

FEDERATION AERONAUTIQUE INTERNATIONALE
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C.I.V.L. MEETING HELD IN PARIS ON OCTOBER 25th - 27th 1977
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SUMMARY OF CONCLUSIONS
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I. QUESTIONS OF SAFETY

A second Report on Accidents analysis will be circulated, although some C.I.V.L. Members have not yet been able to reply to the questionnaire.

The report by the French Federation on training methods and training safety will be translated and circulated by the French Delegation.

Documents on methods used by the U.S.A. Hang Gliding Association for ensuring satisfactory manufacturing standards were distributed.

II. PROFICIENCY LEVELS AND BADGES

The "Delta Bronze" Badge for Hang Gliding was redefined.

The "Delta Silver" Badge, as already agreed by the F.A.I. will be maintained.

The "Delta Gold" Badge was introduced with performances of 300 Kms straight distance and 200 Kms out-and-return or triangle.

The first 50 "Delta Silver" Badges and the first 50 "Delta Gold" Badges will be numbered, registered and provided by the F.A.I.

II. bis It was proposed to introduce, as a new F.A.I. Award, a "C.I.V.L. Hang Gliding Diploma" for exceptional performances or devotion to the sport. One diploma could be awarded every year by the General Conference.

III. HANG GLIDERS CATEGORIES

A. There will be two Hang Gliders Classes for Records :

- a) Flexible surface aerofoil Hang Gliders with weight shift control only.
- b) Hang Gliders with aerofoil surfaces retaining their configuration at rest and/or with pilot-actuated aerodynamic controls.

B. World Championships and Competitions

The three existing categories will be maintained. However a minimum wing loading of 5.37 Kg/m^2 was introduced in Category 2.

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FEDERATION AERONAUTIQUE INTERNATIONALE

INTERNATIONAL HANG GLIDING COMMITTEE (C.I.V.L.)

MEETING AT 6 RUE GALILEE, PARIS, ON THE 25th & 26th OCTOBER 1977

M I N U T E S

drafted by Harry W. Robb, USA, Secretary, and received at F.A.I. on 14 November 1977. Approved by Roman Camps, Spain, President.

Were present : In the Chair : Mr. Dan POYNTER, President (U.S.A.)

Mrs. Ann WELCH, President of Honour
(UNITED KINGDOM)

AUSTRIA	Mr. Sepp HIMBERGER, Delegate
FRANCE	Mr. Bernard BERTHOU, Delegate Mr. René COULON, Observer Mme Stéphanie NICKLAS, Observer
IRELAND	Mr. Tom HUDSON, Delegate
ITALY	Mr. Heinz KOSTNER, Delegate
JAPAN	Mr. Asahi MIYAHARA, Delegate
LIECHTENSTEIN	Mr. Sepp ENDER, Delegate
LUXEBURG	Mr. Jean WILLEMS, Delegate
NETHERLANDS	Mr. Floor C.G. GREMMEN, Delegate Mr. Alex J. ENGEL, Observer
NORWAY	Mr. Tor FALCK, Delegate Mr. Stein A. FOSSUM, Observer
SOUTH AFRICA	Mr. Don R. WOOD, Delegate
SPAIN	Mr. Roman CAMPS, V-P CIVL & Delegate
SWEDEN	Mr. Erwin KJELLERUP, Delegate
SWITZERLAND	Mr. Uli SPÖRRI, Observer
UNITED KINGDOM	Mr. Pat J. KING, Delegate
UNITED STATES	Mr. Harry W. ROBB, Secretary CIVL & Delegate

F.A.I. : Mr. Bertrand LARCHER, Director General
Mr. W.P. WELSH, Technical Counsellor
Mme Sandra PRODRAM, Executive Secretary

APOLOGIES FOR ABSENCE WERE RECEIVED FROM :

Mr. LAING, AUSTRALIA
Mr. Mike OLLIVE, SOUTH AFRICA

The Meeting was called to order by C.I.V.L. President Dan Poynter, U.S.A., on 25th October 1977, at 9.00 a.m. Total of 14 voting Delegates were present, with 6 non-voting Observers.

Adoption of the Agenda was discussed. The following changes were made :

1. Report of the 1977 F.A.I. General Conference in Rome would be made by Bertrand Larcher, F.A.I. Director General.
2. New item : International Pilot Rating System was added.
3. New item : 1978 European Championships was added.
4. New item : Misuse of F.A.I. Sporting Licenses was added.

I. APPROVAL OF MINUTES OF THE LAST MEETING (14th-15th September 1976)

These Minutes were approved.

II. REPORT ON GENERAL CONFERENCE AT ROME

A Report of the 1977 F.A.I. General Conference at Rome by Bertrand Larcher, F.A.I. Director General was given. It included an account of the new provisions of Section 1 of the Sporting Code, as they had been approved. The President of C.I.V.L. read his own report to the General Conference. He proposed to the Delegates present that the remainder of the day would be devoted to Sub-Committee Meetings.

The Meeting was reconvened at 9.00 a.m. on 26th October 1977.

The President stressed the responsibility of the Sub-Committee work which is the basis for all advancement and improvement of C.I.V.L. He also talked about the advantage of continuity of appointment of the Delegates from each country from year to year, especially since a Delegate normally is not elected to any of the officer positions during his first term of appointment.

III. REPORTS BY THE CHAIRMEN OF THE SUB-COMMITTEES

1) Accident Data Analysis Report by Roman Camps, Spain.

One comprehensive mailing had been accomplished. The survey and compilation of the first report was very costly. All contributions would be appreciated to continue the work. Certain countries active in C.I.V.L. did not cooperate in sending reports of accidents in their countries. This failure lessens the value of the report.

Roman Camps, will issue a final summary of Accident Reports at an early date. He will also include a list of those countries who have not participated in the C.I.V.L. Program by failing to submit accident reports from their country.

2) Training Methods and Training Safety. Report by Bernard Berthou, France.

The report was delivered in French. A translation in English is to be made available.

3) Manufacturing Standards. Report by Harry Robb., U.S.A.

The report is contained in Annex 1. The Sub-Committee will review all manufacturing standards documents as soon as available with a view to a report by March 1978.

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4) Insurance Report by Sepp Himberger, Austria, Chairman.

- The status of the insurance availability in each country was requested.
- A combined list of the program in each country will be prepared and mailed to each Delegate.

5) International Judges

The Chapter in the revised Section 7 on International Judges was deleted.

6) F.A.I. Badges and Proficiency Standards. Report by Ann Welch, U.K.,

The existing Proficiency Standards, plus the results of the sub-committee meeting are contained in the proposed revision of Section 7.

Ann Welch is to continue with the procurement program for all three types of Delta Badges.

Three items were discussed, moved, seconded, and passed by vote of Delegates :

- a) Proposal to upgrade the Delta Bronze Badge requirements;
- b) Proposal for initial requirements for the Delta Gold Badge;
- c) Reduce the Delta Silver Badge issue by F.A.I. to 50 badges. Establish the Delta Gold Badge issue by F.A.I. at 50 badges.

7) World Record Categories. Report by Ann Welch, U.K.

The proposal is to be contained in the proposed revision of Section 7 (see Annex 2). New wording of the two categories is intended to conform to Competition Class II and Class III specifications.

- a) Hang gliders with flexible surface aerofoil, with weight shift control only.
- b) Hang gliders with an aerofoil surface retaining its flight configuration at rest, and/or with pilot-actuated aerodynamic controls.

8) Creation of an F.A.I. Diploma for Hang Gliding

- a) Several names were proposed for the Diploma, but it was concluded that the name of any person was premature at this time.
- b) It was agreed that the name be "C.I.V.L. Hang Gliding Diploma". It would be awarded annually by the General Conference, upon proposal by C.I.V.L. to any person for outstanding performances or devotion to hang gliding.

9) Hang Gliding Specifications for Championships (Report by Uli Sporri, Switzerland)

- a) A discussion was held on the need to retain Competition Class I. It was suggested that it is still popular in some countries and it may evolve into a "Formula Class" as in other sports. It was agreed to retain Class I for international competitions.
- b) It was proposed and agreed that a minimum wing loading of 5.37 Kgs./M² requirement be added to Competition Class II.
- c) No changes were proposed for Class III. However, the subject of a Certificate of Authorization based on certain glider manufacturing standards was considered. It was proposed that the subject be examined by the C.I.V.L. Meeting in 1978 as a definite requirement for the 1979 World Championships.

10) World Championships Rules Report by Harry Robb, U.S.A.

- a) It was agreed to approve the revision of the Chapter on World and Continental Championships as submitted by the Sub-Committee which had met on the previous day. (See Annex 2). This Chapter will be part of the new F.A.I. Sporting Code, Section 7. It will be redrafted and circulated for approval by C.A.S.I.
- b) The final draft of the new Chapters on World Records, and on International Delta Badge Qualifications will be considered by special working committees and then by the C.I.V.L. Bureau for submission to C.A.S.I. at the February or June 1978 Meetings. Preliminary revision should be prepared within the next six weeks.
- c) The same procedure for adoption of the Local Regulations for International Competitions in 1978 was adopted. (See Annex 3).

IV. ELECTIONS

Nominations for President :

1. Mr. Roman Camps, Spain - Accepted
2. Mr. Dan Poynter, U.S.A. - Declined

Mr. Roman Camps, Spain, was declared President for 1977-1978 by acclamation.

It was proposed and agreed to offer a vote of thanks to President Daniel Poynter for his work and service during his terms of office 1975-1976 and 1976-1977, and to appoint him President of Honour of C.I.V.L.

President Roman Camps stated that each Vice-President of C.I.V.L. would be expected to supervise the work of sub-committees assigned to him. The Vice-Presidents will be nominated and elected one at a time.

Nominations for Vice-Presidents (3) :

1. Mr. Berthou, France - Accepted
2. Mr. Hudson, Ireland - Accepted
3. Mr. King, U.K. - Declined
4. Mr. Kjellerup, Sweden - Accepted
5. Mr. Miyahara, Japan - Declined
6. Mr. Robb, U.S.A. - Accepted

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- b) Status of motorized hang gliders
- The discussion revealed that motor hang gliding is illegal in many European Countries. However, there is much activity in Great-Britain. If a motor is used for take-off in England, the hang-glider is classified as an aircraft and subject to government control. If the motor is used only in the air, it is not.
- c) Tow Launch developments - A report was made by Harry Robb.
(See Annex 4).

VII. FUTURE WORLD CHAMPIONSHIPS

Bids for the 1981 World Championships.

1. Great-Britain reported that it was not yet prepared to make a formal bid for the Championships.
2. Mr. Poynter reported interest by El Salvador, Central America although it is realized that the country is not a member of F.A.I. at this time.

VIII. OTHER BUSINESS

- a) International Pilot Rating System
- The subject was discussed during the International Delta Badge sub-committee work session. Although the Delta Bronze Badge is used as a basis for a minimum rating for competition, it is not possible to supersede the national rating systems of the various countries at this time.
- b) A European Championships at Kössen, Austria on 2nd-10th September 1978 was approved. New Local Regulations for International Competitions, subject to final processing by a special sub-committee and the C.I.V.L. Bureau, will be available for use in 1978.
- c) Misuse of F.A.I. Sporting Licences. Request by Sepp Ender
Liechtenstein
- Mr. Ender observed that no system was in effect in C.I.V.L. or F.A.I. to enforce the requirement that each competitor in an International Competition must possess a valid F.A.I. Sporting Licence with a current F.A.I. stamp. The Director General stated that it is the responsibility of each Organizer to state the requirement in the Competition Announcement, and to require a check during Registration that each competitor does have the F.A.I. Sporting Licence in his possession.

IX. DATE AND PLACE OF THE NEXT MEETING

Mr. D. Poynter proposed that the next C.I.V.L. Meeting in 1978 be a three day meeting to be held at Kössen, Austria 12th-13th-14th September immediately after the European Championships.
Mr. Sepp Humberger, Austria agreed that the Organizers would accept to act as the Host.

It was agreed that the C.I.V.L. President would address a letter to the President of F.A.I. requesting favourable consideration of the next C.I.V.L. Meeting being held in September 1978 at Kössen, Austria.

- X. Mrs. Ann Welch reminded the Delegates that the new Section 1 requires the approval by C.I.V.L. of the Director of the event and the Chairman of the International Jury for Continental, as well as World Championships.
It was agreed that Sepp Humberger, Austria be approved as the Director of the European Championships.
It was agreed that Ann Welch, United-Kingdom, be approved as the Chairman of the International Jury for this event.

SUB-COMMITTEE REPORT
MANUFACTURING STANDARDS FOR HANG GLIDERS
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1. The current USA Hang Glider Manufacturers Association Testing and Certification Program document was introduced to the committee meeting.
2. Each member was asked to explain the status of any hang glider testing program in his country. The results were as follows :
 1. Austria, Germany, and Switzerland have cooperated on a "Standards Program". A document outlining their decisions will be produced in the near future.
 2. France is coordinating information with a representative of a National Research Center - ONERA - and is planning to form a Manufacturing Association.
 3. The United Kingdom has established a set of manufacturing standards which will be formally finalized by the end of this year. An Airworthiness Committee now submits Certificates of Airworthiness for gliders to Civil Aviation Authorities for acknowledgement.
A list of US approved hang glider types and models was requested.
 4. The Netherlands, Japan, South Africa, and Sweden have 1 or 2 manufacturers each, and basically have depended on the US Standards established two years ago. They also import American and/or British model hang gliders.
The NAC of Japan has formed a committee to study this problem.
 5. Denmark, Ireland, Norway, and Spain have no hang glider manufacturers and depend on imports from America and/or United Kingdom for their hang gliders.
3. All members recognize the value of hang glider parachutes, but their use is still optional in each country.
4. The Manufacturing Standards Sub-Committee for 1977-1978 should assemble documents from Austria, Germany, Switzerland, France, and the United Kingdom as soon as they are available. Although no country may be required to augment its own program, it will be desirable to make all documents available to manufacturers in every country for their information and possible improvement of their own program. It would be beneficial if one comprehensive program could be structured for use world-wide as the endorsed FAI and CIVL Program.
5. It was proposed that a Provisional Requirement be established for 1978 that all hang gliders entered in World or Continental Championships present a Certificate of Airworthiness only from those manufacturers whose gliders have been certified by one of the recognized Manufacturers Association Standards Programs. If approved by the CIVL Plenary Meeting in 1978, the requirement would be enforced in 1979 and thereafter at World and Continental Championships

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CHAPTER I

The first part of the document discusses the early history of the United States, focusing on the period from the late 17th century to the early 18th century. It covers the establishment of the first permanent English colonies in North America, the growth of the colonial economy, and the increasing tensions between the colonies and the British government. Key events mentioned include the founding of Jamestown, the Pilgrims at Plymouth, and the various colonial charters and laws. The text also touches upon the impact of European wars on the colonies and the role of the British crown in managing the distant territories.

The second part of the document details the American Revolution, from the outbreak of hostilities in 1775 to the signing of the Declaration of Independence in 1776. It describes the military campaigns, the Continental Congress's actions, and the eventual victory of the Continental Army at Yorktown. The text explores the political and social changes that accompanied the revolution, including the rejection of British monarchy and the adoption of a new form of government. It also discusses the challenges of the new nation, such as the need for a stronger central government and the struggle for national unity.

The third part of the document examines the early years of the United States under the Articles of Confederation and the Constitution. It covers the period from the signing of the Constitution in 1787 to the early 19th century. Key events include the ratification of the Constitution, the establishment of the federal government, and the early years of George Washington's presidency. The text discusses the challenges of building a new nation, including the struggle for a strong central government, the issue of slavery, and the westward expansion of the United States. It also touches upon the early years of the Industrial Revolution and the growth of the American economy.

SUB-COMMITTEE REPORT

F.A.I. SPORTING CODE SECTION 7 (Revision proposed)

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1. The revision is organized into the following three Chapters.
2. Chapter 1. WORLD RECORDS - CONTENTS
 1. Definitions - Providing specific terms for use in the evaluation of take-off and record start locations and times, plus terms for the end of the record attempt and landing.
 2. Categories and Classification of World Records
 1. Goal Distance Out-and-Return, Goal Distance One-Way, Open Distance One-Way and Altitude Gain are the four basic categories of World Records.
 2. The two Hang Glider Competition Classes II & III are established as World Record Classifications for the four Categories.
 3. Male and Female Pilot classifications are retained for all record categories.
 4. The combination of 2 types of pilots, 2 types of hang gliders, and four categories results in the authorization of 16 different World Records.
 3. Operational Procedures - Include the use of Official Observers, photographic evidence, certified flight instruments, certified and mathematical processing of the record attempt results prior to submission of a record claim.
 4. Administrative Procedures - Designate the Controlling NAC for the record attempt and the certification. The basic level of the initial records, and the margin of exceeding existing records are designated. Application Forms and Certification Forms are provided for use by World Record Claimants.
3. Chapter 2. FAI INTERNATIONAL DELTA BADGE QUALIFICATIONS
 1. General - The International Proficiency Badge Program is designed to test a pilot's proficiency by requiring the demonstration of the minimum skills required to safely fly in International Competition. It does not supersede hang glider ratings in any country, and is not a rating program. However, the Delta Bronze Badge is considered the minimum skill for any equivalent national Hang Glider Rating Program for international competition.
 2. FAI International Delta Bronze, Silver, and Gold Badges have been established, to be manufactured by FAI, by any NAC, or purchased from any NAC in accordance with the original design. C.I.V.L. has approved the issue of Delta Bronze Badges by each NAC to each of its competitors in the Official Final Results of the 1976 World Championships. FAI Hg. will register and issue the first 50 Silver Badges, and the first 50 Gold Badges. Thereafter, each NAC will procure and issue its own Badges.
 3. Administration - Shall be accomplished by the NAC where the qualification attempt takes place, unless there is no NAC in that country. In this case, the NAC of the pilot shall control the administration and certification.

4. DELTA BRONZE BADGE - Qualification requirements were upgraded as follows :
 1. A distance of not less than 2 kilometers shall be flown over a course marked by two pylons not less than one-half kilometer apart.
 2. Five flights of not less than 5 minutes each.
 3. Five landings within a circular area of 25 meters radius.
 4. One landing over a 10 meter barrier, within a circular area of 50 meters radius.
5. DELTA SILVER BADGE - No change in qualification requirements.
6. DELTA GOLD BADGE - Qualification requirements were established as follows :
 1. Straight distance of 300 kilometers.
 2. Out and Return distance, or distance in a triangular course of 200 kilometers.

4. Chapter 3. WORLD AND CONTINENTAL CHAMPIONSHIPS

This Chapter was discussed and approved.

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HWR/AT
15.11.1977

SUB-COMMITTEE REPORT

LOCAL REGULATIONS FOR WORLD AND CONTINENTAL CHAMPIONSHIPS
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1. These Local Regulations supplement the F.A.I. Sporting Code Section 1 and Section 7. They shall be reviewed and updated as necessary by CIVL in order to permit the operation of each Championships to reflect the current status of hang glider design and flight technique.
2. All of the systems and procedures contained in these Local Regulations have been formulated in order to solve problems encountered in the past several years. Problems should be solved with the benefit of this experience and guidance given in the form of Regulations. Local Regulations are separated from the Sporting Code Section 7 so that they need not be approved by CASI and the FAI General Conference.
3. CONTENTS of the proposed Local Regulations include the following subjects :

Sections

1. General
 2. Competition Entry Requirements
 3. Equipment Requirements
 4. Competition Schedule
 5. Definitions
 6. Flight Tasks
 7. Maximum Duration Flight Task
 8. Pylon Turns - Figure 8's
 9. Designated Maneuvers
 10. Maximum Glide Ratio
 11. Target Accuracy Landing
 12. Closed Course Altitude Gain
 13. Cross Country
4. The proposed Local Regulations are to be reviewed and processed by a special sub-committee, prior to the preparation of a final draft to be adopted for use in 1978 Continental Championships.

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HWR/AT
15.11.1977

SUB-COMMITTEE REPORT

TOW LAUNCH HANG GLIDING STATUS
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1. The 5th Annual Cypress Gardens boat-tow launch international open competition; known this year as the World Cup was as successful as always, even with the first adverse weather in five years.
2. Most of the competitors had an opportunity to fly on a 700 meter tow line to an approximate altitude of 500 meters AGL on a winch mounted in a tow boat. An adjustable hydraulic valve preset to a pressure of 75 kgs on a disc brake allows a flyer to take off with 70 meters of tow line and reel out the remaining 630 meters of tow line by a demand force of 75 kgs either by climbing more steeply to overcome the brake pressure, or by driving the tow boat a few kilometers faster than flying speed to overcome the brake pressure. This system protects against excessive boat speed, or unexpected air gusts or thermals.
3. The first land-tow launch competition was planned for July in Texas where a release from the tow line at an altitude of 500 meters would be sufficient to catch thermals to gain altitude to the base of a daily line of alto-cumulus clouds known as a "cloud street" which is ideal for cross country flight.

Unfortunately, the competition was not held, but is being planned for next year at about the same time of year. It is anticipated that as soon as this first competition demonstrates the proper techniques for use of the winch in competition feasibly and safely, more competitions of this type will be organized.

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WORLD AND INTERNATIONAL CHAMPIONSHIPS

COMMISSION INTERNATIONALE DE VOL LIBRE

FOOT LAUNCH HANG GLIDER

LOCAL REGULATIONS

COMPETITION ENTRY REQUIREMENTS

1. Eligibility and Entry to any F.A.I. World or International Championships are regulated by the Sporting Code Section 7.
2. National Team Entries in World Championships shall be composed as follows :
Class 1 - 2 Pilots, Class 2 - 5 Pilots, Class 3 - 2 Pilots for a total of 9. This proportion may be changed by Local Regulation approved by C.I.V.L. if it appears that the sporting use of the three Classes of hang gliders has changed significantly in the year prior to the World Championships.
3. The C.I.V.L. Hang Glider Technical Forms submitted for all hang gliders of each National Team shall be acceptable at Registration. However, inspection of hang gliders and other flight equipment prior to the start of Official Competition shall be mandatory to insure adherence to the requirements of the Competition Class Specifications and to normal safety standards.
4. In addition to any other basis for entry, the Championships Director, with a majority of the Panel of International Judges, may recommend disqualification of a contestant if it appears that his participation may be a danger to himself or to other contestants. During the Competition, they may take the same action if any contestant indulges in unsporting conduct, or displays any other actions considered detrimental to the flyers, to the Organisers or to the sport.

COMPETITION EQUIPMENT

1. Hang Glider Class Specifications are outlined in Annex 2, subject to modification by Organisers' Local Regulations, approved by C.I.V.L. when required to recognize and accept improvements in hang glider design at the time.
2. Measurement of each competitor's hang glider entered in the Competition shall be in accordance with the instructions in Annex 3.
3. Pilot Support Systems shall be inspected for safe fabrication.
4. Protective headgear is mandatory on all flights at the Competition Site.
5. Other protective clothing and flight equipment for the Competition are optional except when required in the Competition Announcement.
6. Certain operational equipment for the Competition is described in Annex 4.

BL/SL

22.9.1977

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COMPETITION SCHEDULE

1. Competition Events may be a combination of the following Flight Tasks :

<u>Minimum Sink</u>	<u>Maximum Glide Ratio</u>	<u>Combination</u>
1. Maximum Duration	4. Maximum Glide Ratio/ Distance Pylons	6. Closed Course Altitude Gain
2. Pylon Turns	5. Accuracy Landing	7. Closed Course Distance
3. Designated Maneuvers		8. Cross Country

2. When flight conditions allow, each Competition Class shall be scheduled for a minimum of one Flight Task in each of the three general categories to test all flight capabilities of the glider and not favor any particular design factors. Compatible Tasks shall be combined into a single Event whenever the site layout and flight conditions allow, and the Target Accuracy Landing Task should normally be scheduled with approximately half of the Flight Tasks. No Flight Task should be repeated more than 3 times when other Tasks may be assigned to appeal to spectator and pilot interest and capability.
3. When any Flight Task such as Distance or Cross Country requires, or allows, a competitor to fly out of sight of spectators for any extended period, a Flight Task in the local area of spectator view should also be scheduled.
4. Daily Flight Tasks for each Competition Class, based on weather conditions forecast for the Site, shall be chosen and posted for the information of all competitors as soon as possible throughout the period of Official Competition.
5. Practice Flights may be scheduled and officially controlled by the Organizers, or may be designated as Unofficial Flying.
6. Unofficial Flying, not supervised by the Organizers, may be allowed on the Competition Site at the discretion of the Organizers, and in accordance with the normal Site Regulations.
7. One comprehensive Operational Briefing on Flight Tasks and other pertinent information shall be scheduled the day prior to the start of Official Competition for all Team Leaders - competitors in International Competition Meets. Other daily Operational Briefings shall be scheduled as considered necessary.

COMPETITION OPERATIONS

1. Flying Safety requirements are contained in Annex 6.
2. Operations Standards are contained in Annex 7.
3. Flight Tasks Standards are contained in Annex 8.
4. Flight Traffic Rules are contained in Annex 9.

MAXIMUM DURATION FLIGHT TASK

1. Course layout

- a) Moderate limits of the Flight Course should be established to allow the Flight Course to be flown only for a reasonable time. The Exit Gate of the Course shall terminate in an area suitable for possible additional Flight Tasks and the Target Accuracy Landing Task.

2. Course requirements

- a) This Flight Task is a demonstration of flying capability and knowledge of micro-meteorology to recognize lift areas and to maximize altitude gain in lift to prolong hang glider flight, but with final conservation of altitude to terminate the flight in the Landing Zone. A maximum or specified flight time for this Task may be required.
- b) Judges will be stationed at the corners of any boundaries of the Flight Course to report violations of the limits of the Flight Course for possible disqualification from the Flight Task or any other penalty announced. A red flag and audible signal will be used to signal violations.

3. Task scoring

- a) Termination of the flight in the Landing Zone shall be required to qualify for Flight Task Scoring.
- b) Placements are normally based on maximum flight times from Launch Point Entry Gate to any designated Exit Gate from the Flight Course.
- c) Placements may also be based on the times nearest the specified flight time. For trophy placements, ties may be broken by use of the better score in the Target Accuracy Landing portion of the combined Flight Tasks.

PYLON TURNS - FIGURE 8 TURNS

1. Course layout

- a) The Flight Course shall be established to achieve the general idea of the Task Diagram in Annex 10. Two, or three, pylons may be used for a combination of optional or required directional turns or figure 8's around any two of the three pylons as selected for different orientation to the wind during the Flight Task.

2. Course requirements

- a) This Flight Task is a demonstration of flying capability to achieve maximum manoeuvrability turning around designated pylons at minimum sink rate, in accordance with the flight diagram provided for all competitors.
- b) If a preceding Flight Task is not assigned, each competitor may be given a specific time to complete the initial portion of his flight from Launch to the entry gate for this Flight Task, to arrive with maximum altitude.

- c) The two Pylon Judges will also control flight traffic over their pylons. An incoming pilot who is judged to be entering traffic over the pylons below the level of existing gliders will be signalled with a red flag and an audible device to discontinue his approach as planned and land safely away from any other traffic in the Flight Course or the Landing Zone. The pilot "waved-off" shall be awarded a reflight for the Flight Task only if it is judged that he did not deliberately cause the conflict of traffic to void a poor approach.
- d) If completion of a figure 8 or certain designated turns is required for scoring, the pilot shall have the option of repeating any missed pylon, as signalled by the Pylon Judge, to attempt a successful pylon turn for scoring.

3. Task scoring

- a) Termination of the flight in the Landing Zone is required to qualify for Flight Task Scoring.
- b) Placements are based on the total number of pylons successfully rounded, plus flight time in minutes and seconds. Maximum scores are best scores.

DESIGNATED MANOEUVRES

1. Course layout

- a) A Flight Course with limited or minimum normal convection or ridge lift should be selected for this Flight Task which is designed to be performed with the normal sink rate of the glider after arrival in the Manoeuvres Area. The course should be located in view of the spectators and in the vicinity of the Landing Zone.
- b) If a preceding Flight Task is not assigned, each competitor may be given a specific time to complete the initial portion of his flight from Launch to the entry gate for this Flight Task, to arrive with maximum altitude.

2. Course requirements

- a) This Flight Task is a demonstration of flying capability to perform certain basic flight manoeuvres in a prescribed sequence, prior to performance of additional optional flight manoeuvres, all within a maximum period of three minutes, or as otherwise specified. Maximum manoeuvrability at minimum sink is required.
- b) The flyer shall be timed as he starts the first of the following manoeuvres, which shall be observed and evaluated by 3-5 Manoeuvres Judges whose judging calls shall be recorded by a Secretary.

1. 180 degree turn (either direction) and reverse to opposite direction 180 degree turn.
 2. Reverse to opposite direction 360 degree turn.
 3. Reverse to opposite direction 720 degree turn.
 4. Reverse to opposite direction turn to optional aerial manoeuvres.
 5. Another set of the same turns performed in any sequence at the option of the pilot may be required.
- c) Each competitor will submit a "Manoeuvres List" prior to the Flight Task for approval by the Manoeuvres Judges. Any proposed manoeuvres judged to be potentially unsafe shall not be approved. Wing-Overs, if authorized, will be limited to an approximate 90 degree bank and 90 degree turn to receive credit for scoring.

3. Task scoring

a) Termination of the flight in the Landing Zone shall be required to qualify for Flight Task Scoring.

b) Manoeuvres Scoring Table :

1. 180° Turn - 10 pts.	3. 360° Turn - 15 pts.	5. Wing-Over - 20 pts.
2. Reverse - 10 pts.	4. 720° Turn - 25 pts.	6. Optional manoeuvres reverse turns - 10.

c) Placements are based on maximum flight scores.

MAXIMUM GLIDE RATIO

1. Course layout

a) A Flight Course with limited or minimum normal convection or ridge lift should be selected for this Flight Task, which is designed to be performed with the normal L/D glide ratio capability of the hang glider. The Flight Course shall terminate in an area suitable for additional flight tasks and the Target Accuracy Landing Task.

b) A series of optional distance pylons located in accordance with the idea of the Task Diagram in Annex 10 may be included in this Flight Task.

2. Course requirements

a) This Flight Task is a demonstration of flying capability to achieve maximum L/D glide ratio over the terrain with the hang glider. In-flight observation of wind drift and any lift areas, plus wise choice of the most advantageous nose trim and Flying speed to traverse the Flight Course, including any distance pylons, in the minimum flight time are required.

- b) If no flight diagram is provided, the pilot may fly on either side of the distance pylons, and may traverse the pylon course more than once. Each pylon must be flown past or turned successfully in sequence, and the pilot must repeat any missed pylon, as signalled by the Pylon Judge, to attempt a successful pylon for any further scoring in this Flight Task.
- c) The Number 1 Pylon Judge shall also control traffic entering the pylon course. An incoming pilot who is judged to be entering traffic over the pylons below the level of existing gliders will be signalled with a red flag and an audible device to discontinue his approach as planned and land safely away from any other traffic in the Flight Course or the Landing Zone. The pilot "waved-off" shall be awarded a reflight for the Flight Task only if it is judged that he did not deliberately cause the conflict of traffic to void a poor approach.
- d) Either portion of this Flight Task may be combined with other types of Flight Tasks.

3. Task scoring

- a) Termination of the flight in the Landing Zone shall be required to qualify for Flight Task Scoring.
- b) Placements are based on minimum flight time from Launch Point Entry Gate to any designated Exit Gate from the initial Flight Course, plus minimum flight time in the optional distance pylon course, if included. Subtract the number of pylons successfully traversed from the total flight time in minutes and seconds. Minimum score is the best score.

TARGET ACCURACY LANDING

1. Course layout

- a) The Target and Landing Zone shall be established in accordance with the Landing Diagram in Annex II. The Landing Zone shall have a clear approach from as many directions as possible to accommodate the flatter glide angles of the modern hang gliders with high aspect and glide ratios.

2. Course requirements

- a) This Landing Task is a demonstration of flying capability to plan a controlled approach to a designated target landing, possibly through a specified approach corridor; and to maintain controlled flight through the decreasing flight speeds required to achieve a controlled and accurate landing on or near the target.
- b) Landing Form shall be evaluated by 3 Landing Judges in accordance with the definitions in Annex 5. Landing distance shall be evaluated either by use of Circular Zone scoring, or by accurate measurement of distance in accordance with the definition in Annex 5.

3. Task scoring

- a) Placements are based either on Circular Zone scoring with maximum score as the best score; or on measured distance from the target with minimum score as the best score. When specified by the Organizers, the landing distance score may be modified by the quality of the landing form, in accordance with Annex I2.

CLOSED COURSE ALTITUDE GAIN

1. Course layout

- a) A Flight Course should be established in accordance with the idea of the Flight Task Diagram in Annex 10 when ridge lift is sufficient to allow successful operation of this Flight Task. The Base-Start and Peak-Finish Sites shall be readily visible to competitors and accessible to Officials.

2. Course requirements

- a) This Flight Task is a demonstration of flying capability to achieve a combination of maximum lift, and maximum penetration glide ratio over the terrain with the hang glider in a prescribed area.
- b) Each competitor shall approach the Base-Start Site in relatively straight and level flight at normal flying speed. His body shall pass at or below the level of the Site, or he shall reverse course for another approach. If it appears that he will pass below the level of the Peak-Finish Site, he shall reverse course for another approach to gain more altitude to pass at or above the level of the Site.
- c) A Site Judge and a Timer will be located at each Site to evaluate the accuracy of the flyer's passage, and to mark the timing.

3. Task scoring

- a) Placements are based on minimum flight time from the first pass by the Base-Start Site to the final successful pass by the Peak-Finish Site.

CLOSED COURSE DISTANCE

1. Course layout

- a) The Distance Flight Course should be established in accordance with the idea of the Flight Task Diagram in Annex 10. Distance between the Turn Points should be great enough so that most competitors will not be able to complete the course with the normal lift and flight conditions for the area on the day of the Flight Task. Turn points must be chosen for best visibility and easy recognition by the flyers, as well as access by vehicles and Officials.

- b) Although the Target Accuracy Landing Zone should normally be the required landing site, additional Designated Landing Sites may be established on the route of the Distance Flight Course to encourage attempts at greater distance by the competitors.

2. Course requirements

- a) This Flight Task is a demonstration of flying capability and knowledge of micro-meteorology to recognize lift areas to achieve a combination of maximum altitude gain during a maximum glide ratio penetration over the terrain for a medium-range cross country flight in the minimum possible time.
- b) Each competitor shall fly around each Turn Point on the side furthest from the center of the Flight Course in the direction and sequence required by the flight diagram provided to all competitors, or by any verbal instructions. The pilot must repeat any missed Turn Point, as signalled by the Pylon Judge, to attempt a successful pass for any further scoring in the Task.
- c) Timing of each leg of the course will be marked by a Timer who shall record the absolute time of passage of the Turn Point in hours, minutes, and seconds.
- d) When additional Designated Landing Sites are established in the Flight Course, a Landing Site Judge or Timer shall record the time of any landing at a Site.

3. Task scoring

- a) Termination of the flight in one of the Designated Landing Sites shall be required to qualify for Flight Task Scoring.
- b) Placements are based on a combination of maximum distance and minimum flight time from Launch.

CROSS COUNTRY

1. Course layout

- a) The Cross Country Flight Task shall normally be selected as an out-and-return flight to conserve resources of Officials, vehicles, and mid-course Designated Landing Sites, and in the interest of flying safety during recovery of pilots and hang gliders. A distance of more than 15 kilometers for the total flight is desired, and an adequate number of Designated Landing Sites shall be selected, with the distance from the Launch Point calculated for each Site.

./...

2. Course requirements

- a) This Flight Task is a demonstration of flying capability and knowledge of micro-meteorology to recognize lift areas throughout a much greater area to achieve a combination of maximum altitude gain during a maximum glide ratio penetration over the terrain to assure progress on the cross country flight from one lift area to another.
- b) Certification of the distance and time of termination of the flight will be made by the Landing Site Judge and/or Timer at any Site.

3. Task scoring

- a) Termination of the flight at one of the Designated Landing Sites shall be required to qualify for Cross Country Flight Task scoring.
- b) Placements are based on a combination of maximum distance, and minimum flight time from Launch.

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Administrative Information

By order of the Board of Directors, I, the undersigned, do hereby certify that the foregoing is a true and correct copy of the minutes of the meeting of the Board of Directors of the Corporation held on the 15th day of June, 1915, at the City of New York, New York.

Secretary

Witness my hand and the seal of the Corporation this 15th day of June, 1915, at the City of New York, New York.

Executed on this 15th day of June, 1915.

WORLD AND INTERNATIONAL CHAMPIONSHIPS

COMMISSION INTERNATIONALE DE VOL LIBRE

FOOT LAUNCH HANG GLIDER

LOCAL REGULATIONS

INTERNATIONAL COMPETITION

ORGANIZATION CHART

1. COMPETITION OFFICIALS

		<u>COMPETITION RULES</u>	
<u>CHAMPIONSHIPS CHAIRMAN</u>		* <u>CHAMPIONSHIPS DIRECTOR</u>	<u>INTERNATIONAL JURY</u>
<u>SECRETARY ADMINISTRATIVE</u>		* <u>DEPUTY DIRECTOR</u>	* <u>STEWARDS</u>
<u>OPERATIONS MANAGER</u>			
<u>LAUNCH TRANSPORT</u>		* <u>CHIEF JUDGE DEPUTY CHIEF</u>	
<u>RESCUE CREW FIRST AID</u>	* <u>CHIEF SCORER</u>	* <u>INTERNATIONAL JUDGES</u>	* <u>SAFETY DIRECTOR TECH. COMMITTEE</u>
	<u>ASSISTANT SCORERS</u>	* <u>PYLON JUDGES</u>	* <u>LAUNCH DIRECTOR</u>
	<u>TARGET MEASURERS</u>	* <u>MANOEUVRES JUDGES</u>	<u>LAUNCH ASSISTANTS</u>
	<u>OFFICIAL TIMERS</u>	* <u>LANDING JUDGES</u>	* <u>LANDING DIRECTOR</u>

* Primary Competition Officials

2. COMPETITION OFFICIALS DUTIES

1. CHAMPIONSHIPS CHAIRMAN - Is primarily the Director of Planning for the World Championships or any other International Competition. He should be a manager with experience in organising group functions and coordinating committee activities. He is responsible that each committee function of administrative and technical logistics planning for the Competition is assigned to at least one person, and that periodic reports of progress indicate that all phases of the preparation will be accomplished by the date of the Meet. Although the supervision of the operation of the Competition is assigned to the Championships Director at the start of Official Competition, the Chairman shall still be involved in all support services for the Competition, and in those Ceremonial Events which form an important atmosphere for the World Championships. He has an influential leadership position, and he is the source of the spirit of the working group of committees.

2. CHAMPIONSHIPS DIRECTOR - "Is in overall operational charge of the event." (F.A.I. Sporting Code Section 1 - 4.2.1.). He also is primarily a Manager involved in all aspects of the operation of the Competition. He should take part in the planning of the Competition, and shall work closely with the Chairman to assure that all specifications and standards for the Competition are fulfilled in accordance with the F.A.I. Sporting Code and the Official Competition Rules.

The Director has responsibilities in three management areas :

1. The Meet Director has an organization, as illustrated by the Organization Chart with personnel and equipment, and a system of operation as outlined in the Rules. As an Administrator of the system, he must know every element of his organization in order to be fair and objective
2. The Director's main task is the supervision of the work of the persons in his organization. He must not be forced into doing someone else's work.
3. Decision-making is always a problem, but he is the highest Official and others are not always allowed to solve the many problems. Many decisions will be based on advice from the many Officials, but one man must always issue the final decisions, and that is the Championships Director.

3. DEPUTY DIRECTOR - Is the second-in-command, and shall assume the authority of the Director as directed and as required in the absence of the Meet Director. He shall aid the Director in the fulfilment of his duties as directed.

4. INTERNATIONAL JURY - Organization and duties are outlined in F.A.I. Sporting Code Section 7 - 4.7 which combines with these Official Competition Rules.

5. STEWARDS - "Are advisers to the Director." F.A.I. Sporting Code Section 1 - 4.2.2.

6. SAFETY DIRECTOR - Is responsible to the Chairman during the planning stages of the Championships, and to the Meet Director during the operation of the Competition.

FOOT LAUNCH HANG GLIDER

LOCAL REGULATIONS

HANG GLIDER CLASS SPECIFICATIONS

1. GENERAL

- a) Flight instruments are permitted in all Classes.
- b) Communication devices are prohibited in all Classes.
- c) Any physical means to produce energy to increase performance is prohibited.
- d) Any item is permitted if not prohibited.
- e) Specification and airworthiness certificates, or equivalent, are required in each Class for each glider.

2. COMPETITION CLASS 1

- a) The frame shall consist of four structural components which include two leading edge spars, one keel spar, and one cross spar. The cross spar may be in two sections.
- b) Flexible surface aerofoil.
- c) Pilot weight-shift control only. Pilot-actuated aerodynamic controls, including spoilers, prohibited.
- d) Maximum aspect ratio shall be 4.5.
- e) Minimum wing loading shall be 5.00 kg/m²
- f) Capsule or partial capsule fairing of pilot is prohibited.

3. COMPETITION CLASS 2

- a) Flexible surface aerofoil.
- b) Pilot weight-shift control only. Pilot-actuated aerodynamic controls including spoilers, prohibited.

4. COMPETITION CLASS 3

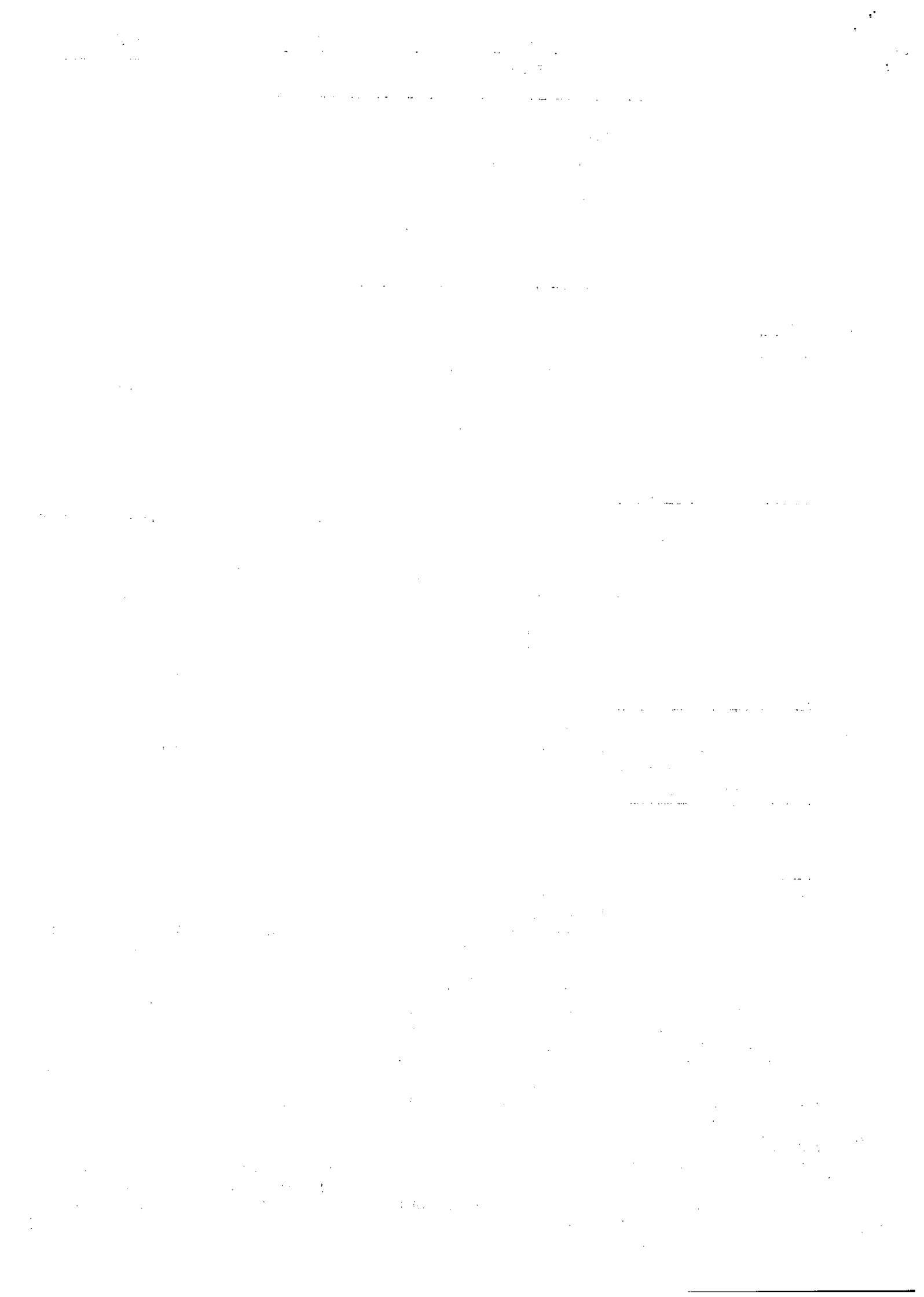
- a) Rigid surface aerofoils and pilot-actuated aerodynamic controls are permitted.

5. NOTES

- a) Flexible surface aerofoil is one which does not retain its flight configuration at rest.
- b) Wing loading is calculated with take-off weight and projected sail or surface area (= Take-off weight / projected sail or surface area.)
- c) Aspect ratio is wing span² / projected sail or surface area.
- d) Wing loading and aspect ratio may be measured at the end of Competition for winning placements only. Gliders not meeting specifications will be disqualified from any winning placements. (See C.I.V.L. Sporting Code, Section 7 4.5.3 and F.A.I. Sporting Code Section 1 - 5.6.).
- e) Higher L/D gliders should be assigned suitable Flight Tasks in competition.

6. REVIEW

- a) These Class Specifications shall be reviewed annually by C.I.V.L. Delegates at the C.I.V.L. Plenary Meeting to assure that any necessary modifications are accomplished to recognize and accept improvements in hang glider design for the benefit of international competition.



FOOT LAUNCH HANG GLIDER

LOCAL REGULATIONS

DEFINITIONS

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I. ADMINISTRATION

1. A COMPETITOR is a person entered and competing in a sporting event.
2. A TEAM is a single group of competitors. The performance of the Team as a whole is counted for the result.
3. A WINNER is a Competitor or Team having obtained the best results according to the Official Rules for the event.
4. The title of CHAMPION may be awarded only to a winner of a World or Continental Championship.
5. The NATIONALITY of a person is proven by an identity document stating the nationality and issued by or on behalf of the government of the country concerned.

2. COMPETITION

1. PROJECTED SAIL AREA - Is the area of the glider frame spars outlined within the coverage of the sail and the apex, less the triangular plan areas of any trailing edge scallop cuts of the sail, and plus any area of extended trailing edges of the sail.
2. WING LOADING - Of a hang glider is the ratio of the combined weight of the flyer with his flight equipment and the hang glider, compared to the projected area of the sail, or lifting surface. A flyer weighing 77 kg - with his flight equipment plus a 23 kg glider with 20 square meters of projected sail area would have 5,00 kg/M² wing loading (100 kg / 20 M² = 5,00 kilograms per square meter wing loading).
3. ASPECT RATIO - Is the ratio of the hang glider wing span to its width, and is calculated by dividing the square of the wing span by the projected sail area. A hang glider with a wing span of 9 meters - measured between the two rear sail attachment points on the wing leading edge spars, and a projected sail area of 16 square meters has an aspect ratio of 5,00. Example :
$$9^2 = 81 / 16 \text{ m}^2 \text{ equals } 5.00 \text{ aspect ratio.}$$
4. CONTROLLED FLIGHT - Is that condition in which the flyer has controlled possession of his hang glider, and is maintaining controlled flying speed.

5. LANDING FORM EVALUATION

1. CONTROLLED LANDING - Is an upright, feet-first landing with controlled possession of the glider, which qualifies as a completely safe landing. It is essentially a nose-up, wings level landing with little or no directional turn on landing. The nose plate and/or the control bar of the glider may be dropped or touch the ground only for reasons of safety in adverse winds.

2. SAFE LANDING - Is a Controlled Landing which may terminate with an inadvertent loss of the control bar, or nose rotation forward to the ground due to a slight loss of balance of the flyer in normal landing wind conditions. Landing in a slight turn, or touching the ground with a wing tip lightly, resulting in a directional turn on landing of less than 45 degrees from a normal straight ahead landing shall be allowed.
3. UNCONTROLLED LANDING - Is a relatively unsafe landing resulting from a gross lack of normal control of the glider on the final approach and/or final landing, but with no damage to the glider, or injury to the flyer.
4. CRASH LANDING - Is an unsafe landing resulting from a gross lack of normal control of the glider on the final approach and/or final landing, with damage to the glider, or injury to the flyer.

6. LANDING DISTANCE EVALUATION

1. Landing must be within the designated target scoring zone.
2. Landing distance is marked on the flyer's point of contact with the ground, during the final landing, which is furthest from the target. The landing will be marked at the heel touchdown when landing is short of the target and at the toe touchdown when landing is past the target. Any momentary, inadvertent initial touch prior to the final landing such as may occur during rotation from prone to upright flying position shall not be considered as a touchdown for landing. However, the flyer may not drag his feet to slow down when overshooting the target.

When circular distance lines are used for zone distance scoring, the width of the line will be included in the scoring zone nearest to the center target.

7. RESTRICTED AREAS -Are those areas such as the spectator area, inhabited areas, electric power and ski lift lines, private property with requests for no overflights, etc... which may require flight above a specified minimum altitude, or prohibition of any competition overflights.
8. ABORT ON TAKE-OFF - Is registered at the moment when a flyer loses controlled possession of his glider, or loses controlled flying speed, and cannot ultimately regain either control for a successful take-off.

FLYING SAFETY

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1. WING LOADING MINIMUM - Allowed in competition in C.I.V.L. Competition Class 1 shall be 1.00 as a safety measure to insure adequate flyer weight for safe weight-shift flight control in the normal condition of wind velocity and gusts encountered in competition flying. No wing loading minimum is specified for Competition Classes 2 and 3 at this time.
2. HANG GLIDER INSPECTION - In addition to the pre-competition entry, qualification inspection shall be required prior to the next flight of any glider subjected to an unusually hard landing or actual crash. When required, any replacement of components will be accomplished before the next flight and inspected by the Safety Director or Technical Committee. Penalty for disregard of this requirement shall be disqualification from the next flight. Based on the extent of the damage, use of a reserve replacement glider may be allowed.

After the pre-competition entry qualification inspection, any major change in rigging, or optional replacement of any major components, will require another inspection. If not reported to the Safety Director, the change may result in disqualification from the next flight.
3. DECISION TO CEASE FLYING - In unsafe weather conditions, may be based on the opinions and decisions of the following Officials and Competitors :
 1. The Launch Director may declare the Launch Point "Closed." The decision shall be confirmed by the Safety Director or the Meet Director when feasible.
 2. Refusal to launch by a Flight Check Pilot (Wind Dummy) not entered in the competition shall close the Launch Point until a decision on flying can be made by the Safety Director and/or the Meet Director.
 3. Any competitor shall have an opportunity to influence a decision by use of the Launch Take-Off Refusal Option defined in Competition Operations.
 4. At any time in the competition when the Flight Check Pilot is used for official evaluation of flight conditions in the Flight Course, his report of his flight shall be received and evaluated by the Safety Director and/or the Meet Director before the Launch Point may be declared "Open".
 5. The Safety Director may declare the Launch Point "Closed", based on his observation of unsafe flying conditions at the Launch Point, in the Flight Course, or in the Landing Zone. If possible, confirmation of the Meet Director shall be obtained prior to the decision. Otherwise, confirmation shall be coordinated as soon as possible.
 6. The Meet Director and the Safety Director shall determine when weather or any other conditions dictate a decision to cease flying. Cancellation of flying for any period shall not automatically disqualify the competition in any Task up to that point, but may do so in obviously unfair conditions.

The first part of the paper discusses the historical context of the study, focusing on the evolution of the field from its early days to the present. It highlights the contributions of key figures and the challenges faced by the community. The second part presents a detailed analysis of the data, showing the trends and patterns over time. This is followed by a discussion of the implications of the findings and the need for further research. The paper concludes with a summary of the main points and a call to action for the field.

The data shows a clear upward trend in the number of publications over the last decade, indicating a growing interest in the subject. This is particularly evident in the area of [specific topic], where there has been a significant increase in both the quantity and quality of research. The findings suggest that the field is becoming more interdisciplinary, with researchers from different backgrounds contributing to the discourse. This is a positive sign for the future of the field, as it allows for a more comprehensive understanding of the subject. However, there are still some gaps in the knowledge, and further research is needed to address these. The paper concludes by emphasizing the importance of continued collaboration and communication within the community, as well as the need to support young researchers and promote diversity in the field.

FLIGHT TRAFFIC RULES

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1. INTERNATIONAL HANG GLIDER COMPETITION

1. GENERAL FLIGHT REQUIREMENTS

1. Take-off and landing should normally be made into any significant wind.
2. Pilots shall not fly directly above or below another hang glider, except with a clearance of approximately 30 meters-or a minimum safe distance. Be aware of traffic below at all times.
3. All flights shall maintain not less than 30 meters horizontal or vertical clearance from power and ski lift lines and other similar obstructions, from buildings, and any assemblage of persons.
4. Pilots shall not fly in or through Restricted Areas without clearance.
5. IFR Flight is prohibited. Pilots shall maintain visual contact with the ground at all times. Flights shall be limited to daylight hours.
6. Pilots shall not fly above 4,100 meters MSL. without a supplementary oxygen supply on any flight.
7. Pilots should wear a personal flotation device when there is any possibility of landing in the water.
8. Parachutes for glider and/or pilot support are recommended.

2. RIGHT-OF-WAY

1. Gliders approaching each other head-on shall give way to the right.
2. Pilots flying downwind have right-of way. Pilots flying upwind shall not turn in front of approaching downwind gliders if it will disrupt their flight path.
3. Pilots shall be aware of air traffic below them at all times. Lower altitude glider has the right-of-way.
4. The first pilot in a thermal establishes the direction of turning. Other pilots following shall turn in the same direction, no matter which pilot is higher.

3. RIDGE TRAFFIC RULES

1. Glider closest to the ridge has right-of-way when safety is a factor, Gliders on the Launch Point shall not take-off to endanger a glider flying the ridge wave.
2. Glider overtaking another glider passes between the slope and the glider being overtaken.
3. Pilots shall make all reversing turns away from the ridge, into the wind. They shall not turn in front of an approaching glider if it disrupts his flight path.
4. All 360 degree turns away from the ridge must be completed at least 60 meters--from the face of the slope. The turn should be aborted prior to the 180 degree point if it appears that completion of the turn will take the glider less than 60 meters and dangerously close to the face of the slope.

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