

Pilot Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Exam written: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Instructor name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Instructor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Marked: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MARKS:**

**A B C D E F**

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**27 37 25 44 31 10 174**

**Pass mark =85%= 148**

SPORT LICENCE THEORY TEST

Paragliding Training Manual (Version April 2003)

You are encouraged to complete this paper as soon as convenient, during or after your course, whilst all information is still fresh in your mind.

**All ‘airlaw’ questions to be passed.**

NOTE: This is an open book research examination. Please answer concisely. The test answers must be your own effort and should not be copied from others!

Draw sketches where required (distinguish between describe and/or illustrate).

Where sketches are provided, write/draw answers on them.

The test can be completed online and then printed to finish the drawings/illustrations and hard copy to be submitted to your instructor.

**SECTION A:** GENERAL KNOWLEDGE AND AIRLAW

1. What does the law require for flying in South Africa? (1)

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1. Explain what the abbreviations stand for, and what functions each organization have: (10)
   1. CAA

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* 1. FAI

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* 1. CIVL

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* 1. AeCSA

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* 1. SAHPA

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1. What is an IPPI card, and for what is it required? (2)

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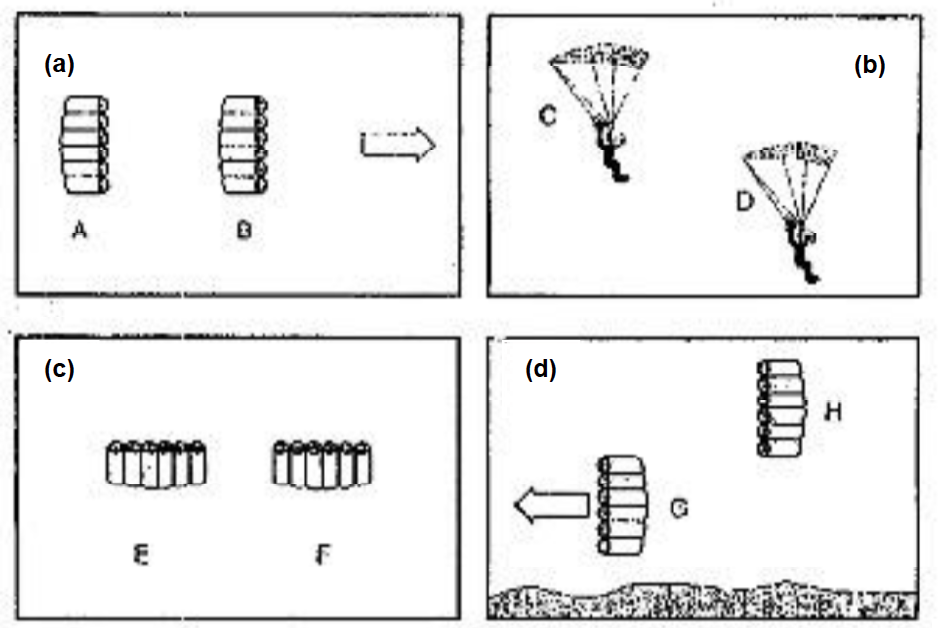
1. What is a FAI Sporting Licence, and when does one require it? (2)

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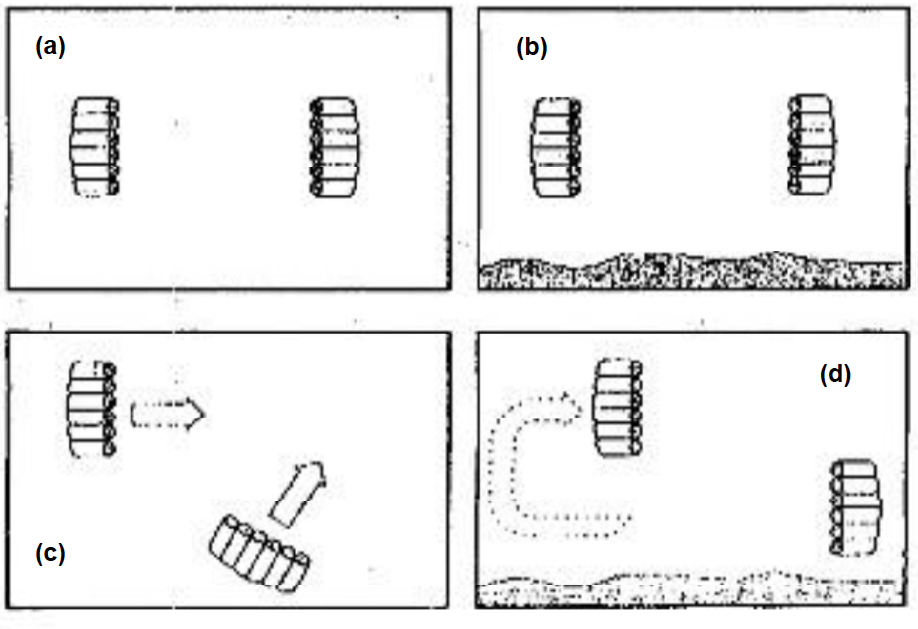
1. Where can one obtain these documents (IPPI Card and FAI Sporting Licence)? (2)

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1. In the attached diagrams, circle the aircraft that has right of way. (Please obtain the diagrams from the SAHPA Office.) (4)



1. In the attached diagrams show the actions expected from BOTH pilots in each situation. (Please obtain the diagrams from the SAHPA Office.) (4)



1. What is a “Notam”? (2)

Section Total = [27]

**SECTION A:** STRUCTURE AND AERODYNAMICS

1. What are the pros and cons of Dyneema type lines? (4)

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1. What are the pros and cons of Kevlar type lines? (4)

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1. For what experience levels are a DHV 1-2 and a DHV 2 glider targeted? (2)

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1. What are the AFNOR ratings, and what pilot skill levels are they targeted at? (6)

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1. Explain the difference in behaviour and required pilot skills between a wing with an aspect ratio of 4.8 and a wing with an aspect ratio of 5.6. (4)

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1. What is trim speed? (1)

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1. While ridge soaring, you turn in behind a tandem. What can you expect? What caused it? Illustrate how it is created and what happens to it. (5)

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1. What will happen to a paraglider that flies into the area below and behind a Boeing or other large aircraft? (2)

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1. What can happen when a cold drink or other liquid is spilled over a harness with a reserve parachute? What should one do? (3)

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1. What annual maintenance checks must be done regularly on every paraglider? (3)

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1. Which of these three options will provide flatter turns: turning using brakes only, or turning using weight shift only, or turning using some brake and some weight shift?

Give reasons for your opinion. (3)

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Section Total = [37]

**SECTION D:** NAVIGATION AND AIRSPACE

1. What do AGL, ASL, ATO and QNH stand for in aviation terms? (4)

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1. What is a CTR, FAP, FAR and FAD on an airspace map. When can you fly in each of these? (10)

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1. What does TMA on an airspace map mean? Explain a TMA that is labeled FL95 / 4500 ALT. (3)

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1. Explain what VFR stands for and how it applies to Hang Gliding and Paragliding. (3)

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1. Your take off height is 1700m ASL. Controlled Airspace starts at FL110.

What is controlled airspace? (4)

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How high can you go ATO before you get into it (in meters)?

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Under what conditions can you enter it?

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1. You are flying with a GPS going away from take-off on a cross-country flight, and flies with a bearing of 90 degrees to the take off site (bearing in this case means that “goto” is set to take-off). Are you flying North, South, East or West of the take off? (1)

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Section Total = [25]

**SECTION D:** FLYING SKILLS AND AIRMANSHIP

1. How do you recognize that you are in a parachutal stall? (2)

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1. What can cause a paraglider to go into a parachutal stall? (4)

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1. How does one get out of parachutal stalls? (2)

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1. After suffering a major asymmetric collapse, you over-controlled and your glider went “negative”. How will you recover? (2)

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1. What is the biggest danger of an inadvertent stall? (2)

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1. What can happen if you fly into a whirlwind or dust devil?

What actions would you take? (3)

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1. How do you prepare for a water landing? What dangers are connected to water landings in a river, a lake, and the sea? (6)

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1. What dangers does one have to be aware of when top landing? (3)

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1. How can flying in rain affect a paraglider’s flight characteristics? (3)

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1. Coming in for landing, you notice game running. What would you do? Explain why. (4)

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1. You are flying at the coast and see a squall line. What does it mean, and what will you do? (3)

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1. What is density altitude? (2)

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1. What differences can you expect when you take off at 5,000’ ASL compared to sea level? How will it affect your take off? (3)

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1. Your long steering/brake/toggle line is damaged during pull up and breaks off shortly after take off. How will you control the glider? (1)

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1. You are flying on a long cross-country flight. What are the two things that you should

be aware of at all times? (2)

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1. You have a row of high voltage power lines in front of you, and it may be possible to cross the lines safely even though you are losing height. Where would you cross it, and why? (2)

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Section Total = [44]

**SECTION E:** METEOROLOGY AND AIRFLOW

1. The Met office predicts a 12 knot wind from 310o. What wind speed would you expect

in km/h and which way must take off be? (2)

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1. Your favourite thermal site has been burnt. What sort of conditions can you expect? (2)

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1. Which way does the wind tend to swing during the day (in SA), and why? (2)

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1. It is very hot near the coast, and the wind is coming from the inland. What is this wind called, and what sort of conditions can be expected? (4)

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1. Describe the climatic weather differences between the Western Cape and the

Highveld in winter and summer. (6)

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1. You are ridge soaring at a mountain site late afternoon, just before sunset.

What conditions can you expect on the ground, with relation to the wind? (2)

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1. Explain what clouds you can see in sequence as a cold front approaches in South Africa. (4)

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1. When can one expect lenticular clouds? (2)

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1. What is very strong lift under clouds called? Under what type of clouds can one expect to get into this type of lift? (2)

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1. When is it safe to fly over the back of a ridge? (1)

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1. Flying low through the gap at the Dam (or other places) is very common, but every

now and again someone finds himself in trouble and suffers collapses. Why? (1)

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1. Flying low through a gap can be safe under certain circumstances. What are these circumstances? (3)

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Section Total = [31]

**SECTION F:** AEROMEDICAL

1. Which medicaments and drugs have an impact on your reflexes and

decision-making? (3)

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1. What would happen when you are flying higher than 4000m ASL for an extended

time and what are the symptoms? (4)

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1. You have landed safely in the mountains in inhospitable area, no injuries but a long walk out and no communication with the outside world. Night is falling, necessitating sleeping out, the temperature is dropping steeply, and there is no chance of reaching civilisation in the dark without possibly injuring yourself by falling down cliffs and

tripping over rocks. So you stay put in a small and safe, but not very protected

area. The wind is very cold. What is a real danger and how can you prevent it? (3)

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Section Total = [10]

GrandTotal: [174]