

Southern California Soaring

A Publication of the Region 12 Soaring Council
February/March/April 2005

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Special Convention Issue

Welcome to our Special Convention Issue! For the second time in four years, the SSA Convention is coming to Region 12, on Thursday, February 10th, through Saturday, February 12th, 2005. The Soaring Software Academy is on Wednesday, February 9th.

We hope you will attend. Please bring along your non-flying friends and your family -- this is an excellent opportunity to introduce them to soaring. Also, please volunteer to help out on the floor of the Convention. You will have a good time, will get a free shirt and admission, and will earn some money for your club or RESCO. See inside this issue for all the details.

We will see you there!



Register On-Line for the Convention!

Sign up on-line at <http://www.ssa.org/online/home.htm> or call the SSA at 505-392-1177.

All meal events are selling at twice the normal rates - seats are limited so book early!

ASA Powered Sailplane Demonstrations in Ontario

The Auxiliary-Powered Sailplane Association (ASA) was founded in 1988 to encourage the design, development and safe use of self-launching and sustainer-engine sailplanes and motorgliders. Membership is open worldwide. You need not own a powered sailplane to join. For more information, see the ASA web site: <http://www.motorglider.org>.

At the Ontario Convention, ASA members and manufacturer's representatives will conduct glider-side presentations on the exhibit floor. They will cover topics such as design, maintenance, power system controls, extract/retract mechanisms, safety devices, and flight operations. Everyone is welcome, whether you own a powered sailplane, are considering purchasing one, or are simply interested in learning more about this increasingly popular launch method.

Thursday, February 10

Apis Motorgliders: Robert Mudd (9:00 to 9:30am; 1:30 to 2:00pm)

Schempp-Hirth Motorgliders: Dave Nadler & Heinz Weissenbuehler (11:00 to 11:30am; 2:30 to 3:00pm)

Lambda Motorgliders: Robert Broadwell (2:00 to 2:30pm)

Friday, February 11

Alisport Motorgliders: Leo Benetti-Longhini & Bob Carlton (9:00 to 9:30am; 1:30 to 2:00pm)

DG Motorgliders: Oliver Dyer-Bennet & Gary Evans (11:00 to 11:30am; 2:30 to 3:00pm)

Lambda Motorgliders: Robert Broadwell (2:00 to 2:30pm)

Saturday, February 12

Stemme Motorgliders: Karen and Bret Willat (9:00 to 9:30am; 3:30 to 4:00pm)

Carat Motorgliders: Oliver Dyer-Bennet (10:00 to 10:30am; 1:30 to 2:00pm)

Schleicher Motorgliders: Kempton Izuno & John "Bumper" Morgan (11:00 to 11:30am; 2:30 to 3:00pm)

Convention Programs

Adventures in Sailplane Development

Thursday, 9:00 to 9:45 am

Bob Kuykendall

The speaker, a soaring enthusiast with no formal engineering training, has developed a high-performance sailplane. He will discuss the lessons learned and the lessons applied, as well as development methodologies, and software tools for design and development. He will also touch upon the philosophy of amateur design, and the role of the resourceful individual in modern society.



Bob Kuykendall's sailplane.

Evaluating Glider Gel Coat Finishes

Thursday, 9:00 to 9:45 am

Bob Iacovara

Gel coat is the interface between a glider's composite structure and the environment. It protects the substrate, but also can present quality issues including cracking, yellowing, chalking, and fading. The speaker will outline types of gel coat finishes, their performance characteristics, and the latest technology.

205 Diamond Distances – Survived and Enjoyed

Thursday, 10:00 to 10:45 am

Henry Combs

A soaring icon will discuss his basic philosophy: safety and enjoyment.

You Ain't Seen Nothin' Jet: Jet Sailplanes - Past, Present, and Future

Thursday, 10:00 to 10:45 am

Bob Carlton

A history of jet powered sailplanes from 1949 to the present, including information about the speaker's Silent-J twin jet sailplane project. His project could help lead to future inexpensive jet sailplanes and homebuilt jet aircraft.



The Silent-J jet sailplane.

The History of Modern Hang Gliding

Thursday, 11:00 to 11:45 am

Bill Liscomb

The inventions and events leading to the birth and growth of hang gliding in the 1970s, including highlights of the individuals, history, and challenges presented in the sky and on the ground.

How More Will Soar: What Keeps People Away?

Thursday, 11:00 to 11:45 am

Alexis Glynn Latner

Clubs and soaring sites across America are seeing declining numbers of pilots, and face cultural trends that divert prospective soaring pilots into other endeavors. Several experts will share their observations and advice, while challenging our conventional ways of thinking about the problem.

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Getting Better with Age: Restoration of Vintage Gliders Around the World

Thursday, 1:30 to 2:15 pm

Jan Scott

Composite sailplanes first appeared around 1970, and quickly turned wood and fabric covered sailplanes into white elephants. In the mid-seventies, an organization was created in the United Kingdom to save, restore and fly these unwanted gliders. The speaker will describe how the movement caught on, and then spread throughout the world.



Vintage Baby Bowlus.

FAI Environmental Commission: Does Green Mean Goodbye?

Thursday, 1:30 to 2:15 pm

Bernald S. Smith

The Federation Aeronautique Internationale's Environmental Commission prepared the Environmental Code adopted by all airports. The speaker explores the German Aero Club's success in dealing with environmental concerns, especially as they relate to gliding.

Interplanetary Cross Country: Straight Distance and Out and Return Exploration

Thursday, 2:30 to 3:15 pm

Al Cangahuala, Ph.D.

Several recent Interplanetary missions have involved atmospheric flight. The speaker focuses on the Cassini-Huygens probe currently at Saturn's satellite Titan, and on the Genesis mission that gathered solar wind samples before returning to Earth. Emphasis will be on the parallels between these long missions and long cross-country flights – such as the importance of good maps, and familiarity with landing sites.

Soaring Over the Sea: Torrey Pines

Thursday, 2:30 to 3:15 pm

Ed Slater, Gary Fogel, Doug Fronius

The panel will discuss the historical and technical aspects of soaring at Torrey Pines. This will include the process of obtaining permits from the various landowners and governmental agencies that control the Torrey gliderport property, and the preparations undertaken to assure the safety of winch and ground launching at this historic site.

Reaching for 60 FPM: The LightHawk Sailplane

Thursday, 3:30 to 4:15 pm

Danny Howell

The LightHawk sailplane exceeds the famed Carbon Dragon in its utilization of lower level atmospheric energy. This plane could validate Paul MacCready's 1959 prediction of sustained soaring at almost any location, any time of the day or season, with very low sinking speed. These attributes, combined with improved maneuverability, could vastly expand the opportunities for soaring flight.



Prepping the LightHawk for launch.

Technical Aspects of the Silent Self Launch Sailplanes

Thursday, 3:30 to 4:15 pm

Paolo Balocchi

The speaker will cover the history, technical evolution, and latest developments of the Silent series of sailplanes, which have become a platform for several propulsion systems. He will discuss research and experimentation, as well as developments expected to appear in future production.

Marfa: First World Contest in the USA

Thursday, 4:30 to 5:15 pm **Burt Compton, George Moffat**

Located on a high plateau near Big Bend National Park in west Texas, Marfa hosted the 1970 World Soaring Contest (the first ever held in the USA). Speaker George Moffat won the Open Class at the contest. He and Burt Compton will discuss the events that lead up to this historic contest, the first-generation glass sailplanes that participated, and the personalities who flew them.



Marfa from above.

Stress-Free Soaring and Staying Aloft

Thursday, 4:30 to 5:15 pm **Bob Leve**

Emotional reactions to the conditions encountered in flight can lead to diminished attention span, imprecise control movements, and disorientation. The speaker will focus on reducing and controlling cockpit stress through the use of relaxation, feedback, fluency, and imagery.

In the Middle of Nowhere: Pilot and Crew Survival

Friday, 9:00 to 9:45 am **Jim Payne**

The Air Force's Survival Training Guide describes survival techniques for harsh climates like those that generally accompany great soaring. Planning and preparation are the key – the speaker provides checklists and advice for pilots and crews.

The OLC-System, a Major Leap for Soaring

Friday, 9:00 to 9:45 am **Reiner Rose**

The Aerokurier Online Contest (OLC) is a world-wide, de-centralised competition with daily scoring via the internet. Documentation occurs exclusively with flight recorders – there are no declarations or official observers.

The Nonprofit Shoe: Does It Fit Your Club Too Tight, Too Loose, or Is It Gelling?

Friday, 9:00 to 9:45 am **Frank Whiteley, Dave Newill**

Do your club members need a tax write off? Would your club like to save money? The speakers discuss the pros and cons of a nonprofit club, and describe the different types of nonprofit status.

Sierra Wave Cross Country: 120 mph All Day

Friday, 10:00 to 10:45 am **Kenpton Izuno**

An overview of planning and flying long wave flights in California's Sierra Nevada. The speaker will discuss the specifics of ship and pilot preparation, task selection, risk factors, and weather forecasting. He also will address in-flight aspects such as upwind transitions, reading clouds, and managing yourself during extremely long flights.

Soaring Vario, Flight Recorder and Flight Computer Comparisons

Friday, 10:00 to 10:45 am **Paul Remde**

Are you overwhelmed by the many available options for variometers, flight recorders and soaring flight computers? The speaker will present comparison tables that give an overview of all available products, and also will give examples of complete systems.

How Do You Grow Your Club's Future? Youth in Clubs

Friday, 10:00 to 10:45 am **Mark Keene, John H. Campbell**

The average age of club members isn't getting any younger. The speakers will discuss ways to attract and keep young people, and the opportunities available to youth -- from scholarships and grants, to training camps and international competition.

Sailplanes and Gliders in the Nation's Hangar

Friday, 11:00 to 11:45am

Russell Lee

Smithsonian aeronautics curator tells interesting stories about the 31 sailplanes and hang gliders in the collection.



Soaring Excitement: A Southern California Cross-Country Primer

Friday, 11:00 to 11:45 am

Mike Koerner

A basic primer on cross-country soaring in Southern California. The speaker will tell you what you need to know, including where to go and when, what to do, and what to avoid.

Insurance for Clubs: Mixing and Matching a Plan That's Right for You

Friday, 11:00 to 11:45 am

Pat Costello, Harry Fox

Some clubs are using creative ways to insure and save money. Is there a better way to manage club insurance, and how much insurance is needed? Discussion of self-insurance, higher deductibles, reciprocal agreements, and the future of aviation insurance.

Seeing Beyond the Horizon: New Directions in Soaring Flight

Friday, 1:30 to 2:15 pm

Gary Osoba

The speaker will review new soaring flight techniques that use turbulence and wind shear. He also will discuss the possibility of a round-the-world gliding flight using dynamic soaring and the jet stream.

Getting Sick and Dry in the Sky -- Why?

Friday, 1:30 to 2:15 pm

Dan Johnson, MD

Dehydration and motion sickness can sneak up on pilots. The speaker will discuss causes and solutions.

WinPilot - New Products and Program Improvements

Friday, 2:30 to 3:15 pm

Jerry Plaszowiecki, Richard Pfiffner

The speakers will present new developments in the WinPilot Flight, Desktop and Evaluation Software Suites.

No Medical Certificate Required, But Are You Safe to Fly?

Friday, 2:30 to 3:15 pm

Walter Cannon, MD

The speaker will discuss the medical and mental conditions that – according to the FAA -- make us unsafe to pilot a glider. The topic is especially pertinent because of the new Sport Aircraft regulations, which do not require a third class medical certificate.

Planning for the Future: Clubs Don't Plan, They React. Planning for Club Growth in a Shrinking Market

Friday, 2:30 to 4:15 pm

Buck Arnold, Bob Lacovara, Frank Whitely, Harry Fox, Dave Newill

Most clubs don't plan beyond the end of the runway. The speakers will review data from the recent national club survey, which identified the problems facing clubs today. They also will distribute a CD that contains a chart that clubs of any size can use to plan for the future.

The Present and Future of Elegant Soaring

Friday, 3:30 to 4:15 pm

Dr. Paul B. MacCready

Discussion of the latest research: ways to increase best L/Ds to 100 or more; the use of sunlight to provide power directly; and the use of turbulence and shear to stay aloft.

News from Poppenhausen - Development of the ASG-29

Friday, 4:30 to 5:05 pm

Dipl. Ing. Michael Greiner

The speaker (the "G" in ASG-29) will discuss his new design, as well as other current projects at Schleicher.

Crash Course

Friday, 4:30 to 5:05 pm

Allen Silver

Bailout procedures, keeping your parachute under control on the ground, and survival techniques.

Increasing Safety Electronically - ELTs, TPAS, Transponders, and Rhinos

Saturday, 9:00 to 10:45 am

Eric Greenwell, John Morgan, John Godfrey, Mike Parker

The panel will explain how electronics can alert pilots to the presence of other aircraft, and thus reduce the chance of mid-air collisions. They will discuss transponders, transponder detectors, and new technologies that exchange GPS coordinates.

Recent Flight Tests

Saturday, 9:00 to 9:45 am

Richard H. Johnson

The speaker presents the latest in his series of sailplane flight tests.



Burt Compton, and Dick and Alice Johnson.

Where Eagles Soar: A Quarter Century of Bald Eagle Restoration on the California Channel Islands

Saturday, 10:00 to 10:45 am

Dr. Peter Sharp

The director of the Institute for Wildlife Studies will discuss the history of bald eagles in southern California, the factors that lead to their local extinction, and the Institute's bald eagle restoration efforts on the California Channel Islands. His work (which has included hanging from a cable beneath a helicopter to remove eggs from eagle nests, and later replacing eagle chicks hatched in the laboratory) has been documented on a variety of television shows, including National Geographic, Animal Planet, CNN, and ABC News, and the IMAX movie "Adventures in Wild California."

New Zealand Mountain Soaring: Land of the Long White Cloud

Saturday, 11:00 to 11:45 am

Gavin Wills

The presentation covers the extraordinary mountain waves and spectacular soaring conditions above New Zealand's Southern Alps.

Competitions are Fun! And for You Too! Somebody Has to Lose and I'm Ready

Saturday, 11:00 to 11:45 am

Dave Nadler

Soaring contests are not just for hotshots. They are a great way to have fun, improve your skills, and immerse yourself in soaring. If you have basic cross-country skills, and would like to learn more, consider competition flying.

Soaring to the Stratosphere: Perlan Project - Plans, Problems, Progress

Saturday, 12:00 to 12:45 pm Einar Enevoldson, Elizabeth Austin, Ph.D.

The goal of the Perlan project is a 62,000' soaring flight. The speakers will review flight progress, and plans for the next phases of the project. They also discuss the project's technical problems and solutions, as well as atmospheric data and analysis.

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Go After The Laughter, 2005 Edition: Cheap & Trashy Soaring Encampments, Regattas, and Safaris You Can Do With Your Friends!

Saturday, 1:30 to 2:15 pm

Bob Wander

Flying in new places is fun. This talk will describe cheap, trashy, and FUN soaring camps and safaris worldwide, and tell you how you can organize fun soaring camps with your friends.

NDFD A New Way of Presenting the Weather!

Saturday, 1:30 to 2:15 pm

Dan Gudgel

The National Digital Forecast Database (NDFD) changes the way that weather information is obtained and displayed, and its text, tabular, and graphical displays enhance flight safety.

Sailplanes and Aerospace Engineering at Penn State

Saturday, 2:30 to 3:15 pm

Dr. Mark Maughmer

For well over a decade, Penn State has modeled one of its courses on the German Akaflieds, where students design and fabricate sailplanes. That course -- along with the Penn State Soaring Club, and graduate research activities in design -- has helped nurture interest in soaring among young engineers.

Downwind Cross-Country Wave Flying

Saturday, 2:30 to 3:15 pm

Gordon Boettger

Mountain wave presents incredible possibilities for long downwind cross-country flights. The speaker will cover clearances, equipment, and the pros and cons of using thermal vs. wave conditions.

High Performance Winching - 40 Seconds to Freedom

Saturday, 3:30 to 4:15 pm

Bill Daniels

Ground launch is more efficient, and less expensive, than aerotow. The speaker considers: What is a modern, high performance winch? What new technologies are on the horizon? Can a club build its own modern winch, and at what cost? What skills are needed to operate a winch safely, and how are they acquired? Can winch launch co-exist with air tow?

Plummet, Procrastinate or Plop... Landing Lore Unleashed

Saturday, 3:30 to 4:15 pm

Cindy Bricker

Landing accidents account for more than 65% of insurance claims. The speaker will describe specific landing techniques that can nearly eliminate such accidents.

Global Hawk: A High Altitude, Long Endurance, No Seat Motorglider

Saturday, 4:30 to 5:15 pm

Robert C. Ettinger

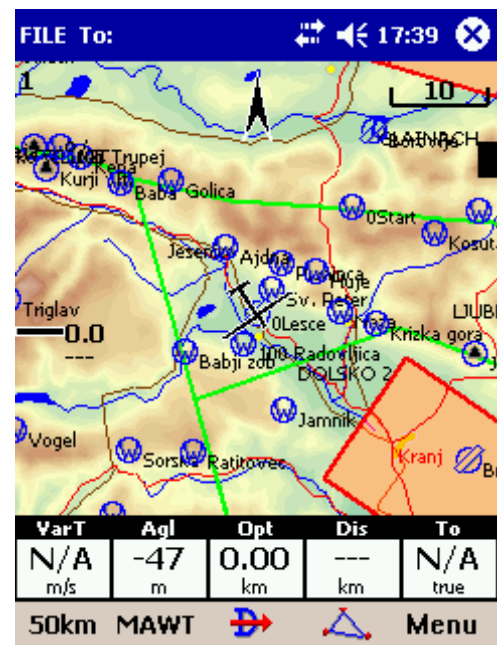
Global Hawk is a large, jet powered, high altitude, long endurance, unmanned reconnaissance system. The speaker describes its development and operation.

Battle of the PDA Cockpit Software

Saturday, 4:30 to 5:15 pm

John DeRosa

Are you trying to decide which soaring flight software to run on your Pocket PC or Palm device? This panel discussion will consist of short product overviews by the authors of several popular products: Glide Navigator II, SeeYou Mobile, pocket*StrePla and others.



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Awards Banquet

Twice Silver Distance: Straight Up and Down in a 7:1 Glider

Saturday, 7 pm

Astronaut Mike Melvill

Long-time glider pilot Mike Melvill is Vice President/General Manager and Test Pilot at Scaled Composites, LLC. He became the first person in history to reach space in a privately funded craft when he piloted SpaceShipOne to an altitude of 328,491' on June 21, 2004. On September 29, 2004, he attained a height of 337,500' when he piloted the craft on the first of the two flights required to win the \$10 million Ansari X-Prize. An experimental test pilot for 24 years with total flight time of 6950 hours in 139 types of aircraft, the speaker is not limited to "vertical" missions, having flown his Long-EZ around the world in 1997. He will discuss his experiences piloting SpaceShipOne, as well as the possibilities for a new age in commercial space flight.



Mike Melvill before launch.



SpaceShipOne in glider mode.



Special SSA Convention Announcement

Interested in becoming a Glider Flight Instructor? The Soaring Safety Foundation will be conducting a Glider Flight Instructor Ground Training Class at the SSA 2005 Convention in Ontario, CA. The Class will include both a 1/2 day presentation on preparing for your CFIG rating and becoming an effective glider flight instructor, and the 2-day CFIG Revalidation Clinic.

The 1/2 day class will be held at the Convention from 3-7 pm Monday, February 7, 2005. This is the day prior to the beginning of the standard CFIG Revalidation Clinic scheduled for February 8 and 9, 2005, also at the Convention. A registration fee of \$175 covers the total cost of this 2 1/2 day event, including materials.

If you are interested, please immediately contact SSA for more information. It is likely that attendance will be limited, so your early reply would be appreciated - first come, first served. If the 1/2 day attendance is insufficient, we reserve the right to cancel the class and refund fees.

Model Aircraft

Local radio controlled aircraft modelers will demonstrate the new generation of electric powered and glider models on Saturday, Jan 12. The demonstration will occur between 9am and 2pm, outdoors at the southeast corner of the Convention Center. The event will include 6" wingspan micro R/C aircraft weighing less than one ounce, electric scale models, discus hand launch gliders, and electric helicopters. Also on display will be scale sailplanes, jets and other unique models. Pilots and builders will be available to answer your questions.

Plan to Arrive in Ontario Early! New, FREE Convention Event

“SOARING SOFTWARE ACADEMY”

Wednesday, February 9th, 2005 Noon – 5:50 p.m.

DoubleTree Hotel, Ontario, CA

“Soaring Software Academy” is presented by the SSA free of charge to the entire soaring community, and is a major addition to the Convention. These classes are sponsored, organized, and conducted by cockpit and desktop soaring software representatives.

Target audience: Pilots who currently own cockpit PDA flight management and/or desktop flight display and analysis software, as well as those considering the purchase of such software.

Goals: Intensive classes will provide instruction in the use and capabilities of each program, ranging from the most basic to advanced features.

Noon – 12:50 P.M. ___ WinPilot 3D

1:00 – 1:50 P.M. ___ Win Pilot ADV & PRO

2:00 – 2:50 P.M. ___ SeeYou

3:00 – 3:50 P.M. ___ SeeYou Mobile

4:00 – 4:50 P.M. ___ StrePla

5:00 – 5:20 P.M. ___ pocket*StrePla

5:30 – 5:50 P.M. ___ Glide Navigator II

Help Soaring and Your Club: Volunteer at the Convention!

For over a year, key members of the RESCO family have been working hard as the “Local Convention Organizing Committee.” Region 12 Director Jim Skydell has headed the Committee, as well as being the SSA official responsible for the planning and execution of the entire convention. Jim has been helped by Doug Easton (advertising and promotion), Dave Raspet (volunteers), Cindy Brickner (logistics), Mike Koerner (registration), Doug Turner (RESCO booth), Keith Schrader (exhibit hall), Sean Ford (volunteer sign-up on the website), Derek Lisoski (Grob flight simulator) and Carlos Miralles (model flight demonstrations). Collectively, these Committee members have invested hundreds of hours to make the 2005 SSA Convention the most enjoyable and best-attended event in soaring history. We owe them a big thanks!

Now, it is time for you to help. First, don’t attend the convention by yourself. Instead, bring your spouse, your significant other, your kids (under age 15 are free), your friends, relatives and neighbors. They will enjoy the sailplanes on the convention floor, the exhibits of soaring products, and the programs. While they may not decide to become glider pilots, they will learn why you disappear most weekends. Also, where else can they get a firsthand account of the SpaceShipOne flights from the first private astronaut, Mike Melvill?

Second, the Committee needs you to help staff the Convention. You need only work one shift (roughly four hours), though you are encouraged to volunteer for multiple shifts. In return, you will be showered with benefits: An extremely cool logo polo shirt; free admission for the day you volunteer (you may roam the exhibits and attend presentations before or after your assigned shift); one additional day of free admission for each day you work; a free meal if you work a breakfast, lunch, or dinner function; the undying thanks of the Committee; and MONEY.

Did we mention money? Yes, if you volunteer you will earn money either for your Region 12 soaring club (it must have by-laws), or for RESCO. Money going to RESCO will be used for the benefit of the entire region. All clubs (and RESCO) will share at least \$5,000, and probably significantly more. The actual amount of money will be determined by a formula based on total convention attendance and profit. The SSA will pay the funds within 90 days after the Convention. *More Convention attendance and profit means more money for all clubs!*

The money will be apportioned between the Region 12 clubs and RESCO according to the percentage of total work done. A club with several volunteers can earn substantial money, especially if the volunteers work more than one shift each. None of the hundreds of hours of work by your Local Convention Organizing Committee count in this system.

Volunteer at the Convention!

To sign up, go to <http://www.socalsoaring.com/volunteer/>.

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If you received an email notification that this issue was published, you are already part of our email address database, and nothing further need be done. If you did NOT receive our email announcement message, please send your email address to subscribe@socalsoaring.com so we may keep you informed when new issues are published, and of important Region 12 events.

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Thanks to everyone who helped with this issue.

To all Region 12 members: Many soaring-related businesses support our efforts to revitalize and enhance soaring activities by advertising in Southern California Soaring. Please do your best to return the favor.