## Meeting of the Commission Internationale Medico-Physiologique (CIMP)

# Minutes of the FAI CIMP meeting held in the Olympic Museum, Lausanne, Switzerland on 24-25 April 1999.

The meeting was chaired by the President, Dr. René Maire.

## Agenda Item 01, Welcoming Address.

The President welcomed those attending for the first time, these were:

Dr. Phivos Christophides
Dr. Peter Quispel
Dr. Vadim Bogachev
Dr. Branko Brodnik
Dr. Samuel Huber

Cyprus
Netherlands
Russia
Slovenia
Switzerland

The President also referred to the move of the headquarters of the FAI from Paris to Lausanne, the city of the Olympic Committee, and thanked Max Bishop and his team for all the support received by CIMP.

#### Agenda Item 02, Roll Call of Delegates.

The delegates and others attending were:

Austria Dr. Bernhard Schober, Delegate Cyprus Dr. Phivos Christophides, Delegate Czech Republic Dr. Oldrich Truska, Delegate Finland Dr. Eero Vapaavuori, Delegate France Dr. Thierry Villey Delegate Germany Dr. Ernst Hollmann, Delegate

Netherlands Dr. Peter Quispel, Voting Representative

Poland Dr. Janusz Marek, Delegate Russia Dr Vadim Bogachev, Delegate Slovenia Dr. Branko Brodnik, Delegate

Spain Dr. Pedro Ortiz Garcia, Delegate & V-P Sweden Dr. John Grubbström, Alternate Delegate &

**CIA** Representative

Switzerland Dr. Samuel Huber, Alternate Delegate

Dr. René Maire, Delegate & President Dr. Dominik-Franz Weibel, Pres. of Honour

United Kingdom Dr. Peter Saundby, Delegate & Secretary

USA Dr. John McCann, Delegate & V-P

FAI Mr. Max Bishop, Secretary General

#### Agenda Item 03, Apologies.

Apologies were received from:

Dr. Hans Hjört Sweden Prof. Antonio Dal Monte Italy

Dr. Albert van der Merwe South Africa Dr. Colm Killeen Ireland Dr. Peter Daxner Slovakia

The President had also received messages of good will from:

Prof. K. Klukowski Poland Dr. Oliver Dzvonik Slovakia

## Agenda Item 04, Minutes of the Last Meeting.

These [1] were approved without any correction, and there were no matters arising that were not agenda items.

## Agenda Item 05, Report of the President.

Dr. René Maire gave his first report to the CIMP. He cited the report [2] that he had given to the General Conference of the FAI in Toulouse in which he had addressed both internal and external questions, the latter being the problems of doping and in Europe, the JAR 3 Med. While pilots need knowledge to fly safely, they should not be needlessly grounded. He had attended two meeting of the JAA-FCL Medical Sub Committee and a copy of his report with three annexes was tabled [3]. He had also attended the conference on doping held in Lausanne in February and a document setting out the IOC position was tabled [4]. After the address by the President, Max Bishop, Secretary General of the FAI welcomed the delegates to the new home of the FAI and described the new offices and facilities.

# Agenda Item 06, Aim of the CIMP meeting 1999.

The President emphasised that the aim of the meeting was to exchange ideas and medical scientific knowledge to enhance sport aviation medicine. The meeting would be one single meeting and not now be divided as has been the case in some previous meetings. Delegates would work and social activities are at the periphery. The special aims would be to establish the home page and E-mail communication, to consider the regional problem of JAR 3 Med, and to review the practice of ECG screening of pilots after a presentation by Dr Michael Joy as a guest speaker. He would wish to identify within CIMP, doctors with detailed knowledge of each aviation sport and other related specialist fields so that CIMP could become a reference centre for the aviation sports.

## Agenda Item 07, Scientific Presentations and Reports of Working Groups.

Handicapped pilots: by Bernard Schober and Thierry Villey.

This presentation covered the development of ancillary controls, limb protheses and the principles of assessment. The distinction between progressive and unchanging pathologies. Certificates of demonstrated skills, and the debate on whether assistance in entering and leaving the aircraft is permitted. The legal questions of licensing have been resolved in France and other countries. A distinction can be drawn between novices and experienced pilots who become disabled. Clubs for disabled pilots have been established. Competitions for handicapped pilots are inappropriate because for

safety they must be able to fly the aircraft without limitation. The Austrian report was tabled [5]. In summary, there is a right to fly, but safely. Employers have a duty to select those best fitted to perform the task notwithstanding disability legislation.

#### **Spatial Disorientation: by Oldrich Truska.**

This covered both spatial and geographical orientation and listed three stages, unawareness of error, awareness of conflicting inputs, onset of stress reaction. The importance of knowledge and medical training by doctor pilots was emphasised. A summary was tabled [6].

## Ophthalmology: By Eero Vapaavuori.

This reviewed the new JAR regulations and pointed out inconsistencies, contradictions and unrealistic standards. These relate to maximal corrections with cylinder lenses and non acceptability of small scotoma. A half dioptre variation in visual acuity is physiological. When spectacles are used by a pilot to correct vision, these become an essential component of the system by which the aircraft is controlled, and should be subject to airworthiness criteria. Progressive lenses induce unacceptable distortions and multi focal lenses are preferable. The ideal glasses for all phases of flight do not exist and more than one pair should be allowed. Acceptability of laser correction [PRK] has lagged behind technical improvements in the procedure. A summary of the points raised was tabled [7]. In discussion, Eero was urged to publish his findings.

## Diabetes Mellitus, by Peter Saundby.

A copy of a paper on diabetic pilots published in the J. Aviation Space & Environmental Medicine, but originally presented to CIMP, was tabled [8] together with the FAA proposals for medical certification [9]. In discussion it was agreed that the USA delegate would be asked to report progress when experience had been gained.

## Psychology: by Oliver Dzvonik.

A complex paper was tabled [10] but the author had been unable to attend in person. The paper reported a survey of psychological characteristics of military and civil pilots. The conclusion was that the profession of pilot presumes specific personality qualities, but these are largely formed by training and experience.

#### Coronary artery disease: by René Maire

This reviewed recent developments in interventional cardiology, especially stenting. A paper was tabled [11] and the conclusion was that coronary stenting is now accepted practice with a good outcome. For fitness to fly, criteria previously established for angioplasty can be used. A paper by T.P. Chua and U. Sigwart in the European Heart Journal [Eur Heart J Supplements 1999; 1[Supp D]: D78-83] analysed the acceptable revascularisation of the myocardium in respect of pilot recertification. The angioplasty failure rate after six months is small, therefore adequate revascularisation can be achieved by both surgical and non-surgical means.

#### **Human Centrifuge: by Janusz Marek.**

A brief presentation [12] was given of the remarkable capabilities this new facility. It is intended that a account of the research and training achieved will be presented at CIMP 2000.

## Flight Safety: by John Grubbström.

This showed the improvement in flight safety achieved in Sweden consequent on the introduction of pilot self checking by Hans Hjrt. In discussion it was mentioned that Europe Airsports has appointed a flight safety coordinator, Mathias Borgmaier to develop comparable statistics as was done by Bill Scull for OSTIV. CIMP will be interested in this data.

# Agenda Item 09, First Main Topic. Cardiological assessment, including the ECG, for Flight Crew Licensing.

Dr. Michael Joy, introduced as a guest speaker, is the author of the cardiology chapter in the JAR 3 Medical Manual, and adviser in cardiology to both the UK CAA and ICAO. In an illustrated presentation, he set out the use of electrocardiography in aviation, developed following the accident to a Trident at Staines where the aircraft captain made fatal errors following a heart attack. Class 2 private pilots could hold instrument ratings and fly in controlled airspace. The principal justification for electrocardiographic screening is that while no means of transportation was completely safe, it is important that the public sees that every measure to assure safety has been undertaken. The ECG is a common tool in cardiology, which is why the use is never questioned by practising cardiologists. Pilots who concealed their history of myocardial infarction would be exposed. Compared to other cardiological examinations, or even engineering inspections of aircraft, the ECG was a cheap test. Peter Saundby referred to a paper originally presented at the 1994 Dublin meeting and showed that ECG screening cost over 100 million Euros to prevent an accident, this arose from poor sensitivity and low specificity. There is a different viewpoint between public health screening and cardiological investigation. Because myocardial disease was only responsible for a small percentage of total accidents, that money could be more effectively spent in other ways. In discussion divergent views were expressed. The USA requires ECGs for older commercial pilots, but not private pilots; John McCann agreed that the FAA also had no proper scientific base for their schedule of medical examinations. René Maire mentioned that aggregating costs of a single test will always give a high figure, but relevant is the cost to a single pilot as a proportion of the total costs of flying. John Grubbström asked that the accidents prevented to be quantified. Samuel Huber questioned the value of screening asymptomatic persons. Max Bishop called attention to the great anger among pilots. Thierry Villey reported the concern of airsports organisations in France and stated that medical requirements had become a political issue. Oldrich Truska considered ECGs to be a basic tool and this was supported by Pedro Ortiz. In response to a question, Michael Joy defended the need for ECGs to be read by cardiologists, but suggested that there could be a recreational licence with a lower standard of medical surveillance.

#### Agenda Item 10, Doping.

René Maire reported on the IOC Doping conference in Lausanne (2-4 February 1999) which had been accompanied by massive documentation. He reviewed and explained the Lausanne Declaration on Doping in Sport which contained six parts. The key points were that all were guilty, trainers and officials as well as competitors. Scales of punishment were considered and some sports were considered not to be cooperating. An independent international Anti-Doping Agency will be established. Attention was drawn to an earlier paper by Prof. Dal Monte entitled 'Questions relating to the use of drugs and to training in flying', this is a most useful reference document with supporting view foils [13]. The FAI in the General Section of the Sporting Code forbids doping, but

does not fully comply with the IOC rules. The CIMP reaffirmed support for the FAI General Section. A paper had

## Agenda Item 11, World Air Games.

These will be held in Spain, end of June - early July 2001. It was agreed that the CIMP meeting for that year would be held in Spain, probably Seville, and that the Scientific Meeting would be expanded into a two day Airsports Aviation Medicine Scientific Congress. This would address Airsports activities, the training of Airsports doctors and doping. There would be a call for papers in late 1999 and both organisational and scientific committees would be required.

### Agenda Item 12, CIMP Home Page and E-mail communication.

First Thierry Montigneaux from the Secretariat-General demonstrated the FAI web page and supporting email facilities. Pedro Ortiz presented the CIMP web page amid acclamation. The meeting supported development along the lines proposed with policy documents and declarations being publicly available. E-mail discussions between CIMP meetings had become so routine that it was now becoming impracticable to be a national delegate without having an E-mail address. It was agreed that communications between CIMP and the Airsports Commissions needed improvement, and there were often internal problems within nations which could be improved. Both the President and the Secretary would attend the FAI General Council in May.

## Agenda Item 13, Airsports Aviation Medicine Book.

A Spanish language booklet had been written and published by Pedro Ortiz. CIMP supported the value of this book. Help was required in translation into other languages and embodying local requirements. This was offered.

#### Agenda Item 14, Meeting Reports.

Members of CIMP had attended the following meetings:

Aviation Psychology Vienna

Cyprus International Aviation Medicine Symposium

Europe Airsports Brussels & Vienna

Academy Meeting Singapore AME Seminar France

## Agenda Item 15, National reports.

Germany Uncertainties relating to JAR Med. and additional national requirements.

Austria Similar problems

Czech Implementing JAR Med, some practical problems.

Holland Some groups of pilots excluded.

Cyprus Use ICAO requirements, problems with JAR Med.

Russia Nothing to report.

USA Aero Med Ass provides advice to pilots in borderline cases. FAA requires

random testing of workers in aviation, and has been identifying adulterants used to confuse laboratory testing. Penalty for either; loss of

licence.

UK Airsports medical advisers have been tasked by the UK CAA to propose a

system for medical fitness of pilots.

Spain Delayed implementation of JAR Med. National law requires doping

testing, 20/yr. Doping control will be exercised at the WAG.

France Pressure by government for doping control. GA is declining to regulatory

costs. Retaining national Class 2 medical certification.

Sweden Aviation is declining and the pattern changing. Safety record improving

due to self assessment and risk awareness. JARs implemented.

European balloon Championship had no landing accidents.

Slovenia New regulations for ULM using driving medical standards. JARs being

introduced. Tradition of over-regulation from the old Yugoslav Republic.

Swiss Congratulated Piccard [and Brian Jones -Sec] on the round the world

balloon flight. A doping contract provided some testing, no positives yet. Simulator training for spatial disorientation. Trials by the Swiss AF of a liquid filled G suit. Investigations continue into the MD 11 Swissair

accident.

Poland Cooperation between the NAC and the AF on aerobatic pilots. Centrifuge

training. Accident analysis.

[Sec. Note; at the Bureau Meeting following, it was decided that in future National Reports should be submitted in advance of the meeting, and in common with all other papers submitted, posted on the <cimp-com-l@fai.org> list.]

#### Agenda Item 16, Advice to Council.

After a short debate, the CIMP unanimously agreed the following three part statement:

CIMP views with concern the increasing conflict between pilots and medical regulatory authorities in Europe.

Pilots should appreciate that disease is an important cause of fatal accidents and that maintenance of health is essential for flight safety.

Medical regulatory authorities should accept that all costs or restrictions placed on pilots are supported by evidence.

## Agenda Item 17, Any Other Business.

None notified.

#### Agenda Item 18, Election of Officers.

In an election conducted by the FAI Secretary General, the following were elected:

President René Maire Vice Presidents John McCann

Pedro Ortiz Hans Hj\_rt Peter Saundby

Secretary

#### Agenda Item 19, CIMP Programme 1999-2001.

A Scientific Congress to be associated with the WAG in the year 2001.

## Agenda Item 19, Working Groups.

The main working groups are:

Home Page Pedro Ortiz
Scientific Meeting Pedro Ortiz
Eero Vapaavouri

## Agenda Item 20, Future Meetings.

By the requisite majority, CIMP decided that the year 2000 meeting would be held in Prague over the week-end 2-4 June. The 2001 meeting would be held in Spain in conjunction with a Scientific Congress and the World Air Games. [Sec. Note: At a Bureau Meeting immediately following, it was determined that as CIMP policy, the costs of any social activities must fall upon those attending.]

The meeting ended with thanks to the President and the staff of the FAI for hosting the meeting in Switzerland. Especially interesting was the pre-meeting excursion to the Swiss Air Force base at Payerne and the flying display.

Peter Saundby Secretary.

# List of papers tabled, copies can be made available on a request to the author or the Secretary:

- 1. Minutes of the 1998 CIMP meeting.
- 2. CIMP President's report to the 1998 FAI General Conference.
- 3. Dr. René Maire, Report on the JAA-FCL Medical Sub Committee meeting in Porto Portugal, 15-16 March 1999 with 3 Annexes.
- 4. Lausanne Declaration on doping in Sport, 4 Feb 1999.
- 5. Handicapped Pilots, Bernard Schober.
- 6. Disorientation in Sporting Flights. View foils.
- 7. Ophthalmological update, Eero Vapaavouri.
- 8. R.P. Saundby, Case reports of Insulin-Dependent Glider Pilots in the United Kingdom. Aviation Space and Environmental Medicine; Vol 69, No 10, Sep 1998.
- 9. FAA office of Aviation Medicine, Civil Aeromedical Institute, Medical certification of insulin treated diabetic applicants. <a href="http://www.cami.jccbi.gov/AAM-300/insulin.html">http://www.cami.jccbi.gov/AAM-300/insulin.html</a>
- 10. Personality traits and anxiety states as predictors of selection and training level of Slovak pilots, Oliver Dzvonik.
- 11. René Maire; Coronary stenting, a new method in interventional cardiology.
- 12. Janusz Marek; Modernisation of Human Centrifuge as an acceleration simulator. 10 View foils.
- 13. Prof. Dal Monte; Questions relating to the use of drugs and to training in flying,

## CIMP address list.

A complete current address list is held by the FAI Office and can be made available by E-mail. Details of those who attended CIMP 1999 will attached to the minutes.