

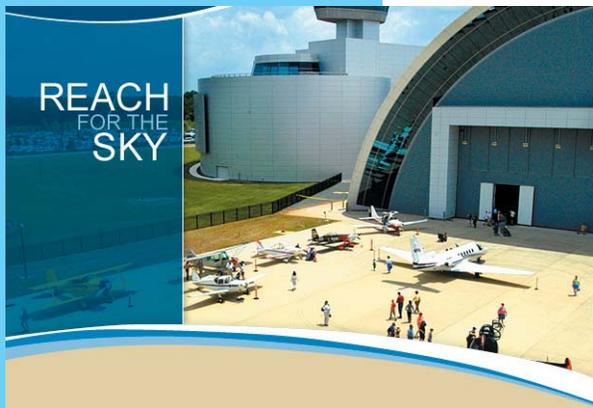
SKYLINE

SKYLINE SOARING CLUB NEWSLETTER

April 2008

Become a Pilot Day

National Air & Space Museum



Natalie Margy, the docent program manager at the National Air and Space Museum's Udvar-Hazy Center, once again invites glider and hang glider owners and clubs to display their aircraft at the June 14 "Be A Pilot" day.

If you're interested in attending applications will be accepted online at www.nasm.si.edu/becomeapilot.

Cheers,

—Richard Freytag

Going for the Gold

First solo wave flight reaches gold heights

By Gordon Roesler

This narrative is about a relatively inexperienced pilot's contact with the wave. I hope that it's useful for other new pilots and that the old hands might give me suggestions for next time.

The fact that the mountain ridges near Front Royal produce wave activity has been teasing me ever since I joined SSC two years ago. I was led into my first wave ever by Paul

Seketa as I was still regaining proficiency after a 30-year layoff from soaring. So I'd had the experience but I wanted to do it on my own. Thursday, February 28 seemed like it would offer a good shot. Winds were forecast from the northeast at 17 knots, which is a good recipe.

Wind forecasts can be found at <http://adds.aviationweather.gov> and <http://usairnet.com/cgi-bin/launch/code.cgi?sta=KOKV&model=avn &state=VA&Submit=Get+Forecast>.

Vern Kline was just launching in the Sprite when I arrived. He radioed to the other glider aloft, carrying Bob Sallada and Jim Kellett, that he'd just found wave. I figured, time to go get lunch, these guys aren't coming down for awhile.

It was also time to change clothes. It was 24 degrees on the ground, and I have been underdressed at altitude in the past. Vern had also radioed down that his

canopy had iced up, and that his fingers were getting cold. So on went four layers on the upper body, two on the legs, ear warmers, gloves and two pairs of socks inside the German hiking boots. Those boots are great; I've never had cold feet while wearing them.

There's a first time for everything

When Jim came down, I asked him to be the official observer for a gold badge altitude attempt. Since I'd bought the barograph from him I knew he'd want it to work well. It had been calibrated just 10 days earlier. After sealing it up I wound it more than I ever had before—I'd hate to have a good badge flight spoiled by a barograph stopping midflight.

I barely fit into the Sprite cockpit with all the layers. I asked tow pilot Eric Litt to leave me to the north of Signal Knob. The tow up was somewhat turbulent, as you'd expect in high winds. I really didn't get pushed too far out of proper tow position and released at 3700 feet as planned, but further to the east than Eric expected. I'd seen a likely looking cloud and was eager to go. After release I was at 4200 feet after about two turns.

Then I remembered that you're supposed to "notch" the barograph. So I pulled spoilers and lost 300 feet. I was now concerned that if I did find wave, I couldn't get a 3000 meter gain above my "notch" altitude and still stay below 14,000 feet since I wasn't carrying oxygen.

That didn't turn out to be a problem. After messing around below the clouds and working my way to the north I started

See "Wave" on page 4



New Tow Plane

Skyline Soaring Club's newly acquired second tow plane arrived at Front Royal Airport April 1. The aircraft was purchased from the Berlin Segelflugverein and flown directly from Germany to Virginia by Captain Clarence Oveur and copilot Roger Murdock. Tow operations with the new aircraft will begin immediately.

Photo by A. Prilfools

Board Notes

Vern Kline volunteered and was appointed Spritemeister by the board.

The board is still looking for a volunteer for the chief flight instructor position.

Annual inspection has been completed on the ASK-21 and Sprite. The Sprite will also go down for about a week later this spring to have the elevators recovered and maybe a canopy replacement.

Region IV Club Meeting

Chris Groshel and Joe Rees represented SSC at the regional club meeting and the following is a short summary.

Each club briefed their status and issues. Besides MASA, we were one of the largest clubs and had the greatest constant growth. Most issues the other clubs had were the same ones we face.

Discussed getting more people to go cross-country flying. They suggested forming a cross-country group in each club and encourage OLC. One point made is the need to have trailers and ground crews.

Talked about exposing clubs to non-soaring pilots with ideas including supporting air shows, school magazine subscriptions, scholarships, community events, sending DVDs to area pilots, dropping off old Soaring magazines with the club address in waiting rooms.

Discussed the experience other clubs had with 501-C3 foun-

ation status.

Discussed the transponder letter of agreement between Potomac TRACON and MASA. Tidewater has a similar problem and will be trying to set up a similar LOA.

Lots of discussion on interclub agreements and they all felt that the Region IV clubs should set up some consistent rules and policies that allow more club interaction. Some key points were:

- Low or no visit fees (determined by each club).
- Duration (determined by each club).
- Use equipment at normal rates.

Skyline Soaring Club, Inc. is a private, 501(c7) non-profit organization, dedicated to the enjoyment and promotion of the sport of soaring. SSC is based at the Front Royal-Warren County, Va. airport and is an affiliate club of the Soaring Society of America. For information about the club go to www.skylinesoaring.org or e-mail welcome@skylinesoaring.org.

President — Shane Neitzey

Secretary — Craig Bendorf

Treasurer — Daniel Noonan

Membership — Steve Rockwood

Chief Tow Pilot — David Dawood

Skylines Editor — Dennis Johnson

Directors — Robert Creedon, Spencer Annear, Paul Seketa

Skyline Soaring Club website — www.skylinesoaring.org
Soaring Society of America website - www.ssa.org



—Tow and dual instruction only. If you want to solo join the club.

—No insurance conflict as long as SSA member.

—Must be SSA member and show card.

—Complete simple form attesting to currency, certification and provide contact information.

—Briefing by instructor or tow pilot in area. No checkout for tow.

—Discussed ways to facilitate better inter-club communications.

—Each club website would include links to other Region IV clubs.

—Tidewater to provide Wiki site for club leaders (password protected) to log comments. That link could be under Region IV club link.

—Each club website to provide information for visiting pilots (fees and contact information)

Operations Manual

The SSC Operations Manual update should be posted on the SSC website in a few weeks. When it comes out you will find that all fees and costs information will be removed and you will be referred to a SSC fee schedule posted on the SSC web page. This will make it easier for everyone, including new and visiting members, to find and reference the fee breakdown. We will send out an announcement when the new operations manual and fee sheet have been posted.

The request for club members to loan funds to the club to purchase a second tow plane has been very successful, but we are still slightly short of our goal of \$40,000 and are looking for a few more pledges of any size. The second tow plane committee will start serious shopping once the loan pledges are in the bank, so please send in your pledges now. To make it easier for club book keeping, due to the many different sizes of pledges, the interest start date will be set once all of the pledges are in. The goal is to have all pledges in by April 1 so we can get things moving. The second tow plane committee consists of Spencer Annear, Dave Dawood, Richard Freytag, Shane Neitzey, Dick Otis and Bill Vickland.

The issue of exemptions from club duties was discussed by the board and it was recognized that the health conditions of some of the older club members will require the board to approve long term waivers. The board reserves the right to request alternative club service, such as helping on committees. Those requesting waivers need to personally notify the board.

The request for volunteers to discuss a proposed program to provide glider flights to wounded veterans in recovery at local military medical facilities was successful. Gordon Roesler has volunteered to head up the committee and Phil Jordan, George Hazelrigg, Jim Kellett, and one or two others have volunteered to help.

Dan Noonan proposed helping out with the club's need for a higher performance single-seat glider by leasing his Cirrus to the club. The board is pursuing this offer and will work

out an agreement and insurance requirements. Club instructors have been asked to propose qualifications and training requirements for board approval and to develop a training program and checklist.

The club is in dire need of volunteers to form a club event committee to propose and organize some 2008 club social, flying, training or any old fun event that club members could participate in. Currently our only scheduled events are a request to support a glider display at the Randolph Macon Academy Springfest on April 19 and the September Front Royal Air Show.

The next board meeting will be held at 6 p.m. Thursday April 10 at Shane's shop in Manassas. Any members who have issues for the board to discuss should send them to the SSC directors e-mail address: directors@skylinesoaring.org
—Craig Bendorf, SSC Secretary

Second Tow Plane Pledges

Skyline had good participation in the pledge process with 39 members pledging funds. As of March 18, 11 of the 39 have come forward with funds to cover their pledges. Among those missing are eight with pledges of \$2000 or more, four with \$1000 pledges, 13 with \$500 pledges and three with pledges of less than \$500.

The seller of an airplane will probably not accept a pledge in lieu of cash so the committee will consider only airplanes selling for cash on hand or less. Please honor your pledge in the near future so SSC has the resources to purchase the plane it needs. Thanks

—Spencer Annear

Glider Status

The ASK and Sprite annuals are complete. The Sprite records are with the Grob records in one of the tan cabinets near the Sprite. The ASK has broken filler material along the length of its total energy probe. Shouldn't be a problem but for now I don't know how we're going to fix it. Any repair will be done when the weather warms up. The Sprite will also go down for about a week later this spring to have the elevators recovered and maybe a canopy replacement.

—Chris Groshel

Welcome Back

Some club members will remember Bruce Spinney. Bruce joined the club in 1999 and was forced to go inactive in 2002 due to some vision problems. Well, Bruce's vision has been corrected and he is ready to soar again. Bruce has requested a change to active status with the club. Welcome back to active status Bruce. I'm sure Bruce will be contacting one of our instructors soon to receive a check ride and return to glider soaring.

—Steve Rockwood, SSC membership officer

Product Recommendation

Many soaring pilots swear by Suntigers, either clip-ons or prescription lenses. They're remarkable in that they actually

improve visibility in haze. See www.suntiger.com
—Jim Kellett, Resident Curmudgeon

Hello Everyone,

We're back from an extended vacation to New Zealand and Australia. In New Zealand I made the obligatory pilgrimage to Omarama and did some mountain soaring in their beautiful Duo Discus. We also stopped at the Nelson Lakes Gliding Club that we happened to see on our way.

In Australia we had a great time in Sydney & Canberra. I did not fly but we cruised around the Sydney harbor.

I am glad to hear that we are close to purchasing our second tow plane. My pledge is \$1000.

—Greg Ellis

Skydiver now strives to stay aloft

Skyline welcomes Bill Burner, new member, glider and tow pilot

My interest in flying must come from my DNA – I can't remember ever not being fascinated by flight. The next time I hear a plane fly overhead I will almost certainly at least look up at it – I guess just to make sure it really is flying; that the magic is still working.

Sport parachuting was my starting point as an aviation participant – because I could not afford flight lessons. That was back in the late '60s. I bought surplus military gear and got in the air for a couple of hundred bucks.

With that a trend began which has, to my incredibly good fortune, continued to this day. Somehow I have always stumbled into absolutely outstanding people and organizations to guide me and stimulate me as an aviator. So this bio is really about the people I have been lucky enough to meet in aviation.

How about this for starters? My first 300 jumps were made at West Point, Virginia and Ridgely, Maryland. Those two drop zones in the late '60s routinely supplied about half of the U.S. skydiving team (which would have been an Olympic team had skydiving been an Olympic sport) each year. So, I started in a hot bed of competition jumping. Every one of my jumps was made with the explicit intent of not just hitting the ground, but landing on a four-inch disc, that was the "dead center" of the target pit.

On my first jump I was so entranced by the view from the parachute harness that I completely forgot about where the wind was blowing my 28-foot flat circular parachute for the first thousand feet of the descent. I barely made the drop zone. Nonetheless, I came to know three national champions as my close friends.

My next 300 jumps were made in the New Orleans area. The drop zone owner was filming a documentary of sport parachuting for a local TV station. Since I had a cutaway harness I volunteered to make the jumps for the movie in which we purposely packed a parachute to malfunction. The idea was that he would film the malfunction in slow motion while in freefall next to me, as it occurred, and then open below me and film the emergency procedure of cutting away the malfunction and opening the reserve chute. Guess what? In seven tries we could not get it to malfunction.

While there I somehow managed to convince John D. Nicolaidis, Chairman of the Aeronautical Engineering Department at Notre Dame University (I know, it's in South Bend, Indiana) that he needed me as one of his test jumpers for a new type of parachute, the ram air canopy as it was then called. They were the ones who developed that canopy. A couple of guys got their PhD off it. I did only a few of the test jumps to man rate that parachute. The problem we were working on was that it wanted to open too well, and we needed a better reefing system to cushion the opening shock.

Having gotten the first ram air parachute ever released to the public in 1970 I was able to get a job that summer as a professional sky diver in Tommy Bartlett's Stage Sky and Ski Water Thrill Show, in Wisconsin Dells. There were three shows a day and we were a scheduled act in the show, the only scheduled skydiving act in the world at that time. Our salary was \$100 per week, before taxes, to do nothing but jump in the show. Pretty neat. The way we looked at it we were getting sixty odd dollars after taxes and 21 jumps. At any rate, the guys I jumped with were the absolute cream of the crop, highly experience jumpers, living every jumper's dream of being paid to only jump. I was there not because I was their equal, but only because I had a chute that virtually no one else had ever seen or dreamed of.

I also competed in regional and international meets, mostly using the old round parachutes, which were still state-of-the-art back then. I got to know guys who were literally the best jumpers in the world, as proven in competition. When my knees finally gave out I started flying instead.

Continuing the good luck of falling into one outstanding aviation venue after another, how about this? Who would be the neatest guy to say was the person who taught your flight instructor to fly—your instructor's instructor? Well, the guy who taught me to fly was Al Santilli from the Albuquerque Soaring Club. Al's ticket was signed off by Orville Wright. When Al signed me off someone said, "Now you can say you are a third generation pilot."

I can also claim that one of my knee operations was done by a surgeon who had operated on Joe Namath. But I can't throw a football any better than I can fly, and coffee still costs me a buck at McDonalds.

The guy who actually did most of my flight instruction was an old college friend, Bevo Howard, Jr. His father, Bevo senior, was three time national aerobatic champion back in the '50s. To this day every time I fly I still hear Bevo's voice bellowing out at me from the back seat of the Schweitzer 2-33, "Pitch, pitch, watch your pitch!" After soloing me in the 2-33 he put me right in a

Schweitzer 1-26 for my second solo and said, "Here, this will teach you something about pitch."

After about 100 hours in gliders I transitioned to power in an Aeronca Champ. The first plane I owned was a home built that I picked up (90 percent complete, only 50 percent left to do) for \$2,000, a Whitman Tailwind. I got a famous homebuilder in Albuquerque to finish it for me and flew it for about 50 hours. It was a real tricky, short coupled little tail-dragger; short wings, underpowered and twitchy. On takeoff every time you lifted the tail, no matter how carefully, it would veer sharply to the left. It was more than the P factor; I think the gear wasn't aligned true. It taught me more about flying



having trouble maintaining altitude. So I headed south toward the field. That brought me into a big patch of 10 knots down. I started looking at farms. I couldn't believe this. Choosing 70 knots and a 225° heading I was making good 180° on the ground and thinking I could make the field if I flew an abbreviated pattern. I called entering the pattern at 2300 feet while still a couple of miles out but was down to 1800 by the IP, still in heavy sink.

Then fortune turned. Just north of the IP I stumbled into an unmarked seven-knot elevator going up. It was amazing, I was at 6000 feet in a couple of minutes. This improved my morale.

I started working my way to the west, getting up to the 6000-foot rotor cloud bases, then penetrating to the next cloud westward. I was working hard; the lift was violent and hard to center. My canopy frosted a little on one side.

When I was finally as far west as Massanutten Ridge I noticed a funny thing, when I got to cloud base then pushed out just west (windward) of the rotor cloud there was lift that allowed me to go above cloud base and remain clear.

Wave

At 7000 feet, with 5 knots of lift in completely smooth air I knew it was real. By 8000 feet I could clearly see the big picture, long streets of rotor clouds running up and down the Shenandoah Valley parallel to the ridgelines. The lift was above the west edge of my particular cloud.

The vista was spectacular and the sun coming through the canopy felt great.

The wave near Front royal is generated by the Great North Mountain to the west of Strasburg. I was operating over US-340 north of Front Royal (see map). It's easy to see the large buildings along that road.

I radioed back and asked our ground crew to inform Potomac Tracon that glider operations would go up to 10,000 feet. By the time I got an acknowledgement I asked them to do it for 14,000 feet. Tracon was very helpful responding that I was in radar contact and that operations to 14,000 feet were OK but that some traffic would come past and to keep an eye out.

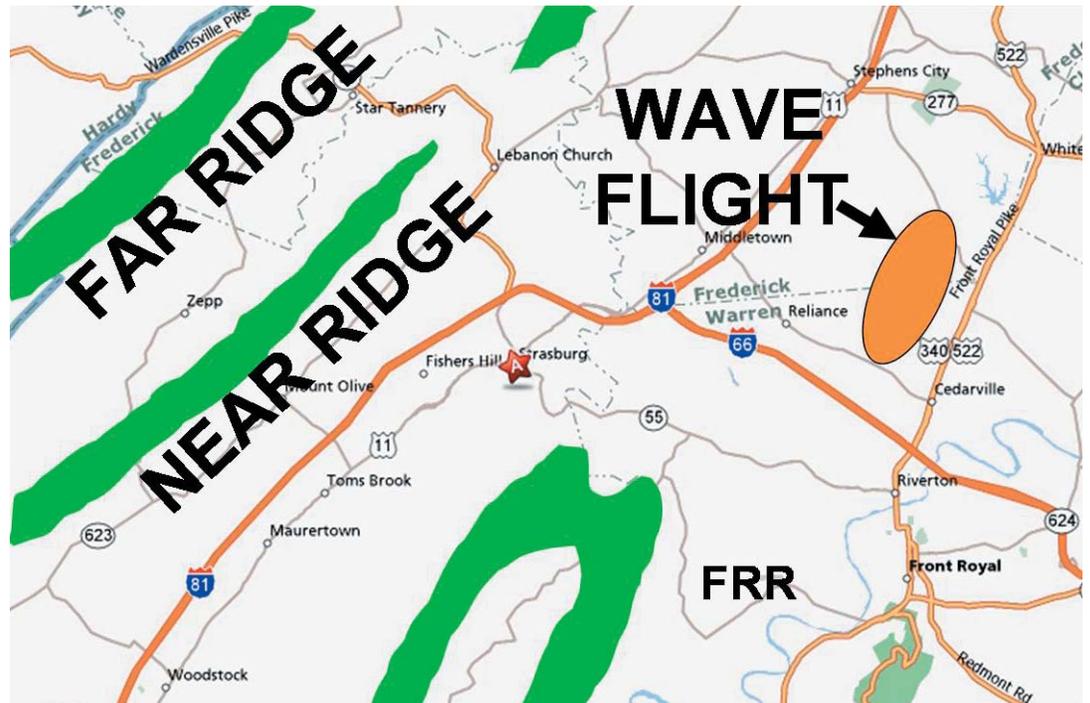
I got up to 13,200 feet with almost no adjustments to course or speed, keeping careful track of my time above 12,500 feet. As the lift weakened with altitude I tried to recenter in the wave. I was unsuccessful and wound up back down at 11,000 feet. This was also when I noticed that I could not feel the tips of my toes.

Funny, the rest of me was comfy. The sun through the canopy felt quite pleasant, my fingers were comfortable inside

my leather-and-Thinsulate gloves, but the toes were a concern. I found that I could restore toe feeling with vigorous toe wiggling. This is not conducive to smooth flying, but I had lost a little bit of skin to frostbite as a Boy Scout and did not want to repeat that, so wiggling took priority. Eventually the toe feeling returned.

In planning the day's flying, I had calculated that 13,500 feet from a 3,700 foot release should be adequate for a gold altitude claim. But what effect would my late notch have? I remembered that I had descended to 1,800 feet; wouldn't the altitude gain be calculated from that point? I did not have a copy of the rules handy, but with feeling in my toes I decided I'd take another shot at 14,000 feet.

It turns out that the wave was not of equal strength at all points. When I lost communication with my toes I had turned



back south toward FRR, descending at 80 knots with spoilers open. But now, I slowed down, and fortuitously, was in the stronger part of the wave where I'd started. I went back up, was more judicious in recentering (I didn't even try) and made the climb from 12,500 to 13,900 feet in 15 minutes. That was pure joy. About this time, Dennis Johnson and Jim Kellett made it into the same wave, passing directly below me (about 1000') at one point.

It's important to mention that I was very aware of commercial traffic in the vicinity—most of it below me on approach to Dulles. The closest one was a regional jet about two miles away, at my altitude and flying across my track. That called to mind the glider-RJ midair in Colorado a year or so ago. Needless to say my visual scanning was very thorough.

The period of maximum risk from the commercial traffic was in the portion of my descent between cloud top and cloud base altitude. I was descending in the clear streets between the rotor clouds but a jet could burst through one of those clouds with little warning. So I decided that the descent through that altitude band (8000 - 6000 feet) should be very rapid. I descended at 80 knots, with partial spoilers, and a

than any other bird. Hands on, vigilance.

I eventually bought a Globe Swift that was highly unusual as it had been converted to a single seat, with a 200 horsepower engine and constant speed prop. I wanted to get some retractable time. That plane taught me that single seat airplanes, and especially tail draggers, are not practical, they are toys. We put it up for sale when we moved to Germany, and finally sold it 11 years later when we moved overseas again, to Turkey. While in Albuquerque I wound up towing for the club for a few years, using a 180 HP Super Cub.

In Germany we bought a Grob 103A Twin Acro after seeing an incredible aerobatic demonstration by the company test pilot. Too bad the pilot did not come with the plane. He did give both Sharon (my wife and fellow pilot) and I a front seat demonstration ride at the Grob factory in Mindleheim that concluded with a high speed pass down the runway at a canopy altitude of about five meters—inverted.

We flew the Grob off a winch with the Wiesbaden Aero Club. We were the only Americans in the club. Winch launches are really exhilarating. The ground roll is usually about two to three fuselage lengths and then you're flying and in order to go faster you pull back on the stick to increase your pitch. It seems too good to be true. How can it be that you can get both speed and altitude simply by pulling back? I asked the German instructor, "Well, just how hard can you pull back?" His answer, "It depends upon your character."

Actually, there is a very real limit. It's critical that you do not overspeed the glider as it's under very heavy wing loading while on the winch. Not only is it kiting up, it's also lifting a metal cable that at the start is one kilometer long.

I had a long hiatus from general aviation until retiring from the Air Force and moving to Northern Virginia. Then, continuing my lucky streak of finding aviation's most outstanding people, how about Jan Scott as the perfect, high-integrity no-nonsense guy to supervise a private pilot breaking back into flying after ten years off?

I've been soaring out of Jan's beautiful private field in Lovettsville since 1999. I bought his Bergfalke (a vintage German trainer) and taught two of our four kids to fly in it. We took them to Bermuda High Soaring in South Carolina to get soloed as I'm not an instructor. One of our kids, Guinevere, went on to get her private glider license at age 16. We also bought a 1-26A with a sport canopy so that we would not have a family fight over the plane once the kids started flying. Watching the Pawnee tow plane in South Carolina got me yearning to start towing again. That meant getting current in power and so we bought a Citabria last fall. I hope to get Guinevere started on her power rating in it soon.

I feel extremely fortunate to have met so many absolutely outstanding people in my aviation pursuits. The first glimpse of the Skyline Soaring Club and how it operates makes me feel very much like I have once again fallen into a special place full of truly exceptional people.

I'm genuinely glad to be aboard.

—Bill Burner, February, 2008

SSA Convention

"Survivable Loads on the Pilot and the Crashworthiness of Glider Cockpits" by Dr. Tony Segal was one of the better seminars at the SSA convention in Albuquerque. I will try to convey what I thought was important.

Pilots are injured in hard landings more by the rebound shock than the initial spinal contact due to the longer time constant the spine is in motion. If the rebounds are decreased, injuries decrease. Dr Segal said sitting on one inch CONF foam will greatly reduce the rebounding movement.

Five point seats belts are good, but a six point harness would be better. The shoulder harness should wrap over the back of the shoulder and then end at the glider mounting. In other words, the seatbelt mounting point in the glider should be below the top of the shoulder not above the shoulder.

If you wear a back pack parachute you should have wedge foam to remove the gap between the end of the chute and the base of the glider seat pan.

On the lighter side there were many other good seminars: Breakthroughs in Winch Technology, Leaving the Nest, FLARM Collision Warning, How to Prepare for and Fly Your First Contest, Three Essentials of Good Judgment, So You Want to Buy a Pre-Owned Fiberglass Sailplane, any many more. You should have been there.

Jim Kellett received the Exceptional Achievement Award at the 40th Annual SSA Awards Banquet. Congratulations Jim.

—Frank Banas



side slip that allowed me best visibility to the west where all of the commercial traffic had been coming from. There were no scares.

I mentally rehearsed the high-wind landing scenario, and asked UNICOM for a runway report. I was surprised to hear that ground wind was only 3-4 knots. It was much greater at altitude (I'm guessing 35 knots), so I prepared for wind shear as well. I flew the pattern at 65 knots and my approach and landing were normal.

I'd done it! A gold altitude gain. We pulled out the barograph to look at the trace. And—uh, oh—the barograph drum seemed to have stopped turning just before that second, higher leg that went to 13,900 feet. But I wound it so many times.

There is enough data on the barograph paper to support that I did make a 3000-meter altitude gain, thanks to that early descent to 1800 feet. Jim Kellett wrote to the badge lady, Judy Rupprecht of SSA, to see what she'd say about the stopped barograph. Basically, because the high point follows the low point and the trace is continuous between them (so I couldn't have re-launched) it is probably a valid trace. On hearing that I promptly filled out the award paper-

work. But that aspect is really secondary. This was one of the most exciting, enjoyable and rewarding glider flights I've ever had.

Still though, I wondered why the barograph stopped. Then it hit me, what was the temperature at altitude? It was 28° degrees F. (minus 2° C.) when I launched. A normal temperature lapse rate is 2° C. per 1000 feet. So at 14,000 feet it would have been minus 28° C. No wonder my feet were cold, no wonder the altimeter went in jumps instead of smoothly, no wonder water condensed on my nose, and no wonder the barograph stopped.

So fellow pilots, if you try a wave flight in February you just can't dress too warmly—and maybe you'll want to bring a blanket for your barograph, too.

My biggest lessons:

- I had to work right up to the rotor cloud base, then fly windward to contact the wave.
- Once in the wave use only very small course and speed changes to find the best lift.
- Dress very, very warmly.
- Keep your eyes open for traffic, traffic, traffic.

