

Human Powered Flight

**Regulations and Conditions
for**

**THE KREMER INTERNATIONAL
MARATHON COMPETITION**

August 1988

THE ROYAL AERONAUTICAL SOCIETY

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Human Powered Flight

A prize of 50,000 pounds is offered for the first successful controlled flight over a specified Marathon course in one hour under the following Regulations and Conditions laid down by the Human Powered Aircraft Group Committee of the Royal Aeronautical Society. The competition will be conducted by the Royal Aero Club of the United Kingdom, which is an active member of the FAI, and in accordance with the General Section and Section 2 of the Sporting Code of the Federation Aeronautique Internationale (FAI).

The competition is to be known as the KREMER INTERNATIONAL MARATHON COMPETITION. On behalf of the Society's Council, the Human Powered Aircraft Group Committee of the Society are the 'Organisers' of the competition. The Regulations and Conditions of the Competition are as follows:

COMPETITION REGULATIONS AND CONDITIONS.

1. GENERAL

The competition is for the successful completion of a flight over an approved course within the United Kingdom in a specified time of ONE hour or less. The prize of 50,000 pounds will be awarded to the first person who fulfils the Regulations and Conditions to the satisfaction of the Organisers.

2. PRIZES AND TROPHY

In addition to the 50,000 pound prize a trophy will be presented to the winner. The trophy will be engraved with the winners name and country of origin.

3. ELIGIBILITY

The competition is international and is open to individuals or teams from any part of the world. It will be governed by the Sporting Code of the FAI and these Regulations and Conditions.

4. CONDITIONS OF ENTRY

4.1 Aircraft

(a) The aircraft shall be a heavier than air machine and the use of lighter than air gases shall be prohibited.

(b) The aircraft shall be propelled entirely by human power. No device for the storage or supply of energy may be used.

(c) Any mechanical or electrical system of the aircraft shall be designed, in such a way, as to produce no undue hazard to the crew or persons in the vicinity of the aircraft.

(d) No drugs or stimulants, including oxygen, shall be permitted. In this respect each entrant flying as a crew member must take such tests as approved by the UK Sports Council and after any successful attempt at the competition

(e) No part of the aircraft shall be jettisoned during any part of the flight, including take-off and landing.

(f) The aircraft shall be controlled only by the airborne crew of the aircraft.

4.2 Crew

(a) The crew shall be those in the aircraft during the takeoff and flight. There shall be no limit to their number.

(b) No member of the crew shall be permitted to leave the aircraft at any time of the flight, including the take-off and landing.

(c) With the exception of one wing tip handler to assist in stabilising the aircraft prior to take off, only the crew may approach the aircraft prior to and during any competition flights.

4.3 Ground and Weather Conditions.

(a) There shall be no restrictions regarding wind strength or general weather conditions, other than the need for adequate visual observation and unrestricted observation for the Official Observers.

(b) The take-off and flight will be made from an agreed location which will be free from adjacent buildings or other large objects which could impart significant disturbance or deflection of the air.

4.4 The Course

(a) The Course (see diagram) shall be around two turning points which shall not be less than 4051 metres apart and will be clearly marked. The Course will include the take-off and landing runs and the 'completed flight' includes both the take-off and the landing.

(b) All parts of the aircraft shall be flown outside each turning point.

(c) The course may be flown in either direction.

(d) A line, defined as the Course Datum Line, will be set at right angles to the line joining the turning points and approximately midway between them. The Course Datum Line, which will not be less than 50 metres or exceed 150 metres in length will be suitably marked. Following its take-off and initial climb, the aircraft must be observed to cross the Course Datum Line and around both turning points at a height not less than the Aircraft Clearance Height.

(e) The height, defined as the Aircraft Clearance Height, shall be not less than 5 metres above the ground to the lowest point of the aircraft as measured with the aircraft in horizontal flight.

(f) Prior to take-off, the aircraft will be at rest and positioned so that the nose of the aircraft is at the Course Datum Line. The flight shall start from rest and, subsequent to take-off, the aircraft shall be flown at a height not less than the Aircraft Clearance Height on the 10 occasions it will cross the Course Datum Line as well as at the turning points. The timing of the flight will commence when the nose of the aircraft crosses the Course Datum Line. The timing of the flight shall end when the nose of the aircraft crosses the Course Datum Line at the completion of the final circuit. The elapsed time is recorded. The flight is complete when the pilot lands the aircraft and brings it to rest to the satisfaction of the Official Observers. Landings which result in damage to the aircraft shall be declared non-flights and cannot be accepted as flights for the purposes of this Competition.

(g) The total flight time for this competition is the 'elapsed time'.

(h) The aircraft must be in continuous flight over the course. The completed flight will comprise the takeoff climb, two circuits of the outer course, a third circuit which shall be a Figure-of-Eight circuit, followed by two circuits of the outer course, all combined to form the 'Marathon Course'.

4.5 Observation

(a) Every official attempt shall be observed by official observers appointed by the Royal Aero Club of the United Kingdom.

(b) The agreed course and the timing of the flight shall be conducted by its observers in accordance with the provisions of the Sporting Code of the FAI, and these Regulations and Conditions.

(c) The flight shall be observed throughout the entire flight.

(d) The timing of the flight shall commence when the nose of the aircraft crosses the Course Datum Line. It shall end when, having completed the course, the nose of the aircraft crosses the Course Datum Line.

(e) Total flight times of one hour or less will be declared official provided that the flight has been completed to the satisfaction of the Official Observers. Only then will the Official Observers submit the attempt for ratification to the Organisers.

5. APPLICATIONS FOR ENTRY

5.1 Entry forms shall be obtained from and returned to the Secretary, Human Powered Aircraft Group Committee, The Royal Aeronautical Society, 4 Hamilton Place, London W1V 0BQ, United Kingdom.

5.2 Each application and completed entry form shall contain an application for official observation and a signed statement that the entrant and crew members are willing to undertake medical tests for drugs.

5.3 The entrant shall undertake to abide by the Regulations and Conditions relating to this competition and to the official observation of all competition flights by the entrant.

5.4 Each entrant shall include a declaration of all arrangements made for the sponsorship of the competitor where applicable. All subsequent arrangements or changes to those arrangements for sponsorship shall be notified to the Organisers without delay and before any competition flights take place.

5.5 The entrant shall be responsible for all expenses incurred in connection with transportation of the competition aircraft to the United Kingdom and to the competition site. The entrant will be responsible for all expenses relating to storage of the aircraft before and after any competition flights. The entrant shall undertake to defray all expenses incurred in the official observation of all competition flights.

5.6 The entrance fee for non-sponsored entrants shall be 100 pounds or equivalent, made payable to The Royal Aeronautical Society at the time of entry, and is non-returnable. The entrance fee for sponsored entrants will be advised to the sponsoring organisation for payment.

5.7 Final notice of the proposed time and date of any attempt requiring official observation shall be sent in writing to the Organisers and the Royal Aero Club at least thirty days before the proposed date. This time is required to arrange for official observation. Applications will be considered in order of receipt.

5.8 The final notice of an official attempt must be accompanied by a further sum of 100 pounds, or equivalent, payable as above.

5.9 A FAI Sporting Licence will be required by all pilots taking part in this competition. Application Forms may be obtained from National Aero Clubs, including the Royal Aero Club, in the United Kingdom or from the RAeS for nationals of countries not represented by the FAI.

6. GENERAL CONDITIONS

6.1 Insurance

Such insurance must be approved by the Organisers and evidence that the entrant has taken out, on behalf of himself, pilots and crew, representatives and employees, and his sponsors.. if any, adequate insurance (to a combined limit of at least 750,000 pounds and including insurance against third party liability), and indemnify The Royal Aeronautical Society and the Royal Aero Club of the United Kingdom against any claim of any kind whatsoever arising out of or in connection with the entrants participation in the competition. Such insurance should also cover the Society and its members and employees. Evidence that such Insurance has been effected must be produced to the Official Observers and the Organisers, before every attempt, and each entry shall include such an indemnity.

6.2 Sponsorship

The sponsorship of competitors by industrial, commercial or governmental agencies is permitted. No advertising material may be carried on the aircraft or displayed in connection with the competition except as first agreed between the Organisers and the Sponsor(s).

6.3 Jurisdiction

In any question or dispute regarding the acceptance of entrants, eligibility of entrants, pilot and crew, the aircraft, the course, sponsorship or official attempts, the decision of the organisers shall be final. The award of the prize shall require the approval of the Society's Council

6.4 Ratification of Claim.

Any entrant establishing an official time of One hour or less is eligible to be considered by the 'Organisers' for ratification as the winner of the competition. For this purpose the entrant shall supply satisfactory documentary and other evidence, such as video film, in support of the claim of compliance with these Regulations and Conditions. The entrant is responsible for seeing that this evidence includes the Official Observers signed reports and other information as required under the provisions of the FAI Sporting Code.

6.5 Interpretation of Regulations and Conditions.

The interpretation of these Regulations and Conditions or any of the Regulations and Conditions hereafter issued, shall rest with the Society's Council on the recommendation of the Organisers. The entrant shall be solely responsible to the Official Observers for due observance of these Regulations and Conditions and shall be the person with whom the Official Observers will deal in respect of any question arising out of this competition.

The Kremer International Marathon Competition Course

