CISM INTERNATIONAL

SCIENTIFIC SYMPOSIUM

WARSAW 1995

PHYSICAL EDUCATION, SPORT AND HEALTH
IN THE ARMED FORCES
# SUMMARY

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Aim of the Symposium

The aim of the symposium was to study the present and future collaboration between physical instructors, sports coaches and the sports medical and paramedical specialists.

The symposium was aimed to regroup three categories of participants:

- Military physical education and physical training instructors: they are mainly all round instructors working daily with soldiers in the widest sense (recruits, non commissioned officers, officers).
- The sports coaches: they are mainly specific sports specialists working with the top military athletes;
- The sports medicine team: they comprise physicians, physiologists, nutritionists, physiotherapists, psychologists, ... and they work together and advise both the military instructors and the sport coaches.

Subtopics

The subtopics of this symposium are:

1. Assessment of actual health status and physical fitness of soldiers (mass evaluation or screening) and top military athletes (specific evaluation).
2. Process of detection and selection of soldiers and top military athletes.
3. Comparison of exercises load control systems and procedures of optimization of the load control within soldiers and top military athletes.
4. Overload and overtraining problems.
5. Illnesses and injuries related to physical and sports activities.
6. Process of post exercise recovery and regeneration of the soldiers and the top military athletes.
ORGANIZATION

The CISM International Scientific Symposium on "Physical fitness, sport and health in the Armed Forces" was held in Warsaw (Poland) from 20 to 24 March 1995. It was organized by the Permanent Commissions for Sport and for Sports Medicine of CISM in close collaboration with the Polish Armed Forces.

The Executive Committee was composed as follows:

**Director**
Reg. Dir. Hans NEISBERGER - Germany.
Chief of Section Sports Scientific aspects and Documentation CISM.

**Chairman of the Organizing Committee**
Col. dipl. Edward ZAWADZKI - Poland,
Chief of the Physical Education and Sport Department of the General Staff of Polish Armed Forces.
Chief of the Polish Delegation to CISM.

**Director of Scientific Aspects**
Col. Prof. Krzysztof KLUKOWSKI M.D. - Poland.
Research Director of Polish Air Force Institute of Aviation Medicine.

**Director of Medical Aspects**
Col. Prof. Romuald LEWICKI - Poland
Chief of Sports Medicine Department of Military Medical Academy - Poland

**Technical Director**
Dr. Ph. Harald VERVAECKE,
Member of the Permanent General Secretariat of CISM.

**Administrative Director**
Col. (Ret) Dr. Crim. Yves DEWALLEF,
Member of the Permanent General Secretariat of CISM.

CONSEIL INTERNATIONAL DU SPORT MILITAIRE

CISM INTERNATIONAL SYMPOSIUM

Physical Fitness, Sport and Health in the Armed Forces
PROGRAMME

Monday 20 March 1995

08.30
Departure time to the Conference Centre of the Polish Armed Forces (CKWP).

08.30 - 09.00
Transport to CKWP.

09.00 - 09.45
Breakfast at CKWP.

09.45 - 09.55
All participants take their place in the Conference Room.

10.00 - 10.30
Opening Ceremony of the Symposium.
Master of Ceremony: Dr.Ph.Harald VERVAECKE (Belgium).
10.00 All participants stand. Entering of the authorities.
10.02 CISM and Polish anthems are played.
10.06 All participants be seated.
10.07 Welcome Speech by Colonel Dipl.Edward ZAWADZKI (Poland).
Chairman of the organizing Committee of the Symposium.
10.11 Opening speech by Reg.Dir.Hans NEISBERGER (Germany).
Director of the Symposium.
10.18 Opening speech by Major General Leon KOMORNICKI (Poland)
Deputy Chief of General Staff and Chief of Instruction Inspectorate.
10.25 Opening speech by Mr Eugenius PIETRASIK (Poland).
Vice Minister of Sport. Dept.Chairman of Physical Education in the Governmental Office.

10.30 - 11.00
Coffee/Tea Break.

11.00 - 11.30
CISM and the First Military World Games by Dr.Ph.Harald VERVAECKE (Belgium).

11.30 - 12.00
The 1995 CISM International Symposium by Col.Prof.Dr.MD. Krzysztof KLUKOWSKI
(Poland)

12.00 - 13.30
Lunch

13.30 - 14.00
Transport to the Polish Air Force Institute of Aviation Medicine (WiML).
Visit of WiML.
- Welcome speech by the Commander of WiML.
- Effort tolerance tests.
- Low body negative pressure and hydrostasis.
- Tolerance to + Gz acceleration tests.
- Information by physical training bases.
- Tests in simulated flight conditions.
- History of WiML.
- Farewell speech by the Commander of WiML.

14.00 - 16.00
Transport to the hotel.

16.00 - 16.30
Free

16.30 - 19.00
Transport by CKWP.

19.30 - 20.00
Dinner hosted by CISM and the Polish Delegation to CISM.

20.00 - 21.30
Transport to the hotel.
Tuesday 21 March 1995

07.30 - 08.00  Transport to CKWP.
08.00 - 09.00  Breakfast

Subtopics 1 and 2

- Assessment of actual health status and physical fitness of soldiers (mass evaluation or screening) and top military athletes (specific evaluation).
- Process of detection and selection of soldiers and top military athletes.

Moderators:  Reg.Dr. Hans NEISBERGER (Germany), Director of the Symposium.
Colonel Prof. MD Krzysztof KLUKOWSKI (Poland), Director for scientific aspects.

09.00 - 09.45  "Some considerations on detection and selection of athletes"
Dr. Ph. Harald VERVAECKE (Belgium), Member of the CISM Permanent General Secretariat.

09.45 - 10.15  "The physical fitness and efficiency of newly-recruited soldiers"
Lt-Col. MD. Andrzej BURCON (Poland), Advisor of sports medicine in the Physical Education and Sport Department of the General Staff of the Polish Armed Forces.
Coffee/Tea Break.

Moderators:  Reg.Dr. Hans NEISBERGER (Germany), Director of the Symposium.
Dr. Ph. Harald VERVAECKE (Belgium), Member of the CISM PGS.

10.15 - 11.15  "Increasing role of the physical fitness of the soldiers"
MSc. Libor SOUMAR (Czech Republic) - Czech Army Sports Research Institute.

11.15 - 11.45  "Process of detection and selection of soldiers and military top athletes"
Lt. Bart DE MUYNCK, Teacher at the School of Physical Education of the Belgian Armed Forces.

11.45 - 12.15  "Tests and norms for monitoring locomotor abilities by Slovenian soldiers"
Prof. Dr. Frans AGREZ - University of Ljubljana - Faculty of sport.
Lunch

Moderators:  Reg.Dr. Hans NEISBERGER (Germany), Director of the Symposium
Ass.Prof. Marek KLOSSOWSKI PhD (Poland), Chief of the Exercise Laboratory of the Polish Air Force Institute of Aviation Medicine.

13.30 - 13.55  "Assessment of health and fitness of members of the United States Air Force"
Colonel James E. DALE (United States), Chief Health Promotion, Office of the Surgeon General.

13.55 - 14.20  "The methodology of studies and evaluation of physical fitness in flying personnel"
Colonel Prof. MD Krzysztof KLUKOWSKI (Poland).

14.20 - 14.30  " Sélection des athlètes dans l'armée Algérienne"
Lt-Col. Prof. MD. Mohammed SAOUTHI, Chief of the Toxicology Centre of the Central Military Hospital (Algeria).

14.30 - 15.00  "Catégorisation médico-sportive dans les Armées françaises: vers une nouvelle orientation"
Médecin en Chef Francis HUET (France).
Coffee/Tea Break.
Subtopics 3 and 4

- Comparison of exercises load systems and procedures of optimalisation of the load control within soldiers and top military athletes.
- Overloading and overtraining problems.

Moderators: Reg. Dir. Hans NEISBERGER (Germany), Director of the Symposium.
Colonel Prof. MD. Krzysztof KLUKOWSKI (Poland).

15.30 - 16.00
"Coincident thresholds for muscle and blood lactate accumulation during progressive exercise".
Prof. Dr. Jolanta CHWALBINSKA - MONETA (Poland), Researcher in the Department of Physiology of the Polish Science Academy.

16.00 - 16.30
"Overloading and overtraining/overuse problems"
Lt-Col Jaco MOOLMAN (South Africa).

16.30 - 17.00
"Ability to swim and swimming proficiency of 20 years old males".
Lt Andrew TELBAN (Slovenia), Adviser for sport in the Slovenian Army.

17.00 - 17.30
"Background and development of a new physical education infrastructure in the Irish Defence Forces"
Captain SHEEHY & Captain RICHARDSON (Ireland).

17.30 - 18.30
Dinner.

18.30 - 19.00
Transport to the hotel.

19.00
Evening free.

Wednesday 22 March 1995

07.30 - 18.00
Transport to CKWP.

08.00 - 09.00
Breakfast.

Moderators: Reg. Dir. Hans NEISBERGER (Germany), Director of the Symposium.
Colonel Prof. MD. Henryk TCHORZEWSKI (Poland), Chief of Department of Pathophysiology of Military Medical Academy.

09.00 - 09.30
"The role of physical exercises in free radical processes"
Colonel Prof. MD. Josef KEDZIORA (Poland), Deputy Dean of the Military Medical Academy.

09.30 - 10.00
"The polish education and sports department".
Colonel Dipl. Eduard ZAWADZKI (Poland), Chairman of the Organizing Committee, Chief of the Polish Delegation to CISM.

10.00 - 10.30
Coffee/Tea Break.
Subtopics 5 and 6

- Illnesses and injuries related to physical and sports activities.
- Process of post exercise recovery and regeneration of the soldiers and the top military athletes.

Moderators:
Reg.Dir. Hans NEISBERGER (Germany), Director of the Symposium.
Colonel Prof. Romuald LEWICKI (Poland)

10.30 - 11.00
"The depressing state after overtraining in top athletes, correlated to injuries in training phases".
Lt-Col Asst.Prof.MD. Luis Antonio F.DA SILVA (Brazil).

11.00 - 11.30
"The immune system as a target of physical effort and psychological stress".
Colonel Prof.MD.Henryk TCHORZEWSKI (Poland).

11.30 - 12.00
"Anemia in athletes".
MD.Zbigniew SZYGULA (Poland), Physical education Academy Krakow.

12.00 - 12.30
Lunch.

13.30 - 14.00
Transport to Wilanow Royal Palace.

14.00 - 15.30
Visit of Wilanow Royal Palace.

15.30 - 16.00
Transport to Old City of Warsaw.

16.00 - 17.00
Walk through the old city of Warsaw.

17.00 - 17.30
Transport to CKWP.

17.30 - 18.30
Dinner.

18.30 - 19.00
Transport to hotel.

Thursday 23 March 1995

07.30 - 08.00
Transport to CKWP
Breakfast

Moderators:
Reg.Dir. Hans NEISBERGER (Germany), Director of the Symposium.
Colonel PHD. Maciej KALINA (Poland), Physical education and sport department of the General Staff of the Polish Forces.

09.00 -09.30
"The recovery of soldiers and top military athletes after a physical exercise".
Mr Jari UTRIAINEN (Finland), Head of coaching, Master of Sports Sciences.

09.30 - 10.00
"Tendinous and muscular injuries of the elevation motion system of the knee in athletes"
Dr W.HAGNER (Poland), Medical Academy.

10.00 - 10.30
Coffee/Tea Break.

Moderators:
Reg.Dir. Hans NEISBERGER (Germany), Director of the Symposium.
Colonel Dr.Crim.Yves DEWALLEF (Belgium), Member of the PGS of CISM.

10.30 - 11.00
"Practical aspects of echocardiography in sports medicine".
Dr.MD.Anna JEGIER (Poland).

11.00 - 11.30
"Is it true: mens sana in corpore sano?"
Colonel PhD.Maciej KALINA (Poland).
12.00 - 13.30  Lunch.
13.30 - 14.30  Plenary session - discussions and conclusions.
14.30 - 15.00  Closing ceremony.
15.00 - 15.30  Transport to hotel.
15.30 - 19.30  Free.
19.30 - 20.00  Transport to CKWP.
20.00 - 22.30  Closing banquet hosted by the Chief of Instruction Inspectorate of the General Staff.
22.30 - 23.00  Transport to hotel.

Friday 24 March 1995

Breakfast and departures.
PRESENCE LIST

DIRECTOR
1. Reg.Dir. Hans NEISBERGER

PERMANENT GENERAL SECRETARIAT CISM
2. Dr.Ph.Harald VERVAECKE
3. Col.Dr.Crim.Yves DEWALLEF

ALGERIA
4. LtCol.Mohammed SAOUTHIL
5. Capt.Ghazi BENBOUZID

BELGIUM
6. Cdt. Luc CORDONI
7. Lt.d’Av.Bart DE MUYNCK

BOTSWANA
8. Maj.David MARUMO
9. Sgt Million Tabalume MASUMKIBA

BRAZIL
10. LtCol.Med.Luis Antonio F.DA SILVA
11. Lt.Pedro Celso GAGLIARDI Palermo

CEZCH REP
12. LtCol.Dr.Emil BOLEK
13. Mgr.Libor SOUMAR

FINLAND
14. Mr.Jari UTRIAINEN

FRANCE
15. Médecin en Chef Francis HUET
16. Col.Jean Claude AUWOINE

GERMANY
* Mr.Hans NEISBERGER
IRELAND
17. Capt. Thomas SHEEHY
18. Capt. Noel RICHARDSON

JORDAN
19. Col. JAFAR HÜSNI JOUNES
20. Capt. Mhmoud Waridat MOHAMMAD

KENYA
21. LTCOL. Dr. James MUTUNGI
22. Maj. Samuel R.MWANGI

KOREA REP
23. Comm. Bong Kuk OH

SLOVENIA
24. Lt. Andrej TELBAN
25. Dr. Bojan JOST

SOUTH AFRICA
26. LtCol. Jaco MOOLMAN
27. LtCol. Gerhard OPPERMAN

TUNISIE
28. Maj. Habib EL ASKRI

U.S.A.
29. Col. James E. DALE
30. Maj. Joe MAZZOLA
POLAND

31. Col.Dr. Lech SWIECICKI
32. Maj.Mgr Tadeusz PIWONSKI
33. Lt. Krzysztof GARBACKI
34. Lt.Piotr KOWALSKI
35. Col.Gregor MOZANSKI
36. Capt Ryszard KARHONIK
37. Lt.Mieczyslaw KARPIEL
38. Maj.Jozef NAPORA
40. Maj. Andrej PUZNIAK
41. LtCol.Zbigniew MALYCHA
42. Maj. Tadeusz BRZOSOWSKI
43. LtCol. Edward WARYCH
44. LtCol. Tadeusz SADZA
45. Maj. Andrzej RAKOWSKI
46. Cmdr Andrzej KRZESKI
47. Cmdr Marek BUCZKOWSKI
48. Cmdr Wacław LASZKIEWICZ
49. Maj. Szczepan MATUSIAK
50. LtCol. Janusz HERNIK
51. Zygmunt SKROBICKI
52. Maj. Zdzisław OLEJNIČZAK
53. Col. Stanisław BACZYŃSKI
54. LtCol. Jan HARIŚMUK
55. LtCol. Henryk CHOZODY

POLISH LECTURERS

56. Prof. Jolanta CHWALBINSKA-MONETA
57. LtCol. Marek KŁOSOWSKI
58. Col. Prof. Henryk TCHORZESWIKI
59. Dr. Henryk KUNSKI
60. Prof. Wojciech DRYGAS
61. Dr. Anna JEGIER
62. Col. Prof. Romuald LEWICKI
63. Dr. Zbigniew SZYGULA
64. Col. Prof. KEDZIORA
65. Prof. Tadeusz RYCHLEWSKI
66. Dr. S. WYLEGARSKI
67. LtCol. Henryk KOLANO
68. Col. Dr. Maciej R. KALINA
69. Col. Prof. Krzysztof KLUKOWSKI

INTERPRETERS

70. Mr Jacques VANDE VELDE
71. Mrs Christiane GAMACHE
72. Mr. Bratyslaw DABROWSKI
ORGANIZING COMMITTEE

73. Col Edward ZAWADZKI - Chief of the Organizing Committee.
* Col Prof. Krzysztof KLUKOWSKI - Scientific Director.
* Col Prof. Romuald LEWICKI - Medical Director.
74. LtCol. Andrzej BURCON
75. LtCol. Andrzej WOLSKI
76. LtCol. Ryszard SOLINSKI
77. Maj. Jerzy SMOLINSKI
78. Capt. Zbigniew LEWICKI
79. Lt. Ireneusz BURSKI
80. Lt. Tomasz DOBEK
81. Mrs Barbara GAWRYS
82. Mrs Elzbieta JASZCZEBSKA
83. Mr Adam SLIWAKOWSKI
Opening speech

Reg. Dir. H. NEISBERGER (Germany),
Director of the Symposium,
Member of the CISM Sports Commission.

Ladies and gentlemen,

It's a great pleasure and an honour to me, to welcome you to the first International CISM Symposium in 1995.

I remember very well the scientific clinic of Prague two years ago - and particularly the high competence and responsibility of the Polish delegates. Still during the event they were spontaneously expressing their interest in organizing too a scientific seminar in Poland and they asked for assistance.

We had good reasons to promote this request. The International Military Sports Council is one of the major sports organizations in the world as well as being the military organization with the highest number of different armed forces.

In the last few years we noticed an accelerated growth of our membership. The main reasons were the massive entrance of former members of the SKDA and the breakup of some Eastern European countries.

In all cases we have welcomed these new nations because they are all devoted, to perpetuate our motto: "Friendship through Sport" within their Armed Forces and the scope of events organized by CISM.

CISM is an international sports organization, which the Armed Forces of the member countries are affiliated to, each being represented by a delegation at the General Assembly. Membership gives the right to stage and to take part in world and regional championship, clinics and various meetings.

In this way we convinced the authorities of CISM, that is to say the Executive Committee to approve this scientific clinic in Warsaw respectively to recommend it to the General Assembly for approval.
The main aim of this clinic is to study the present and future collaboration between physical instructors, sports coaches and the sports medical specialists. Therefore the clinic is aimed to regroup three categories of participants:
- Military physical education and physical training instructors, working with soldiers in its widest sense.
- The sports coaches as specific sports specialists working with top military athletes.
- The sports medicine team comprising physicians, physiologists, nutritionists, physiotherapists, and so on. They work together and advise both the military instructors and the sports coaches.

The main topic of this clinic is: "Physical fitness, Sport and Health in the Armed Forces".

It will be studied and discussed within the following sub-topics:
- Assessment of actual health status and physical fitness of soldiers and of top military athletes.
- Process of detection and selection of soldiers and of top military athletes.
- Comparison of exercises load control systems and procedures of optimalization of the load control within soldiers and top military athletes.
- Overloading and overtraining problems.
- Illnesses and injuries to physical and sports activities.
- Process of post exercise recovery and regeneration of the soldiers and the top military athletes.

The International Military Sports Council is organizing this international scientific clinic in close cooperation with the Polish delegation to CISM.

I'm very happy being able to say - at the beginning of this clinic - that the local organizing committee, that all personal who has taken part in the preparation of the clinic has done an excellent job up to now - and I'm sure they will continue till the end of this week.

Thank you very much for your outstanding work.

Ladies and gentlemen, in my capacity as Symposium Director, I declare the CISM International Symposium "Physical Fitness, Sport and Health in the Armed Forces" open.