



Skydiving School Examiner REFERENCE MANUAL[©]

CSPA Role: Skydiving School Examiner (SSE)

Sections:

- A. The SSE and the CSPA**
- B. Role of the SSE**
- C. Responsibilities of the SSE**

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Foreword

THE CANADIAN SPORT PARACHUTING ASSOCIATION (CSPA) is pleased to provide this Skydiving School Examiner (SSE) Reference Manual© as part of the overall program of for Sport Parachuting in Canada.

This SSE manual is based on many years of experience from programs across Canada and has been rewritten to account for the many changes that have occurred in the sport since the change to the ratings system in 2005. Considerable financial and human resources were expended to refine this program to meet the needs of the skydiving community.

The SSE Reference Manual© is designed to assist senior instructors to learn how to conduct examinations and complete paperwork for all levels of student and novice skydivers.

The C.S.P.A. Coaching Certification Program is one of the most comprehensive in sport parachuting in the world. We sincerely hope that you will take full advantage of the benefits offered through both this manual and Canadian skydiving certification courses.

Disclaimer

The CANADIAN SPORT PARACHUTING ASSOCIATION (CSPA) wishes their readers to note that this publication has been prepared for general information only. The publication of the information contained herein is not intended as a representation or warranty that this information has been approved or tested by the CSPA and is suitable for any general or particular use by its readers. Readers are advised that the information published herein should not be relied upon unless competent advice has been obtained with respect to its suitability for a particular application.

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Acquisition of the skills necessary for the safe performance of sport parachuting activities is not a process whereby self-instruction is either recommended or considered satisfactory. The same holds true of the process of acquiring the necessary skills for coaching or inspection of sport parachuting and skydiving techniques. Anticipation in gaining programs offered by individuals certified to be properly qualified is recommended whether you are learning the skills for the first time or learning how to teach the skills to others.

Note: In all cases, the information contained in the current version of PIM 1 supersedes and overrides any information contained within this document. Please refer to the latest version of PIM 1 that can be found on the CSPA website <http://www.cspa.ca/>



Acknowledgements

This manual is based in large part on the Instructor B Manual (February 2000), which was written between 1995 and 1998 by the CWC, with contributions by Tony Mercer, Tom Pfeifer, Rob Hutchinson, and Marc Andre Simard. CSPA would like to acknowledge the following people who contributed to the development of the first version of the Instructor B Manual: Joe Ablitt, Gary "Duff" Boyd, Eric Bradley, John Davies, Duncan Grant, Tom McCarthy, Howard Summerfeld, Bob Wright and Mike Zahar.

* * * * *

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Skydiving School Examiner Training & Certification Pathway

Prerequisite	Portfolio	SSE Evaluation
• C-CoP	A-CoP Exam open book	*See website for further details, http://www.cspa.ca/cwc/english/ratings.htm
• Coach 1 Certified	B-CoP Exam open book	
• SSI Certified	C-CoP Exam open book	
• GCI Certified	Training on administering Night Endorsement	
• One of: JM Certified, or IPFF Certified, or C2 Certified	Training on administering Water Endorsement	
	Receive EPR B & C CoP Briefing	
	Administer a CoP Exam under supervision	

Welcome to the Skydiving School Examiner

The Skydiving School Examiner (SSE) position, introduced in 2007, serves to replace parts of the former Instructor B (IB) that are not covered by the Skydiving School Instructor (SSI) rating.

These include the following:

- administering CoP Exams
- administering Endorsements,
- may act as a Drop Zone Certificate Administrator (CA) or Logbook Examiner (LE) [when nominated by a Drop Zone and approved by the CSPA],
- endorse the completion of certain practical requirements for Coach and Instructor candidate portfolios,
- eligible to apply for the Course Facilitator learning seminar,
- help to oversee Coach and Instructor currency requirements (development in progress)

There is no course for a qualified applicant (see pre-requisites on the following page) to become an SSE. Interested and pre-qualified applicants shall work under the mentorship of an existing SSE in the field on several tasks. You are advised to seek out an experienced and responsible mentor who will take the appropriate time to show you and explain exactly what needs to be done, so that you can benefit from their knowledge and experience.

Once these tasks are complete, the corresponding portfolio is to be sent into the CSPA Ratings Processor for verification and certification, along with the current rating processing fee as set by the CSPA. Once returned by the Ratings Processor, the applicant is deemed to be a Certified SSE.



Section A - The SSE and the CSPA

By the time you have worked through this section, you should be well prepared to do the following:

- Outline the CSPA Instructing and Coaching model and explain how it blends with the National Coaching Certification Program (NCCP) administered by the Coaching Association of Canada (CAC)
- Discuss the benefits from taking a CAC NCCP theory course
- Identify the criteria necessary to qualify for the CSPA SSE rating:
 - Prerequisites required to partake in the mentorship
 - Practical requirements needed to obtain a certified rating
- State the privileges, authority and responsibilities associated with the SSE rating
- State the skills, knowledge and qualities needed to be a SSE

Module 1.1 – Introduction and Overview

a) Introduction

During the SSE mentorship, you will learn information that will allow you to continue on the path toward managing the paper activities around your Drop Zone and to improve your own skydiving knowledge and awareness. The following section outlines the prerequisites required to certification, evaluation requirement, privileges, practical requirements, and the process to become certified as a SSE.

I) Prerequisites:

- C-CoP (may only administer CoP Exams to the same level of achievement; in order to administer a D CoP Exam, the SSE must hold a D CoP)
- Coach 1 Certified
- SSI Certified
- GCI Certified
- Either
 - JM Certified, or
 - PFFI Certified, or
 - C2 Certified
- *Minimum of 2 years* experience in *each* of the above certifications prior to application
- Current CSPA membership

II) Evaluations in the **Portfolio**:

- Write the A-CoP, B-CoP, and C-CoP exams, open book
- Assist in administering a CoP Exam under Direct supervision
- Receive Night and Water Endorsement training
- Demonstrate a high level of technical knowledge throughout the course

III) How to become certified: The SSE practical requirement to produce a complete portfolio:

- Within **one (1) year**
- Perform 50 skydives, to show currency
- Complete the SSE Portfolio document and **mail the original portfolio** (*keep a photocopy for your records*) to the Rating Processor via the CSPA office. See instructions within the Portfolio on Page 2, 7.

- CSPA rating processing fee as set by the CSPA annually (which goes toward funding future development).

You are not permitted to act or sign as a SSE until the portfolio is completed and signed off by the required person and the certification documentation returned to you from the CSPA Ratings Processor.

Note: If the practical requirements are not completed within one year from initial registration, you must file a written request for a rating extension, detailing why the practical was not completed, otherwise your attempt will be voided. When you mail in a request for extension to the CSPA, please include the following:

- Photocopy of the complete SSE portfolio to show your progress to date
- Photocopy of your current, in-date CSPA membership card
- A letter of explanation
- The CSPA rating processing fee for extension request must be included with the extension request (which goes toward funding future development).

Failure to file the request or completing the requirements before the extension expiry date will result in you having to retake the practical components for future consideration.

V) Privileges of the SSE:

- Supervise
 - Either Act as Certificate Administrator, or Logbook Examiner for a drop zone [only when nominated by a specific Drop Zone, and approved by CSPA]
- Assist
 - Instructors and Coaches in completion of their portfolios
 - Students and Novices in preparation and completion of Exam requirements
- Administer
 - All privileges of current ratings held
 - If an approved Certificate Administrator, may give Exams for A, B and C CoP
 - May also give D CoP exam but only if holding this certificate level
 - Night Jump Endorsement
 - Water Jump Endorsement
 - Exhibition Jump Rating (EJR) Exam
 - Emergency Procedures Review (EPR) B and C

VI) Maintenance of Certification:

A currency of contacts is required to maintain certified status. More information on currency requirements is under development. You are urged to keep clear records of all contacts for future currency purposes. Use a database or spreadsheet to manage your contacts.

VII) Horizontal Development Opportunities

New information and updates may be communicated through a CWC Newsletter, the CanPara Magazine or the CSPA website. Coaches, Instructors and Course Facilitators are strongly encouraged to participate in as many as possible any of the following events:



- Bi-annual Skydiving Symposium hosted by the PIA (Parachute Industry Association)
- Sport Leadership Conference
- NCCP related workshop “Multi Sport or any Sport Specific Workshops”
- CWC Open houses and workshops
- CSPA Instructional Courses
- Manufactures courses
- CSPA or USPA Instructor/Coach Workshops
- Training & Coaching from advanced athletes/competitors in their skydiving discipline
- Course Facilitator Conference

Module 1.2 - CSPA and CAC Coaching Model

What is the National Coaching Certification Program?

The NCCP is a coach training and certification program offered in over 60 sports in Canada. The principal objective of this program is to develop the abilities of coaches working with athletes at all levels, from community to high performance sport.

Participant's Reasons for Being in Sport

The athlete or participant comes to the sport situation with his/her own needs, interests and reasons for being involved. Some coaches spend more time with an athlete than a teacher, or even parents in some instances. Because of the significant influence they have on the development of participants, both from an athletic and human point of view, coaches must seek to identify if the reasons why they are coaching are consistent with what athletes want or need.

In general, people participate in sport for one or more of the following four reasons:

1. Desire for Achievement: a wish to improve and master new skills and pursue excellence.
2. A need for Affiliation: a desire to have positive and friendly relations with others
3. A desire for Sensation: a desire to experience the sights, sounds and physical feelings surrounding a sport or the excitement in a sport.
4. A desire for Self-Direction: a wish to feel a sense of control, to feel in charge.

The CSPA Coaching Program in association with the NCCP:

The association between the CAC / NCCP and the CSPA Coach and Instructor system allows for the registration of CSPA's certified coaches with the CAC. Benefits accrued by the association include:

- National recognition for the Coaches
- Access to valuable resources for updating coaching techniques
- Professional Development opportunities

Presently two of the CSPA ratings fall into the NCCP framework. The coach of a novice skydiver – the Coach 1 – falls into the Instructional Stream, Beginner context, while the Coach 2 falls into the Instructional Stream, Intermediate context.

Coach 1 (Instruction Beginner): The Coach 1 will assist Solo and higher Certificate of Proficiency (CoP) holders to acquire the basic skills for individual skydiving on a daily basis. Training takes the form of a three-day course that includes classroom and skydiving activities. The emphasis in the course is on teaching the coach how to coach effectively, and then letting them practice and demonstrate their abilities through guided exercises and simulations. The course provides the most up to date information on "how" to coach, making the course both enjoyable and informative. Graduation is based on, attendance and participation, a written quiz, and the evaluation of coaching simulations and jumps. As such the Coach 1 fits the Instruction Beginner context

“Instruction – Beginners: This type of instructor teaches basic skills to individuals with very little or no experience in the sport or the activity. The coach deals with a limited



number of participants at a time, and focuses on the fundamentals of the activity with an emphasis on safety, where appropriate.”

Note: In the NCCP system a coach is trained in a course and then separately evaluated in the field with real athletes. In skydiving it is imperative that evaluation is covered in the course through simulations provided by the learning facilitators, so that graduates can immediately work safely with novices.

After successful completion of the course, the Coach 1 will work with Solo-CoP holders, helping them to improve their skydiving skills. This is the "practical" section of certification where the coach gains experience through the application of the information from the course and creates a **“portfolio”** that is required for certification. The Coach 1 is the foundation for all other CSPA coaching and instructing ratings (i.e. Jump Master-JM, Skydiving School Instructor-SSI, Progressive Freefall Instructor-PFFI, and Coach 2).

Coach 2 (Instruction Intermediate): The Coach 2 will assist experienced novices and recreational skydivers to an advanced level of overall skill development, encouraging regular participation by setting goals for performance. Training will also take the form of a weekend course with evaluations by way of written tests, practical demonstrations, and skydiving activities.

“Instruction – Intermediate performers: This type of instructor helps participants refine basic skills, and introduces a variety of more complex techniques to individuals who already have some experience in the sport and who already exhibit a fair degree of proficiency in the activity. The coach provides more “customized” instruction based on the individual performance characteristics of each participant, and would be expected to manage bigger groups. An instructor working with intermediate performers is expected to be fairly knowledgeable in all matters related to the selection and adjustment of equipments. He/she may also act in a supervisory capacity for coaches working with beginners.”

After successful completion of the course, the Coach 2 will work with individuals and groups at the drop zone, helping them to improve their skills in accuracy, formation skydiving, free fly, style, canopy piloting or Canopy Formation, etc.. Again, this is the "practical" section of certification where the coach gains experience through the application of the information from the CSPA technical and theory course and creates a **“portfolio”** that is required for certification.

It is planned that in the future the CSPA will have the resources to provide training for coaches of competitive skydivers (Competition Introduction / Competition Development)

Summary of the CSPA / CAC requirements for the Coach 1 (Instruction Beginner) and Coach 2 (Instruction Intermediate)

Course	Technical Components	Portfolio Tasks
Coach 1	<ul style="list-style-type: none"> • Coaching Tasks • Manoeuvre Series (video) • Freefall FS Skills • Coach Jumps • Accuracy • Packing • Making Ethical Decisions • Quiz 	<ul style="list-style-type: none"> • Perform 50 Jumps • Complete 25 coaching contacts (ground or in air) – to include one jump observed and debriefed by a certified Coach 2 • Complete the CAC Ethics Evaluation (on-line) • Complete the portfolio booklet and submit within 1 year
Coach 2	<ul style="list-style-type: none"> • 1 on 1 FS Coaching • Accuracy/Canopy Flight 	<ul style="list-style-type: none"> • Perform 50 Jumps • 25 must be in air 1 on 1 FS belly-to-earth jumps – to include one jump observed and debriefed by a certified Coach 2 • Complete the CAC Ethics Evaluation (on-line) if not previously completed for Coach 1 • Completed portfolio booklet and submit within 1 year

Additional CSPA Instructing Ratings

Note: The following ratings presently fall outside the scope of the CSAP / CAC association and as such do not result in a NCCP accreditation as does Coach 1 and Coach 2.

Jump Master - JM: This program will take the form of a three-day clinic. Training will be specific to the equipment, aircraft and progression sequence recommended by CSPA and used at the particular drop zone. To enrol in the program, the individual must have successfully completed the Coach 1 technical clinic. As the practical component, the Jump Master will be asked to complete a portfolio of activities with student parachutists.

Progressive Freefall Instructor - PFFI: This training will be completed through a course presented over a number of days. Pre-requisites are C2 certified and either JM or SSI certified. Following the clinic, the PFFI practical component involves jumping with student parachutists in the PFF role to complete the portfolio.

Skydiving School Instructor - SSI: The major privilege of the SSI rating is that of being the First Jump Course Instructor. Training will be completed at a weekend clinic involving classroom activities. The course content will be oriented to the drop zone's specific techniques and facilities. After completion, the SSI will be asked to participate in the club or drop zone's training programs as a portfolio completion requirement.

Skydiving School Examiner - SSE: This is an examiner position where a candidate will work through a portfolio task book being mentored on administering CoP exams and related activities as a Certificate Administrator or Log Book Examiner. This SSE role can also serve as the Chief Instructor for CSPA school affiliation purposes. More info is found on the CSPA web site at <http://www.cspa.ca>.



Ground Control Radio Instructor - GCI: This is a hands-on rating using material covered in the Coach 1, Jump Master or Skydiving School Instructor courses. As a pre-requisite, the candidate must first observe 25 student landings by a highly qualified and Certified GCI. The candidate must attend a formal training seminar provided by an approved Course Facilitator. After the training module, the candidate must provide canopy guidance for 25 students under the direct supervision of a rating holder. This mentoring program produces a portfolio that acts as the basis for certification.

Review Questions

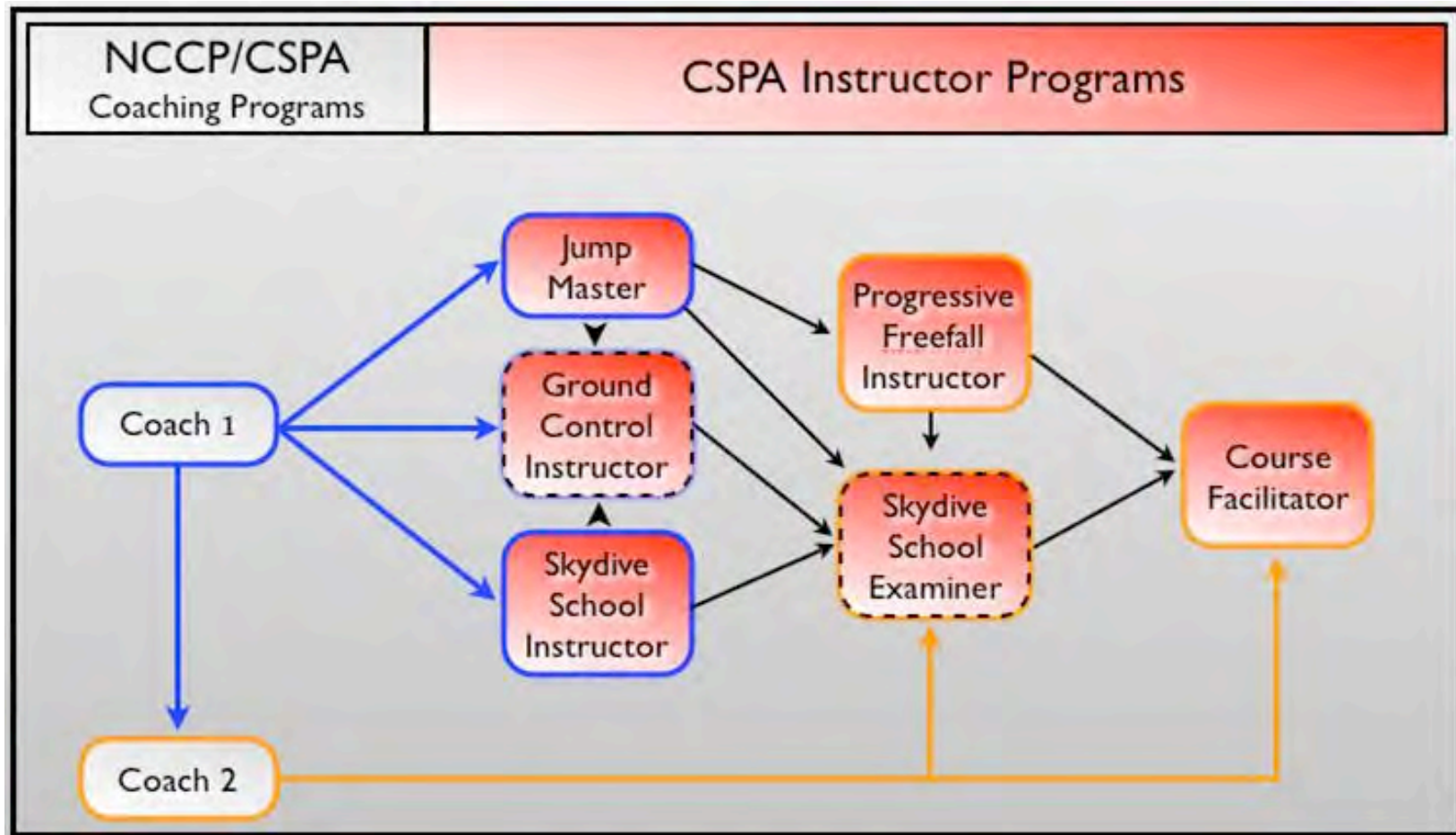
- 1) Give two benefits gained from attending a NCCP theory course, and updating your coaching knowledge through the CA.
- 2) State the practical requirements needed to become a certified SSE rating holder.
- 3) List the privileges associated with the SSE rating.

Summary of CSPA's non-NCCP Ratings

Course	Technical and Theory Components	Practical Tasks
Jump Master	<ul style="list-style-type: none"> Instructing Tasks Spotting Equipment Dispatching Exam 	<ul style="list-style-type: none"> Prior to dispatching on their own, must dispatch 6 students under the direct supervision of a highly experienced, Certified Jump Master Dispatched 25 students by IAD or SL Supervise 25 students who are under canopy guidance (radio or arrow) Completed Portfolio booklet countersigned by a certified SSE
Skydiving School Instructor	<ul style="list-style-type: none"> Classroom Teaching Risk Management Exam 	<ul style="list-style-type: none"> 3 first jump courses – to a minimum of 10 students under the direct supervision of a highly experienced, Certified SSI Completed Portfolio booklet countersigned by certified SSE
PFF Instructor: PFF-R (Restricted to 2:1 only) PFF (full certification; can perform 1:1)	<ul style="list-style-type: none"> Jumps from main and reserve side Level, Proximity and Quadrant control Signals 2 on 1 with minor to major problems 1 on 1 with minor to major problems: spin, inverted and inverted spin recovery Exam 	<p>For the PFF-R rating:</p> <ul style="list-style-type: none"> 25 PFF Jumps including one 2:1 PFF jump evaluated by a certified PFFI 10 of the 25 jumps as Reserve Side Instructor Completed Portfolio booklet countersigned by a certified SSE Be certified in Coach 2 and certified SSI or JM <p>For PFF rating (allowing 1:1 PFF jumps)</p> <ul style="list-style-type: none"> 5 jumps 1:1 with a student already demonstrating excellent control and competence, and on their final 2 PFF level jumps One 1:1 PFF jump evaluated by a certified PFFI Obtain the signature of two (2) certified PFFI Complete and send in application for upgrade to PFFI from PFF-R
Skydiving School Examiner	<ul style="list-style-type: none"> Certificate Administration Log Book Examiner Exhibition Jump Rating Examiner Night Jump Endorsement Water Jump Endorsement 	<ul style="list-style-type: none"> Write the A, B & C-CoP exams, open book Administer a CoP exam Administer a Solo Certificate Receives the Night & Water Endorsement (if not previously endorsed) by the supervising instructor and instruction on administering the Night & Water Endorsement briefings Receives Emergency Procedures Review endorsement briefing/info from the supervising instructor, up to their CoP level
Ground Control Radio Instructor	<ul style="list-style-type: none"> Observe 25 student landings Partake in GCI module training Mentored practical exercises 	<ul style="list-style-type: none"> Provide ground control to 25 students under direct supervision of a highly experienced and Certified Ground Control Instructor



CSPA Rating System



-Dashed Boxes are positions that are completed through an apprentice based approach in the field and do not have an associated classroom course.

- Tandem rating is provided directly through the manufacturer and not the CSPA.

* see current PIM1 for complete information

Section B – The Role of the SSE

Module 2.0 – The Role of the SSE

The SSE must have a very high level of technical knowledge in all areas of sport parachuting. They must be thoroughly acquainted with the content of the equipment, the progression sequence of the CSPA Skills Grid and the relevant Endorsements required at each level of progression.

What qualities are desirable in an SSE? As a minimum, you will need to be a responsible individual, out-going and personable, setting a positive example with a high standard of professionalism, ethics and integrity, skill and of personal safety. The responsibilities are to make the experience for each skydiver enjoyable and meaningful without compromising their safety. Maximize each person's learning experience by setting clear and realistic goals.

The SSE must have a sincere interest in working with student and novice parachutists in helping with their progression...or this is not the role for you.

The SSE should have high standards of professionalism, ethics and integrity, skill and of personal safety

An instructor as part of the CSPA technical system is in fact a representative of CSPA. There is responsibility toward the CSPA to support and abide by and role model the Basic Safety Rules and Technical Recommendations (PIM 1) procedures as well as all other aspects of the sport of the Association, and to encourage others to do the same.

The bottom line is that you must be professional in your approach. It should be remembered that the student is paying for your instruction, even if indirectly; they have the right to expect a quality product.

Module 2.1 - The SSE Role in Skydiving

The SSE is a highly experienced instructor who has the necessary skills and knowledge to take on the responsibilities of supervising the progression of Novices, new Coaches and Instructors. This role represents our sport to our most valuable asset – the new student and-up-and-coming novice's. The SSE is a guide for other instructors who might someday follow in the same footsteps. *An Instructor's Attitude* is reflected in the attitude and achievements of your students and fellow instructors. You will have a great deal of influence because training is the key to the future of sport parachuting in Canada. It will be important to keep fully up to date with developments and changes within the sport and use the most current CSPA Parachute Information Manuals (PIMs). Every opportunity should be taken to continue development as a skydiver and an instructor.

Your first responsibility will be towards the student, whose safety and enjoyment is paramount. In addition, you must ensure that the instructors and staff working with you live up to their responsibilities, both towards their students, the drop zone and towards the CSPA and the Basic Safety Rules (BSRs). Finally, you have a particular responsibility to the CSPA for maintaining the integrity of the progression, Endorsements, and Certificate of Proficiency (CoP) system.



2.1.1 - The SSE as a Role Model

As a SSE, your students, novices, coaches and instructors will look to you for the correct ways to behave. Other jumpers will watch your skydiving techniques, trying to copy the way you perform. This can include the way you dress, the way in which you prepare for the jump, the care and attention directed towards your equipment, the caution shown towards the dangers of the jump and your general attitude and demeanour. However, their observation and copying of your behaviour is not restricted to your skydiving techniques; they are likely to adopt your methods. Or the opposite may occur, where they see your behaviour as callous and negative and not want to come to you for help. Think about some of the following situations:

- Your method of working with inexperienced people (do you support and encourage new jumpers? Or do you ridicule and gossip behind their back, mocking them around the fire, after they have left?)
- Your interactions with other experienced skydivers (do you respect their experience? Or do you think you can do better? How big is your Ego? Do you think you are a Sky God?)
- The ways in which you respond to questions from spectators and non-participants (do you answer each question with sincerity? Or do you put them down and discredit what they are saying because they are a “whufo”?)
- Your behaviour towards the pilots, the drop zone operator, other Coaches and Instructors. (Do you show respect for others and their position?)
- Your comments pertaining to the club, drop zone, the provincial and national organizations and systems. (Are you reflecting a positive image? Are you acting in the best interest of the club and sport? Or are you trying to fill your own pockets at the club’s expense?)
- Your sincerity in helping others to achieve. Are you only out for personal gain, financially or to fill your own ego and personal agenda? You will find this will not last for very long...

The correct behaviours are summarized by the term "professional", showing respect for both individuals and organizations alike. These are the types of behaviour that are sought in your novices. It is of considerable importance for you and your fellow Coaches to provide this type of leadership in order for the novices to learn the correct ways to skydive and to interact with others whom they will encounter. Failure to show professionalism in everything you do will very likely result in people not seeking your advice, or avoiding you altogether. The more your ego comes into play, the less people will see you as a sky god. One way to know how to act and behave is to remember the days when you were receiving instruction and what it is you liked or most admired about your favourite Instructors.

2.1.2 - Role of the SSE on the Drop Zone

The SSE plays an important and vital role on the drop zone, and as such wears a number of different hats. The SSE will assist recreational skydivers to achieve an advanced level of overall skill development by encouraging regular participation and by setting goals for performance in order to pass the certification exams. The SSE works with individuals and groups at the drop zone, helping them to improve their knowledge by giving seminars on the various Endorsement topics. This is the “practical” section where the instructor gains experience in applying information directly to the novice skydiver. The SSE plays a major role in helping the Solo student through C CoP or D CoP holders to achieve their next certification level. The list of roles of the SSE would include, but not limited to:

- assist and supervise less experienced Instructors and Coaches in achieving certification
- evaluate applicants for CSPA's Certificates of Proficiency
- help to develop a drop zone progression program
- give seminars on skill development or safety
- provide leadership on the drop zone
- promote CSPA
- assist recreational skydivers to an advanced level of overall skill development
- assist recreational skydivers in goal setting
- ensure CSPA and drop zone policies are followed

2.1.3 - Role of the SSE in the CSPA CoP system.

Endorsements (see also Section 3.2 page 29)

Endorsements are granted to show competency or proficiency in specific areas of parachuting. Endorsements are tested by verbal or written or practical testing, or a combination, prior to writing the exam. By virtue of previous certified ratings held, the SSE is able to certify the following Endorsements:

MPE – Main packing endorsement

SCE – Sport Canopy endorsement A and B

EPR – Emergency Procedures Review A

In addition, the SSE can train and sign off on these Endorsements:

EPR – Emergency Procedures Review B and C

EJR – Exhibition Jump Rating

Night Jump

Water Jump

From PIM 1 Section 6 page 20,

“It is the responsibility of the persons holding signing privileges to ensure that the candidate has acquired the practical skills and technical knowledge, to a satisfactory degree, prior to signing the Endorsement Card or logbook”

So ask questions and make the person perform any necessary demonstrations.

- **Reserve or Emergency Procedures** – Practical Component (Solo and A CoP)
 - Taught in FJC , the practical application of invoking the emergency procedures: Cutaway and Reserve activation
 - Reviewed by SSI using practice harness, hanging harness, real parachute gear, mock handles, etc.



- **Emergency Procedures Review** – Theoretical Component (Solo, A, B, and C)
 - Taught in FJC, the theoretical discussion of unusual/emergency situations and how to deal with them, considering all phases of the Skills grid
 - *See Appendix for detailed description of this Review*
 - Topic Areas from Preparation, Equipment, In-flight, Freefall and Canopy
- **Sport Canopy** (A, B and C)
 - Different types of turn
 - Landing techniques
 - Stall practice and recovery
 - Rules of flight
 - Terminology
 - Weight limits and wing loadings
 - High speed landings, etc.

Certificates of Proficiency (CoP)

In addition to assisting with progression, the SSE helps others to attain CoP's.

- Ensure that the assessments are objective – to maintain the national standard everyone must meet the minimum criteria
- Make sure that they are qualified and knowledgeable before they write the test
- Direct candidates to use the study guides so that they know what is required beforehand

SOLO Certificate

Completed the reserve procedures endorsement	SSI, SSE
Completed the Emergency Procedures Review Solo Endorsement	JM, SSI, SSE
Accumulated 10 jumps and a minimum of 3 minutes of freefall with stable activation at the prescribed altitude on the last five jumps	JM, IPFF, SSE
Correctly answer all Solo test questions	JM, SSI, SSE

A Certificate

Completed the Sport Canopy A endorsement	C2, SSE
Completed the Emergency Procedures Review A Endorsement	JM, C2, SSI, SSE
Completed 25 jumps and accumulated 10 min FF Time	CA, SSE
Achieved a pass mark of a least 80% on a written exam administered by a CSPA Certificate Administrator	CA

B Certificate

Completed 15 self-directed accuracy jumps, landing within 15 meters of target	C2, JM, SSI, SSE
Performed a manoeuvre series, consisting of right 360 turn, left 360 turn, front loop, back loop, right barrel roll, left barrel roll, in less than 16 sec.	C2, SSE
Completed the Sport Canopy Review B endorsement	C2, SSE

Completed the Emergency Procedures Review B endorsement	C2, SSE
Completed 50 jumps and accumulated 30 min FF time	CA, SSE
Achieved a pass mark of at least 80% on the written exam administered by a CSPA Certificate Administrator.	CA

C Certificate

Performed 25 self-guided stand-up accuracy jumps within 10 meters of the target	C2, JM, SSI, SSE
Completed 100 formation skydives; 25 of which are 4 way or larger	C2, SSE
style series in less than 13 seconds	C2, QE, SSE
Free fly series in less than 16 seconds (From the sit, back loop, front loop, 360 right turn, 360 left turn, cartwheel right, cartwheel left)	C2, SSE Judged using Air to Air Video
Less than 15 cm scored on an electronic scoring pad on 5 precision accuracy jumps	C2, QE, SSE
Completed the Emergency Procedures Review C endorsement	C2, SSE
Completed 200 jumps and accumulated 60 min FF time	CA, SSE
Achieved a pass mark of a least 80% on a written exam administered by a CSPA Certificate Administrator	CA

D-Certificate

Completed 10 consecutive pre-planned canopy stand-up landings to within 5 meters of a target	C2, QE, Judge, SSE
On 5 FS 4 way jumps, score 7 points within 35 seconds of exit OR on 5 FS 8 way jumps, score 7 points within 50 seconds from exit. Either case requires using 5 different FAI formations per jump	C2 Video, FS Judge, SSE
Style series in less than 11.5 seconds	C2, Judge, QE, SSE
Less than 5 cm scored on an electronic scoring pad on 5 precision accuracy jumps	C2, QE, Judge, SSE
Competed at a regional, provincial or national competition in one discipline	C2, QE, Judge, SSE
Completed 500 jumps and accumulated 180 minutes (3 hr) of freefall time	CA, SSE
Achieved a pass mark of a least 80% on a written exam administered by a CSPA Certificate Administrator	CA

NOTE: If there is any discrepancy between this manual and the latest version of CSPA PIM 1, the PIM 1 will always be considered correct. See PIM 1 – Section 6 – Certificates of Proficiency for specific details.



Logbook Examiner (LE) and Certificate Administrator (CA)

- CA: Gives and marks the exams for the CoPs and verifies the Endorsements
- LE: for Solo, A and B CoP, checks the logbooks for complete entries and correct signatures by rated/certified individuals. (For C and D CoP the logbook is sent to the CSPA office directly.)
- Reason there are two positions: Checks and balances, error checking
- More information is given in Section 3.3 below.

2.1.4. Series Evaluation for the SSE

To learn how to judge a competitive style series we recommend that all SSE's take a Qualified Evaluators course. In your role in evaluating style for a CoP, we suggest that you use a modified rubric and the following section provides the appropriate information.

1) Types of Style Series

There are two different types of Series evaluated during the CoP progression:

- I. Manoeuvre Series: for the B CoP
- II. Style (Cross) Series Evaluation: optional for the C and D CoP

Manoeuvre Series

For the B CoP this must be completed in *less than* 16 seconds (15.9 seconds or faster, including gigs):

Right Turn, Left Turn, Front Loop, Back Loop, Right Barrel Roll, Left Barrel Roll

Also written as: RT, LT, FL, BL, RBR, LBR

Style Series, aka Cross Series

For the C CoP this must be completed in *less than* 13 seconds (12.9 seconds or faster including gigs).

For the D CoP this must be completed in *less than* 11.5 seconds (11.4 seconds or faster including gigs).

There are four different style series each consisting of a set of six manoeuvres: four turns (360° horizontal turns around a vertical axis) and two loops (360° vertical turns around a horizontal axis). They are the:

1. (International) Cross Series - the required set for *C and D CoP* requirements:
 - a. Left turn, right turn, back loop, right turn, left turn, back loop
 - b. Also written as: LT RT BL RT LT BL

Other series are:

2. Reverse Cross Series: RT, LT, BL, LT, RT, BL
3. Right Cross Series: RT, LT, BL, RT, LT, BL
4. Left Cross Series: LT, RT, BL, LT, RT, BL

2) Major Definitions

- Heading - A position from which the series is initiated and to which all manoeuvres must start and stop. Moves that are within the allowable tolerance of error are said to be "on heading"
- Off Heading (at the start) - Starting the series when not aligned with the correct heading
- Off Heading (out of a loop) - Any back loop that finishes on a heading that is different to the starting heading
- Undershoot - Any turn that under rotates short of the original heading
- Overshoot - Any turn that over rotates past the original heading
- Arrow - The term given to the penalty if the first back loop finishes with a heading in the direction of the third turn
- Deviation - A pitch that occurs in a turn or a roll that occurs in a loop
- Zap - The term given to a series which automatically receives the maximum time (16 seconds)
- Gig: a time deduction, or penalty, for an execution error; details in the following section.

3. Scoring and Penalties.

The score for the jump is the time in seconds taken to complete the series plus any time added on for penalties. The timing commences when the jumper starts the first turn and finishes when they pass through the horizontal plane on the last loop. The angles are measured with reference to the body or torso. You should ignore the head, arm, and legs when evaluating style.

Penalties can be assessed for various, in sequence infractions including:

- a) Off heading in the direction of the first turn
- b) Undershoot or overshoot (must be greater than 90°) on the first turn
- c) Undershoot or overshoot (must be greater than 90°) on the second turn
- d) Off heading out of first back loop (in the direction of the third turn)
- e) Undershoot or overshoot (must be greater than 90°) on the third turn
- f) Undershoot or overshoot (must be greater than 90°) on the fourth turn
- g) Off heading coming out of the second back loop (in either direction).

Another penalty in competitive style is a deviation and refers to having more than 30° of pitch in a turn or roll in a loop. It generally occurs as a result of going from turns to loops and loops to turns without completing the first manoeuvre. This is very difficult to judge with hand-held Binoculars and is best left to competitive judges.

The following are suggested guidelines to use when evaluating CoP style jumps:



Undershoots: This constitutes as advantage as the full 360° turn is not completed.

1 to 30° (minor)	0.2 seconds
31 to 60° (major)	0.5 seconds
61 to 90° (gross)	1.2 seconds
Greater than 90°	Zap

Overshoots: Here the turn continues past the heading, so the jumper is self-penalised and receives no penalty up to 90°. A 270° over-rotation results in a Zap.

0 to 90°	0.0 seconds
91 to 180° (major)	0.5 seconds
181 to 270° (gross)	1.2 seconds
Greater than 270°	Zap

Back loop off heading: Here the definition is with respect to the heading at the beginning of the back loop not to the correct heading. There is a grace angle of 15° for this manoeuvre

0 to 15°	0.0 seconds
16 to 30° (minor)	0.2 seconds
31 to 60° (major)	0.5 seconds
61 to 90° (gross)	1.2 seconds
Greater than 90°	Zap

In addition to the circumstances indicated above, a Zap will be assessed for the following: An incomplete series, being out of control, omitted moves, and performing the wrong series. These all result in the maximum score of 16 seconds.

When observing style sets for CoP purposes, use the system above, look for the obvious, and consider the following:

- The jumpers have 5 seconds to establish themselves on the pre determined heading. After this point, the watch starts as soon as they move off heading (even if they move back and stop for a while)
- The first two turns are easy to judge
- The first back loop has special rules. On the way in to the loop, the penalties will depend upon the second turn. On the way out, only a heading in the direction of the third turn (Arrow) is a penalty
- The third and fourth turns are easy to judge
- On the way in to the second back loop, the penalties will depend upon the fourth turn. On the way out, off heading in either direction will be a penalty - If you suspect a Deviation then award a 0.5-second penalty.

When judging using air-to-air video, you should speak with both the Jumper and the Videographer about proper set up for the recording. The recommended set up for air-to-air video is:

The Jumper who is performing the series:

- signal they are ready to exit to the Videographer, and leave when ready.
- Once set up in the air, turn toward a large, fixed ground target, such as a barn, grove of trees, pond or a road intersection

- wait several seconds of time so that the videographer has time to get set up in their position, and also to increase to speed to terminal velocity
- use only the ground target as reference and NOT the videographer
- prior to break off altitude, stop all manoeuvres, try to locate the videographer, and track away

The Videographer should:

- exit with the jumper on their signal
- as soon as the ground target heading has been set by the jumper, move quickly to set up behind the jumper
- set up and maintain flight 2 – 3 metres higher and 2 – 3 metres out from than the jumper; depending on their camera zoom, it should be wide enough to see all manoeuvres, and close enough to capture the details
- keep the background clearly visible, still and in a fixed orientation (no orbiting)
- not move, at all, during the entire execution of the series, except perhaps to side slide or back slide to keep the jumper in frame. Under no circumstance is the videographer to orbit. The ground reference should not move at any point during the skydive
- maintain altitude awareness and know what the break off procedures will be with the jumper.

If the jumper is paying for the videographer slot, and you deem the quality of the video unacceptable, especially if you cannot judge it, then you should discuss with the videographer, on behalf of the novice, about paying for their own slot; and you might want to avoid using that videographer until they get more experience.

If judging from the ground using a high-powered Telemeter, remember to train your recorder so they are aware of typical comments. You will call the first five moves, stop the watch and then call the last back loop. A commentary to the recorder might be: Initial heading: off heading - minor. Right turn: under - major. Left turn: OK. Back loop: off heading - disadvantage. Left turn: over. Right turn: over. Back loop: OK.

In the simplified system, this results in 0.7 seconds in penalties. 0.2 for the minor advantage gained by the off heading in the direction of the first turn and 0.5 for the major undershoot on the first turn. All the other infractions counted against the jumper.

Advice to the jumper: To become a competitive style jumper takes lots of jumps and coaching and additional information can be found in PIM 2B. For the purposes of Certificates of Proficiency, the following simple advice can be given.

- They have 5 seconds to establish themselves on a fixed ground heading.
- When first doing style, the jumper should go to 8000ft. This gives them a chance to fall to 7000ft (about 10 seconds) to build up speed before they start. Then even an 18-sec set will still be safe. Regardless of this, remember to stress altitude awareness throughout the manoeuvre
- Use the box man position
- the style tuck is for competitors
- Keep the transitions smooth and stop the 2nd and 4th turns before starting the back loop
- Emphasise turning technique (no banana turns) and tight legs
- Thoroughly dirt dive the jump; mental rehearsal is essential.

For those who wonder why the style requirements exist, advise them that the jump involves anticipation, memory, control, starting and stopping, and recovery skills required for any



discipline in skydiving. In addition, it is fun and challenging to manoeuvre your body at high speed and there is a sense of accomplishment in producing fast and clean style sets.

Summary Questions

- What are the additional endorsements that an SSE may administer?
- Who can administer the D CoP?
- Who can qualify for drop zone safety officer?
- Why can one not act as both LE and CA for a single certificate applicant?

Summary

- In this section we dealt with the broader role of the SSE in the CSPA system. In addition to the FJC you will have responsibilities within the progression sequence and in signing endorsements, qualifications for the CoP's as a CA or LE (if designated), and in the EJR. The key point is to ensure that the candidates are well prepared with your evaluation and meet the standards set by the system.

Section C – Responsibilities of the SSE

3.1 Code of Conduct and Ethics

In the present day political climate, additional responsibilities are placed upon those who choose to help others progress in sport. Types of behaviour that were overlooked or ignored in the past are no longer acceptable and everyone is becoming aware that appropriate behaviour, attitudes, and actions must be displayed at all times. All sport and sporting bodies have developed codes of conduct and ethics. In the CWC policy and procedure manual, the following statement appears:

Philosophy Statement

The CWC actively supports the values and efforts of the CAC.

Discipline of Coaching

We believe:

- ✓ That the athlete participant should be the central focus of the sport system.
- ✓ That Coaches are leaders and role models who assist in the holistic development of athletes including life skills and character building.
- ✓ In equal opportunity for all coaches regardless of gender, race, age, culture, disability, socio-economic level and /or geography.
- ✓ That honesty, integrity, competence, and confidence are essential traits for all Coaches.
- ✓ In proper conduct within an ethical framework.
- ✓ That every participant in sport is entitled to a qualified Coach.

Coach Education

We believe:

- ✓ In the importance of education for Coaches, not as the sole determinant of coaching performance, but as one of the essential components in the development of a competent Coach.
- ✓ That Coach education is an ongoing process that demands a commitment from:
 - ✓ The Coach to stay current.
 - ✓ The CWC to keep coaching programs up-to-date, of the highest quality, and reflective of the needs of Coaches.
 - ✓ That education is competency-based.
 - ✓ That the volunteer and professional Coach are both essential for the success of skydiving and that the contribution made by these individuals must be valued.

In addition, the CWC believes that:

- ✓ The instruction and coaching of parachutists should only be conducted by those individuals with CSPA qualifications.

Although written using the word coach, this statement is just as applicable to the CSPA instructor.

It is important that you identify the key components of the code that apply to you. Pay particular attention to: equality of treatment, safety, intimacy, harassment or abuse, professionalism, and the miss-use of drugs and alcohol.



NCCP Code of Ethics

See CAC resource page at

http://www.coach.ca/eng/certification/nccp_for_coaches/resources.cfm

What is a Code of Ethics?

A code of ethics defines what is considered good and right behaviour. It reflects the values held by a group, and outlines the expected conduct of members while they perform their duties. It can also be used as a benchmark to assess whether certain behaviours are acceptable.

Why a Code of Ethics in Coaching?

Core coaching values have been formalized and expressed as a series of principles in the NCCP Code of Ethics. These principles can be thought of as a set of duties and responsibilities regarding participation in sport, coaching athletes or teams, and administering sports.

The NCCP Code of Ethics can help coaches to evaluate issues arising within sport because it represents a reference for what constitutes “the right thing to do”.

Principles of the NCCP Code of Ethics

The NCCP Code of Ethics is a simplified version of the Code of Ethics of the Canadian Professional Coaches Association (CPCA). However, both codes deal with the same fundamental principles and beliefs:

1. Respect for Athletes
2. Coaching Responsibly
3. Maintaining Integrity in Relations with Others
4. Honouring Sport

The following pages provide a description of each principle and outline implications for coaches.

The Fair Play principles, which follow the NCCP Code of Ethics, relate to the principle of “Honouring Sport”.

NCCP Code of Ethics

1. *Respect for Athletes*

The principle of respect for athletes challenges coaches to act in a manner respectful of the dignity of those involved in sport. This principle is based on the basic assumption that each person has value and is worthy of respect. Acting with respect for participants means that coaches:

- Do not make any participant feel more or less worthy a person than others, on the basis of gender, race, place of origin, athletic potential, colour, sexual orientation, religion, political beliefs, socio-economic status, marital status, age, or any other conditions.
- Have a responsibility to respect and promote the rights of all participants. This is accomplished by establishing and following procedures for **confidentiality** (right to privacy), **informed participation** and **shared decision-making** (right to self-determination – athletes' rights), and **fair and reasonable treatment** (right to procedural fairness). Coaches have a special responsibility to respect and promote the rights of participants who are vulnerable or in dependent positions, and therefore less able to protect their own rights.
- Interact with others in a manner that enables all participants in sport to maintain their dignity.
- Build mutual support among fellow coaches, officials, athletes, and their family members.

2. **Coaching Responsibly**

The principle of coaching responsibly carries the expectation that the activities of coaches will benefit society in general, and athletes in particular, and will do no harm. Fundamental to the implementation of this principle is the notion of competence, which implies that coaches should be well-prepared and possess up-to-date knowledge of their discipline so that they will be able to maximize benefits and minimize risks to athletes.

In addition, coaching responsibly implies that coaches:

- Act in the best interest of the participant/athlete's development as a whole person.
- Recognize the power inherent in the position of coach.
- Are aware of their personal values and how these affect their behaviour.
- Acknowledge the limitations of their knowledge and competence in their sport.
- Accept the responsibility to work with other coaches and professionals in sport in the best interests of the athletes.



3. Integrity in Relationships

Behaving with integrity means that coaches are expected to be honest, sincere, and honourable in their relationships with others. Acting on these values is possible when coaches have a high degree of self-awareness and the ability to reflect critically on how their views and opinions influence how they interact with others.

In coaching, critical reflection questions existing assumptions about the values and practices that govern coaches' actions. The essential component of critical reflection is an attitude based on (i) open-mindedness, i.e. an active predisposition to hear more than one side of an issue; (ii) active inquiry, i.e. asking why things are done the way they are; and (iii) sincerity, i.e. coaches being genuine in their coaching relationships.

4. Honouring Sport

The principle of honouring sport challenges coaches to recognize and promote the value of sport for individuals and teams, and for society in general. Honouring sport implies that coaches:

- Act on and promote clearly articulated values related to coaching and sport.
- Encourage and model honourable intentions and actions.

Fair Play Principles

In addition to a Code of Ethics, coaches and athletes should abide by the principles of Fair Play. Applying Fair Play principles implies that all those involved in sport recognize the importance of fairness, a respectful attitude, and appropriate conduct when engaged in sporting activities, and agree to model and promote them.

The following are examples of Fair Play behaviours for coaches, athletes, officials, and parents:

- Follow all of the rules, and never seek to deliberately break a rule.
- Aim to compete fairly, using talent and ability to win; refuse to win by illegal means or by cheating.
- Respect the official(s), and accept their decisions without doubting their integrity.
- Recognize good performances by the opponent.
- Maintain dignity in all circumstances, and demonstrate self-control. In defeat, recognize with dignity the superiority of the opponent. In victory, act modestly, and do not ridicule the opponent.
- For the officials – know all the rules well, and apply them with impartiality at all times.

3.2 Endorsements

As an SSE 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. As stated in PIM 1, "Prior to signing the candidate's endorsement, it is the responsibility of the signing officer to ensure that the candidate has acquired both the practical skill and technical knowledge to a satisfactory degree."

The additional endorsements that you will be able to sign off are sport canopy, emergency procedures, emergency procedures review, night jumps, and water jumps. For each endorsement, it is imperative that the candidate first gains background knowledge through experience, discussion, and the reading of the relevant material in the PIMs. 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.

Along with all the practical training, there are basic and special skills for which a skydiver may require to be certified or "Endorsed". These Endorsements contain specific training procedures and regulation for such skills as Main Parachute Packing, Water and Night Jumps, Solo Checkout and Formation Skydiving (2 Way and Group). As a skydiver masters the skills required for each endorsement, they will be tested by an Instructor/Coach/Rigger and "signed off" for that particular activity.

Endorsements are tested by written testing, verbal questioning and/or practical testing; or a combination of these. The endorsement is tested and signed off by the proper rating holder. A list of the rating holders required for each endorsement is found below. All endorsements for the respective CoP must be obtained prior to writing the CoP exam.

If your logbook does not have an endorsement card, a stick-in page can be obtained from your member group or CSPA office.

Logbook entries for jumps used to meet certificate requirements must be countersigned by a CoP holder who has witnessed the actual jump. Entries must include name, CoP level and number, e.g. R. Parachutist, D-400. A pilot's signature with a Transport Canada license number is not acceptable for certification purposes.



The type of rating required to sign off specific Endorsements is:

Endorsement	Required For	Signed By
Emergency Procedures	Solo	SSI, SSE
Solo Checkout Jump	Solo	JM, PFFI
Emergency Procedures Review Solo	Solo	JM, SSI, SSE
2 Way FS	A	C2
Emergency Procedures Review A	A	JM, SSI, C2, SSE
Main Packing	A	JM, SSI, C2, RA, SSE
Sport Canopy A	A	C2
Emergency Procedures Review B	B	C2, SSE
Group FS	B	C2
Sport Canopy B	B	C2
Emergency Procedures Review C	C	C2, SSE
Night Jumps	Night Jumps	SSE
Water Jumps	Water Jumps	SSE

Night and Water Jumps: A jump is not required for these two endorsements, nor are they a requirement for any CoP. However, a thorough testing of the candidate's knowledge is mandatory. Emphasize safety and make it clear that a specific review briefing must be made prior to actually making the jump. It is also recommended that night and water jumps are made under the supervision of someone who has performed one.

Emergency Procedures and Emergency Procedures Review: These are clearly very important endorsements. As an SSE you provide the emergency procedures endorsement during the first jump course. Remember that the student must attain the autonomous stage of learning to ensure that they can deal with any problem arriving in a stressful situation. On all jumps, student parachutists should be reminded and questioned on aspects of their emergency procedures. Only continuous rehearsal, both mental and physical, will ensure smooth execution of the assessment - reaction procedure. A detailed description of the Emergency Procedures Review is contained in the Appendix.

Before applying for an "A" or "B" CoP, the candidates must now go through an Emergency Procedures Review. The candidate should use their own equipment and demonstrate the appropriate procedures for various "what if" situations. Remember that emergency procedures are not just those associated with parachute malfunctions. The candidate should be able to tell you of their plans for dealing with in flight emergencies, freefall situations, canopy problems, and landing predicaments.

3.3 Certificates of Proficiency

Introduction

The CSPA is authorized by the Aero Club of Canada to issue parachuting certificates on behalf of the FAI, in the general interest of sport aviation in Canada. The CSPA issues Certificates of Proficiency (CoPs) to recognize ability and knowledge, separated into classes to represent different levels of competence.

These certificates or "licenses" -- A, B, C and D -- benefit the traveling skydiver and all drop zone operators with one standard of FAI Certificate of Proficiency.

Additionally, the CSPA grants a nationally recognized "Solo" certificate that updates the former self-supervision endorsement.

The CWC through its system of coaches and instructors is responsible for developing programs that help skydivers achieve the tasks required at each level. In most cases, these coaches and instructors verify the completion of these tasks.

How to Qualify

Skill requirements (skydiving skills) for a CoP must be verified by a person designated by CSPA as qualified to perform that function. Qualified individuals holding signing privileges include Coaches, Instructors, Riggers (for packing), Judges and Qualified Evaluators.

The standards for the certificates of proficiency have been developed over a number of years. They are designed to test both technical knowledge and skills appropriate to the jumper at each level. You should provide every encouragement and assistance to each jumper so that they can attain these certificates, as attaining a CoP is a significant achievement. These certificates are recognized around the world and compromises to the standards should never be made.

You have 2 major roles in the CoP system: administering endorsements (section 2.3.1.2) and as an evaluator for style and manoeuvre series (section 2.3). Remember that before a candidate performs any evaluation jumps, it is important that you fully explain what is expected and state the evaluation criteria.

You must demonstrate your ability in the following skill areas:

1. Preparation

As per the Skills Grid

2. In flight

As per the Skills Grid

3. Free fall

Freefall jumps that are to be counted for CoP purposes must be controlled. The term controlled refers to the parachutist having unassisted control over the attitude of the body from exit to canopy inflation. Control must be maintained during parachute activation.

When recording freefall manoeuvre performance times, the actual time plus any penalties (corrected time) must be shown in the logbook.



The exit altitude and freefall time must also be recorded for every jump in addition to recording the accumulated time.

4. Canopy Control

Accuracy jumps counted for CoP purposes must be controlled. The term controlled refers to the parachutist having a controlled approach on a pre-determined target, executing turns with a minimum amount of oscillation.

The distance of landings from the centre of the target must be recorded in the logbook. Precision landings are required for the different levels of CoP. Record every distance that can be reasonably measured.

These jump and landing demonstrations must be self-spotted and performed without assistance - that is without instruction or coaching. Landing made while receiving direct instruction or coaching do not count.

5. Equipment

As per Skills Grid

6. Technical Knowledge

As well as performing skills there is an amount of knowledge that must accompany those practical skills. You will be tested on that information prior to applying for your Certificate of Proficiency. You will find study information in the following texts (check online at <http://www.cspa.ca/en/resource.html>):

- PIM 1 (2008)
- PIM 2A (2009), B (1995), and C (2004)
- The most current CSPA logbooks mini-manual.

The type of information that you will be tested on can be found in the information about the endorsements needed to fulfill the CoP requirement; information pertaining to the privileges of each CoP level; Rules and Recommendations of the CSPA, and; competition, equipment and general parachuting knowledge.

Evaluations

All written/verbal examinations and demonstrations of practical skills will be directed to a skill level appropriate to that of the certificate being applied for.

There are three areas to be evaluated, these are:

1. Practical Skills

There are performance standards for each certificate. These standards are identified later in this section. All practical skills for the respective CoP must be achieved prior to writing the CoP Exam.

These practical requirements must be witnessed and signed in the logbook by the Coach/Instructor who has the proper rating. A list of the rating holders required for each task can be found in the Endorsement section, below. During processing of your application, your logbook entries are reviewed with special attention being paid to the specific practical qualifications for that certificate.

Solo Certificate

Introduction

The Solo Certificate is the first step in becoming a licensed skydiver. It allows the skydiver to jump alone without direct supervision of an Instructor. The skydiver will have demonstrated an ability to plan and conduct a safe skydive through the tasks completed below.

It is a Canadian national certification only, and it is not recognized internationally.

The holder of a Solo Certificate may:

- participate in solo skydives (with a minimum activation altitude of 2,500 feet)
- participate in 1:1 FS training with a Coach 2 for the "A" CoP requirement

TASK	SIGNING OFFICER
Performed one solo freefall delay greater than 30 seconds	JM, PFFI
Performed one 5 second solo freefall delay from 4000 feet	JM, PFFI
Completed 3 self-spotted (unassisted) jumps with controlled self-guided canopy landings to within 50 meters of the target	JM, PFFI
Demonstrated in freefall, belly to earth, a figure 8 turn (360 degree turns in both directions)	JM, PFFI
Performed one "Ride the Slide" exit (sitting exit with back towards propeller) for 5 seconds prior to rotating back to belly to earth	JM, PFFI
Under canopy, demonstrate a canopy stall and recovery (above 2000 feet)	JM, PFFI
Completed the Solo Checkout Jump Endorsement	JM, PFFI
Completed the Reserve Procedures Endorsement	SSI, SSE
Completed the Emergency Procedures Review - Solo	JM, SSI, SSE
Accumulated 10 jumps and a minimum of 3 minutes of freefall with stable activation at the prescribed altitude on the last five jumps	JM, PFFI, SSE
Correctly answer all Solo test questions	JM, SSI, SSE



3.4 Certificate Administrator and Log Book Examiner

Certificate Administrator (CA):

One of the privileges as an SSE is to be a Certificate Administrator giving the CoP exams to other skydivers up to your current certificate level. You will need excellent administrative skills, a genuine interest, and a commitment to do a good job. If this task interests you, you must apply to be the CA through your Drop Zone, and then you can request the CoP exams from CSPA. To prevent waste, usually only one individual will have copies of the exams for any one drop zone. Therefore, if there are other senior instructors on your drop zone who already have this privilege, CSPA will most likely refer you to those individuals and you will have to discuss with them how to share the exam responsibility.

Prior to allowing an individual to write a CoP exam, you must ensure that they have met all of the practical jumping requirements and that all the relevant endorsements are signed. It may be useful to ask the candidate a few introductory questions on must know material. If the person cannot give the correct answers, you should advise that they study further, and provide them with appropriate references and guidance, before allowing them to take the exam.

The exams are designed to test a candidate's knowledge in each of the six skydiving skills areas. Most of the material for the exams has been taken from PIM 1, 2A and 2B. Study guides are available from the CSPA office or from the CWC section of the web site (www.cspa.ca).

Some notes:

- Exams are written under the direct supervision of a Certificate Administrator (CA). The results of written exams will be immediately entered on the application section of the exam booklet by the CA. Failure of a written exam will require a minimum waiting period of 14 days before re-examination can take place. Finished Applications are only good for 30 days, after which time they expire, and must be re-written.
- Place the candidate in a comfortable, quiet setting, away from aircraft noise or landing areas.
- Written exams are prepared by the CWC. They are distributed, on request, to the CA, up to and including the highest class of CoP held by the CA. Some recommendations for giving the exams are:
 - Advise the exam applicant to PRINT their answers in CAPITAL letters, e.g. A, B, C, D. This will help avoid confusion between letters. When marking, if you cannot read what the letter is, then it is incorrect.
 - Advise that NO MARKS are to be made on the Exam Question sheet. Emphasize NO MARKS.
 - If they do not understand what a question is asking, advise them to leave the answer blank, and proceed to the next question. Sometimes it will become clearer later on, or after looking at other questions.
 - They are allowed to ask for clarification of a question. However, the CA is NOT to direct them toward an answer in any way. If they do not understand the technical words or definition, this may be an indication that more studying is required.

- It should take no longer than 2 hours to write the exam. Longer than this, it is questionable how well they know the material.
 - If you are dealing with someone who is truly illiterate, or English or French is not their first language, such that they cannot read the questions or they cannot write their answers, then you may give the exam verbally or have someone, including yourself, scribe for them. Caution should be stated that no help can be given in soliciting the answers if using a scribe. Clarifying remarks should only come from the CA.
- The CA determines if requirements and qualifications have been met, prior to applying for a CoP. Each member group normally has one CA. The CA will complete the pertinent items on the application form and verify all the required information. The practical demonstrations must be witnessed by appropriately rated Coach or Instructor. The CA must ensure this has taken place.
- General qualifications and endorsements must be identified by the CA from a properly verified logbook and the official CSPA Endorsement Card, prior to signing the CoP application form. Endorsement cards are available from the CSPA office, or from the web site.
- Students and Novices will write the applicable CoP exam and review the results with the Certificate Administrator as soon as the exam is written. To aid in this process, here are some recommendations:
 - Once the candidate has finished writing the exam, ask them if there was a problem in understanding any of the questions. If so, clarify the question and give the candidate additional time to answer the question one more time.
 - Using the answer key, mark all 80 questions, placing a small tick or dash beside incorrect answers. Keep the Answer Key private and confidential at all times.
 - For each incorrect answer that you marked off, have the candidate re-read the question, and determine what the correct answer is, on their own. You can provide clarification of the question, but be careful not to lead them to the answer.
 - Add up all correct answers, convert to a Percentage, and write the results down as indicated on the CoP exam sheet.
- Place the scores and percentage on the front page of the candidate's answer sheet. Ensure that the correct date appears on the page and then sign it. Make sure that the candidate also signs the sheet.
- For Solo, A and B applications, have the requirements verified, the application form must be initialed and signed by the CA, before forwarding required items to the CSPA. There is no LE for the C and D CoPs; rather, this is done directly by the CoP Processor.
- Congratulate the candidates that pass and remember to go over any answers that were incorrect. The exam is not only a test of present knowledge, but also a way of educating a person with information that may be lacking.
- If the candidate fails, discuss their weak areas, point them to study materials, and encourage them to spend more time in review. They can retake the exam but only after at least 14 days. If there are 2 versions, ensure that they write the other version than what was just failed.



- Exams are to be kept confidential and secure at all times. Mismanagement of the exams and answer sheets, or improper distribution of the exams or answer sheets will likely result in the CA position being withdrawn, and possibly the SSE Certification as well, pending a CWC meeting.

Final administrative details are:

- Ensure that the candidate knows what else they have to do to get their CoP (e.g. passport pictures are required if A CoP, make payment to the CSPA, mailing address, etc.)
- For the A or B CoP, direct them to a Logbook Examiner (LE).
- The candidate is responsible for sending the complete application to CSPA's head office within 30 days from the date on the exam
- Sign the individual's logbook with the date and the mark they received. This grants a candidate "pending" status. This status is considered valid for sixty days.

NOTES:

1. If a Logbook Examiner is not available then the logbooks and application form can be sent to the CSPA office.
2. For the C and D CoP, logbooks containing the qualifying jumps and the paperwork MUST be sent to CSPA.
3. Ensure the CSPA Endorsement Card has been filled in by the correct individual.

Logbook Examiner (LE):

Logbook Examiners should be a responsible SSE who is experienced and competent as a Certificate Administrators, having provided good paperwork for approximately 20 exams. There is usually only one Logbook Examiner per region or Drop Zone. It is the privilege of the LE to verify all applications for Solo, A and B CoP if nominated by member group and approved by CSPA. The LE can be an SSE or a CF.

The duties of the Logbook Examiner are to ensure that the CoP application form is correctly filled in and to systematically check and verify all the Endorsement signatures and jumps related to the application. They provide a back up check in the application process. If any discrepancies are found, they must be fixed before the Logbook Examiners can sign the application. A Logbook Examiner who signs substandard paperwork will have this privilege removed by CSPA.

The Certificate Administrator and the Logbook Examiner have separate responsibilities but they work together to provide the checks and balances needed to maintain the high standards of the certificate of proficiency system.

3.5 Portfolio Requirements for Coach and Instructor Candidates

The SSE has the privilege and responsibility to verify the Portfolio for Coach and Instructor candidates. This is a significant responsibility and should not be taken lightly. The SSE may verify that the candidate has met all the requirements, to the minimum standard of the CSPA, and by their signature stating that the person is justified in receiving final Certification for the particular rating.

*To put it bluntly, the SSE is taking **responsibility** for the Candidate's ability to act in the capacity of the specific rating that is being signed off.*

For instance, for a candidate submitting the SSI Portfolio, the SSE is verifying that the individual:

- has taught the required number of courses
- performed well enough that the individual is released and able to teach the First Jump Course on their own, without supervision

Think of this in terms of your own legal responsibility and liability. If something happens, such that the First Jump Course Instructor is taken to court, you may very well be called upon to justify that they did perform the minimum requirements to the minimum acceptable standards by the association. If in fact you cannot justify this to the court, then your own credibility, and perhaps liability, may be at risk. This is not to say that mistakes can happen after the person has received their full certification; but you should be absolutely sure when signing any portfolio that the minimum standards have indeed been met for the person you are signing off.

In all of the portfolios, you will see a final page that looks similar to the Coach 1 Portfolio sample below, located on Page 10 of the Coach 1 Portfolio:



Practical Experience Document	
Total Number of Jumps: _____	Jumps made in the last year: _____
Years in Sport: _____	CAC NCCP Number: _____
Number of Coaching Contacts since course completion:	
In-Air Observed _____	On Ground _____ Aircraft _____
I wish to (check one):	
<input type="checkbox"/> Upgrade to C1 Certified <input type="checkbox"/> Revalidate my Coach 1 certified rating (5 yr renewal) <input type="checkbox"/> Gain an extension due to: (list reason for extension request) _____ _____	
I certify that the information in this portfolio is a true and accurate representation of my experience as a rating holder.	
_____ Candidate's Signature	_____ Date (day/mon/year)
_____ Email	
Verification by SSE or IB: I have inspected the logbooks of the above named individual and find the information contained in this portfolio to be an accurate record of their experience.	
_____ Verification Signature	_____ Date (day/mon/year)
_____ Verification Name (Print)	_____ CSPA #

When you are presented with a Portfolio for final certification, you should ensure the following:

- **ALL** information has been filled in for the **ENTIRE** portfolio. There should be no blanks anywhere. Portfolios submitted with missing information will be returned to the candidate; and the signing officer, such as the SSE, will receive a note asking why the portfolio was signed with information missing. This will reflect very poorly on you.
- Signatures and dates are required in all places in the portfolio where indicated
- The **appropriately rated person** has signed the practical components, as indicated within the portfolio. For instance, the practical requirements for the Coach 1 Portfolio require verification by a Certified Coach 2. It is your responsibility to ensure that the signing officer is a) a Coach 2, and b) has received their Certification, in hand; having applied for certification is insufficient, as it has happened that certification has been denied with reason. Again, if the portfolio reaches the Ratings Processor without the required rating signature, this will reflect very poorly on you.

Here is a chart of the various Ratings, and the SSE signing responsibility:

Rating	Practical Component	Final Verification
For ALL Ratings		<ul style="list-style-type: none"> • verify the Rating of the signing officers; • the record of contacts has been filled in completely; and signed for each contact • verify the PED has been filled in; • candidate signature and date; • CSPA Membership is current; • All completed by the 1-year Expiry date listed within the Portfolio
Coach 1	None	<ul style="list-style-type: none"> • verify the 25 contacts to include a Variety of contacts to SOLO (Novices) from Skills Grid Stages 5-8; contacts outside of this realm (e.g. 2 Way, Free Flying) will be denied by the Ratings Processor; • verify completion of the MED Evaluation; • verify the Evaluation Coach Jump has been completed;
Coach 2	None	<ul style="list-style-type: none"> • verify the 25 contacts to include 1:1 FS (Belly) for the 2 Way and Group FS Endorsements with a Solo or A CoP holder; contacts outside of this realm will be denied by the Ratings Processor; • verify completion of the MED Evaluation IF the Coach 1 rating is prior to 2005; • verify the Evaluation Coach Jump has been completed; • verify the Coach 1 rating is Certified
Jump Master	None	<ul style="list-style-type: none"> • verify that 6 students were dispatched, while directly observed by an attending certified JM in the aircraft, PRIOR to commencing dispatching on own • verify the 25 IAD/SL dispatches have been performed; freefall students are not to be included • verify the Coach 1 rating is Certified (JM portfolio may be submitted concurrently with C1)
Jump Master - Restricted	None	<ul style="list-style-type: none"> • verify that 6 freefall students were dispatched, while directly observed by an attending certified JM in the aircraft, PRIOR to commencing dispatching on own • verify the 25 freefall dispatches have been performed • verify the Coach 1 rating is Certified (JM portfolio may be submitted concurrently with C1)
Skydiving School Instructor	None	<ul style="list-style-type: none"> • verify the 3 FJC were taught under the DIRECT supervision of a Certified SSI • Verify that a minimum of 10 students were taught • verify the Coach 1 rating is Certified (SSI portfolio may be submitted concurrently with C1)



PFF Instructor	None	<ul style="list-style-type: none"> • verify 25 PFF jumps were safely made • within a 1 year period • verify a 1:1 Evaluation Jump was performed • verify Coach 2 certified • verify Jump Master Certified or SSI Certified
GCI Instructor	Coaching Contacts Record	<ul style="list-style-type: none"> • verify the candidate has directly observed the required pre-requisite 25 Ground Control student canopy guidance by a certified ground control instructor within a one year period prior to the GCI training module. • Verify the candidate has trained as a Ground Control Instructor • Verify the completion of the practical requirements of directly controlling 25 students to a safe landing • Verify completed within a one year period • verify the Coach 1 rating is Certified (GCI portfolio may be submitted concurrently with C1)
SSE	<ul style="list-style-type: none"> • A, B and C CoP Exams • Night and Water Endorsement • EPR B and C • Administer a CoP Exam 	<ul style="list-style-type: none"> • Verify completion of the SSE portfolio and that the candidate has met the minimum standards • Verify SSI certified • Verify GCI certified • Verify JM or C2 or PFFI certified

3.6 Exhibition Jump Rating

One of the most rewarding and ambassadorial aspects of skydiving is the Exhibition Jump or ‘demo’ rating. For the jumpers it is an opportunity to share their colourful and exciting sport with the mainstream public. Demo jumps also serve to bring modern knowledge of our sport to the public, providing the opportunity to educate, entertain, and reinforce a positive image of skydiving.

Of course, with this increased reward, there is an increase in risk. It is common knowledge in the entertainment industry that the performance is different from the rehearsal; this is especially true in exhibition jumping. Although you have jumped hundreds or even thousands of times at several different drop zones, performance anxiety increases significantly when jumping before live audiences and/or television cameras. Even if the proposed landing zone is completely free of obstacles and larger than the drop zone normally being used, jumping before the public is NOT just another skydive! Mess up a landing at the drop zone, it costs maybe a bit of your ego. Mess up at a demo, and you will be vulnerable to everything from the laughter from the crowd to litigation.

The goals of this section are outlined in more detail in PIM2C.

The Exhibition Jump Rating

There are minimum qualifications and regulatory approvals required to conduct a “*parachute descent over a built-up area or assembly of persons*” as Transport Canada has defined demonstration jumps. Transport Canada requires that only jumpers who have proven their competence may participate in demonstration jumps. CSPA is empowered to certify those jumpers through the Exhibition Jump Rating (EJR).

As an SSE, you have the authority to administer the EJR and the responsibility to ensure only those worthy of it are granted this special rating. The following are the minimum requirements for the EJR:

a) Prerequisites:

- Current CSPA membership
- Minimum class C Certificate of Proficiency
- Minimum 500 ram-air parachute jumps
- Minimum 50 parachute jumps in the previous 12 months

b) Requirements

- Perform 10 consecutive pre-planned stand-up accuracy jumps landing within 5 meters from target centre (10m diameter), witnessed by an EJR examiner.
- A pre-planned jump witness must have one of these ratings:
 - SSE
 - Course Conductor
 - Coach 2



- Logbook Examiner
- CSPA Judge (may not administer the Exam)
- Score 80% or more on the EJR written exam, and;
- Application Fee to be submitted to the CSPA (at the current rate set by CSPA)

c) Annual Currency Requirements

- Current CSPA membership
- 50 jumps in the previous 12 months, 10 of which must have been within 5 meters of target center, not necessarily consecutive, using a parachute which meets the wing loading and performance characteristics of the main parachute intended for use on exhibition jumps,
- Verification by an EJR examiner.

Notes:

1. A declared jump means that you must tell the examiner before the jump. Once declared, it cannot be changed.
2. The “consecutive” portion does not mean ten jumps in a row e.g. 541, 542, 543... 550. A jumper can decide which jumps they declare e.g. 542, 556, 597, etc.
3. If a candidate misses on any of the ten designated jumps, then they must re-start the series at jump number one.
4. The EJR must be renewed yearly with the CSPA Membership; the renewal form is attached to the annual membership renewal application.
5. There is no charge for the renewal if renewed with the membership renewal.

Exhibition jumps are an important aspect of publicity for our sport. To ensure that this publicity is positive, all jumpers who have the exhibition jump rating must be qualified and capable of performing well in front of the public.

The SSE has three roles in the rating system:

1. Each new EJR applicant must demonstrate
 - a. 10 consecutive pre-planned stand-up landings
 - b. within 5 metres of target.
 - c. After personally watching the landing, you should sign off the jump in the person's logbook.
2. If YOU are EJR rated, you may also administer the exam.
3. Finally, the EJR expires with their CSPA membership renewal regardless when they first received it. Recurrency may take place later but the application fee will apply.

As an SSE you may sign the revalidation form to confirm that the jumper has met the annual requirements.

The 10 consecutive stand-up landings with 5m are an absolute requirement.

Allowing someone to participate in an Exhibition Jump is not just to stroke that person's Sky God Ego. There is a very real safety concern in any Exhibition Jump. There can be Zero tolerance for mistakes, such as landing outside of the intended area, impacting with an obstacle in the landing zone, or worse impacting with the crowd of observers. Landing and falling down, potentially having to be carried out on a stretcher, with hundreds of people watching in horror will quickly diminish any Sky God Ego attitudes; unfortunately too late! Notwithstanding, the impact on the sport of parachuting as a whole if an Exhibition Jump participant is not fully prepared for the pressures associated with such a jump.

When you sign off each of the 10 jumps, the candidate is proving, beyond ANY doubt, that they can perform as required. Consistently! Each and every time! If the person performs 9 landings within the criteria, but then lands outside of the 5m, or falls down on the 10th declared jump...then the Count starts back at Zero!

What if this happened on the 10th Exhibition Jump? This would be completely unacceptable!

There should be no compromise whatsoever. If the person gets mad at you, so be it. But you may have just saved a little girl or boy from getting hit by an out-of-control parachutist flying at them at 30 mph.

Note that the entry and stop must be within the 5m radius of the target. One cannot swoop into the landing area through where a crowd could be standing, and certainly not out the other side.

Stand your ground, especially if the candidate cannot stand theirs!

Exhibition jump insurance will be available only to those members of the CSPA who hold a valid Exhibition Jump Rating (EJR).

EJR Examiner(s) - Instructions

After the candidate has completed the 10 qualifying jumps, a rated person may administer the exam. The candidate must achieve score of at least 24/30 correct answers on the EJR written exam.

You are encouraged to read the detailed information in PIM 1 Section 8.

Summary Questions

- What are the responsibilities of a signing officer toward endorsements?
- What is the difference between a CA and a LE?
- What are the responsibilities of a Certificate Administrator (CA) and a Logbook Examiner (LE)?
- Give three functions an SSE has with respect to the Exhibition Jump Rating (EJR)



Appendices

Appendix – Emergency Procedures Review

Reviewing emergency procedures with an appropriately rated Instructor is one of the most critical components of obtaining each CoP. The key here is “Emergency Procedures” not just reserve procedures (e.g. aircraft emergencies, injuries etc).

It used to be that the only time a person received training in emergencies was the first jump course. With the advent of the Solo, A, B & C CoP, reviews of this valuable information can be refreshed and new layers of sophistication added to the basics. At the "A" CoP level review the basics (buildings, trees, power lines and low obstacles, free fall emergencies) while refining unintentional night and water jumps, basic FS safety, canopy avoidance drills and group landing approaches. Cutaway practice must be performed and a high level of proficiency displayed.

Emergency Procedures Review

Address the five areas of the Skills Grid

Preparation

- Weather
- Forgotten equipment (i.e. do not find yourself at the plane with no altimeter, develop a gear up routine)
- Serious doubt prior to boarding
- Negative response to another skydiver’s accident

In flight

- Aircraft
- Aborted take off
- Crashed take off (engine failure on take off)
- Crashed after take off <1000’
- Aircraft stall
- Engine failure at altitude problem <2000’, >2000’ to <3000’, >3000’
- Aircraft emergencies: fire inside, fire outside,
- Emergency exit altitudes for main & reserve
- When to shut off AAD's during an unplanned descent in the aircraft
- Sickness
- Main/reserve deployments in aircraft, door open, door closed, on climb out
- Tail strike
- Aircraft stall on exit

Freefall

- Malfunctions
- Other equipment (altimeter not working, lose goggles)
- Stability problem around pull
- Traffic problems; collision
- Fall into cloud/haze layer
- Lazy pilot chute toss



Canopy

- Correctible situations
- Low vs. High speed malfunctions
- Two canopies out scenarios
- Traffic on opening, traffic on landing
- Obstacle avoidance or collision
- Turbulence
- Landing in the wrong direction; how to land downwind, high speed safely (butt slide)
- Landing off DZ
- Trees, power line, water, fences, cars and roads, buildings and roofs
- F111 vs. Zero-P material
- Who to talk to when you want to learn to 'swoop'

Equipment

- Poorly fitting gear, incorrect gear-up by helpers
- Damage on opening
- AAD misfire
- Closing loop
- Wrong closing order
- Out of date reserve repack

Emergency Procedures Review SOLO Certificate

Address the five areas of the Skills Grid:

Preparation

- Weather
- Forgotten equipment (i.e. finding yourself at the plane with no altimeter, develop a gear up routine)

In flight

- Aircraft emergencies
- Emergency exit altitudes for main & reserve
- When to shut off AAD's on an unplanned descent in the aircraft
- Sickness
- Main/reserve deployments in aircraft or on climb out

Freefall

- Malfunctions
- Other equipment (altimeter, goggles)
- Stability around pull
- Traffic problems

Canopy Control

- Correctible situations
- Low speed malfunctions
- Two canopies out scenarios
- Traffic on opening, traffic on landing
- Obstacles
- Turbulence
- Landing in the wrong direction

- Who to talk to when you want to learn to 'swoop'

Equipment

- Poorly fitting gear
- Damage on opening
- AAD misfire

FS Safety

1. When dive planning a student or novice, separate unusual situations from the normal jump. Keep unusual situations in the skill assessment or review portions.

Emergency Procedures Review "A"

A review of the topics discussed for the SOLO Certificate is required.

1. Review the basics (buildings, trees, power lines and low obstacles, free fall emergencies) while refining unintentional night and water jumps, basic FS safety, canopy avoidance drills and group landing approaches. Cutaway practice must be performed and a high level of proficiency displayed.
2. For unintentional night jumps specifically discuss selecting safe alternates, landing in deep brakes, and the good old fashioned PLF.
3. Issues on 2-way climb outs
4. Freefall 2-way problems
5. Loosing track of your 2-way partner
6. Canopy avoidance drills, and what to do if you can't avoid
7. Emergency aircraft exit altitudes can be a bit lower now if needed
8. Flight landing patterns

A full unintentional water landing briefing is mandatory at this point. There are many key points to stress. Please note that the full night and water jump endorsements must be acquired by the novice prior to performing these types of jumps.

- 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 turn canopy to land beside you
- 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 do need to be addressed

RSL's, AAD's, and two canopies out.

RSL's, AAD's 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.

The two square canopies out scenario needs to be discussed; cutting away down planes, identifying the dominant canopy, steering and landing sides by sides and biplanes. The novices need to understand the risk of entanglement if cutaways are performed. The PIA report (available at www.pia.com) is an excellent resource on the subject. See also PIM 2A 2009.

Gear transitions, borrowing gear.

The following additional topics need to be discussed:

In flight

- Issues on 2-way climb outs, and
- Emergency aircraft exit altitudes can be a bit lower now if needed.

Freefall

- Freefall 2-way problems, and
- Loosing track of your 2-way partner.

Canopy Control

- Canopy avoidance drills, and what to do if you can't avoid,
- The two square canopies out scenario discussion should include:
- Cutting away down planes,
- Identifying the dominant canopy,
- Steering and landing sides by sides, and
- Steering and landing biplanes.
- The novices need to understand the risk of entanglement if cutaways are performed, and
- Group landing patterns.

Equipment

- RSL's, and AAD's have limitations and the novice needs to be aware of the situations where these devices can be a disadvantage. e.g. Spinning malfunctions, prolonged level flights, and
- 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,
- After landing into the water, front loop out of the harness,
- Discard helmet, shoes,
- Swim away from the canopy,
- Tread water and disrobe,
- Swim for shore, and

Equipment concerns need to be addressed.

Night Jumps

For unintentional night jumps specifically discuss:

- Selecting safe alternates,
- Landing in deep brakes, and
- PLF.

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

Emergency Procedures Review "B"

A review of the topics discussed for the SOLO and "A" Certificate is required.

1. Large group FS safety and large aircraft safety are the major topics. Refresh the novice on the key points of all procedures.
2. Decelerate properly from tracking before deploying.
3. Again, cutaway practice must be performed with a high level of proficiency.
4. Emergency situations specific to the person's discipline.



Emergency Procedures Review "C"

A review of the topics discussed for the SOLO, "A" and "B" Certificate is required.

1. Physical emergency procedures might change with equipment.
2. RSL's and where they might or might not be appropriate.
3. Severity of 'low-speed' malfunctions.
4. High Performance landing approaches in a traffic pattern.
5. Emergency situations specific to the person's discipline.
6. Again, cutaway practice must be performed with a high level of proficiency.

By this point, this endorsement should mostly be to prompt the person to give some thought to emergency procedures and to remind them of potential problems. Tailor the conversation to the person's discipline and to whatever areas that you see them needing improvement in (e.g. if their landings always look out of control, not understanding 2 canopy out situations fully).

Appendix: Emergency Procedures Review - Topic Headings:

Preparation Unusual Situations

- Weather
- Serious doubt prior to Boarding
- Negative Response to another Skydiver's Accident

In-flight Unusual Situations

- Aircraft
- Aborted Take Off
- Crashed Take Off (Engine Failure on Take-off)
- Crashed After Take Off < 1000'
- Engine Failure at Altitude Problem > 1000' < 2000'
- Engine Failure at Altitude Problem > 2000' < 3000'
- Engine Failure at Altitude Problem > 3000'
- Structural Failure (Collisions)
- 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

Freefall Unusual Situations

- Correctables
- Lazy Pilot Chute Toss
- Hesitation
- Loss of Stability
- Loss of Goggles
- Altimeter Not Working
- Freefall Rules

Canopy Unusual Situations

- Malfunction Decision Making
- React
- Think
- Assess
- Assessment of High Speed Malfunctions
- Assessment of Low Speed Malfunctions
- Correctables
- Problems under Canopy at Altitude
- Cannot Locate the DZ or Landmarks
- Cannot Find the Toggles
- Problems Under Canopy, Near the Ground
- Obstacle Landing Avoidance (How to Avoid)



- Avoidance Procedure
- Ground Scan
- Off DZ Landings
- Trees
- Power Wire and Telephone Wire
- Water - Unintentional
- Fences, Cars and Roads
- Roofs and Buildings
- Complex / Multiple Obstacle Areas
- Downwind
- High Wind
- Flared too High
- Reserve Canopy Control
- Problems On the Ground
- Injury on Landing
- Off DZ Landing
- Reserve Canopy Landing

Equipment Unusual Situations

- Lost Equipment
- Damaged Equipment
- Malfunction
- Unthreaded Hardware
- Closing Loops
- Poor Gear Up by Helpers
- Wrong Closing Order
- Out of Date

FS Safety (Note: For Emergency Procedures Review B, reference PIM 2B)

Notes for the Instructor

1. When dive planning a student or novice, separate unusual situations from the normal jump. Keep unusual situations in the skill assessment or review portions.
2. For canopy unusual situations, review the React procedure first. Analyze the reaction procedure carefully. Review the Assessment portion second. Use sensations (seeing, feeling and hearing) for assessments only and avoid technical names. Give scenarios, one from each category (high, low and those correctable). Analyze the assessment decision and time components carefully.
3. Introduce technical names just prior to self supervision.
4. Tell them not to tell the other novices or students the technical names as that is the Instructor's decision.
5. Attempts to correct certain types of malfunctions are not to be introduced to anyone before 100 jumps and on the decision of an Instructor.
6. Cover all areas but try to keep it short and simple.
7. 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.



Appendix – Packing Endorsement

The applicant must satisfy the four listed requirements and successfully pass a practical test to get signed off on the endorsement card by an instructor, coach or rigger.

1. “P” – **pack**: ability to pack properly, minimum 10 under supervision demonstrating proper sequence, techniques and neatness (PIM 2A).
2. “I” – **inspect**: ability to do basic inspection while packing (PIM 2B).
3. “N” – **name**: ability to identify major components (PIM 2B).
4. “T” – **tangles**: ability to clear common minor entanglements (PIM 2A).

The above points are best taught in two phases. The first phase is:

1. Teach the normal pack. (pack, inspect, name)
2. Practical experience of the normal pack, usually 6 - 10 times.
3. Practical testing demonstrating packing techniques, basic inspection and orally listing the names of the major components.

The second phase would be the not normal pack.

1. Teach the seven common entanglements and how to recognize them.
2. Practical experience of clearing entanglements, receiving feedback, while you supervise.
3. Practical testing demonstrating the ability to recognize and clear minor entanglements.

The Seven Common Entanglements

1. back or front flip through risers, below slider
2. back or front flip through risers, above slider
3. step through one riser, below slider
4. step through one riser, above slider
5. step through a line, below slider
6. step through a line, above slider
7. step through a cascade

Suggestions for the Coach / Instructor / Rigger

1. Make sure that you pack well first, before teaching someone else.
2. Make sure that you are using approved techniques and know the correct reasons for their use.
3. Cross check with a rigger to make sure that what you do is correct.
4. Make sure that the person being checked out also knows how to do proper safety checks. It is actually on the skills grid **before** packing.
5. Teach and practice endorsement parts 1, 2 and 3 together.
6. Evaluate part 1 separately, first, orally.
7. Evaluate parts 2 and 3 together, practically.
8. Teach entanglements (part 4) as a separate phase after they have learned the complete normal pack first. This will make entanglements easy to learn and understand.
9. If unsure about part 4, team-teach first with someone rated who truly knows it.
10. Make sure you teach part 4 and practice it, before you evaluate it.
11. Evaluate part 4 separately, practically, after parts 1, 2 and 3.



12. When evaluating part 4, 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.
13. Always use the PAF method when teaching packing, break into lots of small steps.
 - Lay canopy out
 - Run the lines, with brakes separate out
 - Lay canopy down
 - Flake the cells
 - count the nose
 - Role the nose
 - Repeat this process until proficient prior to moving to stacking the lines.
 - Etc.
14. When all 4 parts are passed, sign off the endorsement card. Be ready to stand by your decision.
15. This endorsement is required for the B CoP.
16. All endorsements, as with everything in this sport, are to be treated as a positive educational experience. They are **not** to be an opportunity to degrade.

Ratings for Administering

Pre January 15, 1997 Coach 1 and Rigger A are the lowest ratings to administer this endorsement. Post January 15, 1997 Coach 2, Instructor A and Rigger A are the lowest ratings to administer this endorsement. Any person who was a Coach 1 prior to January 15, 1997 retains the privilege; however, with forthcoming recurrency requirements, this will likely change.



Appendix - Night Endorsement

A Night Jump is a parachute jump made between one hour after (official) sunset and one hour before sunrise.

Reference PIM 1 Section 3.2

The following are the maximum wind speeds, at canopy height, in which sport parachute jumps may be carried out:

- Night & Water Jumps - 10 mph (5 m/sec.)

Reference: PIM 1 Section 3.18

Parachutists, possessing at least an A CoP, and a Night Jump endorsement should review the recommended procedures prior to taking part in night jumps (see PIM 2B). Night jumps are to be performed wearing a steady or flashing light visible through 360 degrees. Visual instruments should be illuminated with a steady light. Parachutists must have good canopy control skills and be capable of performing reliable stand-up landings prior to participating in night jumps.

All first-time night jump participants should be supervised, regardless of CoP level.

Reference: PIM 1 Section 3.19

Those participating in night group skydiving activities shall hold a CSPA C CoP, a night endorsement, and be proficient at equivalent tasks performed during daytime group freefall.

Things to discuss during a Night Jump briefing:

Hypoxia -- a decrease in arterial oxygen saturation, causing decreased oxygen supply to the brain. Occurs at high altitudes to the lower air pressure.

Rods of the Retina -- specifically evolved cells of the retina of the eye, which are able to respond to very low levels of light (i.e., at night).

The two main factors in aviation physiology are *Arterial Oxygen Saturation* and *length of exposure to low oxygen levels*. As one ascends in an airplane, the atmospheric pressure decreases with a corresponding decrease in arterial oxygen saturation. Because of various factors, however, this is not a straight-line relationship. Figure 1 is a graph of Arterial Oxygen Saturation at various altitudes, both breathing air and breathing 100% oxygen. The first effect of hypoxia is a decrease in night vision because the rods of the retina are very sensitive to lowered oxygen levels. Effects start at 1,500m (5,000 ft).

It is **STRONGLY ADVISED** that people do not smoke prior to preparing for a Night Jump. This lowers the level of arterial oxygen saturation, increasing hypoxia, decreasing night vision by approximately 5,000 ft.

When landing, it is common for people to want to flare early. Inexperienced night jumpers are advised to avoid the urge to flare too early, keep the head up, eyes on level with the horizon. If



a flare is started too early – STOP – such as holding at ½ brakes, then continue the flare at the proper height (~10 feet).

Jumpers should be very clear on the landing direction: facing the same direction as any field lights so that they cannot actually look into the lights themselves but are viewing from behind. Obstacles should be clearly lit up and avoid landing near those lights which are indicating obstacles.

The load should be organized based on experience, number of passes, opening altitudes, type of canopy, etc. For instance, a general order of exit should be: Lower exit first, larger canopy open before a smaller canopy in a formation, smaller canopy exit before larger canopy, free flyer exit before belly flyer (remember, there is little wind, and leave plenty of separation). Stage openings such that the fastest canopy is opening the lowest, the largest/slowest canopy is opening last, separated by ~500 opening (accounting for snivelling as well). Hop-n-pop from high altitudes should be coordinated with the aircraft pilot so that no unexpected air traffic flies through while under canopy at several thousand feet.

Jumpers should be kept in the dark, away from ALL sources of light for at least 30 minutes prior to boarding the aircraft. It takes 30 minutes for the eyes to adjust to the darkness, and only a flash of light to lose night vision entirely. This includes Glow Sticks or strobe lights. These should be turned off or covered with duct tape (or similar covering which does not allow any light through). Do not break the glow stick (start the glow) until just before Exiting the aircraft.

Jumpers in the plane are to keep ALL lights and lit instruments away from the Pilot's view. The pilot also requires night vision even with a lit instrument panel. Never shine a light in the Pilot eyes or that of any other Jumper.

If using a glow-in-the-dark instrument, make sure it is sitting under a brightly lit lamp for about 1 hour.

*** People on the ground should NEVER use a flashlight to search for a canopy in the air during night jumping. The flash could temporarily blind the jumper at the most crucial time of landing approach.

Once landed, immediately walk out of the landing zone, keeping the helmet on, glow sticks clearly visible, and a watchful eye for a canopy suddenly coming out of the dark. All jumpers should proceed to the Check-In point after landing safely, and identify themselves with a Check-In person who is keeping a list of jumpers. The Check-in person will notify the DZSO if someone does not check in; this is necessary in the event of an off drop zone landing, cut-away or bad spot.

Jumpers are urged to carry a whistle to signal out to other canopies.

Jumpers are urged to carry a small flashlight, securely fastened inside the jump suit or attached securely to the inside of the arm sleeve. This can be used to check the canopy out after opening. It should NEVER be used to locate other jumpers under canopy as it could temporarily blind someone.



Appendix -Water Endorsement

Water jumps are pre-planned parachute jumps into an open body of water of more than 1.5m (5 ft) in depth. A water jump can be an enjoyable experience provided normal procedures and a few additional precautions are employed. This section will provide a general outline for conducting a water jump, including pre-planning, training and conduct of the parachute operation and post jump responsibilities.

Reference PIM 1 Section 3.2 Winds

QUALIFICATIONS

Parachutists, possessing at least a CSPA B COP or higher. Or A COP, with water jump endorsement and under supervision of a coach 1 or higher, should review the recommended procedures prior to taking part in water jumps (see PIM 2B). In addition to general equipment recommendations and BSR requirements, participants should be able to swim and must wear running shoes, a personal floatation device, and a rig that allows unrestricted exit from the harness.

All first time water jump participants should be supervised regardless of CoP level.

This Endorsement can be signed off by a SSE.

The holder of a Class A Certificate of Proficiency may:

- Participate in intentional night and water jumps, once briefed and signed off by an SSE. The jumps must be under the supervision of at least a B CoP holder experienced in that activity.

The holder of a Class B Certificate of Proficiency may participate in:

- Intentional night and water jumps, once briefed and signed off by a SSE

Floatation Gear: Equipment which, when attached to parachutists and inflated, will keep them and their equipment afloat in water.

SPECIFIC REGULATIONS

1. CSPA

- a. Maximum winds - 10 MPH (9 KTS, 5 M/S)
- b. Motor powered safety boat of sufficient size to hold the operator and assistant, jumpers and their equipment.

2. Transport Canada

- a. Airspace clearance if required. Since a lake is not normally a drop zone, it may be necessary to obtain MOT approval or at least file a NOTAM.



SPECIAL EQUIPMENT

1. Provided by the Jumper

- a. Swim suit;
- b. T-shirt;
- c. Runners or water shoes;
- d. Hard shell helmet (may be provided by the DZ);
- e. Parachute system with the AAD, packing card and any weights removed (may be provided by the DZ) **NOTE** Canopy manufacturers recommend not immersing canopies in water as it will remove the UV-protective coating and can increase the porosity thereby decreasing performance; and
- f. Flotation device of a suitable nature to support the jumper upon entry into the water. The recommended flotation device is a short body or wet suit as it will provide the greatest amount of flotation and not impede the removal of the harness upon entry into the water. It will also help the jumper maintain their body heat while waiting for recovery. Other suitable flotation devices are may west style CO2 and manual inflation life jackets. Though suitable they can pose an added hazard if inflated while the jumper is still in the parachute harness. Not inflating life jackets should not be used, as they will impede proper fitting of the parachute harness.

2. Provided by the Dropzone

- a. Suitable jump aircraft, sterilized of any loose equipment that could fall out during the WDI or jump runs.
- b. Sufficient WDIs to provide for initial WDI and confirmation runs. If there is going to be any more than a 1 hour turn around or delay between drops a confirmation WDI run should be done after each break.
- c. A suspended training harness suitable to allow jumpers to practice their procedures from the time of exit from the aircraft until entry into the water.

3. Ground Crew/Recovery Team

- a. A boat of sufficient power to be able to maintain its station in the event of wind or current changes. And of sufficient size to hold the operator, assistant, jumper and their gear. Safety boats should also be equipped with the following:
 - a. Plastic bags or bins for parachutes to minimize potential for damage to equipment;
 - b. First aid kit;
 - c. Buoy or marker;
 - d. Radio with communication to both shore and the aircraft;
 - e. Note – recovery of equipment should be done by hand as boat hooks and other gaffs may cause damage to equipment.
- b. Shore crew should be equipped with the following:



- a. Tell tail and arrow to indicate wind direction;
- b. First aid kit;
- c. Radio with communication to the recovery boat and the aircraft; and
- d. Safety vehicle in the event of off DZ landings.

CONDUCT OF THE WATER JUMP

1. Preparation

- a. Prior to commencement of the water jump. A briefing must be held, by the person in charge of the jump to ensure all jumpers and support staff, are aware of their responsibilities. The briefing should be done prior to the jumpers receiving the jump training, this will allow the ground crew time to set up and check water conditions, and help to get the jumpers into the right mindset. The following personnel must be present:
 - i. Pilot;
 - ii. Jumpmaster;
 - iii. Ground crew/recovery team; and
 - iv. All jumpers participating in the jump.
- b. The briefing must include the following points:
 - i. Time schedule, to ensure all personnel are on time and ready to go. A well thought out schedule will ensure people are ready and allow for concurrent activity;
 - ii. Confirmation by the pilot and ground crew that they have all of their specific equipment to do their jobs;
 - iii. Confirmation that all jumpers have their safety equipment and their equipment is ready for the jump;
 - iv. Stop drop procedures;
 - v. Current weather, wind and water conditions; and
 - vi. Radio checks.
- c. Pre-jump ground training. All jumpers conducting the water jump must demonstrate the following skill sets while wearing their life preservers or wet suits and while suspended from a training harness. It is recommended that water jumps be a maximum of 10-second delay. This will eliminate the requirement for altimeters;
 - i. A 10 second count;
 - ii. Proper deployment of their parachute;
 - iii. Releasing of the RSL;
 - iv. Releasing of the leg and chest straps from their keepers;
 - v. Removal of the chest strap from the locking buckle at 1000 feet;
 - vi. Proper flair procedures- jumpers should be instructed to allow parachute to run after entry into the water, and not maintain full brakes. This will ensure the parachute surges forward and does not fall on the jumper.

NOTE- Do not instruct jumpers to cut away their mains prior to entry into



- the water as it is difficult to determine height above water, and doing so may result in serious injury;
- vii. At this point the jumper should stand on the ground and practice getting out of their gear with their life preserver or wet suit on, then practice inflating their life preserver manually. Once out of their equipment, jumpers should maintain positive control of their container until such time as they are recovered;
NOTE – Parachute containers will float for a short period of time due to the air trapped inside of the packed reserve. Therefore jumpers should be instructed to not panic while getting out of their harness after entry into the water.
 - viii. After all jumpers have completed the practical rehearsals they should be briefed on the WDI run procedures and instructed to watch where they land;
 - ix. Jumpers should also be briefed on opening altitudes which should be 3000' to ensure they have enough time to do their drills and set up for landing; and
 - x. Finally jumpers should be informed about possible changes to their freefall control due to lack of clothing.
NOTE – Some additional training that can take place in a pool or controlled setting, are swimming out from under a canopy and treading water.

2. **In-flight Procedures**

- a. After take off JM should conduct final checks of all jumpers to ensure that their life preservers are not going to impede the operation of their parachute. And jumpers are ready to go;
- b. As the aircraft approaches the drop point the JM should confirm the location and identify the arrow on the ground confirming wind direction and clearance to drop;
- c. Once over the release point the first WDI should be dropped. After the WDI has been released the aircraft should circle the area and the JM maintain visual contact until the WDI makes contact with the water;
- d. If the WDIs land off target, make the suitable corrections and throw a second set of WDIs. Continue this procedure until a suitable release point has been found; and
- e. On each jump run a maximum of one jumper per safety boat should be dispatched, ensuring sufficient time between passes to allow safety boats to recover the jumpers.



3. Ground Crew/Recovery Team

- a. Upon arrival at the water landing area safety boats should conduct a final check of their gear, do a check of the landing area for any hidden obstacles and place the marker buoy;
- b. Shore based recover should ensure the arrow is clearly visible to the aircraft;
- c. If a tell tail is being used it should be placed where it is best seen, by the approaching jumpers;
- d. In the event wind or water conditions are unsafe the arrow will be taken up. This will indicate a stop drop to the aircraft;
- e. Once jumpers are in the air, each boat will identify a jumper and move to that jumper once they have entered the water;
- f. Once the boat reaches the jumper. The jumper will pass the container to the recovery boat then enter the boat. Once aboard the jumper will assist in the recovery of the equipment; **NOTE** - Rubber made bins work best and allow for fast recover and transport, while ensuring minimum risk of damage to equipment.
- g. Once the load is complete the jumpers are returned to shore and all gear transferred to the recovery vehicles; and
- h. Ensure all markers and buoys are removed and the area checked for equipment or garbage. Leave the area as you found it.

4. Post Jump Procedures

- a. All metal fittings on the parachute and containers should be wiped dry. Metal cable housing should be pulled through using a length of cord and a small piece of cloth;
- a. Reserves should be deployed and hung up to dry with the main canopy and parachute harness away from sunlight or fluorescent lights, as exposure to this kind of light will break down the nylon; and
- b. Finally ensure all jumpers log books are signed and their water endorsement registered on their endorsement card.

5. Unusual Situations

- a. Canopy Malfunction – In the event of a canopy malfunction, carry out your normal procedures. Once under canopy ensure you are heading for the intended landing area and then carry on with your preparations for a water landing. **NOTE** ensure you are going to make the water before you begin undoing the chest strap.
- b. Malfunction of the inflation device – It is recommended that jumpers wear a water body suit or short wet suit to eliminate this from happening. However, if a May West style life preserver fails to inflate once you are in the water, continue to attempt to manually inflate. **NOTE** – Most



parachute containers will float and can provide a means of support while waiting for the recovery boat.

- c. If landing under high winds or currents – after entry into the water cut-away your main and move away from it.

UNINTENTIONAL WATER LANDING PROCEDURES

1. Avoid if possible;
2. Head for the closest shore;
3. Undo the RSL;
4. Undo the chest strap;
5. Remove the running end of the leg straps from their keepers;
6. Land face into the wind, then allow canopy to run;
7. Undo the leg straps and remove the harness;
8. Remove any additional weights you may be carrying; and
9. If using a helmet with out vent holes, trap air inside of it and use it as a floatation device. Or detach the main canopy and use the pack tray as a float and try and make your way to shore.

EVALUATION

All jumpers involved in the water jump must physically demonstrate the practical requirements of the pre-jump ground training before being allowed to jump. You do not have to actually water jump to become endorsed. However, nothing can replace the experience of actually doing your first water jump. Each time a water jump is conducted a full briefing must be given. It is also recommended that some form of pool training be conducted.



Appendix - Course Facilitator

Course Facilitator (CF): A CF trains candidates for coach and instructor ratings. Training is provided initially in the form of a Course Facilitator Training Seminar. The training takes three days, under the direction of a Master CF.

To Qualify:

- holder of a Class D Certificate of Proficiency
- 1000 jumps
- C2 certified
- SSE certified
- SSI trained

Certify:

- all endorsements
- all CoP requirements

Recommendations:

- assist on a C1 course
- nominated by a Course Facilitator
- Nationals competition experience

In addition the candidate must possess at least the following qualities and experience:

- Proven teaching experience
- A wide range of coaching and instructional experience.
- Good assessment skills.
- Extensive technical knowledge.
- Skills as a facilitator.
- Administrative ability.
- Ability to process paperwork.
- Ability to modify programs in order to meet individual needs.
- A commitment to the coaching system and CSPA.

The Master Course Facilitator, or Master Learning Facilitator, oversees all Course Facilitator Training, evaluations, challenge for upgrade, and maintains the list of current Course Facilitators.

The CWC determines when a Course Facilitator Seminar is required. Under such circumstances, the CWC will generate a list of candidates through contact with the Course Facilitators and DZO's. However, suitably qualified candidates, upon receiving a recommendation from a current Course Facilitator, may apply in writing to the Chair of the CWC at any time. All names will be kept on a list, and invitations to the next Course Facilitator Seminar will be sent to the selected candidates.



Appendix – Coach 1 Review

Coach vs. Instructor Overall Role

- Coach refines the novice
- Instructor teaches new / survival skills

Goal Setting

Characteristics of Goals (SMART)

- Specific
- Measurable
- Achievable
- Relevant
- Time-Bound

Short Term - specific / immediate

1. State and describe the performance
2. Conditions of performance
3. Standard / criteria for pass

Identification of Goals

1. Identify current skill level
2. Identify long term goal
3. Identify next 2 - 3 steps towards the long term goal

Teaching Process: P-PAF

- Prepare - parts, practice, skill analysis, views, training aids, technical knowledge
- Present - WPW, no negatives, no theory
- Apply - PPW, giving feedback
- Feedback - positive, specific, immediate

Skill Analysis

Pre-Observation Plan: Know where you want to look ahead of time.

Observation Plan: Hips and Extremities plus special areas, remember by using cue words

Pre-Analyzing

1. Correct version of skill
2. Results of jump
3. External factors
4. Skill Analysis Principles

Analyzing: Check the following

1. Start position, Initiation, Glide, Recovery, End position
2. Whole - part - whole
3. Timing / coordination of movements
4. Apply the principles and identify three items done well and three to improve (for the debrief)



Principles of Skill Analysis

1. Stability
2. Summation of Joint Forces
3. Continuity of Joint Forces
4. Impulse

Debrief Format

1. Their version of the complete jump
2. Your complete version and analysis
3. Three items done well, three items to improve
4. Reset the goal, next jump
5. Check log book entry
6. Improvement practice or show next jump

Five Phases of the Jump

- Preparation
- In-flight
- Freefall
- Canopy
- Equipment

Plus Technical Knowledge

Dive Planning for Performance

- **Observe only during freefall and canopy control**, participate in all other phases
- Exit, ensure stability, altimeter check
- Same (1) freefall move repeated over the entire dive, altitude checks in between
- Hand wave at 1000' above activation, cease exercise and concentrate on the activation, activate at the correct altitude

Freefall Observation Positions

- Less than 10 meters away
- Level or slightly low
- Side or corner of person

Privileges of a Coach 1

- Supervise novices from grid stages 4 - 8
- Assist C2, JM and IPFF under direct supervision
- Sign off turns and accuracy for Solo Certificate
- Qualify for the C2 and JM course



CSPA Skills Grid – 2009

Redesigned by Sharon Winters, NESTA Chapman and Scott McEown



PREPARATION	EQUIPMENT	INFLIGHT	FREEFALL	CANOPY CONTROL	TECHNICAL KNOWLEDGE
PRE-LEVEL.....Jump Introduction.....SSI, Jump Master or PFFI					
Physical rehearsal	Equipment components and Function Activation of reserve <Reserve Proc. End.>	Seating and movement Assisted exit	Wide spread arch -	Canopy identification Flight control check Guidance response Observation of surface winds Landing techniques Ground Control Assisted	Unusual situations: inflight under canopy on ground
Stage I.....Freefall Introduction.....Jump Master or PFFI					
Relaxation	Altimeter setting and mounting	Pre-exit handles check Verbal Review	Box position Observation circle Altimeter use Activation	Spiral Turns*(Full glide turns) above 2000' Ground Control - Partial Assistance	Box position Unusual situations: in freefall
Stage II.....Turns: Start & Stop.....Jump Master or PFFI					
Mental Rehearsal	Gearing-up procedures and Adjustments	Ground Orientation Spotting - Observed	Heading control Arm exercise Leg exercise	Observation of drift Ground Control - Unassisted	Theory models: spotting freefall control
Stage III.....Turns: 90° and 180°.....Jump Master or PFFI					
Recall and Awareness Self-evaluation	Setting audible Altimeter Setting AAD Full Gear Checks	Heading control Spotting assisted	90/180 turn right/left (Vertical axis Rotational control)	Stall practice & Recovery (above 2000')	Theory models: freefall math canopy flight (straight, turns, stalls)
Stage IV.....Turns: Figure 8.....Jump Master or PFFI					
Self directed instruction	Packing: introduction	Pilot briefing Spotting unassisted	360 Turn Right/Left (360° vertical axis rotation)	Rear riser turns Basic Landing pattern	Theory models: freefall control 360° turns
Stage V - SOLO Check-out					
<i>Goal Setting</i>	<i>Component Ident.</i>	<i>Ride the Slide</i>	<i>Solo Check-out Jump</i>	<i>Basic Landing pattern</i>	<i><Solo Emer. Proc. Review></i>
SOLO CERTIFIED					



PREPARATION	EQUIPMENT	INFLIGHT	FREEFALL	CANOPY CONTROL	TECHNICAL KNOWLEDGE
Stage VI.....Back loops.....Coach 1					
Warm-up Stretching	Packing: assisted	Exits (e.g. dive, rear float)	Back loop (360° lateral axis rotation)	Rear riser spirals (above 2000') Line of Flight Approach	Theory models: freefall control back loops line of flight approach
Stage VII.....Front loops.....Coach 1					
Concentration	Packing: unassisted (observed)	Exits (e.g. poised, front float)	Front loop (360° lateral axis rotation)	Set-up assessment	Theory models: freefall control frontloops
Stage VIII.....Rolls.....Coach 1					
Anticipation	Packing: clearing Entanglements	Intentional unstable exit	Barrel Rolls R/L (360° longitudinal rotation)	Front riser turns Flat turns	Theory models: freefall control rolls
Stage IX.....Delta/Backslide.....Coach 1					
Solo dirt dive (Sequence preparation)	Equipment Inspection while packing	WDI, Meteorological Rep.	Delta, Delta Dive	Set-up assessment with line of flight	<Night Endorsement> <not required for CoP>
Stage X.....Stag and Pike Loops.....Coach 2					
Fitness	<Packing Endorsement> Deployment control Techniques	Dive to delta exit Floater track exit	Basic Solo Free Style, Artistic and Inverted Flight E.g. french roll, stag, T, daffy, sit, stand-up	Stall turns Angle control on approach	<water endorsement> <not required for CoP>
Stage XI.....Combined Manoeuvres.....Coach 2					
Dive planning	Accessory equipment	Rate one turn Downwind spotting	Combined manoeuvres Style, manoeuvre series	Assessing/critiquing a canopy approach	Model for accuracy approach
Stage XII.....1:1 FS - Pin Practice.....Coach 2					
Relaxation	Jumpsuit selection	Spotting for FS 1:1 tight exits	1:1 Formation Skydiving Pin practice with proximity Break off procedures -	Riser manoeuvres Front Riser Spirals Rear Riser Flare/Stalls (above 2000 feet)	Advanced FS body position (mantis)
Stage XIII.....2-way FS Endorsement.....Coach 2					
Mental training techniques	Use of weights	1:1 tight exits Rehearsal with relaxation	Level control Docking procedures	Avoidance techniques	<Sport Canopy Review A> <Emerg. Proc. Rev. A>
A - CoP completed					



PREPARATION	EQUIPMENT	INFLIGHT	FREEFALL	CANOPY CONTROL	TECHNICAL KNOWLEDGE
Stage XIV.....2-way Drill Dives: Turn and Dock.....Coach 2					
Memorization	Variations to packing techniques	1:1 tight exits (variations)	Freefall grips Turn and dock	Riser flared landing	Model for three turn types
Stage XV.....2-way Drill Dives: Side slide and Dock.....Coach 2					
Group Dirt diving	Variations to packing techniques	1:1 tight exits (variations)	Side slide and dock	Assessing weather	Model for group freefall
Stage XVI.....2-way Drill Dives: Diagonal and Dock.....Coach 2					
Dive planning (review)	Variations to packing techniques	1:1 tight exits (variations)	Diagonal dock Superpositioning	Assessing terrain	Model for group exits
Stage XVII.....Partner Sequential.....Coach 2					
Stress control	Variations to packing techniques	1:1 tight exits (variations)	Relativity control Flying base Partner sequential	FS approach/rules, group approach	FS rules and courtesies in freefall
Stage XVIII.....Advanced Solo Moves.....Coach 2					
Self-directed skill development	Routine maintenance	Exit order	Advanced solo skills E.g. Sit/Inverted 360 deg	S-turn Sashay	Equipment servicing
Stage XIX.....Small Group FS.....Coach 2					
Dirt diving - review	Storage practices	Small group exit, no grips Small group exit, with grips First formation exits	Flat track Group FS	Parallel canopy flight	Maintaining the fall rate Safety for Group FS
Stage XX.....Closing Long Distances.....Coach 2					
Goal setting techniques review: SMART, short, long term goals	Equipment seminar	Large aircraft loading and spotting	Long swoop Floater tracking Recovery <Group Endorsement>	Large group pattern approach	Equipment characteristics and selection <Sport Canopy Review B> <Emerg. Proc. Rev. B>
B-CoP completed					



CSPA Skills Progression Grid – 2009 Alternate Edition					
Progression of each of the 6 areas are independent of each other, however all stages must be completed prior to receiving your CoP.					
PREPARATION Section 2	EQUIPMENT Section 3	IN-FLIGHT Section 4	FREEFALL Section 5	CANOPY CONTROL Section 6	TECHNICAL KNOWLEDGE Sections 2 - 6
PRE-LEVEL.....First Jump Introduction.....SSI					
Physical rehearsal	Components and function Activation of reserve <Emergency procedures Endorsement>	Seating and movement Assisted exit	Wide spread arch	Canopy identification Flight control check Guidance response Observation of surface winds Landing techniques Ground Control Assisted	Unusual situations: in-flight under canopy on ground
Student Progression to Solo.....Jump Master or PFFI					
Relaxation Mental Rehearsal Recall and Awareness Self-evaluation Self directed instruction	Altimeter setting and mounting Gearing-up procedures and adjustments Setting audible altimeter Setting AAD Full Gear Checks Packing: introduction	Pre-exit handles check Verbal Review Ground Orientation Spotting - Observed Spotting - assisted Pilot briefing Spotting unassisted	Box position Observation circle Altimeter use Activation Heading control Arm exercise Leg exercise 90/180 Turn left/right (Vertical axis rotational control) 360 Turn left/right (Vertical axis rotational control)	Spiral Turns (Full glide turns) above 2000' Ground Control - Partial Assistance Observation of drift Ground Control – Unassisted Stall practice & Recovery (above 2000') Rear riser turns Basic Landing pattern Flat Turn Turbulence	Box position Unusual situations in freefall Theory models: spotting freefall control freefall math canopy flight (straight, turns, stalls) freefall control 360° turns
SOLO Check-out ... Jump Master, PFFI					
<i>Goal Setting</i>	<i>Component Identification</i>	<i>Ride the Slide</i>	<i>Solo Check-out Jump</i>	<i>Basic Landing pattern</i>	<i><Solo Emergency Procedures Review></i>
SOLO CERTIFIED					



PREPARATION	EQUIPMENT	IN-FLIGHT	FREEFALL	CANOPY CONTROL	TECHNICAL KNOWLEDGE
Novice Progression -The Basics.....Coach 1					
Warm-up & Stretching	Packing: assisted	Exits (e.g. dive, rear float)	Back loop(360° lateral axis rotation)	Rear riser spirals (above 2000')	Theory models:
Concentration	Packing: unassisted (observed)	Exits (e.g. poised, front float)	Front loop (360° lateral axis rotation)	Line of Flight Approach	freefall control-back loops
Anticipation	Packing: clearing entanglements	Intentional unstable exit	Barrel Rolls R/L (360° longitudinal rotation)	Set-up assessment	line of flight approach
Solo dirt dive (Sequence preparation)	Equipment Inspection while packing	WDI, Meteorological Report	Delta, Delta Dive	Front riser turns	freefall control-front loops
				Flat turns Set-up assessment with line of flight	freefall control-rolls <Night Endorsement> [optional training]
Novice Progression - Advanced.....Coach 2					
Fitness	<Packing Endorsement>	Dive to delta exit	Basic Solo Free Style, Artistic and Inverted Flight E.g. French roll, stag, T, daffy, sit, stand-up	Stall turns	<water endorsement> [optional]
Dive planning	Deployment control techniques	Floater track exit	Combined manoeuvres	Angle control on approach	
Relaxation - advanced	Accessory equipment	Rate one turn	Style and manoeuvre series	Assessing/critiquing a canopy approach	Model for accuracy approach
Mental training techniques	Jumpsuit selection	Downwind spotting	1:1 Formation Skydiving	Riser manoeuvres	Advanced FS body position (mantis)
	Use of weights	Spotting for FS	Pin practice with proximity	Front Riser Spirals	<Sport Canopy Review A>
		1:1 tight exits	Break off procedures	Rear Riser Flare/Stalls (above 2000 feet)	<Emergency Procedures Review A>
		Rehearsal with relaxation	Level control Docking procedures	Avoidance techniques	
A - CoP completed					



PREPARATION	EQUIPMENT	IN-FLIGHT	FREEFALL	CANOPY CONTROL	TECHNICAL KNOWLEDGE
Intermediate Skydiver Progression.....Coach 2 / Coach 2DS					
Memorization Group Dirt diving Dive planning (review) Stress control Self-directed skill development Dirt diving - review Goal setting techniques review: SMART, short, long term goals	Variations to packing techniques Routine maintenance Storage practices Equipment seminar	1:1 tight exits Exit order Small group exit, no grips Small group exit, with grips First formation exits Large aircraft loading and spotting	Freefall grips Turn and dock Side slide and dock Diagonal dock Super positioning Relativity control Flying base Partner sequential Advanced solo skills E.g. Sit/Inverted 360 degrees Flat track Group FS Long swoop Floater tracking Recovery <Group Endorsement>	Rear Riser flared landing Assessing weather Assessing terrain FS approach/rules, group approach S-turn Sashay Parallel canopy flight Large group pattern approach	Model for three turn types Model for group freefall Model for group exits FS rules and courtesies in freefall Equipment servicing Maintaining the fall rate Safety for Group FS Equipment characteristics and selection <Sport Canopy Review B> <Emergency Procedures Review B>
B-CoP completed					



Document Change Log

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