

PILOT TRAINING & FLIGHT RECORD BOOK

VERSION 2.2022

Student's personal details

Name : _____

Date of birth : _____ Age : _____ Weight : _____

Training Location : _____

Instructor & School : _____

Important Notice

Understanding the risks

Paragliding is a weather dependent sport and under certain weather conditions it could be quite extreme and dangerous. Please be reminded that paragliding is an inherently dangerous sport, if the activity is not conducted properly or according to recommended safety rules, severe injuries or even death can or possible to occur even to well trained and experienced pilots.

By engaging in this sport during and after your training sessions, you hereby declare your awareness of the risks and accepts the potential dangers associated with it. You are required to declare any pre-existing medical conditions that may prohibits you from participating in the training, take full responsibility of your health condition before and during the activity.

What this record book is about?

The objective of this record book is to identify and provide proof that you have completed all the required tasks during your training progression to become **Student Pilot (SP)**, or to proceed with your **Novice Pilot (NP)** training sessions or for your application process to obtain a flying license.

Insurance

Please make sure that you subscribes to a proper sports insurance plan before engaging in this sport. PGMY trainee pilots are automatically covered with a 3-month insurance subscription from Pacific & Orient Insurance Co. Berhad throughout their training sessions.

Phase 1 : Classroom

1. Theory & Rules : Student completed the classroom session explaining Thermodynamics, Airmanship, Airspace, Wind & Topology and exhibits a clear understanding of the subjects. Verified by :

..... Date

2. Questionnaires : Student successfully completed all of the questionnaire on Page 5-11 and the result was verified by :

..... Date

Phase 2 : Ground Handling

3. Gearing up : Student demonstrated the ability on all occasions, to correctly identify all essential parts of the equipment and connected them properly. Verified by :

..... Date

4. Inflation : Student demonstrated the ability to inflate the glider smoothly using Forward technique (Reverse is optional). This task was performed repeatedly and verified by :

..... Date

5. Glider Controls : Student demonstrated the ability to control the glider well above head for at least 15 seconds and walk forward with 30-45° slalom. This task was performed repeatedly and verified by :

..... Date

Phase 3 : Launching & Landing

6. Launching : Student demonstrated the ability to perform safe and firm launches, adhering to safety and wind observation guideline, using Forward technique (*or Reverse technique where applicable*). Verified by :

..... Date

7. In-flight controls : Student demonstrated the ability to control the glider while in-flight, maintaining course and its airspeed towards landing. Verified by :

..... Date

8. Landing : Student demonstrated the ability to perform safe landing, adhering to the landing approach guideline, exhibited good piloting attitude and complied to airmanship rule (whenever applicable). Verified by :

..... Date

9. Landing Technique : Student demonstrated the ability to land on foot, smoothly and this task was performed repeatedly on several different wind speeds. Verified by :

..... Date

Phase 4 : In-flight tasks

10. Turns : Student demonstrated the ability to steer the glider smoothly for left and right turns, using the brake toggle and/or with combination of weight-shifting. Verified by :

..... Date

11. Figure-8 : Student demonstrated the ability to steer the glider for Figure-8 manoeuvre and performed them safely. This task has been successfully completed on several occasions and verified by :

..... Date

12. Big-Ears : Student demonstrated the ability to execute the Big-Ears and performed them accordingly. This task has been successfully completed on several occasions and verified by :

..... Date

Phase 5 : Additional tasks

13. Reserve Deployment : In a simulated environment, student demonstrated his/her ability to deploy the reserve chute accordingly. This task has been successfully conducted and verified by :

..... Date

14. Reserve Installation : Student completed the tasks of reserve inspection including its installation to the harness. This task has been successfully conducted and verified by :

..... Date

Questionnaire

- 1. You arrived at the launch area and the clouds are developing very fast into a towering cloud not far from the flying area. What should you do?**

Anda tiba di lokasi penerbangan dan awan kelihatan membentuk dengan kadar yang cepat sehingga membentuk ketinggian seperti menara, tidak jauh dari kawasan penerbangan. Apakah yang patut anda lakukan?

.....

- 2. What is the name of the cloud mentioned above?**

Apakah nama awan yang disebutkan di atas?

A Cumulus nimbus B Strato nimbus C Alto stratus D Albo stratus

- 3. Your arrived at the launch area and observed a group of pilots rushing to fly because the condition seemed to be good and plenty of pilots already gagging in front of the launch area, what you should do?**

Anda tiba di lokasi penerbangan dan kelihatan sekumpulan pilot sedang bergegas dalam persiapan untuk memulakan penerbangan kerana cuaca kelihatan bagus dan terdapat ramai pilot yang sedang terbang berkumpul di hadapan kawasan meluncur, apakah yang anda patut lakukan?

.....

- 4. You are at the launch area and the windsock further in front is showing a mild headwind but the windsock located behind the launch area showed the wind is from opposite direction, occasionally they changed position to be coming from either side or cross-wind, should you launch when the windsock temporarily shows the headwind direction?**

Anda berada di lokasi meluncur dan bendera di hadapan menunjukkan arah angin berhadapan untuk meluncur tetapi bendera di bahagian belakang menunjukkan arah yang bertentangan, dan kadang-kadang semua bendera akan berubah menunjukkan arah dari sisi, adakah anda patut melakukan penerbangan apabila arah angin tiba-tiba berubah menunjukkan arah yang berhadapan dengan arah meluncur?

A Yes B No C After 10 mins of stability D Follow other pilots

- 5. You are at the takeoff that is 1300m AMSL and the valley below is at 150m AMSL, the manufacturer indicates the glider has 8:1 glide ratio. In trim speed and absence of thermals during the flight, what is the farthest distance you can fly out?**

Anda berada di lokasi penerbangan dengan ketinggian 1300m AMSL dan kawasan lembah di bawah berada pada paras 150m AMSL. Pengeluar peralatan layar udara menyatakan ianya mempunyai nisbah meluncur sebanyak 8:1. Dalam keadaan "trim speed" dan ketiadaan thermal semasa meluncur, berapakah jarak paling jauh yang anda boleh capai?

A 1.3km

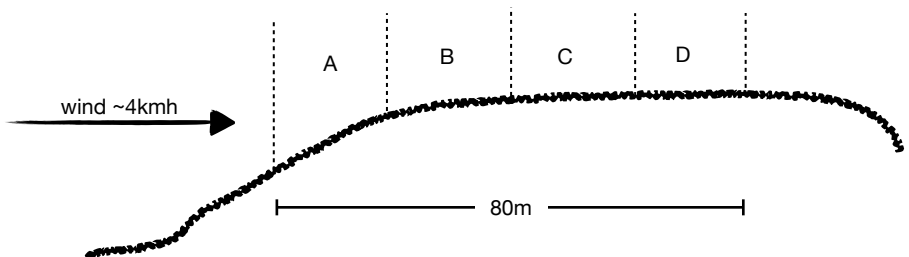
B 3.6km

C 5.8km

D 9.2km

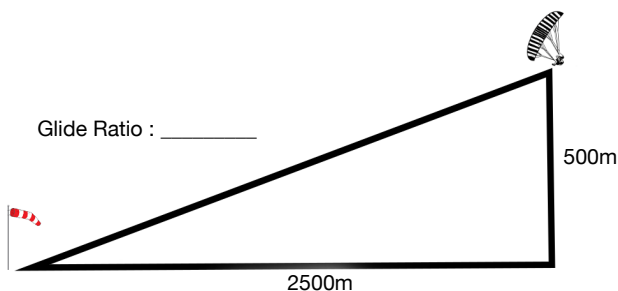
- 6. From the diagram below, identify the most suitable location where you will setup the glider and begin your inflation for launching.**

Dari gambarajah di bawah, sila nyatakan lokasi yang akan anda gunakan untuk membentang kanopi payung dan memulakan proses meluncur.



- 7. Given the diagram below, please calculate the Glide Ration (GR) of the flight.**

Menggunakan gambarajah di bawah, sila kira Glide Ratio (GR) penerbangan nya.



8. What is the most important thing to ensure of when there are other pilots flying in the same airspace with you?

Apakah perkara yang paling penting untuk dipastikan sewaktu penerbangan dengan kehadiran juruterbang lain di ruang udara yang sama?

- A Avoid collision B Fly further C Right of way D Functional radio

9. If the wind speed near the ground is measured at 10kmh, what is the wind's approximate laminar speed at higher altitude?

Jika kelajuan angin yang hampir dengan darat adalah 10kmj, apakah anggaran kelajuan angin laminar di paras yang lebih tinggi?

- A 10kmh B 15kmh C 20kmh D 25kmh

10. What does the term "laminar wind" refers to?

Apakah maksud "angin laminar"?

- A Wind at higher altitude B Horizontally smooth wind C Strong wind

11. You are flying with a ridge on your right, another pilot at the same altitude is approaching in the opposite direction. What is your call for an action?

Anda sedang terbang dengan bukit berdidikan di sebelah kanan anda, dan di paras yang sama anda melihat terdapat juruterbang lain sedang menuju kearah anda. Apakah tindakan anda?

- A It's my right-of-way! B Shout to alert the pilot C Divert to avoid the pilot

12. You are preparing for a final approach to land and there is another pilot in front doing the same, where should you land if both are landing together?

And sedang bersedia di peringkat akhir untuk mendarat dan terdapat juruterbang lain yang juga sedang melakukan perkara yang sama, di manakan kedua-dua juruterbang harus melakukan pendaratan?

- A On the side B Behind the pilot C At least 50m away D All are correct

13. "It increases speed by adjusting the glider's angle of attack", refers to...

"Ianya meningkatkan kelajuan dengan mengubah kedudukan sudut kanopi payung", merujuk kepada...

- A Spreader-bar B Speed-bar C Shark-nose D Weight-shifting

14. You are flying and another glider made a fly-by crossing in front, what do you expect to happen next?

And sedang terbang dan secara tiba-tiba terdapat juruterbang lain melakukan lintas-lalu di hadapan anda pada aras yang sama. Pada jangkaan anda, apakah yang akan berlaku?

A Turbulence B Gain of height C Loss of height D Nothing happens

15. The glider's profile against the relative wind direction is called...

Profil kanopi payung melawan arah laluan angin dipanggil...

A Angle of Attack B Shark Nose C Leading Edge D Trailing Edge

16. If you are continuously applying the brake and slowed-down the glider with very little air speed, what will most likely happen?

Jika anda dengan secara berterusan menggunakan brek dan memperlambatkan kanopi payung dengan kelajuan diudara yang minima, apakah yang berkemungkinan akan berlaku?

A Frontal collapse B Fly backwards C Stall / Parachute D Nothing

17. Which is more important during your landing approach - Air Speed, Ground Speed or Wind Speed?

Semasa waktu pendaratan, apakah yang paling penting di antara ketiga-tiga faktor berikut - Kelajuan DiUdara, Kelajuan Bebanding Daratan atau Kelajuan Angin?

A Air Speed B Ground Speed C Wind Speed D Doesn't matter

18. If you are at the launch area getting ready to fly and the windsock indicates a 20kmh speed, what would be your decision?

Jika anda berada di lokasi penerbangan dan sedang bersiap-sedia untuk melakukan penerbangan tetapi penunjuk-arah udara menandakan angin berada pada kelajuan 20kmj, apakah keputusan anda?

A Fly away! B Reverse launch C Wait for slower wind D Inflate carefully

19. The temperature to which air must be cooled in order for vapour to begin to condense is called...

Paras suhu dimana udara yang perlu disejukkan untuk proses pemelupaan bermula dipanggil...

- A Dew point B Boiling stage C Inversion level D Cold front

20. In summary, the condition described above is commonly known as...

Secara ringkas, kondisi yang tersebut di atas sering dikenali sebagai...

- A Inversion B Cloud Base C Altitude Gain D Condensation

21. Please write down the meaning of AGL and AMSL abbreviations

Sila tuliskan maksud ringkasan AGL dan AMSL

.....

22. If you are trying to descend quickly, which manoeuvre suits best for a controlled descent according to your training level?

Jika anda sedang mencuba untuk turun dengan cepat, tindakan manakah yang paling sesuai untuk dilakukan berdasarkan paras latihan anda?

- A Big-Ear B Horseshoe Stall C B-Line Stall D Spiral

23. While thermaling in a group, which pilot has the right of way?

Semasa melakukan thermaling secara berkumpulan, juruterbang yang manakah mempunyai hak laluan mengatasi anda?

- A Lower pilot B Higher pilot C Instructor pilot D Student pilot

22. What are the characteristics of a glider with high aspect ratio?

Apakah sifat-sifat kanopi payung yang mempunyai "aspect ratio" yang tinggi?

- A Bigger size B More active C More stable D Prone to collapse

23. While the speed-bar is fully engaged, how should you steer the glider?

Bagaimanakah anda patut mengemudi kanopi payung semasa "speed-bar" sedang aktif digunakan?

- A Brake toggles B Rear risers C Weight-shift D Reserve toggle

24. What is the worst cause of fabric ageing?

Apakah penyebab yang paling buruk keatas penuaan fabrik kanopi payung?

- A Ultraviolet B Folding C Heat+Moisture+Storage D Wet

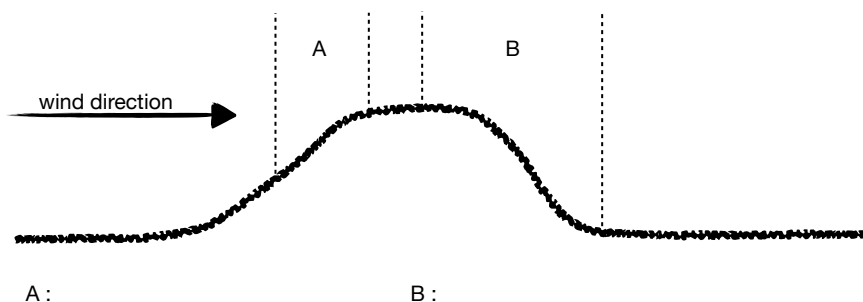
25. Upon completion of your training, which glider rating suits your level?

Setelah selesai latihan, kelas apakah yang sesuai untuk kegunaan anda?

- A EN-A B EN-B C EN-C D EN-D E CCC

26. Fill in the blanks at the diagram below to describe the areas :

Sila isi diruang gambarajah di bawah :



27. If you are in a situation that requires you to deploy a reserve, how should you throw the reserve chute?

Sekiranya anda berada di dalam situasi yang memerlukan pembuangan kanopi cadangan, bagaimanakah cara anda melontarnya?

- A At the glider B Far away at horizon C Anywhere D Behind me

28. What should you do after deploying the reserve chute?

Apakah yang anda perlu lakukan selepas melontar kanopi cadangan?

- A Check the chute's status B De-power the glider C Observe surrounding
D Radio for assistance E Check if video is recording F All of the above

29. What does the abbreviation VFR means?

Apakah maksud VFR?

.....

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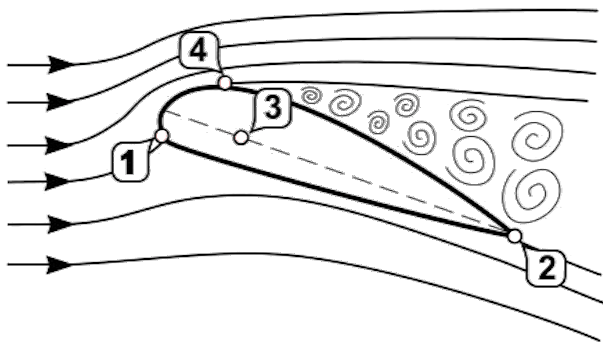
30. What is the airspace class that is not regulated and commonly used for VFR flights?

Ruang udara yang manakah tidak dipantau secara formal dan kebiasaannya diguna untuk penerbangan paragliding?

- A Class-A B Class-B C Class-C D Class-D E Class-E F Class-F G Class-G

31. Which number correctly indicates the Stagnation Point (SP) and Center of Pressure (CP) in the diagram below?

Nombor yang manakah mengenalpasti lokasi Stagnation Point (SP) dan Center of Pressure (CP) dengan betul dalam gambarajah di bawah?



- A 1 & 3 B 2 & 3 C 4 & 3 D 4 & 1

32. What is a glider’s trim speed?

Apakah maksud “trim speed” sesebuah glider?

- A The highest speed of glider B The slowest speed of glider
B Glider speed not affected by external factors or adjustments

Phase 6 : Identification Card

Upon completion of this training course and obtaining the instructor sign-off for all of the tasks, you are then eligible to continue practising on your own with minimal or without supervision of an instructor.


You are required to abide by the rules that were taught in the course and shall ensure that you continuously follow the guidelines for safety in paragliding including using a helmet and proper gears even for ground handling sessions.

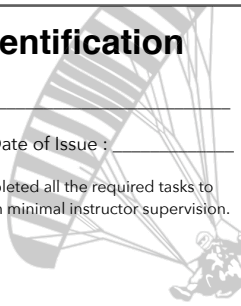
At this stage, you are required to use paragliders with the ratings of EN-A or EN-A+ as recommended by your instructor.

By completing the identification card, you are required to bring it along with you when visiting any unfamiliar flying sites to be presented to the site operator for their verification.

At this level, you are not permitted to fly at flying sites with the ratings of "Advanced" or "Expert" and shall seek advice or consultations from the site operator prior to commencing your flights, even at flying sites with the ratings of "Novice" and "Intermediate".



Pilot Identification	
	Name : _____
IC/ID No. : _____	Date of Issue : _____
I hereby confirm that this pilot has successfully completed all the required tasks to qualify as Student Pilot and is able to paraglide with minimal instructor supervision.	
Certified by : _____	
This identification card is not a flying license, it is valid for 12 months from the date of issue as temporary certification and not renewable.	



You may cut-out the above to be laminated as your temporary ID

Phase 7 : License & Pilot Card

By common practice, you are required to log at least 40 flights before qualifying for the examination and certifications to obtain a flying license from the National Aviation Controller (NAC). Each country will have their own agency that are registered as a member of FAI.

To view the list of all FAI members worldwide, scan the QR code for a shortcut to their website. Applications for the national licenses can be made directly at their website or through you instructor by completing the declaration form below for submission.



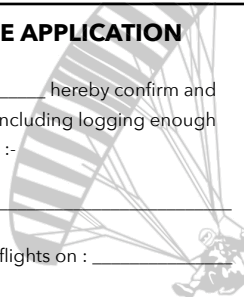
INSTRUCTOR DECLARATION FOR PARAGLIDING LICENSE APPLICATION

I _____, Instructor # _____ hereby confirm and declare that the following Student Pilot has completed all the required tasks including logging enough number of flights to qualify for the national license. Pilot details are as follows :-

Name : _____ IC/ ID : _____

Training Completed on : _____, and completed _____ logged flights on : _____

Instructor's signature, date and official stamp :



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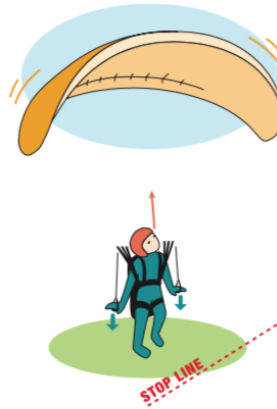
Lunching Technique (Forward)

The most common mistakes committed by newly certified pilots is during launching, often due to haste and peer pressure at the launch site. Please make sure that the following recommendation is followed accordingly.

1 I Inflate



2 C Control



3 D Decide



4 A Accelerate



5 T Takeoff / Clear terrain



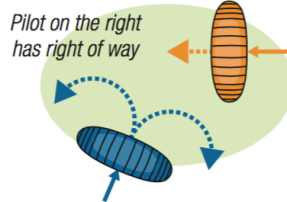
Airmanship (Inflight Rules)

More often than not, you will be flying with other pilots and some could be someone that you never met before. However, while in the air, there is a common rule of engagement that are followed by all training schools worldwide and please make sure you are following them accordingly.

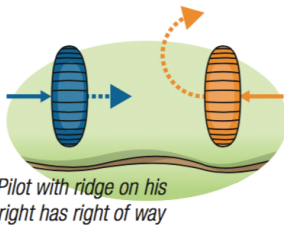
1st Rule



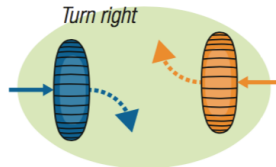
Converging



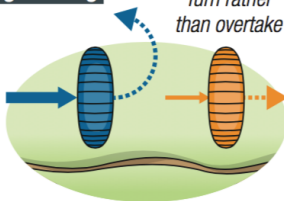
Head on (near ridge)



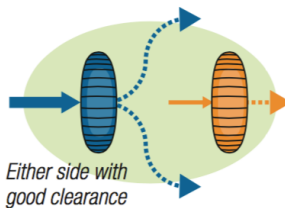
Head on



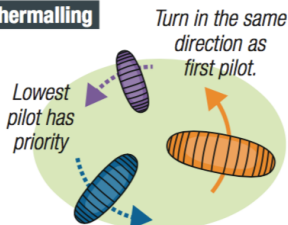
Ridge soaring



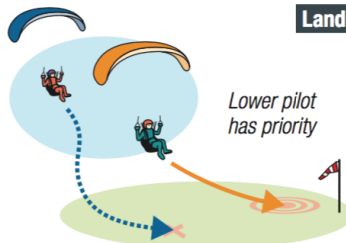
Overtaking



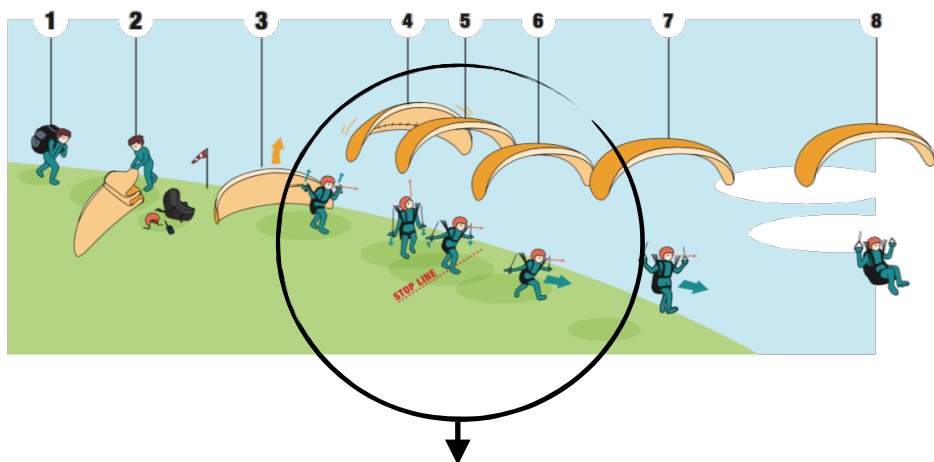
Thermalling



Landing

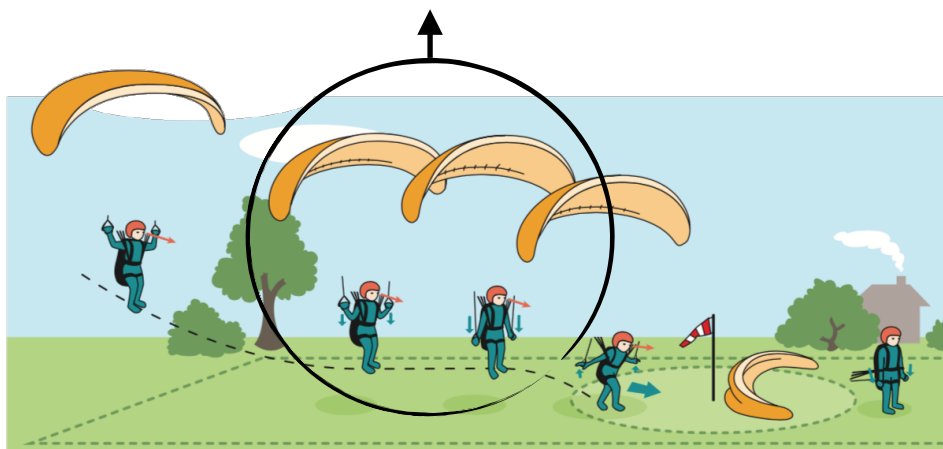


Launch & Landing Reminder

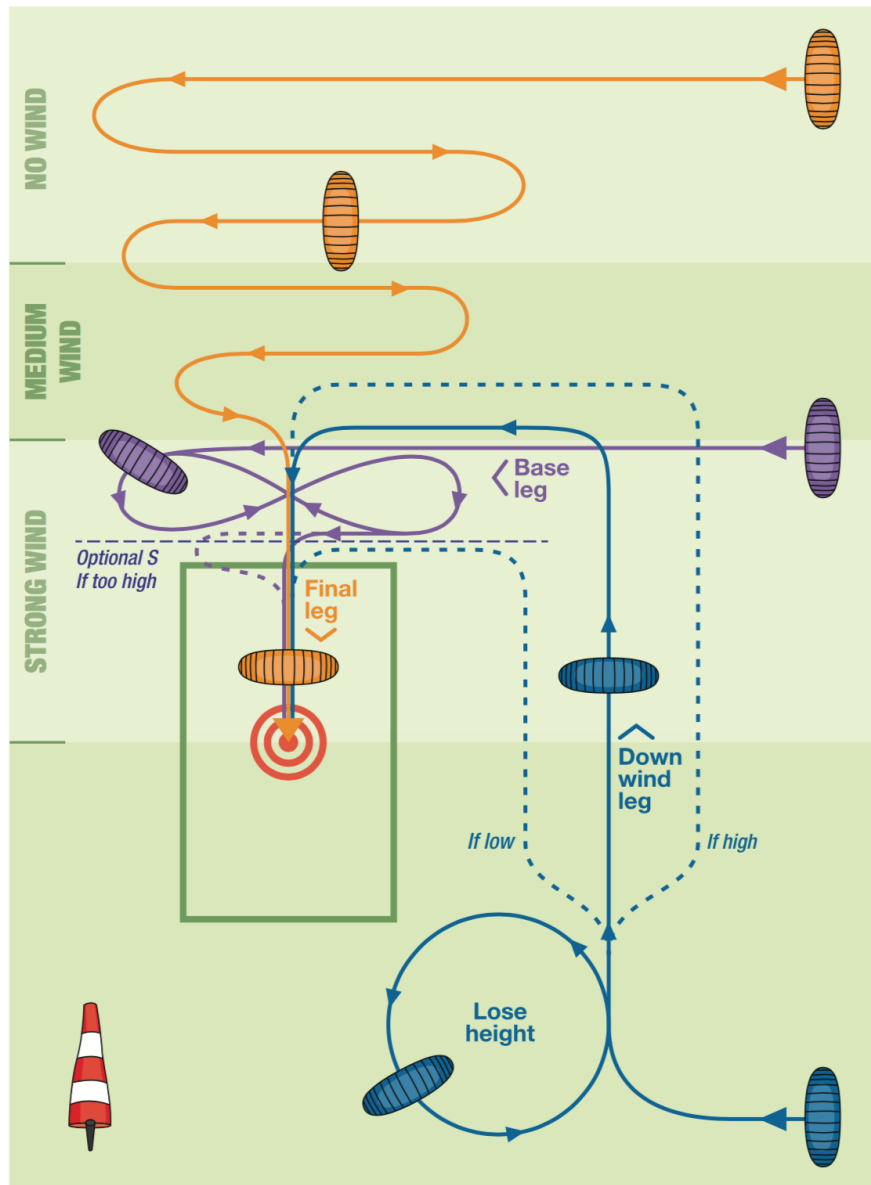


The most critical part during launching and shall pay attention to every details of the glider's behaviours or reactions.

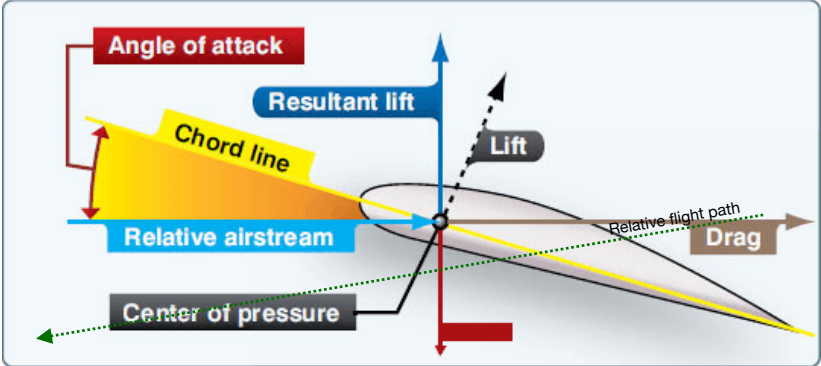
Please make sure a suitable height above ground before executing the braking sequence to stop the glider, recommended height should be about 1.5m or "a person's height" - depending on the wind speed and glider speed.



Landing Approach Guideline



4 Laws of Aerodynamics



It is imperative that you understand the 4 laws of aerodynamics and the correlations between each other on how they influences your flight. Your instructor will elaborate in detail on this matter using this diagram as the visual reference.

In summary, below are the points that your instructor will elaborate further and please scribble your notes on this page.

- | | |
|---------------|------------------------------|
| 1. WEIGHT (W) | 1. ANGLE OF ATTACK (AoA) |
| 2. THRUST (T) | 2. CENTER OF PRESSURE (CoP) |
| 3. LIFT (L) | 3. STAGNATION POINT (SP) |
| 4. DRAG (D) | 4. RELATIVE FLIGHT PATH (FP) |

Notes :

Bernoulli's Principle

Energy per unit volume before = Energy per unit volume after

$$P_1 + \frac{1}{2}\rho v_1^2 + \rho gh_1 = P_2 + \frac{1}{2}\rho v_2^2 + \rho gh_2$$

Pressure
Energy

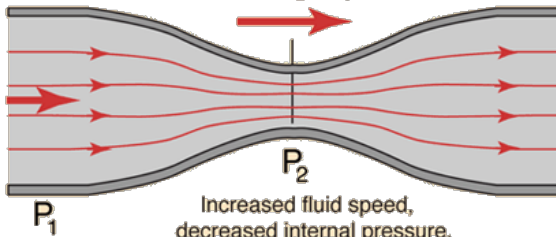
Kinetic
Energy
per unit
volume

Potential
Energy
per unit
volume

The often cited example of the Bernoulli Equation or "Bernoulli Effect" is the reduction in pressure which occurs when the fluid speed increases.

Flow velocity
 v_1

Flow velocity
 v_2



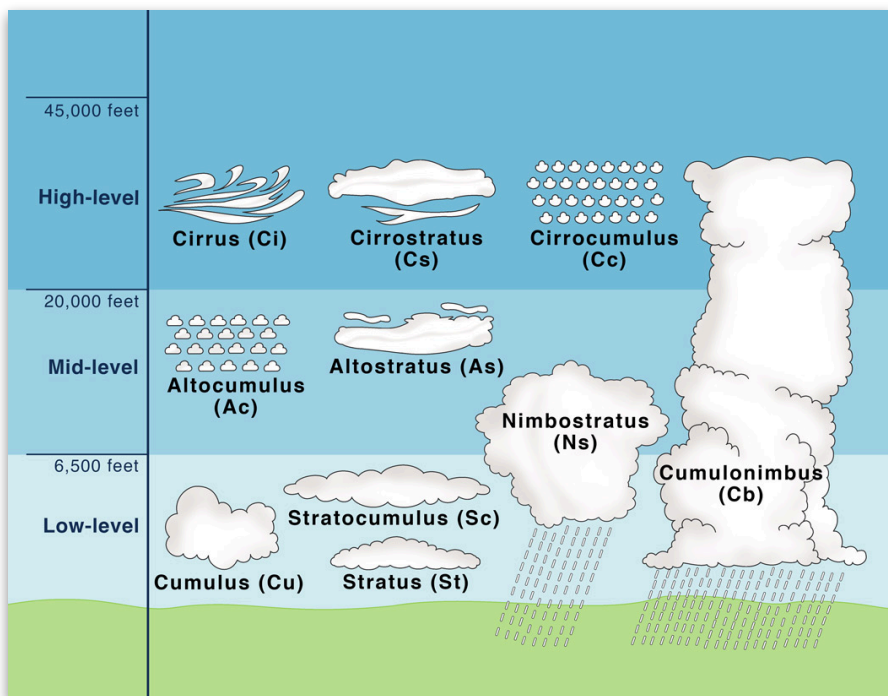
$$A_2 < A_1$$

$$v_2 > v_1$$

$$P_2 < P_1 !$$

Draw a diagram below based on your understanding of Bernoulli's Principle relative to paragliding's glider design.

Types of Clouds



Please note down the type of clouds that are suitable for paragliding and draw a diagram of paragliding rules with regards to flying near clouds.

Notes :

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