Call for Presentations

Soaring Society of America Annual Convention

Little Rock, Arkansas

February 20-22, 2020

OSTIV Track

Presentations are being sought for the International Organization for the Science and Technology of Soaring's (OSTIV) speaker tracks at the Soaring Society of America's Annual Convention. The desired presentations can address any scientific or technical aspects of soaring flight including:

Technical Presentations
Aerodynamics, Structures, Materials, Design, and Maintenance

Scientific Presentations
Meteorology, Climatology, and Atmospheric Physics as related to soaring flight.

Training and Safety Presentations
Training and Safety, Coaching, Health, and Physiology

General Interest Topics of a Technical Nature

In addition to topics that deal with conventional sailplanes, presentations are welcome that are concerned with motor gliding, hang gliding, paragliding, ultralight sailplanes, and model sailplanes. Topics that focus on instrumentation, electronics, safety, statistics and other system technologies will be included in the sessions for which the application of the technology is most relevant.

It is hoped that qualifying presentations will be later written up and submitted for possible publication in the online OSTIV Journal, *Technical Soaring*.

Please submit a title and an abstract, of your proposed presentation, as well as a photograph and a short biography of yourself to mdm@psu.edu or:

Mark D. Maughmer
229 Hammond Building
University Park, PA, 16802

Registration instructions and additional convention information are available at:

http://www.ssa.org/convention

Speakers should register, although the registration fee for speakers is free.

Typical and Suggested Topics are:

Technical Sessions:

The technical sessions will cover all aspects of design, development, and operation of sailplanes, motor gliders, ultralights and solar- or man- powered aircraft. Topics may include, but are not limited to:

- Airworthiness, structural concepts, new materials, fatigue, crashworthiness, manufacturing processes;
- Aerodynamics;
- Stability and control;
- Airframe vibration and flutter;
- Propulsion systems;
- Design integration and optimisation;
- New developments in flight testing;
- Airworthiness requirements;
- Cockpit instruments, including navigation instruments (GPS etc.).

Scientific Sessions:
Meteorology, Climatology, and Atmospheric Physics:

- Meteorological data acquisition and service for gliding operations;
- Weather forecasting for soaring flight;
- Climate-change and soaring
- Mesoscale and small convective, baroclinic or orographically induced phenomena;
- New observations; measurements or analysis of convergence lines, cellular patterns, shear structures, standing and moving waves, short period cycles, turbulence, boundary layer in complex terrain;
- Analytical techniques of delineating thermal and mesoscale structures from routine or experimental ground or flight data, or from remote sensors;
- Modelling of thermals, mesoscale or microscale structures;

Training and Safety Sessions:
Training and Safety sessions will be held on subjects covering disciplines such as:

- Flight training, theory and analysis of techniques and results, psychology, objectives, training facilities and material;
- Safety, health, human physiology and psychology in connection with soaring;
- Human and medical factors in aircraft design and operation;
- Piloting techniques;
- Flight operation in controlled airspace;
- Safety devices.

General Interest Topics:
Topics of general interest in the field of gliding such as:

- General philosophy of competition classes;
- Documentation of badge and record flights;
- Common interests with other air sports like hang gliding, paragliding, microlights and ultralights;
- Man-powered flight; solar-powered flight, and electric-powered flight.