



**LAUNCH INTO PARAMOTOR
STUDENT HANDBOOK**



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WELCOME TO “LAUNCHING INTO PARAMOTOR” - PPG SCHOOL

I welcome you on behalf of Explore Sports – PPG School team of instructors. Thank you for the trust in choosing our school as you launch into paramotor, Powered Paragliding (PPG), fulfilling your dreams of flying.

Through the efforts of our diverse and talented team, we are dedicated to our students’ success. We will deliver innovative solutions with the emphasis on exceeding your expectations. Explore Sports empowers our instructors, providing schools with comprehensive syllabuses and premier equipment in the industry for your safety.

This training logbook belongs to the student: he/she must bring it to each training or theoretical lesson during Phase I (B+C), Phase II and/or III (in-flight), Phase IV & V training. At the end of the training syllabus, a copy of this logbook shall be provided to the Flight Training Unit (FTU) performing Phase II and/or Phase III (in-flight).

This logbook allows the student to become familiar, right from the beginning of his/her training, with the requirements set forth by Transport Canada (TC) to obtain an Ultra-Light License – Powered Parachutes or achieve Flight Instructor status.

The training logbook is a tool for the students and for themselves and for the instructors he/she will be involved with during training to track progress. The review of each phase in the logbook will promote discussion and self – evaluation, with the aim of making the student/ instructor aware of his/her responsibilities.

The student, with the help of his/her instructor(s), **will keep his/her training logbook up to date.**

The training logbook is to record Phase I (A) online certificate, Phase I (B+C) ground handling i.e. the preparatory lessons for Phase II and/ or III (in-flight) and filing all documents with TC so the student legally qualifies to fly PPG in Canada. Phase IV & V track instructors progress as they work towards their goal of Flight Instructor.

The team and I are here to help navigate every step of the way.

Sincerely,



Aaron C. Hackel
Owner/Chief Flight Instructor
Explore Sports & PPG School

THIS HANDBOOK BELONGS TO:		TRANSPORT CANADA - FILE NUMBER
_____ <small>(FIRST NAME)</small>	_____ <small>(LAST NAME)</small>	

ADDRESS				
_____ <small>(#)</small> <small>(STREET)</small> <small>(CITY/TOWN)</small> <small>(PROVINCE)</small> <small>(POSTAL CODE)</small>				
PHONE		HOME:	CELL:	WORK:

RECOMMENDED TO OBTAIN	RECOMMENDING INSTRUCTOR <small>(PRINT NAME)</small>	SIGNATURE	LOCATION <small>(CITY & PROVINCE)</small>	DATE
<input type="checkbox"/> PHASE I – A (ONLINE)				
<input type="checkbox"/> PHASE I – B (GROUND SCHOOL)				
<input type="checkbox"/> PHASE I – C (GROUND SCHOOL)				
<input type="checkbox"/> PHASE II (30x FLIGHTS) or 5HRS				
<input type="checkbox"/> PHASE III (TRIKE or QUAD)				
<input type="checkbox"/> PHASE IV (TANDEM FOOT LAUNCH)				
<input type="checkbox"/> PHASE V (TANDEM TRIKE)				
ENDORSEMENTS				
<input type="checkbox"/> ULTRA-LIGHT EXAM (MIN 30x FLIGHTS)				
<input type="checkbox"/> FITEN (MIN 50HRS)				
<input type="checkbox"/> FLIGHT TEST (PASSENGER)				
<input type="checkbox"/> CLASS 3 MEDICAL (IV & V)				
<input type="checkbox"/> TOWING (WINCH)				
<input type="checkbox"/> P1				
<input type="checkbox"/> P2				
<input type="checkbox"/> PPL, CPL, APTL or EQUIVALENT				
<input type="checkbox"/> SIV				

WHAT TO EXPECT - EXPLORE SPORTS - PPG SCHOOL

- Step #1: Explore Sports (ES) – PPG School will submit your self-declared Class 4 medical to Transport Canada (TC).
- Start Phase I (A) – Online course syllabus in the comfort of your home, gaining all the knowledge required by Transport Canada to legally fly paramotor in Canada.
- As you work through Phase I (A), we team you up with (ES) – PPG School’s certified ground handling instructors for Phase I (B+C). Learn to kite a wing, running through a series of skill building techniques. Once you are proficient at flying the wings in a free-flight harness Phase I (B), you will demonstrate the skills developed using a cage, motor and throttle during Phase I (C).
- You will work through the online (A) and ground school (B+C) consecutively mastering ALL skills and receiving certificates of achievement. Once you complete the online syllabus and ES – PPG instructors sign off on Phase I (B+C), you will book in for Phase II and/or III (In-Flight).
- Phase II and/or III: ES – PPG School will submit appropriate documents to TC and issue a Student Pilot Permit (SPP).
- Prior to your first solo flights, instructors will perform a hang-test, adjusting all safety straps, teaching how to get in and out of the harness and use of throttle control.
- During the hang-test, your Flight Instructor will run through the intended flight pattern. In pre-flight, you will mimic your entire first flight, learning everything to expect from launching, landing & throttle control.

KEEP IT SAFE & HAVE FUN!!!

Follow these PPG School safety guidelines, including a few reminders which could save your life:

- Lack of knowledge and over-confidence can be catastrophic. We encourage you to keep asking questions and do anything you can to keep learning and improving your skill level.
- Never do things with a PPG/PPC if you think you can, ONLY when you know you can!!
- Don’t launch wings in wind too strong for your level of kiting.
- Never launch in a thunderstorm or in extremely gusty conditions.
- Always have room to abort your take-off or landing.
- Never launch near powerlines. Powerlines can be invisible and deadly from the air.
- Always have a safe landing area within gliding distance.
- Never fly below 100 feet without .5 mile clear view ahead.
- Plan your exit. Fly with the intent you will have an engine out at ANY TIME.
- Always start your flight into the wind with a turnaround point flying downwind back to where you launched.
- **YOU are 100% responsible for your own FUN & SAFETY.**



~~WIND AWARENESS & WIND QUALITY~~

How to determine wind direction & strength:

1. Use a windsock with telescopic pole. Ensure you are not downwind of large trees or obstacles upwind creating false reading or effects of rotor.
2. Use your wing. In any wind, your wing will want to position itself directly downwind.
3. "Feel" the wind. Looking into the wind you can usually feel it on your face.
4. "Listen" to the wind. You can normally hear the wind entering the ear canal.
5. Pick up leaves, pieces of grass or dirt, slowly letting go to identify air movement.
6. Observe your surroundings. You should be doing this anyway, looking in a 360° pattern for obstacles. Look for anything off in the distance i.e. trees, smokestacks, ripples in the water, grass or crops blowing.
7. Use hand-held anemometer. You can download an anemometer app for your phone or purchase an external device.
8. Use local websites. Keep in mind, websites are more of a reference or guideline. Each website can display a different forecast. All websites can be inaccurate. The best test is to be standing at the launch site, having the confidence you know the conditions are favorable for flight for your skill level.

WIND QUALITY

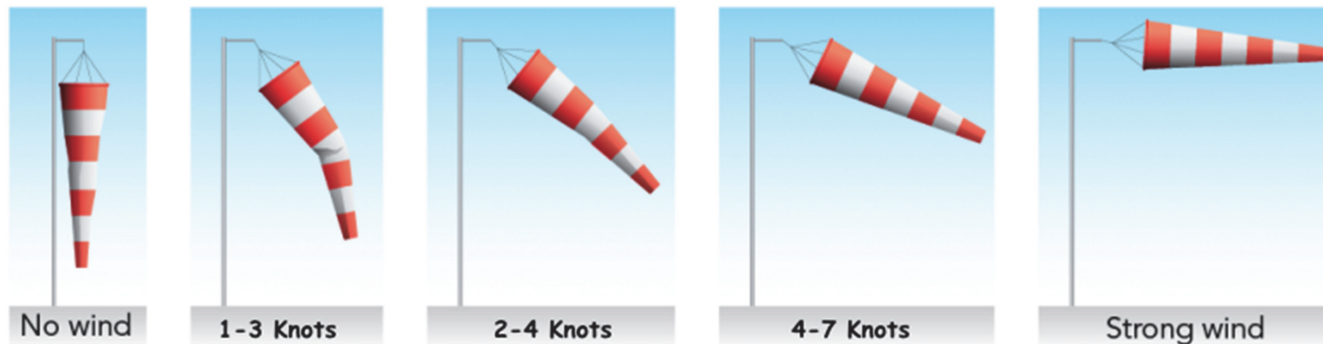
The more constant the wind is, the higher its quality. Low gust variance is the best for flying paramotor. Gust variance is the difference in wind speed between the lowest wind and the highest wind measured within 5 minutes in the same spot.

1. Avoid gust variances over 4 knots/7kph (i.e. if the wind is blowing 18.5kph – 27kph or 10-15 knots)
2. Keep an eye out for approaching thunderstorms, even if off in the distance. Land ASAP if a storm approaches. Pay attention to everything going on around you. **Be alert or stay in bed!**
3. Identify anything upwind and downwind which could cause wind shadows, turbulence or rotor. To have "clean wind", you should be a minimum of 8 times the height away from something in the distance. For example: If there is a tree upwind of you which is 10 feet tall, it will create wind turbulence or rotor up to 80 feet downwind.
4. Remember to fly into the wind. Plan your flight heading into the wind first. Be prepared to have an exit point or strategy at any time during the flight.

WIND AWARENESS

Do not underestimate the wind speed. When in doubt, stay grounded or continue to practice kiting a wing on land. Normally the wind and gust variants get stronger the higher you fly. The wing size you choose for your flight depends on the current wind speed, the motor you are using, your height, weight, skill level, altitude and air temperature. Cold wind has a greater air density and packs more of a punch = much stronger.

There is a well known saying amongst PG/PPG pilots. "I'd rather be on the ground wishing I was in the air vs flying in the sky, wishing I was on the ground".



The more time you commit to kiting a wing on land in a variety of wind conditions, the better pilot you will be flying in the sky.

When determining wind quality & speed, be aware of: Airflow - over obstacles/ hills, ridges, gullies/ venturi areas/ evolution of the day/ valley wind/ anabatic/ katabatic/ sea breeze/ lee side turbulence/ wind gradient/ slope lift/ basic cloud types including: cirrus/ alto stratus / cumulus / cumulonimbus / high and low pressure / temperature inversion.

DETERMINING WIND SPEED FOR FORWARD OR REVERSE LAUNCHES

No Wind - Fwd Launch 0 kph / 0 Knots

- is your toughest, fastest launch & landing.
- give yourself additional running room during take off and gliding space when landing.
- zero wind makes it very hard to "feel" the wing during launch.
- pilot needs to have confidence his/her wing has inflated properly.

Light Air - Fwd Launch 1-5 kph / 1-3 Knots

- good for launching, great for flying.
- very light breeze, hardly noticeable on your face.
- inflate the wing overhead filling the cells with air while moving backwards, positioning the wing directly into the wind.

Light Breeze - Fwd or Rev Launch 4-8 kph / 2-4 Knots

- ideal when first learning. Easy launches & landings.
- you can feel the wind on your face and leaves start rustling.
- allows you to consistently kite the wing overhead, checking bridle prior to launching.

Medium Wind - Reverse Launch 8-13 kph / 4-7 Knots

- Ok for flying, ideal for practicing kiting a wing on land
- Small branches start to sway.
- Light flags starts flapping.
- Fine beach sand will start to move.

Strong Wind - Reverse Launch 15-19 kph / 8-10 Knots

- Know your limits
- Medium branches start to sway.
- Loose sand will get picked up and blown downwind
- Frequent whitecaps occur on water. Practice flying wing on the ground in strong wind, determining if you will be comfortable in the sky

Stay Grounded 20+ kph / 11+ Knots

- Stay grounded
- Small trees sway
- Consistent white caps on water

LAUNCH & LANDING AREA

Talk to area locals about specific protocol before launching in an unfamiliar area. Use VFR Navigation Chart (VNC) for short to extended cross-country flights at low to medium altitudes. Recognize what airspace you are flying in. The ideal site for powered paragliding should have a launch area as wide as possible that is free from all obstacles, hazards & bystanders.

Ensure the area is clear from bystanders and others who may not understand the potential dangers of flying PPG.

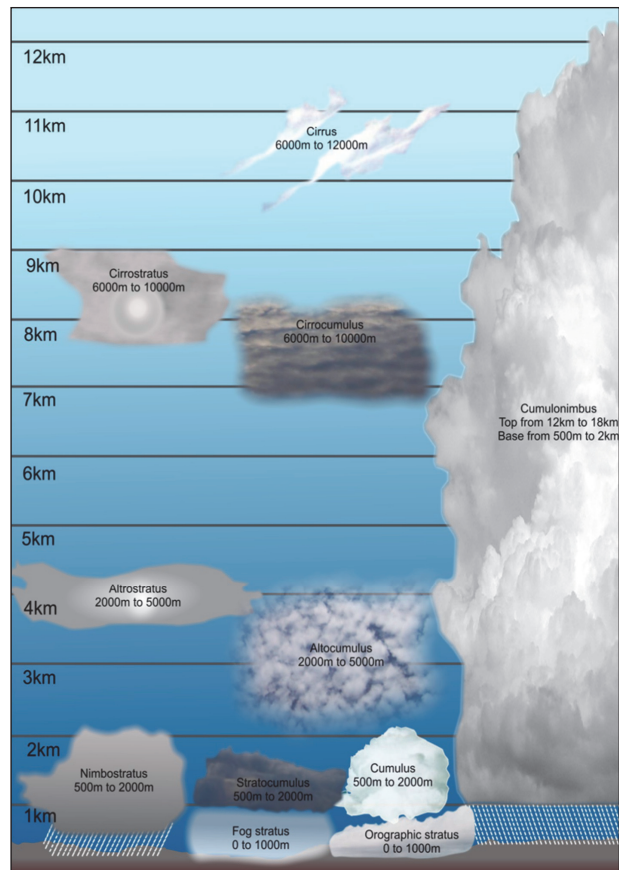
Examine the site closely for any objects that could interfere with your launch or landing i.e. rocks, holes, crops; be aware of trees, large walls, buildings, roadways, or powerlines.

Your buffer zone really depends on your skill level & the wind conditions you are comfortable launching and landing in.

Optimal Paramotor Launch/Landing Site Characteristics, including a few tips for keeping your local spots accessible:

1. Ensure the area is free of debris and holes.
2. Clean wind with no chance of shadow or rotor.
3. No powerlines within .5miles in any direction.
4. Stay at least 5 nautical miles away from an aerodrome
5. Stay 1000' from built up areas, people, animals & under 2000' above ground level (AGL) – Understand what category of airspaces you intend to fly including air law and procedures for each: Controlled, uncontrolled, special use and other airspace.
6. Do not fly low over people, livestock or animals.
7. Do not repeatedly fly over the same spot.
8. Lay your wing out where it doesn't interfere with other pilots.
9. Do not leave your motor running, unattended.
10. At small launch sites, launch and land wings one at a time.
11. Respect each pilots' space, including air law.

TYPE OF CLOUDS



PARAMOTOR – PREFLIGHT CHECKLIST

Comprehensive checklist of your equipment before & after every use:

- Harness: Check webbing, stitching – no wear or damage. No loose webbing which could potentially reach the propeller.
- Cage/Chassis: Securely fasten, no damage or misalignment. Cage fits correctly and is secure.
- Pivoting arms move freely with little to no lateral movement.
- Netting tension is set. No damage, tears that could get sucked in the propellers' rotation.
- Propeller is securely fastened, rotates around the cage free of hitting netting or any ground debris, sand, branches, leaves etc.
- Propeller does not have any cracks or “nicks” offsetting the balance.
- Check spark plug colour – replace if needed. Black = too rich vs White = too lean. Brown or double double/chocolate coffee colour = perfect.
- Oil/Gas mixture (40/1): Recommend Shell V-Power or AvGas ***Premium petroleum with no ethanol*** - Drain first 2L of gas trapped in hose line into your vehicle prior to filling jerry can.
- Recommended Oil: Vittorazi Atom 80, Moter 185, Factory R, Cosmos 300 – Full synthetic: Motul 710 or Motul 800 or Amsoil “Dominator” – 2 Stroke racing oil
- Recommended Oil: Polini Thor 130, 190 Light, EVO, HF, 200, 202, 250 & 303 – Yama lube R2 – 2 Stroke racing oil
- Fuel cap is securely fastened
- All springs are intact – Normally 6x
- Inspect muffler for cracks
- Motor securely fastened to frame
- Throttle engages and releases
- Kill engine switch engages
- Rubber mounts are intact
- Engine idles without stalling
- No leaks, breaks, worn-out parts
- Air box is secure, inspect for tears

Preflight Wing Check:

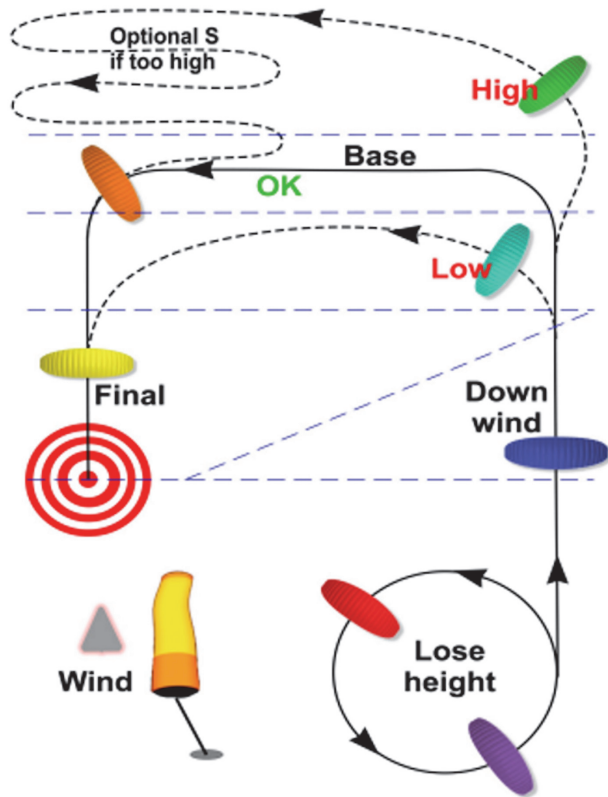
- No holes, rips or tears
- No nicks or stretching in bridles/risers

ALWAYS FLY WITH:

1. Helmet – Recommend EN966 Certified
2. Valid Class 4 medical or greater
3. Student Pilot Permit (SPP) or Aviation Document Booklet (ADB)
4. Proof of 3rd party liability insurance
5. Certificate of Registration
6. Extra sparkplug & tool
7. Small flathead screwdriver to change carburetor low and high screws & idle






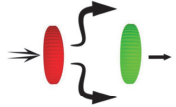
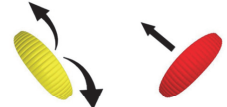

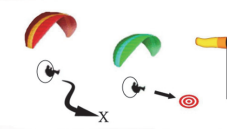
LANDING PROCESS - PARAMOTOR

AIR LAW : Consider and respect environment and rules of site/
 Airspace rules and anti-collision rules. Always wear a helmet.



AIR LAW – AERIAL COLLISION AVOIDANCE

AIR LAW : Consider and respect environment and rules of site/
 Airspace rules and anti-collision rules. Always wear a helmet.

<p>1st RULE</p>  <p>AVOID COLLISION!</p>	<p>HEAD ON</p>  <p>TURN RIGHT</p>
  <p>RIDGE SOARING turn rather than overtake</p>	<p>HEAD ON near ridge</p>  <p>Pilot with ridge on his right has right of way</p>
<p>OVERTAKING</p>  <p>Either side with good clearance</p>	<p>CONVERGING</p>  <p>Pilot on the right has right of way</p>
<p>THERMALLING</p>  <p>Turn in the same direction as upper pilot</p>	<p>LANDING</p>  <p>Lower pilot has priority</p>

PHASE I (A), (B) & (C)

PHASE I (A) – ONLINE SYLLABUS – ULTRA-LIGHT PERMIT COURSE

This record of ground school declares the successful completion of Explore Sports – PPG School paramotor ground school online syllabus including a written examination. Phase I Part A ground school course covers the following topics:

- Canadian Aviation Regulations [3 hours].
- Aerodynamics and Theory of Flight [2 hours].
- Meteorology [10 hours].
- Flight Operations [3 hours]
- Airframes, Engines and Systems [5 hours]
- Radio and Electronic Theory [3 hours].
- Flight Instruments [2 hours]
- Navigation [5 hours]
- Licensing Requirements [2 hours]
- Human Factors Including Pilot Decision Making [5 hours].
- Written Examination – Final Mark _____%

PHASE I (A) ACHIEVEMENT:

DATE: _____ TOTAL HOURS (MIN 20): _____ CODE#: _____

PHASE I (B) GROUND SCHOOL:

Using a free flight or ground harness must be able to demonstrate the following skills:

- Has basic weather and wind knowledge to kite a wing
- Understands the requirements for a good launch area to kite a wing
- Can unpack a wing independently
- Can layout a wing properly
- Can check risers
- Can untangle risers
- Can independently fluff a wing and build a wall
- Is able to inflate the wing overhead, checking bridles & risers
- Can perform a pre-inflation safety check (A-risers)
- Demonstrates hooking risers into a harness for forward launch
- Demonstrates hooking risers into a harness for reverse launch
- Can perform 3x successful forward launch in <5 knots
- Can perform 3x successful reverse launches in >5 knots
- Is able to control speed running with the wing at zenith/12 o'clock
- Can properly pack up a wing into stuff or ruck sack

PHASE I (C) GROUND SCHOOL:

Using a chassis/cage, motor & throttle must be able to demonstrate the following skills:

- All skills listed in the criteria in Phase I (B)
- Can perform a pre-inflation safety check (A-risers)
- Demonstrates hooking risers into carabiners for forward launch
- Demonstrates hooking risers into carabiners for reverse launch
- Can perform 3x successful forward launch in <5 knots
- Can perform 3x successful reverse launches in >5 knots maintaining the wing at zenith/12 o'clock
- Is able to control speed running with a wing at zenith/12 o'clock forward & reverse launch
- Without a wing attached, can simulate a launch with the motor running, bringing in throttle and running for 15yards (3x)
- Can run extensively keeping the wing in a proper launch position at zenith (riser/bridles not touching the top of the cage)
- Can run extensively, changing from forward to reverse kiting a wing overhead at zenith/12 o'clock

PHASE I (B) & (C)

PHASE I (B) – GROUND SCHOOL – PARAMOTOR

This record of ground school declares the successful completion of Explore Sports – PPG School paramotor ground handling. PHASE I (B) of the paramotor ground school course covers the following skills & topics:

Using a free flight or ground harness:

- Has basic weather knowledge to kite a wing
- Understands the requirements for a good launch area to kite a wing
- Understands the effects of rotor
- Can unpack a wing independently
- Can layout a wing properly
- Is capable of checking risers
- Can demonstrate untangling risers
- Can independently fluff the wing & build a wall
- Is able to inflate the wing overhead > 5knots checking risers
- Is able to inflate & kite the wing overhead in > 5knots for 30+ seconds
- Demonstrates safely hooking into a harness for FWD & REV launch
- Can perform a pre-inflation safety check (A – risers), kiting the wing overhead
- Can simulate forward launches in < 5knots, maintaining the wing at zenith/12 o'clock
- Can simulate reverse launches in > 5knots, maintaining the wing at zenith/12 o'clock
- Is able to control speed running with the wing at zenith/12 o'clock rotating from forward to reverse and back again multiple times
- Can properly pack up a wing into stuff sack or ruck sack

PHASE I (B) ACHIEVEMENT:

Date: _____ Instructor: _____ Signature: _____

PHASE I (C) – GROUND SCHOOL – PARAMOTOR

This record of ground school declares the successful completion of Explore Sports – PPG School paramotor ground handling course. PHASE I (C) of the paramotor ground school course covers the following topics: All skills listed in the criteria in Phase I (B) &

Using a chassis, frame, cage, motor & throttle:

- Demonstrates hooking into carabiners for forward & reverse launch
- Can perform a pre-inflation safety check (A-risers)
- Can perform forward launches in < 5knots
- Can perform forward launches in > 5knots, maintaining the wing at zenith/12 o'clock
- Can perform reverse launches in > 5knots, maintaining the wing at zenith/12 o'clock
- Is able to control speed running with the wing at zenith/12 o'clock
- Can run extensively keeping the wing in proper launch position (risers off top of cage)

PHASE I (C) ACHIEVEMENT:

Date: _____ Instructor: _____ Signature: _____



PREREQUISITE TO MOVE INTO PHASE II (IN-FLIGHT)

Explore Sports – PPG School Student Pilot – Phase I (B) + (C) – Demonstrated Skills & Logged Requirements

Date Achieved DD/MM/YY	The student/pilot has demonstrated below skill or task, completing each independently & with confidence	Pass Yes/No	Instructor Initials
	1. Has basic weather knowledge to kite a wing & understands how different wind conditions at a site will affect their flights.		
	2. Understands the requirements for a good launch area to kite a wing		
	3. Understands and can explain the effects of rotor		
	4. Equipment Management: Wing preparation, layout & inspection		
	5. Fluff the wing, inflate the wing overhead & build a wall		
	6. Demonstrates method(s) of establishing proper connection for forward & reverse launch. Risers attached to the harness/carabiners with clear lines.		
	7. Prior to launching the wing, performs a preflight safety check (A – Risers)		
	8. Demonstrates sufficient kite handling skills for a controlled launch		
	9. Foot Launch:		
	a) Can perform multiple forward launches in <5 knots		
	b) Can perform multiple reverse launches in >5 knots		
	c) Is able to control speed while running with the wing at zenith/12 o'clock – without motor		
	d) Is able to control speed while running with the wing at zenith/12 o'clock – with motor		
	e) Is physically fit to run with the motor for 15 yards, completing 3x successful launches in a row		
	10. Trike or Quad:		
	a) Is able to drive the trike or quad in a figure 8 pattern with good throttle control		
	b) Is able to properly hook the wing into a trike or quad after building a wall, setting the wing		
	c) Can simulate launches sustaining a wing (not intended for flight) in a launch position for 30 yards		

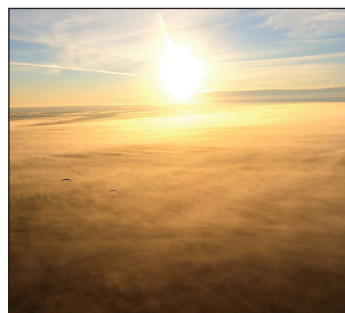
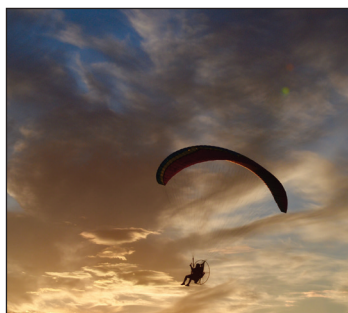
RECOMMENDATION FOR THE FIRST SOLO FLIGHT PHASE II: PHASE I (A), (B) & (C) ACHIEVED

I, undersigned _____ certify that _____ has reached a satisfactory level of competence to carry out solo flights under the supervision of a Flight Instructor. _____ has demonstrated the skills and logged all prerequisites to move into Phase II – In Flight.

INSTRUCTOR AUTHORIZATION: _____ FILE #: _____ DATE: _____

PHASE II (IN-FLIGHT) PREREQUISITES

PHASE II (IN-FLIGHT) PREREQUISITES	RECOMMENDING INSTRUCTOR (Print Name)	SIGNATURE	LOCATION (City & Province)	DATE
<input type="checkbox"/> PASS PHASE I PART (A)				
<input type="checkbox"/> PASS PHASE I PART (B)				
<input type="checkbox"/> PASS PHASE I PART (C)				
<input type="checkbox"/> WINCHING				
<input type="checkbox"/> PHOTO ID PASSPORT, DRIVERS LICENCE & BIRTH CERTIFICATE				
<input type="checkbox"/> CLASS 4 MEDICAL				
<input type="checkbox"/> WAIVERS				
<input type="checkbox"/> INSURANCE "MARSH - SILVER WINGS"				
<input type="checkbox"/> STUDENT PILOT PERMIT				



PHASE II (IN-FLIGHT):

- Achieved all skills in the criteria for Phase I (A), (B) & (C)
- Hang test
- Pre-flight simulator
- Communication with and without the use of radio
- Perform a pre-flight safety check (A-risers)
- Motor safety check: Idle, high & low screws
- Pull spark plug and check colour
- Fueling – oil/gas mixture
- Engine – warm-up procedures
(on ground & wearing on back for high RPM)
- Forward launch in <3 knots of wind
- Reverse launch in > 5 knots of wind
- Weight shifting during flight
- Setting and use of trims – 1/2 & fully deployed trims using stabilo lines to fly, wing in full reflex (if applicable)
- Forced engine out
- Descent: S-turns
- Descent: Spiral
- Spot landing between 10 yard markers
- Stop & start engine during flight
- 5x Touch & Go
- 20 Minute Flight & > 1000'
- Understands and can articulate air law - including aerial collision avoidance
- Demonstrates landing process
- Understands the effects of rotor
- 5x unassisted launch & landings
- Understands emergency protocol and procedures
- Achieved 30x solo flights
- Issued letter of recommendation to write Transport Canada – Ultralight Exam



PHASE II or III - IN FLIGHT ACHIEVEMENT:

Date: _____ Instructor: _____ Signature: _____

PHASE II – IN-FLIGHT – ULTRA-LIGHT PARAMOTOR - SOLO FLIGHT

This record of Phase II in-flight instruction declares the successful completion of Explore Sports – PPG School ultra-light Phase II syllabus. Phase II ultra-light powered paragliding course covers the following skills & topics on Foot-launch:

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> Student Pilot Permit | <input type="checkbox"/> Pre-Flight Safety Check | <input type="checkbox"/> S-Turn & Spiral Descent | <input type="checkbox"/> Post Flight Briefing |
| <input type="checkbox"/> Insurance | <input type="checkbox"/> Motor Settings (Idle, High & Low) | <input type="checkbox"/> Spot Landing | <input type="checkbox"/> Accident Reporting |
| <input type="checkbox"/> Medical | <input type="checkbox"/> Spark Plug – Colour | <input type="checkbox"/> Touch & Go | <input type="checkbox"/> 30x Flights Solo |
| <input type="checkbox"/> Waivers | <input type="checkbox"/> Fueling – Gas/Oil | <input type="checkbox"/> Stop & Start Engine during Flight | <input type="checkbox"/> Letter of Recommendation to write TC – Ultra-Light Exam |
| <input type="checkbox"/> Certificate of Registration | <input type="checkbox"/> Engine – Warm-up Procedures | <input type="checkbox"/> 20 Minute Flight & >1000' | |
| <input type="checkbox"/> Physically & Mentally Prepared | <input type="checkbox"/> Forward Launch in < 3 Knots | <input type="checkbox"/> Air Law - Aerial Collision Avoidance | |
| <input type="checkbox"/> Hang-Test | <input type="checkbox"/> Reverse Launch in > 5 Knots | <input type="checkbox"/> Landing Process | |
| <input type="checkbox"/> Pre-Flight | <input type="checkbox"/> Weight Shifting | <input type="checkbox"/> Understanding the effects of Rotor | |
| <input type="checkbox"/> Communication with & without the use of radio | <input type="checkbox"/> Setting & Use of Trims | <input type="checkbox"/> 5x Unassisted launch & landings | |
| | <input type="checkbox"/> Forced Engine Out | <input type="checkbox"/> Emergency Procedures | |

PHASE II ACHIEVEMENT:

Date: _____ Instructor: _____ Signature: _____

PHASE III – IN-FLIGHT – PARAMOTOR - SOLO FLIGHT- TRIKE, QUAD, WHEELS or SKIS

This record of Phase III in-flight instruction declares the successful completion of Explore Sports – PPG School paramotor Phase III syllabus. Phase III ultra-light powered paragliding course covers the following skills & topics on Trike, Quad, Wheels or Skis:

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> Student Pilot Permit | <input type="checkbox"/> Pre-Flight Safety Check | <input type="checkbox"/> Throttle Control using a Training Wing – ground control | <input type="checkbox"/> Airlaw - Aerial Collision Avoidance |
| <input type="checkbox"/> Insurance | <input type="checkbox"/> Motor Settings (Idle, High & Low) | <input type="checkbox"/> Wheels or skis with ground wing | <input type="checkbox"/> Landing Process |
| <input type="checkbox"/> Medical | <input type="checkbox"/> Spark Plug – Colour | <input type="checkbox"/> Setting/Use of Trims | <input type="checkbox"/> Understanding the effects of Rotor |
| <input type="checkbox"/> Waivers | <input type="checkbox"/> Fueling – Gas/Oil | <input type="checkbox"/> Forced Engine Out | <input type="checkbox"/> 30x Flights Solo |
| <input type="checkbox"/> Certificate of Registration | <input type="checkbox"/> Engine – Warm-up Procedures | <input type="checkbox"/> S-Turn & Spiral Descent | <input type="checkbox"/> Accident Reporting |
| <input type="checkbox"/> Physically & Mentally Prepared | <input type="checkbox"/> Setting up for FWD Launch | <input type="checkbox"/> Spot Landing | <input type="checkbox"/> Emergency Procedures |
| <input type="checkbox"/> Hang-Test | <input type="checkbox"/> Throttle Control without a wing | <input type="checkbox"/> Touch & Go | <input type="checkbox"/> Letter of Recommendation to write TC – Ultra-Light Exam |
| <input type="checkbox"/> Pre – Flight | <input type="checkbox"/> A-Assist – If applicable | <input type="checkbox"/> Stop & Start Engine during Flight | |
| <input type="checkbox"/> Communication with & without the use of radio | <input type="checkbox"/> Post Flights | <input type="checkbox"/> 20 Minute Flight & > 1000' | |
| | <input type="checkbox"/> Flight over 1000' | | |

PHASE III ACHIEVEMENT:

Date: _____ Instructor: _____ Signature: _____



PHASE II OR III – DEMONSTRATED SKILLS & LOGGED REQUIREMENTS TO WRITE ULTRA-LIGHT EXAM

Explore Sports – PPG School Student Pilot – Phase II or III – Demonstrated Skills & Logged Requirements to write Ultralight Exam

Date Achieved DD/MM/YY	The student/pilot has demonstrated below skill or task, completing each independently & with confidence	Pass Yes/No	Instructor Initials
	1. Achieved all prerequisites in Phase I (A), (B) & (C). All waivers, insurance, ID submitted to ES – PPG		
	2. Transport Canada Class 4 medical – File Number assigned and submitted to ES – PPG for SPP		
	3. Hang test – Preflight from simulator:		
	a) Properly get in and out of the harness – harness adjustments		
	b) Mimic first solo flights and able to understand and explain torque compensation		
	c) Demonstrate the use of good throttle control		
	d) Demonstrate the ability to communicate both hand or leg signals and by 2way radio		
	e) Starting the motor from a seated position in harness		
	f) Weight shifting		
	g) Setting trims & using stabilo lines		
	h) Demonstrate landing procedures: Trims set, kill engine, slide forward in harness, hands held high		
	i) Perform emergency procedures		
	j) Explain and perform all motor preflight checks		
	k) Explain Air law – aerial collision avoidance – demonstrate & explain rules of engagement with other pilots or aircraft		
	4. In – Flight Exercises:		
	a) Smooth transition from running to flying + in/out of harness during launches & landings		
	b) Fly intended pattern discussed in preflight, accounting for torque, controlled turns in both directions		
	c) Demonstrate the use of good throttle control		
	d) Successful spot landing between two markers 10 yards apart: accurate, planned and controlled		
	e) 5x successful touch and go		
	f) Weight shifting turns		
	g) Deploy and retract trim settings including full out flying full reflex with stabilo lines if wing allows		
	h) 5x successful forward launches in < 5 knots		
	i) 5x successful reverse launches in > 5 knots		
	j) 5x successful unassisted launch & landings – understanding sink rate and best glide		
	k) Descent: Demonstrate both S-Turns & spiral maneuvers on final approach to avoid osculation		
	l) Forced engine out		
	m) Flight to 1000' – kill motor, glide to 200' then start the motor before touching ground		
	5. 30x Solo flights achieved – Letter of recommendation issued to write Transport Canada Ultralight Exam		

PHASE II OR III ACHIEVED - RECOMMENDATION TO WRITE ULTRA-LIGHT EXAM

Date: _____

DD/MM/YYYY

To whom it may concern,

This document is to verify _____ Transport Canada File# _____ is enrolled with
Name of Student / Pilot
Explore Sports - PPG School Flight Training Unit # _____ in the Ultra-Light Powered Parachute training course.

_____ has successfully completed 20 hours of ground school on Air Law, Meteorology, Aeronautics and
Name of Student / Pilot
Emergency Procedures. He/She has achieved _____ Hours as a solo pilot in command of a powered paraglider, including
_____ take off and landings. He/She has demonstrated the ability to perform normal and emergency maneuvers competently.

I, _____ certify that _____ has reached a satisfactory
Flight Instructor & TC File Number Name of Student / Pilot
level of competence to carry out solo flights independently, graduating from Explore Sports – PPG School’s syllabus. I hereby recommend
_____ to write Transport Canada’s Ultra-light exam.
Name of Student / Pilot

Recommending Flight Instructor Signature: _____

*****Letter of recommend valid for 30 days from date listed above to write Transport Canada’s Ultra-light Exam*****



PHASE IV & V – IN-FLIGHT – ULTRA-LIGHT PARAMOTOR - TANDEM - FOOT LAUNCH & TRIKE – FLIGHT INSTRUCTOR RATING

This record of Phase IV & V in-flight Flight Instructor instruction declares the successful completion of Explore Sports – PPG School paramotor Phase IV & V syllabus. The Phase IV & V ultra-light paramotor course covers the following skills, topics & certificates for Flight Instructor: Tandem – Foot-launch, Trike, Quad, Wheels or Skis:

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Minimum 50x hrs Solo | <input type="checkbox"/> Pre-Flight Safety Check | <input type="checkbox"/> Throttle Control using a Training Wing – ground control | <input type="checkbox"/> Emergency Procedures |
| <input type="checkbox"/> 2x Hrs Tandem | <input type="checkbox"/> Motor Settings (Idle, High & Low) | <input type="checkbox"/> Throttle Control using a Tandem Wing – ground control | <input type="checkbox"/> Letter of Recommendation to write TC - FITEN – FI Exam |
| <input type="checkbox"/> > 90% TC - Ultra-Light Exam | <input type="checkbox"/> Spark Plug – Colour | <input type="checkbox"/> Forced Engine Out | <input type="checkbox"/> Radio Operators License |
| <input type="checkbox"/> Class 3 Medical | <input type="checkbox"/> Fueling – Gas/Oil | <input type="checkbox"/> S-Turn & Spiral Decent | |
| <input type="checkbox"/> > 80% - FITEN | <input type="checkbox"/> Engine – Warm-up Procedures | <input type="checkbox"/> Spot Landing | |
| <input type="checkbox"/> In-Flight – TC Examiner (AP) | <input type="checkbox"/> Setting up for FWD Launch | <input type="checkbox"/> Touch & Go | |
| <input type="checkbox"/> Hang-Test | <input type="checkbox"/> Passenger Responsibilities | <input type="checkbox"/> Stop & Start Engine during Flight | |
| <input type="checkbox"/> Pre-Flight | <input type="checkbox"/> A-Assist | <input type="checkbox"/> Accident Reporting | |
| <input type="checkbox"/> Communication with & without the use of radio | <input type="checkbox"/> Weight Shifting | | |
| | <input type="checkbox"/> Setting/Use of Trims | | |

PHASE IV & V ACHIEVEMENT:

Date: _____ Instructor: _____ Signature: _____

SIV ENDORSEMENT

A pilot awaiting the SIV Endorsement must present to the rating HPAC/ACL Instructor signed proof by an SIV instructor of their successful completion of an SIV course consisting of the following basic criteria:

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Big Ears | <input type="checkbox"/> Spiral descent ability | <input type="checkbox"/> Recovery from induced asymmetrical collapse | <input type="checkbox"/> Recovery from induced stall |
| <input type="checkbox"/> Recovery from induced frontal collapse | <input type="checkbox"/> Recovery from induced spin | | |

NOTE: the SIV Endorsement is not an aerobatics endorsement*

SIV ACHIEVEMENT:

Date: _____ Instructor: _____ Signature: _____

PHASE IV & V ACHIEVED - RECOMMENDATION TO WRITE FITEN EXAM

Date: _____

DD/MM/YYYY

To whom it may concern,

This document is to verify _____ Transport Canada File# _____ is enrolled with
Name of Student / Pilot
Explore Sports - PPG School Flight Training Unit # _____ in the Ultra-Light Powered Parachute training course.

_____ has successfully completed 20 hours of ground school on Air Law, Meteorology, Aeronautics and
Name of Student / Pilot
Emergency Procedures. He/She has achieved _____ Hours as a solo pilot in command of a powered paraglider, including
_____ take off and landings. He/She has demonstrated the ability to perform normal and emergency maneuvers competently. He/She has achieved over 90% writing Transport Canada's Ultra-light exam and holds a valid Class 3 medical.

I, _____ certify that _____ has reached a satisfactory
Flight Instructor & TC File Number Name of Student / Pilot
level of competence to carry out solo flights independently, graduating from Explore Sports – PPG School's syllabus. I hereby recommend
_____ to write Transport Canada's FITEN exam.
Name of Student / Pilot

Recommending Flight Instructor Signature: _____

*****Letter of recommend valid for 30 days from date listed above to write Transport Canada's FITEN Exam*****



VITTORAZI MOTOR MAINTENANCE SCHEDULE & TORQUE SETTINGS

MOTOR OR PART	BEFORE & AFTER USE	EVERY 25 HOURS	EVERY 100 HOURS	150+HOURS & NOTES	TORQUE SETTINGS
Spark Plug	Check	Replace	X	Check Colour – Chocolate Brown	25Nm or 221in lbf
Oil Leaks, worn out parts	Check	X	X	No leaks or worn out parts or replace	X
Screws & Nuts	Check	X	X	Settings vary	25-27Nm or 221in lbf – 239in lbf
Throttle	Check	X	X	Engages & releases	X
Kill Switch	Check	X	X	Engages prior to flight	X
Engine Idle	Check	X	X	Motor runs without stalling	X
Rubber Mounts	Check	X	X	Engine support screws	X
Carburation	Check	X	X	Check spark plug colour	X
Belt	Check	Cleaning & Tension	Replace	X	X
Air Box & Manifold	Check	Clean & Check	X	X	X
Pull Start	Check	Spark Plug	Spark Plug	Spark Plug	Spark Plug
Reed Valve	X	Check	Replace	X	X
Gaskets	X	Check	Replace	Replace when needed	X
Piston Rings	X	X	Replace	X	X
Piston	X	X	Clean Soot	Replace after 200Hrs	X
Piston Roller Bearing	X	X	Replace	X	25-27Nm or 221in lbf – 239in lbf
O – Ring Head	X	X	Replace	X	X
Head & Cylinder	X	X	Clean Soot from Head. Clean Exhaust Port & Decompressor Hole	X	X
Oil– Seal Starter Case	X	X	Replace	X	Motor Runs without stalling
Bearing Crankshaft	X	X	Check	Replace at 200Hrs	X
4mm Screws or Nuts	X	X	X	X	2.5Nm – 3Nm or 22in lbf -26.5in lbf
5mm Screws or Nuts	X	X	X	X	6Nm – 6.5Nm or 53in lbf – 57.5in lbf

VITTORAZI MOTOR MAINTENANCE SCHEDULE & TORQUE SETTINGS

MOTOR OR PART	BEFORE & AFTER USE	EVERY 25 HOURS	EVERY 100 HOURS	150+HOURS & NOTES	TORQUE SETTINGS
6mm Screws or Nuts	X	X	X	X	9Nm – 10Nm or 79.7in lbf – 88.5in lbf
8mm Screws or Nuts	X	X	X	X	25Nm – 27Nm or 221in lbf – 239in lbf
Crankcase Screws	X	X	X	X	10Nm or 88.5in lbf
Crankshaft	X	X	X	Replace at 200Hrs Replace roller bearing	X
Reduction Bearing	X	X	Replace	X	X
Soundproofing Material Silencer	X	Check – Replace if needed	Replace	Every 100Hrs or 1 Year	X

MOSTER 185

MOTOR OR PART	BEFORE & AFTER USE	EVERY 25 HOURS	EVERY 100 HOURS	150+HOURS & NOTES	TORQUE SETTINGS
Centrifugal Clutch	X	X	X	Replace at 150Hrs	X
Reduction Pinion Bearing	X	X	Replace	X	X
Carbon Propeller Screws – 6mm	X	X	X	X	10Nm or 88.5in lbf
Wood Propeller Screws – 6mm	X	X	X	X	6Nm – 7Nm or 53.1in lbf – 62in lbf
Exhaust Nuts	X	X	X	X	32Nm or 283in lbf
Exhaust Studs	X	X	X	X	25Nm or 221in lbf
Flywheel Nuts	X	X	X	X	42Nm – 45Nm or 372in lbf – 398in lbf
Pinion Nuts	X	X	X	X	42Nm – 45Nm or 372in lbf – 398in lbf
Reduction Pinion Bearing	X	X	Replace	X	20Nm or 177in lbf
Cylinder Head Nuts	X	X	X	X	16Nm – 17Nm or 142in lbf – 150.5in lbf
Cylinder Studs	X	X	X	X	20Nm or 177in lbf



EXPLORE SPORTS – PPG SCHOOL – FLIGHT LOG: 1 – 15

Aircraft	Registration Markings	Aircraft	Registration Markings	Aircraft	Registration Markings
TYPE #1	C-I	TYPE #2	C-I	TYPE #3	C-I

WING	MAKE	MODEL	SIZE
TYPE #1			
TYPE #2			
TYPE #3			
TYPE #4			

YEAR:			AIRCRAFT	WING	SITE			FLIGHT			INITIALS
FLIGHT #	MONTH	DAY	TYPE #	TYPE #	LOCATION	LAUNCH TYPE	WIND CONDITIONS	LAUNCH TIME	LAND TIME	DURATION	Student/ Instructor
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

TOTAL TIME IN DECIMAL:



EXPLORE SPORTS – PPG SCHOOL – FLIGHT LOG: 16 – 40

YEAR:			AIRCRAFT	WING	SITE			FLIGHT			INITIALS
FLIGHT #	MONTH	DAY	TYPE #	TYPE #	LOCATION	LAUNCH TYPE	WIND CONDITIONS	LAUNCH TIME	LAND TIME	DURATION	Student/ Instructor
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											

TOTAL TIME IN DECIMAL:



EXPLORE SPORTS – PPG SCHOOL – FLIGHT LOG: 41 – 65

YEAR:			AIRCRAFT	WING	SITE			FLIGHT			INITIALS
FLIGHT #	MONTH	DAY	TYPE #	TYPE #	LOCATION	LAUNCH TYPE	WIND CONDITIONS	LAUNCH TIME	LAND TIME	DURATION	Student/ Instructor
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											
51											
52											
53											
54											
55											
56											
57											
58											
59											
60											
61											
62											
63											
64											
65											

TOTAL TIME IN DECIMAL:



EXPLORE SPORTS – PPG SCHOOL – FLIGHT LOG: 66 – 90

YEAR:			AIRCRAFT	WING	SITE			FLIGHT			INITIALS
FLIGHT #	MONTH	DAY	TYPE #	TYPE #	LOCATION	LAUNCH TYPE	WIND CONDITIONS	LAUNCH TIME	LAND TIME	DURATION	Student/ Instructor
66											
67											
68											
69											
70											
71											
72											
73											
74											
75											
76											
77											
78											
79											
80											
81											
82											
83											
84											
85											
86											
87											
88											
89											
90											

TOTAL TIME IN DECIMAL:



EXPLORE SPORTS – PPG SCHOOL – FLIGHT LOG: 91 – 115

YEAR:			AIRCRAFT	WING	SITE			FLIGHT			INITIALS
FLIGHT #	MONTH	DAY	TYPE #	TYPE #	LOCATION	LAUNCH TYPE	WIND CONDITIONS	LAUNCH TIME	LAND TIME	DURATION	Student/ Instructor
91											
92											
93											
94											
95											
96											
97											
98											
99											
100											
101											
102											
103											
104											
105											
106											
107											
108											
109											
110											
111											
112											
113											
114											
115											

TOTAL TIME IN DECIMAL:



EXPLORE SPORTS – PPG SCHOOL – FLIGHT LOG: 116 – 130

YEAR:			AIRCRAFT	WING	SITE			FLIGHT			INITIALS
FLIGHT #	MONTH	DAY	TYPE #	TYPE #	LOCATION	LAUNCH TYPE	WIND CONDITIONS	LAUNCH TIME	LAND TIME	DURATION	Student/ Instructor
116											
117											
118											
119											
120											
121											
122											
123											
124											
125											
126											
127											
128											
129											
130											
								TOTAL TIME IN DECIMAL:			

CONVERSION TABLE: MINUTES = DECIMAL

0 – 2 Minutes = 0.0	21 – 26 Minutes = 0.4	45 – 50 Minutes = 0.8
3 – 8 Minutes = 0.1	27 – 32 Minutes = 0.5	51 – 56 Minutes = 0.9
9 – 14 Minutes = 0.2	33 – 38 Minutes = 0.6	57 – 60 Minutes = 1.0
15 – 20 Minutes = 0.3	39 – 44 Minutes = 0.7	



EXPLORE SPORTS – PPG SCHOOL – NOTES

Date: DD/MM/YY	NOTES

