# F.A.I

## Fédération Aéronautique Internationale FAI – The World Air Sports Federation

## HISTORY

## FAI – The World Air Sports Federation



The Fédération Aéronautique Internationale, FAI - The World Air Sports Federation, was founded in 1905. It is a non-governmental and non-profit making international organization with the basic aim of furthering aeronautical and astronautical activities worldwide, ratifying world records and coordinating the organization of international competitions. After a century of steady growth, FAI is now an organization of some 100 member countries, forming a strong network linking all those who participate in air sports worldwide

At the start of the 20th Century, the pioneering flights of pilots such as Clement Ader, the Wright Brothers and Santos-Dumont, the proliferation of aeronautical competitions, and increasingly rapid technological advances marked the real birth of the modern aviation era.

A small group of visionary men recognized the need for an international federation to coordinate and give direction to the rapidly growing aeronautical activity.

On 10 June 1905, Count Henry de la Vaulx, Vice-President of the Aero-Club de France, Major Moedebeck of the German Airship League and Fernand Jacobs, President of the Aero-Club of Belgium, gave a presentation to the Olympic Congress of Brussels on their proposal for a « Fédération Aéronautique Internationale ». The Delegates received the idea warmly, and to demonstrate its support, the Olympic Congress adopted the following resolution: "This Congress, recognizing the special importance of aeronautics, expresses the desire that in each country, there be created an Association for regulating the sport of flying and thereafter there be formed a Universal Air Sports Federation to regulate the various aviation meetings and advance the science and sport of Aeronautics". On 12 October 1905, an international aeronautical conference was convened in Paris. After two days of debate, the representatives of Belgium, France, Germany, Great Britain, Italy, Spain, Switzerland and the United States adopted the entire package of proposed Statutes. The Fédération Aéronautique Internationale was founded on 14 October 1905. From its inception, the FAI defined its principal aims as being to "methodically catalogue the best performances achieved, so that they be known to everybody; to identify their distinguishing features so as to permit comparisons to be made; and to verify evidence and thus ensure that record-holders have undisputed claims to their titles."

2

A century later, in spite of the emergence of new technologies and of several air sport disciplines, the objectives of the FAI as expressed in its Statutes have essentially remained the same. Today, FAI's Statutes describe its aims and objectives as follows:

□ To make evident the essentially international spirit of aeronautics as a powerful instrument for bringing all people closer in mutual understanding and friendship regardless of political, racial or religious considerations, thereby helping to create international good will and thus build a better and more peaceful world.

□ To promote physical and moral qualities, technical knowledge and skill as basic to astronautical activities and air sports.

□ To bring together the air sports men and women of the world in international competition.

□ To educate young people through sport in the spirit of mutual understanding and friendship.

□ To co-ordinate it's Members' separate efforts to further aeronautics and astronautics throughout the world.

□ To ensure adequate access to airspace for all who wish to fly.

□ To provide a forum for the exchange of information and discussion of mutual problems with other elements of civil aeronautics.

#### AERO CLUB OF CANADA

The FAI consists of member countries and each country is limited to one member. If there is more than one air sport active in a country they must form a single organization to represent them at FAI. The Aero Club of Canada (ACC) is the member for Canada. Its members are the national associations of each activity.

For aeromodelling MAAC is our member in the ACC. Other members are the Soaring Association of Canada, Hang Gliding and Paragliding Assoc of Canada, Canadian Sport Parachuting Assoc. of Canada, Canadian Sport Aeroplane Assoc., and Canadian Balloon Assoc.

The ACC sends a delegate to the FAI General Conference each fall to represent the interests of Canada.

The FAI organizes World Championships for Aeromodelling every two years. Eligibility to compete is governed by the FAI as a whole but the rules for each event are established by the FAI Aeromodelling Commission (CIAM). MAAC sends a delegate to the Plenary Session of the CIAM each spring to represent the Canadian Aeromodellers. Rule changes in any event can only be made by CIAM.

The CIAM has established rules for about 40 classes and organizes World Championships in about half of them.

#### FAI EVENTS:

#### WORLD CHAMPIONSHIP EVENTS IN BOLD TYPE

#### F1:FREE FLIGHT

F1A: NORDIC GLIDER A2 F1C: FREE FLIGHT POWER

F1B: WAKEFIELD RUBBER

F1D: INDOOR RUBBER POWERED\*

F1E:	SLOPE GLIDERS	F1F:	HELICOPTERS	
F1G:	COUPE D'HIVER	F1H:	A1 GLIDERS	
F1J:	POWER FOR JUNIORS*	F1K:	CO <sub>2</sub> POWERED	
F1L:	INDOOR EZB	F1M:	INDOOR BEGINNER	
F1N:	INDOOR HAND LAUNCH	F1P:	SIMPLIFIED POWER	
	GLIDER			
	F2: CONTROL LINE			

F2A: SPEED\*

F2B: STUNT\*

F2D: COMBAT\*

- F2C: TEAM RACE\*
- F2E: DIESEL COMBAT
- F3: RADIO CONTROL
- F3A:PATTERNF3B:MULTITASK GLIDERSF3C:HELICOPTERF3D:PYLON RACERSF3F:SLOPE GLIDERSF3H:CROSS COUNTRY GLIDERSF3I:AERO TOW GLIDERSF3J:THERMAL GLIDERS\*
- F3K: HAND LAUNCH GLIDERS

#### F4: SCALE

F4B:CONTROL LINE\*F4C:RADIO CONTROLLED\*F4D:INDOOR RUBBERF4E:INDOOR CO2

#### F5: RADIO CONTROLLED ELECTRIC

F5A:	PATTERN	F5B:	MOTOR GLIDERS*
F5C:	HELICOPTER	F5D:	PYLON RACERS*
F5E:	SOLAR POWERED	F5F:	10 CELL GLIDERS
F5G:	BIG GLIDERS		

5

\* World Championships in even years, others in odd years.

## F1A FREE FLIGHT GLIDERS

## THE AIRPLANE

MINIMUM WEIGHT: 410g, SURFACE AREA 32 – 34 dm<sup>2</sup>

In practice these are extremely clean high aspect ratio airplanes, usually made from high tech materials. They are usually equipped with variable rudder deflection and tailplane incidence so that high energy launches may be made. The model will bunt at the top of a zoom in such a launch. Since the elimination of the builder of the model rule complete airplanes are available from eastern bloc countries.

## THE CONTEST

The object of the contest is duration after release from the towline. The models are hand towed by a 50m line from a flight line perpendicular to the wind direction. In practice a thermal must be found to achieve maximum duration. They are allowed to circle on tow as long as they want in search of thermals. Seven flights are flown in rounds between 30 and 90 minutes long. Maximum duration for the first round is 4 min. And for subsequent rounds is 3 min. If at the end of the rounds more than one contestant has a perfect score, a flyoff is necessary. The maximum time of each flight in the flyoff is increased by two minutes starting at 5 min. Until a winner is declared.

#### F3A RADIO CONTROLLED AEROBATIC POWER MODEL AIRCRAFT

#### THE AIRPLANE

THE MODEL MUST FIT IN A 2m BY 2m BOX. THERE IS NO LIMIT ON MOTOR SIZE. THE WEIGHT LIMIT IS 5kg (11 lbs). ELECTRIC MODELS ARE LIMITED TO 42 VOLTS. THEY ARE WEIGHED WITHOUT THE BATTERIES.

In practice they are clean monoplanes with about 120 – 150 four strokes. They usually have a hump backed appearance because the canopy is well forward on the fuselage. This is to give area up front to improve knife edged flight. They usually have long tails and short wings. The short wings give good roll rates and the long tail moments give smoothness.

#### THE CONTEST

The contest consists of rounds during which various aerobatic manouvers are performed. The manouvers are scored by a panel of judges. In world championships the judges must come from different countries and be approved by fai.

The manouvers consist of some preset schedules which may be practiced before the contest and some schedules which are only revealed to the contestant at the time of the contest with no opportunity for practice. Details of the schedules may be found on the fai web site. Www.fai.org

The most important criterion for the judges is accuracy. Consecutive loops must be the same size and the intersection of figure eights must be in the same place. The next criterion is smoothness. Manouvers must flow cleanly with no jiggling or corrections during the manouver.

#### RADIO CONTROLLED ELECTRIC POWERED MOTOR GLIDERS

## THE AIRPLANE

MINIMUM WEIGHT: 2 kg, MAXIMUM BATTERY WEIGHT:1100g, MAXIMUM NUMBER OF CELLS: 30, MAXIMUM SURFACE LOADING 75g/dm<sup>2</sup> NO RESTRICTION ON MODEL SIZE OR MOTOR

IN PRACTICE THESE ARE EXTREMELY CLEAN AIRPLANES, USUALLY MOULDED IN FIBREGLASS, AROUND 2m SPAN WITH VERY POWERFUL DIRECT DRIVE BRUSHLESS MOTORS TURNING FOLDING PROPS. AILERON CROW IS USUALLY USED FOR GLIDE CONTROL FOR SPOT LANDINGS.

#### THE CONTEST

THE CONTEST IS SPLIT INTO TWO PARTS, DISTANCE AND DURATION WHICH MUST BE ACCOMPLISHED IN A SINGLE FLIGHT. THE DISTANCE PART IS FIRST, WHERE LAPS OF A 150M COURSE ARE FLOWN. THE OBJECT IS TO MAKE THE MAXIMUM NUMBER OF LAPS IN 200 SECS. LAPS ARE NOT COUNTED WHEN THE MOTOR IS RUNNING. THE DURATION TASK BEGINS IMMEDIATELY AFTER THE DISTANCE WITHOUT LANDING. THE DURATION TASK IS A TEN MIN. MAX WITH A SPOT LANDING. TIME IS DEDUCTED WHEN THE MOTOR IS RUNNING.

IN PRACTICE THE MODELS ARE LAUNCHED OUTSIDE THE COURSE, CLIMB TO GREAT HEIGHT IN 20 -30 SEC AND THEN ENTER THE COURSE FOR LAPS. IF SUFFICIENT HEIGHT IS AVAILABLE THE MODEL CAN BE ZOOMED INTO THE DURATION TASK WITHOUT RUNNING THE MOTOR AGAIN TO AVOID THE PENALTIES FOR MOTOR RUN TIME

#### F5D RADIO CONTROLLED ELECTRIC POWERED PYLON RACING MODEL AIRCRAFT

### THE AIRPLANE

MAXIMUM WEIGHT: 1250 g, MAXIMUM WEIGHT OF BATTERY PACK: 425g NO RESTRICTION ON MODEL SIZE OR MOTOR. NO LANDING GEAR IS REQUIRED

IN PRACTICE THESE ARE EXTREMELY CLEAN MODELS, USUALLY MOULDED IN FIBREGLASS, POWERED BY VERY FAST DIRECT DRIVE BRUSHLESS MOTORS. SPANS ARE LESS THAN 1m.

## THE CONTEST

THE COURSE IS TRIANGULAR IN SHAPE 400m LONG. A RACE IS TEN LAPS. UP TO FOUR MODELS ARE FLOWN IN EACH HEAT. SCORING IS AGAINST THE CLOCK. THE LOWEST TIME WINS. IF FOUR OR MORE ROUNDS ARE FLOWN THE WORST SCORE CAN BE DROPPED. IF NINE OR MORE ROUNDS ARE FLOWN THE WORST TWO SCORES ARE DROPPED.