



Caption for this photo??????

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# **Statement of Purpose**

The purpose of the Pacific Soaring Council, Inc., a non-profit, 501(c)3 corporation, is to initiate, sponsor, promote and carry out plans, policies and activities that will further the education and development of soaring pilots. Specifically, activities will promote and teach the safety of flight; meteorology; training in the physiology of flight, and the skills of cross country and high altitude soaring. Other activities will be directed towards the development of competition pilots and the organization and support of contests at the local, regional, national and international levels of soaring. PASCO is the acronym for the Council. WestWind is the monthly publication of PASCO. Material may be reprinted without permission. The present board will remain in office until November 2001. Current dues are \$25 annually from the month after receipt of payment.

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**Aviation Weather Briefings** National Weather Service, Reno 800 WX-BRIEF (#\*318) (775) 858-1300 (#\*318) Reno - 775 793-1313 Truckee - 775 793-1313

Sierra Highway Information Auburn - 702 793-1313

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Air Sailing, Inc. Airport David Volkmann 775-787-3197

Attitude Aviation 299 W. Jack London Blvd. Livermore, CA 94550, (925) 456-2276

**Central California Soaring Club** Avenal Gliderport - 600 LaNeva Blvd, Avenal CA 93204, 559-386-9552

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**Northern California Soaring Association (NCSA)** Byron Airport, Byron, CA. (925) 516-7503 Contact Mike Schneider (925) 426-1412

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**Central California Soaring Club** Avenal Gliderport, Avenal, CA. Contact Mario Crosina, 1747 Bobolink Lane, Fresno, CA (559) 251-7933.

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**Crazy Creek Soaring Society (CCSS)** - Crazy Creek Gliderport, Middletown, CA. Contact Roger Archey, (415) 924-2424.

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Minden Soaring Club - P.O. Box 361, Minden, NV 89423 Contact Rick Walters (775) 265-3386.

**Mount Shasta Soaring Center** – Siskiyou County Airport, Montague, CA, Contact Gary Kemp, 530-934-2484, gkemp@sunset.net

**Nevada Soaring Association (NSA)** - Air Sailing Gliderport, NV. Contact Vern Frye (775) 825-1125 h

**Northern California Soaring Association (NCSA)** Byron Aiport, Byron, CA. Contact Mike Schneider (925) 426-1412

**Silverado Soaring Association -** Crazy Creek Gliderport, Middletown, CA; Truckee Airport, Truckee, CA. Contact Douglas Lent (916) 966-4038

**Valley Soaring Association (VSA) -** 2668 Husted Road, Williams, CA 95987. Contact Peter Kelly (707) 448-6422

## **WORLD WIDE WEB ADDRESSES - REGION 11**

**SOARING SOCIETY OF AMERICA** http://www.ssa.org PACIFIC SOARING COUNCIL http://www.ranlog.com/pasco/index.html AIR SAILING INC. http://www.airsailing.org JIM AND JACKIE PAYNE - FAI BADGE PAGE http://home.aol.com/JPAviation **BAY AREA SOARING ASSOCIATES** http://www.flybasa.org CENTRAL CALIFORNIA SOARING CLUB http://www.soaravenal.com CHICO SOARING ASSOCIATION http://www.syix.com/clarkaw/csa\_home.html MINDEN SOARING CLUB http://www.mindensoaringclub.org **MOUNT SHASTA SOARING CENTER** http://www.community.net/~soaring/mssc.html NORTHERN CALIFORNIA SOARING ASSC. http://www.bethany.edu/psych/ncsa PALOMINO VALLEY SOARING www.soar-palomino.com **RENO SOARING FORECAST** http://nimbo.wrh.noaa.gov/Reno/rnosafrno.htm SILVERADO SOARING, INC. http://www.silveradosoaring.org/ SOAR HOLLISTER http://www.soarhollister.com/ WILLIAMS SOARING CENTER http://www.williamssoaring.com/ VALLEY SOARING ASSOCIATION http://www.community.net/~soaring/

# **Minutes of the PASCO Board of Directors**

Nov. 5, 2001 – ATTENDING: Jim Alton, John Bell, Diana Bishey, Sergio Colacevich, PeterDeane, Cindy Donovan, Tony Gaechter, Karol Hines, Rolf Peterson, Ty White. DIRECTORS NOT PRESENT: Chad Moore.

#### MINUTES OF SEPTEMBER MEETING:

The September meeting was a virtual meeting conducted by email. There were no objections to the minutes as submitted.

#### TREASURER'S REPORT:

As of Nov. 1, banking accounts totaled \$11,379.26 excluding the scholarship fund. Money owed the scholarship fund from the 2000 banquet has been transferred, and the process has begun to update the account for the new officers.

There is a pronounced historical seasonal variation in the assets of PASCO, with October the low point. We expect assets by January, again excluding the scholarship fund, to be approximately equal to the \$16,000 in assets in January of 2001.

The PASCO league operations broke even, and awards will be paid for from the general funds. The Region 11 Regionals showed a profit of \$827. WestWind display ads for the calendar year have been billed and will bring in \$2442. As noted in previous meetings, we significantly manage our costs by setting the number of WestWind issues published each year.

We have not disbursed money from the scholarship fund for the past two years. Its current balance is approximately \$6800.

Action item: Ty and Peter will form a committee of two to review the historical procedures for this award and to propose a process.

## ADDENDUM TO THE TREASURER'S REPORT:

At the end of the meeting the board approved an expenditure of \$4,690, which will significantly impact the amount of our assets.

#### PUBLICATION CHAIRPERSON REPORT:

There is no shortage of articles which would limit the number of issues. September and October issues were combined, November and December issues are upcoming for a total of eleven for this year. A review of our display advertising rates indicate they may be low. Action item: Prepare to discuss advertising rates, possible solicitation of new advertisers, and billing procedure. (Regarding the latter, it was suggested to bill at half-year intervals on a trailing basis.)

#### AWARDS CHAIRPERSON REPORT:

There have been no nominations received for the Les Arnold and the Esther White Awards so they will not be presented this year. The board enthusiastically approved a recipient for the Exceptional Service Award.

#### PASCO LEAGUE CHAIRPERSON:

Jim Alton has graciously consented to manage the PASCO League next year. He was reminded of the fact that a considerable amount of personal contact with potential pilots is an important part of the job.

Jim is in the process of setting dates and sites. Ty, who is responsible for the PASCO calendar, and Peter as Competition Chairperson, who is able to help avoid competition date conflicts, will assist.

Action item: Dates will be set by the end of December for inclusion in the January WestWind if possible.

## COMPETITION CHAIRPERSON REPORT: Upcoming events include:

\* 2002 Regionals, Minden, early June, Andrew McFall organizing.

\* 2002 Air Sailing Sports Class contest, July 1-6.

\* 2002 Standard Nationals, Hobbs, N.M., July 2-11.

\* 2002 15 meter Nationals, Tonopah, Nev., July 16-25.

\* 2003 Standard Nationals, Shasta.

Action item: Peter will ensure communication with Gary Kemp regarding northern California contest plans.

Action item: Start to plan for next Nationals bid for 2004, bid due about July of 2002.

The Air Sailing camps are the last two weeks of June. Andrew McFall would like to restart the Minden wave camp with PASCO involvement.

Action item: Karol will invite Andrew, who is an incoming Board member, to present at the next board meeting.

#### MEMBERSHIP CHAIRPERSON REPORT:

Several years ago dues were set so that a membership of 400 would support 10 issues per year of WestWind. As of Nov. 1 our membership is at 380 and has been declining very slightly, with no significant recruitment effort.

Several approaches were discussed to augment the visibility of PASCO. These included preparing a membership kit for FBO's, recruiting a PASCO representative for each FBO, and taking a more active role in being a visible sponsor at regional safety and cross-country seminars.

Action item: Ty will proceed with the membership list mailing.

#### PUBLIC RELATIONS CHAIRPERSON RE-PORT:

No report.

Rolf has volunteered to update two items in the brochure which are out of date, the Requirements for Glider Pilots section and the list of contacts.

#### SAFETY CHAIRPERSON REPORT:

As Sergio is retiring from the board, his successor will carry on with his work to publicize the Critical Assembly Check.

A major ongoing activity of this position is to coordinate the high altitude training sessions, which require constant oversight and contact with the appropriate official. It is suggested to ask Andrew to take this on as part of his interest in the wave camp.

The Sawyer award has a cash award which has been informally endowed by the winners. The board suggested that PASCO should provide the funds instead of the previous winners. Sergio has strong opinions on the rules and

format for the Sawyer Award competition. Action item: Sergio will present a proposal to the board regarding the Sawyer Award rules

the board regarding the Sawyer Award rules and process.

#### FAA LIAISON:

In the aftermath of the Sept. 11 attacks, the FAA, among other actions, closed or severely restricted the airspace around the Lawrence Livermore National Laboratory. The result was to prohibit all general aviation activity at Livermore and Byron airports.

Rolf's and others' work with the FAA resulted in the creation of a window for private owners to fly their aircraft out of those airports to another location.

These events and responses are likely to increase pressure for additional transponder requirements for general aviation aircraft, including gliders. PASCO's position is supportive of transponder usage, and "PASCO recommends that gliders operating cross country, within 50 NM of Reno-Tahoe Airport, install and use a Mode C altitude encoding transponder". The board recognizes the difficulty presented by the lack of suitable equipment at this time but would like the SSA to be more supportive of transponder use than they are. OLD BUSINESS:

New board members: Joining the board are Jim Alton, Buck Arnold, Andrew McFall and Kenny Price. John Bell will remain on the board and will keep the books, although he will not serve as secretary. The board wishes to offer heartfelt thanks to outgoing board members Diana Bishey, Publications Chairperson; Sergio Colacevich, Safety Chairperson; and Tony Gaechter, PASCO League Chairperson.

Banquet/Seminar status: We are expecting upwards of 100 attendees with an exciting lineup of speakers, including Einar Enevoldson, PERLAN Project Manager, and Dr. Elizabeth Carter, Project Meteorologist, speaking on "The Stratospheric Wave Project: Soaring to 100,000 Feet".

Action item: As John will be unable to attend the banquet he will arrange with Karol for the delivery of the treasurer's report.

Distribution of funds to FBO's for "relief" from September down time: The board approved the expenditure of funds to invite two representatives to the banquet as our guests and to donate \$600 from our general funds as an expression of our support. This applies to each of the seven commercial glider operations in our region.

Action Item: Ty will coordinate.

Banquet raffle: The board suggested we forgo a raffle this year as we do not need an immediate donation to the scholarship fund and the program will be full without it.

Action item: Ty will follow up with traditional raffle donors.

Youth Soaring Academy Support: The board is highly supportive of this effort, initiated the publication of an article in the April 2001 WestWind and will continue to facilitate Mr. Davies' interactions with the SSA. The board also feels that any effort to expand this program to other sites will of necessity be a grassroots program similar to Mr. Davies' and is not something that the board can reasonably expect to initiate.

Action item: Karol to follow up regarding further correspondence.

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# Janice, Would you like to write a title for this article? *And do you have a photo of JJ?*

By John "JJ" Sinclair

"How far to Kirk?" I asked. "There is no Kirk," replied an authentic American Indian wearing a flat billed cowboy hat, the kind the drill instructors wear. It had a large feather sticking straight up from the brim on one side. In the other seat of the dilapidated pickup sat a young lady about 18. Between them lay a scope-mounted, bolt-action, thirty odd six that looked like it had seen more than its share of action.

"Well, how far to Highway 97?" No reply. "I'll give you 50 bucks to drive me to the highway." "Look White Man, I'm on a hunt. Pick you up on my way out, you still here." Varrooom — the pickup sped away in a cloud of dust. Glancing over my shoulder at the LS-7 sitting in a meadow, I started walking down the long dusty road. As I walked, I remembered the pilots briefing that morning. Contest Director Stew Tittle, had asked me to give the safety briefing and I had told the pilots what they should have with them when flying in the wild country of northern California and Oregon. Among other things, I mentioned a cell phone and a handheld radio. Good advice, and I had neither. It had been a memorable day. We had just flown the fourth day of the 1998 15 Meter Nationals at Montague, Calif. Stew had wanted to call Crater Lake as a turnpoint, if the conditions were right.

This day looked promising. There were cumulus all the way from Montague to the lake. They were a bit low, but the lift was strong and I figured the cloud base would rise from its initial 10,000 feet. Climbing fast on Craggy, as one of the task committee members, I gave Stew the thumbs up, with a "let's doer." Crater Lake is only about 75 miles away, and it's not far enough for a strong day. Stew sent us to Quartz Valley first and then on to Crater. Sounded good to me, give those cu's longer to rise on up. In and out of Quartz had been easy and then I made my the first big (bad) decision of the day. There were good looking cu's over the mountains, but the cloud base still hadn't risen. Off to the east the cu's looked ragged.

I went up the mountains. Things were working well, the only problem was there was only about 3,000 feet between the bottom of the cu's and the top of the trees. By the time I got to Mt. McGoughlin, my maneuvering band had dwindled to2,000 feet. I was getting "nervous in the service," and then the last cu didn't work! I was a thousand feet above the trees and no place to put it, except Lake of the Woods. I checked the windward side of McGoughlin and found some very weak lift.

Just then, I spotted Gary Ittner and Rick Walters and followed them like a puppy dog. The problem was, it was just another "misery loves company" party. We made it to about ten miles south of Crater Lake, but couldn't get high enough to get the turn. It was located on the lip of the crater and we would run into the side of the mountain before we got within a quarter mile of the place. What to do?

Gary headed west, Rick and I headed east. We found a four knotter and got plenty high enough to get the turn, now ten miles back. I then made my second big (bad) decision of the day. There was eight or ten ships below me in this four knotter, why not leave now, get the turn and then come back and these guys will be marking the thermal for me.

I did and they didn't. On my way back, there was no thermal, no gliders, nothing! I had left that thermal a couple of thousand feet below the top and now needed every inch of the altitude I hadn't taken. It looked like a dead glide to Chiloquin, no pattern, no nothing, just straight in. Off to the east was a knoll, sun and wind on the west side. It's got to work or we're going to land in that meadow. It didn't and we did. Rough field, as cattle had left hoof holes in the mud before it dried up some. I got a message off to Rick with my coordinates, but he was landing too and wasn't sure they were received. Talked to the Indian and now I'm walking to a town

# **Use of Mode C Transponders**

#### Reno, Nevada

The potential conflict between gliders and commercial air traffic near Reno has increased with the growth of commercial jet traffic into Reno-Tahoe Airport (RNO) during the past few years. PASCO emphasizes that glider pilots operating in the Reno area must be alert for all air traffic arriving and departing RNO.

Transponder signals are received by Traffic Collision Avoidance Systems (TCAS) on board commercial aircraft as well as by Air Traffic Control (ATC) Radar. By Air Traffic Control (ATC) Letter of Agreement, gliders in the Reno area can transmit the 0440 transponder code in the blind, without establishing radio contact with Reno Approach Control.

PASCO recommends that gliders operating cross country, within 50 NM of Reno-Tahoe Airport, install and use a Mode C altitude encoding transponder.

A new page has been added to the Minden Soaring Club Web site: http/www.mindensoaringclub.org/. Look under the WELCOME page for a new section for those soaring out of Truckee, Minden, or Air Sailing. Please study this material on safe soaring within the Reno ATC area.

that doesn't exist and I don't know how far it is. Great Sport, why the Hell do we do this? The smart money went to the ragged-looking cu's that were to the east of Montague. Nine of them made it and had an easy ride. The rest of us were strung out all the way to Crater Lake and back. About two miles down the road, I came to a trailer, no phone, no power, nothing. Another mile or so, down the road and I spotted a doublewide with power and phone (must be getting closer to the highway) The owner let me use his phone. My crew had received Rick's message and was on the way.

I gave the owner 20 twenty bucks for using his phone and then walked back to the ship. Made a mental note of how to dismantle the gate that led into my field, just in case. It was now nine o'clock and the mosquitoes were eating me alive. I got in the cockpit and must have killed at least a dozen or more of the hungry little buggers inside the cockpit. About ten o'clock, I heard the Bum-Bum-Bum-Bum of an empty trailer being driven fast down a washboard road. Got out the only piece of survival equipment I had, a flashlight. When the headlights came into view, I gave them the old-Hi-Ho. Elden Hinkle and my son John had found me by using a little \$100 handheld GPS. As they were driving north on Highway 97, the needle swung 90 degrees right. They turned around and took the first road to the east. Driving down this road, the needle swung 90 degrees left. They took the next road north. Then driving down that road, the needle swung 90

degrees left again and I was in the field on their left. Great invention, this GPS.

The guy that I had given 20 bucks to showed up at 11 o'clock with the owner of the field so we didn't have to pull the hinge pins on his gate. No place to eat that late at night, got back to Montague at 1:30 a.m.. Up at seven, put the ship together, water it up and get to the Task Committee meeting by 9. Are we having fun yet? John Sinclair of Placerville, Calif., started soaring 30 years ago and has 3,500 hours in gliders. He has made 1000K twice and takes considerable pride in having flown his Silver, Gold and Diamond badges in a wooden sailplane, a Duster that he built. He is a partner in an ASH-25. During a 22year career as bombardier and navigator in the Air Force, beginning with B-29s and B-52s, he flew F-4s and F-111s. After operating a glider repair station for 20 years, he retired and restored a Bowlus Albatross.

# Cross-country seminar changes focus to beginning, intermediate pilots

While the first three PASCO cross-country seminars were tailored for experienced pilots, the fourth in the series is aimed at beginning to moderately experienced glider pilots. The seminar will target any pilot who has some cross-country orientation, possibly some PASCO League experience or ASI XC Camp attendance, and who is looking to take the next learning steps to achieve SSA Soaring Badges.

The speakers will discuss planning and mental and physical preparation for flying cross country, beginning with flights from local glider ports to the nearest landing sites.

Seasoned pilots will be present to assist in describing local lift, good weather patterns, preferred routes for leaving the field, and safe landing sites. Other expert pilots will discuss mentoring, preparing for badge flights, and decision-making in the air.

The date for the PASCO-sponsored all day seminar will be announced by mid-December. It will be held at the University of California, Berkeley, physics department. Co-hosts are Sumner Davis, past PASCO president and a physics professor representing the university, and Carl Herold, a PASCO founder and a member of the SSA Hall of Fame.

Each attendee will receive eight hours of briefings, a couple of briefing surprises, a CD of the seminar with all of the briefings included, and additional reference and handout material.

Final program details and registration information will appear in the January and February issues of WestWind, as well as in e-mail messages and Web page publicity.



# Stratospheric Wave Project: Soaring to 100,000 Feet

#### By Janice Hoke

Millionaire balloon pilot Steve Fossett said he's supporting a team of high-level soaring pioneers because "these people do know what they're doing – and I get to fly with Einar."

Fossett, veteran sailplane pilot Einar Enevoldson, formerly a NASA test pilot for the F104 and experimental lifting bodies, and meteorologist Elizabeth Carter gave an update on the Stratospheric Wave Project: Soaring to 100,000 Feet to about 100 people at the annual PASCO banquet Nov. 17 at the Monarch Hotel in Dublin.

The project aims to take a pressurized sailplane piloted by Enevoldson and Fossett into the Earth's stratosphere by using mountain waves that will propel them into the Polar Vortex, an area of strong stratospheric wind that provides energy needed for the tropospheric wave to amplify with altitude. The phenomenon, discovered by scientists studying ozone depletion, is little understood, Carter said. It is strongest in New Zealand and Sweden, two sites where the PERLAN mission will attempt flights.

"It's different every year. We don't know when it dies, when it starts, what its temperature is. Somehow, the tropopause must weaken and allow the wave to penetrate," she said. Carter, who earned a Ph.D. in physics from the University of Nevada, Reno in 1994, has an atmospheric and snow research consulting business, Firnspiegel, located at Kings Beach, Calif. She is also under contract to NASA Dryden to perform meteorological support to the X43 and the Helios project flight testing. She had a soaring flight at Minden this past summer.

Ed Teets, an atmospheric physicist, is the NASA Dryden program manager through whom Enevoldson

and the PERLAN team coordinate. He and Carter got their doctorates at UNR's Desert Research Institute together under Hal Klieforth, who participated in the Bishop Wave project many years ago.

While powered airplanes like the SR-71 and B2 fly as high as the lower stratosphere, the PERLAN sailplane which will be designed for the flight will be strong, stable, controllable and will have

simple systems not dependent on a powerplant. It will carry 50 non-reusable batteries. The sailplane will have a 101-foot wingspan and a low wing loading of about 7.5 lb./sq. ft. While it can be flown manually without artificial stability below

90,000 feet, it will require automatic stabilization above 90,000 feet. At 100,000 feet, it is estimated the L/D will be about 30. It can be flown by hand by pilots in space suits at night and in difficult weather and will be equipped with a drogue parachute, said Carl Herold, a project consultant who is working on instrumentation.

Fossett, who holds many singleand multi-place balloon records as well as sailboat records and has attempted round-the-world balloon flights, agreed two years ago to sponsor the sailplane project, Enevoldson said. Fossett has qualified in a space suit in the altitude chamber at Beale Air Force Base and has learned through his balloon flights to stretch oxygen by partially pressurizing his lungs to buy more time at altitude, he said.

This month, preliminary flights in a modified DG505M with lithium batteries and liquid oxygen replacing the engine are slated to reach altitudes in the 40,000 to 50,000 foot range from takeoff in California City, Herold said, moving to New Zealand to try to catch the Polar Vortex in the June through September period.

Development of the PERLAN sailplane and other mission components will take two years, Herold said. The project has the strong support of NASA, which is keenly interested in mapping the stratosphere and understanding turbulence in the wave field as well as the chemical activity of the ozone layer.

"NASA Dryden is full of glider pilots and people with tremendous enthusiasm for flight that extends every boundary," Enevoldson said. "They all speak the same language."

The federal agency has helped with the loan of space suits, meteoro-



(from left) Elizabeth Carter, Steve Fossett, Einar Enevoldson at the PASCO Banquet

logical data from high-flying balloons and design studies. Enevoldson gave credit to two preceding efforts to explore high-altitude soaring flights, the Sierra Wave Project in 1950-56 that

reached 44,500 feet and gave pilots a new appreciation of the rotor and clear-air turbulence, and the world record flights of Larry Edgar (1952), John Robinson (1949), Bill Ivans (1950), Paul Bikle (1961) and Bob Harris (1986), the current World Record holder of 49,009 feet over the Sierra Nevada Mountains, in the lee of Mount Whitney, Calif. In the 1980s there was a Flight Level 500 project which made several flights above 30,000 feet in a Grob multiplace glider with pressure suits. "They tried to accomplish a world altitude record with all donations and volunteers, but it was just too difficult to do with all volunteers," Enevoldson said.

"Without Steve Fossett's participation, without the dedication and teamwork of NASA, without the experience of the PERLAN team members, and without the credentials of Einar, we wouldn't get to first base," Herold said.

Visit the new PERLAN WEB site (<u>http://www.firnspiegel.com/perlan/</u>) which is currently under development. For those interested in the many world record achievements of Steve Fossett, visit: <u>http://</u> <u>www.who2.com/stevefossett.html/</u>. Thanks to Carl Herold for his help in preparing this article. —Editor

# A Good Soaring Day In The Great Basin

**Editor's Note:** Carl Herold gives us an insight on a spectacular day of soaring when the usual strategy of finding and climbing thermals wasn't the best choice. Only thermaling less than 10 percent of the flight, he used long, continuous areas of lift under snow virga to achieve a national record.

#### By Carl Herold

On the morning of Thursday, July 26, 2001, I declared a multi-place motor-glider 750 Km triangle speed task from the Douglas County Airport in Minden, Nevada, I would fly my Nimbus 3DM, N73AB, CN # 1V. The flight was to be logged on my Cambridge Model 10 flight recorder. My attentive official observer was Nevada State Record keeper, Douglas J. Donohue from Gardnerville, NV.

My "Honorable Ballast" and copilot was Milton Hare from Redwood city, Calif., who usually flies his ASH 25. Milton was looking forward to bombing around the course in my "barge" at high cruising speeds.

The morning soaring forecast indicated a freezing level at 15,000 feet in the Great Basin. Little did I realize how beneficial this would be as the soaring day unfolded. This was a weather condition to fly the weather and not the forecast. The previous day produced good soaring for others, but I had obligations that day. The lift forecast for today was 1,517 fpm, the same as for the day before. The Reno NOAA Office Soaring Forecast indicated winds aloft of 280 degrees and 11 knots at all soaring levels. The NOAA weather synopsis was "a flat level ridge of high pressure is building in the soaring area. The air mass will become marginally

unstable but moisture remains pretty limited so there will be some cumulus but probably no convection." The K index was moved up from 3 to 4 for the day.

The 7:30 PST high-resolution imagery provided few cloud clues to influence task setting. There were some clouds in the northwestern quadrant of Nevada. The water vapor showed moisture thinning down the White and Inyo Mountains. The soundings for Reno, Desert Rock and Elko showed about a 10-degree C dew point additional drop (dryer) above 500 mb (18,000 feet) inhibiting over-

development. The surface moisture was also dryer below 750 mb.

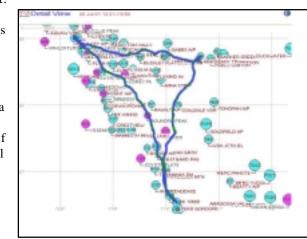
This looked like a virga day over much of the area well dast of the Sierra from Minden to Lone Pine. If the cloud base were

less than 14,000 feet, rain virga would mark the streets for cruising in lift and possible rain OD obstacles for the day. As the day warmed, pushing cloud base above 15,000 feet, then light rain virga turned to snow virga.

I would have to wait until the weather began to develop along the declared course to find out. With snow virga it looked like lightning and heavy overdevelopment weren't likely, but Mother Nature will insert unplanned soaring potholes. For this reason, I decided to declare my favorite and 41<sup>st</sup> 750 Km triangle instead of the 1000 Km triangle.

I declared a 759.63 Km speed triangle with the Windmill remote start/ finish Gate 7.5 miles southeast of Minden Home base. The first turnpoint would be the Cerro Gordo Peak near Lone Pine and the second turnpoint would be Mahogany Turn Point 14 miles west of the Round Mountain Gold Mine. The third and shortest leg was 26.4% of the course distance. The total distance flown from Minden to/from the remote start/ finish gate around the triangle was 783.6 Km (486.76 miles)

I self-launched into good lift and made a poor start at the Windmill Gate, 22 minutes after launch. I did not connect into good lift by Lone Pine Canyon below adequate-looking cumulous clouds. I made a second start 18 minutes later and still only achieved 400 to 600 fpm climb. I decided to not dally here and flopped over Bald Mountain at 11,500 feet looking for lift. There were lots of good-looking clouds, but the weak



lift was better for cruising 11.000 to 12.000 feet over the Pine Grove Mountains looking for stronger lift cells. I did not connect with much good lift, but kept cruising through scraps of delayed sink

under clouds until about 15 miles south of Lucky Boy Pass when I finally found my second climbing thermal, a 10-knot climb to over 14,000 feet, with cloud base of 15,000 feet. I averaged 95 mph the next 126 miles to Cerro Gordo Peak.

I could tell we needed to keep moving as the virga was growing fast east of the Sierra and appeared to be a likely blocking pothole on returning north from Cerro Gordo Peak on the way to the second turnpoint. I averaged 89.78 mph on the first 193.86mile leg.

After turning the first turnpoint, the misty virga was now snow. The small snowballs ranged from 1/8 to 1/ 4 inch in diameter and didn't stick. When we reached east of the Tinnemaha Reservoir, I decided to enter under the cloud cover surrounded by snow virga and there was delayed sink and lots of lift streets for cruising everywhere and no lightning. I left the virga and meandered off course towards the town of Silver

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Peak east of the Fish Lake Valley and ran the next virga snow streets the same way, just keeping the glider moving at 14,000 to 16,000 feet, indicating 75 to 85 knots. The true ground speeds were 90 to 110 knots, with a 10-knot tailwind component. On the second 153.6 Mile leg, I averaged 85.69 mph. My meandering path along lift streets from the course line was increasing my average speed, and I was not wasting time thermalling. This is always a tradeoff to make.

On my approach to the second turnpoint, I moved towards a cloud in the blue west of the turnpoint. It evaporated with negligible lift and I turned east to 5 miles from my Mahogany turnpoint and then made a long southwesterly glide to the snow virga lined along the Gillis Mountain range (NE of Hawthorne) just cruising without much turning to get home against an increasing headwind, maintaining 14,000 to 15,000 feet. This extra 10 miles at the second turnpoint cost me about 8 minutes. I don't consider this a mistake, just that every decision doesn't always work out.

On the last leg home from the Mahogany turnpoint, we (Milton flew about 50 percent of this leg home) only averaged 79.35 mph. I finished by gliding over Mt. Siegel against an 18-knot headwind with much turbulence at about 11,500 feet to dive to the finish gate at 8,500 feet with spoilers out above 100 knots to finish. Against the headwind, I allowed an extra 1,500-foot margin to be above the Pine Nut Mountain leeward sink. It could have been a wasted energy margin, but we needed it. After an hour on course. I knew I should have started at 10,000 feet instead of 8,500 feet. This would have saved me some more time, and would have increased the task speed to about 87.78 mph, producing a 3.14 mph increase. Hindsight is always 20-20.

The average speed for the 742.01mile course was 84.63 mph. By thermalling seldom and staying at 14,000 to 16,000 feet cruising most of the flight along snow virga streets, we produced a 750 Km U.S. National and Nevada State multiplace motor glider speed record, exceeding the existing national record of 123.72 kph (76.61 mph) by 8 mph. .

We thermaled 33 minutes, 9.9 percent, out of the 5 hours and 34.6 minutes of the task time. Long meandering streets of snow virga provided continuous lines of cruising lift, influencing the key tactical soaring strategy. A climb-and-glide strategy was not the best cross-country strategy for the day. We were soaring in average lift of -1 to 2 knots while cruising at 70 to 85 knots for long periods of time. Occasionally we would stop and thermal climb a few turns at 8 to 10 knots, if there was blue hole long glide ahead. We made unproductive, wasted turns about 2 percent of the task time. More than half of the time we were cruising under virga cloud. We avoided the blue most of the time, except for gliding to and from the second turnpoint.

The estimates above were produced by hand analysis. SeeYou and other flight analysis software tend to overstate the statistics by up to a factor of two. I have found the current computer modeling techniques tend to provide statistics to compare against other pilots, but the absolute accuracy is poor, so I manually smooth the gps data in a series of many selected segments, performing total energy calculations along the whole flight. This is a better (for me)labor-intensive process, but is still not very accurate.

Our minimum and maximum altitudes around the course were from 11,500 feet to 17,700 feet msl, with an average cruising altitude of 14,700 feet.

Milton knew the flight was going well when he got to share the cruise and climb the "Big Barge" on the second and third legs of the flight. It wasn't as exciting as climb and highspeed glide flying, but when the cruising streets are along your course, you cover the ground making less tactical mistakes. Further, by cruising at constant lower cruising speeds, I avoided those wasted dolphin pullups. We tended to stay under and close to the streets of virga and small roll clouds close to the virga. Streets of lift usually last longer and are less deceiving lasting than searching for a conventional convective plume.

The record was homologated by the SSA and is waiting approval by the NAA. At that time it will also become a Nevada State Record.

This was the most efficient long cruising flight I have accomplished. On May 30, 1986, I flew close to the same course in my Nimbus 3T producing a National and Nevada Open single Place Speed Record of 83.35 mph.

This was a good soaring day over a large area, especially in the Great Basin. On this same day, July 26, four other pilots were also making long flights:

# Jim Payne, ASH-25, Tonopah, Nev., a 32-mile quadrilateral from Tonopah to Barker Creek to Bald Mtn. to Duckwater and return.

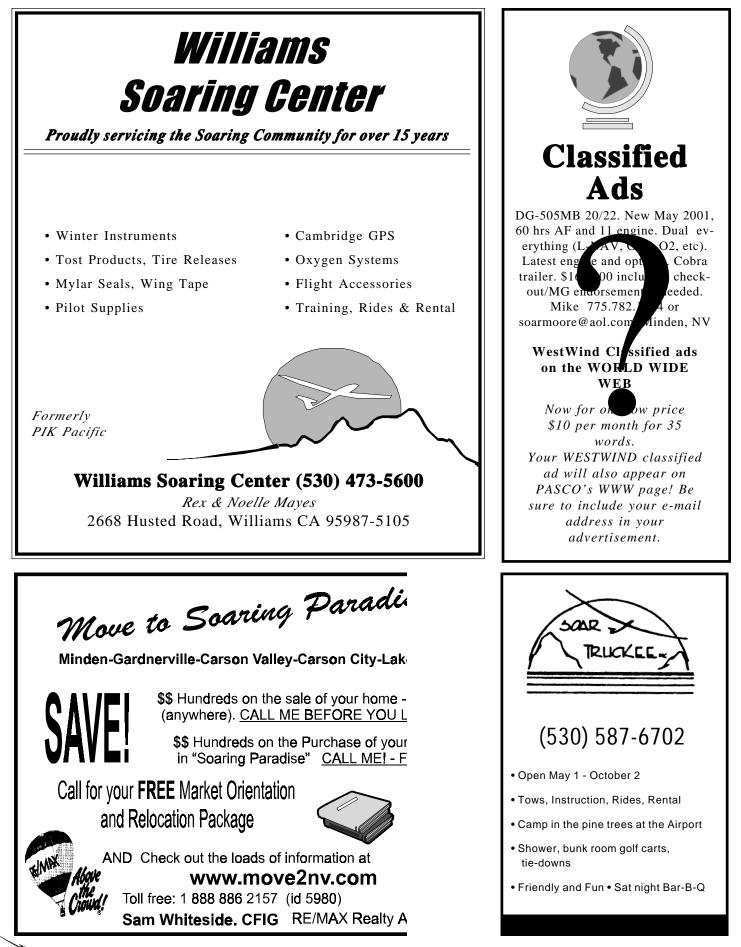
# Sergio Colaevich, Discus, Truckee, Calif., a 1030 Km Diplome triangle from Truckee to Westgard Pass, to 14 mi NE of Valmy and return.

# Al Macdonald, ASW-22, Ely, Nev., a 570-mile triangle from Ely to Jackpot to Battle Mtn. and return

# Bob Barber, Mosquito, Lubbock, Texas, a 255-mile triangle from Lubbock to Brownfield area, to Sudan and return.

Carl Herold lives in Reno, Nevada. He has flown 51 glider and 13 motorglider types for a total of 6,000 logged hours and 190,000 logged cross-country miles for a total distance of 7.6 times around the Earth. This distance was accumulated in 29 states and 3 provinces. He currently soars his Nimbus 3DM out of Minden. He is the founding president of PASCO in 1967-1969, a member of the SSA Hall of Fame, holder of the Eaton Award, and a past president of the Soaring Society of America. He is currently leading a group of experienced glider pilots producing an annual cross-country seminar and publishing a CD of the briefings on behalf of PASCO.

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# **People at the PASCO banquet**

**Bertha Ryan**, a past SSA director and member of the Hall of Fame, attended the banquet Nov. 17. She has been soaring since 1950, was in the Massachusetts Institute of Technology soaring club and built her own Schweitzer 1-26.

**Nick Thomas**, winner of the 2001 Sawyer Award, said it "is not just a competition but a way of encouraging and improving my flying. It forced me to fly longer and higher and do things I normally wouldn't do." The award, given for total handicapped distance flown during the season, gives an intermediate pilot something to strive for, Thomas said. He will administer the program in 2002.

**Rolf Peterson**, who was given the Les Arnold Award, PASCO's highest honor, at the banquet, has served as PASCO's liaison to the FAA for many years and as a member of the board, attended the meeting when the board pulled the wool over his eyes, stating there were no good candidates for the award. The board met later to elect him unanimously for the honor. President Karol Hines said Peterson has helped make sure "we could fly around Mt. Diablo" and has managed several cross-country and thermaling camps. "He does what he wants to do, but not by himself. He brings a lot of people along with him," she said.

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# **WESTWIND PASCO Calendar of Events**

PASCO Board Meetings in 2002: Note that there will NOT be a Board meeting every month: check the calendar for scheduled meetings, TBA.

May 27-31: Region 11 North Open Class Regional Championship, Siskiyou County Airport, Montague, CA. Contact Gary Kemp, P.O. box 405 Willows, CA 95988, 530-934-2482, gkemp@diamond.sunset.net.

April 13: Air Sailing Spring Cleaning Work Party, Air Sailing Gliderport, NV. Contact Dale Thompson, <u>dale@sinewave.com</u>, 4443 Fieldcrest Dr. Richmond, Ca. 94803-2001, 510-223-4259.

June 15,16, 22-24: Region 11 Championships, Minden-Tahoe Airport, Minden, NV. All classes. Contact Andrew McFall, 775-884-4394, <u>AndrewMcFall@aol.com</u>

June 17-21: 2002 Air Sailing Thermaling Camp, Air Sailing, NV. Contact Rolf Peterson, 2618 Tahoe Dr., Livermore, CA 94550, <u>rolfpete@aol.com</u>, (925) 447-5620 h, (925) 447-4255 w. June 23-28: 2002 Air Sailing Cross-Country Camp, Air Sailing, NV. Contact Chad Moore, 5431 Southside Rd, Hollister, CA 95023-9123, (831) 636-6864 h, <u>chad@outside-thebox.org</u>

July 1-6: 2002 Air Sailing Sports Class Contest, Air Sailing Gliderport, NV. Practice Day June 30. SSA-Sanctioned Regional Contest. Contact Chad Moore, 5431 Southside Rd, Hollister, CA 95023-9123, (831) 636-6864 h, <u>chad@outside-thebox.org</u>

July 4-7: Family weekend at Air Sailing Gliderport, NV. Contact Rosemary Hayes, 9732 State Route 445, PMB 356, Sparks, NV 89436, (775) 475-2440, <u>crhayes@soar-</u> palomino.com.

July 8-12: NSA Safari from AirSailing, NV. Contact Vern Frye for information at (775) 825-1125, eagleduble@aol.com July 15-19: Air Sailing Badge and Record Camp I, Air Sailing, NV. For information contact Charlie Hayes, 9732 Pyramid Lake Highway, PMB 356, Sparks, NV. 89436. Email <u>crhayes@soar-palomino.com</u>. (775) 475-2440

July 16-25: 15-Meter Nationals, Tonopah, NV. Practice Days July 14,15. Contact Jim Norris, 767 Palermo Dr., Santa Barbara, CA 93105-4449, (805) 898-1008 h, jim@interwoof.com, website www.imdata.com

July 22-26: Air Sailing Badge and Record Camp II, Air Sailing, NV. For information contact Charlie Hayes, 9732 Pyramid Lake Highway, PMB 356, Sparks, NV. 89436. Email <u>crhayes@soar-palomino.com</u>. (775) 475-2440

August 10,11: The Fifth Annual Gerlach Dash, Air Sailing Gliderport to Gerlach, NV. Sponsored by Nevada Soaring Association. Contact Vern Frye for information at (775) 825-1125. Motel reservations at Bruno's in Gerlach (775) 557-2220.

# Re: Jim Herd's article on Minden Nov 01 WestWind

Perhaps there are some misconceptions about Minden<sup>1</sup>s current status as a base for sailplanes. In a nutshell, soaring here is as alive and well as it ever has been. We have no "encroaching" urban growth around the airport that I know of that is hindering glider operations. I know of no significant loss of facilities and services. Powered flight operations other than sailplanes and tows account for about 30-40% of all flight ops. Gliders based on the field have grown from about 25 to over 80 in the past 10 years. Paved parking areas used by

sailplanes are 50% larger than they were in 1990. Actually the soaring community<sup>1</sup>s profile is much larger than it was as evidenced by numerous visiting soaring pilots and their birds during March-September. During the summer we can have as many as 100 gliders on the field.

The Minden Soaring Club works hand in glove with the airport management. In essence Minden continues as the premier soaring site of choice for records, training and cross country flights. It has also evolved into the

motorglider capital of the world with as many as 25 powered ships on the flight line during the summer season.

Letter to the Editor



As far as loss of soaring privileges, the facts are that the FAA grant assurances under which the airport operates prohibit restrictions imposed by airport management against any particular class of aeronautical activity without FAA approval. My experience since flying a glider out of this field for 12 years is there have been no accidents involving power aircraft and gliders. This says a lot about cooperation and sound airmanship demonstrated by both the power pilots and the sailplane pilots. Minden Soaring

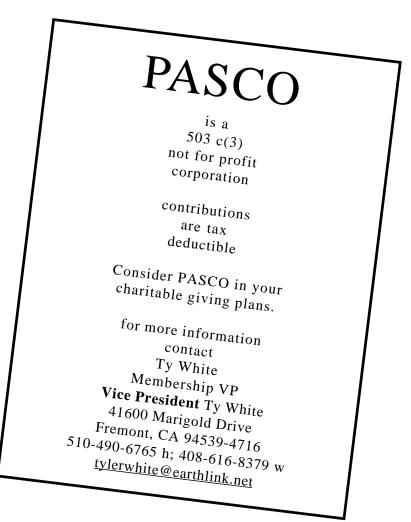
Club<sup>1</sup>s plans for growth is simply a logical evolution of soaring<sup>1</sup>s growth at this airfield.

Best Regards, Pete Williams

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