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WHOLE AIR

ISSUE NO. 44 (5th in 1985)

August/September 1985 — \$2.50 (Can. \$3.25 / DM 6)



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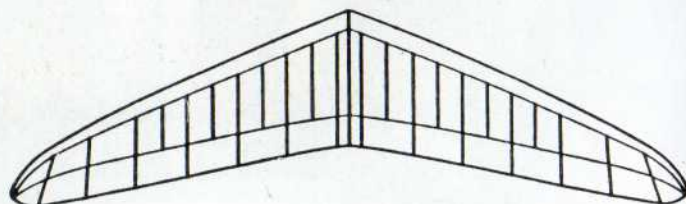
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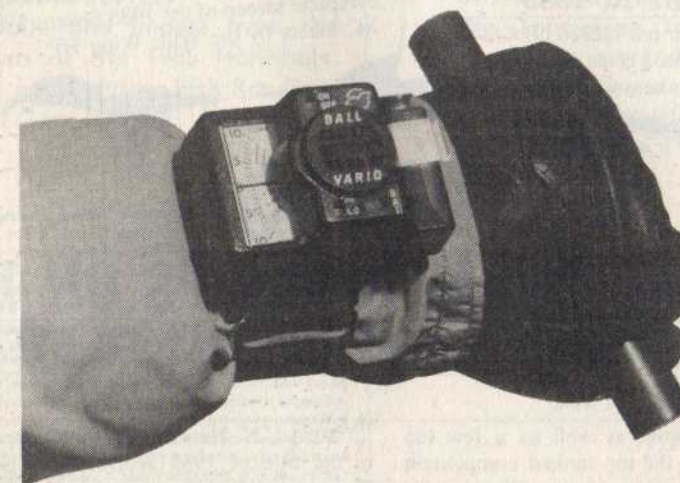
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Mingus Gaze

JUNE 10, 1985
4 HP's FLY OVER 100 MILES FROM MINGUS MOUNTAIN

Dana Roosevelt flew 155 miles from Mingus Mountain on a Wills Wing HP yesterday to move into first place in the ongoing Arizona XC Hang Gliding Contest. Dana was hotly pursued by three other local pilots, all of whom also flew HP's. Last year's champion Bob Thompson recorded 145 miles on his HP, and now holds second place in the meet. Third and fourth places are currently held by Bruce Reufer and Jim Whitelaw, who flew their HP's 135 miles.

Sacramento Tin Fork Tri

JUNE 28, 1985
STEVE RODERICK WINS REGIONAL CHAMPIONSHIP

Steve Roderick, of Nevada, flying a Wills Wing HP, outpaced all other pilots to win the 1985 Region II Regional Hang Gliding Championships. Steve is a relative newcomer to the competition scene, having flown in his first competition only last year. However, by taking maximum advantage of the HP's exceptional performance, Steve was able to turn back top ranked pilot Ken Brown who was flying the new Airwave Magic IV, as well as several other highly regarded competition pilots on the latest equipment. The regional event is a qualifier for the U.S. National Championships, to be held in July at Chelan, Washington. By winning the regional meet, Steve has qualified for a place in the Nationals, and hopes to go after the \$3000 Wills Wing contingency prize for winning the

JULY 1, 1985
VOIGHT WINS REGIONALS ON WILLS WING HP

Paul Voight, flying a Wills Wing HP took first place in the Region 12 Regional Hang Gliding Championships held in Ellenville, New York recently. The format for the contest was open distance cross country and Voight was able to record the longest cross country flight of the meet on his HP thus taking first place. Top placing pilots in each regional competition are eligible to go on to compete in the National Championship meet which will be held this year in Chelan, Washington.

hop Her

JULY 3, 1985
JIM ZEISET WINS '85 WORTHINGTON MEMORIAL XC ON WILLS WING HP

Colorado pilot Jim Zeiset put it all together in the Owens Valley this past week to win the George Worthington Memorial Open cross country hang gliding contest. Zeiset credited the outstanding cross country performance of the HP in helping him to place first in the grueling seven day event. Four other HP's finished in the top seven places in the meet, lending credence to Zeiset's evaluation of the HP's performance advantage. The top placing pilots from the Worthington Memorial Open will now go on to compete in the next phase of XC competition in the Owens

EXTRA!
 BISHOP, CA - JULY 8, 1985

Rawlings Flies 198 Miles In Owens XC
FLIGHT ON WILLS WING HP IS LONGEST IN 1985

Rick Rawlings, number one ranked pilot in the U.S., took over first place in the ongoing cross country championships here with a spectacular 198 mile flight.

shop Her

JULY 12, 1985
RAWLINGS WINS OWENS XC TO COMPLETE WILLS WING SWEEP
163 MILE FLIGHT CAPS CHAMPIONSHIP PERFORMANCE IN DON PARTRIDGE MEMORIAL

Number one ranked U.S. pilot Rick Rawlings flew his Wills Wing HP to first place in the Don Partridge Memorial Cross Country Hang Gliding Meet held here during the past week. Rawlings sealed the win with a 163 mile flight on the last day of competition. The win by Rawlings, following Jim Zeiset's victory in the Worthington Memorial, wraps up a complete sweep of the 1985 Owens Valley XC meets by the Wills Wing HP.

Chelan Tribune

RAWLINGS WINS NATIONAL CHAMPIONSHIPS ON HP BEATS OUT WORLD CHAMPIONS MOYES AND PENDRY IN 9 DAY XC EVENT

JULY 20, 1985

Chelan, Washington - Former National Champion and current USHGA number one ranked pilot Rick Rawlings, flying a Wills Wing HP, lived up to his number one seed by winning the World Class of the 1985 US Nationals, which concluded here today. The highly competitive world class field included England's John Pendry, the 1985 World Champion; and Australian pilot Steve Moyes, the

1983 World Champion, as well as a few top Canadian pilots and the top ranked competition pilots from around the United States. The nine day contest utilized timed cross country goal tasks requiring flights of more than 100 miles on some days. With the competition points he earned for his first place in this final meet of the national championship circuit, Rawlings secured the title

of 1985 U.S. National Champion in addition to the title of 1985 World Class Nationals Champion which he earned by winning this meet. With few meets of any significance left on the schedule for 1985, Rick Rawlings and his HP seem destined to repeat as the USHGA number one ranked pilot for 1986.

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- 1985 U.S. NATIONALS**
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Problems and solutions of attracting the public to celebrate our National contest with us.
- 21 **TABLE OF RESULTS**
Who won, both for Sporting and World/Overall Class.
- 22 **MIDDLE OF THE PACK**
Mike Daily, flying in his first Nationals, tells us how he feels about the trial against the country's best pilots.
- 23 **FOUR ON THE FLOOR**
Parachute deployments came in a batch of four before and during the Nationals at Chelan, but no one was hurt. Amen!
- 24 **HO HUM, ONE HUNDRED**
Almost nonchalantly, but for the first time in the U.S. Nationals, a one hundred mile task was called.
- 24 **CHRIS BULGER'S FINAL GLIDE**
One of the country's most successful competition pilots lost his life while aero towing World Champion John Pendry. What can we learn?
- 26 **THE DUST SETTLES**
Results and impact from the finish of the 1985 Nationals. We congratulate Rick Rawlings and Gerry Uchytel.

26 **A CLASSY AFFAIR**
A little humor came from this year's Nationals, thanks to Matt Wagner and Doug Lawton, who created the new "Leisure Class."

WORLD MEET '85

33 We begin a complete coverage package of the bi-ennial World Meet from Kossen, Austria, to augment our brief report in last issue. German Correspondent, Gib Eggen, D.O., gives us the base story line, and offers his opinion about the contest which was both exhilarating and full of sharp disappointment. Then, Rob Kells tells us his ideas about how the USA can win the Gold, perhaps in the 1987 rendition. Also, you can read thoughts by Rick Pfeiffer, John Pendry (World Champion), Steve Moyes (last World Champion), Team Leader Brian Milton... and more.

PILOT'S PERSPECTIVE:

- 16 **FLYING IN COSTA RICA**
Thanks to a Central American Correspondent, we know a bit more about the "new" sport of hang gliding in this interesting little country.
- 18 **GREAT GLIDER GIVEAWAY**
The Tennessee Tree Toppers gave away a grand prize worth \$3,500. Did you win? TTT Board Member and Raffle Chairman, Cliff Whitney, tells us the story.

28 **SEEDWINGS' BOB TRAMPENAU**
Here's the story on one of hang gliding's most renowned designers, builder of the Sensor 510 and originator of many new ideas. Researched and written by professional journalist, Dave Higdon.

31 **SURVEYING OUR READERS**
Whole Air's popular reader survey returns. It's still FREE, and we want you to participate.

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- Tandem Aero Towing
- Masters Grandfather Mtn. Ball and Afro Flight Decks
- Flying in Japan
- ...and more...

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Cartoon by Bob Lafay



THE RANGERS WILL GET A KICK OUTA THIS. HA! HA! GUARANTEED NOT TO SCARE THE SHEEP. HA! HA! HA! I WONDER WHERE HE IS?



Volume 8, No. 5, 1985
ISSUE NO. 44

Editor

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German Correspondent

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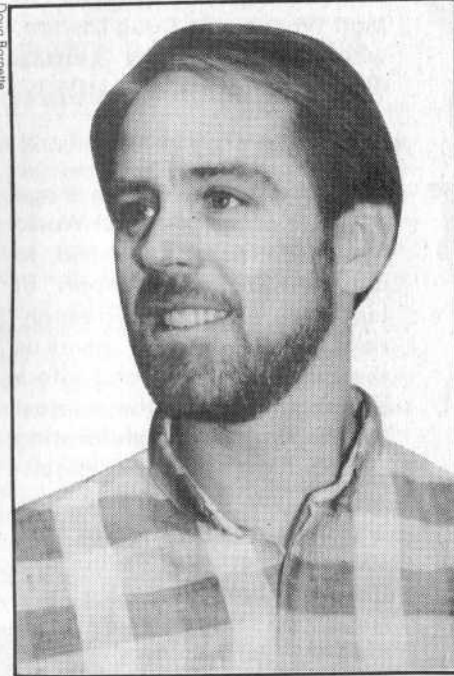
Cover Photo

Willi Tacke

On The Cover:

Drachenflieger editorial staff member, Willi Tacke, captured an approach to landing at the 5th World Meet in Kossen, Austria May 25 through June 9, 1985.

Publisher's Column



HELP!

WE NEED YOUR help. Many words have appeared here in this column and have been written and spoken in a great many other places. These words express concern over a diminishing size in our sport. Some of them concern an apathetic attitude.

Perhaps they are all wrong. But, I think not. The size of many aspects of this sport are quite obvious when one edits a journal for the sport. *Hang Gliding* Editor, Gil Dodgen, has also written about this, and the two of us share a view of the sport virtually unseen by any others in this country.

Perhaps we should not discuss it. Some business leaders, in and out of this sport, say to talk about "business being bad" is to help make it so. Some truth is certainly contained in this thought.

Then again, on the other hand, if one doesn't discuss a problem, a solution may never be reached. Acting as though a problem does not exist is sure way to never address it. Something about "Ignorance is Bliss," comes to mind.

MORE INFORMATION REQUIRED

No doubt some feel that they know a lot more than I about what problems do exist, and what can be done about them. It has been pointed out to me that many others have worked on the problems. About that I am certainly glad, because, folks, I do not have all the answers.

I hope to change that, and those of you reading this column will know how. Hopefully, for those who can pass by these arresting statements, the form on page 31 will catch their attention.

FREE!

We want your input. And to elicit your responses, we'll try to make this as easy as possible. And free! When you jump to page 31 ---, you'll see a survey form. We've tried to make it pretty much fill-in-the-blank. Also, we'll pay the cost of first class mail return to us. You do have to do something. You have to tear the page out. To make sure you've missed nothing, the page is what's called a "stand alone." That is to say that when you rip it out--easily done by holding the spine and ripping carefully top to bottom--you will destroy no other part of the magazine.

I really need to hear from you. I will not bribe you in any way. No free issues. No T-shirts. No cash. But, listen, for the good of the sport... for the future of this publication, please do fill the thing out and return it.

In the past, *Whole Air* used to survey you fine readers every issue via our reply mail, combo-subscription card and survey form. We used to amaze other magazine folks because we regularly got between 7 and 10 percent returns on these. In the "real" publishing world, 1-1 1/2 % is considered good.

That helped a lot. We learned. We changed because of it, trying to alter our editorial format to suit your comments and desires. It was ceased even though it certainly was still helping. But costs had to be cut as ad revenues dropped, and our little reply card became a casualty in the austerity measures that were taken.

Now, the idea is back, in a more cost efficient form. But you'll have to do some of the work. (No groaning, please.)

You will have to fill it out, tear it out, fold it on the dotted line, tape it closed, and jam it in a mailbox. Can ya handle it? PLEASE DO.

To address the many American pilots that--for some incomprehensible reason--still do not subscribe, we also want information. You can help us. You can photocopy the page (both sides, to still get the free reply mail privilege!), and hand it to your buddy who doesn't subscribe. You can also help us by falling to your knees and begging him/her to send us money. It's not such a bad deal. We'll send 'em a magazine for the bucks.

But because we know you will all not do that, we'll be surveying these folks by direct mail as well. Then we can also ask these flyers why they don't seem to need *Whole Air*.

Like the letter writer in the July 1985 *Hang Gliding* (Mr. J. G.), we hope they "finally subscribe to *Whole Air*," even if it is mostly "out of some frustration." (By the way, thanks J.G., I appreciate it.)

At year's end, or when ever the last of these survey forms flow in, we'll have a data base of some significance, and will at least be able to chart our own course more accurately. We may even make the survey page a regular feature. It is expensive, but we have to know more.

SO, PLEASE HELP!!

Thanks,
Dan Johnson



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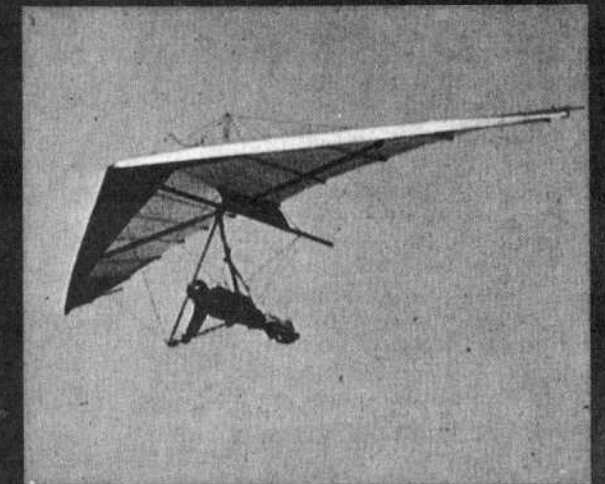
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FORUM

Delta Wing Rebutts Airwave

Dear Editor:

In response to Kenny Brown's letter in the last issue of *Whole Air*, although he is one of my favorite people, I can assure him that it will take Delta Wing no longer to improve the Magic design than it took Airwaves to improve on the Comet, or UP and Airwaves to utilize the king post, ball tips, floating cross bar, roach tip, etc., etc., all first developed at Delta Wing and now used by Airwave and all other manufacturers. However, their use of our design features is acknowledged and has my blessing.

As for consumers being wary, I suggest that they and/or Kenny contact me regarding the certification of the Mystic and the lack of certification of the Magic.

Delta Wing believes that it has obligations to the same consumers Kenny is warning and has spent a great deal of time, money, and energy to certify the Mystic. But it is certified to the rigid 1985 airworthiness standards—in three weeks, not three years and still uncertified like the Magic. It would be interesting if Kenny or Airwaves were to attempt to certify the Magic to our standards. Perhaps I

could even give them some help.

I would be happy to provide this help as we have the greatest confidence in certified gliders and the utmost respect for the dealers who insist on certification. It is expensive, time consuming and usually aggravating—but definitely worth it.

Your move Kenny,

BILL BENNETT
Delta Wing Kites & Gliders, Inc.
Van Nuys, CA

Lip Service

Dear Editor:

As a new subscriber to *Whole Air*—thanks for such a fine publication.

My dear buddy Tom Peghiny suggested that I send you a copy of "Lipservice"—newsletter of a fledgling organization of women pilots. I took the liberty of putting you on the list of interested people.

The numbers of women in hang gliding is either increasing or getting more vocal! In any case, we'll keep you posted.

JAN SISKIND
N. Brookfield, MA

A Note to Chris

We awoke to the news of your death.

Both of us shared many good times with you, so the news hit us hard!

I think in writing this note, we put forth the thoughts of anyone who knows you. "You're a hell of a guy."

"Chris, may your spirit soar forever."

With Love,

TOM and MIKE CROWDER

Liked the Official Program

Dear Editor:

You asked for comments on the Chelan issue. I thought it was terrific!!! The issue appeared to fill several needs. It is the kind of site information that the membership has been asking for. It was written in a style that allowed the material not only to be used as an introduction to the Chelan area for pilots and non-pilots alike, but also as a good PR guide for the sport itself. I assume that was all by design. I'm glad that you had the flexibility to devote 18 pages of print to the article. I doubt that we will have the luxury to devote that kind of space in *Hang Gliding* magazine to a single subject. I hope you are able to provide that kind of site coverage in future issues.

RUSS LOCKE
USHGA

Dear Editor:

I look forward to your coverage: your Chelan preview was excellent.

JOHN WOIWODE
St. Paul, MN

Go (more) West WHOLE AIR

Dear Editor:

I thoroughly enjoyed the May 85 issue. Outstanding! (My only complaint is that I don't share the interest in fixed wings. But I do recognize the magazine as a valid forum for all non-motorized flight.

Just please don't overdo it.)

I especially applaud your efforts toward adopting an international perspective. Our sport has clearly seen success in some other countries which in many ways surpasses what we've observed in the US. Maybe we can learn from those successes.

In light of your "world" approach, I suggest you cast an eye across the Pacific as well as the Atlantic. My impression, admittedly without supporting facts, but gained from reading, talking with Japanese pilots, and hang gliding in Japan, is that there are more active pilots and more developed flying areas in Japan than in the US. And hang gliding seems to have a better public image, which is good for the sport. Also, US made gliders and equipment are very popular. I think Japan may represent a tremendous market for American manufacturers, which is not being fully exploited.

Other parts of Asia may also prove to have market potential. There is an effective hang gliding community in Korea. Although facing enormous obstacles, the sport seems to be growing and improving. I believe there are Chinese (Taiwan) active in hang gliding as well.

An interest in this area by the American magazines and manufacturers could yield dividends for both Asian and American pilots. Note the 86 Asian

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Games and the 88 Summer Olympics will be held in Seoul, Korea. Even if hang gliding is not an Olympic sport, these games represent tremendous opportunities for bringing it into the public view.

Keep up the good work.

MICHAEL McCARLEY
US Forces Korea

Thanks for the well-thought-out comments, Michael. Our readers will no doubt enjoy your article on "Hang Gliding in Korea," scheduled for our season-ender, October '85 issue.

—Ed.

Let's Get Jerzy Flying Again

Dear Editor:

Congratulations on the new direction for *Whole Air*. The inclusion of foreign news and coverage of the latest developments in towing will benefit everyone in the hang gliding community. It's good to see national and international coverage of our sport.

I was moved to write you after reading the letter from Jerzy Lutkowski in the June issue of *Whole Air*. Does anyone—shop or manufacturer or individual—have a good, used glider to spare? One that's not too old, and airworthy? Can we get Jerzy back in the air?

LYNDA NELSON
Concord, CA

Thanks for the kind words, Lynda. Anyone wishing to follow through on Lynda's idea for aiding Polish expatriot, Jerzy Lutkowski may correspond through this publication.

—Ed.

Foreign Ultralights Have Sponsor Problems, Too

Dear Editor:

Preparations for the First Microlight World Championship, to be held at the Larzac airport from August 15th to 25th, are well under way.

Nonetheless, the organizers are encountering headwinds and airpockets in arranging their program. Sponsors—essential to the

success of this event—insist on guaranteed television coverage. The press, however, is far from convinced that the Championship is not just another so-called "ULM competition" devoid of any true sport importance.

Toss into the pot a pinch of "South Africa" (pressure from the French Ministry of Sport against their participation, pressure for it from the International Aeronautics Federation) and you have some idea of the navigation problems encountered by the devoted band of organizers determined to mount a tough, meaningful, spectacular, and thrilling Championship event.

THE ORGANIZERS
Millau, France

Sponsorship problems are big headaches in any language we guess. The *Chelan Nationals* nearly had one but ran out of time. Maybe next year... meanwhile, best of luck to organizers of the 1st World Championship for Ultralights.

—Ed.

New Club?

Dear Editor:

Nothing is better than Sunshine 'n Soaring...

In the time of industry slump and a national decline of new sport flyers, a group of North Carolina pilots have organized a different club with a revolutionary twist.

SUNSHINE SOARING club is announcing the most awesome flying adventures you can possibly dream of. What's the catch? It is the fact that there are no club offices to hold, no yearly dues, no ratings required and flying becomes hassle free with no red tape at super unregulated sites. Just exactly what hang gliding was meant to be.

The basic theme is FUN with highlights on the site camping and cookouts.

Whitetop, Virginia is the location of the highest peaks in the state a mile above sea level with grassy slopes to launch several thousand feet to the valley floor. Top landings and 2 launch directions accent the smooth road and large LZ's.

Interested persons can receive the club newsletter and more info from: Sunshine Soaring, 301 Kingstree Road, King, NC 27021.

TOMMY THOMPSON
King, NC

Thanks For The Effort

Dear Editor:

I would like to congratulate you on your efforts to keep a hang gliding magazine. *Whole Air* continues to have interesting and informative information on the sport and I hope that you will be able to continue this trend in your new location.

WILLI MULLER
Calgary, Alberta

Dear Editor:

What can I say, twenty bucks for three years, take my money now!!! Before you change your mind.

I love the new format. First thing I did though was count the pages. I found a lot more (to my surprise).

The new foreign articles are nice; it lets us know what the largest pilot population is doing. (Yes, I only learned they were larger by reading *Whole Air*).

The light sailplane stuff is terrific, keep it coming. It's definitely the next step. I can envision a light single surface hang glider to play with in ridge lift, and a foot or wheel launched sailplane in the garage to go for it with.

I also wanted to say I enjoyed Gary Engelhardt's story, "Chasin' Curly." I know both of these guys and they worked extra hard for those flights.

How about a color center-fold? Keep up the good work on *Whole Air*, sure wish you guys were back East again.

CLIFF WHITNEY
Chattanooga, TN

Dear Editor:

Congratulations (belated) on your move to Tacoma and your new association with *Western Flyer*! Your *Whole Air* Magazine has always provided a valuable alternative news source in addition to *Hang Gliding* magazine and I thank you for your dedication to that service. We are doing well and business is steady.

Ken deRUSSY,
Hang Glider Emporium
Santa Barbara, CA

Thanks for the kind words. And congratulations yourselves! For readers that are not aware, Ken deRussy, and wife Bonnie Nelson just entered their 12th year (!) in the hang gliding business, for which they deserve a nation-wide round of applause. (Some may say Ken & Bonnie need their heads examined for those twelve years. but our psychiatrist says we shouldn't be the ones to say it.)

—Ed.

Dear Editor:

Your magazine sounds like just the kind of informational entertainment I've been looking for. I started flying when at 16 years of age. My Dad and I built from some California plans a Rogallo 18-foot hang glider. We covered it with an orange and white parachute sail. The porosity was terrible and 30 second flights off the hill were long.

I am a licensed pilot and have scratch-built a Volmer Jensen SunFun ultralight which I still fly. I live under 10,000 ft. Mt. Graham here in Southern Arizona and am considering hang gliding again.

RANDY WHITE
Safford, AZ

Help Sell? We Will

Dear Editor:

Many thanks for the write-up on the Polaris line of gliders in the July issue of *Whole Air*. As usual it was very well done by your people.

If Fly West can be of any service to the advertising sales method you presented in the July Nationals issue ("Publisher's Column"), please advise us. I would be more than happy to see the program work.

Thank you again for the article and your fine magazine. Keep up the good work.

ROD PORTEOUS, Pres.
Fly West Hang Gliding Ltd.
Calgary, Alberta, Canada

Don't worry, Rod, we'll definitely get in touch. We will hope to do a similar issue for Western Canada, perhaps involving the Grouse Mountain meet. Thanks for the offer. Anyone else?

—Ed.

INDUSTRY NEWS

Update on HGMA Activity

HGMA
INCORPORATED

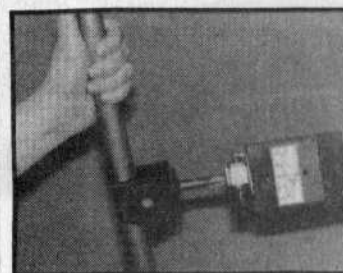
Four meetings of the HGMA Board of Directors have been held in 1985. At the February 7th meeting, Mike Meier was elected President, and Roy Haggard was elected Vice President and Secretary/Treasurer. At that meeting Wills Wing filed an addendum for their HP when using their E-66 control bar, with or without a bent "speed bar" baretube, in either the prone or supine configurations. A package was reviewed and a Certificate of Compliance was granted for Delta Wing's Light Dream 205.

At the May 8th meeting, a package was reviewed and a Certificate of Compliance was granted for UP's GZ Glidezilla 155. Addendums were also filed for the use of a 48" kingpost with 2.5" by .049" crossbar on Wills Wing's HP, and for 1.125" x .058" downtubes on the E-66 control bar when used on the HP for pilot weights up to 185 pounds. Further the addendum included the use of .714 minor axis 4130 steel streamline tubing in an application of 1.125" by .058" aluminum.

The May 23rd meeting carried an addendum filing for UP to employ hardware changes to the owner's manual for the GZ 155. Also an addendum was filed for the "B model" of Seedwings Sensor 510 160 VG with enclosed cambered keel and tight keel pocket.

On July 12th, just prior to the 1985 Nationals at Chelan, packages were reviewed and Certificates of Compliance were granted for Progressive Aircraft's Dawn Comp 160, for Delta Wing's Mystic 166 VG, and for Delta Wing's Mystic 177 VG.

Litek Announces the VE-12 Miniature Variometer



Litek has announced the new VE-12 glider mounted variometer, and indicated plans are forthcoming for an optional wrist mount of this unit.

The VE-12 offers a small size to minimize frontal area, which they say is not significantly larger than the nine volt battery that is required to power it. It can mount on either side of the glider by using a Ball clamp. Company official, Chuck Kanavle, just grinned at the mention of the Ball company's clamp. He says, "Well, they make a good one and I use it myself. What can I say?" How's that for truthfulness.

Controls include an audio with high/off/low detentes, a power switch, and a battery test button. The VE-12 features an adjustable sink alarm trip point, large face, which the company is know for, and can be ordered with what they call the -OV option—an earphone jack (for \$10 more at order time, though it can be added later on at slightly greater expense).

All adjustments can be made from outside the unit, and battery life is said to be over 100 hours, using the same proven circuitry which has made Litek a hallmark in hang gliding. The best news is the price has decreased to \$169.00 as Litek has been able to eliminate some expensive parts like the deep-drawn aluminum shells.

Litek reports that the VE-7 and VE-35 will continue to be available. For further information on the Litek line, write 4326 Fish Hatchery Road; Grants Pass OR 97526; or phone 503/479-6633.

Fly Seven Worldwide Destinations

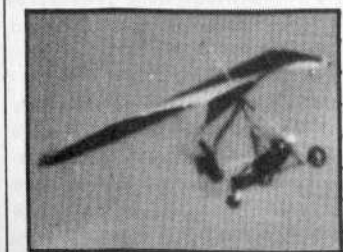
The Santa Barbara Hang Gliding Center is organizing hang gliding safaris to seven worldwide destinations.

Trips are scheduled for New Zealand in January of 1986, Europe in June of 1986, to Hawaii on a weekly basis, and within California for cross-country seminars in the Owens, and now the SBHGC is offering new listing to Rio de Janeiro (Dec 29 to Jan 3rd, 1986), plus India and Australia.

The site of the Second Annual Himalaya Safari in October is one of the destinations, and with a similar contest theme, the trip to Australia will head to Mt. Buffalo, site of the next World Meet in 1987. The Australian trip is part of the January 1986 New Zealand expedition.

All safaris include airfare, transportation, accommodation, retrieval, and repair facilities, with maximum airtime as the primary goal. For more information, contact proprietor Achim Hageman at 29 State St., Santa Barbara CA 93101; or phone 805/687-3119.

New American Company Offers Prone Trike



Working with a major eastern ultralight center, Carmen Cappella has announced the first marketing efforts of the Cappella prone trike. The model is the first such offered by an American company.

Collaborating with Emil Rolando and Bruce Doerr of Mid-East Ultralights, the sixty pound machine has gone through a series of tests, and has now been declared "ready" for the market by developer Carmen Cappella. The trike is said to bolt up to any existing hang glider in a matter of minutes, and any prone harness may be used.

The prototype was test flown by Mark Airey at Mid-East, based in Blairstown, New Jersey, in October of 1984. Since learning to fly the unit himself, Cappella claims to have logged numerous soaring flights in several states. The largest demonstration of the prone trike was at the 4th of July Aerobatic Invitational Demonstration in Ellenville this year.

The machine uses two disc brakes which provide braking and steering while grounded. The engine is pull-startable (pull cord is located above the pilot's head), and Cappella claims a climb rate of 400 FPM, though no test or engine specifications were provided.

Cappella is working on a lighter, more versatile model that can be foot-launched as well as on its wheels. For more information, contact Carmen Cappella at Box 247 Applegarth Rd., Hightstown NJ 08520; or phone 609/448-1153.

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photo by Bettina Gray



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Eighth Intercollegiate Meet Scheduled

University of Lowell Hang Gliding Club



The 8th Annual International Intercollegiate Meet will be held over the Columbus Day weekend of October 12-14 at Morningside Recreational Area in New Hampshire.

Several clubs in America and Canada have been invited to compete in the fun meet, one of the most established and successful of its kind anywhere in the world. Some fourteen colleges will be competing, including the U. of Lowell, U. of Massachusetts, Plymouth State U., M.I.T., the U. of New Hampshire, Northeastern U., Northern Essex Community College, Bridge Water State U., the U. of Maryland, Lyndon State U., R.P.I., the U. of Connecticut, and two other schools.

Organized under the direction of Bill Blood, a long-time college-level promoter of the sport of hang gliding, the meet will permit any pilot to participate regardless of their skill level.

Tom Peghiny of Pioneer Aircraft will be performing with his own design ultralight aircraft. He will also be assisting in tow launching hang gliders. A big cookout will feed all pilots and helpers on Saturday the 12th. Also included for the \$30 entry fee will be camping and other meals, plus free T-shirts and certificates for all participants.

If you would like more information, or wish to offer your support in some way to this deserving and fun effort, contact: Bill Blood at the U. of Lowell Hang Gliding Club, 1 University Av., Lowell, MA 01854, or call Blood at 617/452-6000 ext. 2477, or call Jiff Nicolay at Morningside by dialing 603/542-4416.

Grandfather Mtn. Establishes Order of the Eagle



Major Insurance Loss Will Not Affect Sport



The "Order Of The Eagle Award" is the new replacement to Grandfather Mountain's famed Order Of The Raven Certificate. The newly established award can be earned by pilots who complete a successful cross country flight from the North Carolina peak. A number of the World Class pilots who have just competed in the prestigious Master of Hang Gliding Championship were eligible to win the new certificate.

The well known Order Of The Raven (Ravens are the prevalent local species of birds soaring Grandfather) was given to the first 200 pilots who logged an hour or more aloft at the rugged east coast site.

Now, the Order Of The Eagle will require pilots to land at least 20 miles away from Grandfather's lofty peaks. Current record holder is veteran Joe Foster, who flew 63.2 miles away to land at Mountain Empire Airport near Wytheville, Virginia.

As with the beautiful Raven certificate, the Order Of The Eagle certificate will be a handsomely-printed rendition of nationally known artist Richard Evans Younger's dramatic portrait of an American Bald Eagle. Three hundred of the new certificates will be printed. At present, only three of Grandfather Mountain's Exhibition Team—Joe Foster, Stewart Smith, and Jeff Burnett—have succeeded in meeting the test.

The largest insurance settlement in USHGA history will apparently not have a negative impact on the association's liability insurance policy.

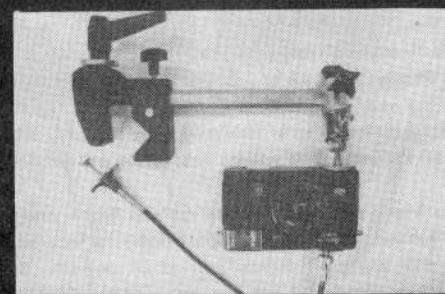
A claim was settled with the family of woman who was struck by a glider while observing the flying at Dog Mountain a few years ago. As a pilot launched, he was turned back into the cliff. The leading edge struck the woman, knocking her backward, where she hit her head on a rock. The injury was fatal. The amount was reportedly in the realm of USHGA's entire premium for a three-year period, or roughly \$120,000.00.

Present insurance agent, John Robbins, had not even been informed of the claim, as the settlement was with one of USHGA prior insurance companies, bought through a former agency. Robbins said, "There will be no negative impact, like increased cost of the policy, as a different company held the coverage at that time."

"So far this year 1985, there has only been a single claim against the new carrier," Robbins relayed, "and this involves another spectator who was assisting a pilot as he launched. While insurance coverage is definitely there, the adjuster is trying to determine liability, as the individual may not have tried hard enough to avoid injury to himself." The person is not a member of USHGA.

The claim activity this year is so low, that even given the tightest insurance marketplace in years, USHGA is in no unusual jeopardy. A likely reason for that is the new higher deductible, felt Robbins. But as insurance has been a very difficult area for all levels of aviation in recent history, this situation certainly bodes well for our national association.

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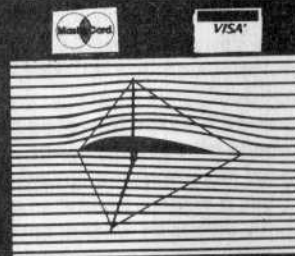
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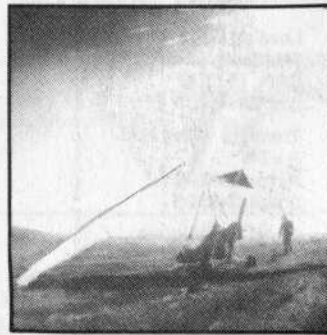
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INTERNATIONAL NEWS

English Pilot Sets Ultralight Distance Record



A couple interesting news items concerning Mainair Sports trikes should be noteworthy to hang glider pilots.

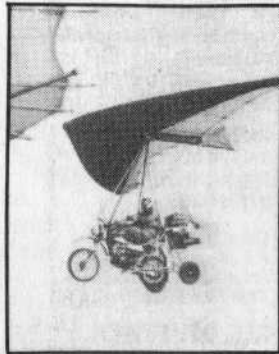
In the first, a 27 year-old business man from Hertfordshire flew a Mainair Gemini Flash trike for a world record distance on July 3rd. Taking off from Land's End in Cornwall at 5:00 AM, Richard Meredith-Hardy flew for almost 12 hours to cover 589 miles non-stop, landing near John O'Groats in Scotland.

The distance of 589 miles is the longest non-stop distance ever flown in an ultralight. Since Meredith-Hardy was carrying a barograph and had the required witnesses, he will be submitting a claim for FAI sanction of his mark.

The ambitious pilot plans more record flights such as a non-stop London to Paris flight, and a 14,000 mile epic following the course of the River Nile for the full length of Africa. Noteworthy, of course to American pilots who are limited to five gallons of fuel, is that Meredith-Hardy carried 31 gallons. Such a record therefore, cannot be set in America where fuel capacities of this volume are prohibited by FAR Part 103, which governs operations of both hang gliders and ultralights.

In a show of stamina, after a night's rest, Meredith-Hardy flew home to Hertfordshire, clocking up another 500 plus miles. How's that for cross country?

Skybike to Work?



Ever wanted to fly to work, but needed transportation when you got there? In another Mainair Sports development, you can obtain such a contraption (see photo).

The skybike is a research vehicle designed to explore and illustrate the principle of a ground mobile aircraft. Other grand schemes (Molt Taylor's Aerocar for example) have never made it into mass production, but Mainair may have a different approach.

With a range of 60 miles and a mere 2 minute disconnect time, it certainly is an interesting little craft, employing a hang glider wing and psuedo-trike power package.

A second version will address what many early viewers asked, "Why not use the motorcycle's engine for the prop's power supply?" Mainair sees a military application, for example allowing a soldier to fly into an area unobserved and yet to be instantly mobile on roads or open terrain. Well, it's perhaps more useful than parachuting.

For those that wish more information, contact Mainair Sports (one of England's largest hang glider/microlight shops) at Shawclough Rd; Rochdale, Lancashire; England OL12-6LN.

La Mouette Publishes First Gazette



The hang glider manufacturer that may be able to lay claim to being the world's largest, has now entered the publishing enterprise with their newly released *Gazette La Mouette*.

La Mouette, builder of the Atlas '85, the Profil, and the Cosmos Aero Tug, among other products, has just mailed issue no. 1 (June 85) of their house organ. The quarterly distinguishes itself not only for the originality of this type of project, but for being the only journal we know of in hang gliding which publishes in both french and english. The slick paper, eight panel, brochure-folded periodical brings news from La Mouette's world distribution network.

But far more than a thinly veiled advertisement, *Gazette La Mouette* covers information of many types including tips on aero towing, a profile of World Champ John Pendry, cross country flight achievements from many countries, litigation reports, and letters from other manufacturers.

Editor Sherry Thevenot (wife of Gerard T., director of La Mouette) says in the cover statement, "La Mouette has long been an important center of hang gliding activity... and now with a large international clientele, it has become a natural new giver and gatherer. The numerous requests for answers to questions and 'more information' spurred on the idea of designing a newsletter for dealers and the general hang gliding public.

"The *Gazette* is a non-lucrative work which means that subscriptions and advertising are requested only for the sake of covering publication costs. It does not pretend to compete with already established hang gliding magazines." For further information or a subscription, contact *Gazette La Mouette* at 1, rue de la Petite Fin; 21121 Fontaine les Dijon; France.

British Hang Gliding Receives Trophies From Queen



The Prince of Wales Trophy was awarded to the British Hang Gliding Team for their successes in international competition in 1984, marking the first time the coveted award has ever been awarded twice to the same entity. Also on the May 1st special occasion Her Majesty the Queen also presented the National Cup to Brian Milton for his services to hang gliding during its first ten years (see photo featuring Milton; Beverly Snook, Chairman of the Royal Aero Club; Her Majesty the Queen of England; and The Duke of Edinburgh).

At the same event the Gold Medal went to a deserving sky diving relative work instructor, Chris Lyall. The award for Lyall's bravery was earned when Lyall witnessed a free fall collision of two pupils, one of which was knocked unconscious. Lyall "flew" to the injured man, turned him over, and deployed his parachute. Only then did he himself "track away" for his own deployment, apparently with only split seconds to spare. The student landed still unconscious, but will recover to jump again.

Bravo! to the British Team, Brian Milton, and an obvious professional sky diving instructor, Chris Lyall.

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HANG GLIDING IN COSTA RICA

Story and photos by Dr. Arturo Yglesias M.

AT LAST, HANG GLIDING has arrived to this tropical and peaceful country of Central America. It took some years and a lot of pioneering effort, but we finally are off and flying.

The first local "lunatics" were some ticos (as Costaricans are called) that got in touch with the new sport in the early '70s. The built standards with bamboo and plastic, and later with iron tubing. Even while running and sweating their way down half of the hills in Costa Rica, they did not manage to get airborne. So the next step was jumping from low cliffs. The usual next step was the the hospital, so after a few such instances they quit.

During the next several years no development of the new sport occurred until the late '70s. Some standards for boat towing were brought into the country, but this type of flying did not find acceptance and was soon forgotten.

Also during the '70s one of Costa Rica's aviation founders, a Mr. Roman Macaya, today aged 82, was a hang glider pioneer. He built several models, and continues with these designs to this day. Macaya once bought a vintage standard that someone left in the Customs Department. The glider was being auctioned as "T. V. antennas," and at the age of 73, flew several times in one of hills which was later to be used for training.

In 1982 a retired North American, Bill Merwin, came to live in Costa Rica. He was an experienced hang glider pilot and brought with him several modern gliders and an ultralight. Soon he was flying around, well above the locals who marvelled at his abilities.

At first, no one knew what was happening. Once, after landing near a small town, a policeman asked him for his passport. The constable informed Merwin that no immigration or customs offices were located

nearby.

It was not long, however, before he was joined by the original group of would-be hang glider pilots, and logically among them, Roman Macaya. Altogether, they decided to form an association, with Merwin serving as the instructor. The association is known as ACOPLU,



or Association Costarricense de Planeadores y Ultraligeros).

We bought some standard rogallos and began looking for the training hills we would need. When others became aware of the new sport, they began joining in flocks, and by the end of 1983, some of the earlier group was ready for their first high altitude flights. Then, a fatality struck!

Merwin crashed while completing his last turn in an approach. One week later he died from the injuries sustained in that accident. He was a member of the USHGA and we submitted a report. Merwin had become a friend to all in the fledgling group, and they owed him a lot. One of the current launching points now carries his name.

The new group then underwent a very low period. The legions of followers disappeared like magic, and only a small group continued training on their own. A couple of months later, the Hang Gliding Club of Honduras came to our rescue.

Learning of the incident, two of them on their own initiative came to Costa Rica with the intention of leaving at least one local flying. These pilots, now good friends of ACOPLU, were Gustavo Erazo and Ralph Fiestar.

After watching us on the training hill, they chose the one who seemed to crash the fewest times, and their course of action went something like this:

"Who, me?!"

"Yes, you... and tomorrow. Because we must leave the following day."

So, there I was, standing on top of our first flight hill. It was 400 feet to the landing zone, but it looked to me like a mile!

"Well, Arturo, when you feel ready, run hard."

"Eh... and where do I land?"

"Down there."

"Where?"

"Eh.. uh... down there." And Gustavo pointed somewhere on Mother Earth, because the landing area was full of bushes, rocks, some trees, and a huge river. "Well, are you going to fly or not?"

And so I found myself, running, suddenly suspended from a creaking contraption, asking myself some elemental questions, like, "What am I doing here?" I watched the earth—and that river—coming towards me, fast. After one historical minute, I managed to make a landing. It was not very elegant, but it was safe and only a little wet (I had found the river).

Soon, I began flying from some other low hills, and pushed, eh... helped six other ticos to fly high altitude. Only now, we were on our own.

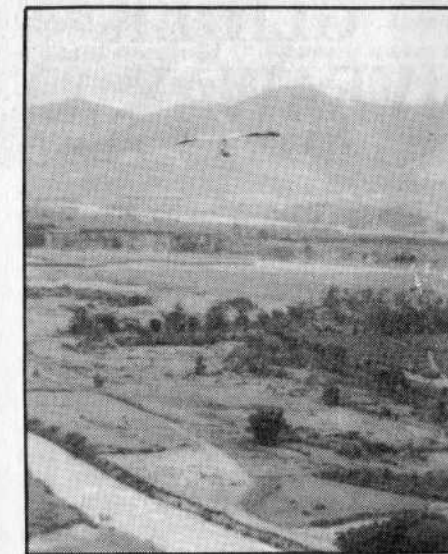
The learning and advancement has been difficult, what with having to gain knowledge from just our own experiences. We got some of Dennis Pagen's books, and old issues of *Whole Air* and *Hang Gliding*. We enjoy the pictures a lot (not all of the guys read English).

But we kept going and now we have better gliders, including several Ravens, Javelins, and Ducks. We are also getting more flying hours. We have benefitted from visitors from Hon-

duras and Guatemala, and we expect to gain a lot from a new resident. He's a young "gringo" with an instructor rating from USHGA.

We have developed several sites from which to fly, mainly in Central Costa Rica around our capital, San Jose. We fly mostly northeast wind directions and during the rainy season, some westerly winds. We also have a place over the coast on the Pacific, but much exploring still remains in the search for more suitable flying sites. We have also tried some tandem flights, and towing. But this last is just for curiosity because what we lack are not mountains from which to launch, but nice landing areas.

Our primary problems are the extreme conditions that prevail, ranging from no winds to gusting 30 MPH conditions. And we have problems with spare parts. We have managed to develop our own repair techniques, but almost everything must be imported from the United States.



However, along this line, some news can be reported. A former supplier of parts from Manta Products (Fledgling manufacturer) has established a small factory for the construction of ultralights, using the model name, Pharaoh. Through this person we have some chance to develop our spare parts inventory.

Ultralighting has also been slow in growing. Even though two or three ultralights have been flying around for three years, it has not picked up. Though lately, interest seems to be accelerating for both hang gliding and ultralight flying. We hope this new builder will help us develop both sports.

After all this time, we have developed two qualities: patience and optimism. Every weekend the members assemble and march to the thought of, "Today will be just fine." And as usual, nothing is impossible for an optimistic hang glider pilot, especially if he is a tico.

For those who may wish to make contact with the ACOPLU group, or generally be in touch with the flying community that is developing in Costa Rica, write: Arturo Yglesias; P. O. Box 3787-1000; San Jose, Costa Rica; phone 213750 — or Oscar Chavarria (ACOPLU president); P.O. Box 112-6150; Santa Ana, Costa Rica.

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"I WON!"

... THE TENNESSEE TREE TOPPERS GREAT GLIDER GIVEAWAY.

WHEN YOU HEAR something about the TTT (Tennessee Tree Toppers) you probably hear that they were the ones that got USHGA Chapter of the Year for 1984. Or maybe you heard about the now-famous radial ramps at the club's Hensen Gap site and Whitwell site. Matter of fact, you may have heard about the TTT because they are one of the few well-financed, member-owned organizations that owns their sites outright... sites that are paid for.

Then again, maybe it's their famous parties you've heard about, particularly their annual Christmas extravaganza.

Most likely, though, it is their revered flying sites in the Sequatchie Valley, near Chattanooga, Tennessee about which you have heard.

On May 25th, the greatest TTT event of all time took place, according to most club members and other participants. It was the occasion of the annual Mayhem cookout, competition, fly-in, and this year for the first time, a new attraction.

The TTT Great Glider Giveaway!

That's right. You heard about it earlier in *Whole Air*, even before the World Team raffle sponsored through the USHGA. Did you buy a ticket? If you did, what was the number on your stub? Maybe you better go dig it out, because the winners are about to be announced right here.

The weather for the annual Mayhem event was perfect. This was a pleasant and enjoyed surprise, seeing how Mother Nature treated us at the Region 10 Qualifier a few weeks earlier in the year. People began arriving Thursday morning and it was apparent that the occasion was going to be one of the largest gatherings in TTT history.

Flying was abundant on Thursday the 23rd with many pilots taking in the beautiful Sequatchie Valley scenery from high above the mountain. The clear day could not have been ordered more perfectly.

Friday flying continued to be exceptional. By mid-afternoon the set up area was filled to capacity. This takes more than just a few gliders as the TTT owns four acres. Club leader pilots like Dave Schmidt (president), Rick Jacobs, and Dennis Michaels logged altitude gains of over 5,000 feet above the valley.

That evening your author had the opportunity to take a non-pilot on a rare tandem flight and give him a chance to see over the mountain for the first time (remember how that felt?). We logged over an hour in my trusty Raven 229 with ten other pilots sharing the light evening lift.

Great Glider Giveaway Begins.

The next morning was the day. Saturday had been selected as the day to announce the winners (there were three, not just one). Everybody was at the breaking point. Tickets



(Opposing page, top) James Yocum receives the happy news of a \$3,500 grand prize. (Above) Karen Robinson holds her 2nd prize of a Ball 652 vario.

were being sold left and right. Over 100 sold on the day of the drawing. People were buzzing about what they would order if their name was drawn for the Grand Prize, or even if they got Second or Third.

But, First Things First.

Preparations were underway for one big party, TTT-style. Rick Jacobs and Barry Price had volunteered their services even while it was soarable. They had some cooking to do. What a job for an estimated 175 people in attendance. Barbequed chicken and plenty of fixings were served up for dinner.

Shortly after dinner, the first keg began to float in its ice chest. But never to worry. The TTT does its partying fully equipped, and a second was nearby.

All the while dinner and drinks were being consumed, the band was tuning up over on the bluff near that famous ramp. No jug and ukulele duet, this was a full-blown band with guitars, electric fiddle, drums, the works. John Saari had arranged a month earlier for the group and they did wail on the bluff that night. (Can you say, "Party down!?) The band played for over an hour while calls were made over the P.A. system to sell those last Great Glider Giveaway tickets.

The big rotating basket was loaded up as the band played a last slow number.

The Time Is At Hand.

Deronda, the only person available that had not purchased a ticket turned the crank and mixed up the tickets. She closed her eyes and pulled the Third Place winner from the huge heap of tickets inside.

The winner was Tim Mackey of Bedford Hills, New York, holding ticket 151. Mackey won the harness of his choice, and chose a

Keller pod harness.

The basket was turned again and Second Place was drawn. Winner Karen Robinson was present and you could hear her scream all the way at the back of the crowd. Karen won a vario of her choice and chose a Ball 652 deck, valued at \$600. Her smile was non-stop from then on.

It's A Nation-wide Game

Once again, a spin of the basket, and a quick drum roll. The Grand Prize winner is ticket 93, a James Yocum of Littleton, Colorado. Yocum was notified by phone as was Mackey. He chose the glider of his choice—a Wills Wing HP, a harness of his choice—a Bennett Airstream pod-style model, the vario of his choice—a Ball 652, and a set of FM radios. A Grand Prize total valued at \$3,500... all for a \$20 investment.

The band played another hour, and did countless encores. People danced till they fell. The tandem pilot I mentioned earlier—Tim Orr—had such a night, a drunk tree ran right into him.

When Sunday arrived, bodies were strewn everywhere from the night before; on the ramp overlooking the valley, in the bath tub of the new homes being built adjacent to the TTT land, and still slumbering with various little mountain animals.

In all a tremendous affair. The TTT sold some 312 tickets (about \$6,240 revenue), which enabled the TTT to donate \$312 to the USHGA, to be divided between the organization and the World Team fund.

Out of the proceeds, the plan from the outset was to construct a clubhouse on the property owned by the club. And it is already a reality. The 1,000 square foot structure overlooks the valley, thanks to those proceeds and a lot of volunteer labor. It just shows what can happen when you turn folks like President Schmidt loose with the club checkbook. (Photos of the construction will follow later on, they promise.)

Thanks To All Who Helped

The TTT and the Fund Raising Committee would like to thank all who purchased tickets in the Great Glider Giveaway, and the consideration given the club from several manufacturers involved. We would also like to thank *Whole Air* for the space promoting the raffle, and to USHGA for the small editorial in the magazine. We realize that they also had a raffle started slightly after the Great Glider Giveaway.

TTT membership is available for only \$30 yearly and entitles a member to receive "Branches," the club's newsletter. Also, one receives the chance to attend club functions, and then of course, there's the flying... at some of the best sites in the country.

Post Script

You haven't seen nothin' yet! Look for the details on yet another... well, the club wants to keep you in suspense.

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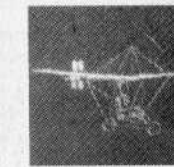
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WA



THE CONTEST

1985 Chelan Nationals

CHELAN, WASHINGTON 1985 U.S. NATIONALS

In several short-length stories, here's the Whole Air style account of one of the most successful Nationals yet / stories by Dan Johnson with help from Mike Daily — photos by Howard Handy, John Erben, Dan Johnson.

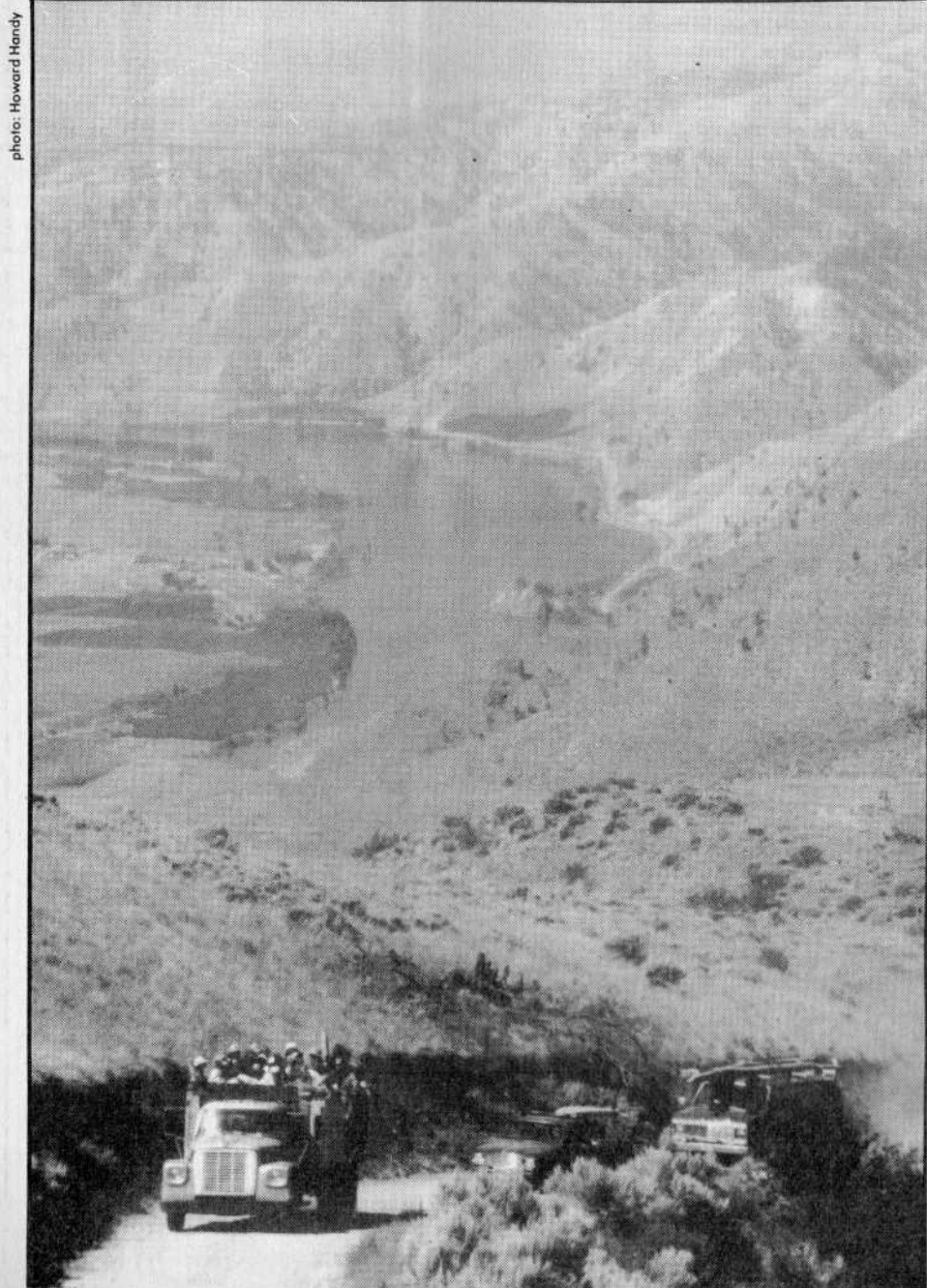


photo: Howard Handy

"Where's the Meet?"

JUST AS WENDY'S now famous Clara Peller asked her worn-out line in an attempt to locate the beef, we could practically hear the voices of visitors and residents of the city of Lake Chelan ask, "Where's the Meet?"

A major problem with cross country meets became very apparent at this year's Nationals. With this difficulty considered before, of course, it was nevertheless clear that most folks in the town of the 1985 event really did not know what was going on with a major contest about which they had been hearing.

With one notable exception, until the day of the aerobatics display, very few townspeople or tourists even knew any flying was happening at all.

The notable exception was the excellent efforts of Kevin Moore. Anyone paying the least bit of attention to Radio Lake Chelan (KOZI AM & FM)—the town's only radio station—heard frequent reports by Moore. He travelled everywhere with the action, in a way one might expect of reporters following the President of the United States. Employing skills gained earning a college degree in the field of broadcast journalism, Moore delivered not only frequent on-site live interviews, but gave his own running account of the day-to-day activities. For many of us who attended the Chelan Nationals but who did not drive all over the desert chasing the pilots, Moore's reports kept us informed and knowledgeable in a professional manner.

It did the same for the townsfolk and ample numbers of vacationers. Actually that's about all these people had to go by, except of course for a complete program provided under the banner of this publication.

So what, eh?

photo: Howard Handy

It would seem that with all the chatter heard in so many parts of this industry these days about "shrinking memberships in USHGA," and "reduced industry size," or "failing health of the sport," that one thing our fun flying activity could certainly use is... the attention of the people in a town where the Nationals are being held.

Yet they hardly knew what was going on. What to do?

The tasks and format of this year's Nationals are hardly likely to change. The idea of cross country flying or racing is perhaps the best discipline in hang gliding to demonstrate flight skills. It's hard work, but rewarding (see Mike Daily's "View from the Middle of the Pack"). It is a jump of improvement over fishbowl races, one-on-one, and all other formats that preceded it. It is what sailplanes



use for their competition; they've been at it long enough to have distilled this format. So now that hang gliding has positively arrived at such a construction for meets, we doubt it will change significantly in the contests ahead.

Ways exist to still run the meets most competitive pilots seem to desire, and yet give the natives a show.

For starters, a shuttle service could take spectators to the launch site. This would demand a bus of reasonable description. We doubt many persons have much interest in standing up in the customary "cattle truck," much as they do suffice for pilots and crews. Of course, such a service would mandate a charge, but then, this could represent a profit center for such a motivated sponsor/organizer as this would require.

If one begins chasing the dollars of

OVERALL RESULTS

(F denotes Foreign Pilot)

Place	Pilot	Class	Home	T.E.T. Score	Normalized Score
1	Rick Rawlings	W	Sylmar, CA	1603.17	6304.76
2	John Pendry (F)	W	England	1591.53	6278.01
3	Bruce Case	W	St. Paul, MN	1664.96	6110.60
4	Randy Haney (F)	W	Canada	1703.84	6079.94
5	Rick Duncan (F)	W	Australia	1762.04	5673.24
6	Gerry Uchtyl	S	Seattle, WA	1812.86	5588.89
7	Rich Pfeiffer	W	Santa Ana, CA	1803.15	5568.48
8	Kevin Christopherson	W	Casper, WY	1851.57	5391.53
9	Joe Greblo	W	Van Nuys, CA	1890.33	5200.43
10	Lee Fisher	W	Seattle, WA	2016.39	5030.06
11	Steve Moyes (F)	W]	Australia	2091.45	4783.56
12	Rick Sauer	S	Witter Springs, CA	2105.28	4461.57
13	John Woiwode	S	St. Paul, MN	2109.48	4360.50
14	Mark Bourbonnais (F)	S	Canada	2118.25	4334.14
15	Jim Lee	S	Albuquerque, NM	2146.68	4242.26

SPORTING CLASS ONLY

Place	Pilot	Class	Home	T.E.T. Score	Normalized Score
1	Gerry Uchtyl	S	Seattle, WA	1812.86	5588.89
2	Rick Sauer	S	Witter Springs, CA	2105.28	4461.57
3	John Woiwode	S	St. Paul, MN	2109.48	4360.50
4	Mark Bourbonnais (F)	S	Canada	2118.25	4334.14
5	Jim Lee	S	Albuquerque, NM	2146.68	4242.26
6	Doug Johnson	S	Duluth, MN	2225.47	4080.98
7	Sergio Magistri	S	San Francisco, CA	2203.72	4013.48
8	Randy Adams	S	Stockbridge, MA	2196.54	3975.47
9	Jeff Bennett	S	Chugiak, AK	2354.02	3531.25
10	Pete Lehman	S	Pittsburg, PA	2316.25	3458.24
11	Mark Kenworthy	S	Renton, WA	2417.26	3395.87
12	Ian Huss	S	Boulder, CO	2392.95	3346.41
13	Christopher Ballinger	S	Kensington, CA	2472.75	3211.35
14	Terry Wilkins	S	Alta Loma, CA	2422.44	3194.01
15	James Zeiset	S	Salida, CO	2438.34	3165.48

Total Mileage Flown — All Competitors — 20,936

Total Miles Flown — Pilots Making Goal — 7,852

Total Miles Flown — Pilots Landing Short of Goal — 13,084

Average Miles Flown By Each Registered Competitor — 40+ per pilot per day

spectators, another likely occurrence would probably include a concession stand on top to address the thirst and more of these folks as they learn the "hang waiting" game with all of us pilots.

Shade would also be pretty necessary at a place like Chelan Butte. But then, this all might not have been possible at Chelan, as the pilots received special dispensation to use the Butte launch at all. The West in general, and Chelan therefore included, had been experiencing an exceptionally dry season, raising the fire hazard to the extent that the top of the mountain was officially closed. County fathers were good enough not to shut the whole Butte down, but it seems unlikely in retrospect that they would have also permitted a spectator scene as described above. However, after the commendable job done by organizers and pilots alike this year, maybe next year...

Another more workable thought on the

accrue. A major sponsorship could be generated (one almost was this year), and from that could come funding for a variety of uses. With aerobatic drama, a television contract might be garnered, and the major sponsorship would be ever more probable if this was secured.

If aerobatic contests can be held, pilots who do not wish to compete might want to come and attend an aerobatic seminar. If the pilot community would come to a seminar for this purpose, they might also come for a whole schedule of other workshops. And if a large number of pilots were attracted, suppliers in the sport might set up booths, where they might really sell some gear. The general public is not much interested in their goods, at least before they take some lessons and get the bug. But pilots in sufficient numbers may make such an idea work, when it has failed in the past (Ellenville Nationals, and the American Cup).

The drawback? To achieve all or part of this idea requires a good organization, with good leadership, and a supply of funds. Tracy Knauss (American Cup promoter) was able enough, motivated enough, and spent a great deal of his and other people's money. Yet the American Cup has gone the way of the swing seat harness. So, the task is no small one.

But the American Cup, the Ellenville Nationals, and other valiant attempts did one thing particularly different, and in this difference promise may still lurk.

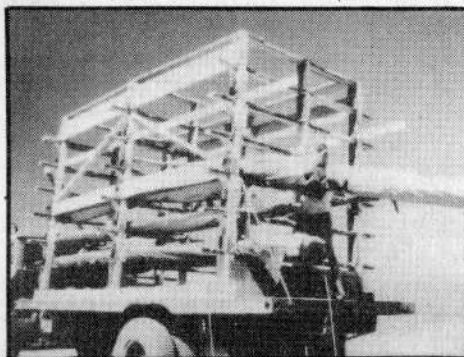
These events, while open to large groups of pilots, did not really cater expressly to their wants and needs. The general public came first, because it was thought that therein lie the chance for the greatest profit. Gate fees of several thousand spectators adds up more quickly than bits and pieces here and there from pilots.

Plus, one hears the familiar lament that pilots are "el cheapo's." Though *Whole Air* surveys indicate that readership's largest single concentration (32%) earns over \$30,000 per year, it is still felt by most other pilots that, as a group, hang glider enthusiasts try to spend as little as possible. Perhaps so, but then again, maybe the effort has never directed itself to their desires well enough.

This could go on forever, but one unknown is still larger than life. Will pilots go for it? Does the sport desire this? Do most hang glider pilots see any value whatsoever in aiding growth of the sport? Adding that to the need for some human turbo to pull all this together and you've really nothing left but a bunch of speculation.

One thing is sure. Time will tell. Perhaps at some time in the future, no one will ask, "Where's the Meet?"

photo: John Erben



Mitch McAleer upside down, viewed from ground.

subject might involve doing more out and returns, with the landing goal ending up in some location where spectators could be served. The Chelan airport was an excellent possibility for this, could deal with the crowds, had amenities like porta-johns, and might receive the approval of city fathers who hold jurisdiction.

Still another is to run an entire parallel contest. One would serve the cross country pilots in the now-standard T.E.T. format, running virtually identically to this year's meet. Alongside could be a boat towed (in Chelan, with its excellent lake, or aero towed elsewhere perhaps) aerobatic contest. In this would compete only top level pilots who can land near crowds without mishap. Obviously their aerobatic skills would have to be quite good too. And "smoke," to assure good visibility, and a chance of following and appreciating the maneuvers, would be vital. If this occurred everyday, even if only for an hour, the outreach could be tremendous.

Involved with the above should and could be prize money. Plus another benefit might



THE EVENT

1985 Chelan Nationals

A View From the Middle of the Pack

AS A PILOT who just competed in his first Nationals, I would like to share a few of the lessons I learned. And I would like to express some of the feelings I experienced which made the effort worthwhile.

First of all, the event is much more than a competition. It is a gathering of the best and most ardent pilots in our sport. Friendships are made anew or renewed. For a first-timer the names and faces we have heard about and seen become personalities as you progress to a first-name basis.

The Nationals in 1985 is special because barriers were broken and many milestones were reached. We did things that we did not know could be done.

Those who attended also had to share first-hand the loss of a great pilot, Chris Bulger. All were reminded of the serious nature of our sport and were challenged to examine our motives and practices.

The highest of highs and the lowest of lows were a part of our experience. What we were doing seemed surreal and all too real at the same time.

Prior to the event I viewed myself as a competent, consistent pilot who flew safely and was capable of making great flights. During the first couple of days I realized how much room for improvement existed before I could consider myself "good" on this new scale.

Being in the same air as some of the best pilots in the world, climbing in the same

thermals, interthermal gliding, knowing when and what to leave... all these areas of pilot skill, judgement, technique, and "feel" were learned, relearned, and redefined.

I came away from the Nationals knowing that those who finished at the top were not lucky. They were just better pilots, plain and simple. I also came away with the knowledge and satisfaction that I had improved my skills demonstrably over the course of the event.

Entering and competing in the Nationals is expensive. It is hard work. It pushes your

photo: John Erben



endurance and taxes your skills. At the same time, the lessons learned are invaluable. Personal milestones are attained and surpassed, and you develop a feeling of camaraderie with others who made the same sacrifices.

Finally, I would strongly urge any pilot who is sincere about becoming better to make every effort to compete in the Nationals at least once. You will never forget the experience.

Personally, I am ready to do it again in '86.

—Michael Daily

FOUR ON THE FLOOR

SITES WHICH PERMIT 100 mile tasks to be called—and more importantly, achieved—must produce lift in generous, even surplus quantities. Chelan Butte, and the flats over which the 74 registered Nationals pilots crossed country, indeed supplied an ample volume of the upward-bound air.

Most of us ordinary pilots feel no amount of lift is too much. Certainly, if we restrict our flying to more moderate days, or if we normally fly at sites which are not renowned for strong lift, any chance to "peg" our variometers is wonderful. However, places and times exist when the up stuff can overwhelm the situation.

Stories related about flying in the Owens Valley have for years told of such powerful thermals that, if the upward motion alone did not cause problems with glider control, at least the exiting of a strong one could cause one to "go over the falls." Matter of fact, the phrase became popular after such an occurrence brought tucked, tumbled, broken gliders into the hang gliding press.

Very fortunately, before much of the upside-down-against-one's-will flying happened, back-up parachutes were on the equipment list, and most pilots experiencing such lift conditions had one. Right after "over the falls" became a hip phrase, a new buzzword followed... "save." By this, no one meant a saved flight which found a thermal moments before a landing was imminent. The word carried an even more important meaning. "Saves" happened when a pilot whose craft was upset threw his/her 'chute for a successful deployment and consequent "save" of that flight, glider, and life.

Amen. Thank God and Bill for the back-up 'chute.

Four other pilots have good reason to utter the above comment after Chelan Butte and/or the flats to the east, caused them to make "save" a very personal word.

The first was a pre-Nationals deployment by Seattle pilot, Dan Uchytel (one of the Chelan Nationals organizers). While competing in the Chelan Region I Qualifier, Uchytel's early-model Dawn was turbulated by one of those rowdy thermals, and following the failure of his basetube, the glider broke up, and Dan threw his 'chute, successfully. Amen No. One.

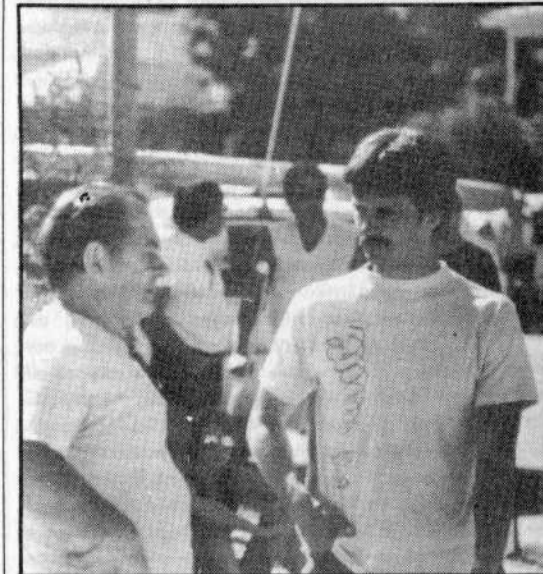
(P.S. This story makes no comment about the gliders involved or any reason why that make or model was involved. Concerned pilots are encouraged to contact the manufacturer for their comment. We are not well enough informed, nor knowledgeable enough on the reasons to pass any judgement. But surely, ANY glider can tumble. Once so upset, ANY glider can break. Consult the experts!)

Chuck McCaslin was the second pilot to be "saved." According to the *Cloudbase Country Club Newsletter*, McCaslin was the first pilot to

deploy over the flats. Also before the Nationals, his Flight Designs Shadow was "flipped upside down in a dust devil." He apparently felt his kingpost failed, followed by the leading edges. Chuck suffered only a minor injury when he pulled back in on the 'chute's lanyard so he could deploy again if the first time was unsuccessful. Amen No. Two.

Kevin Bye has the distinction of being the Chelan site distance record holder. He had it before the 1985 Nationals, and he still has it. No small feat. He certainly is aware of the strength of thermals around Chelan, having logged a 122 mile flight, nearly to Spokane on the state's eastern border. Plus he has other good distance experience over those flats. But mid-way through the meet, Bye was upset by especially rough conditions, and he deployed when his Dawn failed. No injury. Amen No. Three.

Allegra Davidson was one of only two female



The sport's first Back-up System Promoter, Bill Bennett, speaks with Kevin Bye.

competitors in the 1985 Nationals. She did respectably well, flying in conditions that might deter a great many recreational flyers. Allegra also had the most serious injury of the Nationals, and it all resulted from the fourth deployment situation.

Davidson found another of those gnarly thermals and it caused her Dawn to be tumbled out of control. She lost her grip on the control bar and chose to deploy. Though the 'chute operated properly, she was tied to the glider's keel by the lanyard, breaking several ribs, and she sustained a serious foot injury when striking the ground. She was fortunate to receive rapid help from Rob Kells and her husband Ben, and should recover fully, according to reports. Though the injury was painful, the incident would have been more severe without that deployment. So, injury aside, Amen No. Four.

The famous "Four on the Floor" of the Chelan Nationals recommend: Check your 'chute. Keep its repack current. Practice its deployment. And give it a hug once in a while.

Ho Hum One Hundred

WALT DODGE SAID no one had ever called a one hundred mile goal task in the Nationals prior to Chelan. In fact, if memory serves, no one has done so in America outside of the Owens Valley. But calling a task is about as different from flying a task as standard rogallas are different from the superwings of today.

A total of 525 miles in tasks were called in the Chelan Nationals. Since seven rounds were run, an average task involved 75 miles of flying. Now, in these days of much more common 100-mile flights in all parts of the country, this might not seem so amazing, but ask yourself how many times you have considered taking off for a destination that far away?

We think it is really incredible (worn out as that word may be) that only a very few years ago, any 100-mile flight anywhere made the general news media. Within the sport, such an accomplishment was enough to make a hero or heroine of the pilot. Now, in our sport's Nationals, a flight of that distance was not only called as a task, it was achieved, and by a sizeable portion of the competing field.

Perhaps more than that, the task did not become a day where pilots were scattered all over eastern Washington in valiant attempts merely to reach the Reardon 100 mile goal. They raced to that goal! Canada's Randy Haney—who achieved a distinguished Third Place in the Kossen World Meet—made the goal the second day that task was called in a scant four hours and six minutes. His time enroute calculates to an average speed of 25.1 MPH (see below).

Kells recorded first 100-miler.



The Nationals fourth-ranked pilot, Rob Kells—World Team member to Kossen and a very talented flyer—arrived at Reardon that second day beaming with happiness, it was said. In spite of the various achievements Kells can put in his logbook, this flight represented his first 100 miler.

All this obviously speaks well for Chelan Butte and the flats from whence came the many

dust devils that enabled these pilots to travel so far. But it fairly screams about the knowledge we all as pilots can gain in 1985. And credit must also go to Meet Director Walt Dodge with substantial help from Harold Locke, for evaluating the conditions and having the fortitude to call tasks of this distance. Harold who?

DR. WEATHER

Winning an award at the final ceremony was Dr. Weather. Harold Locke is a sailplane pilot who also flies hang gliders with great skill, and who shines as an interpreter of weather conditions for soaring flights. His skill at this effort proved so invaluable to Dodge that a Nationals T-shirt with most competitor's signatures on its back was given to the erst-while weather-guesser.

It is interesting that both the U.S. Nationals and the 1985 Weltmeisterschaft employed such important, even key use of weather forecasters. Neither meet would have gone as well without them, and the calling of tasks evolved into a new era of technical accuracy because of these gifted individuals. (Jo Bathmann did the job in Kossen, and he has supplied Whole Air with an article about weather and its relationships to cross country competitions. Locke has been invited to review that technical article, and to comment or add his own thoughts for our readers illumination of this vital subject.)

AN ALTERNATE RESULTS LISTING

Out of seven rounds, it is interesting to see who turned in the fastest times, over what distances.

Goal: Wilbur	60 miles
(one-way task)	
Goal: Chelan airport	59 miles
(out & return task)	
Goal: Reardon	100 miles
(one-way task)	
Goal: Davenport	90 miles
(one-way task)	
Day No. 1 (Sat 7/13)	Wilbur
Day No. 2 (Sun 7/14)	Wilbur
Day No. 3 (Mon 7/15)	Chelan
Day No. 4 (Tue 7/16)	Reardon
Days No. 5 & 6 (7/17 & 18)	OFF
Day No. 7 (Fri 7/19)	Davenport
Day No. 8 (Sat 7/20)	Reardon
Day No. 9 (Sun 7/21)	Chelan

FASTEST PILOTS

Day No. 1	Chris Bulger
Day No. 2	John Pendry
Day No. 3	Chris Bulger
Day No. 4	Chris Bulger
Day No. 7	John Pendry
Day No. 8	Randy Haney
Day No. 9	Randy Haney

(NOTE: It was on Day No. 5 (Wed, 7/17) that Chris Bulger was killed while towing John Pendry. Bulger was in Second Position at that time. Thursday was also called off as everyone felt the tragic loss of Bulger the day earlier.)

CHRIS BULGER'S FINAL GLIDE

AT THE 1985 NATIONALS, on Wednesday, July 17th at about 7 PM, the sport suffered a tragic loss as Chris Bulger was killed while flying a trike which was aero towing World Champion John Pendry.

The accident had a dramatic impact on that day off from the meet. The contest had been proceeding positively with flying every day. All indications seemed to show that Chelan was one of the safest sites ever used for true long distance competition.

Two incidents not related to Bulger's accident involved in-flight structural failures which were followed by proper parachute deployments that saved the pilots involved (see text of other Chelan Nationals stories).

Chris had no parachute. He also flew with no helmet. The seat belt restraint system in the trike he was piloting offered insufficient protection. He was flung free of the craft during a series of tumbles which followed the failure of the tow line. At press time, the details surrounding the towline failure had not been fully discovered, but certainly too strong a weak link was used.

A lock out condition had apparently begun, and when some part of the line failed (breaking at Pendry's harness), the trike was apparently released with excessive energy that shot its nose skyward. Evidently the resultant deep pitchover progressed to a number of tumbles which subsequently caused a structural failure of the trike's wing. Pilot and craft both plummeted to a steep embankment. Chris probably died on impact.

John Pendry spiraled down immediately, and was briefly joined by numerous pilots who ran over from the Chelan airport where the takeoffs were begun. An ambulance arrived shortly, but Bulger was pronounced dead on arrival at Chelan's hospital.

More knowledgeable persons than ourselves will endeavor to piece the accident's puzzle together. Cause and effect will be probed carefully once all the facts of the event are gleaned from a variety of sources and witnesses.

The sport has lost one of its most talented participants. Chris was in second place after four rounds of the contest, having the day prior completed the 59 mile out and return task arriving earlier than anyone else by a considerable margin.

But hang gliding has also lost one of its more enthused leaders as well. Just days before the Nationals started, Chris and I had



(Above) Chris takes radio reporter Kevin Moore up in the trike. (Bottom) Chris' close friend Chris Hansen attaches Chris' ashes, which he dropped to the wind over Seattle's Tiger Mtn. site.

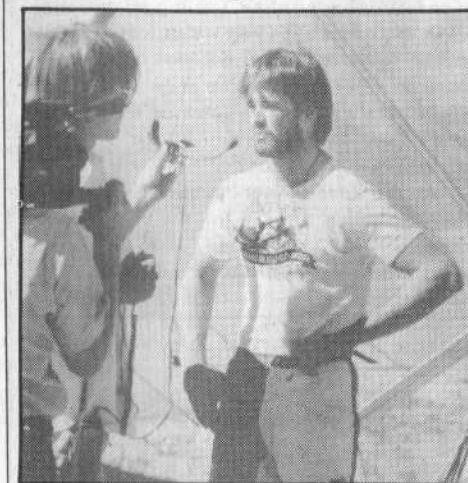
another lengthy conversation in a chain of talks about Chris' upcoming plans.

Chris was bound for Florida where he would have begun his college level education. He was very excited about an operation he planned to set up for the purpose of aero towing a second unpowered trike in which an instructor and student would be carried. This idea which has been promoted by a few persons in the sport (myself included) seems to hold promise for introducing new persons to our flight activity. Chris was concerned about the reducing size of the U.S. hang gliding community, and while he studied in flat Florida, this was to be his contribution to its growth.

After the 1985 World Meet in Austria, Chris traveled to visit Gerard Thevenot of La Mouette. In his week-long stay in Dijon, France, he and Thevenot worked toward developing this system where one powered trike towed another aloft. In the towed vehicle would be a student and instructor but no engine. The purpose clearly to bring safe, controlled flight instruction in hang gliders to anyone who desired to learn. The need for mountains and their launches could be eliminated, and with an instructor on board, the learning process could be enhanced.

While others may carry this idea onward (I'm sure Chris would hope so), it will not be fifth-ranked Bulger who will do the flying. His amazing abilities are forever lost.

Some lessons can and should be learned by the rest of us, in my opinion. Personally, though I have much experience in trikes and other ultralights, and though I fly with a parachute always, I will not fly them again until I have secured a harness system that holds me to the chute. In my experience with the same trike in which Chris flew that day, the seatbelt became detached, though I felt I had closed its buckle completely. This was discovered after a series of steep turns and stalls (for an evaluation of the Airborne trike I was to prepare). Had some condition upset the craft while my seatbelt was unconnected, I could have also been thrown clear of the trike. While I did have a parachute and helmet, they would have done me no good whatsoever (the chute attaches to the airframe). The point in relating this incident is to say all of us can undoubtedly



take an extra precaution or more on every flight.

The message is clear. The loss of someone as gifted as Chris Bulger for reasons unnecessary is a powerful reminder that the air may offer great enjoyment, but is an unforgiving theater of operation. Mistakes are impartial. No consideration is given to who made them. Or why they were made. Though

spring-loaded back-up parachute systems were nearby in Bulger's vehicle, the failure to use one of them—or a helmet—was not at all the reason for his demise. But, as another pilot asked, if he (and the others who also flew without these pieces of equipment) overlooked their importance, what else was overlooked that day?

Indeed! The oversights added up in a fatal way. Though I considered Chris a personal friend, the truth is he, and only he was responsible for his actions, and few pilots would state it any other way. We all must pay the price of our own failures, just as did Chris. But we who remain to fly another day can gain insight from his error.

If you have a parachute, use it. If you do not have one, get one. Make sure it will save you, not just the glider. Use a helmet, all the time, even if wind in the hair may be a pleasurable experience. Check all components before flight. Do so even if it does delay the action. When engaging in a more complicated activity like towing, check even more thoroughly.

Though I am also sure Chris would not wish his death to negatively impact aero towing, the fact remains that it is still new, and that it involves extra complications. These extra factors need not cause towing to be fatally dangerous. Most towing has occurred with amazing safety. The reason for this is that the important details were not overlooked. Do not risk getting too casual. Mistakes are impersonal. It matters not that you may be in a hurry.

A memorial service was held for Chris Bulger at his home church in Mercer Island, Washington. The priest delivered a beautiful review of Chris' life and love, in a very knowledgeable manner. It was a most touching ceremony. And due to the proximity of the recently-completed 1985 Nationals, plus the upcoming Grouse Mountain meet, a large number of pilots, both famous and ordinary, attended. Joe and Patty Bulger and family displayed a strength of resolve that bolstered all of us who again felt the loss of Chris.

The result... a commanding message... PLEASE FLY SAFELY, by preparing to fly safely before you ever hook in (or get in the seat)!

—DAN JOHNSON

photo: Howard Handy



IT CANNOT BE said that Chelan offers the cleanest site ever flown. The word "cleanest" does not refer to safe, or sportsmanlike, or smooth. It refers to dirt... or rather the lack thereof.

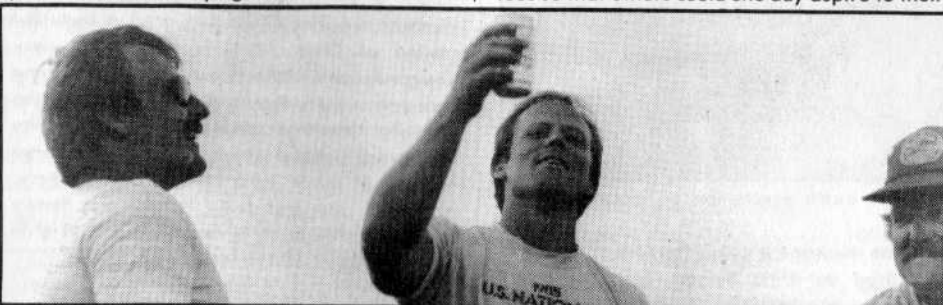
The Leisure Class (see other story in this section) found the dusty conditions at launch and anywhere one landed enroute to the goal, to be a marvel all of itself. Actually, not only the Leisure Class noticed it. Everyone noticed it. You had to, it was everywhere during the exceedingly dry season experienced in the area and throughout the West. The Leisure Class particularly disliked the grubby feeling one acquired after more two minutes of exposure.

You may think this is a strange topic about which to be using so much space. But if you

A Classy Affair . . .

TWO NEW CLASSES were devised for the 1985 Chelan Nationals. The originators were the dynamic duo of Matt Wagner and Doug Lawton of Region Ten. These selfless pilots accepted the demanding job of creating the two new divisions.

First they labored over a class called Cro-Magnon. This awesome title is accorded those pilots with such stunning stamina as to actually desire to have 100 mile or more (1) tasks called every day. The thinking of these supermen flyers is that if such arduous tasks were called, that they could outlast, out-endure, even out-odor their opponents, winning by such cunning, just in case their flying skills were not con-



siderable enough to win the conventional way.
THE LEISURE CLASS

But then, the piece de resistance... the Leisure Class. Sirs Wagner and Lawton felt qualified to construct such a new category, themselves sacrificing all to assure the class was not only fairly and correctly distilled from the many possibilities, but was a class of which they themselves could be proud to be a member.

The heat, the dust, the waiting atop a butte, which (can it be believed?) had no refreshment stand, nor even a proper toilet. Good heavens, will these organizers never learn what is absolutely mandatory if they wish to attract the caliber of pilots entering the Leisure Class? Why these cultured gents cannot reduce themselves to the point where they would be loaded onto a cattle truck to be hauled to the top of said butte as though they were so much feed for lowly animals.

And, no wonder... for the Wagner/Lawton

THE DUST SETTLES

looked at the returning pilots and officials after a 100-mile day, you could see a lot of the desert and not much of the skin underneath. In fact, stories abounded relating how amazing the dust was, "We drove into the field where blank landed and as the tires moved forward, the dust 'flowed' out of its path!" And, "When you step in it, a mini-atomic explosion cloud erupts around your shoe!" Maybe this is one of those 'you hadda be there' situations.

Without requesting a scientific breakdown of the dust itself—and considering that we do not wish to bore many of you to tears—suffice it to say that the old phrase, "After the dust settles..." is a fitting way to list the results of the 1985 Nationals in (dusty) Chelan.

team, when the choice is the above bleak scenario or reclining just outside their luxurious room at the Campbell House, sipping on an icy imported elixir, waving off droves of worshipful fourteen year olds, and trying mightily to make the best decision about which of the previous night's cache of golden-haired, bronzed-bodied lasses to summon for another night's play.

What would you do?

At the Sunday evening ceremony, these fine upstanding altruists of the hang glider movement were presented with an award fitting their renouncement of their \$200 entry fees so that others could one day aspire to their

Leisure Class. When Walt Dodge insisted they arise from their chaise lounges to be adorned in front of the admiring throngs, Wagner and Lawton graciously accepted. Telling the many girls that surrounded them to wait patiently for only moments, Matt and Doug demonstrated the enviable resolve of character they had relied on throughout the whole taxing week and rose to the occasion.

Indeed, when Dodge crowned them winners of the Leisure Class, presenting them with two gleaming cans of Budweiser, not a soul in the hushed audience heard them murmur quietly, "Too bad it's not a Heiny (Heineken is the preferred brand of the Leisure Class)." Of course, the organizers could not accord them the imported award for which they lusted, as Lawton and Wagner had cornered the market of the golden liquid, buying up every known bottle in the village of Chelan.

The true merit of such men could be known by all the rest of us if we would just study their landing forms. They follow below... you are

The table on page 21 will give most of the detail information one usually reads after meets. But one other listing is most deserved we feel. This regards Rick Rawlings and the competition achievements of this impressive pilot.

RICK RAWLINGS

Anyone who reads the stories about American meets in the last three years keeps coming across Rawlings' name. The guy is everywhere. Not really factual, he is not everywhere, he is usually at the top of the list, if in fact, he did not win.

Rawlings is the National Champion for

requested to read them in a moment of solitude, maintaining the grace imparted by these pioneer winners of the 1985 Chelan Nationals Leisure Class.

If that isn't possible, grab a comfortable chair (the only kind authorized for use by the Leisure Class), pop open a Heiny (Official Beer of the Leisure Class), snuggle up to something warm and soft (use your imagination, Leisure Classers), and get a belly laugh out of it all. (No Leisure Class pilot would take it too seriously.) For as Wagner so aptly put it after the over-awed gathering demanded a speech, "You should all consider the Leisure Class... it's easy. Cheers!"

A NOTE: Landing forms were required by the meet director to aid in determining when one launched, witnessed by whom, where one landed, and when. Everyone was expected to accurately fill out their form, and to exercise adult judgement, detailing the landing spot so it could be evaluated correctly for the T.E.T. points to be awarded.

DOUGLAS I.H.L.* LAWTON Contestant No. 46

Goal: "Race to the lake [Chelan] for a cold beer, and to chase the fourteen-year-olds." NOTE: Organizers felt this illustrated a clear understanding of the task.

Lawton, No. 46, recorded his 7,000 foot altitude gain, pinpointed his landing beside his car (where cold beer awaited him). No doubt a long, difficult task.

(*I'm a Heineken Lover)

MATTHEW H. WAGNER Contestant No. 25

Sworn: I, Matthew H. Wagner, on this the nineteenth day of July, in the year of our Lord nineteen hundred and eighty five, did launch from Chelan Butte without a launch time (or assistance). I did know several thermals—yep, verily...and found them to be chilly.

Then my instincts spake to me and they said, "Land by the river, my son."

And so it was. And I was in the jacuzzi with a cold beer in hand. And a date by eight.

(In Walter Cronkite's voice...) And that's the way it is, July 19, 1985.



1985. You probably felt you knew that. Most feel so. And for this year, you are right. But are you aware that he was National Champion last year, too? Note the subtle difference in spelling. Someone else was Nationals Champion last year. Confused?

Let's describe three categories of top pilots: First is the winner of one of the classes at any given U. S. Nationals competition. In 1984, Terry Wilkins was the Nationals



Champion of Sporting Class; Rich Pfeiffer was the Nationals Champion of World Class. Neither was National Champion.

Second is a relatively simple category, the (Top left) Rick Rawlings; (top right) Gerry Uchtyl; (above) Harold Locke; (below) all three winners of each class — Rawlings, Wolwode, Sauer, Uchtyl, Case, Pendry.



No. One ranked pilot. Rawlings was this pilot for 1984, and still is. Simply, this pilot is that successful pilot with the highest ranking in the Competition Points System (C.P.S.). But he is not called National Champion or Nationals Champion. The ranking system is used to pick the World Team, and involves a pilot's best three meets over a two year period. The evaluation period ends on December 31st for that year and the prior calendar year. It holds for the following calendar year. Formerly this took the best six meets over a three year period.

Last is National Champion. This pilot may not win the U.S. Nationals contest. He is the pilot with the highest total of C.P.S. points in his/her best three meets including the last completed Nationals contest, and up until the same event this year. This is not a calendar year as is the ranking system. Rawlings was the National Champion in 1983 (he did not win that Nationals), and again in 1985 (he did this time). Stew Smith was the National Champion in 1984 (he did not win the Nationals). This description of National Champion began in 1983 with the Dunlap Nationals. The deserving pilot is awarded that title after the Nationals meet, holding it until the next Nationals. Okay?

What is really neat this year is that Rick Rawlings is all three guys. What a pilot! Rawlings is still No. One ranked, as he was before the meet. He has the highest total of C.P.S. points for a two year period, though the calendar year upon which this is based does not end till December 31st. He also won the Nationals in World Class, so he has that title.

And he is the National Champion—the official one—until the Nationals of 1986. He is not, however, the Nationals Champion of Sporting Class.

GERRY UCHTYL

Rawlings got a lot of the marbles after that famous dust settled, but he did not get them all. He cannot win the one other significant title... Nationals Champion of Sporting Class. Kudos for that award go to Gerry Uchtyl (pronounced you'-ke-till).

Uchtyl considers the Chelan Butte his "home site" even though he spends most of his year in the east. He should call it home. For his superior achievements, Gerry has his name on the town's monument to hang glider cross country flying. And to many of the knowledgeable local pilots, Uchtyl is hot stuff and a pilot to watch carefully. He proved the accuracy of those feelings by gaining and maintaining a lead in Sporting Class so assuredly that on the last day of the meet, he did not even have to fly to win Sporting Class. His comment? "There are four other guys ahead of me!" And off he flew. He was after the World Class pilots whose raw scores were better than his. He's that kind of determined pilot.

On behalf of all American pilots, Whole Air extends a very hearty congratulations to both Uchtyl and Rawlings, Champions both, however the title is actually described.

When the dust settled, these two were our winners, in many senses of the word.

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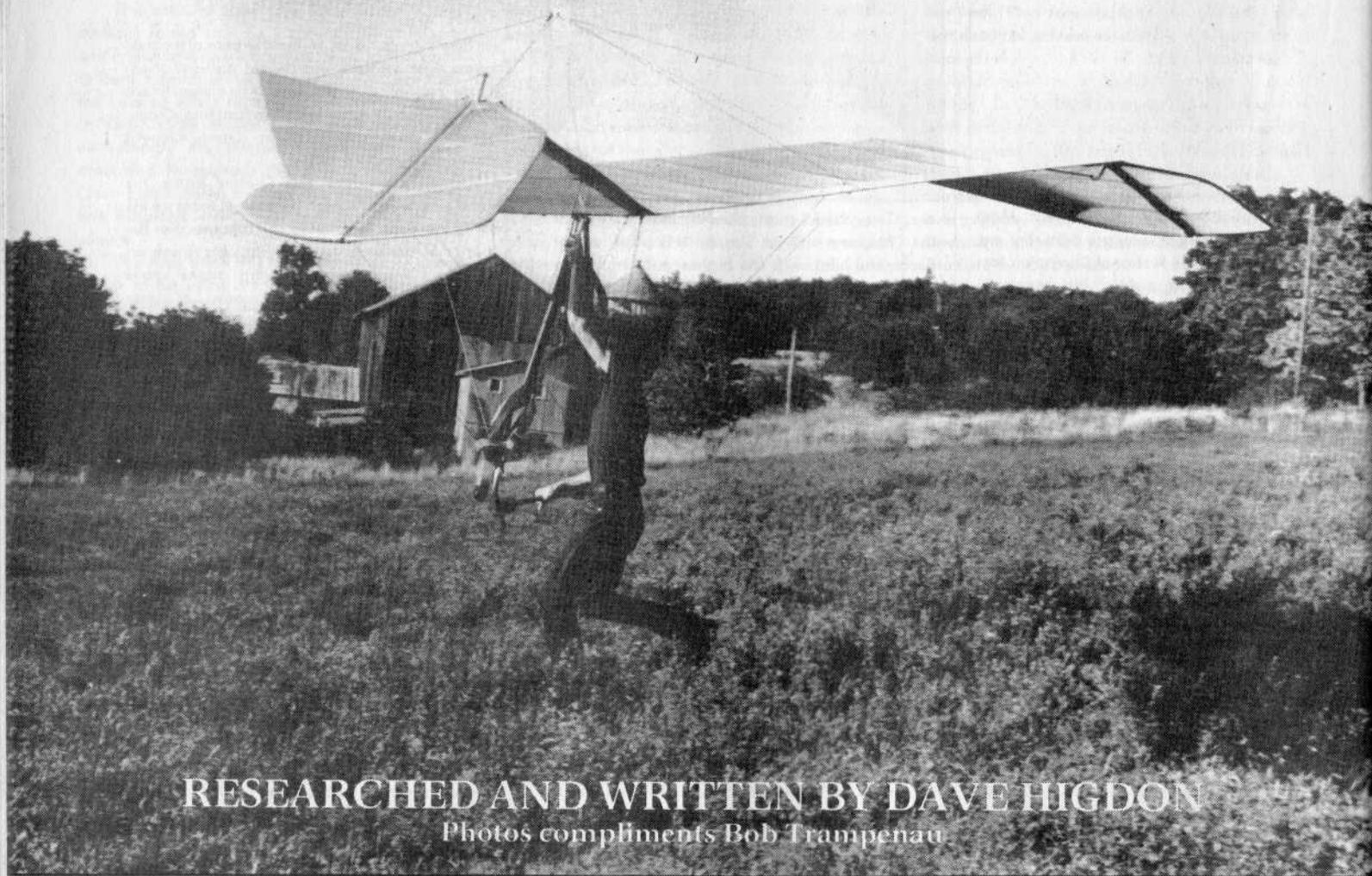
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SEEDWINGS' BOB TRAMPENAU



RESEARCHED AND WRITTEN BY DAVE HIGDON
Photos compliments Bob Trampenau

photo: Seedwings / Bob Trampenau

WHEN YOU ASK Bob Trampenau the open-ended question about what makes him tick, the always-effusive designer barely pauses for a breath before answering. He needs little advance thought before launching into an answer. In fact, he probably pauses more before launching one of his much-copied Sensor 510 gliders into the warm lift of a California thermal than he takes prior to committing his words to print.

Imprudent? Not hardly.

Trampenau answers prudently yet quickly thanks to plenty of stored knowledge.

"Actually, I've learned quite a bit about the whole creative process," the founder of Seedwings answers, seemingly happy for the opportunity to reveal the results of his thoughts.

"To put it simply, it's the art of combining of scientific techniques to the intuitive imagination," he continues in a matter-of-fact manner.

"In other words, I use the mind's abilities about vision and discovery to realize the goals I'm after. Then I work toward those goals in a rational and logical way."



He thinks it, therefore, he achieves it. Rather existentialist.

An example seems in order here.

Trampenau's latest success, the Sensor 510-B 160 VG, came about as a result of images he has formed in his mind over ten years. "Visualizing the long term results helps me direct precise trial-and-error experimentation," he explained. The resulting machine went from conception to certification with a minimum of deviation, he says, thanks to combining two different abilities of the mind. Trampenau: "I'm an artist, a craftsman, and a technician, either separately, or all together whichever the situation requires."

But it wasn't always that way, he cautions. "When I came to California in the early '70s, I had only \$100 in my pocket to start with."

Uncharacteristically, he's selling himself a little bit short. Trampenau also brought with him numerous attributes which would help him realize his goal—building and flying sailplanes and hot-performing foot-launched gliders. "I knew I could build the best," he said. "I've had a keen sense of how to improve the rogallo wing."

Trampenau grew up around soaring, coming, as he did, from the hills around Elmira,

New York, Schweizer sailplane country. His father was Air Force and glider instructor, and an impeccable craftsman in everything including flying machines. The two spent much time sharing a cockpit when Trampenau reached an age where his feet could reach the rudder pedals. Both the elder Trampenau and his son involved themselves in home-building sailplanes, partly an outgrowth of young Trampenau's skills designing and building free flight and indoor model aircraft.

These were the building blocks with which Bob Trampenau earnestly sought to construct foot-launchable high-performance wings, like his evolutionary Sunseed. Sunseed displayed remarkable flying characteristics. But construction and set-up demands hampered Sunseed's practicality. Meanwhile, out in California, a non-evolutionary revolution was underway.

Young men and women sought freedom from gravity by copying and flying a 1950s space-age descent device popularly known as the Rogallo wing.

Easier to set up and fold than rigid wings, Trampenau says "that there was a real opportunity to explore the potential of that basic modular wing design."

Upon completion of college, hang gliding completely captured Bob Trampenau. "The very first Sensors were an attempt to bring some serious performance advances to the Rogallo."

From the very first Sensor 1 in 1976, Trampenau's gliders carried a now-familiar section, the elliptical tip. Somewhat similar to Seagull gliders of the day, Sensor's compound leading edge curves were bent into the tubing.

But not exactly working as hoped, Sensor 1 saw life only as the first step toward Trampenau's ultimate goal. The next few years saw many other Sensors with evolutionary steps which, since they worked, found their way into the main stream of today's hang gliding industry.

Among his firsts were sails using computer-generated and experimentally developed precambered rigid battens using trailing edge reflex lines. These ideas add to those trademark elliptical tips, now constructed of a fiberglass shaft fitted into a socket at the end of the leading edge. The Sensor 210. And that was back in '76 and '77!

Other firsts Seedwing Sensors claimed were short-cambered keel pockets, and fully enclosed cross spars and keels. "I was test flying a Sensor 210B at the Mesa in Santa Barbara in 1976 which had the cross tube and keel inside a greatly enlarged leading edge pocket well before a wing like this ever showed up anywhere else," says Trampenau in a more typical moment of self promotion. The sails on the Sensor 411 carried double surface on about 70% of the wing, and employed half ribs.

In the primeval days of California hang gliding, idea borrowing occurred shamelessly. Occasionally, an entire planform of one manufacturer would show up as another company's "new" wing sporting only cosmetic "improvements."

But not all the ideas pouring forth from

Trampenau's shop enjoyed the wide acceptance of metal ribs, enclosed keel pockets, or several of Trampenau's other ideas. Take those familiar tips, for example.

"An elliptical swept back tip is the most efficient a wing can have," the designer explained. "But all sorts of other ideas were floating around on gliders, like truncated tips, or squared droop tips, or even round, unsupported tips," Trampenau detailed.

"The idea I hit on provided the type of performance I wanted and helped me solve some other design problems at the same time."

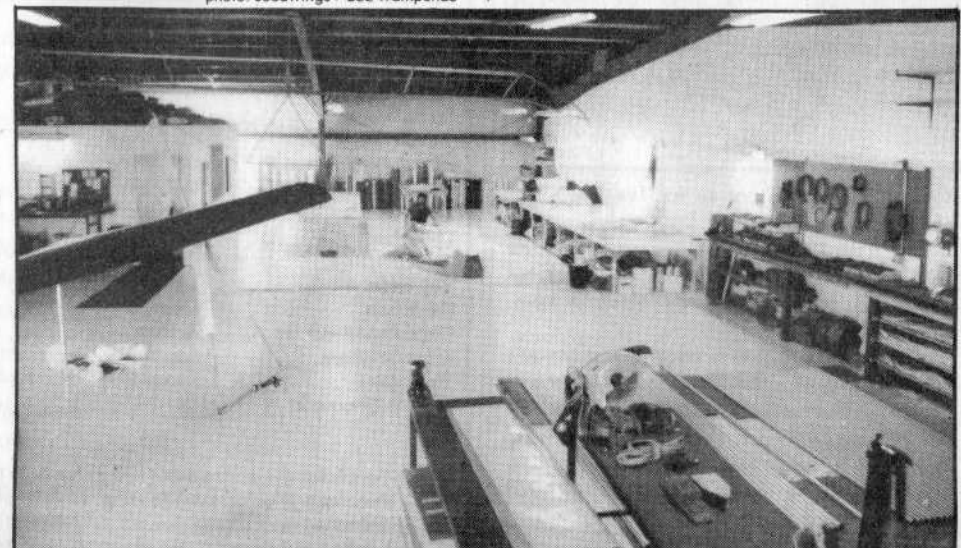
Case in point. Sail tension, which aids straight-line performance, runs counter to sail flexibility and shifting, essential characteristics for a glider that turns via shifts in the center of gravity. While some designers depended on other methods to solve the tension problem, Trampenau hit on tapered fiberglass rods to achieve a solution to both perspectives.

"The sail planform and tip rod work together, keeping the sail fully tensioned in a way no other glider used," he said. "At the same time, the tip rotating about its leading edge let the trailing edge flex for the glider to turn. And, of course, the glider has that efficient elliptical shape—the best of both worlds."

Those early years of experimental gliders resulted in a certified high performance and easy to fly Sensor 210E-183, which happened to use a mylar leading edge sheet that wrapped about the leading edge spar. "The Sensor 210's handling was a dream to fly, although it was frequently misjudged at the time by those who had something else to promote," claims Trampenau. "The Sensor 210's winning performance in the Manufacturer's League of 1980 set the stage of competition that the Sensor gliders have played in ever since then."

In 1981, after six years of grass roots progress, and production of 125 certified Sensor 210E's, Seedwings unveiled the Sensor 510. What started as an evolution turned into a revolution. First, Trampenau enclosed the cross spar inside a nearly 70% double surface. Second, he kept the tips, and added flexible shafts to all batten sections aft of the double-surface seam, further employing trailing edge reflex lines.

photo: Seedwings / Bob Trampenau



"And we incorporated our latest experimentally developed, exclusive computer-generated airfoil," explained the designer. "Through imagination and study, I came up with the picture of what I wanted, then used the tools of science to develop that idea."

But the Sensor 510 was slow to realize broad pilot acceptance. Thanks to Trampenau's image as a somewhat eclectic personality, many people would not try the ship. And running a very small design/manufacturing shop limited his ability to fund a team effort or provide many competition pilots with Sensors to fly.

Add to this the very real situation that the Sensors, being new and different than the rest, were wrongly labeled by some others. The uphill battle to prove the 510 was underway.

For the early part of the 510s history, UP Comets dominated sales, sites, competition, you name it. Thanks to Ultralite Products' size and the Comet itself, almost any advanced novice could fly the ship.

But Trampenau sought the more lofty heights of performance improvements. So, rather than compromise the 510, Trampenau found ways to continue the process of refinement. Then his certified brain child won the 1981 Nationals with Rich Pfeiffer and Jeff Burnett (first and second, respectively) flying 510s, breaking more than a year of Comet dominance. Slowly, methodically, Seedwings steadily improved the 510 breed until Trampenau had the original 180 square-foot model and a certified companion 165 for smaller pilots, like Stu Smith, to fling around the sky.

And as recreational pilots discovered the 510's impressive sink rate, broad speed range, and long glide ratio, Trampenau's effort went into gearing up production, and sewing once-contracted sails.

Then came the VG—Variable Geometry. Other companies previously experimented with systems to let pilots change sail tension and airframe geometry in flight. But the systems never quite matured into consumer items.

Thus, Seedwings found another chance to claim a first.

This year the Sensor 510-B 160 VG was

The new Seedwings factory.

certified, the sport's first production system for altering sail tension. Trampenau's addition of a high strength reinforcement to the fragile trailing edge illustrates the care he puts in to the sport, and continued his line of firsts.

Critics with hang gliding have belabored the attention devoted high performance. True, Seedwings does not build a beginner/novice wing. Trampenau's goal is to fly and build rigid-wing performance in rogallo type convenience.

And a continuation of superwing design work may be going on right now at Trampenau's Santa Barbara address, with production plans at least two years away. "What the success of the Sensor has done is give me the manufacturing base to spend time again doing what I love best," Trampenau expressed. "Design and test new and better personal soaring wings.

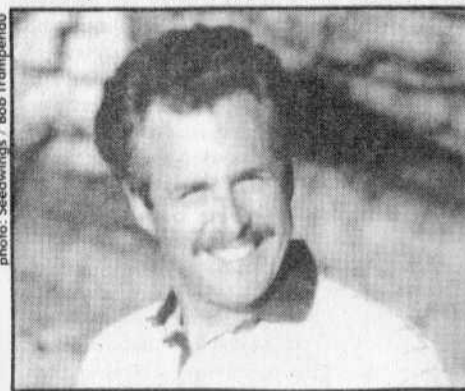
The New York expatriot feels it is time to dig in to his roots, working to give the world simple, light, performing sailplanes.

"I've demonstrated high L/Ds with rogallas (the Sensor), and I think we're approaching 15:1," he said. "But that's getting close to the limits for weight shift, out-in-the-breeze, foot-launched and landed gliders.

As Bob Trampenau's voice trails off, you can almost hear the thought process at work, drawing from a deep well of inner strength to conceptualize the machine.

Have no doubt. If Bob Trampenau's past history holds any clues to the future, it is that he will keep forging ahead and will keep soaring at the top of his priorities.

He remains loyal, however, to the service of his product and the evolution of foot-launched wings. "I am committed to the business and I'm very excited about our sport," an again-energized Trampenau claims. "I've always been willing to make what I believe is the way in which hang gliders should be build,



now and in the future—so far I've been just about right on."

He is confident in his ability to produce the best ships available. He also feels that his effort will again attract the ultimate compliment—imitation.

Little doubt exists about Trampenau's potential impact, however, since his current impact speaks for itself each time a Sensor—or any other curved-tip metal-ribbed double-surfaced wing takes to the sky.

Hang gliding can only be the better for it and for Bob Trampenau's migration west.

RESULTS FROM TWO OWENS VALLEY MEETS

George Worthington Memorial Open
Don Partridge Memorial Classic



Rainer Scholl (W. Germ.) with Jim Lee Zia shell on his Pacific Wings Racing Express. Meet Director Rick Masters on nose.

1985 OWENS VALLEY CROSS COUNTRY CHAMPIONSHIP

Final Standings

Pilot	Country	1st Half	2nd Half	Total Miles	Final Rank
Rick Rawlings	California	527.0	638.0	1165.0	1
Masahiro Minegishi	JAPAN	652.0	611.5	1263.5	2
Yoshikatsu Tonomura	JAPAN	374.5	566.5	941.0	3
Jim Zeiset	Colorado	656.0	562.0	1218.0	4
Jim Lee	New Mexico	442.5	525.5	968.0	5
Ian Huss	Colorado	402.5	452.5	855.0	6
Woody Woodruff	California	529.0	419.0	948.0	7
Naomi Fujita	JAPAN	412.0	417.0	829.0	8
Chuck Jones	California	308.0	388.0	646.0	9
Bill Richardson	Arizona	270.0	380.5	650.5	10
Larry Smith	California	406.0	375.5	781.5	11
Steve Koji	California	383.5	363.5	747.0	12
Don Gordon	California	555.0	346.0	901.0	13
Rainer Scholl	W GERMANY	185.5	323.0	508.5	14
Cindy Drozda	Colorado	350.5	287.0	637.5	15
Glen Volk	California	400.0	259.5	659.5	16
Toshihiro Futagami	JAPAN	404.5	246.5	651.0	17
Tohru Ikenoue	JAPAN	338.5	182.0	520.5	18
Steve Luna	California	520.0	0.0	520.0	—
Paul Robinson	California	491.5	0.0	491.5	—
Mike Eberhardt	Georgia	416.5	0.0	416.5	—
Terry Wilkins	California	409.0	0.0	409.0	—
Chip Henly	California	347.0	0.0	347.0	—
Joe Kutschka	California	331.0	0.0	331.0	—
Yuji Endo	JAPAN	239.5	0.0	239.0	—
Steve Lee	Georgia	222.5	0.0	222.5	—
Dana Roosevelt	Arizona	198.0	0.0	198.0	—
Mike Grisham	California	169.5	0.0	169.5	—
Tip Rogers	Tennessee	102.0	0.0	102.0	—
Marcos Chamoun	BRAZIL	33.0	0.0	33.0	—

NOTE: Totals for the entire meet are given only to indicate mileage flown. Pilots started the second half on an even footing. Only pilots who are finalists in the second half are awarded final scores.

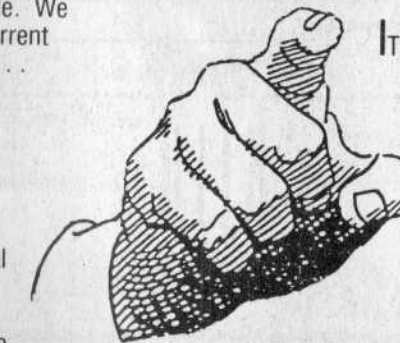
WE'D LIKE TO ASK JUST A FEW QUESTIONS OF OUR VERY BEST SOURCE... ... YOU!

WE PLAN TO be as brief as possible. We don't plan to waste your time. But the current "State of Affairs" in our sport demands...
...that we find out what you think.
...that we are well prepared to take the appropriate steps to assure our own healthy operation.

YES, IT'S IMPORTANT!

And yes, your input is absolutely vital to us. Please do answer all questions.

Yes, it's completely FREE to you, asking only for a few minutes of your time, and a little effort to prepare this page for mailing.



IT'S NOT OFTEN enough that we interrupt our busy schedule to ask one of our most valuable "assets," what YOU think about some crucial subjects.

In this survey, the first of several in a series, you will help us correct our lack of information.

We hope you'll respond. Your sport and our business need your thoughts. Thank you.

Tear along fold by holding spine.

- Are you **currently** a paid-up member of USHGA? Yes _____ No _____
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- Do you have a feel for what percentage of flyers in your area are not USHGA members?
_____ Yes, _____ % _____ No idea.
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...our coverage of competition _____?
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WELTMEISTERSCHAFTS

Written and Edited by Gib Eggen, D.O.

photo: Willi Tacke

THE 1985 WORLD CHAMPIONSHIPS were held in Kossen, Austria from May 25th till June 6th this year. Eleven out of thirteen days were flyable. Four groups of 51-56 pilots each began the contest, with a cut to 40 finalists made after six rounds per group were completed (Group 3 made only five). Over 48,000 kilometers were flown by 210 pilots, and the general consensus of all the top pilots was that this was the best competition they had ever flown in, with respect to weather conditions and cross-country tasks chosen.

The success of the meet was largely attributable to Dr. Jo Bathmann, Deputy Director, and the man who laid out the tasks. (Bathmann is a top pilot himself, flying 202 km in 1983. During this meet he flew 150 km and 166 km triangles, and now holds the Official FAI Triangle Course World Record. Whole Air will present an article by Bathmann in a future issue, dealing with the accuracy of weather forecasting relative to the achievement of long distance flights.)

(Below) Dr. Jo Bathmann, World Meet Deputy Director.



photo: Frigga Bausenwein

Continued on Page 36

WELTMEISTERSCHAFTS

THESE TABLES OFFER the final scores for individuals and teams at the 5th running of the World Meet or Weltmeisterschaft.

Pre-meet European publicity stories indicated 224 pilots would compete representing 43 nations. This impressive total was not quite the final figures indicated in the results booklet that was distributed. Nevertheless, it is significant that the participation was so strong. Compare the numbers with the 1985 U. S. Nationals, where 67 registered pilots competed.

The results booklet listed 204 pilots representing 33 nations. Of these, 30 were teams from countries that competed directly, while three more were considered "guests," they being the Republic of China, Columbia, and Morocco.

The 204 original pilots were divided into four groups of about 51 pilots each. When the cut was made to finalists, the top ten of each group were chosen with an extra two pilots allocated. (No explanation was offered for the extra two.) This resulted in a finalist count of 42 pilots. See Gib Eggen's story about the Pfeiffer fiasco that at one time entertained the cut

going to the top thirteen placers.

Other facts and figures that were listed in the results booklet included final kilometerages flown, which we'll translate to mileages for those that haven't metricized themselves yet. Also, the organizers kept track of launch totals and total hours logged, though this last statistic is approximated. Nevertheless, we feel you might find this interesting. We hope to have not made errors translating some statistics and other information from German, but readers who may be further aware than the editors are asked to excuse errata resulting from this effort.

WORLD MEET FINAL RESULTS NATIONAL TEAMS

Rank	Team	Final Score
1	Great Britain	5191
2	Australia	4965
3	Canada	4530
4	U.S.A.	4401
5	Germany	3398
6	France	2788
7	Norway	2660
8	Mexico	2375
9	Japan	2149
10	Italy	2124
11	Switzerland	1941
12	Spain	1896
13	South Africa	1781
14	Austria	1704
15	Brazil	1690
16	Denmark	1616
17	Yugoslavia	1290
18	New Zealand	1009
19	Sweden	981
20	CSSR	813
21	Belgium	777
22	Hungary	770
23	Finland	765
24	Ireland	698
25	Portugal	609
26	Israel	414
27	Furstent, Liechtenstein	243
28	Poland	151
29	Greece	111
30	Holland	101

GUESTS

1	Republic of China	509
2	Columbia	237
3	Morocco	226



(Above) The winning International Team of Great Britain. (Below) The World Team from the USA. The sign held by the Austrian boy says "The United States of America." (Opposing page) World Champion and British team member, John Pendry.



FINAL STANDINGS

WM
'85



KÖSSEN
TIROL

Total Launches	1,400
(estimated) Hours Flown	2,000
Total Kilometers Flown in Preliminary	37,424
Total Miles Flown in Preliminary	23,254
Total Pilots in Preliminary	204
Average Kms/Mi Per Pilot	183/114
Total Kilometers Flown in Finals	11,479
Total Miles Flown in Finals	7,133
Grand Total Kilometers Flown	48,903
Grand Total Miles Flown	30,387
Average Kms/Mi Per Finalist	273/170

One interesting comparison between the World Meet figures and those from the U.S. Nationals is that American competitors flew an average of over 280 miles (451 kilometers) each, when you figure backwards from an average daily performance of over 40 miles (estimated @ 42+ miles) per pilot per day times seven rounds. Of course, top placing pilots in each meet flew considerably more than these averages indicate.

WORLD MEET FINAL RESULTS INDIVIDUALS

Rank	Name	Nationality	Final Score
1	Pendry, John	Great Britain	1392
2	Moyes, Stephen	Australia	1379
3	Haney, Randy	Canada	1288
4	Calvert, Bob	Great Britain	1238
5	Duncan, Rick	Australia	1222
6	Slater, Graham	Great Britain	1220
7	Thevenot, Gerard	France	1192
8	Carnet, Michael	Great Britain	1182
9	Blenkinsop, Stefan	Australia	1153
10	Bennet, Mark	U.S.A.	1120
11	Jarmann, Ian	Australia	1107
12	Miller, Don	Canada	1091
13	Ziege, Detlev	Germany	1073
14	Rawlings, Rick	U.S.A.	1065
15	Sinclair, Robbie	Canada	1056
16	Cirla, Marce	Italy	1053
17	Heinelt, Offried	Germany	1044
18	Lothe, Jorn Erik	Norway	1035
19	Ikenoue, Tohru	Japan	1020
20	Bulger, Chris	U.S.A.	990
21	Gotes, Jose	Mexico	987
22	Fjeld, Per Espen	Norway	977
23	Tudor, Larry	U.S.A.	976
24	Schotola, Olin	Switzerland	947
25	Zeyer, Jochen	Germany	905
26	Williams, Huw	South Africa	901
27	Bamford, Jim	Canada	898
28	Martiarena, Juan	Spain	891
29	Burghauser, Erich	Austria	875
30	Fauchier, Jean Francois	France	860
31	Kupchanko, Dean	Canada	857
32	Scott, Danny	Australia	848
33	Carr, Johnny	Great Britain	831
34	Arkwright, Darren	Great Britain	823
35	Jensen, Palle Juui	Denmark	818
35	Coelho, Paolo	Brazil	818
37	Gutierrez, Miguel	Mexico	797
38	Kells, Rob	U.S.A.	795
39	Bailey, Robert	Great Britain	751
40	Bosch, Santi Font	Spain	702
41	Pestotnik, Borut	Yugoslavia	671
42	Meeney, Dermont	Ireland	304



Continued from Page 33

ARDUOUS TASKS

All tasks were open ended and not timed, to allow the pilots to fly as far as possible each day. The conditions were so good consistently throughout the meet that it was turning into an "iron man" contest, with the pilots wishing for a day of rest. Those who could stay up the longest were winning; flight times were averaging over six hours per day, sometimes reaching eight. The pilots who had not only the flying skills but the stamina (as true sporting events?) to think clearly for such a long and arduous flight. These successful flyers who made the correct decisions throughout the flights were the winners. This meet truly separated the pilots who could not think in the air and use the local conditions to their advantage from those who could.

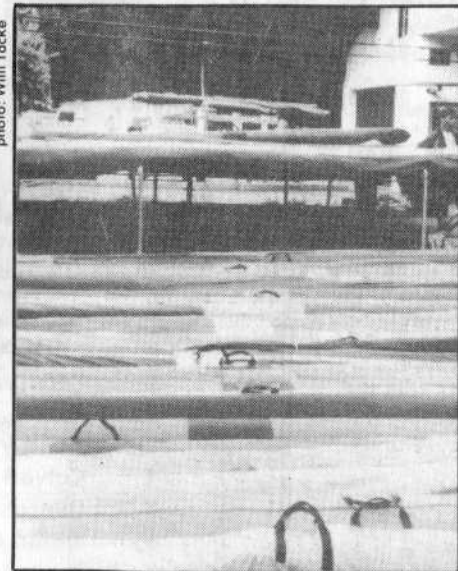
For instance, one might have to stop, wait, and hang out at a peak or ridge, waiting for conditions ahead to improve. Patience was the name of the game, and converting the American pilots to this from their normal "racing mode," (according to coach Brian Milton), was like "holding back a bunch of thoroughbreds."

The courses covered valley after valley

WM '85



photo: Willi Tacke



after valley, with many convergence zones and "dead zones" alike. Wind directions were different in every valley, frequently changing during the course of the day.

Coring lee side thermals was frequently necessary, something many pilots had to get used to, because doing so in their countries under different geographic conditions would be too dangerous. It was not a "piece of cake" here either, as pilots sometimes found themselves plummeting out of control, or going into inadvertent past-90 degree wingovers. Still, no one was seriously injured throughout the meet, another point in its favor.

Only one day had open distance for its task, with pilots flying up to 105 kilometers. Contrast this with the other tasks, all doglegs or triangles, large numbers of them. An example is John Pendry's flight of 189 kilometers—100 "klicks" down the Pinzgau (dubbed the "racing valley" by the American pilots), then double back 150° for another 60 klicks, and add two 16 kilometer triangles to it! (By point of reference, in the opinion of this author among others, flying 100 kilometers here is very roughly equivalent to flying 100 miles in the Western U.S.)

EGGEN'S OPINION ON THE U.S. COMPETITION SYSTEM

FOR FUTURE INTERNATIONAL COMPETITIONS, I would hope the USA would again use Brian Milton as their Team Leader, and Jeff Burnett as a Team Leader/Pilot also. The combination was excellent this year, comprising two untiring, knowledgeable, and experienced individuals who worked very hard for the American team. I know of no two people who are better suited for the job.

Milton has made several, carefully-compiled suggestions to the American Competition Committee with the goal of bringing the U. S. team into reach of the World Meet team and individual trophies. I concur with Milton that the process for selecting a world class team must be changed if the U. S. is to win.

It all comes down to this: What is the purpose of the U. S. Competition System? Is it to produce the best pilot in America? Or is it to produce the best pilot of a particular glider? Or is it—as both Milton and I feel—to win the World Championships and produce an individual gold medalist?

U. S. pilots must fly abroad for experience. The current system is totally isolationary and produces in-breeding, which is a definite weakness. The U. S. is not an elite bastion of hang gliding, that all other pilots of the world need to emulate. On the contrary, competition-wise the U. S. is behind many other parts of the world.

Recently, the USHGA Competitions Committee reversed the rules published in the March issue of *Hang Gliding*, to eliminate points earned abroad as counting for a U. S. National ranking. This ruling was made at a time when no system in America is aimed at developing a world championship team. For the purposes of a national ranking only, this is satisfactory. But a developing elite group of pilots, sponsored by money generated outside of the USHGA, must fly abroad for experience and have these competition points counted in some fashion, if the U. S. is to be Number One. We will not win without international experience. By the same token, a team cannot be picked based on a national points system alone.

Internationally, the U. S. is now at a crossroads, and the next six months will be a very crucial time period. We can continue with our current system and be left behind in the dust, or we can change our goals and fly above all the rest, where we should be. We have the individual pilots who can achieve world-class victory!

Will we help them?

—Gib Eggen, D.O.

FOUR LAUNCH SITES USED

This meet proved, despite pre-meet predictions, that multiple launch sites could successfully be used simultaneously. Four were used, (Kossen, Prost Alm, Hohe Salve, and Zillertal) one by each of the four groups, each on a different mountain. Each site had a choice of three to five different tasks each day, picked by the local site marshall. Dr. Jo Bathmann assisted in picking the tasks each day in cooperation with meteorologist, Dr. Herman Trimmel (weather man for the Austrian National Sailplane Team). Using a meteorological point system developed by Manfred Kreipl (see *Whole Air*, June 1985) and Gaudenz Truog, it was predicted how many kilometers a hang glider pilot can fly on any certain day. Tasks for each site were very well chosen, and pilots flew the expected distances each day within ten kilometers!

FORECASTING AND TASK SELECTION

Truog first developed the idea of forecasting tasks through a weather checklist. Kreipl asked him if he could take his idea and modify it into different systems for the Alps, the flatlands of Germany (where Kreipl is the expert), and for hang gliders, all of which have different requirements.

For example, hang gliders need more information from more weather stations over a smaller area of prediction than sailplanes. Kreipl has done this and published one version for sailplanes in *Aerocourier* already, but will test it further prior to publishing an equivalent for hang glider usage.

photo: Frigga Bausenwein



(Above) One of the four launches simultaneously used in the '85 World Meet, in beautiful Austria. (Below right) The new Hermes from La Mouette, a variation on the new "enclosed keel pocket" theme. (Below, left) The Moyes GTR with Kevlar/Dacron sail.

photo: Gib Eggen, D.O.

photo: Frigga Bausenwein

NEW EQUIPMENT

Equipment-wise, nothing really "new" showed at the Weltmeisterschafts, other than the five or six different HP copies made in Europe already. The U.S. team used streamlined helmets, most competitors used Keller-type harnesses, and Moyes' glider was different due to its sail materials.

The upper surface was composed of Kevlar, which is light, strong, and has low stretch. He used surfkote which molds well around the ribs at the front of the sail, and "normal" cloth for the undersurface, to provide better handling.

PILOT COMMENTARIES

During the course of the meet, Eggen managed to interview several pilots, extracts of which follow:

Steve Moyes

"This competition definitely proved that the use of different launch sites simultaneously will work. It was well organized, the weather was great, and flying so good that the meet was exhausting.

"The International Jury votes only for national interests and should probably be replaced by people not on a team.

"This meet was not as intensive as a one-on-one competition, but it was fairly dangerous because most pilots would "mark" the best ones. I, and Larry Tudor, would have ten or more other pilots surrounding me right after takeoff, turning in different directions. It would sometimes take me fifteen minutes to (stay

alive and) get up over launch.

"Hang gliding in Australia and Europe is growing. I believe it has stabilized in America because the schools charge too much money for not enough effort. They need more instructors that don't want so much money, but that are in the sport to fly and develop it."

Rich Pfeiffer

After a mis-understanding, Pfeiffer lost points for an excellent flight that carried him two kilometers into Germany (out of the host country of Austria), even though he out-flew his opponent, John Pendry. In spite of this sharp disappointment, Pfeiffer was a team man, which contrasts with his reputation of ruthlessly aggressive flying and no-holds barred actions to win individually. His flying and character throughout the competition was that of a champion devoted to a team win. Pfeiffer had the following ideas about the meet:

"I could make an FAI appeal for my preliminary points at the competition new, but this would only confuse the Weltmeisterschaft picture of Pendry vs. Moyes." (Reinstating Pfeiffer's points could influence who would be World Champion). "I'll appeal locally at the USA for my competition points instead.

"International juries must be stopped. The members will always vote in national interest and not fairly. Perhaps a smaller panel with people not involved in the issue at questions would be better.

Continued on Page 39

FURTHER EXAMINATION SHOWS grossly inconsistent interpretation and sanctioned breaking of the rules by the International Jury. The same arguments made by the U. S. Team in the attempt to restore Pfeiffer's lost points, were used by the British at a later date to prevent the inclusion of pilots through 13th place-in each preliminary group. The argument was, however, accepted when the British threatened to leave the meet.

Still later, Randy Haney had points reinstated two days after his flight when he produced a second roll of film to substantiate his route. Can you imagine this happening in a sailplane competition? International politics were too involved. It was hoped that politics could be separated from the meet, and an oath was sworn at the beginning to that effect, but it was not so.

What happened is similar to the global cold war situation. Everyone knows it is foolish, but no one knows how to stop it. If international juries worked, we would not have a



cold war, and all the problems with the rules and their interpretation / enforcement in the meet would not have arisen out of national interests.

Competitions are sporting events, safer ways for man to work out his aggressions than war. I would like to think that, ideally, sport is a way to do this without political interference and complications. This World Meet was absolutely superb in all respects but this one.

Fortunately, the organizers and international jury at Kossen looked so foolish with respect to their rule enforcements/creations that the international jury has been scrapped, to be replaced with a three-person jury, made up of Thomas Bosshard (Switzerland), Ann Welch (Britain), and a third party as yet un-named.

Let us hope that the next World Meet will have these and other safeguards to insure that the true abilities of all pilots are represented.

Rob Kells' Comments on the World Team

(Editor's Note: The following is excerpted with permission from a letter Kells sent to involved and interested parties. Additional information was inserted where necessary to further clarify the situation. These notes are presented in italics, and may be preceded with the word, "NOTE:")

IT SEEMS THAT if we are ever to win World Championship Gold, either team or individual, we had better be learning from our mistakes, so as to not make the same ones twice.

We had a strong team, as good or better equipment as any other team, and we lost! I think first that we must all come to the realization that other countries have excellent pilots.

The competition is so tough that we cannot beat them unless we fly our best and make less mistakes than they do. If in the next meet all things remain as they did in Kossen, we will lose again! Further, we must start working immediately on the next one.

To win the next Weltmeisterschaft (NOTE: the sixth such--this time slated for Australia), I have some suggestions which follow.

WORLD TEAM THOUGHTS

Start now on fund raising. Some ideas along this line include allowing Brian Milton to follow through on his offer to approach corporate and airline entities. This, however, should not automatically qualify Milton as Team Leader, a choice that should be made by the team members selected.

Start logistical planning now. Make it a high priority to send as many of our top pilots as possible to the Buffalo Meet (NOTE:



Australia's major winter meet, the site of which is the probable choice for the World Meet location). Attending the meet will allow possible competitors to gain knowledge of the site.

Rethink the jobs of Team Leader and Assistant Team Leader. The Team Leader position is one that is best suited to a "lawyer" type individual, who has proven his ability to deal with political organizations and to interpret rules. The atmosphere at the World Meets are very political. The Assistant Team Leader should be chosen by the team and be primarily responsible for taking over on-site logistics, organizing the pilot's activities, choosing the site and tasks for practice, among other jobs. The Assistant Team Leader fills the role of "coach," and is the person that does most of what we have considered in the past to be the Team Leader's responsibilities.

On team selection itself, I feel we should take the top eight pilots directly from the points system, and let them have one vote each on the alternate, who would compete in the case of injury to one of the eight, or fly when other important needs dictate. (NOTE: This is in sharp contrast to Milton's suggestions which promote the idea of a hand-picked team evaluated specifically for the pilots' abilities to fly competitively in foreign meets. These selected pilots may not be the top eight in the points system. Kells makes a couple persuasive points against such a selection process, including the difficulty of choosing who will make such selections.) I know that some think it would be better to take the top six and let them choose

the seventh and eighth pilots (plus alternate).

MISTAKES

I see some elemental mistakes that I feel prevented a better U.S. performance. Firstly, the cut was a bad idea which caused divisiveness among team members and was detrimental to team spirit. (NOTE: Kells reports that the British Team, which first used this system, has abandoned it.)

Secondly, no team representatives were at a crucial meeting, at which information was passed along ultimately causing Pfeiffer's zero score (a strategic loss to the team). All meetings of any kind at future meets should be considered mandatory (NOTE: The one in question was not indicated to be such).

Thirdly, two cameras should be required for all pilots. Points were lost on at least two occasions. Also, camera usage in practice would help a great deal.

If it is still required by the meet organizers, all gliders that are taken to the meet should be certified before the team leaves, without exception. (NOTE: A great deal of time and energy was expended by team members to certify the Sensor 510 B while at the meet.)

Lastly, do not over-practice; it is important not to peak too early. All indications were that we peaked in the preliminaries this year and were all somewhat expended by the time the finals began. (NOTE: The team members flew or travelled all but three of twenty six days before the finals started.) Getting to the site early is most valuable.

In closing I feel we should consider hosting the Weltmeisterschafts in 1989. On our home soil, we would smoke 'em.

Best of lift.

-Rob Kells,
1985 World Team pilot

Continued from Page 37

"Any rule changes should be made by handing each pilot the written change with his pilot report in the morning before the next flight, or be in the rulebook already.

"My not being in the finals is unfair to the winner now; it takes some of the validation away from him and detracts from the validation of the meet." (Pfeiffer never lost to Pendry, beating him five out of six days and tying him once in the preliminaries.)

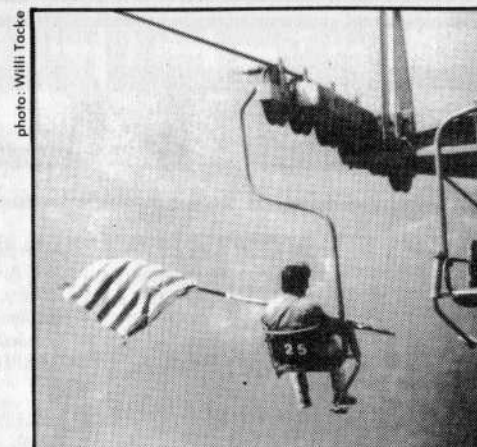
"Other (than the above comments), the organization and task calling was superb, and done by excellent pilots, particularly Jo Bathmann.

"The most important issue is for pilots to win in the air, no where else."

John Pendry

"This is my first World Meet. It's one of the best meets I've ever been in for weather, kilometers flown, and well-picked tasks. This group system works well and is better than heats. I would like to see something other than the never-ending tasks without a time factor, and the scoring has been inaccurate, however, the organizers deserve a lot of credit. They took the advice of pilots from the '84 Tyrolean Masters and changed things for the better."

John is the only pilot to manage to be fully sponsored as his only source of income. He was first sponsored tentatively by Planters Peanuts in November of 1982, and has since had a three-year contract renewal in November of 1984. He feels he is making a fairly good living and giving Planters a good return for their



money through newspaper publicity and other promotional considerations.

John was asked to compare flying conditions in the USA, England, and Austria, since he has been making a world circuit for several years:

"Flying in England is good practice, where you're usually never far off the ground, but you can have good thermals. In the Owens, you can fly very fast over large distances with its large mountain ranges and open flatlands beyond. Here in Austria, you can sometimes fly fast like in the Owens, but you must also watch the conditions and frequently slow down; it's easy to hit the ground here."

Brian Milton's Comments on... THE SUPPORT TEAM

Jeff Burnett - "I have written at length

about Jeff Burnett. I have "paired" up with others in hang gliding, notably Britain's Derek Evans and Roy Hill, but never in the same unspoken way I have worked with Jeff. Within days, we had our separate areas of responsibility easily defined, and easily lived with. It worked so well I began to question it in the end, just because there were no hiccups. We differed in judging characters, but otherwise I hope I am able again, some day, to work with Jeff Burnett."

Walt Dodge - "Walt looked after our money, in mysterious ways, with little books, and so well we never felt the pinch, though every now and then we thought we might. An actor, larger than life, tendency to wind-up team members early in the game, worked very hard all the time except the two days he took 'off' flying. Cherish his 'whaheys' as he climbed up through a Comet on my Typhoon off Hohe Salve, forgive him my bent downtube, and have a good laugh at his beerful celebrations that night."

Luigi Chairani - "If ever a man had to sit on his natural character, it was Luigi. Became the team character, and disciplined himself to all the running around that had to be done. I appreciated his insights into others, because he was a shrewd judge of character, for all that he used some strange phrases to tell me about them. Cherish the day, at Prost Alm, when Luigi sniffed the air and said, 'Hey, this smells good,' stripped to his shorts and ran off, and when next we saw him, he was stone bollock naked and galloping over the mountain. We renamed the mountain Prost-Ass after that."



PRODUCT LINES

TACOMA, WA - Well, hang glider fans (around the world), the competition season is grinding to a halt. But it's been a good 'un, what with a World Meet this year (you do know they alternate years, eh?), and a spectacular U.S. Nationals that was not in Southern California. Plus, Rick Masters' Owens Valley meets also went well, he reports, with two contests that memorialized former greats in our sport... the *George Worthington Memorial Open* and the *Don Partridge Memorial Classic*. Our thanks and congratulations to Rick for persevering in spite of the difficulties involved in running major long distance meets. His main support, of course, is not our babbling herein but the membership he has been able to attract into his XCPA (Cross Country Pilots Association), which also is responsible for keeping the sites open and accessible in the famed Owens Valley. Masters' list shows some 400-plus members. We're impressed actually, that he's done so well in the hang glider environment of today (meaning reduced participation on the American home front). We won't go into the meets themselves here in good ole (and super-popular) "Product Lines," as we've got one packed issue for you covering the above-mentioned contests. But we do want to say that Grouse also had a successful contest as well, with their aerobatic section of the meet bringing such good organizer feelings that the report is they may hold a "really big shew" up there next year, with (get this!) a reported target of a \$10,000 purse. Hmmm? That ought'a get some increased interest in aerobaticizing, we'd speculate. Grouse distinguishes itself for holding just about the only feminine category of competition these here days. The top three women in that event were 1st, *Cindy Drozda* of Colorado (also one of two female contestants in the Nat's); 2nd, *Connie Bowen* of California (famous for her-and Dave's-running of the 1983 Nationals); and 3rd, *Debbie Renshaw* of California. Drozda flew a 165 Light Dream, Bowen a Profil 13, and Renshaw, another Dream, this one a 185. (So, you kin see, Bill's happy.) A hearty congratulations to these pilots from *Whole Air!* At the aerobatic contest, we heard a report that *Mitch McAleer* had won. Having seen this hot upsidedowner at Lake Chelan about ten days earlier, we knew he was good, very good. His nifty, custom-to-the-max Wills HP with special cloth, got rudely landed upon at Chelan. While he was understandably bummed, he shook it off evidently and done good up there in Canuck-land. We also heard that *Kells and Racanelli*-two expected participants in any aerobatic contest (and pilots that have already distinguished themselves as the ones to beat much of the inverted time)-withdrew from the aerobatic contest this year so they could properly train some other folks to do the judging (which duty they took this year), in preparation for the proposed biggie aerobatic contest at Grouse next year. Atta guys, hope it worked. You'd think with all this stuff we heard from Grouse that we'd know the results of the masculine contest. But nooooooo... nobody was sure of the finish results by the time we hadda crank this column out. So we'll save those results for you next issue-our October 85 year-ender-when we also figger to get you the results from the *Masters Championship at Grandfather Mountain*, unless some kind soul calls 'em into us in one big hurry before this issue goes to the printer. (Doubt they'll make it, but if'n they do, you'll find the poop at the end of this page.) (So look!) Well, all the contest talk will soon end. A bunch of you have expressed an opinion of not desiring too much contest coverage, so we've tried not to overwhelm you this year, and this particular issue pretty much contains it all, so don't despair, fellow recreation pilots. Back to pilot reports and ultralight sailplane stuff in future issues, along with lots and lots and lots more foreign soarin' type information. If you have an opinion about these coverage destinations in the future, and if you want to make them known, jump to page 31 and fill out your survey (FREE to you!). Anyhow, all this competition reportage with all the high mileages flown (or kilometerage in almost any other country) suggests it been that kind of year. And it has. We've been telling you about lots of super long distance flights. Last year about this time, we were telling you that it had not been such a great year,

mileage-wise. Some speculated that there'd been too much water in the system. But not 1985. Matter of fact, in many parts of the world, it's been one of the driest in recent history. One new report further accentuates the great thermal weather. *Bruce Mahoney*, who sent us a program for computing great circle distances a while back (anyone want us to print it?), decided to go fly one of those routes, it seems. He racked up a whopping 141.149 great circle miles flight from Oklahoma's Buffalo Mountain, and thereby claims the longest flight in the USA, east of the Rockies. The trip took him five hours and 55 minutes for an average speed of 23.82 MPH), a most respectable speed, especially over such a great distance. *Dave Morton* of Ft. Smith, Arkansas, also had a good one, flying 103.111 on the same day. Let's hear a round of applause for Bruce and Dave for these really good flights in Oklahoma. While we're congratulatin' folks, we want to give another clap on their respective backs to old friends *Ken deRussy* and *Bonnie Nelson* of the *Hang Glider Emporium* in Santa Barbara, who are beginning their twelfth year in the hang glider retail business. As we find ourselves thinking about that length of time (and how long we, too, have been at it), we wonder if that might make the HG Emporium the oldest operating hang gliding store in the U.S. Does anyone know of any shop which has been in continuous operation for longer than eleven-plus years? Let us know! We think there's probably a story in shops that have successfully crossed the decade mark (and then some). It'd be a nice contrast to all the crap about "dying interest" and etcetera, ad naseum. Speaking of dying, though, we think a news item regarding ultralight aircraft may be of interest to you. *Ultralight Aircraft* magazine, once touted (by it's own salesfolks, of course) as the largest of the ultralight mags, has decided to end publishing of this title. Put out by Werner and Werner Corp., of Southern California, the discontinuation of this magazine doesn't mean they are out of biz. One of their people told us they have about 30 titles in their publishing group, so the company's not bankrupt, but they're giving up so far as powered ultralights go. Interesting, huh? One time they claimed a circulation of, oh we fergit exactly, but somewhere around 55,000 or so. Now, they're gone. Poof! Haven't heard anything about *Air Progress Ultralights*, either. And EAA's *Ultralight* magazine has gone, to be *Light Plane World*, although it, too, is pretty thin these days. "Fat cat" AOPA dropped its bleak-looking *Ultralight Pilot* just before they abandoned their whole ultralight division (after dumping some \$1.25 million on the effort, it's reported). Our associate title, here, has changed successfully from *Ultralight Flyer* to the wider coverage *Sport Flyer*. And even *Glider Rider*, once a hefty 112 page book, is down to about 52 pages (even in the summer months). Though *Glider Rider*, now with changed name to *Ultralight Flying!*, looks to be in pretty good shape as they end up with the whole field virtually. Huh! What goes around comes around, eh? They started with the whole ultralight field, such as it was in those days before they gave up hang gliders altogether. Even so, *Ultralight Flying!* has become the association journal for the U.S. Ultralight Association. The USUA is a new organization attempting to do what no others have successfully done, even when (like AOPA) they had lots of moola to work with. As we understand it, if you desire *Glider Rider*, aka *Ultralight Flying!*, you gotta join USUA first, at a cost of 38 buckaroos. Hope it works for them. But all this is most interesting to we who are still plowing along in hang gliding. Makes our woes of the recent months look less like we're gonna just go away. And the \$38 price of USUA is modeled after... nope, not USHGA-whose rates went from \$29.50 to \$39 just this summer-but after (listen up!) AOPA and EAA, both of whom went to higher prices... like \$39.00. Will wonders never cease, eh? Most of us who participated in the decision to raise USHGA rates didn't even know these other huge outfits were having to do the same thing to keep the bills paid. So, little ole hang gliding maybe isn't so badly off after all. Anyway, folks, we're outta news for another installment of "Product Lines," so... Got news or opinions? Send 'em to "Product Lines," Box 98786, Tacoma, WA 98498-0786.

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