

# THE BUZZARD

NORTHERN CALIFORNIA SOARING ASSOCIATION

November 2002

## Why Soar Parowan?

by Monique Weil

Driving almost two days each way is a long journey to find the answer to that question. For about a dozen years, Rolf Peterson has been coordinating an "annual badge, record and cross country gathering" at Parowan, Utah (Las Vegas Sectional Chart). Quietly as is his style, Rolf has been spending some weeks every summer for some years, accumulating hundreds of miles of long flights, SSA distance awards and all kinds of Utah State Records. For example, at random I just picked up last October's Soaring Magazine and found 3 different SSA distance awards listed for him. His Utah Sports Class Records include: O& R 287 nm, Free Distance: 316nm; 3 TP Dist: 346nm.

Early this Summer, as I was talking with Rolf about helping out a bit at Thermal Camp at Air Sailing, I asked him what draws him to such a distant soaring site. He explained that the soaring is great and cross-country soaring is safe due to the large number of nearby airports scattered in easy range of the mountainous ridges. The elevation is similar to Truckee so the summer weather must be comparable. At least I assumed it would be. I had never considered going to Parowan or any other soaring sites in the Great Basin as I assumed that you brought your own glider and there was otherwise no glider available to fly. Well, to my surprise Rolf told me that there was a person by the name of Guenther who did have a couple of gliders for rental this season. Emails confirmed that there were gliders available; I made a reservation with Guenther for an ASW24 "with a sustainer engine, equipped with a data logger, Peschge flight computer, EDS oxygen and new parachute" and headed out to Utah, early July.

### What is the Great Basin?

The Great Basin is a 200,000 square mile area that drains internally; i.e. neither creeks, streams nor rivers find an outlet to the Gulf of Mexico or the Pacific Ocean but evaporate, sink underground or flow into lakes. It ranges from the Wasatch Mountains east of the Great Salt Lake to the Sierra Nevada to the west, the Snake river in Oregon to the north and the Mojave desert in the south; it covers most of Nevada, half of Utah, and sections of Idaho, Wyoming, Oregon and California. It is the product of geological forces creating series of narrow, numerous north-south mountain ranges, a mile above and separated by flat valleys with elevations around four to six thousand feet or more. It is a temperate desert with hot dry summers and snowy winters. After exploring a little of this desolate yet beautiful and spectacular landscape on the ground and in the air, checking out some of the Parks' visitor centers and three-dimensional models deepened my understanding and appreciation.

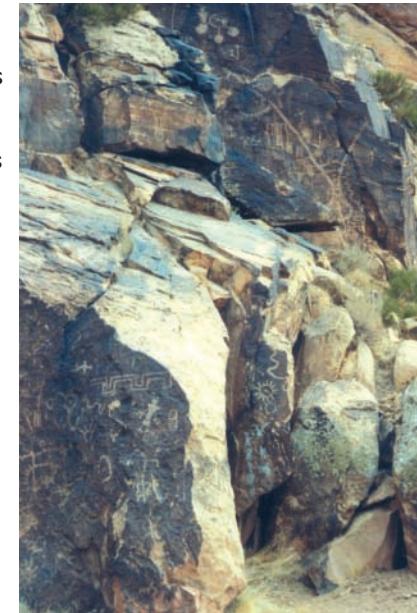
Kempton Izuno's April 2001 article in Soaring on "Nevada Great Basin Soaring" is very thorough, focusing on flights out of Tonopah. He explains why he believes Nevada's Great Basin area is the best Western US thermal area, due to: 30,000+ square miles of high &

very dry 9-12,000' mountain ranges, with valley floors often above 6,000'. Ten mountain range systems providing long lift lines over a broad working area, allowing flexible task setting and route changes on course. Strong summer heating. A normally very dry summertime airmass, but with enough moisture from the Gulf of Mexico to produce cumulus.

I believe Kempton's article applies just as well to the Parowan area. Advantages of Parowan as a site are its reassuringly spaced airports, other safe landing areas such as hay or alfalfa fields; its proximity to a main highway (I 15), to a city with cultural activities such as a Shakespeare Festival (Cedar City) and lots of rewarding sight seeing for the family. On the other hand, it does take the better part of a day's driving beyond Tonopah. Guenther enthused about Parowan in his emails just as FBOs world wide do: "Cloudbase 20,000', best climb rate 15 knots; 300 km out and return in 3 hours". Three young German contest pilots had been there for some weeks, amassing fantastic flights and the weather was superb; they flew 5 flights longer than 500 sm, etc. I did not tell him that there was no way I could compare myself to a "young German" accomplished pilot.

There was quite a choice of driving routes to Parowan. I opted for a scenic route, avoiding freeways. Norm Freitas, one of our students, recommended a scenic route through Yosemite, down Tioga Pass toward Mono Lake and two-lane desolate roads through the Nevada desert toward Cedar City. On route 6, after passing Boundary Peak, the highest point in Nevada, I saw no cars for 2-3 hours or more at a time. I stayed overnight at Tonopah, a run down former silver mining town with cheap motels; I dropped in briefly at the airport, where I only saw one glider tied down but did not leave the car due to the 110 deg heat. The 15 meter nationals were scheduled later in the month but the field looked deserted.

On the way back I drove the northern route, starting at Parowan's famous Petroglyphs (to the Fremont Indians Parowan meant "place of exceptional power"). At Rolf's suggestion I visited the delicate calcite formations of the Lehman caves at the Great Basin National Park before joining U.S. 50. An oppressive heat wave persisted throughout the two weeks of this trip and the cool temperature in the Caves was refreshing. Parowan was no exception to the extreme heat, so I can only quote statistics about average summer temperatures being in the 80s. I have certainly never experienced this degree of



Parowan's Petroglyphs

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## About NCSA

The Northern California Soaring Association (NCSA) is based at the Byron airport, in Byron California. It is the only club giving instruction in the San Francisco Bay Area. The club encourages neophyte members to progress through obtaining their private licenses and further development of their soaring skills. The club is active on weekends only and run by volunteers. Because it is not a commercial operation, members are expected to participate in the maintenance of club facilities and aircraft when they are not flying. There are mandatory workdays for NCSA, usually twice a year, to do essential maintenance on aircraft and facilities.

For More information visit our Web site:  
[www.norcalsoaring.org](http://www.norcalsoaring.org)

The **Buzzard** is published quarterly, give or take or whenever we can get a volunteer. Any other publication is welcome to use any material herein with proper credit given to the source. We'd like to say that everything we print has been checked at least 3 times but lets face it, we save all that caution for flying and let it hang out a bit when it comes to the newsletter, so apologies in advance for any errors or omissions. **Read this newsletter at your own risk.**

## NCSA OFFICERS

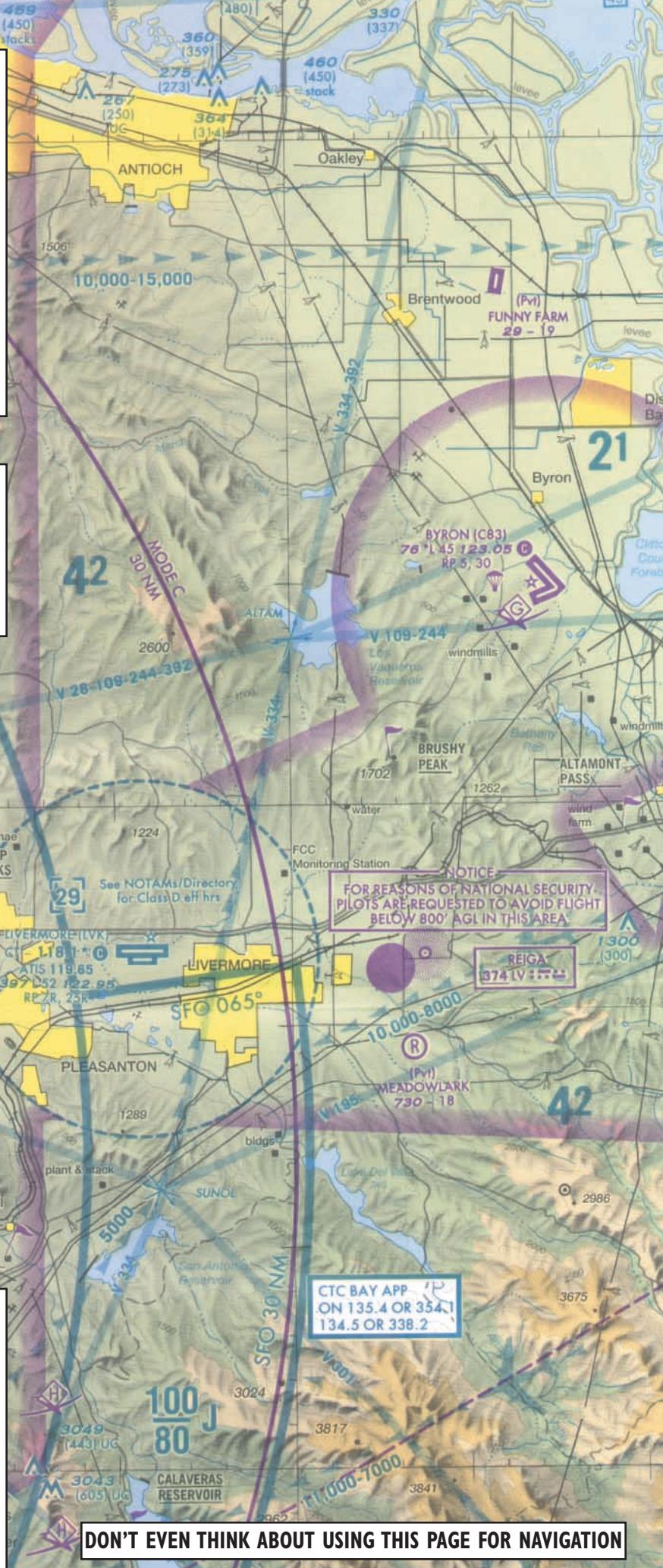
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## INSTRUCTORS

Rolf Peterson	925 447-5620
	925 447-4255
Mike Schneider	925 426-1412
Monique Weil	510 547-0687
Richard Pearl	916 359-7561
Paul Kinzelman	408 279-2268
Dave Cunningham	925 933-4558
Buzz Graves	408 356-5852

## WELCOME TO OUR NEW MEMBERS:

**Scott Stiehr**, Junior Member  
**Osvaldo "Bins" Ely**, Brazilian Hang Glider Pilot  
**Bill Levinson**, rediscovering gliding after many years...has PP Glider from Ionia, Michigan. Congratulations to Bill who just achieved his Bronze Badge.  
**Richard Miller**, wind surfer (developed his own hydrofoil), sailor and former RC pilot  
**Boris Deianov**, Bulgarian, new Private Pilot (power), transitioning to real flight



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heat at Truckee, with similar elevation. The nights hardly cooled down, making sleeping difficult.

Guenther Jacobs was home to welcome me on my arrival in the house he rents for the summer. It was hot. Guenther "discovered" Parowan a couple of years ago after flying at Hilton Ranch. He had been invited to Hilton Ranch as European champion after flying the first 18meter FAI 1000KM triangle in Germany in 1999. This achievement came after 10 years of trying. The flight took 10hr 20min. During the week I stayed at his house I heard about several of his soaring adventures and records, such as flying his ASH 26 from Spain to Germany, with minimal use of his engine. Last summer Guenther made a record 300KM FAI triangle flight in a PW5 out of Parowan, with an average speed of 108.53 KM/hr, as well as two 750 KM flights in a PW 5 (3 free turn points).

Guenther lives near Cologne, Germany and is a retired attorney. He has decided to spend summers in Parowan where he hopes to develop a more stable gliding operation, with tow availability and rental of his gliders. He brought 2 gliders here from Germany, an ASW 24 with sustainer engine and a PIK 20D; he also has a Blanik L-13 for rentals. The rates are reasonably priced and Guenther is a one-man manager. He is extremely generous of his time, taking over line operations, using his bicycle to run between gliders, office and runway; organizing the tow schedule, getting his gliders ready, trying to keep track of glider's location. He keeps his German ships in a hangar, which makes pre-flight easy, protected from the searing sun.

The first day after my arrival, I chose to fly the ASW 24 and we were lined up on the runway in position for tow when I scanned the sky to the west to see a fast advancing system covering the sky. We pushed the glider off the runway just in time before a heavy downpour with strong winds drenched us. This rain was the first in two months or more as the whole area was suffering from a drought. Guenther tied the ship to a runway light post and eventually had to bring his van to tie the ship down until the worst of the storm died down. We had to push my car out of the mud and some areas had flash flooding. Yet the ground was so parched that the next day showed little evidence of the storm. When the rain diminished Guenther suggested I go sight seeing, to Brian's Head, which I did.

South West Utah is covered with dramatic giant canyons, brilliant reds, oranges and yellow rock formations as well as massive mountain ranges, forests, lakes, rivers, dry lakes, desert landscapes, fields of alfalfa as well as sage brush. State and National Parks within easy driving or soaring distances include Bryce and Zion National Parks, Cedar Breaks (and Grand Staircase-Escalante a little further east) National Monuments. Brian's Head Peak, over 11,300' is a ski resort near Cedar Breaks National Monument. There was a narrow dirt road leading up to the peak where I found myself surrounded by large groups of grazing sheep and lambs who were reluctant to give way to me. At the end of this trail was the peak which gave me a panoramic view of the local soaring area with the high terrain overlooking the valley and canyons below. Cedar Breaks is a gigantic rock amphitheater. 2,000' below are stone statuesque forms of reds, yellows, purples. In the high country above are ancient gnarled weather beaten bristle cone trees. The geology of these natural wonders fascinated me and drew me to go sight seeing whenever the weather was not soarable.

The next day was predictably a beautiful soaring day with high cus all over. However I had never flown an ASW 24 before, which Guenther explained was like flying with water due to its engine. Flying with water was new to me also so I was determined to stay local and get the feel of the ship. I did this and liked it. With cumulus bases to 17,000' I could not resist a little 25 mile run up the cloud street to Beaver, then down to Brian's Head and Cedar Breaks, where I had driven the previous day; however there was one problem: I could not get the gear up; either because I was sit-



ting too far forward or because I did not have enough strength, even with both hands.

Another complication with both ships for me was the Metric instrumentation: The altitude was in meters, the airspeed in km/hr, the vario in meters per second. I got out my calculator and made approximations to help my calculations in the air. Still it took me all the days I flew to integrate these calculations in my brain.

The following day I flew the PIK. This also looked like a great day, with cloud bases above 18,000' and over development to the South. Ramy Yanetz, who flies very long distances out of Hollister and many other places, dropped in for a couple of days and flew a 750km triangle to the North. However I was again determined to stay fairly local to put the PIK through its paces before heading out; again I could not resist the strong lift, climbed to 16,600', flew east over Dixie National Forest to Panguitch Lake, then north turning past I 70 and heading back to ski lifts in the Tushar Mountains, near 12,169' Delano Peak; this peak is a 40 mile final glide back to Parowan. The lift was so strong that it felt like a local flight but was actually over 220 KM.

The next day had scattered cus with a Westerly flow and over development to the East. I flew south to Brian's Head ranger station, then headed east; I was over Panguitch Lake when I turned my oxygen on and realized it was not functioning. With cloud bases above 18,000' it required a lot of discipline to stay low as I headed to Delano Peak; I kept giving myself metric calculation tasks to make sure my brain was functioning. One mistake I know I made once was to read the altimeter as 4,000 meter because the big needle was on top. A confusing detail of this metric instrumentation is that the zero is actually at the bottom of the instrument (the six o'clock position) and so the altimeter was actually reading 4,500 meter, i.e. almost 15,000' instead of just over 13,000'! It turned out that the O2 bottle had slipped out of the connecting bracket. The flow was normal on the pre take-off check.

That night I was determined not to make such mistakes again. What I did was to work out approximations and memorize the big numbers, e.g. thousands of meters into feet; then I made a little card to have handy in the air to tell me how many nautical miles per thousand meters I wanted for conservative glide angles: e.g. 18:1 is approximately 10nm/1000 meter; 30:1 is 16nm/1000 meters. I could think much better when I used the "kiss" method and kept it simple.

The fourth day also promised great soaring weather, with cloud bases perhaps 20,000', high pressure and SVV winds about 15 Knots. I was ready to try a 330km out and return, a "bread and butter" Diamond out and return course, up the ridge to Scipio (I-15 and U.S.50 Interchange) While researching Utah's records to look at Rolf's accomplishments I noticed that there was no one listed in the Feminine 15meter category. I thought that would be fun to attempt as there was no competition. However Guenther was having problems with his Peschge data logger and the compa-

ny was not answering his emails for tech support. I was able to borrow a camera but we had no way of mounting one in the cockpit. I did try to follow the rules as best I could, used a barograph and photographed a declaration and turn points etc.; Still I had not reviewed the regulations and was not prepared as I had relied on the data logger. In the end I decided not to send in the data to SSA. I'll just add the flight to my list (not very long) of 300KM out and return flights that for various reasons did not qualify to finish my Gold badge, usually because I did not declare them. This was my first time even thinking about a State Record however.

The flight itself was fairly direct. I had to get a relight as the high cus are not always easy to reach until later in the day and one has to work one's way up the ridge. Mountain ranges in the area are north-south and the flight to Scipio has easily reachable airports on both sides of the ridges, in the valley below at 5,000'-6,000' elevation, both along Highway 15 and 89. The lift was strong and I climbed to 17,999', the turn point only one mountain range beyond my flight of two days previous. I spent too long taking several photos of the Scipio turn point and found myself getting lower as I drifted downwind and picked the wrong cloud to aim for to the east, near Sevier Bridge reservoir. Still I was within easy range of Salina-Gunnison airport, eventually climbing and joining up with Guenther who was following a cloud street near Richfield. After over 5hr 20min in the air I was back at Parowan, landing into a moderate cross wind from the west. The runway is 5,000' long and uphill landing on Rwy22; the usual take off is Rwy 4.

Every morning Guenther would check the weather, looking at satellite images, current and forecast conditions and the water vapor content. There is no soaring forecast for the area. The weather was too windy or wet for flying the next 4 days so I went sight seeing, going to Bryce Canyon and the Hoodoo rock formations, Cedar Breaks, Kolob parts of Zion National Park as well as spending time in the library and museums in Cedar City showing the pioneer Mormon explorations and early mining attempts. Dave Norwood, the very friendly Parowan FBO owner, made several sightseeing suggestions. There is not much to see in Parowan itself but it does have a library, a swimming pool and one bar. You have to be accepted as a member to go to the bar, which is quite expensive. Otherwise only 3% beer is available locally. People go to Mesquite in Nevada to bring back beer or other alcoholic drinks. There are very few eating places in town, though Cedar City does have some good restaurants. As Guenther says "you do not come to Parowan for the food". It was too hot to cook so I made salads and actually lost weight!

Although my week was over I was able to extend the rental of the PIK for another couple of days. Guenther had the room rented to a Danish fighter (and glider) pilot, so I rented an apartment recently built for the students at South Utah University. It was air conditioned and was huge and extremely comfortable, all for \$40 a night. Luckily I had my linen and cooking and eating utensils with me. My fifth flying day was drier and very hot and I eagerly climbed to cooler temperatures. I started south to a ski resort south of Cedar City, north of Zion, then headed NE via Navajo Lake to Bryce Canyon, exploring it for the last time, still awed by the striking colorful rock formations. Heading North under good lift, I started my final glide from Circleville Mountain, south of Delano peak. It was drier and bluer day but the lift took me to 17,950'.

On my last day at Parowan, there was a light SE flow and fewer clouds until later in the day and the initial thermals were rough. Still, the lift was surprisingly good, getting stronger during the day, though the visibility was at times very poor due to smoke. I headed east via Panguitch to the ridge west of the Escalante mountains before heading north under a smoky but strong cloud street turning back after crossing State Route 24 toward the Fish Lake Mountains in the Fish Lake Forest. Just about the time I thought I

was over Piute Reservoir heading for Junction airport for a final glide, I heard a radio call asking me to relay my position. I looked around for where Junction airport should be, announcing that I was over Junction (actually said "Grand Junction" in error) then corrected myself that it was another nearby lake. Now looking at my chart I realized I had made a mistake and was over "The Other Creek", elongated as Piute creek is but a few miles to the east. I figured that the relaying glider thought I was hypoxic as I obviously did not know where I was. I confirmed my position with the GPS as the visibility was poor due to smoke. I had turned it off to save the batteries; I announced that I was OK as I reread the chart; it was actually "the Otter Creek"; not "the Other Creek". By that time I was about 17,000' and headed out on a final glide, about 45 miles out. I arrived over Parowan with little altitude loss and headed West to the Little Salt Lake to find sink to descend to pattern altitude where I saw Rolf below me, on his final glide. Generally on my flights I gave a position report about hourly but reception was not good. A few times I was able to relay my position through a German couple who were flying separate motor gliders out of Escalante.

I do not know if my experience is typical but I had exceptional soaring weather for half the days I was there and decided to sight see on the ground on the other days, which were clearly not going to be pleasant for me in the air. The storms were at times long lasting and strong, with power outages lasting for hours and strong persistent winds. Happily I was on the ground then. My flights were fun and safe and at this stage of my life that is all I wish for. I was able to get high and stay high most of the time and at times I felt I was just exploring new areas and sightseeing, savoring a visual feast. I agree with George Thelen about the effects of aging (Soaring, August issue) and the advice to add a safety margin to reduce stress.. "there are few old, bold pilots". I will take his 15% rule in mind, e.g. "...decide to go home 15% sooner, set minimum thermal height 15% higher above the ground; 15% more clearance to other gliders in gaggles; make flights 15% less ambitious, be always within easy glide of a known safe landing site, – resulting in a 15% increase in enjoyment and life span". I hope to come back next year as I continue getting older but not bolder.



Monique Weil has been flying both power aircraft and gliders since 1966. She is an ATP, a power and glider instructor who loves to fly and teach others how to. One of too few women who soar she is active in WSPA (Women Soaring Pilots Association)'s annual soaring seminars whenever possible. Every flying day is a treat for her; she will not publicly disclose her age.

## Using the TIP and BLIPMAP Soaring Forecasts

Jim Conger (RD)

Dr. Jack Glendening has created automated Internet soaring forecasts called the TIP and BLIPMAP forecasts. Carl Herold introduced me to these wonderful tools about six months ago, and I have been comparing my flights from Crazy Creek, Williams, and Truckee to the predictions. This article summarizes my experiences in interpreting the forecasts, and trying to make the best use of each soaring day.

There are two related tools. The TIP forecasts are pure text sum-

maries for individual locations, suitable for inclusion in an e-mail message. The BLIPMAPs are plots of the same data, but showing how the parameters change over a wide area. TIPs are all you need for a local flight, but the BLIPMAPs are critical for a cross-country expedition. Both tools depend on data that is picked up from other Internet sites, so there are occasional days when the data feeds fail, leading to missing data. The TIP data is usually updated by 8:30 am each day, and early BLIPMAP estimates start appearing the previous evening.

The web links you will want to bookmark for Northern California/Nevada are:

TIPs: <http://www.drjack.net/TIP/index.html>

BLIPMAPs: <http://www.drjack.net/BLIPMAP/CANV/index.html>

I'll focus on the TIP output to explain the numbers. You can then apply this information to the same parameters when you look at the BLIPMAP plots. Note that both TIP and BLIPMAP plots target thermal soaring conditions, not wave days.

#### TIP Forecasts, Step By Step

When you first see a TIP forecast, the density of the information can be intimidating. Here is an example showing the top portion of the output for Monday 22 July 2002 at Truckee. A number of us flew on this day, so we can compare the forecast to pilot's experiences.

DrJack's TIP (Thermal Index Prediction) for TRUCKEE on MON Jul 22

**AM Avg.TI HEIGHTS: 12625,18125 ftMSL @TI=-4.0degF**  
**AM Avg. Hcrit HGT : 15300 ftMSL (Max. \_flat\_terrain\_ thermalling height)**

**AM HGT VARIABILITY: 4575 ft (from TI=0to+4degF)**

**AM Avg. Buoy/Shear: 8 (thermals may be unworkable if 5 or less)**  
**AM Avg UPDRAFT W\*: 699 fpm (subtract glider sinkrate to get vario)**

**PM Avg HGT CHANGE : -734 ft @TI=+4degF**

**Tmax UNCERTAINTY : -4 degF (deviation of WxC Tmax from NWS forecast)**

**BL Max. Rel.Humid.:AM= 52% PM= 51%**

**AM Extensive CLOUD: Dif= 1300 ft LCL= 16847 ftMSL (if Dif>0, expect OD at LCL)**

**PM Extensive CLOUD: Dif= 1575 ft LCL= 17895 ftMSL (if Dif>0, expect OD at LCL)**

**THUNDERSTORM CAPE :AM= 0 PM= 16 (if CAPE>0, thunderstorms possible)**

**TUE AM HEIGHTS: 15285,17727 ftMSL @TI=-4.0degF & Hcrit= 15211 ftMSL**

**TUE PM CHANGE: -897 ft @TI=+4**

**WED AM HEIGHTS: 13312,15666 ftMSL @TI=-4.0degF & Hcrit= 13365 ftMSL**

Let's go through this a line at a time.

#### **AM Avg.TI HEIGHTS: 12625,18125 ftMSL @TI=-4.0degF**

You may remember plots of upper air temperature soundings versus the adiabatic lapse rate from your glider PPL training. This first line just gives you two points on the curve. The lower number is the altitude where the temperature difference is 4 degrees F. The top point is where the two lines intercept. You can see a plot of the curves later in the output. I tend to ignore these values, as the next line is more relevant:

#### **AM Avg. Hcrit HGT : 15300 ftMSL (Max. \_flat\_terrain\_ thermalling height)**

Hcrit is the altitude that you can expect to climb to in an average thermal. My experience is that this is a good estimate if conditions

are not impacted by high cirrus cover or smoke from brush fires that cut off surface heating. You will find some thermals that get you higher than Hcrit, particularly over high ground.

#### **AM HGT VARIABILITY: 4575 ft (from TI=0to+4degF)**

The Height Variability value gives you an idea in the uncertainty in the height of thermals. Values over 2000 feet suggest days when you may have trouble finding lift. Typically you will get high in a good thermal and the fly over the top of lower thermals without feeling a bump. These days give the illusion that the thermals are very far apart, although you will find them again when you (inevitably) get low.

#### **AM Avg. Buoy/Shear: 8 (thermals may be unworkable if 5 or less)**

The Buoyancy/Shear value gives the ratio of how fast the thermals are raising versus how fast the wind is blowing. Below about 10 you will find the thermals difficult to center, as they are being distorted by wind. Below about 5 you will find only turbulence and will be lucky to stay up. If you ever have one of those days when you feel like your thermalling skills have gone to pot, check the ratio. It may have been a tough day for everyone.

#### **AM Avg UPDRAFT W\* : 699 fpm (subtract glider sinkrate to get vario)**

Here we have an estimate of the average speed that the thermal air will be raising. Subtract about 200 fpm for your glider's sink rate in a steep bank and you will have a good estimate of the average variometer reading in lift. You will find occasional thermals much better than this value, and ignore a bunch of bumps below it, but the average will be remarkably close to this number after a long flight.

#### **PM Avg HGT CHANGE : -734 ft @TI=+4degF Tmax UNCERTAINTY : -4 degF (deviation of WxC Tmax from NWS forecast)**

These values give you an idea of whether the lift is expected to improve or weaken in the afternoon, and how much uncertainty there is in the all-important estimate of the maximum surface temperature forecast for the day. I tend to ignore these numbers unless there is a big decrease in thermal height predicted for the afternoon. Then I worry but fly anyway.

**BL Max. Rel.Humid.:AM= 52% PM= 51%**

**AM Extensive CLOUD: Dif= 1300 ft LCL= 16847 ftMSL (if Dif>0, expect OD at LCL)**

**PM Extensive CLOUD: Dif= 1575 ft LCL= 17895 ftMSL (if Dif>0, expect OD at LCL)**

**THUNDERSTORM CAPE :AM= 0 PM= 16 (if CAPE>0, thunderstorms possible)**

Clouds are both good and bad news for cross-country flying. In the Sierras, relative humidity values over about 50% in the boundary layer (BL) can lead to overdevelopment. Here we see the lifting condensation level (LCL) is shown to go from 16847 to 17895 feet from AM to PM. Since we only expected to get to 15300 feet (Hcrit), these values suggest nice cloud markers but lift pooping out well before we reach cloud base. There is also an indication of the potential for overdevelopment (OD) in the Dif value, positive values suggesting overdevelopment.

Worse than overdevelopment are moisture-driven Cumulo Nimbus clouds. A CAPE value above zero gives an indication of the potential for the development of big monsters.

**TUE AM HEIGHTS: 15285, 17727 ftMSL @TI=-4,0degF & Hcrit= 15211 ftMSL**  
**TUE PM CHANGE: -897 ft @TI=+4**  
**WED AM HEIGHTS: 13312, 15666 ftMSL @TI=-4,0degF & Hcrit= 13365 ftMSL**

This block of information shows the expected changes in the critical values over the next two days. As with all predictions, the further in the future you look the less certainty in the numbers. However, these are the best estimates I have found and I use these numbers to plan when my next trip to the airport will be.

There is a lot of additional information in the remainder of the TIP forecast, including predictions about the wind speed and direction over the course of the day. These are all echoed on the BLIPMAPs, which gives incredibly useful images of where high winds are expected, where you can anticipate large scale convergence zones, the areas that are the most likely to overdevelop, and so on.

#### Comparison With Pilot's Observations

So how was the day? Although one pilot got to 16,800 feet over Mt. Rose, most of the workable thermals pooped out around 15,000 feet. Cloud markers were available, but normally not reachable. Most thermals were about 3 knots average, although the occasional 5 knot thermal could be found. Probably the most important aspect of the day was the B/S = 8 indication. Thermals were difficult to work.

My day? I got off tow too early (1400 feet AGL) and spent a lot of time just trying to get out of the airport. I also forgot to tell the tow pilot to release me on the far side of my first turn point, forcing me to fly back to pick it up, and then went through the whole process of scratching up to altitude a second time. I wasted over an hour polishing pine trees until I finally got under way. It was clear by this point that 500K was not going to happen, so I turned north with several other pilots. The smarter pilots (not including me) went towards Herlong and turned at Ravendale. One pilot went south, but found that conditions deteriorated south of Mt. Paterson and returned. I went to the northwest, only to find the air mass changing as I approached Nervino. Beautiful clouds well north of Nervino beckoned, but the Nervino airport was closed which eliminated my "out" (read your NOTAMS!). I had to drag back to Sierraville and polish their pine trees in more choppy lift. Eventually climbing out I again verified the TIP values in a few more thermals before flying back to Truckee. Upon landing several people commented how choppy the thermals were that day - just as forecast.

The bottom line is that the forecasts are remarkably accurate, but not foolproof. A good plan is to have several courses set in different directions. Check the BLIPMAPs before you decide which one to declare. In particular check the Hcrit, the wind speed, direction, and overdevelopment potential. Keep an eye out for high cirrus or smoke, as these will substantially worsen conditions in the areas affected, and won't be considered in the BLIPMAPs. Once on course adjust your mental model of the day based on what you see and experience during the flight. Half way through the course your own information will be far more useful than the forecast. And don't forget the basics of flying safe!

## PASCO's Thermal Camp

PASCO's Thermal Camp, run by Rolf Peterson was successful again this year. It was the first Air Sailing event to use the new and very comfortable club house. NCSA's participation was high, with 53AS flown by Charlie Ferguson and Tom Hird and 3FB, flown by Andres Glassow and Mike Oshell. Dave Cunningham and Monique Weil assisted. Dave Cunningham energetically promoted the achievement of SSA badges and the response was very positive. Mike Oshell

earned his A, B and C badges and a Silver Altitude; Charlie Ferguson earned his B and C badges. Tom Hird earned his Silver Altitude. Andres Glassow soared FB from Air Sailing to Truckee with an inoperative airspeed indicator (the previous night had a heavy rain and hail storm) with minimal assistance from the back seat!



lonely lenticular stalks Thermal Camp Attendees

For Charlie Ferguson the Thermalling Camp experience started in the 53AS aero tow flight from Byron to Air Sailing .

Here is his report:

## My "ride" to Air Sailing Thermalling Camp 2002.

by Charlie Ferguson

This is a little narrative of how I was a part of getting our Blanik 53AS up to Air Sailing gliderport for the 2002 Thermal Camp. There were many people involved: from Ken Ferguson taking the ship's trailer up to Truckee the week before; Sam Tucker (our new associate A&P) who repaired the tail wheel just in time; Monique Weil sharing the flying duties and Andreas Glassow, Lee Grisham and Tom Hird, all helping launch and remembering all the accessories that needed to go with the ship. The Tow Pilot was Mike Oshell.

June 14th, 7:30AM was a beautiful calm Saturday. All assembled: Andres, Monique, Mike and Lee; we pushed the glider out to the end of Runway 23 at Byron and by 9:30 made a perfect launch, with a left 210 deg turn toward the mountains. We climbed steadily past Discovery Bay, Lodi and Sacramento. We saw the emergency landing airport options within gliding distance: Franklin, Rancho Murieta, Cameron Park. We were about 10,000' above the hilly terrain of Placerville. The last good land out spot on the western Sierra after Placerville was Georgetown airport north of our route. After that we were out of gliding distance for about 5 miles until we could make Blue Canyon and then Truckee. I could see Mt Rose before I could see the Truckee airport

After crossing over Rancho Murieta we changed to low tow position. It was not as difficult as I thought it would be. Less fatiguing I suppose than having to hold such an exact position on high tow. We were at 11,000' at Donner Pass and could see Verdi Peak, Peavine, Loyalton, Donner Lake, Sierraville and finally Lake Tahoe.

As we headed toward Reno-Stead the vegetation suddenly got sparser (I had not been to Reno in many years). We released at about 11,000' near Stead and I got my first orientation area flight by gliding into a strong thermal, climbing back up to altitude over Fred's range. As we crossed Fred's mountain we could see Pyramid Lake and the warm springs valley stretched out from side to side. We did a couple of broad circles around the valley while

Monique pointed out the local landmarks.

Letting ourselves down, I set up to land, checking the tetrahedron. Runway 35 slowly aligned with the Blanik's nose and we touched down midway down on the left side of the paved strip. It was my first landing on dirt and sage stubble. We came to a stop sooner than I am used to at Byron airport in spite of the faster ground speed.

It was a little before noon, about 2 1/4hr total time. The heat was intense. We found the tie down area; talked to Charlie and Rosemary Hayes and met some of the other people at the flight line. It was a busy Saturday, with the Nevada Soaring Association members and various individuals getting rides and instruction so Charlie did not stay to chat for long.

I spent the rest of the day getting the lay of the land and settling into my "tin tent" accommodations and soaking in the sights, sounds and air of the high desert.

## Dave Cunningham Achieves Diamond altitude In N113YZ

Dave Cunningham made his 10th attempt at diamond altitude from Minden on Sunday April 14th this year. Dave wanted to do it the fun way in his I-26. Armed with a favorable forecast from Doug Armstrong, he belted in and the rest is history. What follows is the email forecast from Doug as well as Dave's email communication back to Doug and Mike Schneider upon successful completion. Diamonds do look good on you Dave!



**Good Morning**  
Enjoy the Sierra wave tda...cur wave xtnds south arnd MMH...raobs showed a lyr of some turbc btwn 250-270...trop 390-410...please soar with care...gsty sfc wnds coming up as Slide mtn winds just hit 56 mph...yes...diamonds do look good on you...your feedback is appreciated...cheers...Doug

**Doug Armstrong,**  
Great forecast. You called the weather perfectly. I arrived at Minden about noon, took a tow - the tow pilot told me twice that I should be off at 8,000' where we were in wave with 1000' up. I pointed our I-26 (N113YZ) toward the mountains at 40 MPH and went up, straight up over the Minden airport. Took me less than 20 minutes to go to 23,100' but I then stalled. After a brief bit of searching, I discovered that the wind speed had increased and I was being blown east away from the lift. Increasing the 3YZ's speed to 60 MPH brought me back into the wave once more and 10 minutes later I was up to 25,400', my goal of Diamond altitude and a Lenni award. Took me 20 minutes to descend! Total flight time 1.1 hours!

*It was a beautiful day, scattered clouds at 15,000' that I saw from both below and above. Great views of the lakes and mountain ranges, distant valleys. I captured 40 pictures and will have the memories in my mind forever.*

*I did enjoy one of the last glider tows that day as the surface winds increased to beyond the ground handling capabilities and the tow operations were suspended about 2:00 PM. There were 6 total Diamond altitude awards earned yesterday at Minden, one nearing 30,000'. Thanks again for calling the wave forecast.*  
Dave

Mike Schneider,

You told me that when it would happen, it would be easy. You were right, it was easy yesterday, Sunday! Still, nine previous attempts that were not easy had caused me to doubt your wisdom. Yesterday was great, though.  
Dave

**Editor's note:** N113YZ went to 30,000' the week before, piloted by co-owner Bob Speilman (Chukar).



View of instruments at 25,050'



### **Jack Franklin 1948-2002**

We were shocked and very sad to hear from his wife Janet that Jack died two weeks ago, shortly after his illness was diagnosed. Jack was one of our most enthusiastic students. He last came to Byron in late June, to do his Field Manager duty even though he was in pain. A couple of us attended the October 20th



Memorial get together for Jack, brought a card signed by club members and got acquainted with Jack's family and friends, all grieving for him yet welcoming and pleased that we had come. Jack started glider flight training at Fremont's Sky Sailing airport as a boy, with his first solo at the age of 14. After a 40 year interval his wife gave him a gift of NCSA membership a year ago. He was just about ready to solo again. He was so thrilled about rediscovering gliding, Janet writes that "he even flew in Oahu when we were there on vacation. Flying was not his only love; he also sailed, rowed, hiked, camped and biked; loved to cook; loved music, art and wine. He loved his family and his friends. He loved to laugh and he just loved and enjoyed life." We will miss Jack and remember his laughter and friendship.

### **A reminder to all NCSA pilots:**

Check your log books to see the date of your last

I: NCSA ANNUAL PROFICIENCY FLIGHT ("Birthday ride")

2: date of last BFR.

Next time you come to Byron, please update your data on the list in our log book; include the initial of the Instructor who flew with you. This is a club safety regulation and important to maintain your currency. You are not legal to receive a tow at Byron without these two endorsements. A phase of Wings can serve as either of above requirements.

### **PASCO Seminar & Annual Banquet November 2, 2002**

Registration: 9:30 AM

Classes 10:00 AM to 5:00PM

Awards Dinner 6:30 PM to 9'00 PM

Hyatt Regency Sacramento

1209 L Street, Sacramento, CA 95814

(916) 443-1234

### **Fall Work Day at Byron November 9**

**Annual Meeting and Banquet:  
Pleasanton Hotel,  
Saturday, January 11<sup>th</sup>, 2003.**



### **THE BUZZARD**

*NORTHERN CALIFORNIA SOARING ASSOCIATION*

*P.O. BOX 26, BYRON, CA 94514*