Skydiving School Instructor Reference Manual

Sections:

1: The Role of the SSI
2: Learning
3: Evaluation
3: Instructing
4: The First Jump Course
5: Athlete Development

Last Updated: May 2019

FOREWORD

The Canadian Sport Parachuting Association (CSPA) is pleased to provide this Skydiving School Instructor (SSI) manual as part of the overall development program of sport parachuting in Canada. This manual is based on many years of experience and has been written to account for the many changes that have occurred in the sport since the development of the SSI program. Adjustments have been made to the content and format of both the manual and course, to ensure that candidates obtain the most effective learning experience possible.

The future of parachuting in Canada is very closely tied to how many individuals, once introduced to skydiving, will wish to continue in the sport. The quality of the First Jump Course (FJC) has a significant influence on retention rates and, it is also here that the initial groundwork for everyone's jumping career is made.

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ACKNOWLEDGEMENTS

The SSI course is taken from Instructor B (1998), which was designed and written by Tony Mercer with input from CWC members. This manual has been compiled and edited by Nick Stetzenko. Tom Pfeifer and Tony Mercer helped with the review and Scott McEown did the updates. Thanks to Izzy Perry and Phil Perry and the CWC for their full revision of the 2019 updates.

To obtain more information about different ratings please visit the website of the Canadian Sport Parachuting Association/Association Canadienne de Parachutisme Sportif at http://www.cspa.ca and click Ratings.

SSI COURSE SCHEDULE

(May vary depending on course)

Day 1		Day 2		Day 3	
8:30 - 8:45	1.1-1.6 Introductions and Overview – Course Evaluations	8:30 - 9:00	Teaching Task 3 Prep	8:30 - 9:00	Teaching Task 4 Prep
9:00 - 9:30	2.1 The Adult Learner	9:00 - 12:00	**Teaching Task 3:** FJC Teaching - 30-45 min. presentation, 10 min. debriefing	9:00 - 11:45	**Teaching Task 4:** FJC Teaching - 30-45 min. presentation, 10 min. debriefing
9:45 - 10:00	BREAK				
10:00 - 10:30	2.2 Information Retention and 2.3 Motor Learning				
10:30 - 11:00	3.1 - 3.5 Evaluating – Introduction – Attitude Evaluation				
11:00 - 11:15	Teaching Task 1 Prep				
11:15 - 12:45	**Teaching Task 1:** Demonstration - Delivery and Evaluation, 5 min. presentation, 5 min. debriefing	12:00 - 12:15	BSR Discussion	11:45 - 12:00	Teaching Task 5 Prep
12:45 - 1:30	LUNCH	12:15 - 1:15	LUNCH	12:00 - 1:00	LUNCH
1:30 - 1:45	Teaching Task 2 Prep	1:15 - 1:30	**BSR QUIZ**	1:00 - 3:00	**Teaching Task 5:** FJC Teaching - 30-45 min. presentation, 10 min. debriefing
1:45 - 3:00	**Teaching Task 2:** Mini Lecture - 5-10 min. presentation, 5 min. debriefing	1:30 - 1:45	Course Review		
		1:45 - 2:45	5.3.10 Unusual Situations And 5.4 to 5.8 Post Course Administration - Managing Attitudes		
3:00 - 4:00	4.1 - 4.2 Teaching a Motor Skill to Groups - Learning Outcomes	2:45 - 3:15	5.9 – 5.11 Risk Awareness & Management - Legal Process	3:00 - 3:15	Final Course Review
4:00 - 4:30	5.1 - 5.2 The First Jump Course: Administration - Course Organization	3:15 - 4:00	6.1 - 6.3 Athlete Development: Introduction, Progression, Endorsements	3:15 - 4:00	**FINAL EXAM**
4:30 - 5:00	4.3 Writing a Lesson Plan	4:00 - 4:45	Ground Control Instructor (if needed/wanted)	4:00 - 4:30	Exam marking
5:00 - 6:00	5.3 The First Jump Course: Objectives, Content and Lesson Plans	4:45 - 5:30	Teaching Task 4 Prep	4:30 - 6:00	Course wrap-up, Interviews
6:00 -	Homework: FJC Teaching Task 3	6:00 -	Homework: FJC Teaching Task 4		

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PRE – COURSE TASKS

Prior to the course the candidates must complete ALL sections in the "SSI Learning Guide and Journal", including signatures, and bring it with them to the course. The preparation review includes:

1) THE CSPA RATINGS MODEL

- Outline the structure of the CSPA ratings model
- Identify the role of the SSI within the CSPA ratings system

2) SSI PREREQUISITES, PRIVILEGES, AND CERTIFICATION REQUIREMENTS

- Identify the prerequisites for the SSI course
- List privileges of the SSI
- List the practical requirements
- List certification requirements

  ** It is strongly advised that you have your Coach 1 Certified rating prior to taking this course.*

3) COACH 1 REVIEW QUIZ

- Review characteristics of an adult learner
- Review the Coach's Personal Risk Management Plan

4) BSRS AND TECHNICAL RECOMMENDATIONS

- State the CSPA BSRs pertaining to skydivers in general
- State the CSPA BSRs pertaining to students and instructors
- Identify the Technical Recommendations pertaining to students

5) FJC

- Review notes of FJCs observed
- Perform self-evaluation of modules taught

6) SOLO CERTIFICATE TEST

- Complete the Solo Certificate Test with written answers
- Identify references for answers

In addition, candidates need to arrive at the course with evidence that they have:

- Directly observed two whole FJCs. **Signature required*
- Taught a minimum of 2 FJC modules in 2 different courses, under direct supervision **Signature required*
- Have two (2) sets of lesson plans for the first jump course – these may be copies of those used at your home dropzone

SECTION 1: THE ROLE OF THE SKYDIVING SCHOOL INSTRUCTOR

1.1 INTRODUCTIONS AND OVERVIEW

It may have been some time since you have earned your Coach 1 rating. Since then, you have had a chance to gain experience through coaching novice parachutists and assisting instructors and Coach 2s. If you are Jump Master Instructor rated, you've been dispatching and instructing students. Now you have decided to take on the role of the Skydiving School Instructor, and in doing so, you will be taking on added and significant responsibilities. As a Skydiving School Instructor you become one of CSPA's instructors. You will supervise student jumpers from their initial contact with the sport.

The Skydiving School Instructor course is not a typical CSPA course. There are no skydiving skills to be demonstrated, and little time will be spent on the mechanics of skydiving. These aspects are all dealt with in other coach and instructor training.

1.2 PRIVILEGES OF THE SSI

The privileges of this rating are to:

- Conduct skydiving ground school courses as appropriate. These include:
  - First Jump Course (FJC)
  - First Jump Progressive Freefall (PFF) Ground School
  - Tandem Accelerated Freefall (TAFF) Ground School (when dropzone specific operations training protocols are followed)
  - Tunnel Progressive Freefall (Tunnel–PFF) Ground School
- Certify:
  - Reserve Procedures Endorsement (RPE) required for the student gear used in the FJC
  - Emergency Procedures Review (EPR) Endorsement for the Solo Certificate and "A" CoP
  - The Main Packing Endorsement (Packing, Inspect, Name, Tangles)
- Administer the Solo Certificate test questions.
- Qualify for training as a Ground Control Instructor, and for training as PFF Instructor and Skydiving School Examiner, subject to meeting other prerequisites.

NOTE: The SSI rating does NOT allow the SSI to dispatch students.

1.3 PREREQUISITES FOR THE SSI

The prerequisites for the training course are:

- Coach 1 "trained" status, certified strongly recommended
- CSPA "B" CoP

- 200 jumps
- Complete the pre-course preparation tasks including:
    - Directly observe at least 2 FJCs
    - Teach at least 2 different FJC modules in two separate classes
    - Complete the SSI Learning Guide and Journal
    - Acquire the necessary signatures

The candidates will be required to show current CSPA affiliation and should bring their completed logbooks and rating cards (CSPA and CAC) with them.

The latest information may be found in the current PIM 1 or online at cspa.ca in the Ratings Section.

1.4 PRACTICAL REQUIREMENTS (HOW TO BECOME CERTIFIED)

To achieve certified status, complete the practical requirements, and submit the completed portfolio to CSPA within 1 year. You MUST have Coach 1 certified before submitting your portfolio.

The practical requirements for this rating are to be completed within 1 year of the training course. These tasks include:

- Conduct a minimum of three ground school courses, totaling at least 10 students, while being directly supervised by a certified and experienced SSI
- Complete the SSI portfolio verified by a certified SSI

A candidate unable to complete these requirements due to unforeseen circumstances may make an application to the chair of the CWC for a one year extension. A candidate that does not complete the practical requirements will not be considered a certified SSI Instructor and their “trained” status will expire.

The certified rating is continuous, subject only to currency requirements as found in PIM 1:

- Teach one complete first jump course each year.

1.5 COURSE CURRICULUM

The training course is normally held over a full three day period. The Learning Facilitator has flexibility to tailor the course to the candidates by adjusting times and order of material taught.

The curriculum is organized into 7 modules:

Module 1 – Role of the SSI

1. Paperwork: CSPA affiliation card, logbooks, completed pre-course learning journal collected, and CSPA course forms
2. Introductions
3. Pre-requisites and privileges of the SSI, and evaluations during the course

Module 2 – Learning

1. How information is transferred
2. Memory types

3. Influences on informational retention
4. The adult learning environment
5. Learning potential and styles
6. Motor learning and skill development
7. Teaching complex skills
8. Mental imagery and cue words
9. Psychomotor skills

Module 3 – Evaluating

1. The differences between summative and formative evaluations
2. Objective versus subjective assessment
3. Questioning theory
4. Evaluating if knowledge has been acquired
5. Evaluating performance of physical skills
6. Evaluating attitudes

Module 4 – Instructing

1. ***Preparation***: learning outcomes, main teaching points and delivery techniques, skill analysis, drill design, lesson planning, the adult learning environment. individualization, training aids, and preparing the classroom environment
2. Presentation: lectures, demonstrations, structured discussions, training aids, and teaching to stressful situations
3. Application: principles
4. Feedback: skill analysis, critiques, questioning techniques, and record keeping

Module 5 – First Jump Course

1. Administration
2. Organization
3. Risk Awareness
4. Identifying all the “must know” areas in each section
5. Teaching strategies for each section

Module 6 – Athlete Development

1. Role of the Skydiving School Instructor in progression
2. Overview of the GFF, PFF, and TAFF programs
3. Overview of Long Term Athlete Development module
4. Endorsement administration
5. Solo Certificate Test administration

1.6 COURSE EVALUATIONS

The evaluations on this course are:

- ***Formative***: The Learning Facilitator provides feedback on the performance of the candidate to help them improve. No mark is assigned to the exercise.
- ***Summative:*** The Learning Facilitator provides feedback on the performance of the candidate to help them improve and also assigns a mark to the exercise. To complete the course all summative evaluations must be passed. A make-up may be issued for poor performance in any of these tasks.

SECTION 2: LEARNING

2.1 INTRODUCTION

One of the principal goals of an instructor is to maximize motor learning (or achieve a particular physical performance), especially when there is only limited time available. To achieve this goal, it is important to be familiar with some basic concepts related to how people learn skills and how effective instructors teach sport activities.

On this course, only a brief summary of current ideas on how adults learn is presented. CSPA coaches and instructors are encouraged to research this area more thoroughly.

2.2 LEARNING

We learn by acquiring knowledge or skill through studying, experiencing or being taught. The process depends on previous experience and leads to potential change in behaviour.

Learning is considered to be a relatively permanent change in behaviour.

The FJC student is seeking to be taught the information to be able to successfully complete a first jump in skydiving. The SSI is there to help them acquire the necessary knowledge and skills to accomplish this goal. Only when they have demonstrated that they have learned on the ground will the SSI allow them to make their first jump from an airplane.

2.3 ADULT LEARNING CHARACTERISTICS

Four broad principles are offered to help you think about how to teach adults.

1. Learning occurs in context.

Read the following sentence: "*The notes were sour because the seams split."* What does it mean?

Chances are that you found the sentence confusing, even though all the words are common and familiar. Now consider that the sentence is describing bagpipes and read it again. It probably makes more sense now.

Without a relevant context, comprehension and learning are difficult and unlikely to succeed very well. Keep in mind, however, that learners will attempt to make sense of anything unfamiliar, just as you attempted to make sense of that sentence.

When they do so, they draw upon their prior understanding and experience, but the meanings they construct may be quite different from what was intended if they do not have an appropriate context for the information.

"FJC students are ignorant of skydiving, but not stupid. They lack knowledge, but they do have abilities to reason with the knowledge they understand."

2. Learning is active.

Tell me, I forget.
Show me, I remember.
Involve me, I understand.
Make me think, I learn.

This proverb illustrates very well the importance of getting learners mentally involved in learning activities, generating connections between what they already know and what they are being asked to learn, and constructing meaning from their experiences. The focus of learning shifts from covering the course to working with ideas, as students become active participants.

3. Learning is social.

There is value in having students work together in a group to accomplish some types of learning tasks. Students benefit from hearing perspectives other than their own. It is also valuable that students hear others asking questions as this provides reinforcement that involvement in the learning process is okay. They also benefit from watching others practice the new skills.

4. Learning is reflective.

Learning is facilitated when students get feedback about their thinking, whether that feedback comes from within, an instructor, or a peer. When provided the opportunity for revision through feedback, students can achieve higher levels of performance or reach deeper levels of understanding.

2.4 LEARNING ENVIRONMENT

We must remember that we are teaching adults. A lot of studies have been done into what constitutes the best adult learning environment. Most of our personal experiences of teaching and learning were in school as adolescents, and tactics that were used on us may or may not be appropriate in the adult environment.

The following are suggestions for creating a learning environment that fosters a sense of support for and partnership with adults:

Capitalize on the first session.

First impressions are frequently lasting ones. The first session should create the foundation for a healthy learning partnership and set the tone for the FJC. At the beginning of the classroom session consider informal furniture arrangements with chairs in a circle or around a table and allow time for introductions, including information about the instructor.

Since adults need to know immediately what is expected from them during the course, the first

session should be devoted to needs assessment and discussing their expectations for the course. Provide written information about the course. The end course quiz should be discussed at the outset.

Break the traditional classroom routine.
Deviating from the conventional practices associated with classrooms can help create a better and more effective adult learning environment.

Use humour when appropriate.
Humour can also help learners see the "human" side of the instructor. For example, by laughing at their own mistakes, instructors can help learners understand that errors are a normal part of the learning process. It goes without saying that instructors should never resort to sarcasm or ridicule, for then humour becomes destructive. Properly used, however, humour can assist in building relationships between and among learners.

2.5 FACTORS THAT IMPROVE THE LEARNING ENVIRONMENT

Some of the factors that contribute to good adult learning are:

- ***Individualization***: we all learn in slightly different ways and at different rates. Our motivation, physical and mental capabilities, and previous knowledge will be different. Tailor your presentations and strategies to suit the group of individuals on any given day.
- ***Association***: use the past experiences and knowledge of the people involved. Relate to other sport activity experience. Continue to build on the experience of the previous class, demonstrating relevance.
- ***Participation***: involve the students in the process through physical activity and verbal feedback.
- ***Outcomes***: allow for success through clearly identified and achievable outcomes.
- ***Professional Presentation***: proper use of training aids, supplementary materials, and instructing methods help the student to focus on learning the material rather than being distracted by it.
- ***Feedback***: allows the student to confirm understanding of the material presented in all stages. Use lots of questioning, repetition, and summary of the main teaching points.
- ***Self-Direction***: provide the learner with some control or direction. Make them responsible for their learning. Assigning the students to read a section of the FJC manual before the material is covered can be a useful strategy.

2.6 INFORMATION TRANSFER

Information enters the brain through the five senses, though about 98% of all new information comes through only three:

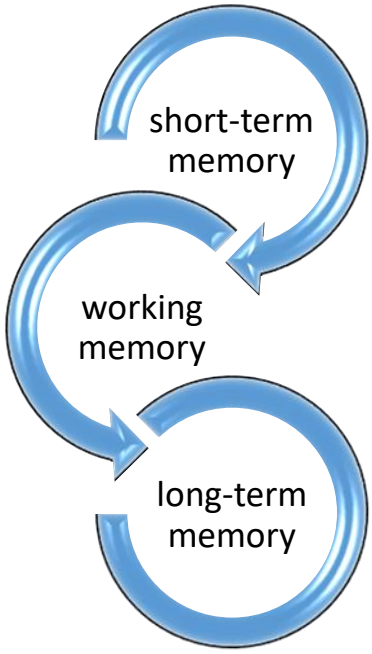
- Sight (75%)
- Hearing (13%)
- Touch (12%)

Researchers believe that two simple questions are subconsciously asked by a person to determine whether information will be saved or rejected:

- Does this make sense?
- Does this have meaning?

After this initial screening process, information is stored in short-term memory. This memory can be thought of as a clipboard where data can be held for roughly 30 – 45 seconds (think about looking up and remembering the number for a pizza delivery while you make the call). This memory registers visual, aural, kinesthetic, and other stimuli from the surrounding environment. It is useful in the present tense and in particular during the initial stage of learning.

TYPES OF MEMORY



The information will then be lost unless it is processed through internal verbalization and repetition and passed into a second temporary memory referred to as working memory. Working memory is a most useful term as it reminds us of the activity that must take place if any of our teaching is to be retained by the student. We need to ensure that our students are focused on the information and skills we are relaying to them, and that they are acting upon and processing (they need to "work at it") this information, or it will be lost.

As mentioned above, working memory is also temporary and to complete the transfer process, the information must be moved to long-term memory. Long-term memory stores well-mastered and automated motor tasks.

In addition, if we are asking students to recall and build on previous knowledge in our lessons, then information will be retrieved from the long-term memory, reprocessed in the working memory and then re-stored.

Our goal as educators is, then, to ensure that important information is transferred to the long-term memory and not simply lost or forgotten. As simple as it may sound, constant review of material is essential for optimal storage and hence learning, as most information will be lost within 24 hours without this reprocessing. This is especially important to consider when the FJC is taught over two days, or if the first jump does not occur on the day of the class. When teaching the FJC it is important to have lots of review and recap so that information is being constantly reprocessed throughout the day.

All information that is perceived via the senses passes through three processors that categorize it as linguistic (verbal communication, reading, watching), non-linguistic (seeing, touch, smells, sounds), or affective (feelings, emotions, moods).

Linguistic learning is the most accurate, hence most often used in formal education through lecture, note taking, etc. Non-linguistic is the use of mental imagery and visualization, and it plays a very important role in skydiving. It is through the creating of mental images that we can learn to understand how things work. Using multiple senses helps to increase this area of learning.

The Affective mode is the power of feelings and emotions to help reinforce learning. This is accomplished through socialization, feedback and praise for a job well done, achieving personal goals. The use of arousal techniques enhances this learning process. More cognitive (intellectual) learning requires a lower arousal level so as to not “overload” the learner, whereby more physical tasks require a higher arousal level, through active participation.

2.7 MEMORY ENHANCEMENT EFFECTS

1. ***Primacy-Recency Effect:*** Studies show that the information that is first learned is first remembered and that information last learned is second best remembered. This effect is the rationale for having emergency procedures at the end of the program.

2. ***Emphasis Effect****:* It is also well known that emphasized material is well remembered. Emphasis techniques include: raising of the voice, repeating the word or phrase, writing the word several times, and repetition.

3. ***Von Restoff Effect****:* Also called the ***Isolation Effect*****,** this means material that is distinctive (i.e. stands out like a sore thumb) will be more likely to be remembered than other items. If you see a list of items and one is written in **bright red** and the others are not, you may be more likely to remember that one item.

4. ***Intensity Effect****:* If students learn with the use of as many senses as possible then storage is also increased. With practical skills, students should see, hear and feel the skill. For technical info both hearing and seeing the information is critical for the intensity effect. This is why using a whiteboard, storyboard or screen along with spoken information is important.

5. ***Chunking Effect****:* This is the maximum amount of information that humans seem to be able to comfortably store and remember. The magic number is 7+/- 2 bits or chunks of information (e.g. seven digit telephone numbers: 967-11-11). To be on the safe side, consider limiting your information chunks to no more than 5 separate "bits."

Use these practical applications:

- Always start and finish with important ideas – the "must-knows." It is very important to decide on the sequence in which you will present the material.
- Emphasizing the main teaching points again, is a very effective way of ending any learning session.
- Use colour to make key material distinctive.
- Involve the students' senses in the learning. Have them DO as well as see and hear.
- Use the Socratic Method of lecturing by questioning learners to draw as much information from them as possible.
- Keep the information down to a manageable amount by selecting the appropriate number of main teaching points.

2.8 LEARNING STYLES

Individualisation should also take into account learning styles. This is a complex subject but it is sufficient for you to realise that the majority of learners use either:

- Visual (75%)
- Auditory (13%)
- Kinesthetic (12%)

input as their main mode of receiving information.

Visual learners have two areas – *linguistic* and *spatial*. Learners who are *visual-linguistic* like to learn through the written language, such as reading and writing. They remember what has been written down. They like to write down directions and pay better attention to lectures if they watch them. Learners who are *visual-spatial* usually have difficulty with written language and do better visually with pictures, demonstrations, videos, and other visual materials. They easily visualize new material by using their imagination and seldom get lost in new surroundings. To integrate this style into the learning environment:

- Use pictures, illustrations, video or other visual aids
- Include outlines, handouts, etc. for reading and taking notes
- Include plenty of content in handouts to re-read after the learning session
- Leave space in handouts for note taking
- Invite questions to help them stay alert in auditory environments
- Post flip charts around the room to show what will come and what has been presented
- Emphasize key points ("must knows") to cue when to takes notes
- Eliminate potential visual distractions
- Supplement textual information with photographs whenever possible

- Show diagrams and then explain them
- Write down key points on a board or screen

Auditory learners like to talk to themselves, may move their lips or read out loud. They often do better talking to someone and hearing what was said. To accommodate this learning style:

- Begin new material with a brief explanation of what is coming. Conclude with a summary of what has been covered. Tell them what they are going to learn, teach them, and tell them what they have learned.
- Use the Socratic Method of lecturing by questioning learners to draw as much information from them as possible and then fill in the gaps with your own expertise.
- Leave plenty of time to debrief activities. This allows the auditory learner to make connections of what they learned and how it applies to their situation.
- Have the learners verbalize the questions.
- Develop an internal dialogue between yourself and the learners.
- Eliminate potential noise distractions.

Kinaesthetic learners do best while touching and moving. It also has two areas – *kinaesthetic* (movement) and *tactile* (touch). They tend to lose concentration if there is little or no external stimulation or movement. When listening to lectures they may want to take notes. When reading, they like to scan the material first, and then focus in on the details (get the big picture first). They typically use colour highlighters and take notes by drawing pictures, diagrams, or doodling. To integrate this style into the learning environment:

- Use activities that get the learners up and moving around
- Play music, when appropriate, to enhance activities
- Use coloured markers to emphasize key points on flipcharts or white boards
- Give frequent stretch breaks (brain breaks) – lecture no more than 20 minutes
- To highlight a point, provide gum, candy, scents, etc. which provides a cross link of scent (aroma) to the topic at hand (scent can be a powerful cue)
- Provide highlighters, coloured pens and/or pencils
- Guide learners through a visualization of complex tasks
- Have them transfer information from the text to another medium such as a mock-up, steering toggles, or reserve vest

Do more than talk when presenting material. Back up the instruction with written notes of the main points, diagrams, videos, and hands on-activities.

2.9 MOTOR LEARNING AND SKILL ATTAINMENT

The learning of physical skills requires the relevant movements to be assembled, part by part, using feedback to shape and polish them into a smooth action.

Motor Learning is the improvement in performance of physical skills as a result of practice.

2.9.1 Phases of Motor Learning

The three phases of motor learning are:

- Cognitive
- Associative
- Autonomous

Cognitive	Associative	Autonomous
Execute a series of unnecessary movements	Quality of movement improves substantially	Movements become automatic and fluid
Activate muscles that are not relevant	Movements are smoother and more relaxed	Display few errors
Unable to bring muscles into balance	Excessive movements gradually vanish	Movement rarely collapses in unpredictable circumstances
Display starting position and movement rhythm incorrectly	Movement collapses only in unpredictable circumstances such as fatigue, pressure or stress	
Have posture that is stiff		
Verbally cue movement patterns		

A major benefit of the autonomous stage – or automatic performance – is that it helps to prevent sensory overload in high stress situations. Threats and emotional responses affect memory processing in that autonomous responses will take precedence over rational thought. Terms such as “dumb struck” and “frozen, I could not move” are well known responses to stressful situations. In the FJC, it is clearly important to teach to stressful situations so that this doesn’t happen.

If skill attainment was as easy as simply performing the task over and over again, then we could all become high level athletes in any sport if we devoted ourselves full-time to that activity. Clearly, other factors come into play and understanding these influences will certainly allow your students to achieve better results.

2.9.2 Skill Development Techniques

There are a few simple techniques that are helpful to successful skill attainment.

- Correct explanations and demonstrations are essential for effective learning. In order to present skills to your students, you must have analyzed the skills to be performed. Keep your explanations simple and to the point.
- Make your demonstrations absolutely correct, each and every time.
- Good activity design promotes effective use of time.
- Visualization aids in proper skill development.
- Psychomotor skill development aids in skill retention.

2.9.3 PART – WHOLE

A student should demonstrate their learning of a skill using the Part – Whole (PW) technique. This means:

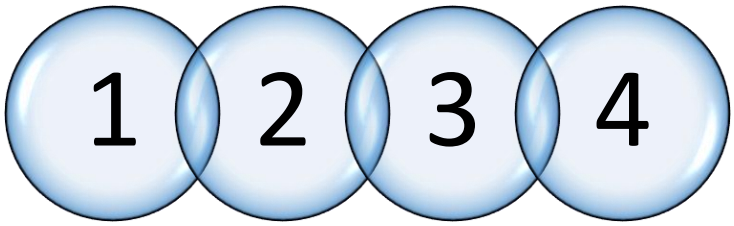
- ***Part:*** Learn the individual actions for the skill with the right positions and actions being clearly demonstrated.
- ***Whole***: Put all the parts together and develop fluidity in the motion.

Because it is unlikely that a student will be able to perform a new skill perfectly the first time through, having students attempt the whole skill right away generally leads to negative feedback that hinders motivation. Therefore, for effective skill attainment, have the student learn the parts correctly prior to attempting the whole skill.

2.9.4 CHAINING SKILLS

Chaining is a teaching method in which a task or process is split into smaller parts that are each learned in sequence. Once a part is learned, it will be chained to the previous part.

CHAINING PROCESS



Some activities are learned by reverse chaining where the student learns the last step in a complex process first.

An example of forward chaining on the FJC would be to teach the first jump in this sequence:

1. Climb out,
2. Arch,
3. Count.

An example of reverse chaining a skill on the FJC could be:

1. Parachute Landing Fall,
2. Canopy Flare, and
3. Body Position on Final Approach.

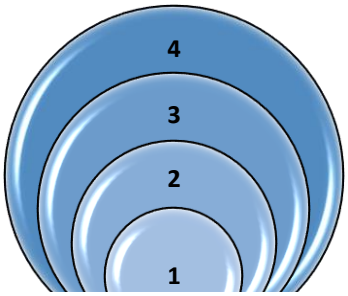
The steps in the chaining process are:

- Decide if chaining is an appropriate strategy
- Divide the complex skill into its parts or links
- Decide on forward or backward chaining
- Teach the first (or last) action and practice
- Teach the second action and practice
- Practice parts one and two together
- Teach the third action and practice
- Practice parts one, two, and three together
- Add to the chain, link by link, until the entire skill has been learned.

2.9.5 SHAPING SKILLS

Shaping is a different process in which the task is first introduced in its most simple level and then refinements or more complex processes are added on top of the basics.

SHAPING PROCESS



This “layering” effect results in a rough technique or skill being shaped into a refined one. An example on the FJC would be to teach the arch in this sequence:

1. Limbs extended - arms out, legs shoulder width apart
2. Refine arm and leg position
3. Hips forward
4. Head back (chin up)

The steps in the shaping process are:

- Decide if shaping is an appropriate strategy
- Decide how many layers are needed and in what order they should be presented
- Briefly demonstrate, or explain the complete skill to be learned
- Use a simplified or incomplete version of the skill that includes the most important item or key action
- Allow practice of the simplified skill
- Add additional or missing parts in steps as required and allow for practice.

2.9.6 VISUALIZATION

Another aspect of skill development involves **mental imagery** and the use of cue words or prompts. Studies show that improved performance comes with the visualization of the body going through the correct motions. As skydivers, we all know of the importance of dirt diving both physically and in our minds. When teaching first jump students, time should be taken to discuss this aspect of learning so that they can mentally practice when the physical opportunities are not available. Indeed the skill should be practiced in the FJC before canopy control, with students closing their eyes and the SSI talking them through the climb out, exit and arch, in real time. Providing this practice of visualization in the course setting is beneficial, in that students can utilize this skill during free time, or more importantly while climbing to altitude for their jump.

When visualizing a complex skill pattern, cue words can be used to prompt you to the next step. For example, when climbing out of the plane, such words as “Left Foot, Left Hand”, etc.

Cue Words

Help the student to both visualize the actions and perform them in the stressful situation of the first jump.

2.9.7 Psychomotor Skill Development

Recent studies have shown that psychomotor skills are useful for teaching the mind, the position and feel of the body when performing a skill. This process is useful for teaching both basic and advanced manoeuvres. Although its application is more obvious in later jumps, it could have application in the FJC, particularly if a student has problems with body positions.

In essence, you are trying to accomplish muscle memory for a particular skill and the technique is best discussed through an example.

Try this, when teaching the arch position:

- Have the student lie on the ground and assume the arch position initially learned while standing upright. The eyes are kept open and you should move around the group and physically correct the body position.
- After the position has been held for 3-5 seconds tell them to relax.
- Ask your students to arch again while correcting body positions. After 3-5 seconds, let them relax.
- Repeat this process 5 times in total.
- Now have the student close their eyes as they are performing the arch. Again, repeat the skill 5 times with rests in between correcting where necessary. By the fifth time the student should have the proper body position.
- Take a 10-minute break and then try it again.

As the student improves you will notice fewer corrections having to be made. They have now acquired "muscle memory" for that position and when in the air should produce the same body position.

SECTION 3: EVALUATING

3.1 INTRODUCTION

Meaningful evaluation helps participants gain insight into how and what they are learning. Therefore, evaluation activities must be integrated into every learning activity, regardless of whether the course intent is the acquisition of information (cognitive), the development of skills (motor), or the exploration of feelings and attitudes (affective). In the FJC, all three apply.

The only educational justification for evaluating is to assist learning.

Within skydiving there are many occasions in which evaluation takes place. From the moment the student enters the sport, an instructor is providing feedback on learning and skill progression. The opportunity for evaluation occurs in many instances:

- Observational analysis
- Verbal critique of performance
- Simple oral questioning
- Written quizzes

In your role as a Skydiving School Instructor, you will be asked to provide an overall evaluation of a skydiver that includes:

- Knowledge
- Skill performance
- Attitude

The ability to do this fairly and accurately is clearly very important.

3.2 TYPES OF EVALUATION

Our experiences in education tend to influence how we evaluate others. You've probably experienced written exams and quizzes in school. The teacher was trying to assign a grade or mark to your performance. This type of evaluation is called "summative" - a quantitative or measurable summary of what you could do. For example, you receive a score or mark.

Recent trends in education have tended to stress the need for more formative evaluations. They are designed to assess what the person's strengths are and to suggest ways to improve. It is not valuable to just come up with a number, letter grade, or standard without any chance for the individual to review their competency and improve.

A Skydiving School Instructor should be a formative evaluator.

For example, your feedback throughout the FJC will involve telling the student what they did well and how to improve. You are essentially looking for an end result that is perfect. You don't give a student an 80% on the ability to climb outside the plane. Students will be asked to repeat their demonstration until it is correct. Even on the final exam, you are not really assigning a mark. You will ensure that any point missed by the student is corrected and fully understood; the student must get everything right.

3.3 EVALUATION STRATEGIES

Modern research would suggest that only by the use of a bank or range of different strategies and techniques can we successfully perform an overall evaluation. This is actually common knowledge to skydiving instructors as, for example, on the FJC we apply this idea through numerous:

- Oral questions
- Demonstrations
- A final written test

We do not rely on only one mode or type of evaluation.

The assessment should also be valid; i.e. the test mode chosen should evaluate the intended **Learning Outcomes (LOs).** For example, if the Learning Outcome for a section is that the student should be able to climb outside the plane and assume the hanging position, it is appropriate to make the student show you that they can do this, rather than just have them to tell you how they are going to do it.

***Skills** require a practical evaluation.*
***Knowledge** is tested through oral questioning or a written test.*
***Attitudes** are evaluated by structured discussion or observation.*

Remember, as mentioned above, to obtain a more complete profile, more than one assessment type should be used. This allows students to show their understanding in a variety of ways that may better suit their learning styles. In our example, you would probably also ask the students to explain and demonstrate the climb out as the mental and physical components should blend together.

METHODS OF ASSESSMENT

Assessment methods can be:

- Objective: set against a pre-determined standard
- Subjective: opinion based

Examples of objective assessments are multiple choice questions. The question is right or wrong; you meet the standard or you don't. On the FJC it can be difficult to be solely objective; however, defining pre-set minimum standards makes this task simpler.

One reason that it is best to try to avoid subjective evaluations is they may open the door to let bias affect your judgement. Unfortunately, bias is somewhat natural and many of us do not realise the prejudices that we carry around with us. A common bias is that of sexual stereotyping, for example. If we believe that men can outperform women on motor skill activities then our standards for any performance may vary between the sexes. This can, actually, work both ways and it may be easier, or harder, for a female to get an accurate evaluation.

Other common examples of bias are those based upon race, body type, sexual orientation, age, etc. These matters were introduced in the ethics portion of the Coach 1 course and reaffirmed through the online evaluation with the CAC. As instructors we must ensure that these biases do not enter into any of our dealings with students, instructors, and other skydivers, as they create subjective rather than objective evaluations.

In addition, there are some considerations that you should bear in mind when designing and delivering your evaluation:

- There should be no surprises
- Always outline the task clearly
- Indicate the standard necessary for success. The standards should be set so that the students have a high chance of success.

Studies have shown that failure at any stage is not a motivation for success in the future. Structure your evaluation for a fair chance of success.

All students should have the opportunity to show what they have learned. It's possible that instructors can focus on certain students, usually the better ones, while others go ignored. Remember that they are individuals, and they all expect to be jumping out of a plane.

Use evaluation techniques that match the learning outcome and use more than one type where possible.

It may be necessary to use alternate assessment procedures for students not able to show their learning in conventional ways. If this is done, a note should be made in the student's file recording the reason for this procedure and the outcome.

ASKING QUESTIONS IN CLASS

'Ask, Pause, Nominate' is a specific method of asking effective, fair questions of students in a classroom setting.

Essential Do's and Don'ts of Questioning

- Questions should be addressed to individuals by name.
- When asking questions, add a pause between the question and the name of the person (ask, pause, and pick) to ensure everyone thinks about it before an answer is given.
- Always repeats answers to ensure that everyone heard.
- Don't ask yes or no answers (50% chance of getting it right by guessing).
- Ask why the student gave a particular answer.
- Difficult and easy questions should be spread around the group.
- Failure to answer correctly must not be used to intimidate, embarrass, or belittle students.
- All students should have the opportunity to show what they know, do not focus on the best students ignoring the others.
- Use techniques such as referral (rebound questions to other members of the class) and deferral (politely hold inappropriate questions to a time in the course where this material is being dealt with).

These techniques have the advantage of focusing the students into listening to each other, and not just you, and also prevent them from "tuning out" when their name isn't called for the initial question.

Formulate your questions so they demand sentence answers. By referring to areas of knowledge – rather than simple facts – you encourage more than yes and no answers and hence can evaluate knowledge.

3.4 EVALUATING PHYSICAL SKILLS

As a Skydiving School Instructor, you will focus on evaluating the demonstration of physical skills (e.g. aircraft exit and arch).

As previously stated, to evaluate a performance objectively, you must compare it with a pre-set standard (the minimum level or score acceptable in the performance of a particular task). These standards come from tasks with well-defined and thought out outcomes.

Generally, in skydiving, we tend to score knowledge and rate performance. More often than not, we rate through a letter grade such as:

Performance Rating System

(E) Excellent: meets all aspects of the objective criteria.
(G) Good: generally, well done, some adjustments required.
(S) Satisfactory: one or two mistakes, room for improvement, but acceptable.
(NI) Needs Improvement – several mistakes, retraining required.

In the FJC, you will have to rate the student's performance to decide whether it is good enough for them to jump. Their performance for emergency procedures must be excellent, while you may accept a satisfactory performance for an oral review of equipment knowledge. You must not accept any performances that are rated Needs Improvement, as re-training and individual assistance should be applied to bring them up to an acceptable level.

A lot of your performance evaluations will be made with reference to past experience with student performance. As a new SSI you will need to consult with more experienced instructors if there is any doubt in your mind as to whether the student can perform the tasks well enough. If a student cannot perform a task up to standards, they should not be allowed to proceed with a jump of that type. It may be that a tandem jump would be a better option.

3.5 EVALUATING KNOWLEDGE

There are many aspects of skydiving where a solid factual or declarative knowledge base is essential. It is important when we are teaching facts that we can accurately test to see if the information has been permanently stored through processing and repetition. We generally ask students questions to verify this type of learning. When designing evaluations, the first question we have to ask ourselves is "What questions?"

An evaluation of knowledge must contain a representative sample of the core content with emphasis on the "must know" aspects.

Let's use the CSPA CoPs as an example. Such a test cannot possibly evaluate all the knowledge possessed by a skydiver who is applying for a certificate. In evaluating, it is very important to select questions that test all major areas of the material and especially ensure that all "must know" areas have been covered.

Using this idea in the FJC, we know that a first jump student will be exposed to a lot of information. You will not be able to assess all aspects rigorously and you will have to make certain decisions about the importance of the information or skill. In the end you will only be able to thoroughly evaluate the Main Teaching Points, mainly through demonstration and oral review. In addition, a final written exam testing the "must know" information should be administered and kept on file.

3.6 EVALUATING ATTITUDES

This is a tricky area as it has many facets and falls into the grey area of subjective assessment. Recently, "attitude" has become synonymous with a person's feelings about something else rather than about themselves. For example, a person may be described as having a "bad" attitude towards rules and regulations. This personality type is occasionally portrayed by certain media and peer role models as being a good one. In skydiving, it isn't. Purposely pushing the limits way beyond your experience level can have deadly consequences for you and the sport.

If the result is that the student shows continued unawareness of their fallibility or they choose to ignore your input, then the consequence may have to be not allowing them to jump. This decision should be related to the behaviour rather than being punishment.

There is another aspect of attitude that you will encounter. This concerns poor performance. We can all relate poor performance to our own inability and let it affect our self-confidence. The reasons for poor performance are numerous and do not all directly relate to the athlete. Perhaps the instructor failed to give the correct information, or taught the skill poorly. Were the outcomes of the task clearly defined so the student knew the evaluation criteria? Was the skill progression appropriate to the individual? Perhaps the student was over anxious, wasn't paying full attention, or was simply having a bad day.

As a Skydiving School Instructor, you will need to help those students who have a poor self-image. There will be those who are not natural athletes or whose friends are progressing faster than they are. Check to see that the poor performance was not a result of poor training or too rapid of a progression. If so, use a more incremental sequence to ensure success. If not, encourage the student through positive vocabulary. "You can do this", "You will do this, when you have successfully completed this aspect," etc. Take extra time for practice and positive feedback. Motivate them to do well so that the increased good feelings about themselves promote further success in the sport. Often the student will benefit from the utilization of mental training methods.

Always remember that there are other more experienced instructors around. If you encounter problems with a student, they may have seen examples of this type before. By consulting with these mentors you will be building up your skills and helping a student to progress or be safer.

SECTION 4: INSTRUCTING

4.1 INTRODUCTION

Having examined the research findings that relate to human learning and evaluation, you are now in a position to apply this new information in your instructing activities as a Skydiving School Instructor.

***Instructing** is providing knowledge in a methodical way.*

The major difference between your coaching experiences and those of your new responsibilities will occur in the FJC where you will be faced with a group, rather than an individual, who will have to be taught both new information and skills.

As a Coach 1, you have been teaching relatively simple skills. To do this, you taught by demonstration using the PPAF method.

Four steps to teaching by demonstration:

1. Preparation
2. Presentation
3. Application
4. Feedback

You probably prepared yourself by following the general pattern of deciding:

- Why is the skill important?
- What are the main teaching points (ex. skill phases)?
- How (and in what environment) are you going to present the material?
- How are you going to evaluate the outcomes of the learning?

As part of the preparation process, you considered the training aids needed and, by analyzing the skills, thought about how you would demonstrate the correct skill technique.

You recognized that the students should be involved in the process and apply the learning to give them practice at it. You would ask them questions to help them process the information and ask for demonstrations of skill development both on the ground in simulation exercises and on the actual jump.

You were prepared to give constructive feedback through accurate and positive critique both while the skills were being learned and after they were demonstrated on the actual jump. To ensure that you had everything in the correct sequence and that you didn't forget any key ideas you prepared a Lesson Plan beforehand.

The FJC is really just a slightly more complex version of the same process. The next section of the manual will expand the steps in PPAF and help you to use the best teaching techniques. It will not deal with the content of the FJC as this is covered in Section 5.

4.2 PREPARATION

Advance organization is a key component to performing well as a Skydiving School Instructor. The following sections discuss the specifics of preparation for your role in the FJC.

The sequence of activities in preparing a lesson is:

1. Identify the intended Learning Outcomes (LOs)
2. Establish evaluation methods to determine that LOs are achieved
3. Decide on the Main Teaching Points (MTPs) to be covered
4. Select the appropriate delivery technique
5. Plan the structure of any practice where motor skills will be demonstrated
6. Write out a lesson plan
7. Prepare the appropriate training aids
8. Prepare the classroom environment
9. Rehearse

4.2.1 LEARNING OUTCOMES

In a way, you have already had practice in writing learning outcomes through goal setting on the Coach 1 course.

A learning outcome is a statement spelling out what participants will be able to do at the end of the lesson.

When writing learning outcomes you should:

- Consider the new performance that will be expected of the student after the learning session.
- State under what conditions the new behaviour will be demonstrated.
- State the expected standard of achievement.
- Think of how you will evaluate that learning has taken place.

Because an outcome is a statement of what the participant will be able to do, use action (doing) verbs rather than inanimate concepts (knowing or understanding).

- If you want the student to show you, use action verbs such as demonstrate, perform, design, or prepare.
- If you want them to tell you, use verbs such as list, state, or describe.
- If you want a written answer, use verbs such as list, or write.

A learning outcome is typically written as follows:

At the end of this lesson, the student will be able to:

- Demonstrate a…
- Perform a …
- State the …

For example, one learning outcome for this module of the SSI course is that “Candidates will be able to write learning outcomes for the First Jump Course.”

4.2.2 Evaluation Methods

You can only know that learning has taken place by evaluation. The appropriate methods are:

- Skills: through practical evaluation
- Technical Knowledge: by oral questioning or a written test
- Attitudes: by structured discussion or observation

4.2.3 Main Teaching Points (MTPs)

In order to prioritise your points, you will need to generate a list of all the components of the knowledge or skill areas. These informational components can be broken down into:

- Must Know
- Should Know
- Nice to Know

*The Main Teaching Points and the evaluation should focus on the **Must Know** information.*

4.2.4 Methods of Delivery

Once you have decided on the MTPs, you will have to decide on how best to present the material. The list of techniques is actually rather small. You will probably:

- Demonstrate: “hands on” skills, procedures, techniques (motor)
- Lecture: knowledge, intellectual abilities (cognitive) or
- Lead a structured discussion: development, change in attitudes or values (affective)

4.2.5 Structure of a Practice

You will want to ensure a smooth flow of activity that helps the student get ready for their first jump. Some key points to remember are:

- You should generally choose a practice scenario for skill development
- Teach motor skills using W-P-W for the simplified skill
- Develop complex skills by chaining or shaping the simple skills
- Decide how and when you will provide feedback

When teaching a group, plan the physical setup of the class so that they can see what you are presenting and you can observe their application.

It is important to choose an effective setup in order to be seen and heard by the students. The choice of setup depends on the space available, the kind of message (information, explanation, and demonstration) and the number of students. The setup can be straight-line, U-shaped, or circular.

These basic formations can be adapted to meet the needs of larger groups, for example:

- Make two rows: the front row kneeling or sitting, and the second row standing, or
- Make three rows: front row sitting, the second kneeling, and the third standing.

The students must be arranged with potential distractions behind them, for example they should face away from:

- The sun
- Activity at the dropzone, such as parachutists landing
- Other groups of jumpers training, for example dirt diving

It is important to ensure that the students have a good vantage point to watch the demonstration. Think of the best vantage points for the athletes in relation to the physical setup you have chosen before you begin the demonstration.

Often it is useful to turn 90 or 180 degrees and do the demonstration again so that everyone can have several views of the demonstration, and has the opportunity to observe from the best vantage point. However, avoid doing the demonstration too many times as it may take too much time, and the students who have already seen it enough may "switch off".

4.2.6 LESSON PLANNING

Now you have thought about the desired outcomes, the main teaching points and delivery mode, the factual knowledge needed, and some decisions on how to develop the skills, you have what you need to construct a plan.

A lesson plan prevents digression and ensures that you remember everything.

The preparation and use of the lesson plan is very important. It really makes you think about:

- What you are going to teach
- Why the material is important
- How you will do it

The simplified lesson plan format that follows is divided into five major headings.

Learning Outcomes (or objectives):	**Preparation:** What do you really want them to learn? What will they be able to do afterwards? What is the best way to achieve these outcomes?
Introduction:	**Presentation:** Sell the lesson: Motivate Overview: what is to be learned? Explain why it is important Tell them how they will use it in their future. Review previous knowledge (to determine appropriate starting point).
Body:	**Presentation and Application:** Main Teaching Points Order or Sequence the material. Divide the body up into sections:

MTP #1:
MTP #2:
Etc.
Choose skill presentation techniques.
Decide on drill design (mass and distributed practice).
Note emphasis techniques.
Select training aids.

Evaluation: **Feedback:** Periodic checks for understanding (adjustments to sequencing and content in the body of the plan may be necessary)
Final evaluation of MTPs – the must knows only.
Final questions from the class.

Summary: Restate the what, why, and how. MTPs only (write them down).

The Body (and Evaluation) sections are usually repeated for each MTP.

Lesson plans are not static and it is not "cool" to stop using them once you gain some experience. They should be constantly updated, improved and amended with all the “secret stuff” you will learn as an instructor. Some day they may save you.

In this course, you will get to analyze the lesson plans of your dropzone and help to make them better.

4.2.7 TRAINING AIDS

It should be clear from learning theories that the use of realistic training aids is essential for effective learning. The aim is to provide your student with a clear picture of the “must know” information, emphasized from the student's point of view and action. When considering the use of teaching aids, you should keep in mind that whenever possible the real thing should be used. If it is not practical to have the real thing in class, then an accurate model or mock-up is next best.

There is no doubt that training aids are invaluable. People learn more effectively when aids are used correctly. The aids involve more senses, attract attention, allow for variety, and can simulate potential situations. They prevent overly long descriptions and let the students see the real thing.

Many training aids can be used in skydiving. Here we will concentrate on those most used in the FJC and focus on the choice and use of the following:

- Whiteboard
- Posters and charts
- Models and mock-ups
- Videos, reference manuals / PowerPoint-type presentations

Whiteboard/Blackboard

A large board is probably the most common and perhaps the most flexible classroom tool. It is effectively used to help reduce the amount of verbal instruction through clear illustration, writing down cue words or MTPs, and to help the student remember the material by providing a summary of the main learning points and "must knows."

Important aspects of technique and usage for the whiteboard are:

- Before starting the class, completely erase the board of unrelated material. Then, write a few lines on the board and go to the back of the room to check size and readability.
- Make your lines parallel to the top and bottom of the board. (For those having trouble with this one, place a few dots at the far right-hand side of the board to use as targets. Hold your elbow high and move as your write).
- Use full, well-rounded letters of uniform size, evenly spaced and large enough for all to see.
- Pay attention to spelling. It is easy to misspell even simple words at the board under the stress of giving a class. Step back periodically to check what you have written.
- Add emphasis by varying letter size, using capitals, underlining or using different colours. Take your time while writing on the board; let the students keep pace with you.
- Always erase that which is no longer relevant. Use the board eraser not your hand (hands leave oils on the board which make it look dirty over time.).
- Spend some time at a board practicing and improving your technique.
- Plan what goes on the board, how it should appear and when it should be written.
- When writing on the board, try facing the class at an angle. Do not turn your back on them for an extended period of time.
- Speak to the class not the board. If you need to talk, stop writing. Step in to write and step out to speak.
- Move occasionally to let everyone see what you have written and use a pointer to draw attention to it so that your body does not obscure the board.
- You should be writing key words, lists or bullet points rather than full sentences.

Use the blackboard to emphasise and draw attention to specific points. Writing every word on the board is counterproductive. The board is an excellent place to record the key information in the summary of any particular session of instruction.

If you have put the main points, new terms, and important diagrams on the board, the students should get a good set of notes by writing when you are writing and listening when you are talking. Tell the students if you expect them to take notes (or not) and plan your board use accordingly.

Models and Mock-ups

Models and mock-ups show the student the three-dimensional view. Use them in demonstrations if the real thing cannot be brought into the classroom. They are better than photos or pictures in most cases since they can be viewed from different angles and can be touched, which appeals to an additional sense. Models attract interest and act to bridge the gap between theory and practice by simulating the real thing as authentically as possible.

Remember that:

- Models and mock-ups should be well made and sturdy enough to stand up to repeated use.
- In a model of a complex object, such as an aircraft interior, small irrelevant details should be left off to avoid cluttering.
- Keep verbal explanations to a minimum while ensuring that everyone in the class is able to examine and investigate.
- When using a model, keep it out of sight when not in use.
- Encourage the students to handle the model or use the mock-up as they would in the real situation.
- Keep the aids available for later practice.

Posters and Charts

Posters and charts can be used to amplify or clarify a verbal explanation. Key points to remember are:

- Make posters from material that can be stored without being destroyed since they are usually reused and have the great advantage that they are easily transported.
- They should be carefully prepared so they are clear. Be sure the captions and components are large enough for those at the back to see, and avoid cluttering with extraneous detail.
- Mount a poster or chart in such a way that you are free to move and the class can easily see it. Use a podium or tripod or fix it to a wall, and be sure that it is secure and will not become dislodged during your talk.
- Face the class when talking and use a pointer rather than your hands for emphasis.

Video

Video is a great teaching aid when used correctly. Students relate well to this environment and this is the video generation. Remember:

- Make sure the video of any performance is technically correct. Students will perform what the video shows, even if it is subtly incorrect.
- Use the slow motion or pause capabilities. This is especially useful when performing skill analysis.
- The use of an unsupervised video is not recommended as students may be used to watching video without actively thinking too much about what they are watching.
- A video can not evaluate learning. The SSI must use this tool as part of a lesson, not as the whole lesson.

Reference Manuals / PowerPoint Presentations

As previously stated, there should be a written source available to the parachuting student right from the beginning. Based upon the intensity effect, the reference manual is not the most effective way of conveying information. However, the advantages are that it is an organized version of material you wish to teach. It adds to the professional nature of the course and can be invaluable for clarification of minor points that may be unclear.

Like a manual, PowerPoint (or other software) slide presentations can also be a useful guideline for the flow of the class, and to ensure that all instructors deliver the same program with the same key words. However, flipping slides and reading them to the class is not teaching. Use this tool to provide structure and illustrations. Like lecturing, watching a screen gets boring very quickly. After a maximum of 20 minutes, change activity or delivery method.
Key points are:

- Explain the format, such as table of contents, illustrations, charts, index and explain how you intend to use the material within the scope of the course.
- The proper use of the text ensures that the student appreciates the main topics and their relationship to each other and that the appropriate points are emphasized.
- The manual or slides ensure some uniformity from class to class. Remember though, that procedures change and any written text should be regularly reviewed and updated.
- Notetaking while in class may supplement a text but is no substitute for it.
- Be familiar with the contents of the text and be able to point out weak areas, strong areas, and discrepancies between it and your specific situation.
- When preparing a lesson plan, note section and page in the text where the material is covered.
- When a topic has been covered in class, it should be summarized and specifically pointed out in the text.

The FJC course manual can be used after the first jump. It should be considered a permanent reference for the future. It can be used after a lay-off or as a review if a refresher is needed.

To ensure student progression, you will frequently need to refer to CSPA's PIMs and other skydiving publications. A FJC manual is essential but doesn't stop there; the reference manual should be used in all areas of your teaching.

Note: It is important to again stress that reference material should be used as a supplement only and never as the sole source of information for any part of the student's training.

4.2.8 Teaching Environment

Finally it will be necessary to physically prepare the teaching environment. The room or outdoor area should be:

- Well lit, warm, and well ventilated
- Distractions should be kept to a minimum and other people made aware that there should be no interruptions
- Keep the board clear of extraneous information
- Have your training aids out of sight until they are needed
- Each person should have sufficient personal space and a surface for writing so that they can take notes
- There should be sufficient space for demonstrations and application

4.2.9 REHEARSAL

Practice your presentation to establish timing and continuity. It is very important that, each time you demonstrate a skill, the performance be complete and correct. For example, if you use the word flare and then use your arms to show the flare, you must go through the full motion as taught. Showing students a poor flare (shoulders to belly for example) will lead them to mimic your incorrect actions.

4.3 PRESENTATION

The choice of exactly how you will deliver a particular part of the FJC will vary from section to section. It depends upon such factors as the goals to be achieved, the size of the group, the physical resources available, and your personality and experience.

There are three main ways of presenting new information and skills:

- Lecturing
- Demonstrating
- Structured discussion

4.3.1 LECTURE

Presenting new knowledge is best done as a lecture. Lecturing is appropriate for information transfer; it is not appropriate when teaching skills.

To maximize the potential for learning, ensure there is application of the knowledge through lots of questioning and feedback through comments on the answers. It is not sufficient to talk for 30 minutes and then assume that learning has taken place. You must always evaluate whether the information has been understood.

Advantages	**Disadvantages**
• Quick and relatively easy to prepare and present • Not instructor intensive • Inexpensive in resources • Accurate transfer of information • Can reinforce cue words	• Can be boring, if given in segments longer than 20 minutes (attention span) or by a poor lecturer • Is not useful for skill development • Can be overused

It is most often used for imparting factual information (skydiving theory) and the reasons behind certain procedures and techniques.

4.3.2 DEMONSTRATION

To teach a skill, the most reliable method is a demonstration by the SSI, followed by supervised practice and thorough feedback. Clearly this is a valuable technique when teaching new skills. It is much more effective to demonstrate the correct body position than to describe it. It would be

even more effective to show a video of the position in the air as well as in the demonstration. A ground simulation will not have the same angles, weightlessness, wind, etc. as the real jump. The connections made through viewing the video will help make the simulation more effective.

Listed below are some key points to remember:

Preparation

- All supplementary materials such as parachuting equipment, models, or charts should be close at hand yet kept out of sight of the class prior to the actual demonstration so they won't distract the students.
- Rehearse well so that you are confident with the procedure, timing and teaching aids.
- If you are using a demonstrator, this person should be well briefed and rehearsed.

Presentation

- Break the skill down into clearly identifiable steps (Whole-Part-Whole).Allow students to focus on your actions and not on your words by not speaking during your demonstration. Theoretical aspects should be covered either before or after the presentation.
- If it is a complex skill, detailed steps, presented in a handout or wall chart, are ideal learning aids. They make it possible for participants to follow the demonstration and to check their own practice later.
- Be clearly visible to all in the class and perform slowly. Be careful not to block anyone's view with your body. Orient the class in such a way that they would see the action normally (Section 4.2.5). You may move in a mirror image for them but this technique should only be used if it adds to the clarity.
- Performed skillfully and realistically.
- Remember the KISS principle.
- Repeat the exercise if you feel adequate learning has not resulted.

Advantages	**Disadvantages**
• Far faster and more accurate than describing a skill	• Requires rehearsal • Must be done correctly • Everyone must be able to see

4.3.3 STRUCTURED DISCUSSION

Structured discussion is a technique that draws on the previous knowledge of the participants. This technique is rarely used in the First Jump Course due to the lack of previous skydiving knowledge of the participants. However, toward the latter part of the course it can be carefully used in the Unusual Situations section. You would build on the previous material taught on the course. It is briefly mentioned here for use in your overall role as a Skydiving School Instructor.

In the adult learning environment, it is important to draw on previous knowledge. Within any group there will be a large variation in experience and this can be utilised in the structured discussion. The concept here is that the SSI leads the discussion drawing on the mutual experiences. There

should be participation from all members of the group and individuals should not be allowed to dominate. Careful management is needed to prevent variations that are being explored from becoming distractions that move the group away from your predetermined learning outcomes.

Advantages	**Disadvantages**
• Little equipment is needed • In small groups, easy to involve all in discussion • Controversial topics can be aired	• May be hard to control • Needs considerable skill on the part of the Instructor • Not effective in motor learning • Can take considerable amount of time

4.3.4 READING

Reading is a valuable educational tool because a large part of how we learned in the past, and now, comes from written words. The use of a FJC manual is highly recommended as it provides a permanent reference for the students and provides back up to the information presented in the course. However, remember that some students may be poor readers and unable to get much information this way.

Reading is no substitute for the Instructor

4.3.5 OTHER

There are a number of other techniques which may have little use in the FJC, but can be valuable in other SSI tasks, such as Endorsement training. Examples of other techniques include brainstorming, small-group work, question and answer sessions, and role-playing. You can observe your Learning Facilitator using these techniques during this course.

4.4 APPLICATION

The second component of the PPAF process is application. Application really means that in any teaching activity, the students must get involved in the process and have a chance to participate by practicing and answering questions. It gives them an opportunity to react, respond, and put what they have learned into practice. And it is the only way an instructor can see if learning has taken place. It is a must in the FJC.

For factual information and technical knowledge, we rely on questioning. By asking questions, the students demonstrate what has been learned and the students are encouraged to process the information that leads to better retention. Ask them some “What if…” questions. This allows them to apply the learning to new situations. They will also get an understanding of what is important as your questions will be based on the “must know” material.

Equally important in application is to provide students with the opportunity to show that they can perform the skill to a high degree of competency. Provide lots of opportunity to practice the skill

and supply feedback. It should be possible to give Student's time to practice on their own or in pairs; just make sure they are not exchanging incorrect information. Ensure that they can perform the skill perfectly with no prompting prior to going on to the next section of the course.

Some additional points to remember are:

- Everyone should be given a chance to participate. You may have to encourage quieter members of a group.
- The practical exercises should closely mimic the real situation with realistic training aids used.
- Allow enough time for improvement with an aim of perfection. It is discouraging to practice without noticeable improvement, so ensure that the skills are being learned in achievable pieces.

4.5 FEEDBACK

Feedback gives information about behaviour, performance, and conduct. If done well, feedback helps students recognize potential problems and correct them. It also tells the student that they have been successful and provides the confidence they need to perform on the real jump.

The purpose of conducting feedback will be to help:

- Determine the student's level of awareness
- Reinforce the use of correct techniques
- Correct errors in technique without reinforcing incorrect actions

Giving accurate feedback on skills requires skill analysis. The SSI must clearly understand how the skill must be performed on the ground. Give clear, positive changes (for example, hips out more, thumb through reserve handle, right foot first). If a student requires multiple corrections, focus on the most important first (shape the skills).

Give feedback in this order:

- Determining the student's impressions and feelings (their version)
- Provide your version
- Identify the correct actions within the performance and actions requiring practice or correction
- Ensure that the student practices the corrected performance

Discuss major points first when giving pointers for improvement.
Most minor points tend to disappear as the major ones are fixed.

Feedback should be:

- Positive. The whole tone of the feedback should be positive. Stress the good aspects and indicate areas that can be improved upon not that were done poorly. Use "do more"

words rather than “don’t do” words.
- Specific. Pick major areas for improvement. Try to be specific using skill analysis techniques.
- Immediate. This preserves that sequence of events and allows the student to focus on what really happened without allowing for time for the brain to fill in the gaps.
- Beware of the overuse of feedback. Let the student practice! It is not necessary to constantly tell them what they are doing right or wrong and how to improve. There is great benefit from time for self–reflection and assessment by the student.

Realize that students will respond better to concise messages as opposed to lengthy explanations. A research study found that legendary UCLA basketball coach, John Wooden rarely spoke more than 20 seconds at a time during practice, with his teaching comments being short, punctuated, and numerous.

Avoid constantly using high intensity, rah-rah approaches to motivating your students. Why? Because they quickly learn that this is an act, and then in situations where you attempt to communicate intensity to them, they don’t buy it.

Never use negative feedback as a motivator. It goes without saying that statements such as “If you keep doing that you are going to die” is not educationally valid. Find a different way of getting your point across.

4.5.1 Record Keeping

Record keeping is a very important aspect of your role as a Skydiving School Instructor. You must write records on all the students that take your First Jump Course and it is advisable to make notes on their performance in the course and on the jump. These should be transferred to the dropzone master log for risk management reasons.

Recorded information will be invaluable as you or another instructor will need this information for subsequent jumps. It will allow you to make decisions about how best to facilitate the student's skill development program.

When making a record or written notes of an individual's performance during a parachute jump, focus on the actions. Record:
- Skill performances and awareness levels in as objective a manner as possible
- Progression that has been made on each of the skill areas: Preparation, In-flight, Freefall, Canopy Control, Equipment Skills, and Technical Knowledge

From your records, and those of the dropzone, you will be able to identify those locations in the program where progress is too slow or too fast for the average student. You may be able to identify a stage where a concerted effort to motivate the student will help to retain him as a skydiver.

SECTION 5: FIRST JUMP COURSE

In this module, we discuss the general content areas of the course and provide strategies and examples of how to practically apply your knowledge of learning and teaching to the first jump student.

5.1 ADMINISTRATION

5.1.1 DOCUMENTATION – PRE-COURSE

For risk management reasons, all documentation should be completed correctly before a student is permitted to participate in parachute training. The following must be completed:

- Liability waiver
- Medical declaration

At the beginning of the course, it must be clearly stated by the SSI, or a member of the school's staff, that skydiving is a dangerous activity. There should be no doubt in the student's mind that skydiving can and does lead to serious injury and death.

Each student should acknowledge, in writing, that they fully understand the personal risks involved and that they are willing to participate voluntarily even with this risk. Once this is recognised, there is no reason to over emphasize this aspect throughout the training, nor should it be used as a motivator to make students pay attention to course material.

5.1.2 EXPECTATIONS AND OBLIGATIONS

When an instructor or a skydiving company accepts payment from an individual for parachute training, a contract for services is created. This implied, unwritten contract has some very specific terms and implications.

As a Skydiving School Instructor you should follow a procedure that will ensure that the student's expectations are satisfied and the obligations accepted. The SSI is presenting themselves as a knowledgeable parachutist and teacher to the students. It is reasonable for the student to expect that the SSI:

- Is qualified to fulfill the role.
- Will present a First Jump Course that fully prepares them for a successful first jump.
- Will clearly identify the tasks that they must perform during the jump.
- Will use equipment that is reliable, well maintained, and supported by all recommended safety devices.
- Will evaluate their capabilities to perform relevant skills prior to the actual jump.
- Will not allow them to make a jump if the instructor feels they are not fully prepared and capable of completing the jump safely and successfully.

The student must accept certain obligations as part of the voluntary participation in skydiving. It is reasonable for the instructor to expect that the student will:

- Answer honestly to questions; have the initiative to ask questions where unsure.

- Actively participate in all parts of the jump, responding to directions or situations in accordance with the training.

5.2 ORGANIZATION

There are many different ways of organising and presenting a First Jump Course. When planning your course, you will need to take into consideration such aspects as the number of students in the course, the length of the course, and how much staff support will be available or needed.

5.2.1 COURSE SIZE

Initially, you will probably conduct courses with only a few students under the direct supervision of a certified instructor. The recommended maximum number at first is 8. Once you have experience, the numbers may increase. The recommended minimum is 2; remember that learning is enhanced with social interaction. To limit the class size will require efficient scheduling. Students should be encouraged to register ahead of time as this helps to allocate appropriate resources. Even with good planning, additional students often arrive unannounced and flexibility will be required.

Remember that if there are too many students it is more difficult to provide quality service. A student who is forced to wait a long time, or to return again, may not wish to continue beyond the first jump. In the long run it may be advantageous for the dropzone to reschedule students in very large classes so that more personalised instruction is available.

How large a group can be effectively trained? This will depend on the instructor's experience and the available support. Larger classes:

- Require more training aids, more assistants, a longer course, and more dropzone support (e.g. gear, jump masters, and packers).
- Produce a more impersonal training environment, and increase the chance of losing a student in the crowd. Remember the legal implications of an inadequately trained student.
- May limit the opportunities for all students to demonstrate their skill development.

Larger classes may be a necessity and an SSI may be forced to expand the size beyond the ideal. In such situations it will be advantageous to try to split the class with another SSI.

5.2.2 COURSE LENGTH

It is generally felt that at least four hours of instruction are required, even in a one-on-one situation, and that in most cases no more than six hours is necessary. The bottom line is that all the students must be thoroughly prepared and must have demonstrated their ability prior to making the jump. Once these criteria are satisfied, the course can be considered complete.

On a one-day course held at a dropzone, the student registers, joins a group, takes the course, and, circumstances permitting, makes the first jump on the same day. Advantages are:

Advantages	Disadvantages
• All instruction is consolidated in a coherent unit. • The instructor may make use of real training aids (e.g., the airplane). • Points can be illustrated by commenting on actual jumps performed by others.	• Necessity of holding classes under less than ideal circumstances (e.g. lack of a proper teaching area, distractions, noise, and discomfort). • Possibility of jumps made hastily, near dark, in order to complete the course on the same day.

In a split course, there may a component that is held off the dropzone. For example, a tunnel PFF FJC will typically be split with the first part held at a tunnel. Other locations include campus, offices or other classroom setting. The course is then completed at the dropzone on the jump day.

Advantages	Disadvantages
• Possibility of staging larger classroom sessions, followed by smaller practical training sessions with several instructors on the weekend • Convenience and comfort of an environment suited to effective teaching and learning, Abundance of AV equipment to support the teaching and learning process. • The information has time to sink in. • Availability of more time at the dropzone for jumping. • The potential for a second jump on the same day.	• The instructor lacks actual training aids, and maybe even mock-ups, so that the student may be forced to visualize through films and diagrams what they can touch at the dropzone. • Due to the split nature of this scheme, the course usually takes more total time and can seem disjointed to some students. • Information transferred to working memory must be reviewed on the day of the jump.

5.2.3 Staff Support

Depending on class size, one or more assistants or demonstrators may often be necessary during all or part of the course. If possible, use JMs, PFFIs or Coaches, who will then become more familiar with the course and the students. These assistants must be briefed on what they should cover. If giving a demonstration of a skill, it must be performed correctly and you should check beforehand that the demonstrator can actually perform the task to your satisfaction. The assistants must also be committed to the students and not have any other obligations that may interfere with their ability to provide the professional level of attention needed by first jump students.

The Skydiving School Instructor must also ensure that additional staff is available to handle the students once they have completed ground training. This will include ground support staff and packers.

The minimum staff required is:

- A Pilot (commercial rating),
- An SSI to teach the ground school,
- A JM to dispatch the student, and
- A Ground Control Instructor to provide ground control.

5.3 THE FIRST JUMP COURSE: OBJECTIVES, CONTENT AND LESSON PLANS

5.3.1 INTRODUCTION

In general, the FJC should be given in the order that reflects the overall sequence of the actual jump:

1. Introduction
2. Overview
3. Equipment
4. Aircraft Procedures and Exits
5. Freefall
    a. Body Position and Count (IAD/SL)
    b. Freefall tasks (PFF)
6. Canopy Control
7. Landings
8. Unusual Situations

As a new SSI you will need to prepare and use a detailed set of lesson plans (much more detailed than the outlines presented here) and continue to use them until the art of conducting the First Jump Course has been mastered and a checklist can be used.

It is important that all instructors working at a school use the same terminology, and that courses are taught consistently.

To design the First Jump Course lesson plans, identify each task (observable activity) which the student may be required to perform. Then ensure that:

- The student is prepared to respond to each task
- The ability to handle the task is assessed

Emphasis must be placed on those tasks which are performed without the direct supervision of an instructor: i.e. during the exit to landing phases. The key is to recognize that although the First Jump Course is a series of activities, there are really only two basic ideas:

1. The First Jump Course is a set of procedures on how to do certain things, and
2. What to do if this or that happens – involving an assessment followed by a reaction that involves the completion of the appropriate procedure.

Disclaimer: The following is a brief overview of each section of the First Jump Course. The sections are not intended to be lesson plans nor do they constitute all the information required in a complete FJC. They do outline major content areas and suggest some strategies to help you in teaching specific information and skills.
For more details on writing lesson plans refer to section 4.2.6.

5.3.2 Introduction to the First Jump Course

Time: 20 minutes

Training Aids: Black/white boards, handouts, photographs, and forms.

Learning Outcomes: Students should be able to:

1. Identify the instructor's relevant experience, various aspects of the sport, the sporting organisations, the dropzone, and other members of the class.
2. Identify the sequence of the day's events.

Presentation:

1. Introduce yourself and all instructors who will be involved. Focus on relevant qualifications and experiences.
2. Have the students introduce themselves.
3. Outline the day's events, breaks, expected time of the first jump, etc.
4. Advise the students about the physical requirements and risks involved.
5. Give a brief overview of CSPA and the provincial organisations.
6. Outline student progression and the various skydiving disciplines and emphasize what can be gained from the sport.
7. Mention any specific dropzone rules (e.g. smoking restrictions).
8. Complete the forms (waivers, medical disclaimers, affiliation) and collect money.

Sample Questions:

1. If you have friends coming out to watch, when would be a good time for them to see you jump?
2. Is it okay to have a beer during the lunch break? Why?

Suggestions:

1. Here is a good opportunity to discuss the expectations and obligations.
2. The students must understand and acknowledge the risk in writing.
3. In the introductions, information provided by the students may include:
    - why they are there
    - other sports they participate in
    - a little about themselves
4. How do you remember the students' names?
    - use name tags
    - write the names on the board or in a seating plan

- at the beginning, get them to use their names when asking questions (Press Conference format)

5. Adult learning environment. You should encourage them to ask questions at all times. Explain that in this course they will not be treated like junior high school students.
6. It is recommended that course administration (course form completion and payment) be handled by someone other than the SSI.

5.3.3 Overview of the First Jump Course

Time: 10 minutes

Training Aids: Black/white boards, parachute gear, model jump plane, video and photos.

Learning Outcome: Students should be able to:

1. Describe a typical first jump.

Presentation:

1. Review, in order, what happens during the following parts of the jump:
    - preparation
    - gearing-up
    - safety checks
    - loading
    - climb to altitude
    - dropzone observation
    - exit
    - arch / freefall
    - canopy identification
    - canopy steering
    - landing
    - debrief

2. You should also state that the "what if" situations will be dealt with towards the end of the course (i.e. Unusual Situations).

Sample Questions:

1. What is the sequence of a normal first jump?
2. What part of the jump will you need to perform without assistance?

Suggestions:

1. This section is mostly descriptive, therefore suitable for lecturing.
2. Using video of good first jumps will help to motivate the students.
3. Always use positive language. They will enjoy the course, the jump, and have a good time today.

5.3.4 EQUIPMENT FAMILIARIZATION

Time: 20 minutes

Training Aids: Black/white boards, demonstrators, suspended harness, a complete set of gear, helmet, jump suit, goggles, and altimeter.

Learning Outcomes: Students should be able to:

1. Outline the names, location, and purpose of the important components.
2. Describe the opening sequence.
3. Describe how to pick up a canopy after the jump.

Presentation:

1. Introduction. How do you sell the importance of this section? Tell them that equipment familiarisation really helps to build self-confidence. Although there is a lot of information in this section, you are only expecting them to remember the ”must know” information.
2. Show them proper donning of the equipment.
3. Illustrate the deployment sequence starting with a packed system.
4. Identify the major components, especially the cutaway handle, reserve handle, and steering toggles, and describe how they work.
5. Demonstrate how to pick up a canopy after a jump.
6. Show and discuss the accessories they will be using.

Sample Questions:

1. What causes the main, or reserve, to be pulled into the air?
2. How many steering toggles are there? Where are they found?
3. Which handle disconnects the main parachute from the harness? Where is it located?
4. Which handle activates the reserve? Where is it located?
5. How you will pick up a canopy after landing?

Suggestions:

1. Skill presentations: Get the students to stand up and gather around the equipment. Ensure that they can all see.
2. Confirm learning in stages. Evaluate at the end and during the session.
3. Show the deployment by simulating the whole opening sequence.
4. Use a demonstrator to wear the equipment for the deployment sequence. A student wearing it will not see what is happening behind them.
5. Let the students wear the gear and handle it if they want.
6. You can name as many of the parts as you like. As there is a lot of interesting information, you will need to stress the ”must know” information. In the oral review at the end, only deal with this information.
7. There is no need to over-emphasise the cutaway system, RSL, and reserve deployment this early in the course.
8. Don't fall into the trap of teaching the other parts of the course in this section: e.g. there is a difference between identifying the reserve handle and discussing how it is pulled. Defer the questions on the use of the components until the appropriate parts of the course.

5.3.5 AIRCRAFT PROCEDURE AND EXITS

Time: 30 minutes

Training Aids: Actual aircraft, aircraft mock-up, and demonstrator.

Learning Outcomes: Students should be able to:

1. Outline safety routines with respect to aircraft.
2. State the commands used by the Jump Master.
3. Describe and demonstrate how to climb out of the aircraft and set up for the arch and count.

Presentation:

1. Introduction: This section is easy to sell – it provides them with information that will keep them safe around and in airplanes and also tells them how to clear the aircraft, get into the proper arch, and not interfere with the parachute deployment.
2. Discuss safety precautions around the aircraft.
3. Outline the procedures for takeoff and climb to altitude. Mention the dropzone orientation, jump altitude, and separate passes.
4. Tell them that it is noisy in the plane and sometimes hard to communicate so that instructions are often backed up with hand signals.
5. PPAF the exit commands and climb out procedures.
6. Students must practice and demonstrate on a mock-up or the actual aircraft.
7. When demonstrating the exit, it is useful to have an assistant act as the instructor(s) so that the students can see the whole picture.

Sample Questions:

1. What are the safety procedures used around an aircraft?
2. What will you do when told to "Get Ready" or “climb out”?
3. What will you do when told to "Go"?
4. What are the cue words in the complete climb out procedure?

Suggestions:

1. Remember that Sections 4 and 5 of the First Jump Course can be reversed.
2. This is definitely a section which involves PPAF and the Whole-Part-Whole process. Demonstrate the climb out as a whole, then discuss the feet, hands, and body movements as parts, and finally put it all together. The students will apply using Part-Whole.
3. Ensure that everyone can see as the plane or mock-up sides may hide you from the students.
4. Here is your first opportunity to really get the students involved. Up to this point it has been mostly listen or look. There has been little opportunity for Application and Feedback from PPAF.
5. Use the actual aircraft or a mock-up.
6. Use of cue words: Have the students memorize key words such as “Left Hand, Left Leg,

etc." to tell them of the sequence and to remind them what to do at each stage.
7. This is a drill practice and should be done until it is right.
8. Tell the students they will be asked to remain still and low on takeoff. If the weight is too far forward on takeoff this can cause a control problem in a Cessna in the event of an engine problem.

5.3.6 Body Position and Count

Time: 20 minutes

Training Aids: Demonstrator, video, diagrams, freefall model.

Learning Outcomes: Students should be able to:
1. Demonstrate the basic arch position and count sequence.
2. Explain the reasons behind arching and counting out loud.

Presentation:
1. Introduction: In the selling section, stress that this is crucial for a good jump. It facilitates the parachute to deployment.
2. Mention the importance of symmetry and explain how the symmetrical body acts in the airflow.
3. Bio-mechanical principles: Outline the stability and balance concepts.
4. Remember to PPAF the arch and count.

Sample Questions:
1. Why do we arch?
2. Why is it important to look up at the aircraft?
3. What is the purpose of counting? Why do you count out loud?

Suggestions:
1. An artist's doll is an excellent aid for the initial body position discussion.
2. Adult learning: This is a good time to use some adult learning strategies by connecting new information to previous experiences. Which way is airflow (hand out of car window)? What is the advantage of a stable body position? How do you get stability in other sports?
3. Shaping: The arch and count should be shaped. Go from the general body position to specifics about the extremities.
4. Chaining: You can chain together the climb out, exit, arch, and count.
5. To get an idea of their body angle in the air, have them lean against you.
6. Use the bio-mechanical principles: Big to small. There are four main points: hips forward, arms back, feet apart, and head back.
7. Try practice arches while lying flat on ground, but don't overdo it.
8. Use autonomous and motor learning practice strategies.
9. Memory Aids: Where the head goes the body follows, so keep your head back and eyes open.
10. Learning Styles: Students will have different learning styles. It is important to use the

senses of sight, hearing, and touch in your presentations. Back up what you say with written notes on the black board, diagrams, videos, and for the tactile learner hands on activities.

5.3.7 FREEFALL

Time: 60 minutes

Pease refer to Module 2 of the *PFFI Reference Manual* for suggested sequence of teaching freefall tasks. There are a number of tasks in this section which should be taught separately and then chained.

Training Aids: Demonstrator(s), video, diagrams, freefall model, practice pilot chute, practice altimeter.

Learning Outcomes: Students should be able to:

1. Demonstrate the arch position and circle of awareness
2. Demonstrate correct response to signals
3. Demonstrate practice pulls
4. Demonstrate the actual pull
5. Explain the correct responses to freefall unusual situations

Presentation: Refer to the PFFI manual for specifics. The parts should be introduced separately (body position, circle of awareness, practice pulls, reading an altimeter, pull), then taught, then chained one at a time.

Sample Questions:

1. Why do we arch?
4. Why is it important to look up at the aircraft on exit?
5. How many seconds does it take to fall 1,000'?
6. What should you do if you find yourself alone in freefall?
7. What is the response to ___ signal?

Suggestions:

1. Teach and practice each individual tasks, then chain: e.g. teach and practice circle of awareness, then practice pulls, then circle of awareness and practice pulls. Then teach and practice the arch. Put all three together. Teach and practice the pull. Practice the whole sequence.
2. Learn the sequence of tasks standing up first. Once a student is lying down and arching, they will quickly get tired.
3. Provide some physical support for the students while arching. A creeper is not ideal. Pillows or a curved, padded surface work well.
4. Practice the sequence of tasks without worrying about how long it's taking at first. Add a stopwatch/practice altimeter once the sequence is memorized.
5. For one or two repetitions at most, have the students practice the sequence and actual

pull lying down with a student rig on.
6. See comments above on how to teach the arch.
7. Use autonomous and motor learning practice strategies.
8. Final practices must be in real time.

5.3.8 CANOPY CONTROL

Time: 40 minutes

Training Aids: Black/white boards, diagrams, photos of student canopy in flight, air photos of dropzone, going to the actual landing area, videos, toy parachute, and/or suspended harness.

Learning Outcomes: Students should be able to:

1. Canopy Analysis
    - Identify a properly open canopy.
    - Describe the canopy analysis procedure and flight control check.
    - Explain and demonstrate how to deal with the minor "correctable" situations such as line twists, slider hang-up, built in turns, collapsed end cells, and lost toggles.

2. Canopy Control
    - Describe the layout of the dropzone from the air.
    - Outline the performance characteristics of their canopy and how the wind will influence it.
    - Describe the process of steering a canopy to land on the dropzone.
    - Explain why it is important to face into the wind on landing.
    - Describe the ground control and back-up systems.
    - Describe what to do if they cannot hear or find the ground control system. Will not allow them to make a jump if the instructor feels they are not fully prepared and capable of completing the jump safely and successfully.

Presentation:

1. Introduction: Sell this section through “Once you have checked that you have a good canopy, the jump is not over”. Be positive; explain that it is more enjoyable to land on the dropzone, rather than stressing the danger of a landing off the dropzone.

2. Canopy Analysis
    - Describe the canopy appearance via video or pictures.
    - Explain what to look for in a properly opened canopy and how to conduct the flight control check.
    - Describe minor (correctable) situations and appropriate solutions to include: line twists, slider hang-up, built in turns, collapsed end-cells, and lost toggles.

3. Canopy Control
    - Review the dropzone layout: landmarks, hazards, and wind indicators.
    - Explain the glide and flat turn characteristics of the canopy.
    - Discuss canopy and wind interactions (into, with, and cross wind) and the consequences for control and landing.
    - Demonstrate how to turn using the suspended harness.
    - Describe the ground control system (designated point, radio, arrow, arm panel combinations).
    - Demonstrate, using actual dialogue examples, the ground control systems. Have the students walk through typical descent scenarios.

Sample Questions:

1. Canopy Analysis
    - How would you describe the appearance of a properly opened canopy?
    - What are the questions you would ask yourself and the procedures you would follow to perform a canopy control check?
    - What you would do in the following opening scenario…?

2. Canopy Control
    - What do the following terms mean: risers, steering toggles, lines, stabilisers, brakes, stall, wind line, and wind sock?
    - What are three ways to determine the wind direction?
    - Which way do you face for landing? Why?
    - How do you turn the canopy if the steering toggles do not work?
    - What do you do if you cannot understand or hear the radio controller?
    - What do you do if you cannot see the ground control arrow/designated point/ other secondary system?

Suggestions:

1. The students should be given a small set of questions (chunking effect) that they must ask about the canopy to decide if it is good (controllable) canopy: e.g. Is it rectangular? Are the lines straight? etc.
2. Identify the "correctable" situations that can be dealt with using pictures or video as well as descriptions. Demonstrate the appropriate responses.
3. Separate the canopy control section into:
    - Some very basic theory on how a canopy flies and turns
    - The mechanics of turning
    - The pattern to fly
    - Use consistent and simple terminology in this section
4. Diagrams on the board can sometimes be very confusing. It helps to state whether you are drawing an overhead or side view.
5. Good training aids in this section include a suspended harness, the arrow, a picture of the dropzone from the air, the observation of other jumpers under canopy from the ground.

6. When practicing, make the students move their arms, turn their bodies appropriately, and walk across the ground to simulate motion. Use the same language as the Ground Control Instructor will use.
7. Canopy analysis and control can be practiced in the suspended harness.
8. Take the students to see others under canopy, and quiz them on what is happening.
9. Remember that malfunctions are dealt with later.

5.3.9 LANDINGS

Time: 30 minutes

Training Aids: Platform and soft landing area, demonstrator.

Learning Outcomes: Students should be able to:

1. Demonstrate the landing position.
2. Demonstrate the flare procedure.
3. Demonstrate a parachute landing fall (PLF) for the "what if" situations.
4. Explain what to do if being dragged.

Presentation:

1. Introduction: The selling point is that injuries can occur on landing. This information and skills will help to prevent it from happening to them.
2. Discuss such aspects as:
    - Where to look
    - The final approach
    - Body position on landing
    - The flared landing
    - How to recover from a high stall
    - Landing
    - Radio commands
3. Discuss leg position, muscle tension, and angle to the wind.
4. PPAF the landing approach from final to landing.
5. Discuss being dragged in winds and how to deal with this.

Sample Questions:

1. If you were landing right now, which way would you face?
2. What are your body position and actions just prior to landing?
3. How would you perform the landing flare?
4. How would you recover from a landing stall?
5. What would you do if you fell over on landing and were being dragged?
6. How do you do a PLF?

Suggestions:

1. Demonstrate the flare technique. Emphasize that they should hold down the toggles until they have landed.
2. You may use a demonstrator for the PLF, as it is hard to critique yourself. Although there is less emphasis on the PLF with student square canopies, some students still use round reserves, or they could land their square down wind.
3. The teaching strategy is definitely Whole-Part-Whole.
4. Shaping: Start by walking them through the roll (hold arms for support) then move to an increased height.
5. Cue words: Have cue words or phrases so that the student is instantly reminded of the landing body position: e.g. feet and knees together, look at the horizon, etc.

5.3.10 UNUSUAL SITUATIONS

Time: 1 to 2 hours

Training Aids: Suspended harness or training vests, parachute gear, and video or photos of malfunctions.

Learning Outcomes: Students should be able to:

1. Aircraft
    - Demonstrate the crash landing positions.
    - State how they would react to various instructions given to them by the instructor in the event of an aircraft emergency.
    - State what they would do in the event of various accidental deployments.
2. Canopy
    - Recognise canopy malfunctions.
    - Demonstrate the correct assessment and action procedures for various canopy malfunctions.
3. Landing
    - State the location of major dropzone hazards
    - Demonstrate appropriate obstacle avoidance and landing procedures.

Presentation: It doesn't get much more important than this. Remember to stress that although emergencies are neither normal nor frequent, they do occur.

1. Aircraft
    - Mention possible aircraft emergencies and actions to include aborted takeoff, forced landings, emergency exits using main and reserve.
    - Accidental deployments in the aircraft, door open and closed, and during climb out.
2. Canopy
    - Describe possible types of high and low speed malfunctions.
    - Demonstrate reserve deployment procedures.

- The cue words are: Assess-Think-React.
- Describe reserve steering and landing procedures.

3. Landing
    - Discuss the hazards and their locations.
    - Demonstrate the procedures for different hazards.
    - The cue words are: Avoid-Prepare-Protect.
    - Discuss an overall avoidance procedure: look away, steer away, land away.

Sample Questions:

1. Aircraft
    - What would you do if the instructor says "This is an emergency! Use your reserve. Go!"?
2. Canopy
    - On check, you look up and see that the canopy is extended but not inflating. Describe and show me what you would do?
    - How do you steer your reserve canopy?
    - What you would do in the following scenarios…?
3. Landing
    - What is the most likely hazard on this dropzone?
    - How do you avoid it?
    - What do you do if you cannot avoid it?

Suggestions:

1. Autonomous Learning: In this section the learning must be autonomous to deal with actions under stress.
2. Emphasize that the process involves Assess-Think-React.
3. Recency Effect: We keep this information until the end of the course as the last learned is the first remembered.
4. All students must go through simulated exercises and demonstrate the correct procedures. Having the students just tell you what they would do is not good enough for parachute malfunctions. Even watching others do it is not effective enough and does not satisfy the PPAF criteria of learning.
5. Use a suspended harness or training vests with appropriate handles to pull.
6. Intensity Effect: In the simulations, put in information to all the senses. This is what you see, hear, or feel. Shake or move the students around and make noise.
7. For high-speed malfunctions, recognition is simpler but the decision making and reaction must be faster.
8. For low-speed malfunctions the recognition is harder but there is a little more time.
9. It is not necessary for students to learn the names of the different types of malfunctions. They must be able to differentiate a correct parachute from a malfunctioning parachute.
10. Stress that cutaway decisions should be made immediately, no later than the time to perform a canopy check.
11. Remember to practice the normal scenario also as the student needs to be able to identify when to keep their canopy also. Include line twists, collapsed end cells etc.

12. To keep the focus of students when they are not demonstrating or being evaluated, have them make positive comments on the performance of others.
13. If the students are arranged in a circle, have them turn outwards after a few practices. This prevents them from copying the actions of others under further simulated situations.
14. Mix up the high, low, normal, and correctable scenarios.
15. It is suggested to end with a normal scenario.
16. Remind the student that you will not be there to help them once they have left the plane. They must deal with these situations.
17. Practice until perfect.
18. For obstacles stress avoidance so that they do not have to use the obstacle landing procedure.
19. Remember to deal with reserve steering and landing.
20. Those dropzones that are using dual squares must develop simple "decision trees" for their students in the event of two canopies out at once.
21. Remember that reactions to unusual situations change between square and round parachutes.

5.4 POST COURSE ADMINISTRATION

5.4.1 BEFORE JUMPING

Before the jump, students should be asked to show their understanding through a written exam or signed checklist. An exam should be marked and any wrong answers discussed by the instructor and corrected by the student before they are allowed to jump. This is excellent risk management as it helps to show that you have covered all the key points. The student is acknowledging that they have been taught these aspects and they understand what they have to do in all aspects of the first jump.

5.4.2 POST JUMPING

After the first jump is completed, you still have a few tasks that must be completed to ensure that the experience is as positive as possible for the student. The JM is responsible for and will lead the debrief. The SSI can help out by supplementing and helping while the students are waiting or post debrief. The SSI should follow up with the students after they have made their jump, in order to get their feedback about the jump. If all students mention similar issues, the information can be used in the structuring of the first jump course (or other course), to address these issues.

THE DEBRIEF

First jump students frequently have difficulty remembering anything from “Go!” until the opening. If this happens, they should be assured that this is a typical situation that will cure itself, likely on the next jump. You can stress that keeping sight of the instructor and the aircraft helps. Keep the debriefing upbeat. The student has just experienced one of the most incredible events in their lives. Your positive comments will add to the experience. Ask them about how they felt in the plane, under canopy, and on landing as well as between letting go and the opening. (PFF first jump students will generally remember portions of the freefall.)

First Jump Records

It is important to record the performance on the first jump. Most first jump students will not have a logbook and it is recommended that the dropzone provides a mini-logbook or record page for the first few jumps. Provide comments from all areas of the skills grid. The students should feel that you want them to return and are interested in recording important information for subsequent instructors' reference. This act alone may cause them to feel like trying our sport at least once more, and demonstrates the professionalism of the sport.

Jump Certificate

Ensure that a first jump certificate is properly prepared. You or the JM will be expected to sign and date the certificate; someone else may type or write the name on it.

Socialisation

In addition to skydiving, you can help new arrivals to become assimilated into the social activities at the dropzone. Make sure that they are invited to stay around at the end of the day. Make a public announcement about their accomplishment and introduce them to the experienced jumpers. Studies have shown that the quality of the social life at the dropzone is just as important to retention as the skydive itself.

5.5 RETRAINING OR REFUND?

In the First Jump Course there will be some students who should not be allowed to jump. The training will have identified those students who are not physically nor mentally prepared for the experience. During the course you may be able to spend time with individuals in retraining or you may have to suggest to them that they come back next week and go through the training again. It is a tough decision to tell a student that they may not jump, but never put a student into a situation where they may not be able to cope.

The list of reasons for you to make this decision is regrettably long but some of them include the inability to:

- Deal with malfunction scenarios
- Perform such physical activities as climb out, arch, and count
- Take the course seriously and listen to what you had to say
- Modify their behaviour to conform to your expectations
- Demonstrate awareness of canopy control and landing technique
- Show any level of stress management control

It is fairly easy to suggest to a student that they are not ready to jump on their own and that a tandem jump may be just the thing for them. If retraining does not help or tandem is not available, then it is a good business move to give some form of refund, bearing in mind that there are costs associated with the ground school and the skydiving operation.

Always address a student privately when discussing the reasons they will not be allowed to jump. If in doubt, involve a senior instructor.

5.6 PHYSIOLOGICAL

Just about anyone who has a reasonable degree of physical health can take and complete the ground portion of the FJC. But as a Skydiving School Instructor, you will also have to assess whether or not a person is physically capable of making the jump.

Jumping does take a certain amount of strength, endurance, and flexibility. A student must be able to do such things as bend their body into the arch position, kneel for an extended period of time, climb out of the aircraft with gear weighing up to 15 kg (30 lbs), either hang from the strut or otherwise set themselves up in the door, steer the canopy, and land. Some reasons a student may not be able to jump:

- Too heavy or large for the gear
- Too small for the gear, to the point where the person might fall out of the harness
- Really out of physical shape
- Totally uncoordinated
- Dizziness due to lack of nutrition intake or dehydration
- Medication which may make them vulnerable to passing out
- Conditions noted in the dropzone's medical waiver

It is important to identify individuals who are on medication and determine whether or not this may have an effect on their performance. Typical medications such as antihistamines along with cold and pain medications (headaches) may potentially interfere with performance by causing nausea or dizziness at higher altitudes. If a student has taken any medication in the last 8 hours, the JM must be made aware of the situation.

Not all physical limitations would prevent the student from jumping. Some potential challenges and possible solutions include:

- Difficulty in kneeling for extended periods of time. You can sit them behind the pilot's seat and dispatch them last.
- An inability to climb out of the aircraft. Have the person get both feet out of the aircraft before they try to grab for the strut.
- Smaller people may have difficulty climbing out due to the weight of the gear and the windblast.
- Inability to hang from the strut for an extended period of time due to low upper arm strength. This may result in letting go prematurely. Teach the students to gently ease them into the flying position and not to dive for the strut.
- If a person is hard of hearing they may need a second radio and additional canopy training plus evaluation of their understanding of the dropzone's secondary method of canopy control.

Generally, people have adequate arm strength to be able to control a canopy. However, if the Ground Control Instructor makes the student do numerous turns, this may tire out the student's arms and they may not be able to flare properly. The Ground Control Instructor should be aware of this and let the student enjoy the view as well as help them to steer back to the target.

Landing is the most common place for injuries in skydiving. To minimize this risk, have them prepare to land at about 200'. That is feet and knees together, legs slightly bent, looking forward and not down. Get them to "stand up" in the harness so that their legs are beneath them.

If they cannot perform on the ground, they will likely not perform in the air.

The overriding principle is that if your student is unable to perform in any of the above areas, try to find a viable option that will still permit that student to make a safe skydive. However, in the situations where this cannot be done, do not jeopardize safety. The student should be told either to do a tandem jump or that they cannot jump.

5.7 PSYCHOLOGICAL

The mind has a very powerful influence on the performance of a skydiver. Students will be under considerable stress and as a Skydiving School Instructor it is necessary to:

- Understand the origins of the stress
- Know how to identify it
- Know how to help the student control it

5.7.1 STRESS

The definition of stress is an emotional or intellectual strain or tension. In the first jump situation, fear of the unknown and a lack of perceived control over the activity bring about stress. Students are entering a very unfamiliar environment. They also have a number of new tasks to perform, which may lead to performance anxiety.

Common thoughts are:

- Will I live?
- Will I be able to breathe?
- Will my parachute open?
- Will I be able to reach the steering toggles?
- What if I have a malfunction?
- Will I remember how to do all the tasks?

Thoughts such as these, if left unanswered, induce great anxiety and stress.

As a Skydiving School Instructor you must be able to identify stress in your students. Students under stress may:

- Be edgy and find it difficult to sit still
- Be sweaty and have a pale complexion and glazed eyes
- Talk excessively and be breathing rapidly
- Be silent and withdrawn
- Have trouble breathing and show a lack of coordination and/or strength

- Find it hard to concentrate and be inattentive
- Be unable to remember information they must know
- Exhibit speech that is different or incoherent
- Be unable to perform important physical tasks
- Have body pain in areas such as the stomach, back, neck or head

Stress does, however, have its positive side. Without it we would be very relaxed and slow to assess and react to situations. The term often associated with “useful” stress is arousal level. If we are too calm, thinking processes and reaction times are too slow. If, the level is too high, then decision making and action become impossible and people tend to freeze.

Individuals perform at their best if they are at their optimum arousal level.

Factors that help to create the optimal arousal level in the student during the course include:

- Confidence: The student must be confident in the training and in their ability to deal with all eventualities.
- Role Model: You, as the instructor, should be calm and in control at all times. Acting as a role model will help the students reduce their stress.
- Training: Provide quality training, as "Knowledge Dispels Fear".
- Focus: Keep the course short and simple. Emphasize the “must know” material and use good training aids.
- Feedback: Make sure that the student feels knowledgeable. Confirm this knowledge through periodic and timely review.
- Muscle Memory: Ensure that a student's reflexes are autonomous when you say "GO!" or describe an emergency situation.
- Ensure that final rehearsals are of the skydive going well.

5.7.2 Stress Identification and Management

For the first jump student, stress management is crucial. There are many strategies that are available to the Skydiving School Instructor. Some involve the facilities and course; others rely on the personal interaction of the instructor and the student or simple techniques that can be taught in a very short time.

As a Skydiving School Instructor, you must be able to direct a student to use relaxation techniques – sometimes without them even knowing it. Students should be given the opportunity to relax both on the ground and in the plane. They must be given some time to think about their jump, to confirm their own knowledge, and to feel comfortable with what they are about to do. However, be aware that too long of a wait before the jump can have obvious negative effects.

During the First Jump Course you could have a discussion on how to cope with the stress. Key ideas are to:

- Focus on the actions that have to be performed.
- Students should be encouraged to have a clear picture of what will be done so this can be mentally reviewed.
- They should see the jump as a series of units
- To help remember what to do, they should be taught key points or cue words.

Simply put, they should try to view the jump as an experienced person would – that is, they should know what they are going to do (have a plan), be confident in their training and in their ability to perform well. They should accept that there is some risk, and that they can deal with it.
Let the first jump students watch the jumps of typical students. Seeing the safe landings and elation on the faces of jumpers as they walk back to the packing area can be very beneficial. Remember to separate this activity from any instruction, as the students will be paying attention to the jumpers and not you.

Jump Masters or PFF Instructors for the first jump student should be introduced to the students during the course and not just at the end. It is recommended that the JM/PFFI come to the course during climb outs and participate in at least the last run through in the course, so that the participants know the same commands etc. will be used. It is considered a requirement, that the student complete their final full dress rehearsal with the JM/PFFI that will dispatch them / jump with them. This situation is great for stress control as when the jump happens they will be dealing with a familiar person.

In any course, the students that are predicted to be the most nervous should probably be dispatched by the most experienced JM/PFFI. For the first jump student, an experienced and competent ground controller who is calm over the radio is also advisable.

The dropzone procedures and facilities can also aid in stress reduction by increasing the student's comfort level. Providing good facilities and opportunities to satisfy student needs for even small things like water will also help.

Having a professional approach and appearance inspires confidence and will often cause students to relax and pay more attention to the material they must know. Skydiving has a lot of competition from other sports for attention. Uphold the values of CSPA and ensure that personal boundaries are not crossed.

5.8 MANAGING ATTITUDES

As a Skydiving School Instructor, you have a responsibility to be proactive and help in developing positive and safe attitudes amongst the students. Positive attitudes develop when students:

- are treated as individuals
- are progressed at the correct pace

- have fun when they jump
- are shown good role models

Your position as a role model cannot be overemphasized.

The key point to turning attitudes around is education and as a Skydiving School Instructor you are well suited to this task. An excellent avenue for the development of good attitudes is when socializing after jumping. Here you can be supportive of positive aspects and explain and discuss why other behaviors are dangerous and counterproductive.

5.9 RISK AWARENESS & MANAGEMENT

An SSI can minimize the risks (legal and otherwise) involved in instructing students by ensuring:

Identified Risks	**A dropzone protects by providing:**	**An SSI should:**
Facilities	Unobstructed student landing area	Identify in FJC training
	Spectator control and signs	Know because you may be involved
	Safety Posters	Show students as emphasis of material taught
	Separate boarding area	Identify in FJC training
	Theft protection	Help students protect valuables
	Training Aids	Ensure the training aids used are safe
Equipment	Reserves in date	If in doubt check with manifest or rigger
	Records of repacks and servicing	Know where they are kept
	First Aid	Know where it is and its contents
Staff	Appropriate ratings	Be certified and meet ratings currency requirements
	Regular Meetings	Attend
	Yearly refresher training	Participate
	Safety Officer in overall control	Ask SO for clarification of any safety points
	Code of Conduct	Be a role model. Focus on the student. Provide equal opportunity to all students.
	Substance Abuse Policy	Not violate
Records	Legal Waiver	Ensure completeness and accuracy
	Medical Declaration	Ensure completeness and accuracy
	FJC Quiz	Checked correct to 100% and signed by student
	EAP	Be aware of contents and role
	Manifest Logs	Record of First Jump date
	Lesson Plans	Teach from a Lesson Plan, keep up to date
	AIM Reports	Assist as necessary. Not likely to be the initiator.
	CSPA Manuals	Keep up to date

5.10 AIMS, INSURANCE, AND THE DEFENCE FUND

CSPA provides an insurance policy for all its Registered Participants and Members who elect to purchase it. The coverage is limited to 3rd party bodily injury and property damage legal liability arising out of the act of parachuting only. It provides $3,000,000 per occurrence. There are several conditions that apply and are stated in PIM 1 and PIM 5. Of the many conditions, an absolute requirement is the prompt reporting of any incident or occurrence through an AIM report: Accident Incident Malfunction.

Accident: Any occurrence resulting in injury requiring medical attention.
Incident: Any occurrence which could have resulted in a situation leading to injury or fatality. (For example, any unusual situation, such as landing off or in a tree, aircraft emergency landing.)
Malfunction: Any partial or complete failure of parachuting equipment while requires the initiation of emergency procedures.

An AIM report must be filed within 10 days for which a claim against the policy may result. CSPA must be informed immediately in the event of a fatality or serious accident. A delay or failure to report such an incident or occurrence may, at the insurance carrier's discretion, result in loss of coverage. A Defense Fund is maintained by CSPA for all Registered Participants and Members who elect to purchase it.

5.11 LEGAL PROCESS

If an incident is serious there can be potential for criminal charges or a civil lawsuit. The following terms are provided to help understand the legal process:

INQUIRY

This is conducted by the coroner. It always happens in the case of a death, regardless of skydiving. It is fact finding in nature with assistance provided by the police. It has the authority to confiscate gear.

INQUEST

This is directed by the coroner. It is a full hearing and "court like" with a Judge presiding. It has the power to call witnesses and make recommendations to prevent a similar re– occurrence in the future. These recommendations may be made to the public and/or the provincial government.

CRIMINAL CHARGES

Filed by the Crown where the police suspect gross wrongdoing has occurred.

CIVIL LAWSUIT

This type of lawsuit is seeking damages that are actual, or due to loss of income, or pain and suffering. A Statement of Claim is filed by the aggrieved. If you are named, you will be served. You will provide a Statement of Defence explaining your side. Following will be an Examination for Discovery where both parties meet and determine if the case should go to trial. The trial will lead to a judgment.

NEGLIGENCE

Failure to do what a reasonable person would do in a given situation.

SECTION 6: ATHLETE DEVELOPMENT

6.1 INTRODUCTION

In this course, great emphasis has been placed on the FJC and student. However, the role of a Skydiving School Instructor is much more encompassing. As skydiving athletes progress through the sport, they require close guidance by experienced instructors who are not just able to transmit the technical information but can assist with progression and the attainment of Certificates of Proficiency.

6.2 PROGRESSION

As a Skydiving School Instructor, you may be involved in the progression of student parachutists. It is important to realise that as an experienced instructor you can “wear more than one hat". You are also a Coach 1 and may be a Ground Control Instructor or Jump Master, if so rated. You should use the correct approach depending on the student's level on the skills grid. Know that the progression is designed from simple to complex and that later skills often build on earlier ones.

The system is also set up so that progression through either the Gradual Freefall (GFF) or Progressive Freefall (PFF) program will graduate students of similar ability. As a Skydiving School Instructor you will probably be asked for your opinion of the advantages and disadvantages of both systems. Remain objective, as they both have their pluses and minuses. Factors such as weather, staffing, specific dropzone resources, money, etc. will influence the student's decision and your advice. In the end the skydiver will be equally competent.

6.2.1 GRADUAL FREEFALL (GFF)

Level	Tasks	Minimum Standards
Pre– Level	2 x IAD	Correct Arch Spread Head up Eye Contact
Pre– Level	2 x IAD W/TPCT	Correct TPCT sequence Identifies hand signal from JM First freefall briefing after jump
L1 (Stage 1)	1 X 3 SECOND DELAY FIRST FREEFALL	Correct Arch Spread Awareness Real pilot chute toss Minor heading drift OK
L2 (Stage 1)	1 X 5 SECOND DELAY	SAME AS PREVIOUS

L3 (Stage 2)	1 X 10 SECOND DELAY	On heading Stop turn if one starts Move to box position > 4 seconds
L4 (Stage 2)	2 X 15 SECOND DELAY	Observation circle Activation @ 3,500' Prove terminal velocity Altitude awareness with altimeter & task maintain heading
L5 (Stage 3)	2 X 20 SECOND DELAY	Start a turn (90°) and stop Regular altimeter checks Hand wave off @ 4,000' and deploy @3,500' Altitude awareness Smooth freefall
L5 (Stage 4)	2 X > 30 SECOND DELAY (ALTITUDE)	180°, 360°, Figure eight turns

6.2.2 PROGRESSIVE FREEFALL (PFF)

The Progressive Freefall (PFF) program allows the following for the student:

- Immediate feedback during the skydive from either of the PFF Instructors,
- Minimizes sensory overload by having approximately 35 seconds to complete assigned tasks, and therefore
- Increased time to relax and observe.

Prerequisites

Prior to doing a Level 1 PFF jump, a student must have completed at least one other jump (IAD or Tandem) or 20 minutes of structured tunnel flying time supervised by a CSPA instructor.

The *minimum* standards for any PFF program are:

- Minimum of five levels
- Student has made one jump (IAD, static line or tandem), or has 20 minutes of tunnel under the supervision of a trained PFFI, before starting the PFF program
- Minimum exit altitude of 8,500' AGL
- Minimum intended opening altitude of 4,000' AGL
- The equipment must use the BOC deployment system.

The objective of the PFF program is to teach the student all areas of the skills grid in a highly intensive program. The minimum program standards require at least 5 jumps that cover all skills required on the "Student Progression to Solo" section of the Basic Skills Grid. For more information, see the *PFFI Reference Manual.*

Progression through the program is done in sequence. Progression with some tailoring is allowed to benefit the student.

Level	Instructors	Tasks
1	2:1	• Body Position • Altitude Awareness • Practice Pulls • Main Activation • Canopy Control • Spotting – observed
2	2:1	• Heading control • Spotting – assisted • Canopy Control
3	2:1 recommended	• 90º turns/body awareness • Spotting – unassisted • Canopy Control
4	1:1	• Gear up, pin checks • Pilot briefing • Spotting – unassisted • Released 180º and 360º turns
5	1:1	• Solo Checkout Jump • All prep and in-flight • performed on own • 360º figure 8 turns, altitude awareness, good main activation • Good canopy control

6.2.3 Tandem Accelerated Freefall (TAFF)

The Tandem Accelerated Freefall (TAFF) program provides a means of teaching a student from the first jump through to Solo certification with the use of tandem and PFF.

The program utilizes one instructor per student throughout the program, which entails four tandem jumps and four PFF 1:1 jumps. In addition, the last Solo jump (a Clear and Pull) is a vital jump for student skydivers to experience, especially if they have not jumped from that low altitude before. It provides them with the opportunity to spot and builds confidence in their abilities.

The program outlined here provides almost all the material required for the Solo Certificate. Instructors should ensure that they cover all the material for their student to successfully complete it.

Level	Jump Type	Tasks
1	Tandem	Arch and Flare
2	Tandem	Altitude Awareness
3	Tandem	Turn Introduction
4	Tandem	Body Awareness
5	1st PFF – 1:1	Altitude Awareness
6	2nd PFF – 1:1	Start / Stop Turns
7	3rd PFF – 1:1	180° Turns
8	4th PFF – 1:1	360° Turns
9	Solo Jump	Clear and Pull

6.2.4 TUNNEL PROGRESSIVE FREEFALL PROGRAM

The Tunnel Progressive Freefall (Tunnel PFF) program allows the following for the student:

- 20 minutes of structured, supervised tunnel flying time including:
  - Initial introduction to tunnel flying by a qualified tunnel coach
  - Maintaining an arch
  - Stable practice pulls
  - Heading control, and possibly turns, left and right
  - Skill analysis and corrective feedback
  - Getting comfortable with the feeling of freefall
- After the tunnel session, the program will normally consist of one 2:1 followed by at least four 1:1 jumps. Please see the *PFFI Reference Manual* for details.

Either before or after the wind tunnel training, the student will receive the full FJC training. Please see the *PFFI Reference Manual* for a description of the recommended progression.

6.3 ENDORSEMENTS

As a Skydiving School Instructor you must be up to date and familiar with the endorsement information. Each endorsement requires that a person demonstrate an understanding of the material to the level that, if they were to try the task, they would be able to perform it well.

PIM 1 states: “It is the responsibility of persons holding signing privileges to ensure that the candidate has the required proficiencies and technical knowledge, to a satisfactory degree, prior to signing the candidate’s endorsement card or logbook.”

For each endorsement, it is imperative that the CoP candidate first gains background knowledge through experience, discussion, and the reading of the relevant material in the PIMs and the Sport

Canopy Endorsements. Once you are satisfied that they have the required information, you should quiz the individual by oral or written means. If a practical skill is to be evaluated, then there must be a demonstration.

A skydiving school instructor is permitted to:

- Certify the Reserve Procedures Endorsement
- Certify the Reserve Procedures Review Solo and “A” Endorsements
- Certify the Main Packing Endorsement

6.3.1 SOLO CERTIFICATE TEST

The administration of the Solo Certificate test may be done verbally or written; written is strongly recommended as it gives the student time to study the questions and contemplate the answers in a calm environment. You will find the test questions as part of the Solo Certificate Application. Prior to administration of the Solo Certificate test, the candidate should have completed all practical requirements and have obtained the necessary signatures.

Just as in the FJC exam, debrief the candidate and correct all errors with them. Confirm understanding.

6.3.2 MAIN PACKING ENDORSEMENT

This endorsement is required for the "A" CoP. As a Coach 1, you were allowed to sign off training towards this endorsement. Now you are able to certify it by doing the practical testing required.

The following abilities must be demonstrated:

- **P**ack using proper sequence, techniques, and neatness
- **I**nspection: Be able to perform a basic inspection
- **N**aming: List the names of major components
- **T**angles: Recognizing and clearing minor entanglements (single, not multiples)

A suggested order is to:

1. Evaluate Packing separately, first,
2. Evaluate Inspection and Naming together, and
3. Evaluate Tangles separately, after the above two have been done.

The person being checked out should demonstrate the ability to clear several types of entanglements. Clearing one type of entanglement by trial and error is not adequate. In addition, make sure the person being checked out also knows how to do proper safety checks as well. It is on the Skills Grid before packing and should have been learned. When all parts are passed, sign off the endorsement card or the candidate’s logbook. Further information is available on the CSPA website.

6.3.3 EMERGENCY PROCEDURES REVIEW (EPR)

Introduction

The SSI has the privilege of signing off this endorsement to the "A" CoP level. The SSI should:

- For canopy unusual situations:
  - Review the React procedure first – analyzing the reaction procedure carefully,
  - Review the Assessment portion second – using sensations (seeing, feeling and hearing) for assessments only and avoid technical names. Give scenarios, one from each category (high, low and correctable).
  - Analyze the assessment decision and time components carefully.
- Cover all areas but try to keep it short and simple with emphasis on the gear that they are using, and
- Make sure you research your topics and deliver technical knowledge that is appropriate to the level of student or novice with whom you are dealing.

As always, you can find further information on the CSPA website.

Cutaway practice MUST be performed and a high level of proficiency displayed for all Emergency Procedures Reviews.

Emergency Procedures Review Solo

These situations must be discussed:

PREPARATION

- Weather
- Negative response to another skydiver's accident
- Serious doubt prior to boarding
- Forgotten equipment

IN– FLIGHT

- Aircraft emergencies:
  - Aborted take off
  - Crashed take off (Engine Failure on Take Off)
  - Crashed After Take Off < 1500'
  - Engine Failure at Altitude Problem > 1500' < 2500'
  - Engine Failure at Altitude Problem > 2500' < 4000'
  - Engine Failure at Altitude Problem > 4000'
  - Structural Failure (Collisions, parachute over tail)
  - Control Problems
  - Stall on Exit
  - Fire Outside
  - Fire Inside

    - Aircraft Breakdown
    - Aircraft/Canopy
    - Canopy/Pilot Chute Out – door closed
    - Canopy/Pilot Chute Out – door open
    - Canopy/Pilot Chute Out – during climb out
    - Tail Strike
- Emergency exit altitudes for main and reserve
- Implications of an AAD on an unplanned descent in the aircraft
- Sickness

FREEFALL

- Lazy Pilot Chute extraction
- Pilot Chute hesitation
- Loss of stability
- Loss of goggles
- Altimeter malfunction
- Freefall rules
- Traffic problems

CANOPY CONTROL

- Correctable situations
- Malfunctions
    - Decision making process
    - Malfunction procedures
    - Two canopies out scenarios
- Problems under canopy
    - Traffic on landing
    - Obstacles
    - Turbulence
    - Landing in the wrong direction
    - Landing downwind
    - Landing in high winds
    - Flaring too high
    - Off dropzone landing
    - Injury on landing
- Problems on the ground
- Reserve canopy control
- Reserve canopy landing

EQUIPMENT

- Poorly fitting gear
- Damaged gear
- Lost gear

- Unthreaded hardware
- Closing loops
- Poor gear up by helpers
- Wrong closing order
- Reserve out of date
- Damage on opening
- AAD misfire

Emergency Procedures Review "A"
A review of the topics discussed for the Solo Certificate is recommended. The following additional topics need to be discussed:

PREPARATION
- Review:
    - The basics (buildings, trees, power lines and low obstacles, free fall emergencies)
    - Refining unintentional night and water jumps, basic RW safety, canopy avoidance drills and group landing approaches
- For unintentional night jumps specifically discuss selecting safe alternates
- Landing in deep brakes, and the good old fashioned PLF

INFLIGHT
- Issues on 2-way climb outs
- Emergency aircraft exit altitudes (can be a bit lower than solo, if appropriate to gear)

FREEFALL
- Freefall 2-way problems
- Losing track of your 2-way partner

CANOPY CONTROL
- Canopy avoidance drills, and what to do if you can't avoid
- Group landing patterns.(traffic issues)
- Two-out scenarios:
    - Cutting away down planes
    - Identifying the dominant canopy
    - Steering and landing sides by sides
    - Steering and landing biplanes
    - The novices need to understand the risk of entanglement if cutaways are performed

EQUIPMENT

RSLs and AADs have limitations and the novice needs to be aware of the situations where these devices can be a disadvantage. i.e. spinning malfunctions, prolonged level flights. Discuss gear transitions and borrowing gear. See PIM 2B.

WATER LANDING

A full unintentional water landing briefing is mandatory at this point. There are many key points to stress:

- Avoidance
- Get to solid ground or shallow water if possible
- Avoid moving water
- Preparation
- Loosening the harness
- Shoes, gloves, helmet
- Inflate floatation device (if available)
- Landing
- Long deep breaths to retain oxygen
- Flare and before touching down
- Front loop down and out of the harness
- Discard helmet, shoes
- Swim away from the canopy
- Tread water and disrobe
- Swim for shore
- Equipment concerns need to be addressed

The full night and water jump endorsements must be acquired by the novice prior to performing these types of jumps.

6.3.4 RESERVE PROCEDURES ENDORSEMENT (RPE) SOLO AND A

This endorsement is completed during the FJC as part of the Emergency Procedures taught for the particular equipment used by the student. This endorsement is required for the first jump and the signature is required for the Solo Certificate.

There are three recommended cut away procedures for a two-handle system (following page).

CUT AWAY METHOD 1

Watch yourself place your right hand on the cutaway handle and your left hand on the reserve handle.

Peel and pull the cutaway handle down to full arm extension and throw away the cutaway handle.

Place your right hand over your left hand.

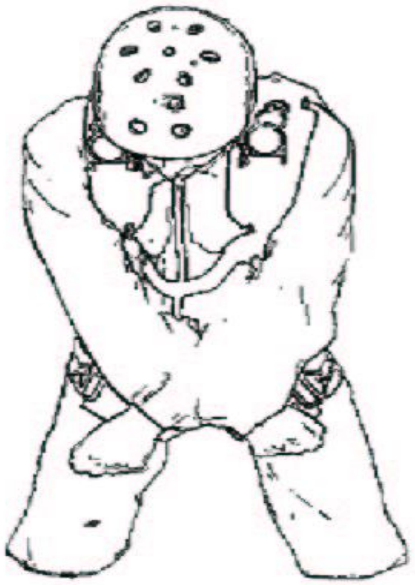
Pull the reserve handle down to full arm extension and throw away the handle.

Return to your arch position.

CUT AWAY METHOD 2

Watch yourself place your right hand on the cutaway handle and hook your left thumb through the reserve handle.

Peel and pull the cutaway handle down to full arm extension and throw away the cutaway handle.



Pull and punch the reserve handle down to full arm extension and throw away the reserve handle.

Return to your arch position.

CUT AWAY METHOD 3

Watch yourself place two hands on the cutaway handle.

Visually locate the reserve handle.

Peel and pull the cutaway handle down to full arm extension and throw away the cutaway handle.

Transfer both hands to the reserve handle.

Pull the reserve handle down to full arm extension and throw away the handle.

Return to your arch position.

APPENDIX: SKYDIVING TECHNICAL KNOWLEDGE

INTRODUCTION

The technical knowledge presented in this Section is meant to assist the SSI candidate with a background of Coach 1 only. It is not meant to explain the complete role of the JM, but rather to present knowledge that would be helpful when teaching the FJC.

AIRCRAFT PROCEDURE

SEATING

The FJC student will need to know the seating arrangement is due to the following:

- Weight distribution
- Exit order
- Number of passes
- Canopy size

With the above in mind, here are some suggestions:

- Cessna
    - All kneeling on the floor with the weight distributed to the front of the cabin. This allows for communication and equipment inspection
    - Student behind pilot can sit – better crash position
    - No standing up on knees & crowding forward as a sudden weight shift can affect center of gravity, and subsequently the pilot's control of the aircraft – especially in an aborted takeoff situation
- Larger aircraft
    - How to get in the aircraft (step or other arrangement)
    - Seatbelt procedures and locations
    - Student should not be nearest the door
    - Student ideally should not be seated on the floor (and normally will not be, unless most other jumpers are tandems)

Student should be mindful of their back and pins, and protect their handles if there is movement.

SAFETY

To approach an aircraft you should:

- Approach aircraft aft of (behind) the wing
- Don't assume the pilot sees you. Make sure the pilot acknowledges your presence
- Be mindful of the sharpness of the trailing edge
- No smoking
- Engine stopped
- Helmets on
- Protect handles

Rules on Takeoff:

- Helmets on
- Seat belts on
- No movement

Rules inflight

- Minimize movement
- Be mindful of handles
- Watch out for things that can snag

Observation Pass

The FJC student should be made aware that usually there will be a pass by the dropzone to ensure their orientation to the landing area and significant landmarks. Often the pass is done at 1,000' and can vary locally.

In-flight Pin Check

The JM/PFFI will perform another gear check of student prior to jumping. This is in addition to the Final Gear Check on the ground prior to boarding. The JM/PFFI will physically check:

- Closing pins – main and reserve.
- AAD – if accessible. Helmet, and goggles if worn
- Chest and leg straps
- Radio operational
- Chest strap, radio, and leg straps.

Pilot Chute Preparation – IAD/SL

The JM will prepare the pilot chute or static line for dispatching. This is often done after checking the closing pins (part of the inflight check). The pilot chute is re-folded and the bridle routed along the container. Check with the JMs how they do this.

Pre-exit handles check – PFF

The JM/PFFI will ask the student to check their three handles and straps, and will then repeat the check.

Verbal Review

The JM will review a key point from climb out, exit, canopy control, and landing.

Door Commands

In a C182 or similar, the JM will call out "Door!" just prior to it being opened. In a larger aircraft, the PFFI will tell the student that the door is opening.

Harness Grip Methods

Cessna, IAD/SL: The grip taken will be either at the shoulder, or the side lateral, depending on the AAD and brand of gear. Check with your training center.

- C-182/206P hanging hip / harness side lateral on the left side of the student's container
- C-180/185 hanging shoulder / yolk on the left side of the student's container

Larger aircraft: The PFFI on the inside of the student will take a grip on the leg strap before the door opens. The PFFI exiting from the outside will pick up the grip as the student positions themselves in the door.

Spotting for Students
The FJC student should be made aware of spotting the aircraft for the skydive.

Explain:

- Reasons for correcting the flight of the aircraft
- The exit point in relation to winds, climb out speed, obstacle avoidance, and parachute

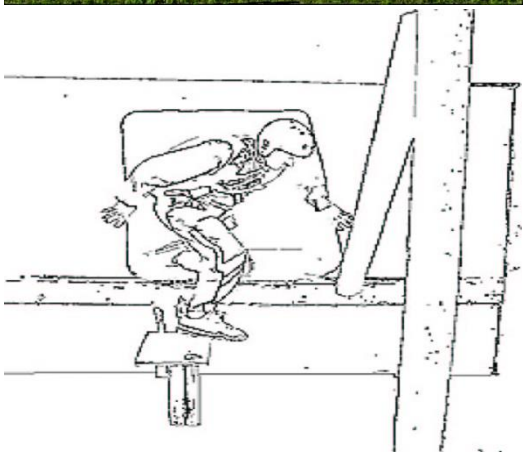
CLIMB OUT PROCEDURE – HANGING EXIT C-182

Door Frame

Grip the door frame with thumbs down while turning the body slightly outwards (about 45°),

Hips forward over the knees, and

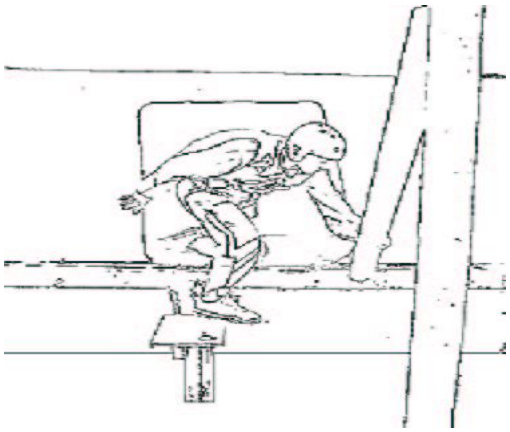
Knees at the edge of the door frame.



Right Foot

Extend right foot down along the front of the strut, and

Keeping toes pointed forward makes it easier to control the leg in the airflow.



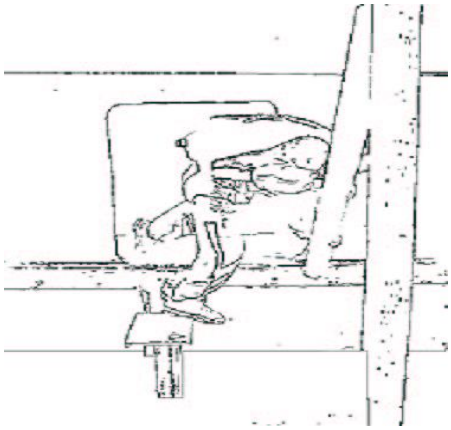
Left Hand

Transfer weight fully on to the right foot,

Reach for the wing strut with the left hand,

The grip should be about 18” from the body of the aircraft or whichever is comfortable, and

Align the left shoulder over the left hand to lessen the strain on the upper body.

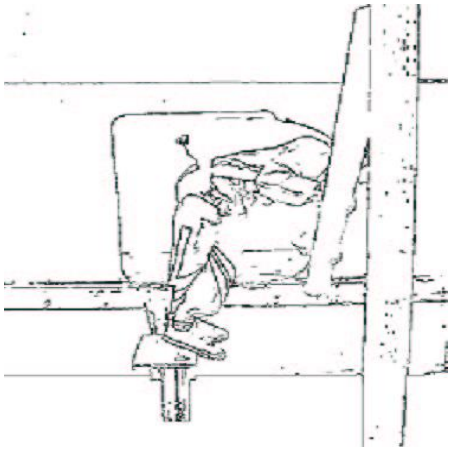


Right Hand

The right hand is dropped from the door frame and grips the wing strut about shoulder width apart,

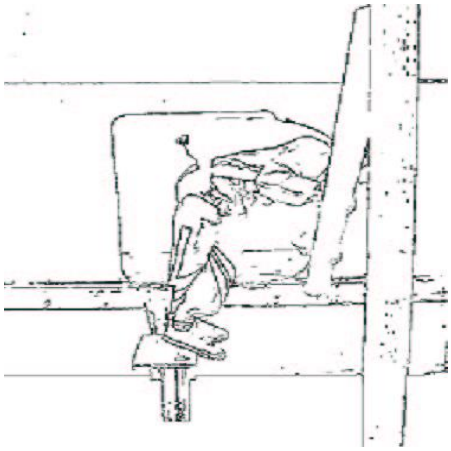
Again align the right shoulder over the right hand, and

Rely on the strength of the legs to maintain balance in the airflow.



Left Foot

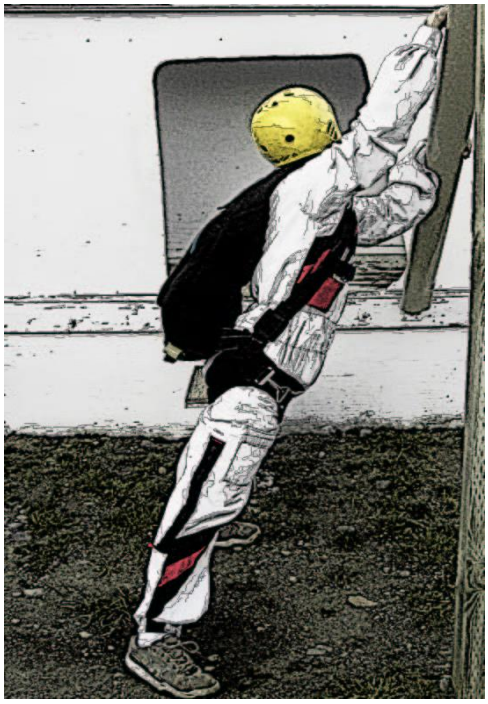
The left foot crosses in front of the right foot and placed on the step or wheel.



Slide, Slide

Slide the hands along the strut about shoulder width apart without letting go, and

Keeping feet still helps maintain balance and stability.



Step Off

Gently step off the strut/wheel and hang with full arm extension, and

Hips forward looking at the Jump Master.

CLIMB OUT PROCEDURE – DYNAMIC EXIT C-182

Door Frame

Grip the door frame with thumbs down while turning the body slightly outwards.

Knuckles outside aircraft!

Lean out the door.

Left foot on step.

Left Hand

Reach out with left hand and grip the wing strut.

Right Foot

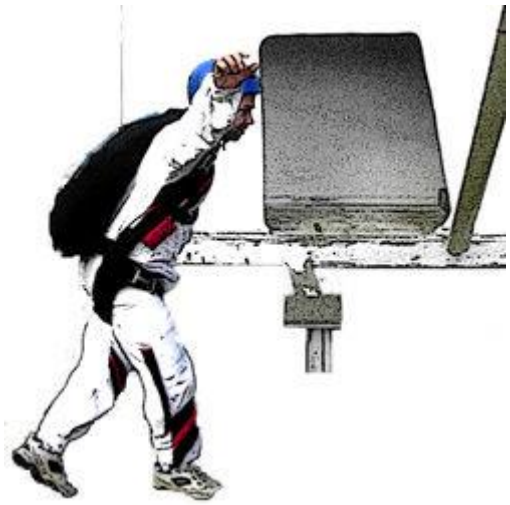
Bring the right foot forward and place it in the lower rear corner of the door.

Look back, make eye contact with JM.

Launch

Use both legs to propel towards the wing tip.

No backwards motion, only to the side.



Arch

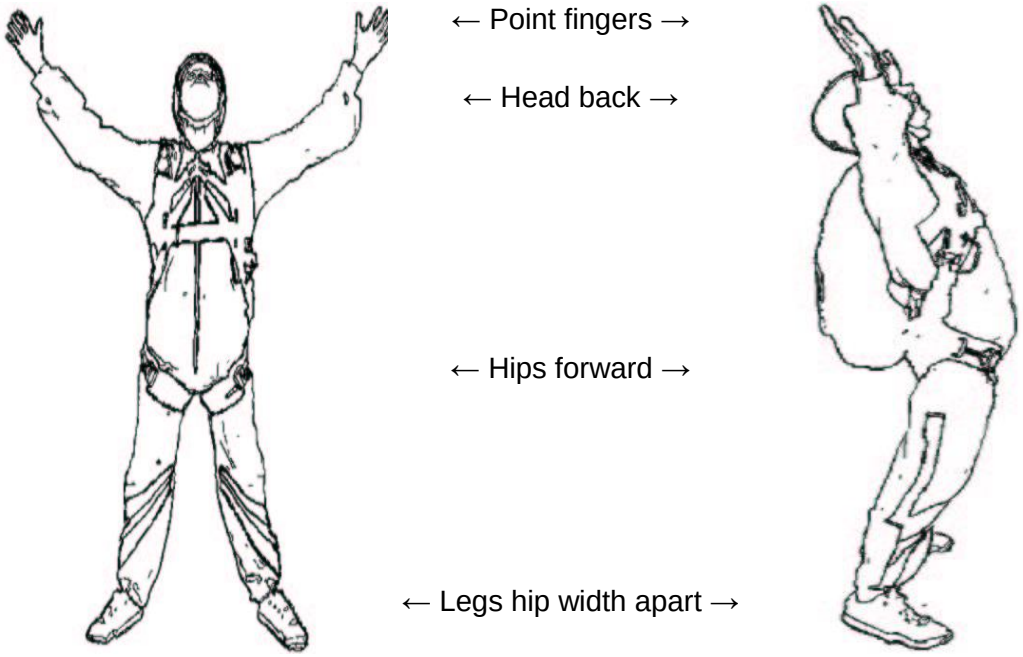
The torso and hips are extended forward into the arch position.

BODY POSITION AND COUNT

The body position used by a first jump student is called the arch. It is basically a spread eagle position that many are familiar with. In skydiving it is also known as the stable spread position.

The arch position allows for:

- Symmetrical airflow around the body, and
- Facilitates the parachute coming off the back cleanly.



Stable Spread (front and side views)

Use the badminton bird analogy – tossed any which way, it always falls with the center of gravity lowest.

The deployment count is used so that the student has an awareness of time. At the end of the count they must check their canopy and act appropriately. The five second count is necessary to allow the main parachute to inflate.

The count used for an IAD is:

- Arch thousand
- Two thousand
- Three thousand
- Four thousand
- Check thousand
- Check Canopy

You may extend the count to 5,000 for slower opening canopies.

The count for a PFF jump is typically four seconds, since the deployment will happen more quickly, and will include a shoulder check intended to clear a pilot chute hesitation.

NORMAL LANDING

The normal body position on landing includes:

- Hands all the way up
- Feet and knees together
- Looking directly off to the front

PLF LANDING

The PLF, or Parachute Landing Fall, is a safety technique devised to reduce the incidence of injury from high speed landings or due to flaring early.

A PLF distributes the landing shock along feet, calf, thigh, hip, and shoulders. It also serves to roll out excessive forward momentum.

The steps are:

- Adopt the following body position while above ground
  - Flare to full arm extension with hands centred and together (bumping fists)
  - Legs slightly bent and together
  - Feet together
  - Toes pointed to the side
- As you touch down, collapse along feet, calf, and thigh
- Twist the upper body or back so the roll goes across the hips to flip the legs over
- Flip the legs over

Some suggestions are to:

- Keep chin tucked and neck tensed to reduce whiplash effect
- Go with the flow, do not hesitate
- Resist reaching to break the fall
- Resist somersaulting

Observation	Cause	Explanation	Correction
The PLF roll doesn't happen It looks stiff like it is segmented Land, then twist Not fluid motion	Feet Apart Bracing	Trying to create a wide base of support when what is required is a narrow base of support to induce instability, initiating the PLF	Keep the legs together Point toes slightly to the same side
The body gets slammed into the ground with the back taking the second impact	Missing contact with calf and thigh	Straightening legs after absorbing impact Failure to twist and bend sharply when balls of feet contact the ground Not relaxed	Relax, be like "Jello" Do not hesitate Continue to fall Do not straighten the legs after absorbing landing impact Bend and twist the torso vigorously upon contact. This motion pushes the knees around and forces the calf and thigh to the ground.

	Knees into the ground	Hesitation upon landing Bending forward Knees relaxed excessively Often occurs on front PLF	Do not hesitate on landing Continue to fall Apply the twisting motion vigorously Keep the legs moderately tense
Elbow or arm hits the ground	Reaching out the elbow or arm to help break the fall Trying to stop the roll with the arm	Leaning forward Failure to twist torso Breaking the fall with the elbows	Twist and bend the torso upon contact Keep elbows tucked along the body Keeping hands together helps Holding and pulling the risers
Motion stops	Not flipping the legs over	Falling or pitching body to ground Hesitating	Roll across back, legs should follow Go with the flow
Face plant	Feet pointing forward Turning the top half of body the wrong way	Body in not proper setup position	Point toes slightly to the same side Turn upper body in same direction as toes
Head strikes the ground	Looking forward or up	Relaxing the neck or raising the head Missing points of contact	Maintain neck tension throughout the PLF Aim to keep the chin lowered on the chest

FLARE

Three common methods of student canopy flaring are:

- Flare – one continuous motion
- Flare, Flare – first flare to waist, second flare to completion
- Flare, Flare, Flare – first flare to shoulders, second to waist, and last to completion

Check with your dropzone's method. Also, some dropzones use a "Recover" command (steering toggles to the waist) to assist landings when the flare has occurred too high.

APPENDIX: LESSON PLAN TEMPLATE

Lesson Plan: Title_____

Learning Outcomes Time: _____min
At the end of this session the student will be able to …:

Introduction:
WHAT / WHY / WHEN

Training Aids: whiteboard, mock– up, video, charts, posters, pictures, handouts, etc.

Main Teaching Points:
The presentation technique(s).
Content headings and sub– headings
Information that will be written on the board
How you will demonstrate the skills.
The type and amount of guided and independent practice
Formation of the class

Evaluations: Demonstrations and ongoing questions. Summary Questions.

Summary Repeat the WHAT/WHY/WHEN of the Introduction and Key points (must knows) only