



# APPI WORKSHOP NEPAL 2018

## APPI PRO-WORKSHOP FOR PARAGLIDING PILOTS & TANDEM PILOTS

**Endorsed by Ministry of Tourism and Civil Aviation of Nepal**

**Place:** Sirkot, Nepal

**Date:** November 25<sup>th</sup> – December 2<sup>nd</sup>

**Master Instructors APPI :** Dale Covington as speaker

Olivier Cotasson

**APPI Instructor :** Damodar Parajuli

**Language:** English

**Partnerships:** Babu Adventures International School and Blue Sky Paragliding, Pokhara

**Practical area:** Sirkot, Nepal.

**Planning:** 3 to 8 days, possibility of 2 extra days.

**Fees: Workshop I Pilot :** 210 USD (plus 13% vat) 3 days theory.

**Workshop II tandem :** 300 USD (plus 13% vat) 5 days theory plus 3 days practical validation.

If the number of participants is large enough, the price could be lowered.

**Included:** Organization of workshop and courses, instructional material, written and electronic documents.

**Accommodation, food (normal Nepali food) and transportation:**

15 USD by day plus 40 USD for transportation (to/from Sirkot and on flight sites).

Departure on November 24<sup>th</sup> at 3pm to Sirkot, Babu Adventures International School, Pokhara.

**More Information and registration:**

[info@babuadventure.com](mailto:info@babuadventure.com) +977 61 464191 , 61 464192, 9846257339

[info@paragliding-nepal.com](mailto:info@paragliding-nepal.com) +977-61 464737, 61 463015

**Important: You must book at Babu adventure school or Blue Sky paragliding at Pokhara before August 31<sup>th</sup> and pay an advance of 180 USD or 18,000 NPR.** If you do not come to the workshop, this advance is not refunded. On the other hand, if APPI cancel the workshop, this advance will be refunded.

If at this date the number of participants is insufficient, the workshop will be canceled, so it is essential to book before August 31<sup>st</sup>.

The full costs of the workshop including accommodation, food and transportation must be paid before departure at Babu Adventure School at Pokhara.

# Workshop I

## Theory workshop for paragliding pilots

**Aimed at:** any pilot

**Duration:** 3 days (24 hours theory)

**Objectives:** Theoretical elements for paragliding pilots.

Each course proposes important and advanced items, as well as an updating with recent knowledge. This is not a teaching of the basics of paragliding.

**Program :** Each day meeting at 7h45, course from 8h to 19h.

**References:**

- APPI logbook 2.0
- U1, U2, U3 summary

**You will need:** a notebook, a pen, a calculating machine, a 12” ruler with Metric scale, a memory stick, a glider, the line length scheme of the glider with numerical value, mobile smartphone or tablet or laptop for exams.

**Extracts of contents:**

*Unit 1:*

Gear.

*Unit 2:*

Aerodynamics,  
Flight mechanics,  
Piloting.

*Unit 3:*

Meteorology and aerology,  
Safety,  
Environment,  
Air spaces and flying rules,  
Paragliding authority role.

# Workshop II

## APPI Tandem Pilot VALIDATION

### Aimed at:

Pilot with APPI 5 advanced pilot certification or equivalent having already an experience minimum of 50 flights in tandem documented. ADVANCED SIV is mandatory to enter the workshop as well as APPI advanced pilot theoretical exam validated online.

**Duration: 8 days (45h theory plus theoretical and practical examinations).**

**Objectives:** Theoretical elements for a safe tandem operating. Practical training and exams for APPI certification. Each course element teaches advanced and critical items, as well as a review of some fundamental knowledge. However, this is not a course on the basics of paragliding.

### Documents and references:

- Nepal tandem workshop description
- Tandem-routine\_en\_1807
- APPI\_LogBook\_2.0
- Nepal tandem workshop advices
- Evaluation tandem flight\_en\_1807
- APPI\_paragliding\_training\_organization 2.3

Documents available at this address:

<https://drive.google.com/drive/folders/18mXTRdl2TT-oZjnafevX1hNd5sURYwO9>

**You will need:** pen, calculator, ruler 20cm minimum in millimeter, memory stick, solo gear in good shape, complete Tandem gear **in good shape**, the line length scheme of the glider with numerical value.

*Some manufacturer do not include this information in the manual. Anticipate this and ask your dealer.*

Complete Tandem gear = glider, harnesses, reserve, helmets, radio, gloves.

Mobile smartphone or tablet or laptop for online exams.

### Extracts of the theoretical contents:

#### Tandem operating:

Organize the tandem flight/preparation with safety as the primary goal. Choosing of the gear, flying site organizing. Relationship with the passenger/client . Operating: attitude, psychology, techniques (T.O., approach, landing), physiological issues, assistance management, camera. Specific public. Most frequent problems. Production of written global procedure, including safety checks and typical briefings etc...

#### Gear:

Care and maintenance of components: glider's cloth aging, line load and required resistance, trim check method and airworthiness assessment. Harnesses and reserve: settings, known problems, certification...

#### Aerodynamics, flight mechanics and piloting:

Stability/ instability of a wing's profile, consequences on piloting. Specifics of tandem flying: Wing loading and speed range, weight factors, trimmers use, etc...

#### Meteorology, numerology:

Global and local forecasting tools, stability/instability, aerological traps and dangerous situations etc...

#### Psychological aspects and safety:

Safety guidelines, risk homeostasis , the good attitude. Stress and coping. Risk management, typical risky situations. What to do in case of accident etc...

#### Legal aspects of tandem operating:

Responsibilities, obligations, insurances. Airspace and flying rules refresh. Authorities, APPI. Environment. Community representative as a pilot, duties.

## DETAILS :

### A – Prerequisites

- Be certified as an APPI 5 Advanced Pilot, or an equivalent rating IPPI 5 plus Advanced SIV and XC certification. Required experience: more than one year of paragliding activity and more than 50 flights in tandem.
- Be over 18 years of age.
- Submit proof of First Aid training (Red Cross or other rescue organization equivalence).
- Advanced SIV certification means that you master at least the following maneuvers :
  - deep 360 damped exit, - pitch, pitch control,
  - stall, backfly, recovery, - spin, recovery,
  - asymmetrical collapse, autorotation, recovery.

Accepted documents are only certifications provided by APPI SIV instructor.

### B – Solo skills check

An evaluation of the piloting skills in solo will be performed as soon as possible depending on the weather, and before any tandem flight. If the instructor judges your level is not satisfactory, you will have at that moment two options:

- 1) You decide to leave and in that case the fees will be refunded less a deduction of 180 USD and the cost of accommodation, food and transportation depending on the number of days lodged.
- 2) You decide to stay, but you will not fly with the tandem as a pilot. You will get new knowledge but that course will not be validated into the APPI system.

To prepare for solo check, we strongly encourage you to repeatedly practice and master the following maneuvers:

- Clean take off with safety check and glider visual control.
- Deep spiral damped exit.
- Pitch and pitch control.
- Timed maneuver: 720°, exit on axis. Time less than 15 sec from 'Go' to glider stabilized.
- U-Shape approach, 4 sec minimum straight final, land in a 20m diameter target.

### C – Training

The training includes a refresh of advanced theoretical knowledge about flight mechanics and piloting, weather and rules. Full review of specific equipment for tandem operating, gear aging inspection methods are given, as well as mental state awareness, pilot's and passenger emotional control.

In the field, emphasis is put on safety procedures and specifics of tandem handling. Practical training covers specifics of tandem operating as well as training for APPI tandem exam.

### D - Qualifications and prerogatives

At the end of the tandem workshop:

➤ ***No matter the experience, if the instructors judge the student is not ready to fly tandem, the NCTP status is canceled.*** The student should improve his skills flying a solo glider before re-attending the tandem course.

➤ ***If the instructors judge that the student is ready to fly tandem, then:***

**a:** For the pilots that have an experience of :

- at least 50 tandem flights as pilot and less than 150 flights in tandem,
- done with minimum 2 different wings,
- on 3 different sites,
- and with 4 different passengers.

Provide flight proof, photo or video, track, contact of passenger.

\* If the exam is not satisfactory, the student's status stays as NCTP "in progress", he should build more experience flying tandem with pilots as passenger until he passes the NCTP exam.

\* If exam is satisfactory, the student's status will be updated to non-commercial tandem pilot "validated" allowing him to fly also **non-pilots as passenger, but not commercially.**

To get APPI Non Commercial Tandem Pilot rating :

**- Theoretical exam :**

50 questions 80% success required / open questions to develop.

**- Practical exam :**

**Maintenance:** glider trim control.

**Flight:** two flights in tandem as pilot.

\* Impeccable briefing and safety procedure (written).

\* Time between passenger greeting glider in the bag and "ready to take off" less than 20mn.

\* Master one takeoff technique (forward or reverse) and able to perform the other one.

\* Glider visual control, acceleration, trajectory control are safe. One descent technique.

\* Timed maneuvers: inverted 360 (figure 8) **30 sec.** glider stabilized, 720° **25 sec.** glider stabilized.

\* Landing **two times:** Neat U-shape (aircraft) approach, min 4 sec straight final, land on foot inside a **40m** diameter target.

One "second chance" flight possible in case of fail on timed maneuvers or accuracy.

**Important:** If there is a fail in the safety procedure, or if the instructor judges an action is dangerous (on take off, at landing or uncontrolled maneuvers), he will cancel the exam.

**b:** For the pilots that have an experience of :

- at least 3 years paragliding experience,

- at least one year tandem operating,

- at least 150 tandem flights as pilot.

Provide flight proof, photo or video, track, contact of passenger.

As result of the exam, the student may gain the following rating :

- APPI Non-Commercial Tandem Pilot "in progress", he should build more experience in flying tandem with pilots as passenger until he passes the tandem exam.

- APPI Non-Commercial Tandem Pilot "validated" allowing him to fly also **non-pilots as passenger, but non commercially.**

- APPI professional tandem pilot « validated » Upon APPI standards, APPI pro tandem pilot is capable of commercial tandem activity, with efficiency and a high level of safety.

To get APPI Pro Tandem Pilot rating :

**- Theoretical exam**

50 questions with 80% success / open questions to develop.

**- Practical exam**

**Maintenance** glider trim control.

**Flight exam** based on professional tandem operating. Two flights in tandem as pilot.

\* Passenger care and attention.

\* Briefings and procedures mastered (written).

\* Time between "passenger greeting glider in the bag", and "ready to take off", less than **10mn.**

\* Master forward and reverse takeoff techniques.

- \* Operational over a wide range of loads and conditions.
- \* Management and use of the camera (goPro stick).
- \* Safety management on takeoff, in flight, and landing.
- \* Excellent technique for glider visual control, acceleration, trajectory control.
- \* Excellent technique in takeoff exit, specially for getting passenger into harness while keeping piloting.
- \* One descent technique.
- \* Timed maneuvers: inverted 360 (figure 8) **25 sec.** glider stabilized, 720° **20 sec.** glider stabilized.
- \* Landing two times: Neat U-shape approach, min 4 sec straight final, land on foot inside a **30m** diameter target.

One “second chance” flight possible in case of fail on timed maneuvers or accuracy.

**Important:** If you fail the security procedure, or if the instructor judges an action is dangerous (on take off, at landing or uncontrolled maneuvers), he will cancel the exam.

### **Important Information:**

➔ **If you want to success your theoretical test during the workshop, it is imperative to study the APPI Pilot Manual and practice the online exam questions on the APPI website minimum two months in advance. To access the manual and exam questions on the website, you must be an affiliate APPI member.**

[www.appifly.org](http://www.appifly.org)

➔ **All participants must have accident and third party insurance valid for the duration of the workshop, you will have to show your insurance certificate before leaving for the workshop. If you do not have one, an insurance is available at the school before leaving for the workshop, valid only in Nepal (for Nepali and foreigners).**

- Tandem pilots: 22,000 NPR for one year.

- Solo pilots: 11,500 NPR for one year.

➔ **APPI certification is internal to the APPI system, and shows no particular right in the country where the activity is performed, unless APPI is recognized by the legal local authority managing free flight.**

## Dear Pilot or Tandem Pilot,

You have applied for the APPI tandem course and we thank you very much.

The main goals of this workshop are :

- Share with to you the latest knowledge disseminated by the international pool of master instructors for a safe tandem operations.
- Issue the APPI qualification corresponding to the level you will show at the end of the course.

The workshop is quite intense and demanding. We recommend you to be relaxed before and have a mind free of problems.

You may also prepare by having a look in the theory books. We will spend very little time on basic topics.

Reviewing the basics of paragliding theory will help the understanding of advanced topics that will be developed during the course.

- Aerodynamics, flight mechanics.
- Meteorology, Aerology.
- Flying rules etc...

Have a look on the APPI manual, [https://appifly.org/spip.php?page=rubrique&id\\_rubrique=29](https://appifly.org/spip.php?page=rubrique&id_rubrique=29)

and check your knowledge with the APPI training tool. <https://appifly.org/?Exams>

### Tandem practical exam :

For the ones fulfilling the requirements , they will be taking exams at the end of the course. Are you experienced, you may feel that you will easily pass... well, watch out!

You have to perform two flights, a third one is possible if needed as a “second chance”.

Safety procedure. APPI promotes a certain procedure that has been proven to minimize the risk. The document *tandem routine* details an example of the whole process. You may adapt it. The non negotiable points are in bold in the *tandem evaluation* document. The safety check procedures are particularly important and have to be respected.

A) The 4 point passenger, the 5 point pilot checks.

B) ONCE ready, before each attempt 4 steps:

- The 7 points vital safety last check,
- Wind check & last words to passenger,
- Look at glider,
- Look at traffic, **Go.**

*Taking the tandem routine document as a foundation, write your own routine, and have your flight operation conform to it. You will also have to present two written briefings: one for no wind conditions, the other for windy conditions. This will be worked during the course, but training before the course will give you better chance to pass the exam. **Any procedure fail will lead to exam cancellation.***

Work your take off technique, forward and reverse launch and trajectory control. Forward launch should feature efficient gliders visual control before accelerate.

Nice U-shape (aircraft) approach is mandatory unless unsuitable, A long final featuring a minimum of 4 sec strait is mandatory. Landing two times in the target on the feet pilot and passenger, no fall.

If the target is missed one time in the two flights, the pilot will have a second chance with a third flight (only one).

The in flight maneuver require a bit of precision (respect of axis, energy, time), so we recommend you to train.

You have to perform:

- One fast descent technique of your choice.
- Two timed maneuvers:

Spiral: The examiner gives the Go, 2 turns same direction (720°), Exit on axis +/- 15°, the chronometer stops when the glider is above head, in straight flight and with stabilized speed.

Figure 8: The examiner gives the Go, 1 turn (360°), exit on axis directly followed by 1 turn (360°) the opposite way, Exit on axis +/- 15°. The chronometer stops when the glider is above head, in straight flight and with stabilized speed.

If a timed maneuver is failed (out of time, out of axis, collapse in the maneuver) the pilot is allowed to try the maneuver again (only one time).

Radio procedure for in flight exercises:

- When Pilot is ready they call: “name, glider, location, ready for xx maneuver”.
- Examiner answers “pilot’s name, ok for xx maneuver, 3,2,1, GO” . When maneuver is completed, the examiner says “stop chrono”. Then he announce the result “ XX seconds, maneuver validated level (NC or pro),” or “maneuver FAIL, reason yyy”.
- Pilots decides what he will perform next (second try on a failed maneuver or perform another maneuver).

The pilot is the one that decide to make maneuvers or not.

If examiner believes there is a safety issue he will stop the exercise and then exam is canceled for that pilot. Examples: procedure fail, dangerous take off or crash on take off, dangerous piloting or exit of flight domain (spin, stall) dangerous approach or crash at landing.

Thanks for your attention,  
The APPI Paragliding Pedagogical Committee.