



APPI 工作坊

台灣 2017

THEORY COURSE FOR PARAGLIDING PILOTS TANDEM PILOT & INSTRUCTOR PRO-WORKSHOP

滑翔傘飛行員理論課 雙人傘飛行員和指導員專業驗證工作坊

Place 地方: Puli, Taiwan 埔理，台灣
Date 日期: **October 31st - Nov 9th, 2017**

Master Instructor APPI: **Patrick Troubet-Lacoste**
主教練: **David Arrufat**

Language 語言: English, Mandarin
英文，中文

(**Important note:** Tandem Pilot Validation can be evaluated in Chinese, English, French and Spanish. Assistant Instructor and Instructor Validation can be evaluated in English only.)

(**重要的提示：**專業雙人傘飛行員驗證可以用中文，英文，法文和西班牙文進行評估。助教和指導員驗證只能用英文進行評估。)

Partnership 合作單位: Puli Paragliding Ltd.
埔里無動力飛行傘有限公司

Practical area 實操考試場地: Puli, Hu-Toushan in Nantou county of Taiwan
台灣南投縣埔里鎮虎頭山 23°57'50.01"N; 120°59'21.79"E

Fees 費用:

Workshop I Pilot: **130 Euros** 3 days theory
工作坊 I 所有飛行員: **130 Euros** 3天理論

Workshop II tandem : **330 Euros** 4 days theory plus 1 day practical validation
工作坊 II 雙人傘飛行員: **330 Euros** 4天理論加1天實操考試驗證

Workshop III instructor: **430 Euros** 6 days theory plus 3 days practical validation
工作坊 III 指導員: **430 Euros** 6天理論加3天實操考試驗證



Included 包括:

organisation of workshop and courses, instructional material, written and electronic documents
工作坊和理論課程安排，教學材料，書面和電子文件

Accommodation 住宿:

is not included, contact www.zhaodyhotel.tw (discounts for workshop participants)
or check www.pulitravel.com for more accommodation options in Puli
不包括在內，請聯絡旅館www.zhaodyhotel.tw (工作坊參加者有折扣)
或瀏覽 www.pulitravel.com 查看更多埔理旅館知訢

More Information and registration 更多信息和報名:

appiproworkshoptaiwan@gmail.com



Workshop I

Theory course for paragliding pilots

工作坊 I 滑翔傘飛行員理論課

Aimed at 目的是: Any pilot 任何飛行員

Duration 為期: 3 days (24 hours) 3天 (24 小時)

Objectives 目標: Theoretical elements for paragliding pilots.
滑翔傘飛行員的理論要素。

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. There will be no validation or certification.
每個課程都提出重要和高級的項目，以及最新知識的更新。
這不是滑翔傘基礎的教學。將不會有驗證或認證。

You will need 你會需要:

- Pen, 30 cm metric ruler, glider with lines scheme featuring lines length.
- Notebook, a calculator, and a memory stick.
- 筆，30公分的尺，飛行傘使用手冊之傘繩長度數據資料。
- 筆記本，計算器和USB隨身碟。

Program 議程: Each day meeting at 8h15, course from 8h30 to 13h and from 14h to 19h
每天早上8時15分集合。課程從8時30分至13時，14時至19時

References 參考 (必須閱讀):

1 readme
11 APPI logbook2.0
U1 - U3 resume

Extracts of contents 內容摘錄:

Unit 1 單元1:

Gear: Ageing, care and control of a paraglider components: cloth, method for lines length control and adjustment; harness and reserve: different kind of settings, known problems, EN certification.

裝備: 老化，護理和控制飛行傘組件: 布料，傘繩長度控制和調整方法; 套袋和副傘: 不同的類型設置，已知常見的問題，歐洲規格認證。

Unit 2 單元 2:

Aerodynamics and Flight mechanics 空氣動力學和飛行力學:

Causes of pressure point migration and influence on stability, consequences on piloting ...
壓力點移動的原因和對穩定的影響, 對飛行操控的後果...

Piloting 飛行操控:

Piloting techniques from classic to modern gliders; aerodynamic and pendulum movements, spiral instability, incidents...
從經典到現代飛行傘的飛行操控技術; 空氣動力和擺動, 螺旋不穩定, 事故...

Unit 3 單元 3:

Meteorology and aerology: Local and global forecasting tools, stability/instability, aerological traps and dangerous situations

氣象學和航空氣象學: 本地和全球預測工具, 大氣穩定/不穩定, 大氣慣性不確定和危險情況

Safety: Risk, risk management, psychological aspects, human factors

安全飛行: 風險, 風險管理, 心理方面, 人為因素

Performance flying: Improving performance, glider's polar, flying fast, transition strategies, drifts...

高性能飛行: 改善飛行表現, 提高傘的飛行效能, 飛行配速, 飛行策略轉換, 飄移

Environment, Air spaces and flying rules

環境, 空域和飛行規則



Workshop II

APPI Tandem Pilot VALIDATION

工作坊 II 雙人傘飛行員驗證

Aimed at 目的是： Tandem Pilot with more than 2 years/150 tandem flights experience,
Advanced SIV validated
雙人傘飛行員需具有超過 2年/150次兩人傘飛行經驗, 高級SIV驗證

(Important note: Tandem Pilot Validation can be evaluated in Chinese, English, French and Spanish)
重要的提示: 專業雙人傘飛行員驗證可以用中文, 英文, 法文和西班牙文進行評估。

Duration 為期： 5 days (45h including exams) 5天 (45小時包括考試)

Objectives 目標： To obtain the APPI pilot tandem validation
獲得APPI雙人傘飛行員驗證

The certification for APPI Tandem pilot requires to validate an advanced SIV course and first aid certificate. If not, final validation will be confirmed when the pilot passes an advanced SIV course and gets first-aid certificate.

飛行員如想獲得APPI專業雙人傘飛行員認證, 必需通過工作坊的驗證和考試合格, 並具有SIV證書及急救證書及提供以上證明文件, 才可獲得APPI專業雙人傘飛行員證書。如未能提供以上證明文件, 最終驗證必需在飛行員通過SIV課程及獲得急救證書後才能被確認。

On top of what is listed for workshop I, you will need

除工作坊 I 上列出之外, 你會需要:

- Tandem glider and harnesses in good state, lines scheme of the tandem featuring lines length, reserve suitable for your total flying weight in tandem, helmets, VHF radio.
- 雙人傘和套袋處於良好狀態, 雙人傘使用手冊之傘繩長度數據資料, 適合你的雙人傘總重飛行的副傘, 頭盔, VHF無線電 (145.00MHz)

Program 議程： Each day meeting at 8h15, course from 8h to13h and from 14h to19h
每天早上8時15分集合。課程從8時30分至13時, 14時至19時

Documents and references 文件和參考 (必須閱讀) :

- 1 readme
- 2 list of exams and documents
- 3 tandem routine
- 4 evaluation tandem flight
- 5 evaluation questions
- 10 questionnaire APPI
- 11 APPI logbook 2.0
- U1 - U4 resume

Extracts of contents 內容摘錄:

This workshop contains Workshop I (units 1, 2 and 3) and is completed with the 2 following units:
這包含以上工作坊 I (單元1, 2, 和 3) 及以下2個單元 :

*Unit 4 單元 4:***Legal aspects of tandem flying 雙人傘飛行的法律方面:**

Responsibilities (moral, civil, penal). Obligations (means and result), national regulation, insurances
責任 (道德, 民事, 刑事)。義務 (手段和結果), 國家規定, 保險

Practical items 實操項目:

- Choosing and taking care of your working tools
- Relationship with the passenger/client
- Flying the tandem: attitude, psychology, briefing, preparation techniques, take-off techniques, assistance managing, piloting techniques, approaches...
- 選擇並照顧你的工作工具
- 與乘客/客戶的關係
- 雙人傘飛行: 態度, 心理, 簡報, 準備技巧, 起飛技巧, 援助管理, 飛行操控, 消高航線設計..

Specifics of tandem flight mechanics: Wing loading, weight factors, trimmers...

雙人傘飛行力學的細節: 傘翼載荷, 重量因素, 組帶調節系統...

*Unit 5 單元 5:***Practical (field) and theoretical exam 實操和理論考試:**

Perform tandem flights in various conditions and various public, respect of procedures will be mandatory. Minimum 2 successful flights. See the following document: read me, list of exam and documents, tandem routine and evaluation flights.

在各種環境天氣條件和各種乘客下進行雙人傘飛行, 尊重遵守程序將是強制性的。最少2次成功飛行。請參閱以下文件: read me, list of exam and documents, tandem routine and evaluation flights. (有助了解明白驗考要求: 考試和文件列表, 雙人傘飛行常規/慣例和評估飛行。)



Workshop III

APPI Assistant Instructor and Instructor VALIDATION

工作坊 III 助理指導員/指導員驗證

Aimed at 目的是: Instructors with more than 2 years/ minimum of 15 students taught from initiation to autonomous pilot level. Advanced SIV validated
指導員需具有超過 2年/最少15名學生從入門到獨自飛行操控水平。
高級SIV驗證

(Important note: Assistant Instructor and Instructor Validation can be evaluated in English only.)
(**重要的提示:** 助理指導員和指導員驗證 只能用英文進行評估。)

**** Sorry, due to safety and language reason, if pilot can not understand or express clearly in English, he/she will not be able to participate in the Instructor validation. ****

**** 抱歉，因為安全理由和主指導員的語言關係，如飛行員不能明白和明確地用英語表達，將不能參加助理指導員和指導員的驗證****

Duration 為期: 6 days for the theory – 3 days field practice and evaluations
6天理論 - 3天實操驗試

Objectives 目標: To obtain the APPI instructor validation
獲得APPI指導員驗證

The certification for APPI Assistant Instructor and Instructor requires to validate an advanced SIV course and first aid certificate. If not, final validation will be confirmed when the instructor passes an advanced SIV course and gets a first aid certificate.

飛行員如想獲得APPI專業助理指導員/指導員認證，必需通過工作坊的驗證和考試合格，並具有SIV證書及急救證書及提供以上證明文件，才可獲得APPI專業助理指導員/指導員證書。如未能提供以上證明文件，最終驗證必需在飛行員通過SIV課程及獲得急救證書後才能被確認。

On top of what is listed for workshop 1 and 2, you will need:

除工作坊 I 和 II 上列出之外，你會需要：

- solo glider type school or progression with manufacturer lines scheme featuring lines length, harness (suitable for ground handling (avoid pod)), reserve, helmet, VHF radio.
- 學校選用或級數型的單人傘，及製造商使用手冊之傘繩長度數據資料，套袋 (適合地面練習 (避免船座袋)，副傘，頭盔，VHF無線電 (145.0MHz)。

Program 議程: Each day meeting at 8h15, course from 8h to13h and from 14h to19h
每天早上8時15分集合。課程從8時30分至13時，14時至19時



Documents and references 文件和參考 (工作坊提供, 必須閱讀):

- 1 readme
- 2 list of exams and documents
- 3 tandem routine
- 4 evaluation tandem flight
- 5 evaluation questions
- 7 pedagogic session example
- 8 instructor routine
- 9 instructor evaluation
- 10 questionnaire APPI
- 11 APPI logbook 2.0
- U1 - U6 resume

Extracts of contents 內容摘錄:

This workshop contains Workshop I and Workshop II (unit 1 to 5) and is completed with:
這包含以上工作坊 I 和工作坊 II (單元1至5) 及 以下單元 :

Unit 6 單元 6 :

Pedagogy 教育學:

Methods, competences to develop to make a pilot, tools to organise and manage pedagogic session, time management, evaluation.

方法，發展和訓練飛行員的能力，組織及管理教學課程，時間管理，評估的工具。

Psycho-pedagogy 心理教育學:

Communication, emotions, character, psychological factors, motivation, risk

溝通，情緒，性格，心理因素，意志，風險

Radio guiding techniques 無線電導航技術

Unit 7 單元 7:

APPI system APPI 系統 :

The main stages and barriers in the process of teaching to fly, from first contact to autonomy.

APPI website: documents, how to register

飛行教學過程中的主要階段和障礙, 從第一次接觸到獨自飛行。

APPI網站：文件，如何註冊

Unit 8 單元 8 :

Field practice and checks: Field practice pedagogic session, and guiding check, theoretical exams.

實操和理論驗試: 現場實操教學課程，指導檢查，理論考試。