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*Fédération  
Aéronautique  
Internationale*

# Minutes

of the Annual Meeting  
**FAI Environmental Commission**

held in Moscow, Russia  
**on 5 March 2016**  
at the Russian Aero Club

March 14, 2016

## ATTENDEES

### PRESENT

President	Mr. Pierre Duval (PD)
Vice President	Mr. Sergey Ananov (SA) (also Russian Delegate)
Secretary	Mrs. Diana King (DK) (also United Kingdom Delegate)
Italy	Mr. Andrea Tomasi (AT) (Delegate)
Sweden	Mr. Rolf Bjorkmann (RB) (Delegate)
FAI	Dr. John Grubbström (FAI President)
FAI	Mr. Frits Brink (FAI Finance Director)
FAI	Ms. Faustine Carrera (FC) (FAI Communications Manager)
In attendance for part of time	Mr. Vladimir Ivanov (President of Federation of Aeronautical Sports of Russia)

### APOLOGIES FOR ABSENCE

Germany	Miss Denise Kluge (Delegate)
Hungary	Orsolya Diófási (Observer)

### PROXIES

The following proxies had been received:

Germany	Mrs. Diana King
Hong Kong	Mr. Sergey Ananov
Portugal	Mr. Andrea Tomasi

## 1. Welcome and Opening Remarks

The President of the Federation of Aeronautical Sports of Russia, Mr. Vladimir Ivanov, welcomed delegates to Moscow and in particular to the historic room at the Russian Aero Club, from where Stalin had viewed activities on the adjacent airfield. He introduced the veteran parachutist who had enabled the Aero Club to keep the room and its historic artefacts.

The FAI President, Dr. John Grubbström, thanked Mr. Ivanov for the welcome and referred to the great history of Russia as a sporting aviation nation. He mentioned that he would later be meeting the Russian Olympic Committee and would be presenting an FAI Diploma to Russian cosmonauts. He commented that the Environment Commission holds a key role, with a duty to move the FAI towards sustainable airsport, and that failure to achieve this would be disastrous for airsport.

The EnvC President, Pierre Duval, thanked Dr. Grubbström and Mr. Brink for coming to the meeting and acknowledged that the Environment Commission must be the leader for the future of sporting aviation.

## 2. Approval of the Minutes of the last meeting in Paris 14 Feb 2015

It was agreed unanimously that the Minutes be accepted.

## 3. FAI President's Report

Dr. Grubbström gave an update on activities and events throughout the FAI, starting with the outstanding success of the World Air Games, which were followed by the recognition of glider pilot Sebastian Kawa as Athlete of the Month by the International World Games

Association. Membership numbers have grown with two new nations joining FAI. In the area of major competitions, a large number of contests took place in 2015, involving over 3000 competitors. Nearly 400 international records were ratified during the year. The emphasis on media coverage of FAI events and activities has increased, with numerous press releases and event screening.

Internally, there has been further development of the FAI extranet, the FAI Sports and Branding Strategy and plans for new strategy on the FAI Brand, Sports Strategy and Product. The FAI Vision and Mission have been developed and are expressed as Promoting Air Sports to the Benefit of our Air Sports Persons, FAI Member Organisations, FAI Air Sports Commissions and the general Public. The phrase 'At home in the sky since 1905!' has been adopted.

#### **4. Commission President's Report**

PD presented his view of the situation for the Environment Commission. He analysed the areas of progress and success and those of failure or lack of progress.

The newsletter had been well received; ways to improve it could include more technical articles and bringing it into the standard FAI style.

The 'green event certificate' had been presented in Rotterdam, but people had not been convinced by its value and it had not been adopted at any FAI events.

Support had been given to CIVA on the development of a low emissions aircraft, but this is not a target for CIVA as it is not seen as competitive.

The Angelo d'Arrigo Diploma has apparently not created any significant interest in environmental factors in sporting aviation.

It may be necessary to use activities and events such as an electric Grand Prix to create interest and attention in environmental matters. eFormula One might be interested in joint events. Alternative types of event could be air expeditions related to nature preservation, or a green airplanes exhibition.

Lack of progress was identified in finding an ambassador and creating a presentation of sport aviation and the environment.

There is a need for more people to become involved in the EnvC work.

#### **5. Executive Board Task List**

There was a discussion regarding the development of electric aircraft. Some reservations were expressed due to cost and the non-sustainable make-up of batteries. There needs to be consideration of the environmental impact from 'cradle to grave'; solar charging of the batteries would help to achieve this.

The presentation on sport aviation and the environment for ASCs had not progressed. It was suggested that an alternative approach could be to develop a manual or handbook on making an event environmentally sustainable. This would initially be advisory but could become obligatory for FAI events.

The Newsletter was discussed further. Dr. Grubbström's opinion was that it should be FAI branded and promoted through the FAI office. It should include articles to interest people interested in new technology. He also suggested seminars with topics to attract interest on the technical possibilities. FC suggested that the EnvC articles could be included in the general FAI Newsletter.

PD suggested that it could be appropriate to complement the EnvC mission, of preservation of the environment, by the development of high-technology possibilities.

## **6. Reports from NAC Delegates**

### **6.1 *Andrea Tomasi, Delegate (Italy)***

AT presented an Italian Aero Club project aimed at promoting sustainability by developing electric propulsion instead of internal combustion engines whenever possible. The starting point was glider launching in cooperation with Alisport, a private company.

In 2016 the Italian NAC will organise a national competition devoted only to Alisport single type self-launching electric gliders. In 2017 a change in National rules will create an Italian championship of such self-launching gliders. At international level, Italy proposes the creation of a 13.5 metre class entirely made up of self launching electric gliders for the 2019 championships.

There was a discussion of the validity of the class, the likelihood that it would be attractive to pilots and how to promote the idea.

### **6.2 *Sergey Ananov, Delegate (Russia)***

SA reported on a new strategy from the Ministry of Aviation to decrease fuel pollution by optimising existing routes, provide motivation for changes in fuel and improve power consumption to equal the best countries. Actions being taken to achieve this are the use of bio-fuel, developing composite aircraft, including carbon plastic, and creating a government programme to make 'fully electric aircraft' with no hydraulics.

SA suggested that there could be benefit in closer liaison with other world organisations such as the WHO, UNESCO, WWF and the World Society for the Protection of Animals, which could give aviation more visibility.

Mr. Brink suggested liaising with OSTIV for technical knowledge and the ICAO Committee of Environmental Protection in Aviation.

SA suggested collecting all of the world experience in the use of general and sport aviation in environmental projects and making them well known worldwide, so that they become strong drivers in the promotion of air sports.

SA suggested writing a training manual for organisers of air sport events on the subject of environmental sensitivity in their work. It could become a normative document for future environmental certification of FAI sites and events. The book could spread through all NACs to their collective members (clubs, etc.). With such a manual some training seminars could be organised.

SA pointed out that people are also part of our environment and that Search & Rescue operations for people who need help in the wild are part of environmental protection. General aviation in Russia demonstrates its significance. In the Moscow region alone there were 102 persons rescued from air by private pilots-volunteers in 2015. Most of the rescued people were elderly or children who lost their way in forests.

SA reported on promotional and eco-tourist air expeditions for nature protection, to demonstrate the use of Sport Aviation tools in connecting people with nature and environmental issues

It was suggested that there is a need for more delegates to attend the meetings, to make greater contribution to the EnvC work and to present what is being developed. It was agreed that a role and person description is needed and this recruitment drive could be promoted through the newsletter and by approaching the NACs.

As a starting point, PD agreed to email all named delegates to ask for confirmation that they are the active delegate; if no reply is received, the NAC should be asked to identify new people to contribute to a specific project. Information about one of the EnvC projects needs to be available to attract more people to contribute.

### **6.3 *Rolf Bjorkmann, Delegate (Sweden)***

RB reported on the proposed establishment of a number of restricted areas due to nature

protection, which have a very adverse effect on private and sports flying. The Royal Swedish Aeroclub (KSAK) has responded negatively and suggested the German solution as a potential alternative.

A wealth of biological species has been discovered on the ground close to the runway at Arlanda airport, with 569 types of plants and insects identified in the short grass. With the potential for even small airfields to be biologically very interesting, this could be helpful in protecting an airfield against external threats.

Although the situation is stable now, the KSAK always feel that sports flying is under threat. If the local community wants the land, or there are noise complaints, restrictions are very easily created. The situation requires constant vigilance and quick reactions. Politicians and other people do not understand that general aviation is the basis for all flying. All types of flying are by definition considered to be environmentally unfriendly and no other message is heard while the Environmental party is part of the government.

The full report is attached as an appendix.

#### **6.4 *Pierre Duval, Delegate (France)***

PD reported that there had been a seminar for electric flying.

The DGAC noise measurement system had been launched, with free areas for aircraft to overfly and be provided with a report on the specific noise measurement of their aircraft. This has been found to be useful to help deal with noise complaints and planning developments, as the aircraft owners have an official report on the level of noise that their aircraft produces. Details of the scheme (known as CALIPSO) can be found on the DGAC website.

#### **6.5 *Diana King, Delegate (UK)***

DK reported on a reduced subsidy for sustainable energy, which has resulted in fewer wind turbine developments threatening airfields. A study of wake turbulence downwind of turbines has been published and has resulted in some changes to the CAA guidance on wind turbines.

The development of electric aircraft has continued, with one self-launching sailplane project combining electric power and jet power to assist the take-off.

The British Human Powered Aircraft Association continues to attract increased numbers of participants to the annual competition for duration, distance and manoeuvrability.

The full report is attached as an appendix.

### **7. Angelo d'Arrigo Diploma**

One nomination had been received and it was considered by the delegates. It was agreed that the nomination was of a sufficient standard that the award should be made. On a vote, the nomination of Alisport, the developer and producer of the "SILENT 2 Electro", the first ultralight glider in the world capable of self-launching by means of a battery-powered electric motor, was approved for the award of the 2015 Diploma, by three votes to none, with one abstention.

The mechanism for improving the number of nominations was discussed and it was agreed that the Diploma should continue to be promoted in future years, that it should be promoted through other Commissions and that delegates should be encouraged to approach their NACs and the NAC member organisations to help to inspire more nominations.

### **8. Electric Aircraft Challenge**

The possibility of organising such an event was discussed and there was some agreement that it could attract attention to environmental ideas, although DK expressed some reservations about the idea of creating and using additional equipment, particularly batteries, which would in themselves have some environmental impact. It was suggested that it could

be included in the World Air Series in 2020.

It was agreed that Markus Haggenev, FAI Sport Director, should be approached for advice and support on the project. A German association that is organising an electric gliding challenge could also be asked for help in launching the project.

The work programme for the project should be:

1. to list the current challenges in electric flying and identify those with whom an FAI project might liaise;
2. if none exist, to consider how a challenge could be developed independently within FAI;
3. to obtain FAI advice;
4. to establish the rules.

This project was agreed, with DK's reservations noted.

## **9. Green Audit for competitions**

It was agreed that it was difficult to see how this could be successful unless people were willing to pay for the audit, which was thought to be unlikely.

## **10. FAI Environmental Policy and Code**

The redrafted Policy and Code was reviewed and, with one small amendment, was adopted. It was agreed to use the redraft as an opportunity for a relaunch, but there was some uncertainty about where the Code sits within the FAI policies. It was suggested that it should be taken on by CASI and incorporated within the Sporting Code, although this would tend to restrict it to being considered mainly within competitive air sport and not within more general recreational aviation.

It was agreed to approach CASI to ask for the Code to be taken on as an appendix within the General Section of the Sporting Code. It should also be distributed to the NACs and ASCs. DK agreed to undertake these tasks.

## **11. Elections**

**President** – Pierre Duval was nominated and elected unanimously.

**Vice-Presidents** – Sergey Ananov was nominated and elected unanimously.

**Secretary** – Diana King was nominated and elected unanimously.

It was proposed and agreed that Bernald Smith should be elected as a President of Honour.

## **12. Next Meeting**

It was proposed that the next meeting should be in Lausanne on 11 March 2017.

The meeting closed at 17.10.

Minutes prepared by:  
Diana King  
Secretary, FAI Environmental Commission  
1 April 2016

## **Appendix 1**

### **Swedish Report to FAI Environmental Commission 2016**

#### **Restriction Areas**

Two years ago the County Administration in south of Sweden suggested to establish a number of restriction areas due to nature protection. Those should effect private and sports flying very negative. Now two years later the government has sent this suggestion for reaction. Royal Swedish Aeroclub (KSAK) has react negative. We have shown the German solution as a potential result.

#### **Fauna on airport**

One have suddenly discovered e biological multiplex on the ground close to the runway at Arlanda airport. The grass has been constantly short cut. So far they have discovered 569 characters of plants and insects. That means that even small airfields could be very biological interesting. That could be worth to test if it is a threat against the field.

#### **Environmental threat**

Although the situation is stable right now, we always feel a threat to sports flying. If the community wants the ground or people complain against noise it is very easy to set restrictions. We have to observe the situation all the time and react quick. Neither politicians or common people understand that general aviation is the basic for all flying.

#### **Flying and environment**

In Sweden all type of flying is by definition environmentally unfriendly. Everything rolling on rail is environmentally friendly. It is impossible to get another message through as long as we have the political situation we have with the Environmental party as part of the government. That means also a common threat against all sorts of flying but so far the market is a little stronger.

Rolf Björkman  
Delegate EnvC  
Airsport Sweden

## **Appendix 2**

### **UK Report to FAI Environmental Commission 2016**

#### ***Renewable energy***

Whilst concern about wind turbines near airfields continues to be high, the frequency of such developments has reduced due to a significant change in government policy, resulting in lower subsidy for wind turbine developments. It is thought that this may change again in future, but there is no certainty about this. As a result of the policy change, several airfields that were threatened by proposed developments no longer have to face the problem.

Research funded by the CAA into the possibility and effect of turbulence in the lee of turbines (the Wind Turbine Wake Encounter Study) was completed by Liverpool University and the report was published in May 2015. The Study was intended to provide Local Planning Authorities, wind industry and aviation industry experts with research data to assist them with the safe deployment of wind turbines in the vicinity of aviation related sites. The study was also intended to assist General Aviation pilots to remain clear of wind turbine wake turbulence.

As a result of the research, the CAA advice on wind turbine wake avoidance was reviewed. The recommended horizontal distance for an aircraft wishing to remain clear of the wake turbulence associated with a wind turbine or turbines with a Rotor Diameter (RD) of 30 meters (m) or less was assessed at 5 x RD downwind of the wind turbine. The previous recommended wind turbine wake avoidance guidance of 16 RD remains in place, pending completion of further research relating to wind turbines with a RD of greater than 30 m.

The CAA and University of Liverpool are now considering undertaking a further research project to produce data that will allow for the provision of enhanced guidance associated with the turbulence created by wind turbines with larger RD sizes.

See <http://publicapps.caa.co.uk/docs/33/InformationNotice.2015038.pdf> for further details.

#### ***Electric Aircraft***

I reported last year on the development of electric aircraft by Electro-Flight. Since then, there has been no obvious development to report from them.

Another company, ProAirsport, is developing an innovative jet-powered SSDR self-launcher, known as Project GloW. Up to now, no jet engine has been found that has sufficient power to self-launch a sailplane. Project GloW is a hybrid, with the wheels driven by a powerful electric motor to assist the turbojet in accelerating the glider to take-off speed. See <http://www.lightaircraftassociation.co.uk/2015/Magazine/Apr/glow.pdf> for more details.

#### ***Human-Powered aircraft***

The British Human Powered Aircraft Association continues to attract increased numbers of participants to the annual competition for duration, distance and manoeuvrability. Each year more designs are brought to the contest and the results achieved are improving year by year.

#### ***Nature Conservation***

The British Model Flying Association continues to have a strong policy of nature conservation and, with a bird conservation organisation, has done a number of studies of the effects of aeromodelling on local bird life. In general no effect is perceived and in one case it appeared that the birds thrived better with the modellers nearby.

Diana King  
Delegate to EnvC  
Royal Aero Club of the UK  
4 March 2016