# Human Powered Flight

Regulations and Conditions for

# THE KREMER INTERNATIONAL SEAPLANE COMPETITION

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### THE ROYAL AERONAUTICAL SOCIETY

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#### THE ROYAL AERONAUTICAL SOCIETY

#### Human Powered Flight

A prize of 50,000 pounds is offered for the first successful controlled flight of a human powered seaplane or amphibian under the following Regulations and Conditions laid down by the Human Powered Flight Group Committee of the Royal Aeronautical Society. This is contingent on the Kremer International Marathon Competition not having been won. 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 11 of the Sporting Code of the Federation Aeronautique Internationale (FAI).

The competition is to be known as the KREMER INTERNATIONAL SEAPLANE COMPETITION. On behalf of the Society's Council, The Human Powered Flight 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 human powered seaplane flight over an approved course within the United Kingdom and within a specified time of six minutes or less. A prize of 50,000 pounds will be awarded to the first person who, to the satisfaction of the Council, fulfils either these Regulations and Conditions or the Regulations and Conditions of the KREMER INTERNATIONAL MARATHON COMPETITION

#### 2. PRIZE AND TROPHY

In addition to the 50,000 pound prize a trophy will be presented to the first winner of either of these two competitions. The trophy will be engraved with the winner's 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 powered 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 part of the aircraft shall be jettisoned during any part of the flight, including the take-off and landing.

(e) The aircraft shall be controlled solely by the airborne crew of the aircraft.

(f) Artificial and external assistance to the aircraft and the crew by any means will invalidate all flights in this competition.

#### 4.2 Crew

(a) The crew shall be those in the aircraft during the take-off 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) Only the crew may approach the aircraft or touch the aircraft prior to and during any competition flight. However one handler shall be permitted to steady the aircraft before take off and behind the Course Datum Line and shall be observed not to assist that take off in any way.

(d) No drugs or stimulants, including oxygen, shall be permitted. In this respect each crew member must be prepared to take such tests as approved by WADA.

#### 4.3 Water and Weather Conditions.

(a) There shall be no restriction on operating conditions, other than the need for adequate visual observation and unrestricted observation for the Official Observers.

(b) The area of water for the competition will be made clear of any objects which could impart significant disturbance or deflection of the air.

#### 4.4 The Course

(a) The Course (see diagram) shall be a Figure of Eight over water embracing two turning points which will be not less than half a statute mile (805 metres) apart, and clearly marked by an anchored buoy or similar device. The Flight includes the take off and landing runs and the completed flight includes both the take off and 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 90 metres, will be suitably marked. Following its take off, the aircraft must be observed to fly around the turning points and must be observed to make four subsequent crossings of the Course Datum Line at a height not less than the Aircraft Clearance Height. The first crossing of the Course Datum Line may be on the surface before take-off.

(e) The height, defined as the Aircraft Clearance Height, shall be not less than 5 metres above the mean water level to the lowest part of the aircraft in horizontal flight.

(f) The Figure of Eight course shall be flown twice in one continuous flight, commencing from rest at take-off, climb, two circuits of Figure of Eight, descent and landing to rest, all combined to form the Seaplane Course.

(g) Prior to the start of take-off the aircraft will be positioned so that the nose of the aircraft does not cross the Course Datum Line nor is more that 2 metres behind it. The landing to rest shall be on water. The take-off and climb to above the Aircraft Clearance Height as well as the descent and landing from an altitude not less than the Aircraft Clearance Height are at the discretion of the pilot.

#### 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) Prior to take off, the aircraft will be positioned so that the nose of the aircraft does not cross the Course Datum Line nor is more than 2 metres behind it. Take off will start on an audible signal from the Official Observers. The timing of the Course shall commence when the nose of the aircraft crosses the Course Datum Line. The timing of the Course will 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 will be completed when the pilot, to the satisfaction of the Official Observers, lands on water and brings the aircraft to rest. The aircraft shall be serviceable after the flight. If there is any doubt, a take off shall be demonstrated within one hour.

(d) When crossing the Course Datum Line. except on the first occasion, the aircraft shall be observed to fly at a height greater than the Aircraft Clearance Height.

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

(f) The total Course time for the competition is the Elapsed Time.

(g) Total Course times of six minutes or less will be declared official provided 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 Flight Group Committee, The Royal Aeronautical Society, 4 Hamilton Place, London W1J 7BQ, United Kingdom.

5.2 Each application and completed entry form shall contain an application for official observation and a signed statement that the crew member(s) 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.

5.4 Each entry 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 Royal Aero Club 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 6 minutes 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.

#### 6.6 Termination

The Royal Aeronautical Society reserve the right to cancel the Competition at any time, in particular if the Kremer International Marathon Competition is won.

# The Kremer Seaplane Competition Course

