



# Flight Plan

Long Term Athlete Development for Skydiving in Canada 2.0



We acknowledge the financial support of The Government of Canada through Sport Canada, a branch of the Department of Canadian Heritage.



ISBN 978-0-9690122-1-4

Originally published by: Canadian Sport Parachuting Association (CSPA) 2009; revised 2019.

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# Acknowledgements

The Canadian Sport Parachuting Association would like to acknowledge the contributions of its original LTAD Working Group members for the creation of the original Flight Plan document:

Doreen West-Gemmell      Rob Laidlaw      John McCarthy      Jenny Mayo      Neil McGrath

We would also like to thank the many individuals who contributed their ideas, advice, comments, translation and photos to this document.

Document Design & Layout: Annaleah McAvoy

*“I am thankful for the dedication and commitment of the original LTAD Working Group members for the creation of this document and their enthusiasm for making it happen plus the ongoing support of the LTAD committee members in maintaining Flight Plan.”*

– Doreen West-Gemmell  
LTAD Committee Chairperson



# Foreword

Some say the sky is the limit. For Skydivers it is a starting point. The sky is the arena where we play, train, compete and put ourselves to the test. Long Term Athlete Development (LTAD) is a training, competition and recovery program which is athlete centered, coach driven and administration, sport science and sponsor supported. It is a framework for setting best practices for training and competition; for identifying and recognizing talent and implementing changes to help individuals achieve their personal best. In doing so, LTAD will enable more Canadians to reach the international podium in our sport.

## The Key Benefits of LTAD are:

- Increased retention of participants
- Coaches will have clear and effective progression programs in all competitive disciplines and recreational areas of skydiving
- Clubs, committees, national and provincial associations, coaches, officials, athletes — will see where they fit, what their role is with the understanding of what they need to do
- Enables athletes to achieve their full potential
- LTAD is the framework for all aspects of our sport and a collaborative effort is essential. Whether a participant is a competitor, recreational skydiver, coach, official, drop-zone operator or other skydiving supporter, LTAD will enhance and facilitate the growth and potential of each. Let us celebrate individual achievements while recognizing the system wide success of all those who have partnered with them.

*The following is a living document meant to grow and evolve just as the sport of skydiving always has!*





# The Competitive Spirit

Canada has a proud history of performance at the international level in skydiving. Canada was represented for the first time at the 1958 World Championship and since then has been represented in various competitive disciplines at the world level. For complete details of Canadian successes at skydiving world championships check <https://www.cspa.ca/en/national-team>.



## The Events

**Accuracy Landing** – The oldest of the competitive disciplines, Accuracy and Team Accuracy require the skydiver(s) to land on a target with a dead centre of 2 cm.

**Freefall Style** – The only individual freefall event, Style combines speed with precision as the jumper performs a series of 6 maneuvers (two 360 degree turns, back loop, two 360 degree turns, back loop).

**Style & Accuracy** – Collectively are known as the “Classic Events” with categories for both male and female.

**Formation Skydiving** – Freefall team events comprised of 4-way Open, 4-way Female and 8-way categories. Teams of 4 or 8 persons are required to correctly perform a sequence of formations in the “belly to earth orientation” as often as possible within a set time which is 35 seconds for the 4-way events and 50 seconds for the 8-way event.

**Vertical Formation Skydiving** – Four person teams performing a sequence of formations in the vertical and horizontal axes as often as possible within 35 seconds.

**Canopy Formation** – This discipline involves several events which are 2-way sequential; 4-way sequential; 4-way rotation. Teams are required to perform sequences with their parachutes within a set time frame.

**Artistic Freefly** – This event is comprised of a two person team and a videographer who perform maneuvers of their choice within a 35 second time frame plus two rounds (speed) of set sequences within 35 seconds. The maneuvers incorporate both the vertical and horizontal axis.

**Canopy Piloting** – This discipline has three events which are Speed, Distance and Zone Accuracy. An overall champion is declared from the results of the three events.

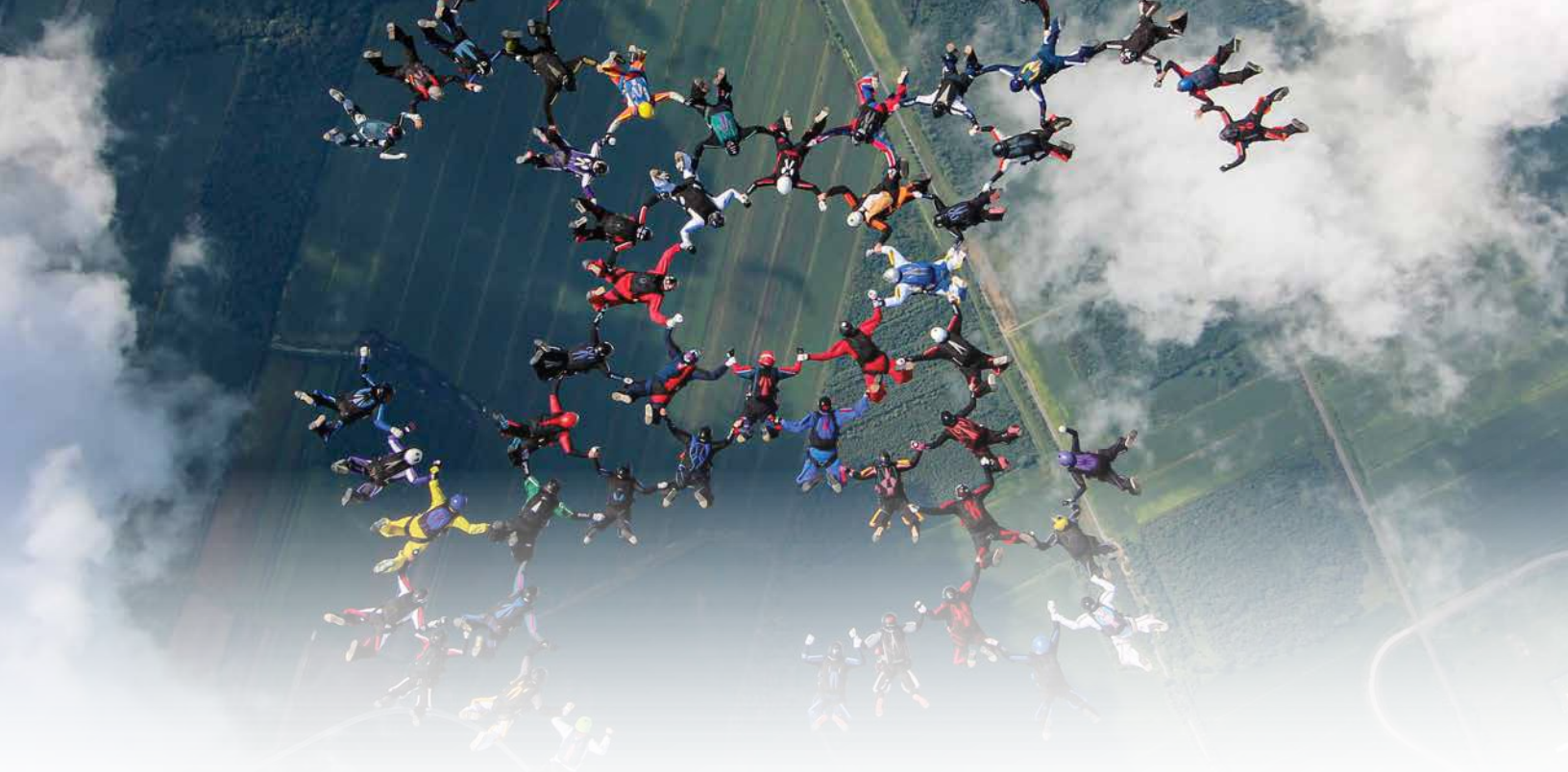
**Indoor Skydiving** – Individual and team events including junior categories held in the vertical wind tunnel. The disciplines included are Formation Skydiving (4-way FS/VFS), Artistic Freefly and Dynamic.

**Wingsuit Flying** - This discipline has two separate events which are Wingsuit Performance and Wingsuit Acrobatic. The Performance event has 3 separate tasks which require individuals to demonstrate a combination of best lift (time task), best glide (distance task) and least drag (speed task). The Acrobatic event requires a team to perform a sequence of manoeuvres (compulsory and free routines) in wingsuit flight with the highest possible merit.

## World Meet Successes

- |             |   |             |  |
|-------------|---|-------------|--|
| <b>1962</b> | Gold, Men's Team Accuracy                   | <b>1994</b> | Bronze, Canopy Formation – Rotation              |
| <b>1966</b> | Silver, Individual Men's Accuracy           | <b>1998</b> | Bronze, Canopy Formation – 4-way Sequential      |
|             | Silver, Men's Team Accuracy                 | <b>2001</b> | Silver, Individual Women's Accuracy              |
|             | Bronze, Overall Country - Men               | <b>2001</b> | Bronze, Canopy Formation – 4-way Sequential      |
| <b>1970</b> | Bronze, Women's Overall                     | <b>2006</b> | Bronze, Canopy Formation – 4-way Sequential      |
|             | Bronze, Men's Team Accuracy                 |             | Gold, Canopy Piloting – Speed                    |
|             | Bronze, Overall Country - Men               |             | Silver, Canopy Piloting – Speed                  |
| <b>1972</b> | Silver, Individual Men's Accuracy           |             | Bronze, Canopy Piloting – Speed                  |
| <b>1976</b> | Silver, Men's Overall                       |             | Silver, Canopy Piloting – Distance               |
|             | Bronze, Individual Men's Style              |             | Bronze, Canopy Piloting – Zone Accuracy          |
| <b>1977</b> | Gold, 4-way Formation Skydiving             |             | Gold and Bronze, Canopy Piloting – Overall       |
| <b>1978</b> | Silver, Individual Men's Style              | <b>2008</b> | Gold, Canopy Piloting – Zone Accuracy            |
| <b>1979</b> | Gold, 4-way Formation Skydiving             |             | Silver, Canopy Piloting – Speed                  |
|             | Silver, 8-way Formation Skydiving           |             | Gold, Canopy Piloting Overall                    |
| <b>1980</b> | Gold, Individual Women's Accuracy           | <b>2010</b> | Gold, Canopy Piloting – Speed, Accuracy, Overall |
|             | Silver, Individual Men's Accuracy           |             | Bronze, Canopy Piloting – Distance               |
| <b>1981</b> | Silver, 4-way and 8-way Formation Skydiving | <b>2012</b> | Silver, Canopy Piloting – Distance               |
| <b>1982</b> | Silver, Women's Team Accuracy               |             | Bronze, Canopy Piloting – Speed                  |
| <b>1983</b> | Gold, 4-way and 8-way Formation Skydiving   | <b>2014</b> | Bronze, 4-way Formation Skydiving                |
| <b>1985</b> | Silver, 4-way Formation Skydiving           |             | Bronze, Vertical Formation Skydiving             |
|             | Bronze, 8-way Formation Skydiving           | <b>2016</b> | Silver, Vertical Formation Skydiving             |
| <b>1987</b> | Gold, Para Ski Women's Overall              | <b>2017</b> | Silver, Indoor Junior 4-way Formation Skydiving  |
| <b>1988</b> | Gold, Individual Women's Accuracy           | <b>2018</b> | Silver, Vertical Formation Skydiving             |
| <b>1989</b> | Silver, Para Ski Women's Overall            |             |  |
| <b>1990</b> | Bronze, Canopy Formation – Rotation         |             |  |
| <b>1993</b> | Bronze, Para Ski Women's Overall            |             |  |





## Introduction

The Long Term Athlete Development (LTAD) plan provides a pathway for athletes to optimize skill development and utilize appropriate training and competition schedules. Building on strong physical literacy skills, the LTAD plan for skydiving outlines optimal training, competition and recovery programs and unites all systems to support and enhance the development of athletes and the sport as a whole.

### The Mission of LTAD

- To **develop** a skills identification system for novices at the point of entry into our sport.
- To **identify** and **integrate** pre-jump training into the progression system.
- To **expand** the **path** of skydiver progression
- To identify **gaps** in the current progression system and provide solutions.
- To **create** a streamlined, understandable and **efficient** system.
- To act as the **agent of change** to create proper planning, training, competition and recovery programs for developing Canadian skydivers.
- To provide a **planning tool**, based on scientific research, for coaches and administrators.
- To provide awareness, education and **action planning**.
- To **improve communication** between all partners.
- To help athletes **win!**
- To facilitate **lifelong enjoyment** in skydiving.

Endorsed by the Canadian Sport Parachuting Association, the factors of LTAD are being used to review the existing programs, make changes and additions to the programs where necessary, and provide the basis for future developments. It is hoped that all stakeholders in skydiving in Canada will use LTAD in a similar way.

*“I could be spending all this time learning to fly. There’s so much to learn!”*

–‘Jonathon Livingston Seagull’  
by Richard Bach

## Where Are We Now?

Long Term Athlete Development for skydiving is an important first step in placing Canada among the top skydiving nations. What we need to address is a systematic approach to growing our sport at all levels to maximize the experience from the first jump to the international podium. Now is the opportunity to build upon our solid foundation and successes. Think about our strengths, our weaknesses and visualize a stronger association with everyone working together in a coordinated effort for the benefit of all. An overview of our sport at this point identifies:

### Participants/Skydivers/Competitors

- More people are being exposed to skydiving through tandem jumps
- Numerous individuals and teams have achieved success at the international level
- We are passionate about our sport and welcome everyone into our “community”

### Coaches/Instructors

- Have very successful instructional programs and well defined levels of support needed for training, licensing and ratings
- Have a great train the trainer process for producing quality Learning Facilitators
- One of the first sports to obtain CAC approval for integrating coaching theory into our coaching programs

### Competitions

- Provide national competitions based on FAI rules where athletes can test their skills
- Competition rules are reviewed annually to maintain their currency
- Incorporate new disciplines as they arise to provide everyone the opportunity to compete
- Some funding support is provided to National Team Members through the Team Trust Fund

### Officials & Riggers

- Have a quality judges’ training program which is respected internationally
- Significant number of FAI rated judges with excellent representation at international competitions
- Exceptional dedication to develop and evolve competition in Canada
- Have a quality riggers’ training program
- Distribute technical bulletins to maintain safety for all

### Leadership

- The Board of Directors represents the diversity of Canada from east to west; French and English
- Have governed well for an association with limited resources led by volunteers
- Board of Directors decisions are based upon and supported by well written policies and procedures
- Provide national coordination of programs and services for all aspects of skydiving

### Dropzones & Facilities

- Do an excellent job of providing services within a limited season of operation
- Provide a positive experience for the public’s first time exposure to the sport
- Support competition by providing facilities where possible





## Where Would We Like to Be?

The vision of the Canadian Sport Parachuting Association is to be the provider of opportunities from dropzone to podium for all disciplines and the promoter of self-expression and individuality in the pursuit of personal excellence. Several areas have been identified as needing attention and it is highly recommended that action be taken on the following:

### Participants/Skydivers/Competitors

- Increase retention of participants in our sport
- Recognize the benefits of an integrated athlete development framework from the grassroots to high performance levels
- Celebrate the successes of our National Team Members and mentor those who aspire to be a member of the National Team

### Coaches/Instructors

- Take our successful coaching programs to the next level in order to encourage and support our competitive athletes
- Encourage female participation in the coaching system
- To be educated in LTAD to understand how and where they fit into the “system”
- Share their passion for the sport, encourage the pursuit of excellence and be committed to the principles of LTAD

### Competitions

- Foster a system of competition from the novice level to the high performance level
- Encourage a cycle of competition at the high performance level to maximize the development of our National Team Members
- Access funding support for competitions and our high performance athletes

### Officials & Riggers

- Provide opportunities for everyone to maintain or increase their skills
- Mentor and develop skills of judges and riggers and plan for succession
- Understand the LTAD plan and where they fit into the “system”

### Leadership

- Be a source of information, expertise and support
- Improve stability of the Board of Directors through decreased turn over and better understanding of the responsibilities of our **volunteer** Board of Directors
- Provide long term strategies rather than a short term focus with improved communication among members, clubs, dropzone operators, provincial associations, national association committees, the Board of Directors and encouragement of everyone’s collaborative efforts
- Provide all programs and support services based on established principals of long term athlete development for all levels of skydiving ability
- Implement optimal alignment of CSPA committees & partners
- Be committed to high performance excellence at the international level

### Dropzones & Facilities

- Have additional facilities across the country to support the training and competition needs of all disciplines
- Promote the benefits of CSPA and foster a harmonious relationship for the benefit of the membership
- Understand their role in the LTAD plan.



## How We Will Get There: A 3 Step Process

### STEP 1: The 10 key factors influencing LTAD

The first step toward finding a solution is to understand the 10 key factors influencing any long-term athlete development plan, particularly as they relate to skydiving in Canada. It is important to take into consideration:

- Training, competition and recovery program guidelines based on the development stages of the skydiver, taking into account the periods of optimal trainability.
- Generic motor and skill development guidelines along with implementation of training and periodization principles.
- Available resources to assist coaches, associations and administrators in delivering the LTAD
- Plan towards achieving the Canadian Sport Parachuting Associations goals and targets.
- The LTAD plan is a long-term approach that should assist our sport to work towards developing the appropriate training environment for everyone in the sport to achieve their potential, whatever their aspirations.

### STEP 2: The 7 stage Athlete Development Model

Success comes from designing and implementing a training, competition and recovery program over the long-term. The Canadian Sport Parachuting Association has produced a seven stage Athlete Development Model (ADM) based on the Canadian Sport for Life document (CS4L, 2005). These seven stages are Active Start, Flying Fundamentals, Learn to Fly, Train to Train, Train to Compete, Train to Win and Active for Life.

### STEP 3: Putting it all in operation

Implementing a long-term plan will take time, patience and a willingness to improve through change. It will take the efforts of everyone in the skydiving community to embrace a common vision; celebrate changes and successes in moving towards that vision and help to address new challenges along the way. We can make our vision a reality by working together – let’s do it!





## STEP 1: The 10 Key Factors

### LTAD Key 1 – Physical Literacy

Fundamental movement skills (walking, reaching, grasping, etc) and fundamental motor skills (agility, balance, coordination, etc) form the basis for fundamental sport skills (running, jumping, throwing, catching, etc) and are known collectively as physical literacy.

### LTAD Key 2 – Specialization

Sports can be classified as either early or late specialization. Early specialization sports include artistic and acrobatic sports such as gymnastics, diving, and figure skating. These differ from late specialization sports in that very complex skills are learned before maturation, since they cannot be fully mastered if taught after maturation. Skydiving is a late specialization sport. The minimum age for Skydiving in Canada is 18 years of age. The Canadian Sport Parachuting Association recommends participation in complementary sports prior to this age, including Snowboarding, Skateboarding, Karate, Diving, Gymnastics, Water Skiing, and especially participating in Vertical Wind Tunnel Sport Activities. Specialization within skydiving begins to occur in the Train to Train stage.

### LTAD Key 3 – Developmental Age

LTAD is based on developmental age, not chronological age. All of us follow the same stages to maturity, but the timing, rate and magnitude of maturity of various qualities differs between individuals. LTAD requires the identification of early, late and average maturation to help design appropriate instruction, training and competition programs according to the readiness of the participant. Skydiving, essentially being an adult sport, would include endurance training as a second phase of development which would occur in a person's late 20's.

### LTAD Key 4 – Sensitive Periods

The five S's of training and performance are Stamina, Strength, Speed, Skill and Suppleness (Dick, 1985).

The terms "adaptation" and "trainability" are often used interchangeably in coaching. However, the difference between them is significant.

Adaptation refers to changes in the body in response to a training stimulus, that may happen at any age. Trainability refers to the responsiveness of the developing individual to the training stimulus at different stages of growth and maturation.

### LTAD Key 5 – Mental, Cognitive & Emotional Development

A major objective of LTAD is a holistic approach to athlete development. This includes emphasis on ethics, fair play and character building in addition to traditional physical, technical and tactical training plus the mental, cognitive and emotional development of the individual.



***"Long Term Athlete Development is about achieving optimal training, competition and recovery throughout an athlete's career."***

**— Balyi (2002)**

### LTAD Key 6 - Periodization

Simply put, designing an annual plan (periodization) is time management. Periodization is about scheduling the right activities with the adequate degree of difficulty, in the right sequence to reach the training and competition objectives for the individual and/or team. The plan must be divided into workable blocks of time (mesocycles). The proper sequencing of these mesocycles is critical for success. In order to reach optimal performance in a competition environment, the mesocycles have to be sequenced in the following manner.

1. Develop the performance capacity of the athlete. The performance factors are, sport specific skills, tactics/strategies, physical components and mental skills.
2. Integrate the performance factors in complex and harmonious blend related to the specificity of the sport.
3. Finally, prepare the athlete or team to perform at identified competitions.

The yearly plan should have three successive periods of Preparation, Competition, and Transition. The variation of volume, intensity, frequency and modality of training within these periods to elicit specific physiological, psychological and technical outcomes is the science behind the training. How it is made to suit an athlete/team is the art of coaching. Considerations in designing a yearly plan include:

- Establishing the goals in all areas of development (technical/tactical/physical/mental)
- Knowing the final picture you are trying to achieve
- Knowing which stage of development the athlete is in
- Knowing the actual training state of the athlete at the start of the annual plan
- Knowing the competition calendar
- Having a clear understanding of the conditions the athlete & coach will have to deal with in competition
- Planning adequate training, competition and recovery is the critical blueprint for success.





## LTAD Key 7 – Competition

Optimal competition calendar planning at all stages is critical to athlete development. At certain stages, developing the sport skills takes precedence over competition. At later stages, the ability to compete well becomes the focus.

“Competition should be considered by the coach as twofold. On the one hand, competition is the culminating point of training for events such as provincial or national championships, World Cups and World Championships. On the other hand, competition is a means to advance the skydiver’s development and to improve a particular aspect of the performance.”

— C. Cardinal

## LTAD Key 8 – Excellence takes time

Scientific research has suggested that it takes upward of 10 years or 10,000 hours of training for a talented athlete to reach international high performance levels. For athlete and coach, this translates into slightly more than 3 hours of training or competition daily for 10 years. There are no shortcuts; Athlete development is a Long Term Process.

## LTAD Key 9 – System Alignment & Integration

The process of designing and implementing the Canadian Sport Parachuting Association’s LTAD is athlete centered, coach driven, and administration supported. System alignment and integration requires effective communication to coordinate the cooperative efforts of the key players in Canadian Skydiving. A strong coordination and agreement between all committees and NSO internal partners is the foundation of all other external partnerships and the integration of our LTAD plan.

## LTAD Key 10 - Continuous Improvement (Kaizen)

The concept of continuous improvement, which permeates LTAD, is drawn from the respected Japanese industrial philosophy known as Kaizen. Continuous improvement ensures that LTAD responds and reacts to new scientific and sport-specific innovations and observations and is subject to continuous research in all its aspects. Periodic updates and changes to the LTAD plan will be performed at regular intervals in the future based on feedback from athletes, coaches, officials, administrators and other leaders in the sport community.



*“For once you have tasted flight you will walk the earth with your eyes turned skywards, for there you have been and there you will long to return”*

—Leonardo da Vinci





## STEP 2: The Seven Stages of Long Term Athlete Development

|                                      | <br>1 | <br>2 | <br>3 |
|--------------------------------------|--|---|--|
|                                      | <b>Active Start (AS)</b>   | <b>Flying Fundamentals (FUN)</b>  | <b>Learn to Fly (L2F)</b>  |
| <b>Time in Sport</b>                 | Pre-Skydiving<br>Physical Activity   | 1st Season  | 1st-2nd Season   |
| <b>Jump Numbers</b>                  | Pre-Jump   | 1-20+   | 21-50  |
| <b>Goals to Achieve</b>              | Physical Literacy in various activities  | Basic safety skills, Solo Certificate, some A CoP requirements                          | A CoP, B CoP<br>Intro to competition   |
| <b>Coaching &amp; Instructing</b>    | Coaches of other sports, Tunnel Coach  | SSI, JM, PFFI, Coach 1, Tunnel Coach  | Coach 1 + 2, Tunnel Coach  |
| <b>Type of Competition</b>           | Other sport competitions, Tunnel League  | Skills Camps, Local Meets, low focus on competition                                     | Skills Camps, Local Meets  |
| <b>Training to Competition Ratio</b> | Individualized Program   | 100% training<br>0% competition<br>All FUN based  | 100% training<br>0% competition  |
| <b>Training Volume</b>               | As desired   | Multi sport involvement<br>10 jumps/month   | 5 hrs/week Includes theory, mental, and fitness practice                                 |

|                                      | <br>4 | <br>5 | <br>6 | <br>7 |
|--------------------------------------|--|--|--|--|
|                                      | <b>Train to Train (T2T)</b>  | <b>Train to Compete (T2C)</b>  | <b>Train to Win (T2W)</b>  | <b>Active for Life (A4L)</b>   |
| <b>Time in Sport</b>                 | 2nd Season   | 3rd Season or greater  | 3rd Season or greater  | Continuous Enjoyment of Sport  |
| <b>Jump Numbers</b>                  | 51-400   | 400-1000   | 1000+  | 0 jumps and up   |
| <b>Goals to Achieve</b>              | C CoP<br>Learn discipline specific skills, attain Provincial average                     | D CoP<br>Skill refinement, attain National average                                       | Maximize performance, attain International average                                       | Officials ratings, Technical ratings, participation in NSO, PSO                          |
| <b>Coaching &amp; Instructing</b>    | Coach 3, CompDev Coach<br>Tunnel Coach   | CompDev Coach, Advanced CompDev Coach, Tunnel Coach                                      | Advanced CompDev Coach, High Performance Coach, Tunnel Coach                             | PSO, NSO, Officials, Learning Facilitators   |
| <b>Type of Competition</b>           | Local, Provincial, Regional Competitions   | Provincial, Regional, National Championships   | National & International Championships   | Active at desired level of competition   |
| <b>Training to Competition Ratio</b> | Primarily training, minimal competition  | Mainly training plus select competitions   | Increasing emphasis on competition to refine competition readiness                       | Individualized program   |
| <b>Training Volume</b>               | 10-20hrs/week<br>90 day training macrocycle  | 15-30 hrs/week<br>120 day training macrocycle  | 20-30+ hrs/week;<br>60-90 day training mesocycles; 1-2 year training macrocycle          | Individualized Program   |



# Active Start (AS)

## Pre-skydiving

Physical literacy is comprised of fundamental movement skills (running, jumping, throwing, climbing, etc.); basic motor skills (agility, balance, coordination, time/space orientation, etc.) and elementary sport specific skills. Physical activities whether they are organized sports or play are essential for healthy living. Participation in activities and sports improves physical literacy skills and builds confidence in one's self. Exposure to a variety of activities and sports can prepare an individual for participation in the sport of skydiving.

Vertical Wind Tunnels are having a major impact on skill development for those participating in skydiving as well as providing the opportunity for anyone to be introduced to freefall skills. There is now the opportunity to introduce a key part of skydiving to non-skydivers in a lower stress, yet exhilarating, environment. Freefall skills can be acquired and honed much more quickly than would previously have been possible. The wind tunnel provides the opportunity for the coach to identify those aptitudes the individual has that lend themselves to skydiving and to help strengthen those that need improvement. It is difficult to assign a relative value to Vertical Wind Tunnel training, but experts estimate that one hour of Vertical Wind Tunnel training can be equivalent to anywhere from 20 skydives to 100 skydives depending on the skills being trained and the experience level of the athlete.

### Objective for the athlete

- Develop physical literacy through a variety of sports and activities

### Key Principle for the coach

- Emphasis is on FUN, fair play, and personal achievement



### Time in Sport

- Pre-Skydiving

### Jump Numbers

- Prejump

### Goals to Achieve

- Physical Literacy in various activities

### Competition Goals

- Tunnel
- League

### Training to Competition Ratio

- Individualized Program

### Training Volume

- As desired



### Key to Success

In 2007 Ben Lemay joined his father Michel and brothers Vincent and Martin on Team Evolution (FS 4-way team). Wind tunnel training was a key part of Ben's preparation for joining the team.

"Ben was trained starting at age 10 in the tunnel over a 5 year period with about 3 hours of coached tunnel time per year. This is not a big secret... if you take a talented kid and show him the right technique right away under very close supervision, his progression will be very fast. I was amazed to see Ben executing movements with more speed and accuracy than myself (12,000 jumps at the time) after about 10 hours of tunnel training. Most of his tunnel training was one on one coaching. Focus was put on perfecting his ability to move efficiently in every direction. Age, talent, and top notch coaching made all the difference. For athlete development, it is essential to introduce tunnel training at a very early stage... simply not allowing people to go on with bad habits. Later introduction of tunnel training will mean relearning.

So when Ben joined the team, he just needed some airtime to transfer his tunnel flying ability into the air. The wider environment makes visual references a little different and therefore adjustments are needed. After 50 jumps with Ben in the line up our team was already performing better. His accuracy and speed was a great input." – Michel Lemay





# Flying Fundamentals (FUN)

1 - 20+ Jumps

Because skydiving is a late specialization sport and most participants have completed their growth process, we presume that fundamental movements and motor skills (ABC's) + several sport specific skills have been developed. Basic skydiving skill acquisition is the focus at this stage. The athlete is encouraged to participate in complementary sports as well. General wellness, fitness and flexibility are promoted throughout the early stages of skydiver training. These attributes increase the ability to acquire skydiving skills and reduce the chance of injury.

Given the nature of skydiving, the psychological components of early skills development is very important. It will be one of emotional control, mental and cognitive skills acquisition. The introduction of mental rehearsal techniques, coping strategies for anxiety and fear plus positive feedback from the coach will lead to confidence. As confidence builds so does skill. As the skills accumulate so too does the athlete's confidence. Success breeds success.

## Objectives for the athlete

- Acquire/develop basic skydiving skills as per skill grid - pre-flight, in-aircraft, exits, freefall, canopy control, landings and emergency procedures
- Acquire elementary practical tactical knowledge
- Learn rules and regulations regarding skydiving, drop zone safety and etiquette
- Develop fundamental movement skills - launch from aircraft, arch, control of stability on 3 axes, eye-foot coordination, time/space orientation
- Develop self-confidence, focus and positive attitude
- Acquire a level of comfort with the equipment

## Resources

- Skydive School Instructor, Jumpmaster, PFFI, Coach 1, Coach 2, Tunnel Coach, Dropzone, Wind Tunnel

## Benchmarks

- Basic control skills, solidify safety routines, basic freefall survival skills, basic canopy flight plan and skills
- Attain Solo CoP
- Minimum 1 day/week skydiving activity

### Time in Sport

- 1st Season

### Jump Numbers

- 1-20+

### Goals to Achieve

- Solo Certificate
- Some A CoP requirements

### Competition Goals

- Skills Camps, Local Fun Meets
- No focus on competition

### Training to Competition Ratio

- 100% training
- 0% competition
- All FUN based

### Training Volume

- Multi sport involvement
- 10 jumps/month

## Key Principles for the coach

The mission of the coach is to create positive, enjoyable and inclusive conditions for learning. Lessons are designed and implemented that ensure the active involvement of all participants with clear objectives, progression and goals. Early identification of the skill sets that the athlete brings to the sport will help define the approach the coach can take with the individual. The coach will build on these skills while introducing and developing ones that are unique to the sport. For maximum participation and retention of the athlete the learning environment must be FUN. At this stage even seemingly small achievements are measured as successes.

- FUN, SAFETY and ACTIVE PARTICIPATION are of primary importance.
- Try to instill the love of sports through active participation.
- Simple success-oriented activities for positive reinforcement.
- Create a stimulating learning environment.
- Limit the information communicated to the participant to what is essential.
- Be clear, concise and adapt the terminology to the learning level.
- No periodization, but well structured programs and practices.

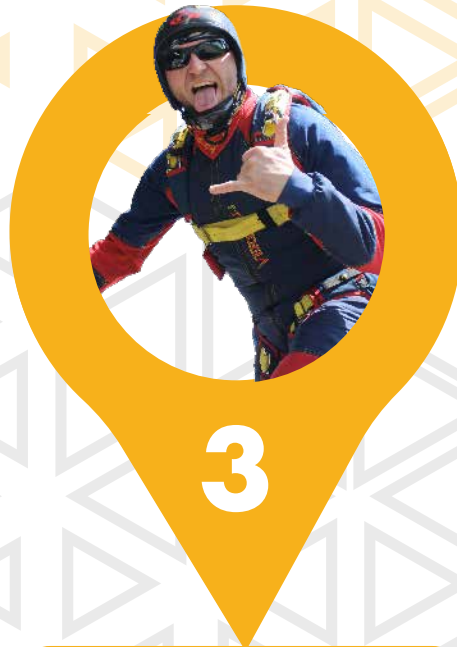
## Key to Success

The main focus is to develop relaxation and focusing routines to perform under stress and control of oneself in a foreign environment. The individual must acquire spatial awareness (time and space) and strong mental control to adapt to this exciting new playground. Safety is the most significant concern at this stage. At the end of this stage in the athlete's development they will be able to safely perform skydives on their own and have acquired their "Solo" Certificate of Proficiency. They have a solid basis of knowledge and skill to proceed to the next stage — Learn to Fly.





# Learn to Fly (L2F)



3

## Time in Sport

- 1st-2nd Season

## Jump Numbers

- 21+50

## Goals to Achieve

- A CoP
- B CoP
- Intro to competition

## Competition Goals

- Skills Camps, local meets

## Training to Competition Ratio

- 100% training
- 0% competition

## Training Volume

- 5 hrs/week
- Includes theory, mental, and fitness practice

## 21 - 50 Jumps

At this point the participant has acquired sport specific basic skills. They can now consolidate those skills and begin to participate in a wider range of activities in the sport. Their exposure to the varied disciplines will show the need to learn, practice and become comfortable with new and transferable skills. The coach will give the athlete a realistic view as to the amount of time, energy and commitment needed to achieve these skills. He/she will develop a plan, tailor made to the individual, to carry them to the next level.

## Objectives for the athlete

- Consolidate basic skill
- Acquire new transferable skills (group flying, etc.)
- Acquire basic practical tactical knowledge
- Learn proper decision making in standard situations
- Develop general and sport specific fitness (such as increase aerobic capacity to combat fatigue created by stress, long days, rarefied oxygen at altitude - swimming, cycling, running, etc.)
- Further develop motor skills
- Expand mental capacities - imagery, relaxation and arousal, self motivation
- Develop coping strategies for pressure and stress (Introduce Ideal Performance State)
- Implement ancillary capacities (warm-up; hydration; cool-down; stretching; etc)
- Acquire peripheral knowledge of the sport in general (rigging, officiating, competitive stream, etc.)
- Be exposed to club competition
- Additional equipment knowledge — packing techniques, wing loading, etc
- Achieve skills to obtain 'A' and 'B' Certificate of Proficiency

## Resources

- Coach 1, Coach 2, Tunnel Coach, Dropzone, Provincial Organization, National Organization

## Benchmarks

- Improved basic skills and acquisition of skills in multiple disciplines
- Attain "A" & "B" CoP
- Minimum 2 days/week skydiving activity

## Key Principles for the coach

The mission of the coach is to teach the basic skydiving skills and tactics essential to enjoy the sport. The emphasis is on broadening the skill base through cross training in multiple discipline fundamentals. The skills taught will follow a logical sequence such that each builds on the preceding one. Limited novice level competitions should be used to stimulate the learning process, for gauging progress and for exposure to competition itself.

- Actively engage the athlete in the activity to develop both motor skills and cognitive understanding
- Introduce skill or tactical acquisition first in the main part of the session (after warm-up) when pursuing multiple objectives to take advantage of rested central nervous system and for athlete concentration
- Teach skill (technique) as element of tactics — what tactical problem can be solved with the skill taught
- Limit the information to that which is needed to perform the task
- Block learning (controlled conditions)
- Develop the four S's - Strength; Speed; Stamina; Suppleness = flexibility
- Introduce single periodization (seasonal planning)

## Key to Success

Development of all fundamental skydiving motor skills should be acquired in this stage. Our focus is still all about the "individual's" skill development in order to consolidate basic skydiving skills to be automatic on demand. Furthermore there is a shift from safety and awareness to exploring the specific techniques of our various skydiving disciplines. An understanding of skill analysis should be required of the skydiver.

By the end of this stage the skydiver has obtained their 'B' Certificate of Proficiency. The skydiver now has the ability to skydive in groups plus has some basic knowledge and skill in a number of skydiving disciplines. They have a solid basis from which to pursue competition, continue recreational skydiving and/or participate in many other facets of the sport. The skydiver is ready for the next stage - Train to Train.





# Train to Train (T2T)



## Time in Sport

- 2nd Season

## Jump Numbers

- 51 - 400

## Goals to Achieve

- C CoP
- Learn discipline specific skills, attain Provincial average

## Competition Goals

- Local, Provincial, Regional Competitions

## Training to Competition Ratio

- Primarily training, minimal competition

## Training Volume

- 10-20- hrs/week
- 90 day training macrocycle

## 51 - 400 Jumps

In the earlier stages the athlete was introduced to competition as a means of enriching their skills development and enhancing their skydiving experience. The athlete has solid sport specific basic skills and the next step is to learn to perform well when in a competition environment. He/she also determines which part of the sport is preferred and considers which skydiving path to follow — recreational, competitive or both. The skills and knowledge gained here are at times subtle but extremely valuable. A great deal of time and effort is required of both the athlete and coach so the training is kept positive, stimulating and enjoyable.

### Objectives for the athlete

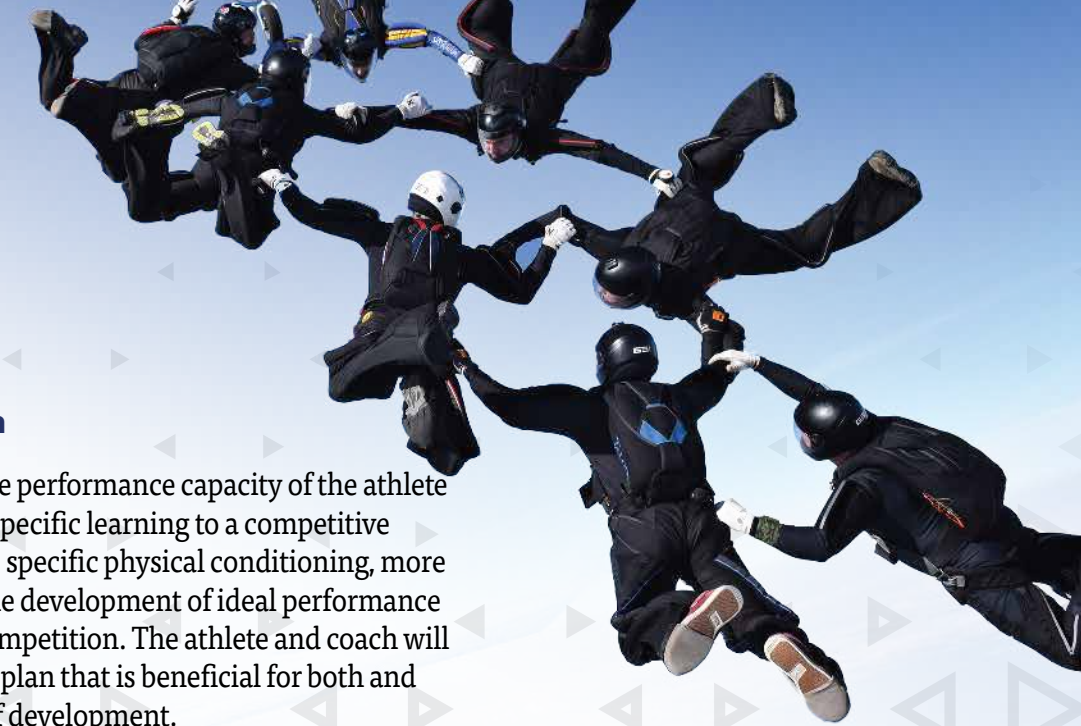
- Consolidate and refine basic sport specific skills
- Acquire and develop new discipline specific skills
- Acquire new practical tactical knowledge for competition
- Further develop general and sport specific strategies
- Further develop mental techniques and strategies
- Develop a competition plan related to the climatic conditions and other aspects to be taken into consideration the day of the meet
- Further develop the 5 S's - stamina; strength; speed; suppleness & skills
- Commit to yearly program — take responsibility for training, preparation, performance and recovery
- Optimize ancillary capacities
- Be coachable
- Achieve level 'C' Certificate of Proficiency

### Resources

- Coach 3, Competition Development Coach, Tunnel Coach, Dropzone, Club, PSO, NSO, Wind Tunnel

### Benchmarks

- Consolidate basic sport specific skills and acquire new discipline specific skills
- Attain "C" CoP
- Match Provincial average or higher



### Key Principles for the coach

The mission of the coach is to raise the performance capacity of the athlete and ensure the transfer of discipline specific learning to a competitive environment. There will be discipline specific physical conditioning, more sport specific skills acquisition and the development of ideal performance state for pre-meet preparation and competition. The athlete and coach will work in concert to arrive at a training plan that is beneficial for both and achieves the objectives of this stage of development.

- Strive for ideal performance state through competition conditions simulation including active time/rest time
- Gradually increase the training load (volume of training and intensity)
- Ensure the skill or tactic is stabilized in controlled conditions (set repetition of specific skills or jumps) as well as varied conditions (simulated competition demands)
- Create conditions where the athlete has to perform the skills or tactics in a state of light to moderate fatigue in order to prepare him/her adequately to the competition requirements
- Extend the limit of the athlete's performance capacity methodically, systematically in order to improve
- Apply single or double periodization (yearly planning)

### Keys to Success

At this stage we must inspire the athlete to compete and test their skills at the next competitive level. The coach must set realistic expectations and goals in which success can be measured in a positive way. The athlete's motivation must be intrinsic in nature with a key focus on success and enjoyment.

While the earlier stages were about the individual this stage is about being part of the group. Team building is extremely important as it is at this stage that new team members "make it — or break it". A strong technical and psychological model is needed to help new athletes and teams integrate into the competitive community.

At the end of this stage the athlete will have an appreciation for the dedication that training takes, the hard earned skills needed and the satisfaction of testing themselves in competition. Valuable life skills such as responsibility, introspection, risk taking, focused concentration, etc are part of the learning at this stage. The athlete is ready to move to the next stage — Train to Compete.





# Train to Compete (T2C)



## 400 - 1000 Jumps

Now that the discipline basics are well consolidated the athlete will progress to a year round training program. This stage raises the bar from Provincial to National level performances. As a rule of thumb, we recommend that approximately fifty percent of the training will focus on skills development, physical conditioning and tactical knowledge. The remaining fifty percent will develop competition readiness and integrating the performance factors to reach a competition performance.

Optimizing preparation through competition simulation plays a key role. The coach will expect athletes to extend to the limit of their performance capacity during training. Anything less will alter the motor coordination of the athlete. The choice of actual competitions will reflect the performance level of the athlete or team. Each competition will have a training focus and a goal. Developmental competitions will be used to challenge the athlete to implement what they have learned to that point and to assess their training. Higher level meets will test the athlete's mental focus, preparation skills and ability to perform on demand.

### Time in Sport

- 3rd Season

### Jump Numbers

- 400-1000

### Goals to Achieve

- D CoP
- Attain National Average

### Competition Goals

- Provincial, Regional and National Championships

### Training to Competition Ratio

- Mainly training plus select competitions

### Training Volume

- 15-30 hrs/week
- 120 day training macrocycle

### Objectives for the athlete

- Further develop general and sport specific fitness with more emphasis on the specificity of the discipline (e.g. upper body strength for CF, CP, VFS and Style)
- Use proper nutrition, hydration and acquire the knowledge of the proper use of dietary supplements during travel and competition
- Consolidate discipline techniques and develop consistency in implementing variants of basic skills and the new skill acquired in a competition environment
- Increase the repertoire of practical tactical knowledge for competition
- Extend to the limit of their performance capacity
- Improve decision making and problem solving (individual tactics)
- Become autonomous and actively participate in his or her own development
- Integrate mental skills in daily activities: distraction control, emotional control, mental imagery, visualization, internal dialogue, concentration, etc.
- Refine Ideal Performance State
- Know and abide by the rules - of the discipline and of the team

### Resources

- Competition Development Coach, Advanced
- Competition Development Coach, Tunnel Coach

### Benchmarks

- Consolidate and refine discipline specific skills
- Attain 'D' CoP
- Attain national average or higher

- Enjoy a sense of belonging and shared commitment within a unique group
- Commit to year round training with self motivation

### Key Principles for the coach

The mission of the coach is to integrate the multiple performance factors needed for the athlete to succeed under a variety of training and competition conditions. The program will build on the person's strengths and try to reduce their weaknesses. The coach must understand the factors that influence tactical thinking when the athlete is confronted by a decision making situation: speed of the action taking place; quality of observation of the athlete; experience and tactical knowledge of the athlete; memory (remembering practical problems solved) and emotional state of the athlete.

- Performances of basic skills to reflect competition intensity/density
- In training, more time should be spent simulating competition demands (varying conditions) than on set repetition of specific skills or jumps (controlled conditions)
- Apply single, double or triple periodization based on athlete needs and competition calendar
- Develop the performance capacity of the athlete/team and integrate the performance factors (10S's) to reach a peak performance at the right time
- Monitor fatigue/recovery adequately
- In team sports, emphasis in training should be on cooperation, synchronization between athletes and speed of execution
- Increase the success rate of skills execution in training and competition - focus on execution not results
- Increase the success rate of the basic practical tactical knowledge implemented in competition

Personal and team goals will be reviewed and updated periodically with an emphasis on training performances and their impact on goals. Post-competition analysis will emphasize what went right and identify areas that need further improvement.

### Key to Success:

By this stage the athlete is willing to push or stretch his/her limits and focus on achieving their personal best. The training intensifies and a strong team attitude is paramount. The athlete has acquired, consolidated, refined and utilized a myriad of skills, techniques and tactics which enhance their competition repertoire.

Moving to the next stage the athlete should be comfortable competing at national level competitions and have had some exposure to the international arena. Most importantly, the skydiver now knows how to train effectively for competition. The next stage strives for excellence — Train to Win.







6

### Time in Sport

- 3rd Season or more

### Jump Numbers

- 1000+

### Goals to Achieve

- Attain International Average

### Competition Goals

- National Championships, World Cup, World Championships

### Training to Competition Ratio

- Increasing emphasis on competition to refine competition readiness

### Training Volume

- 20-30+ hrs/week;
- 60-90 day training mesocycles;
- 1-2 year training, macrocycle

# Train to Win (T2W)

## 1000+ Jumps

This is the transition stage to international competitor. The traits of the top competitor will have become apparent - confidence, competitiveness, desire, work ethic, mental toughness, enthusiasm, and imagination.

All of the accumulated skill, technical knowledge, tactics and conditioning will be raised to optimum levels. The discipline techniques will be refined and maintained. Working with the coach, sport medicine and sport science specialists the skydiver will try to improve their competitive abilities. All training will be highly individualized to try to maintain peak performance over a long period of time. Special care will be taken to tailor the multiple periodizations not only to the international competition schedule but to recognize physical and/or mental fatigue. Over training, recovery time and injury prevention are of real concern. Goals and decision making will be collaborative between the skydiver, the coach and the Integrated Support Team (IST).

Due to the increased demands at this level, attention should also be paid to the management of other factors affecting the athlete and their career such as support staff, sponsors, media, family, finances, travel, etc.

### Objectives for the athlete

- Maintain a healthy lifestyle
- Create a balance between training, competing and home life
- Be creative within discipline - push the edge in training
- Maintain focus — “The Big Picture”
- Be constructively critical of self
- Self motivate
- Be collaborative with coach and Integrated Support Team (IST)
- Recognize what works - evaluation during training and after competitions
- Be ready = Improve Ideal Performance State
- Full commitment to the pursuit of international excellence

### Resources

- High Performance Coach, Sport science specialists, IST, Club, PSO, NSO, IPC

### Benchmarks

- Training mirrors competition conditions
- Achieve international average

## Key Principles for the coach

The mission of the coach is to plan and integrate all aspects of training and performance to model the requirements of international competition.

- Sequence adequately and integrate all performance factors
- Maintain “peak performance” level - continual improvement; be able to perform on demand
- Training is punctual and temporarily focused on specific preparation for major events.
- Concentrate training on simulating competition demands (varying conditions) more than on set repetitions (controlled conditions)
- Training is designed to maintain “peak performance” level — continual improvement
- Monitor fatigue/recovery adequately and ensure injury prevention
- Include breaks in training to permit recovery and to avoid overtraining and injuries
- Ensure access to sport medicine and sport science specialists
- Be effective in managing and leading the Integrated Support Team (IST)
- Manage all demands related to their career (support staff; sponsors; media, etc.)
- Explore aspects related to athlete’s post sport career

### Key to Success:

The athlete has the dream and the training is driven by the athlete’s desire to reach the podium. The coach must be effective in supporting the athlete’s dream by designing the pathway; integrating all of the performance factors required; ensuring the athlete is in the ideal performance state; leading the support team and facilitating the emotional support the athlete may need in any given situation. The athlete is at the centre and support driven by the coach.







# Active for Life (A4L)

Lifelong participation for pleasure, inspiration and FUN!  
 The skydiver can move to the Active for Life stage after leaving the competitive arena or at any time following exposure to the sport. As an active skydiver they can transfer back and forth between this and other stages. Whatever the participant, skydiver or athlete's role is within the skydiving community it is important to recognize each person has gifts and skills to contribute for the success of our sport.

## Objectives for the athlete

- Embrace a commitment to be involved in skydiving activities as an active participant or contributing in an alternative way such as a coach, mentor, teacher, official, rigger, camera person, organizer, dropzone owner, volunteer, etc.
- At all stages of participation and where appropriate, further develop and consolidate basic skydiving skills and fitness with an emphasis on enjoyment
- Foster a priority on physical fitness and nutrition with good training habits, including warm-up, hydration, cool-down, stretching, etc.
- Implement basic mental training skills
- Support inclusion into a peer group and the flying organization
- Value participation in leisure activities equally with competition-oriented participants
- A healthy lifestyle

## Key Principles for the coach

The mission of the coach is to facilitate lifelong participation in order to maintain an active, healthy lifestyle plus for pure enjoyment.

- Encourage participation in competition for FUN.
- Maintain safety as a guiding priority.
- Support & maintain self-confidence, motivation and interest.
- Provide inspiration to explore new developments in the sport or other aspects of the sport.
- Promote physical activity throughout the week.

## Note

- Canadian Sport for Life recommends a minimum of 60 minutes moderate daily activity or 30 minutes of intense activity for adults.

### Time in Sport

- Enjoyment of Sport Anytime

### Jump Numbers

- Any number of skydives
- Officials
- DZ owners
- Supporters

### Goals to Achieve

- Officials & technical ratings sport involvement & lifelong activity

### Competition Goals

- Active at desired level of competition

### Training to Competition Ratio

- Individualized program

### Training Volume

- Individualized program

## Key to Success:

The aim is for the individual to remain physically active and participating in their chosen area of the sport. For the active skydiver it is important to maintain regular physical activity plus make numerous skydives per season as staying current is key in this ever evolving sport.

Life is precious. Enjoy the sense of community in sharing a passion for skydiving and most importantly remember to have FUN!





# Athletes with a Disability (AWAD)

Athletes with a disability are first and foremost athletes, and for this reason, virtually everything in the LTAD for skydiving model is applicable to the developing athlete. The resource paper, No Accidental Champions, can provide insight into additional factors that need to be considered for athletes with a disability.

Safety first! For obvious reasons the type of disability and the extent of the disability may impact how far an athlete with a disability can progress in the sport of skydiving. Some may only be able to experience skydiving through tandem jumping which provides instructor assistance throughout the skydive. Others may experience simulated skydiving by means of a Vertical Wind Tunnel. Individuals with a disability, particularly those with an acquired disability, may pass through the Seven Stages at significantly different rates and at a greater speed since their experience before acquiring a disability (rather than chronological age) becomes an important factor. Each person's individual circumstances must be considered in order to assist them to progress through the LTAD plan for skydiving as far as their desire takes them.

## Objectives for the athlete

- Collaborate with coach and support personnel to maximize safety
- Actively participate in the evaluation of what works/what doesn't work

## Objectives for the coach

- The mission of the coach is to create a welcoming environment for athletes with a disability. Each person must be individually evaluated in order to ensure their successful introduction to skydiving.
- Evaluate and determine what specialized adapted equipment is required and fine tune it to the individual's needs
- Consult support personnel to ensure success
- Evaluate each step; maintain focus on safety and recognize the boundaries of safe participation



## Key to Success

Adapting skydiving for the individual is possible with careful, knowledgeable planning by the athlete with a disability and the coach with assistance from support personnel at the dropzone (boarding the aircraft, in aircraft support, landing area support) and drop zone facilities that are accessible. Changes and/or modification to the existing programs and equipment must address the challenges facing each person on an individual basis taking into consideration the extent and range of the intellectual and/or physical disability. Dropzone facilities will need to be modified in order to become more easily accessed by those with a disability. Fostering partnerships between the Canadian Sport Parachuting Association and organizations knowledgeable about athletes with a disability will assist in advancing the development of adapted skydiving programs.





## STEP 3: Implementation

**“We have evolved when we have changed things. Every person has this power.”**

– Anonymous

The Canadian Sport Parachuting Association (CSPA) embraces the philosophy of Long Term Athlete Development and recognizes it as being a vehicle for change to support and enhance the development of athletes and the sport as a whole.

The LTAD plan for skydiving provides a framework for increasing participation, improving the retention rate and provides a pathway for developing talent. Implementing the LTAD plan will call for change which will affect such factors as organizational resources, competition planning and coaching programs. Change is not easy and successful implementation will require a collaborative effort on everyone's part.

### Implementing change must:

- Recognize a sense of urgency
- Build a team of leaders
- Clearly identify and communicate the vision and mission of CSPA
- Design an Implementation Action Plan
- Enlist the help of those who believe in LTAD
- Listen to those who are involved
- Build confidence through short term successes
- Recognize and celebrate those who are responsible for success
- Consolidate the gains we make
- Increase our pool of Leaders
- Identify new challenges and take steps to address them as we move towards our vision

(Adapted from “Leading Change”, JP Kotter, 1996)

This document is the first step on the path to implementing a LTAD model for skydiving. The steps along this path include a review of competition; alignment of our National Coaching Certification Programs (NCCP) with LTAD; design of specific annual training plans; implementation of our LTAD plan; evaluation of LTAD changes and adjustments as necessary.

The Canadian Sport Parachuting Association's vision is to foster the pursuit of personal excellence. If we are to succeed it can only be through a team effort - Athletes, Coaches, Officials, Dropzone Owners, and Board Members - everyone working together towards a common vision.

**Share the Vision; Be the Change!**

**“Logic will get you from A to B. Imagination will take you everywhere.”**

– Albert Einstein



**“Banking on previous successes will not guarantee success in the future, continuous learning and change is necessary for future successes.”**

– Istvan Balvi





## Glossary of Terms

- **Ancillary Capacities** – Refers to the knowledge & experience base of an athlete and includes warm up and cool down procedures, stretching, nutrition, hydration, rest, recovery, restoration, regeneration, mental preparation, taper & peak.
- **Annual Training Competition and Recovery Plan (Periodization)** – A yearly plan which outlines the appropriate activities with the adequate degree of difficulty, and in the right sequence to reach the training and competition objectives sought.
- **Critical Period of Development** – A point in the development of a specific behaviour when experience or training has an optimal effect on development. The same experience, introduced at an earlier or later time, has no effect on or retards later skill acquisition.
- **Holistic** – Taking into account the whole system of physical, mental, and social conditions.
- **Ideal Performance State** – The physical, mental and emotional state when an athlete performs to the best of their ability.
- **Integrated Support Team** – Sport Sciences, Sport Medicine and other team management professionals that support coaches and athletes/teams.
- **Intrinsic** – Genuine; essential; desired for its own sake.
- **Peak Height Velocity (PHV)** – Is the maximum rate of growth in stature during growth spurt. The age of maximum velocity of growth is called the age of PHV.
- **Peak Weight Velocity (PWV)** – Is the maximum rate of increase in weight during growth spurt. The age of maximum increase in weight is called the age of PWV.
- **Physical Literacy** – The mastering of fundamental motor skills and fundamental sport skills. Fundamental movement skills + motor skills + basic sport skills = physical literacy.
- **Tandem Skydiving** – A skydive in which an inexperienced individual (passenger) is harnessed to the front of an experienced skydiver (Tandem Master).
- **Trainability** – Is how individuals respond to training at different stages of growth and
- **Vertical Wind Tunnel** – A structure that simulates freefall thus enabling individuals to fly in air without planes or parachutes, through the force of wind being generated vertically.
- **CoP** – Certificate of Proficiency
- **C1** – Coach 1
- **C2** – Coach 2
- **C3** – Coach 3
- **CAC** – Coaching Association of Canada
- **CompDev Coach** – Competition Development Coach
- **CWC** – Coaching Working Committee
- **DZ** – Dropzone
- **FAI** – Federation Aéronautique Internationale
- **IPC** – International Parachuting Commission (subpart of the FAI for the parachuting disciplines).
- **JM** – Jump Master Instructor
- **LF** – Learning Facilitator
- **MCD** – Master Course Developer
- **NSO** – National Sport Organization
- **PFF** – Progressive Freefall
- **PFFI** – Progressive Freefall Instructor
- **PIM** – Parachutist Information Manual
- **PSO** – Provincial Sport Organization
- **SSI** – Skydive School Instructor
- **SSE** – Skydive School Examiner (senior instructor)
- **Tunnel Coach** – Vertical Wind Tunnel Coach
- **WPC** – World Parachuting Championship

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# Flight Plan