PROGRAM

XXXII OSTIV CONGRESS

Leszno, Poland
30 July - 6 August 2014

Version 5: July 29, 2014

Wednesday 30 July 2014

Opening Ceremony of the XXXII OSTIV Congress in the Briefing Hall at 18.00 hrs.

- Welcome by OSTIV President Prof. Ir. L.M.M. Boermans

- Addresses by

    - Wlodzimierz Skalik, President of Polish Aero Club
    - Dariusz Cisek, Contest Director
    - Peter Ryder, President of the Jury

- OSTIV Award Ceremony

- Keynote lecture:
  Around the World with a Solar Powered Aircraft
  presented by
  Hannes Ross (member of the Solar Impulse Team)

- Reception offered by the organizer of the World Gliding Championships 2014

TECHNICAL SESSIONS

Thursday 31 July 2014

OSTIV-Lectures at room 101 (first floor) of the Central Gliding School

Afternoon Session

14.00 Numerical investigation into the performance of NACA inlets for sailplane applications.
J. Bosman; School of Mechanical Engineering of the North-West University, Potchefstroom, South Africa.

14.45 Wind-tunnel validation of the gradual lift curve slope at thermal flap settings of some new generation flapped airfoils.
L. Popelka; Institute of Thermomechanics, Academy of Sciences of the Czech Republic, and HpH, Ltd., Kutna Hora, Czech Republic.

15.30 Coffee break

15.45 Highly extensible skin of a shape-variable wing leading edge of a high performance sailplane.
M. Weinzierl; Akaflieg München e.V., München, Germany.

16.30 Wind tunnel study of airbrake aerodynamics.
Z. Patek, J. Cervinka, M. Lahuta; VZLU Aerospace Research and Test Establishment, Aerodynamics, Czech Republic.

17.15 Exploring the possibility of Autonomous Gliders in the Atmosphere of Titan.
R.P. LeBeau[1], C.Coletti[1], G. Bramesfield[2];
1. Parks College, Saint LouisUniversity, Saint Louis, USA.
2. Ryerson University, Toronto, Canada.

Friday 1 August 2014

OSTIV-Lectures at room 101 (first floor) of the Central Gliding School

Afternoon Session

14.00 The influence of target function selection on optimization of winglets for the glider SB14, using and developing a lifting-line based program-chain. .
K. Rohde Brandenburger, J. Himmisch; Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Institut für Aerodynamik und Strömungstechnik, Braunschweig, Germany.

14.45 Turbulators in practice.
L. Boermans; Faculty of Aerospace Engineering, TU Delft, The Netherlands.

15.30 Coffee break

15.45 Analysis of Unsteady Inviscid Flow Effects on a Natural Laminar Airfoil in Flight through Turbulence.
T.W. Martins, A. Reeh, C. Tropea; Institute of Fluid Mechanics and Aerodynamics (SLA), TU Darmstadt, Germany.

16.30 CTA measurements of longitudinal velocity fluctuation and its spectra in thermal convection atmosphere and lee-wave condition using sailplane in-flight experiment.
L. Popelka, M.Marejka, J. Zeleny, V. Uruba; Institute of Thermomechanics, Academy of Sciences of the Czech Republic.

17.15 Proposal for investigation into the fatigue life of the JS1 sailplane.
A. Jonker, L. van der Walt; School of Mechanical Engineering of the North-West University, Potchefstroom, South Africa.

OPEN SESSION

Time: At an evening to be announced, for everybody to attend.
Location: Briefing Hall

Speaker: **R. Heise**, Director of the Mountain Wave Project.

Subject: **The Mountain Wave Project – Himalaya Research Expedition**.
Challenges, objectives and the first scientific results of this outstanding airborne measurement campaign in Nepal.

Saturday 2 August 2014

OSTIV-Lectures at room 101 (first floor) of the Central Gliding School

Afternoon Session

14.00 A game theory analysis of sailplane racing.
N.J. Grasser; The Pennsylvania State University, Aerospace Engineering, State College, USA.

14.45 Improvement of sailplane crashworthiness through keel beams with silicone cores.
U. Schuster, K. Wolf; Technische Universität Dresden, Institute of Aerospace Engineering, Chair of Aircraft Engineering, Dresden, Germany.

15.30 Coffee break

15.45 A composite manufacturing process for producing Class A finishing components.
A. Jonker, Z. Lombaard; School of Mechanical Engineering of the North-West University, Potchefstroom, South Africa.

16.30 Airborne proximity warning device.
L.R. Yusupov; Private, Russian Federation.

17.15 Design and Fabrication of Micro Radio-Control Ornithopters, Helicopters and Fixed-Wing aircraft.
B. Pipenberg; The Pennsylvania State University, Aerospace Engineering, State College, USA.

Sunday 3 August 2014

Excursion

Visit to Breslau/Wroclaw, guided tour, boat trip on the Oder, dinner, visit to Panorama painting, Baroque Church and old University.

(for those who registered at the OSTIV-office)

Time schedule will be announced.

METEOROLOGICAL SESSIONS

Monday 4 August 2014

OSTIV-Lectures at room 101 (first floor) of the Central Gliding School

Afternoon Session

14.00 Comparison of three model results for nowcasting in a convective boundary layer.
N. Şen, A.C. Moral, B. Efe, A. Lauber, O. Mertol, Z. Aslan; Istanbul Technical University Istanbul, Turkey; Karlsruhe Institute of Technology, Karlsruhe, Germany; Istanbul Aydın University, Istanbul, Turkey.

14.45 A free, on-line soaring weather forecasting system for world-wide use.
E. Hindman; Meteorology and Oceanography, Earth and Atmospheric Science Department, The City College of New York, USA.

15.30 Coffee break

15.45 Analysis of mountain wave 3D windfields in the Andes derived from high-altitude sailplane flights.
R. Millane[1], N. Zang[1], E. Enevoldson[2], J. Murray[2]
1. Computational Imaging Group, Department of Electrical and Computer Engineering University of Canterbury, Private Bag 4800, Christchurch, New Zealand.
2. NASA Dryden Flight Research Center, Edwards, California, USA.

Tuesday 5 August 2014

OSTIV-Lectures at room 101 (first floor) of the Central Gliding School

Afternoon Session

14.00 A case study of the wet microburst on 2 August 2011 at Esenboga International Airport (LTAC).
E.T. Özdemir[1,2], A. Deniz[1];
1. Istanbul Technical University, Department of Meteorology, Istanbul, Turkey.
2. Istanbul Technical University, Eurasia Institute of Earth Sciences, Istanbul, Turkey.

14.45 Detection of overshooting cloud tops (Ots) and their relationship to severe weather over Europe.
H. Baltaci, T. Kindap; Istanbul Technical University, Eurasia Institute of Earth Sciences, Maslak 34469, Istanbul, Turkey.

15.30 Coffee break

15.45 The effects of climate change on agricultural production under high evaporation and their role on aviation and gliding in Southeastern Anatolia region of Turkey.
F. Dökmen[1], M. Kuzucu[2]
1. Kocaeli University, Food & Agricultural Vocational School, Kocaeli, Turkey.
2. Pistachio Research Station Directorate, Gaziantep,Turkey.

16.30 The formation of urban heat island in Eskişehir.
A. Tokgözlü[1], B. Gönençgil[2], E. Özkan[3], K. Uysal[3], E. Yasdiman[3]
1. Süleyman Demirel University, Faculty of Art and Sciences, Isparta, Turkey.
2. Istanbul University, Faculty of Literature, Istanbul, Turkey.
3. Turkish Aeronautical Association, Inönü Traini.ng Centre, Gliding School, Eskişehir, Turkey.

Wednesday 6 August 2014

OSTIV-Lectures at room 101 (first floor) of the Central Gliding School

Afternoon Session

14.00 Is the Common Conceptual Model for the Kinematics of Atmospheric Gravity Waves inadequate?
J. Dummann, Private, Germany.

14.45 Analysis of the forest health state based on multispectral images acquired by Unmanned Aerial Vehicle.
M. Kacprzak, Institute of Aviation in Poland.

15.30 Soaring Flights on Thermal Waves.
C. Lindemann, Freie Universität Berlin, Germany.

19.00 Closing Dinner at the Markiz Restaurant

ul. Chociszewskiego 5, Leszno.

(for those who registered at the OSTIV-office)

Transport by own car.