



Fédération Aéronautique Internationale

Minutes

of the Annual Meeting of the FAI Medico-Physiological Commission (CIMP)

> held in Lausanne, Switzerland on 28 and 29 June 2014 at Maison du Sport International

> > Ver. 1.0 / 26.08.2014

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Saturday, 28 June 2014

1. Welcome by President

The meeting was opened by the President FAI CIMP

2. Roll-Call

The CIMP Secretary (RG) called the roll of delegates Disclaimers of conflicts of interest - none stated

President:

Juergen Knueppel	President		(JK)
CIMP Bureau Members • Rene Maire • Peter Saundby • Kazuhito Shimada • Martti Lepojarvi • Marja Osinga • Richard T. Garrison	President of Honour President of Honour Vice President Vice President Vice President Secretary	Delegate Switzerland Delegate UK Delegate Japan Delegate Finland Delegate Netherlands Alternate Delegate USA	(RM) (PS) (KS) (ML) (MO) (RG)
CIMP Delegates: • Bernhard Schober • Jaques Berlo • Samuel Sammuelson • Antonio Dal Monte • Thierry Villey • Hiltrud Garthe		Delegate Austria Delegate Belgium Delegate Iceland Delegate Italy Delegate France Alternate Delegate Germany	(BS) (JB) (SS) (AdM) (TV) (HG)
CIMP Guests: • Wolfgang Lintl • Tine Kirchberg • Heini Schaffner	CIMA Microlight rep, Germany Presenter "Glider Aerobatics" Presenter "Oxygen Requirements"		(WL) (TK) (HS)
 FAI Representative: John Grubbström Susanne Schödel Jerome Krieg 	FAI President FAI Secretary General AD, FAI Administration		(JG) (SSC) (JKR)

Apologies:

• Czech Republic, New Zealand, Russia, Sweden, Thailand, United States

3. FAI Report: (JG) (SSC)

- a. John Grubbström presented the new FAI-video promoting air sports and invited delegates to use it in presentations pertaining to FAI.
- b. Explanation of the FAI-General Conference 2014 in Thailand. He mentioned concerns about the local political situation but emphasised the importance of Asia as a large participant in air sports.
- c. World Air Games in Dubai were discussed and the hopes for a very successful event in December 2015. FAI will also be involved in planned "Urban Games" in populated urban area. There is a partnership between SportAccord and FAI and other Ifs.
- d. The WADA requirements and strategic planning were presented.
- e. The FAI Vision "A world where safe participation in air sports and recreational flying is available to everyone at reasonable cost" and Mission "FAI is the global organisation for the promotion of recreational flying and air sports" were presented.
- f. The promotion of air sports is paramount to the FAI mission and FAI leadership is looking to the IOC for possibilities of air sports in the Olympics, particularly the winter games.
- g. The FAI Secretary General (SSC) presented the "Strategy for the Market: More Visibility" and the plans for increasing visibility that attract the media and spectators.

h. The history and functions of CIMP were presented to the FAI leadership by (JK). The requirement to fund FAI staff-members at CIMP conferences abroad in FAI member states by local NACs or CIMP was questioned because CIMP has no income. The reason why CIMP met in alternate years with the International Congress (ICASM) was explained. (JK) and (PS). Relief from this reimbursement had been granted previously and continuation was requested.

4. Aviation Medicine

a. New Oral Anticoagulants (NOAC/DOAC) and Fitness to Fly (RM):

The modern concepts of NOAC use were reviewed and the new acceptance of these drugs by EASA was reported. NOAC's have an acceptable risk profile vs. Warfarin. These novel drugs allow pilots with low risk conditions, which require anticoagulation, to continue to be medically certified.

b. EASA Medical Expert Group, (MO):

- LAPL, Medical, Alternative Means of Compliance (AMC):
- An overview of the expert group which formulate regulations for EASA medical certification.
- New operational limitations "ORL" and the new color vision testing modalities were discussed. (ORL: Operating-pilot Restriction Limitation - EU Class 2 and LAPL privileges. Valid only with safety pilot and in aircraft with dual controls, or solo without passengers)
- Psychiatric conditions and severity and treatment considerations were revised to delineate severity and treatment and assessment required.
- ICD 10: ICD will probably be incorporated in new rule making. The recommendation was to keep vigilant and make comments if certification standards suppress air sports through inflexible, rigid requirements.

c. The "Drivers License Medical", CAMA & FAA (KS):

The controversy concerning using the US Drivers License as a medical certification in the US for VFR daytime operations in less than 6 place aircraft less than 6000 lbs. Gross Weight was discussed.

d. Med Examination of Air-Sport Pilots: "Time for a New Look" (PS):

The traditional certification scheme that has been held for nearly 100 years and it should be time to change our assessment of fitness.

Significant changes in healthcare systems since the initiation of medical examination of pilots are not considered.

The principles of risk management should be extended to medical risk assessment. Where the risk to public safety is minimal, measures can be reduced. Pilot behaviour rather than undiagnosed disease is today the greatest risk. This is not well addressed by current examination methods. Current policy excludes pilots with low risk conditions which carry little risk to public. - UK statistics indicate that aircraft under 2 tons have not killed a third party person.

e. Considerations for Effective Oxygen use in Sports Aviation (HS):

The insidious nature of hypoxia was emphasized and wrong pilot choice may contribute to these hazards in sport aviation, even at lower altitudes. The physiological consequences are known and some new findings indicate that decrements in function may have consequences for flight safety and health. In the group of recreational pilots are also less fit older pilots, why early decision to use sufficient oxygen (from the beginning of a flight "Zero-Hypoxia", or starting breathing Oxygen from 5000 ft on) is highly recommended. – Signs of early Mountain Sickness, which seem also to develop with increasing diffusion decrements by oedema, were reported.

On the other side there are new EASA plans which may restrict "non-commercial pilots" to fly higher than 10.000 feet without using oxygen. There remain concerns about the EASA flexibility principles, specific concerns about operational regulation and oversight and potentially added equipment cost. Individual Glider pilots want to climb legally higher for a final glide for their home field (present ICAO option). This stayed controversial.

Controversies were discussed and flexibility is requested by professional Alpine Mountain Glider Flyers who request to decide on their own oxygen requirements.

f. Update on Technical Developments: Flight-Helmet Neck Support (AD):

Report of a system of a mechanism which reduces vertebra disk pressure and asymmetric forces caused by helicopter helmets and the added weight of night vision goggles.

g. Recommendations and Advise: The EASA developments will be further watched and considered

5. WADA / FAI Anti-Doping Programme

a. Update on 2014 WADA Strategy after WADA General Conference 2013 (JK):

The results of the last conference contained the following policies.

1. First violation penalty increased to 4-year suspension.

2. If it is proven the offense was unintended, the suspension may be decreased by the Sports Arbitration court.

3. Any practitioner implicated in wilful support of Doping could be subject to, by government, criminal prosecution and loss of Medical License in the country.

b. Personal Experiences of AD Promotion on the AERO 2014 Airfare Friedrichshafen (HG) (MO):

FAI -TUE Panel. Current statistics and decisions were presented. There are situations where lack of data for a decision was recognized. The TUE panel voiced the difficulty of commenting on TUE requests through the WADA owned ADAMS- System. Corresponding information from AERO 2014 was presented.

c. Off-label Use/Abuse/Misuse of Authorized Medicinal products by Medicine Agencies and Doping (JB):

This presentation dealt with the variability of drug responses through explanation of Pharmacokinetic variations. The effect of drugs used for legitimate and illegitimate circumstances is variable and makes "off label use of drugs" more risky for the person using them for doping. The new legislation in the EU requires vigilance of medications for adverse reactions (ADR) and the legal ramifications of "off label and misuse" for illegal purposes.

Discussion, Recommendations and Advise: Improve ADAMS System, find experienced athletes as Ambassadors for AD Promotion.

6. Flight Safety in FAI Air sports

a. Accident Review and Statistics in Europe and USA (RG):

The accident rates in both areas are essentially unchanged from previous years and any decreases are most likely due to decrease in the hours flown.

b. Fatal Aeromodelling Accidents in Japan (KS):

The explosive increase in aero-models is seen all over the world. FAA prohibits their commercial use, but its regulation change is under way. Fatal accident statistics in Japan were presented at Aerospace Medical Association 2014 meeting.

c. Accident Prevention Programmes in GA and Air-Sports (JK):

There are several groups that contribute to flight safety. Some are under the control of FAI - (OSTIV, FAI-Flight Safety Expert Group) - Flight Safety activities in National and international groups such as ICAO, FAA, EASA and NAC's also contribute to this effort. There is very little cooperation.

Flight safety is at a stagnant level. Proactive flight safety is felt the way to further decrease the accident rate. Training is the only way to proactively accomplish this goal. The barrier is mostly economic at this time.

7. Aerobatics: Flight Safety and Aeromedical Concerns

a. Basic Physiology in Aerobatics (JK):

- The evidence is that some aerobatic competition pilots developed great safety concern in aerobatic competitions.
- The past wisdom was that G forces are not significant in sports-aviation.
- High loads of short duration deemed them not significant so far. Modern airplanes sustain higher loads, i.e. also in Red Bull Air-Races.
- The feeling is that these conditions can induce rapid onset G-Loc unaware, in untrained or deconditioned pilots.
- Insufficient training and awareness is the largest obstacle to decreasing this safety concern.
- It was felt that FAI as the institution to set the rules for aerobatic competitions that may be able to have a positive impact in this area.

b. Aerobatic Flying: Experiences as Athlete and Trainer (TK):

- The speaker gave a review of the basic older glider aircraft in existence designed for aerobatic glider flying, under previous standards (before 1980).
- Modern AC for competition training and flying were shown, with the higher performance values up to +/- 10 g. Standards had even been changed.
- Basic manoeuvres and FAI competition nomenclature were introduced.
- Present time aerobatic competitions are not "smooth" anymore. The number of aerobatic manoeuvres per sequence decreased, but their loads increased.
- The international FAI aerobatic competition standards are continuously in further development; influences on flight stresses dubious at time being.
- Competition pilots should understand the recommendations in basic Human Factors training for aerobatic pilots. Needed are:
 - better knowledge and awareness of threats
 - physiological principles
 - knowledge of basic anti G manoeuvres
 - education of trainees, trainers and task setters
- The value of aerobatics in general sports-aviation as a safety training tool was also emphasized.
- The difference of country's basic pilot education requirements for "STALL-trials" was discussed by participants. Some exercise it, some don't!

c. Human Factors & Limitations in Aerobatics (JK):

- The introductory course to G-Forces in aerobatics was presented.
- Spatial Disorientation knowledge in aerobatics is a serious issue.
- This extensive crew-view gave many important educational points for pilots and flight-surgeons.
- The insidious nature of G-LOC and measures to prevent it were explained-
- It was felt that aerobatics aeromedical training course should be developed and included in the FAI website as an educational tool.
- "G-Forces" training PowerPoint presentation will be available on the CIMP page.

Sunday, 29 June 2014

1. Welcome by President + Roll Call The meeting was opened by the President of FAI CIMP The Secretary CIMP (RG) performed the roll call of delegates Disclaimers of conflicts of interest- none stated President: President Juergen Knueppel (JK) ٠ **CIMP Bureau Members** Rene Maire President of Honour **Delegate Switzerland** (RM) Peter Saundby President of Honour Delegate UK (PS) Delegate Japan Kazuhito Shimada Vice President (KS) Martti Lepojarvi Vice President **Delegate Finland** (ML) Marja Osinga Vice President **Delegate Netherlands** (MO) Richard T. Garrison Alternate Delegate USA Secretary (RG) **CIMP Delegates: Bernhard Schober Delegate** Austria (BS) **Delegate Belgium** • **Jaques Berlo** (JB) Samuel Sammuelson **Delegate** Iceland (SS) Antonio Dal Monte **Delegate Italy** (AdM) Thierry Villey **Delegate France** (TV) Hiltrud Garthe Alternate Delegate Germany (HG) **CIMP Guests:** CIMA Microlight rep, Germany Wolfgang Lintl (WL)

Apologies:

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2. Video presentation

Klaus Ohlmann flying over Mt Everest during the Mountain Wave Project (MWP) 2014.

3. The operational aspects of life support systems

"Oxygen at High Altitudes" was discussed.

4. National Reports

Comments from: UK, Italy, Switzerland, Austria, Japan, Belgium, Netherlands, France, Finland, USA, Czech Rep., Germany (see reports in the annexes)

5. Report of TUE Panel: Geoff McCarthy, TUE Panel Chair (GM) (JK)

Work, Decisions and Numbers of FAI TUE Air-Sports Requests 85% of applications approved.

6. Minutes of FAI-CIMP 2013, Paris

The minutes were reviewed and approved by vote.

7. Matters arising from minutes

The nomination of G. McCarthy for inclusion in the FAI- Safety Expert Group

8. Report from the President (JK)

Briefing of CIMP activities; CIMP initiatives (see "FAI Tasking", President Report, in the annexes).

9. Formal approval of any advice to the FAI Executive Board

The FAI Executive board should demand from Nations, ICAO, FAA and EASA concerning worldwide Air Sports, to provide better information on:

- Quality of Accident Investigations
- Comprehensive accident/ incident Data
- Analysis of Accident Causes
- Medical Data / Autopsy reports where medical factors exist
- Total flying activity to enable calculation of rates

10. Election of Officers

- a. President: Juergen Knueppel, Germany unanimous re-election
- b. Secretary: Richard Garrison, USA unanimous re-election
- c. **Elected Vice Presidents**: Geoff McCarthy, USA; Kazuhito Shimada, Japan; Marja Osinga, The Netherlands; Martti Lepojarvi, Finland

11. CIMP Programme 2015

- a. ASMA 2015, Orlando / FAI CIMP plans to conduct a FAI Air Sports Panel. (KS)
- b. Participation / Communication in EASA Medical Expert Group with Europe AS
- c. Deliver Medical Expert Opinion in the TUE Panel for FAI Intern. Level Pilots
- d. Advise to the FAI Anti-Doping Advisory Group, Expert Opinion WADA Program
- e. Emphasis on Human Factors and Flight Safety; Air-Sport Disciplines workshop 2015

12. Nomination of working group: Nomination of FAI TUE panel

Panel Chair, Geoff McCarthy, Berlo, Garrison, Garthe, Osinga, Shimada

13. Any other business

- a. (RM) announced the European Society of Aviation Medicine (ESAM) meeting, -called ECAM-, in Bucharest Romania, Sept. 2014 and encouraged CIMP members to participate if possible.
- b. A secure portal on the CIMP portion of the FAI website will be requested. (RG) will look into this with FAI administration.
- c. The General Conference 2014 will be Thailand, October 2014
- d. The General Conference 2015 will be in Rotterdam, The Netherlands, in September 2015"
- e. The FAI World Air Games (WAG) will take place in Dubai, December 2015, CIMP will evaluate in 12/ 2014 the option to conduct a local FAI-CIMP workshop (RM)

14. Date and place of next CIMP meeting

Oxford, UK, 19-21 Sept 2015, at the site of the annual ICASM Congress