



# World Air Games Newsletter 01 2007/09



***This Newsletter will bring, whenever necessary, the latest information about the model events that will take place during the 2009 World Air Games, the competitors selection process & contests and the test events that are due to take place in 2008 at the same location.***

## World Air Games, the new concept

World Air Games are an Olympic style event simultaneously involving all Air Sports. After the two initial events that took place in Turkey (1997) and Spain (2001) the format has been changed into a more compact, Media and spectators friendly format over one week of intense competition and on a shared time basis at the same location (and an ancillary site nearby for a few events with special requirements, such as Hang Gliding or Indoor Model Aerobatics).

The **Fédération Aéronautique Internationale, (FAI) – The World Air Sports Federation**, officially launched the opening of the bidding process for its marquee event, the World Air Games 2009, in October, 2006.

On 26 October 2006, at the 100th FAI General Conference in Santiago de Chile the FAI President, Pierre Portmann, officially opened the bidding process for the World Air Games 2009, open to all cities, regions, FAI member associations, private event organisers and corporate partners.

The World Air Games is the biggest gathering of air sports in the world and brings together the World Champions and top competitors in ten different air sport disciplines. The event showcases a week of tremendous competition and fills the sky with excitement and thrills for the public. Alongside the competition are plenty of opportunities for air shows, on-site demonstrations, and interactive activities for spectators.

The FAI, in cooperation with TSE Consulting, a specialised sports consultancy, took the initiative to modernise their World Air Games concept to make it more attractive for potential hosts, athletes and spectators. In addition, the FAI and its broadcasting partners have established a worldwide broadcasting network to air the event.

The bidding process has been re-structured into two simple phases. Interested parties had until December 31st midnight, to submit the Phase 1 Application Form, which demonstrate their interest in hosting the World Air Games in 2009. An FAI Selection Committee then selected the Organiser at a high-profile event in Lausanne, the Olympic Capital, in June 1st, 2007.

Turin (Italy) has been chosen to host the World Air Games 2009. The decision was announced by the

President of FAI, Pierre Portmann, at the Olympic Museum, Lausanne.

The FAI Selection Committee reached its decision by a majority vote cast after the final presentations of the three remaining bids on the selected short-list Moscow (Russia), Odense (Denmark), and Turin (Italy).

Turin were successful winners after a bidding process which was launched in October 2006. The bidding process consisted of two short-listings, based on a candidate questionnaire, the submission of a bid book, evaluation visits and final presentations that took place at the Olympic Museum in Lausanne Switzerland.

Commenting on the decision, the President of the FAI, Mr. Pierre Portmann, said: "Turin has been chosen today by the FAI Selection Committee and they are a great choice. There are, however, no losers today, as all three bids made wonderful presentations and would make successful hosts for the World Air Games. Each bid had tremendous backing from their National Air Sport Federations and their governments. We commend them all on their efforts and hope that each bid continues their interest in air sport competitions".

Commenting on their successful bid, Mr. Angelo Moriondo, President of the Turin 2009 Bid Committee, said: "We are both pleased and honoured to be awarded the World Air Games 2009. Building on our past experience, we are committed to making the Games a step forward for all air sports. We invite all our friends in the air sports community to join us in 2009. Now the real work starts !"

The Games are planned to take place during the period of 7th to 13th June 2009. The World Air Games is the biggest gathering of air sports in the world and brings together the World Champions and top competitors in ten different air sport disciplines. The event showcases a week of tremendous competition and fills the sky with excitement and thrills for the public. Alongside the competition are plenty of opportunities for air shows, on-site demonstrations, and interactive activities for spectators.

## The model events

3 model competitions will take place at the Turin World Air Games (WAG). Because it was long ago recognised that none of the CIAM World Championship classes had the potential to attract spectators and Media, work had begun already in 2000 to introduce new competition classes with a better potential. The first such class - **Artistic Aerobatics** - soon proved its value when flown at FAI World Grand Prix, sharing time with full-size aerobatics. Then the growing popularity of indoor flying was the deciding factor for **AeroMusicals** that immediately caught on. Two years later a glider class, **Hand Thrown Gliders**, evolved from the popular F3K class with a different format to make it, not only challenging for the pilots, but spectacular for spectators as well.

To access these prestigious World Air Games competitions, modellers the World over will have to qualify through selection contests run between October, 2007 and November 2008.

Since the March, 2007 CIAM Plenary meeting, a Selection Committee has been at work to define how WAG competitors would be selected. The mission was to present in Turin at WAG 2009 the absolute World's top model competitors.

Early on, it was decided to allow pilots from all parts of the World to compete at WAG. To this end, the World is divided into 6 Continental Regions: Africa, North America, South America, Asia, Europe and Oceania. Provided there are Selection Contests held, there will be, for each competition class, at least one representative from that Region who will be invited to compete in Turin in front of thousands of spectators and benefit from the live worldwide TV transmissions.

Here are the first official decisions that were sent by **CIAM**, the FAI Modelling Commission to all National Air Sports Governing bodies by the end of June, 2007:

“Three exciting Aeromodelling events will be part of the Games:

**Hand Thrown Gliders (FAI Class F6D)** are 1.5 metre radio controlled gliders thrown by hand to incredible altitude. Competitors go through a progressive elimination process until the last two remaining pilots compete for the title.

**AeroMusicals (FAI Class F6B)** is an indoor aerobatics event in which competitors fly their lightweight airplanes to music and produce their personally designed routines allying grace and harmony with incredible mastery.

**Artistic Aerobatics (FAI Class F6A/C)** is an outdoor aerobatics competition where airplanes and helicopters battle for the best and most impressive flights to music.

The top competitors from the whole World will be selected through National and International compe-

titions beginning October, 2007. Selection will be independently made by Continent to ensure every part of the World is represented. The final list of competitors will be decided at the December 2008 FAI/CIAM Bureau meeting.

Selection will be made by continent (Africa, North America, South America, Asia, Europe & Oceania) with an equal number of places reserved for each continent, the remaining places being decided on a Worldwide basis according to points gained by competitors at selection competitions’.

Selection competitions (which may be organised by any club worldwide) shall follow these guidelines:

### A) International contests

They shall be regularly registered in the FAI Contest Calendar (submitted before Nov. 15th) as WAG Selection competitions with an international Jury according to CIAM rules (2 different nationalities, etc.).

The Jury shall report to the organiser's NAC and to the CIAM within 7 days and include the full detailed results with competitors name, nationality & valid FAI licence number.

### B) National contests

Local contests involving only competitors from the organiser's nation. Such contests shall be approved by the National Governing Body (either the NAC direct or the aeromodelling governing body that has been delegated by the NAC). Such contests shall be on the National contest calendar and registered to CIAM as WAG Selection competition (CIAM may also maintain such a freely-available list separate or appended to the International contest calendar). Such contests shall be watched by at least one Official Observer delegated/approved by his NAC (or National Governing Body) who shall attest the competition has been fair and run according to national and FAI rules. This Observer shall report within 7 days to his NAC and to CIAM and include the full detailed results with competitors names, nationality & valid National or FAI licence number.

In addition, results of National or International aerobatics selection contests (AeroMusicals & Artistic Aerobatics) shall include the judges names, full credentials and copy of the score sheets.

WAG Selection contests may preferably be run using as local rules the proposed, amended F6 rules that have been sent to CIAM for publication in the 2008 CIAM Plenary Agenda for use at WAG 2009. A special entry form will be posted on FAI website and contest organisers' websites as well as other websites whenever selection contests will be announced.

*Later on, details of the selection system have been defined and approved:*

Points gained by competitors at selection contests will be computed as follows:

$$\text{points} = (100 * (\text{square root of } n) / p)$$

where  $n$  = number of competitors

$p$  = competitor's ranking in that contest

Then :

#### **Hand Thrown Gliders (F6D):**

Final continental ranking from the best 2 selection contests.

Whatever the number of competitors actually flying at any contest, maximum value of  $n = 30$

#### **Artistic Aerobatics (F6A):**

Final continental ranking from the best 3 selection contests.

Any international selection contest will count 1.5 x

Whatever the number of competitors actually flying at any contest, maximum value of  $n = 15$

#### **AeroMusicals (F6B):**

Final continental ranking from the best 3 selection contests.

Any international selection contest will count 1.5 x

Whatever the number of competitors actually flying at any contest, maximum value of  $n = 30$

**Note: To be on the 2008 International Contest Calendar, international selection contests must be registered to the FAI Office, through your National Governing Body, before November 15, 2007. If not, they still can be run, provided they are registered a minimum of 3 months in advance. They may not appear on the FAI Contest Calendar but will still be on the WAG Selection Contests Calendar as well as on this Newsletter.**

## **Turin, Italy promises a week of competition and excitement at a level never seen before**

The Local Organising Committee (LOC) is basically made of two partners: The **Italian Aero Club**, through its member clubs, is responsible of the sport events as such while a professional events organiser takes care of all practical matters, advertising, communication & Media, etc. And with their experience of the very successful 2006 Winter Olympic Games, they know how to do it !

Here is an extract from the Organiser's dossier:

*There will be three Competition Venues:*

- *Aeroclub Torino (Microlights, Helicopters, Parachuting, Experimental Aircraft, Gliding, Aerobatics),*
- *Avigliana lakes (Hang gliding, Paragliding)*
- *Mondovì (Hot air ballooning).*

*Two other locations will also be used:*

- *Turin Palasport (indoor Aeromodelling)*
- *downtown Turin (night-time as balloon departures)*

*The Opening Ceremony will take place in the beautiful squares in the city centre. The ticketing strategy includes a balanced mix of paid and free admission, to guarantee the largest possible number of spectators.*

*Stands seating up to 4,000 paid spectators will be set up at the competition venues, with two categories of seats, and weekly tickets.*

### **MEDIA CENTRES AND PRESS SERVICES**

*The experience gained during the Winter Olympics, and good relations with all the main international operators will pave the way for the efficient management of the Media, starting from the correct identification and involvement of all the potential communications managers, from the aeronautical and sports field generally, to the major periodicals and dailies, the radio and the large Italian and global television networks.*

*Painstaking preparation of the invitation and pre-accreditation process will make it possible to involve a broad universe of journalists, both to follow the competition and to spread the values of air sports. The pre-accreditation stage will be accompanied from 2007 by a launch and "teasing" stage, with press conferences related to the main event and to collateral events, and meetings and educational events organised with the main editors, local news editors, senior editors and managing editors of the major papers, to involve them and encourage them to write about and attend the 2009 World Air Games.*

*The Main Press Centre will be set up at Aeroclub Torino two months earlier, to organise accreditation, reception (with welcome-bags) and assistance for Ita-*

lian and foreign press, radio, television and Internet journalists.

The Main Press Centre will provide services and support in the main languages of the participating nations, and will cater for the press, radio, broadcasting and the web, and their respective technical requirements.

It will include a suitable number of work stations with broadband connections to simplify the transmission of photographs in real time, a technical secretariat, screens to follow all the events live, boards with results and statistics, and all the necessary information to enable the media to work. The Main Press Centre will also include the Press Room for the general press conferences and those for the competitions held at the Airfield.

The Main Press Centre will be managed jointly with FAI communications managers, and the staff will include a Chief Press Officer, an assistant Press Officer for the general organisation and an assistant Press Officer for relations with the foreign media.

There will also be ten professional journalists, two for each media type plus two for general back-up, assisted by juniors, volunteers and translators (no less than 20 people).

The Main Press Centre will be supported by the Broadcasting Centre which will be dedicated entirely to the television networks, and it will be responsible for the management, organisation and editing of video images of the entire event. Based on the needs of the accredited journalists, of FAI and of the individual federations, it will be possible to activate satellite cover for Intranet transmissions of data and images of all parts of the competition venues.

There will also be Press Centres in the other two competition venues, similarly equipped and each managed by members of the press office.

Mixed zones will be identified at the competition venues for live post-performance interviews, as well as Press rooms for post-event press conferences.

A logistics and catering service will be organised at the various competitions.

A secure area (with closed lockers) will be set aside for the technical gear of the operators and journalists.

## **OPENING CEREMONY**

The opportunities offered by a big town like Turin, including the many trained volunteers and the city architecture, can be exploited during the opening ceremony, to communicate the strong values that lie behind air sports immedia-

tely and convincingly, and to create the right atmosphere to attract large crowds to the events.

The ceremony will be developed around 6 conceptual pillars: 3 key principles and 3 inspiring concepts that will be expressed in a spectacular performance.

The 3 key principles are:

Spectacle, like the beauty of the aerial evolutions combined with “breath-taking” presentations

Visibility, making it easy to watch the ceremony, perhaps just by looking up to the sky, involving everyone without distinction

Participation, to enter the public’s hearts and to involve thousands of people in the great event.

The 3 inspiring concepts are:

A passion for flight, which accompanies the history of mankind, from the Greek myths to the conquest of other planets, a continuous cutting-edge challenge to technology and to man’s capabilities

The emotion of flight, which involves all the inhabitants of the earth from childhood, who are fascinated by this victory over the air, and inebriated by the sense of total freedom that flying gives;

Flying champions, the true protagonists of the Games, the athletes who pit themselves with discipline and respect first against themselves and against the laws of physics, and then against the other contestants.

Combining these six pillars means imagining a parade in the open air, not indoors, but right through the city centre, a series of images that evolve like an exciting film, all of which will capture spectators’ attention, creating a single plot.

The parade will follow an “L” about 3 kilometres long, starting from Piazza Vittorio (the largest completely open square in Europe) and concluding in Piazza San Carlo (Turin’s historical “drawing-room”), along Via Po, around Piazza Castello with the Royal Palace, and down Via Roma.

The acrobats, hot air balloons, special effects and scenery will ensure that the itinerant ceremony starts off with a narrative that combines history and emotions with one’s head in the air, entertainment and technology, reproducing all air disciplines.

The parade will end with all the athletes, led by FAI, divided by event and not by country, all wearing their competition outfits, who will be greeted and acclaimed by thousands of people along the route, like the heroes of the Roman Empire, with ribbons, confetti and music that will rain down on them, a tribute from the skies that they will be challenging.

The choreographic, spectacular part of the ceremony will conclude when the parade reaches a stage suspended in mid air at the centre of Piazza San Carlo, surrounded on every side by spectators,

and the institutional, formal opening of the World Air Games 2009 will begin, accompanied by pictures of the various events projected on giant screens.

## CLOSING CEREMONY

The entire last day of the WAG will be dedicated to the finals of the various specialities.

The end of the competitions will be marked by a display over Aeritalia by the Frece Tricolore, the Aerobatic Team of the Italian Air Force, which will offer a final tribute to all participants.

At 9 pm that evening, there will be a farewell from Turin in front of the Royal Palace, with a setting inspired by flight, where the first three contestants in each category will be presented on a large, long wing-shaped stage, followed by music and films of the events. The FAI and Italian authorities will formally close the Games, and fireworks and lights will fill the sky, before celebrations continue with the crowds in the streets of the city.

## ADDITIONAL ACTIVITIES

The strength of a region, its resources and its population must come together to celebrate the World Air Games 2009 and participants.

**1. MAIN VENUE (AERITALIA AIRPORT)** The flight show area will be set up at the Aeritalia airfield, the Main Venue, where every day all types of spectators (pilots, fans, families, young people, etc.) will be able to satisfy their desire to fly, with simulators, meetings with the athletes, technical tests, and to learn about the materials, machines and history. An AIR VILLAGE will also be created, where there will be restaurants, cafes, and stands selling local products, all surrounding a stage where musical and other entertainments will be organised every evening for local and foreign visitors. An Air Music Festival will be held at the AIR VILLAGE, with all forms of musical expression inspired by flight, by air, by space, etc., a spectacular happening with choreography inspired by the same theme.

**2. DOWNTOWN** The city itself will be both a setting and a protagonist, thanks also to its Museums which have promised to organise exhibitions and displays

linked to the theme of the Games: International Cinema Museum which will programme a series of films about flying Bolaffi Philatelic Centre which will exhibit a vast collection of historical stamps Modern Art Gallery that will offer an exhibition of how flight has been depicted in the figurative arts of the 20th century.

## WHITE NIGHT

We will organise, together with the Torino Municipality, a "white night" to the WAG, with animation, music and entertainment in various parts of the city centre in honour of the guests and spectators from all over Italy and the rest of the world, and to mark the gas balloon race which will start at night. The race should set off from the riverside Valentino park, in the heart of the city, from where the first Italian regular flight took off, and would be the focal point of the celebrations. The balloons will set off through the night, saluted and accompanied by light effects in the night sky. We must underline that similar events organised in the past have attracted crowds of up to 500,000 people.

## TEST EVENTS

Test events to prepare ourselves to the World Air Games will be organised during 2007 and 2008. They will include regional and national competitions for sports in which the Aeroclub Torino has less concrete experience.

The main goals of the Test Events will be;

- To verify our organisation: Logistics, Transport, Medical services, Accommodation, Protocol, Marketing, Volunteers, Ceremonies, etc.
- The involvement of the public, the Sponsors on board and potential sponsors still to be formalised, through press and television communications'.

## The model competitions

As can be seen from the documents above, the model events will take place at two different locations: **Artistic Aerobatics** and **Hand Thrown Gliders** will take place at Aeritalia Airport, which is Turin's historical airport, now used exclusively for sport flying and within easy reach from the city

Torino Aeritalia Airport showing the initially planned setup. Grandstands and giant video screens should enable spectators to follow every detail of the competitions that will alternate every day at the same location.



**AeroMusicals** should take place in the Palaruffini Sports Arena with seats for 4,000 spectators.



## The WAG competition classes

Only classes from Volume 6 of the Sporting Code may be used for World Air Games, as they have been specially designed to be attractive to spectators.

Because FAI WAG rules state that WAG competition rules shall be frozen no later than 8 months before the event and because decisions for model events are made at CIAM Plenary Meeting in March, any change to the present rules have to be decided and approved in March, 2008 and these rules will be enforced at WAG 2009. For this reason, it is highly recommended that selection contests taking place during 2008 and the last part of 2007 make already use of the amended rules as they have been submitted to CIAM, so that selection take place under similar rules to the actual WAG competitions. For convenience, a draft of the rules including the proposed amendments has been made. Here it is:

### RADIO CONTROL freestyle AEROBATICS TO MUSIC

#### 6.1. CLASS F6A – ARTISTIC AEROBATICS

##### 6.1.1 Definitions of an Artistic Aerobatics Aircraft

A model airplane that is aerodynamically manoeuvred by control surface(s) in attitude, direction and altitude by a pilot on the ground using radio control, or a helicopter.

An R/C helicopter is a heavier-than-air model aircraft that derives all of its lift and horizontal propulsion from a power driven rotor system(s) rotating about a nominally vertical axis (or axes). Fixed horizontal supporting surfaces up to 4 percent of the swept area of the lifting rotor(s) are permitted. A fixed or controllable horizontal stabiliser of up to 2% of the swept area of the lifting rotor(s) is permitted. Ground effect machines (hovercraft), convertiplanes or aircraft that hover by means of propeller slipstream(s) deflected downward are not considered to be helicopters.

##### 6.1.2 General characteristics of Radio Controlled Artistic Aerobatics Aircraft:

###### 6.1.2.1. Propeller-driven aircraft:

Maximum overall wing span: 2 m

Maximum overall length: 2 m

Maximum total weight: 5 kg without fuel

Power source limitations: any suitable power source may be utilised except those requiring solid propellants, gaseous or liquefied gaseous fuels. Electric powered aircraft are limited to a maximum of 42 Volts for the propulsion circuit.

###### 6.1.2.2. Jet-powered aircraft:

Minimum overall wing span: 1.80 m

Maximum total weight: 15 kg without fuel

Maximum nominal engine thrust: 150 N

###### 6.1.2.3. Helicopter

Maximum rotor swept area: 300 dm<sup>2</sup>

Note: The swept area of the lifting rotor cannot exceed 300 dm<sup>2</sup>. For helicopters with multiple rotors whose rotor shafts are more than one rotor diameter apart the total swept area of both rotors cannot exceed 300 dm<sup>2</sup>. For helicopters with multiple rotors whose rotor shafts are less than one rotor diameter apart the swept area of both rotors (counting the area of superposition only once) cannot exceed 300 dm<sup>2</sup>.

Maximum total weight: 6 kg without fuel

An electronic rate gyro is permitted on the yaw axis only.

All-metal main or tail rotor blades are prohibited.

###### 6.1.2.4.

Paragraph B.3.1 of Section 4b (Builder of Model) is not applicable to class F6A.

Radio equipment shall be of the open loop type (i.e. no electronic feedback from the aircraft to the ground). Auto-pilot control utilising inertia, gravity or any type of terrestrial reference is prohibited. Automatic control sequencing (pre-programming) or automatic control timing devices are prohibited. It is highly recommended to use the 2.4 GHz RC systems to improve substantially the safety of flying in front of the spectators.

Example:

Permitted:

Control rate devices that are manually switched by the pilot.

Any type of button or lever control that is initiated and terminated by the pilot.

Manually operated switches to couple control functions.

Not permitted:

Snap buttons with automatic timing mode.

Pre-programming devices to automatically perform a series of commands.

Auto-stabilisers ( "gyros" ) for automatic wing levelling.

Propeller pitch change with automatic timing mode.

Any type of voice recognition system.

Any type of learning function involving manoeuvre to manoeuvre or flight to flight analysis.

##### 6.1.3. Definition and Number of Helpers

A helper may be a Team Manager, another competitor or an officially registered helper. Each pilot is permitted one helper during the flight. Two helpers may be present during the starting of the motor(s).

The second helper may place the aircraft for take-off and retrieve the aircraft following the landing.

#### **6.1.4. Number of rounds**

6.1.4.1. The competition consists of one or several qualifying rounds leading to a final round. The starting order for the initial round is established by the Organiser according to any suitable criterion. It is suggested that the starting order be established in reverse order of the competitors skill ranking (established by any generally accepted means) so as to increase the spectators' interest from the beginning to the end of the round.

6.1.4.2. For each competitor, a qualification round consists of one Music Free Style flight. A final round consists of one Music Compulsory and one Music Free Style flights.

6.1.4.3. All pilots are entitled to fly the first qualifying round. If there is a second qualification round, it will be open to no more than the top 80 % competitors. The number of competitors accessing the second round shall be determined by the Organiser before the beginning of the competition, and preferably in the preliminary competition information bulletin, according to the number of competitors and the time available. If more than two qualification rounds are flown, the Organiser shall similarly decrease the number of pilots accessing any subsequent round.

6.1.4.4. The final round shall be open to no more than the top 5 remaining competitors. The number of competitors accessing the final round shall be determined by the Organiser before the beginning of the competition, and preferably in the preliminary competition information bulletin, according to the number of competitors and the time available.

6.1.4.5. At the Organiser's discretion, access to any following round except the last one may be split into direct qualification for most of the competitors and indirect qualification for up to three (3) additional competitors to fill up the originally planned number for that round. In this case, all pilots not directly qualified may take part in an additional round to select the last qualified competitors.

6.1.4.6. The Organiser shall set up and display for each round a timetable stating the time each competitor will be allowed to start his flight.

#### **6.1.5. Definition of an attempt**

There is an attempt when the competitor is given permission to start.

Note: If the competitor fails to take off (lift off) within the 60 seconds allowed, he must immediately make room for the next competitor.

#### **6.1.6. Number of attempts**

Each competitor is entitled one attempt for each official flight.

Note: An attempt can be repeated at the contest director's discretion only when, for any unforeseen reason outside the control of the competitor, the aircraft fails to start (e.g. there is radio interference). Similarly, in a flight that is interrupted by any circumstance beyond the control of the competitor (e.g. sudden rainfall, music broadcast malfunction, etc.), the competitor is entitled a re-fly.

#### **6.1.7. Definition of an official flight**

There is an official flight when an attempt is made, whatever the result.

Manoeuvres must be performed where they can be clearly seen by the judges.

If an aircraft is, in the opinion of the judges or the Contest Director, unsafe or being flown in an unsafe manner, they have to instruct the flight marshal who will command the pilot to land. In this case, the flight will be deemed complete.

#### **6.1.8. Marking**

##### **6.1.8.1. Judges**

All flights shall be judged by a panel of at least 3, and preferably 5, judges. The scores of all judges shall be taken into account.

The score given by each judge for each competitor shall be made public immediately at the end of each flight.

##### **6.1.8.2. Qualification and Finals flights**

Each flight may be awarded marks, in half point increments by each of the judges and for each judging criterion. Judging shall be done on:

Technique (difficulty and precision of the individual manoeuvres) ;

Artistic quality (originality, harmony & rhythm, composition and versatility of the entire flight sequence, adhesion to the music) ;

Overall appearance (use of the flight space, positioning of the manoeuvres and general impression).

Each judge may award a maximum of 30 points to each competitor. A judging guide shall define the judging criteria and their relative weights.

#### **6.1.9. Classification**

6.1.9.1. The score of a qualification or final round is the sum of the flight scores of that round.

6.1.9.2. The flight starting order at the beginning of any round after the first qualification round is in reverse order of the classification at the end of the preceding round.

6.1.9.3. The final classification is established according to the last round flown by the competitor and the classification in this round, in decreasing order from Final to initial Rounds and from highest score to the lowest.

6.1.9.4. In case of a tie, the ranking of the preceding round will prevail. If the tie remains, the sum of the scores of the last and preceding rounds will decide.

6.1.9.5. Provided this is specified in the competition announcement, the Organiser may elect to organise Airplane, Helicopter and Jet Artistic Aerobatics as a single competition with only one aircraft type or any combination of them with a common classification.

#### **6.1.10. Tasks**

##### **6.1.10.1. Music compulsory flights**

These are flights where each competitor must compose his own sequence of manoeuvres to suit a compulsory music. Any manoeuvre may be flown, provided safety is ensured. Unsafe flying, in the opinion of the judges, shall result in a zero score.

The flights shall be judged for technique (precision and difficulty of the individual manoeuvres), artistic quality (composition of the complete sequence, variety of the manoeuvres, rhythm and adherence to the music) and overall appearance as detailed in 6.1.8.2.. Excessive noise deters from the overall ap-

pearance and shall accordingly induce downgrading.

The music to be used may be chosen and prepared by the ad hoc sub-committee or the Organiser and must be available to the competitors three months in advance at the latest.

For finals, the duration of the compulsory music shall be between 100 and 140 seconds.

#### 6.1.10.2. Music free-style flights

These are flights where each competitor must compose his own sequence of manoeuvres to suit a music of his own choice. Any manoeuvre can be flown, provided safety is ensured. Unsafe flying, in the opinion of the judges, shall result in a zero score.

The flights shall be judged for technique, artistic quality and overall appearance as detailed in 6.1.8.2.. Excessive noise detracts from the overall appearance and shall accordingly induce downgrading. A judging guide may define the judging criteria and their relative weights.

The music shall be chosen by each competitor according to his own taste. The music shall be composed of alternating slow and faster tempo segments so as to enable the competitor to display the widest possible range of manoeuvres and mood impressions. The competitor must provide the Organiser with a record of the chosen music on CD, tape or any other suitable support specified by the Organiser in the original invitation document. Details of the music used (composer, interpreter, CD label, etc.) shall be supplied to the Organiser for Public Performance Rights collection purpose.

For qualification flights, the music shall be of 120 seconds duration. When several qualification rounds are scheduled, the competitor may elect flying a different music and/or manoeuvre sequence for any one of such flights.

When the finals is limited to 2 or 3 competitors, the Organiser may elect to run the previous round ( "semi-finals" ) with 240 seconds music pieces. The number of competitors entered in such semi-finals shall not exceed 5.

For finals, the music shall be of 240 seconds duration.

Music duration variations up to plus or minus 5 (five) seconds are allowed. The scored part of the flight begins at the moment the music starts and ends at the moment the music comes to an end.

#### 6.1.11. Timing procedures

6.1.11.1 It is the competitor's responsibility to check the timetable and make sure he is ready to start at the prescribed time. He may be handed out his transmitter at any time as allowed by the Transmitter Impound Steward, but no later than the prescribed starting time of the previous competitor.

6.1.11.2 Once allowed to enter the flight area and with permission from the Field Marshall, the competitor or his helper may start his engine(s). The start of the take-off roll (the moment the aircraft moves under its own power) or lift-off shall occur no later than 60 seconds after the moment permission has been given to start the engine(s).

6.1.11.3 During Music Compulsory and Music Free-Style flights, the competitor may elect to start his scored sequence (start of the music) at any time from the moment of the start of the take off roll (or lift off) until 30 seconds after this moment. He must express his choice to the Judges and timekeeper before the

beginning of his flight and signal to the Steward the moment he wants the music to start. If he fails to signal this moment, the Steward will start the music 30 seconds after the start of the take off roll (or lift off).

6.1.11.4 During Music Compulsory flights, scoring by the judges ceases, at the choice of the competitor, at landing or in flight. Whatever the choice, scoring stops at the moment the music stops.

6.1.11.5 During Music Free Style flights, scoring by the judges ceases at the moment the prescribed music duration comes to an end. At the choice of the competitor, this may occur at landing or in flight. Whatever the choice, scoring stops at the moment the music stops.

6.1.11.6 If the competitor elects ending his scored sequence while in flight, he must land his aircraft (the moment the aircraft first touches the ground on the designated landing area) within 30 seconds of the end of the scored sequence.

#### 6.1.12 Time penalties

6.1.12.1 If the competitor fails to take off within the time allowed, the flight is scored 0 (zero).

6.1.12.2 If the competitor fails to begin the scored sequence within the time allowed, the flight is scored 0 (zero).

6.1.12.3 If the competitor fails to land within the time allowed after the end of the scored sequence, the flight is scored 0 (zero).

6.1.12.4 If the freestyle music lasts less or more than the prescribed duration, the flight score shall be reduced accordingly.

#### 6.1.13. Junior and National Team participation

6.1.13.1 When at least 5 Junior competitors are competing, there shall be a separate Junior classification. Whenever possible, the Organiser should try organising separate flight groups for them.

6.1.13.2 National Teams, when applicable, shall consist of up to eight (8) competitors from the same Nation.

6.1.13.3 A National Teams classification shall be established, taking into account the classification of the three (3) top ranking competitors from each Nation.

6.1.13.4 National Junior Teams, when applicable, shall consist of up to five (5) competitors from the same Nation.

6.1.13.5 A National Junior Teams classification shall be established, taking into account the classification of the three (3) top ranking Junior competitors from each Nation.

For the **AeroMusicals** class, the amendments that should be introduced are simple procedure changes with no bearing on the possible results, except for the two-stage qualification that enables any pilot to get a second chance to access a further round.

## 6.2. CLASS F6B – AEROMUSICALS

### 6.2.1 Definitions

6.2.1.1 Definition of an AeroMusicals competition

A competition in which pilots perform flights to music to express their piloting and artistic skills. The performance

is judged on variety, precision and expressiveness.

There are three sub-classes according to the competition site:

- **Sub-class A (indoor):** for performance in restricted indoor halls
- **Sub-class B:** for performance in large indoor sport arenas or small-size outdoor sporting places
- **Sub-class C:** for performance in medium-size outdoor locations.

#### 6.2.1.2 Definition of an AeroMusicals aircraft

An electric-powered model aircraft, but not a helicopter, that is aerodynamically manoeuvred by control surface(s) in attitude, direction and altitude by a pilot on the ground using radio control.

#### 6.2.2 General Characteristics of Radio Controlled AeroMusicals Aircraft:

Maximum total weight:

Sub-class A: 500 g

Sub-class B: 1000 g

Sub-class C: 2000 g

Power source limitations: any suitable electric power source may be utilised. Batteries are limited to a maximum of 42 Volts for the propulsion circuit.

For better visibility, brightly decorated aircraft are recommended.

AeroMusicals Aircraft shall be controlled with commercially available radio control equipment. There are no restrictions on the number of control functions or auxiliary equipment. No other restrictions apply.

Paragraph B.3.1 of Section 4b (Builder of Model) is not applicable to class F6B.

#### 6.2.3. Definition and Number of Helpers

A helper may be a Team Manager, another competitor or an officially registered helper. Each pilot is permitted one helper during the flight.

#### 6.2.4. Attempts

6.2.4.1. There is an attempt when the competitor is given permission to start. Take-off shall take place within one minute after that moment.

6.2.4.2. Each competitor is entitled only one attempt for each official flight

Note: An attempt can be repeated at the contest director's discretion only when, for any unforeseen reason outside the control of the competitor, the aircraft fails to start (e.g. there is radio interference). Similarly, in a flight that is interrupted by any circumstance beyond the control of the competitor (e.g. sudden light shut-off, music airing malfunction, etc.), the competitor is entitled a re-fly. The whole flight shall be re-flown and scored as a whole.

#### 6.2.5. Definition of an official flight

There is an official flight when an attempt is made, whatever the result.

#### 6.2.6. Definition of a Round

A Round consists of one flight for each competitor entitled to fly in that Round. The number of rounds is established by the Organiser according to the planned competition duration.

#### 6.2.7. Number of Rounds

6.2.7.1. The competition shall be planned so as to limit the total duration. A competition duration from one hour up to no more than two hours is recommended.

6.2.7.2. The competition consists of one or several rounds leading to a final round. The starting order for the initial round is established by the Organiser according to any suitable accepted criterion. It is suggested that the starting order takes into account the competitors skill ranking (established by any generally accepted mean) so as to increase the spectators' interest from the beginning to the end of the round.

6.2.7.3. All pilots are entitled to fly the first round.

6.2.7.4. At the conclusion of each round, only the best ranking competitors are entitled to take part in the following round. The number or percentage of competitors flying in any following round is defined by the Organiser according to the expected competition duration.

At the Organiser's discretion, access to any following round except the last one may be split into direct qualification for most of the competitors and indirect qualification for up to three (3) additional competitors to fill up the originally planned number for that round. In this case, all pilots not directly qualified may take part in an additional round to select the last qualified competitors.

6.2.7.5. The starting order for any round after the initial one is in reverse order of the classification at the conclusion of the last complete round.

6.2.7.6. The last round is called "Finals" with a limited number of competitors, preferably 2 (two) or 3 (three).

6.2.7.7. The Organiser shall set up and display for each round a timetable stating the time each competitor will be allowed to start his flight.

#### 6.2.8 AeroMusicals flights

6.2.8.1. These are flights where each competitor must compose his own sequence of manoeuvres to suit a music of his own choice. Any manoeuvre can be flown, provided safety is ensured. Unsafe flying, in the opinion of the judges, shall result in a zero score.

6.2.8.2. The flights shall be judged for technique, artistic quality, variety, compliance with the chosen music and overall appearance. A judging guide defines the judging criteria and their relative weights.

6.2.8.3. The music shall be chosen by each competitor according to his own taste. The music shall be composed of alternating slow and faster tempo segments so as to enable the competitor to display the widest possible range of manoeuvres and mood impressions. The competitor must provide the Organiser with a record of the chosen music on CD, tape or any other suitable support specified by the Organiser in the original invitation document. Details of the music used (composer, interpreter, CD label, etc.) shall be supplied to the Organiser for Public Performance Rights collection purpose.

6.2.8.4. The music shall be of 120 seconds duration. The competitor may elect to fly a different manoeuvres sequence and/or to a different music for any flight.

6.2.8.5. For Finals, at the Organiser's discretion the music may be of 240 seconds duration, provided this is specified in the initial competition invitation bulletin.

6.2.8.6. Music duration variations up to plus or

minus 5 (five) seconds are allowed. The scored part of the flight begins at the moment the music starts and ends at the moment the music comes to an end.

### 6.2.9. Timing procedures

6.2.9.1. It is the competitor's responsibility to check the timetable and make sure he is ready to start at the prescribed time. He may be handed out his transmitter at any time as allowed by the Transmitter Impound Steward but no later than the prescribed starting time of the previous competitor.

6.2.9.2. Once the competitor is given permission to start, he signals to the Steward the moment he wants the music to start. If he fails to signal this moment, the Steward will start the music 15 seconds after the permission to start has been given.

6.2.9.3. Scoring by the judges begins when the music starts and ceases at the moment the music stops. At the choice of the competitor, the end of the scored flight may occur at landing or in flight. If in flight, the competitor must land his aircraft quickly thereafter.

### 6.2.10. Time penalties

6.2.10.1. If the competitor fails to take off within 15 seconds after the music starts, the flight is scored 0 (zero).

6.2.10.2. If the freestyle music lasts less or more than the prescribed duration, the flight score shall be reduced accordingly.

### 6.2.11. Scoring

6.2.11.1. Judging

6.2.11.1.1. In general, all flights shall be judged by a panel of at least 3, and preferably 5, judges. The scores of all judges shall be taken into account.

6.2.11.1.2. Each flight may be awarded marks, in half point increments, from 10 to 0 by each of the judges and for each judging criterion as defined in the Judging Guide.

6.2.11.1.3. The score awarded by each judge shall be displayed immediately after each flight.

6.2.11.1.4. When the Final Round involves only two competitors, the Organiser may elect to have the winner elected by the spectators, provided this is clearly stated in the initial competition invitation bulletin. In this case, if the result of the spectators vote is not clearly decisive, the panel of judges shall have the decisive vote.

### 6.2.12. Classification

6.2.12.1. All competitors are entitled to compete in the first round.

6.2.12.2. Scores are not carried over from one round to the following one.

6.2.12.3. The final classification is established according to the last round flown by the competitor and the classification in this round, in decreasing order from Final to initial Rounds and from highest score to the lowest.

Although a few amendments may be introduced in the **Hand Thrown Glider** class, they are not yet finalised and will, if approved, only involve minor procedure changes.

## RADIO CONTROL HAND THROWN GLIDERS

### 6.4. CLASS F6D – HAND THROWN GLIDERS

#### 6.4.1 General

A contest where RC gliders must be hand thrown to altitude. The organiser must provide a sufficient number of timekeepers in order to allow enough simultaneous flights at all time. In principle, each competitor is allowed one helper who should not become physically involved in the flight. Handicapped persons may ask their helpers for assistance at launching and retrieving (catching) their glider.

The organiser should provide a transmitter impound where all transmitters are kept in custody while not in use during a flight or the corresponding preparation time.

#### 6.4.2. Definition of hand thrown gliders

Motorless model aircraft, with the following limitations.

Wingspan max. .... 1500 mm

Weight max. .... 600 g

Radius of the nose, minimum 5 mm in all orientations (see F3B nose definition for measurement technique).

The hand thrown glider must be launched by hand and are controlled by radio equipment acting on an unlimited number of surfaces.

The hand thrown glider can be equipped with holes, pegs or reinforcements, which allow better grip of the model aircraft by hand. The pegs must be stiff and remain a firm part of the model, neither extensible nor retractable. Devices, which do not remain a part of the model during and after the launch, are not allowed.

The competitor may at any times change his model aircraft as long as they conform to the specifications and are operated at the assigned frequency.

Each competitor must provide five frequencies on which his model aircraft may be operated, and the organiser may assign any of these frequencies for the duration of any round or the complete contest.

#### 6.4.3. Definition of the flying field

The flying field should be reasonably level and large enough to allow several model aircraft to fly simultaneously. The main source of lift should not be slope lift. The organiser must define the launching and landing area before the start of the contest and all launching and landings should happen within this area. Any launch or landing outside this area is scored zero for the flight.

A typical launching and landing area could be a rectangle 100m x 50m oriented with longer side perpendicular to the wind direction.

#### 6.4.4. Definition of landing

A landing is considered valid if:

the glider comes to rest and at least one part of it touches the launching and landing area;

the competitor catches the glider by hand (or if competitor is handicapped, his helper, if launching was made by this person), while standing with both feet inside the launching and landing area.

#### 6.4.5. Flight time

The flight time is measured:

At task 1 from the moment the glider leaves the hands of the competitor

At task 2 from the end of the launching interval

The flight time is measured to the moment the glider comes to rest on the ground or ground based object or the competitor catches the glider by hand or the working time expires. One point will be awarded for each full second the glider is flying, up to the given maximum flight time One point will be deducted for each full second flown in excess of given maximum flight time.

The flight time is official if the launching happens from inside the launching and landing area and the landing happens inside this area.

#### **6.4.6. Organisation of rounds**

The competitors are arranged in groups. A group should be a minimum of 5 pilots. The contest is organised in qualifying, semi-final and fly-off rounds.

At qualifying rounds the task 1 and 2 is flown. The start and end of the working time are announced with a sound-signalling device. The results are normalised within each group, 1000 points being the basis for the winner of the group.

To the semi-final rounds the best pilot from each qualifying group proceeds. Other pilots, up to the number of 24, proceed to semi-final according to their normalised results. In case of tie at last proceeding places a draw decides.

At semi-final the pilots fly task 2 in three groups.

To the final group the best pilot from each semi-final group proceeds. Other five pilots proceed to final according to their normalised results. In case of tie at last proceeding places, the pilot with better result from qualifying round proceeds.

At fly-off eight pilots fly in one group. All pilots with non zero score proceed to the following round. Usually the number of pilots is reduced by one at each consecutive round, so that at the last round only two pilots compete for the total winner. If in any round all pilots get zero or maximum score the round is repeated

For each round, the competitors receive at least 2 minutes preparation time, as announced by the organiser. During the preparation time, the competitor is allowed to turn on and check his radio, but is not allowed any launch of his glider, either outside or inside the launching and landing area.

#### **6.4.7. Total winner**

The winner is the pilot with best result from the last round at which two pilots were flying. The third place gets the

pilot who has been flying in the last but one round.

#### **6.4.8 Tasks**

##### **6.4.8.1. Task 1 "Last flight":**

During the working time, the competitor may launch the glider an undefined number of times, but only the last flight is taken into account to determine the final result. The length of the flight is limited to 5 minutes. Any additional release of the glider annuls the proceeding timing. When the competitor announces that he has completed his last flight (his official flight for this task), he must leave the launching and landing area, together with his timekeeper.

Working time - 7 minutes.

##### **6.4.8.2. Task 2 "All up":**

All competitors of a group must launch their gliders simultaneously, within 3 seconds. The signal for launching comprises from three short beeps each second and a continuous tone lasting three seconds. During continuous tone the glider has to leave the hand of the pilot. Releasing the glider earlier or later results in zero score for this flight. Maximum flight time is 3 minutes. Each flight time of the 3 attempts of each competitor is to be added up and will be normalised to obtain the final score for this task.

Example:

Competitor A:  $45+50+35 \text{ s} = 130 \text{ s} = 812.50 \text{ points}$

Competitor B:  $50+50+60 \text{ s} = 160 \text{ s} = 1000 \text{ points}$

Competitor C:  $30+80+40 \text{ s} = 150 \text{ s} = 937.50 \text{ points}$

##### **6.4.8.3 Task for fly-off rounds**

All competitors of a group must launch their model aircraft simultaneously, within a three second period. The signal for launching comprises a three second countdown with a single beep for each of those three seconds and a continuous tone lasting three seconds. During the continuous tone the model aircraft has to leave the hand of the pilot. Releasing of the model earlier or later results in zero score for this flight. Maximum flight time is 3 minutes.

When the first model lands or at three minutes flight time a thirty seconds interval starts. All models must land within these thirty seconds.

The pilot whose model landed first receives a zero score or a pilot who released his model before or after the three seconds interval for launching or whose model landed outside the landing area or landed after the thirty seconds interval receives a zero score too.

**This WAG Newsletter will be published whenever new information is available.**

**If you know other pilots who may be interested to take part in the 2009 World Air Games, tell me at [WAG2009@online.fr](mailto:WAG2009@online.fr)**

**Guy Revel**  
**Chairman, CIAM WAG Selection Committee**