

Skydiving™

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Perris Valley to Host RW Training Camp

Air-to-air freefall instruction, lectures, and video training will highlight a five-day relative work training camp at Perris, Calif., November 17-21, 1979, just prior to a Turkey Day Boogie planned for the Thanksgiving weekend.

The course, sponsored by the Perris Valley Paracenter, will be given by freefall trainer Pat Works, author of the *The Art of Freefall Relative Work*. Works' objective as an RW instructor is to promote good skydiving by relating flight techniques that would normally take many jumps to learn by trial and error.

At Perris, Works will be utilizing the techniques of learning relative work which he has developed in similar training camps he has taught in four different European countries over the past four years. Perris instructors and members of the Visions 8-way sequential team will also serve as instructors under Works' direction.

Beginning and intermediate relative workers, as well as skilled skydivers who wish to learn the techniques of relative work instruction, are invited to participate. The five-day course fee, which includes personalized instruction in beginning freefall skills, skydancing and other advanced relative work, use of a videotape system for evaluation, and copies of *The Art of Freefall Relative Work* and *United We Fall*, will be \$52.00. Jump costs will be extra.

Tom Courbat from Redding, Calif., will conduct CRW seminars and organize CRW jumps.

For more information, contact the Perris Valley Paracenter at (714) 657-8727 or Pat Works at (714) 990-0369.



Rande DeLuca took this photograph of the Focus 8-way team at this year's National Championships.

2nd world RW championships run smoothly

U.S., Canada are World RW Champions

Canada was again the big winner at the World Parachuting Championships of Relative Work. Teams from that country won the 4-man event for the second time in a row and finished second in 8-man to compile the best unofficial overall country standing. Nineteen countries entered the meet that was held in France four weeks ago.

The U.S. won the 8-way event as it did in 1977, the first year an official world RW championships were held. The country's 4-way team finished fifth behind Canada, Great Britain, Australia and China. Although the world meet does not determine overall country, such standings are commonly computed by adding together a country's position in both events. If this method is used, the U.S. placed second behind Canada, in front of Great Britain and China.

The U.S. also set a new world record before the meet by building a 10-way star in 5.16 seconds, beating the official record held by the USSR by about three seconds. The star, built after a "no show, anything goes" exit from the tailgate of a Nord Atlas twin turboprop aircraft, was made only moments after the Australian team built one in 5.89 seconds.

The championships were plagued by poor weather during the official practice days and during the first two days of the meet, but were completed in only three days once the weather improved.

The meet was not without its surprises. China entered its first world parachuting meet by sending both an 8-way and a 4-way team. Both squads did very well. The 8-way team surprised

everyone by scoring nine points for their first jump. Mirror Image, the 8-way team from Pope Valley, Calif., that represented the U.S., saw the jump from the ground after it had planned to

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National Buys Sky Suits, Inc.

Sky Suits, Inc., the company that manufactures the Krueger Balloonsuit and Comp II jumpsuit, has been purchased by National Parachute Supply, Inc. National is growing rapidly and bought the company rather than design its own brand of suit and set up its own jumpsuit manufacturing facilities.

Larry Krueger, president of Sky Suits, has joined National to manage the jumpsuit operation.

National recently moved into a spacious building, complete with reception, storage, shipping and administrative areas. The company was started about three years ago by Ron Edwards, a jumper who founded the Chute Shop with several partners in the early 1960s.

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Spaceland Shoots for 1980 U.S. National Championships

Spaceland Paracenter, located south of Houston, intends to bid on hosting the 1980 National Parachuting Championships. Dave Boatman, president of the corporation that runs the fulltime parachute center, told *Skydiving* that Spaceland has both the facilities and the aircraft to host the annual meet.

Although a formal bid has not yet been submitted, Boatman said he's been in contact with USPA President Scott Hamilton about the possibility. The association's board of directors determines the site of the nationals after considering the location, facilities and fees proposed by the potential host.

Spaceland regularly uses propjet DeHavilland Twin Otters as jump aircraft. The Otters are rented from Metro Airlines, for which Boatman is operations manager. A variety of single-engine Cessnas are also available, as are Twin Beeches.

It is expected that there will be some resistance to Spaceland's bid to use Twin Otters, since as DC-3 owners across the country rely on the nationals

for a respectable portion of their aircraft's annual revenue. Proposals to use Twin Otters or Short Brothers Skyvans at past nationals and USPA Boogies were vehemently protested by DC-3 owners who sent what they called "skimming" by airline-owned aircraft.

It is not known whether spaceland will continue with its plans to bid for the nationals if the USPA selected DC-3's as the primary RW aircraft.

The Jaycees of Richmond, Ind., have already notified UPA that they want to host the nationals for a third straight year. Although they grossed \$12,000 during the 1979 nationals and boogie, they still lost \$3,000. (The Richmond Jaycee's gross in 1978 was about \$24,000.)

The management of Skydance drop zone in Tahlequah, OK, has also indicated it wants to host the nationals.

Competitive bidding by several would-be hosts should result in better facilities and lower prices for those who attend the nationals and boogie next year.

Altitude Shop Unveils New Rig

The Altitude Shop of Vallejo, Calif., is now selling their newest design in the harness/container race. Called the Corsair, the rig was first shown at the U.S. nationals last June.

Company spokesman John Randall claims the Corsair is the "most rigger-proff rig around." He said that the company subjected the design to every rigger abuse they could think of. He told how they had packed the reserve with canopies that were too big, used locking loops that were too long and too short, got it wet, froze it and dusted it with dirt. The purpose of these tests was to simulate the abuses that unconscientious or ignorant riggers and jumpers may do to a rig. As a result of the tests, the Altitude Shop is confident they've anticipated almost everything while designing the reserve container.

The company's other rigs, the Top Secret and the Classifier, received somewhat of a bad reputation last year after several riggers had packed the reserves with locking loops that were longer than those specified in the owner's manuals. Longer-than-specified loops can cause a malfunction by slowing down or preventing the release of the reserve pilot chute.

The Corsair is expected to sell well, especially in the West where Altitude Shop rigs have always been popular. Although the reserve container is completely new, the rest of the system is similar in many ways to the company's previous designs. Materials and workmanship in the rigs inspected by *Skydiving* were excellent.

The Corsair will be marketed primarily through the Altitude Shop's dealer network, as Randall said his company is concentrating more on wholesale than retail transactions.

FAA Planning to Modify NPRM

The FAA plans to alter its controversial proposed rule that put parachuting interests in an uproar when it was announced last spring. Specifically, the FAA intends to drop its controlled VFR plan and reduce the number of terminal control areas it announced earlier.

FAA Administrator Langhorne Bond informally notified several general aviation leaders in early September that the proposed rules will be modified to "reflect the comment we have received." The FAA received over 40,000 letters reacting to the NPRM, the great majority of them in opposition.

The original proposal called for an additional 44 TCAs at major airports across the country. It also would have lowered the floor of positive controlled airspace from 18,000' MSL to 10,000 or



A student exit of Zephyrhills, Fla., out of the center's C-47. Note static line.

Jumper Logs 233 Jumps in a Day

Dave Parchment made 233 jumps in one day on June 17th, surpassing the previous mark set in 1978 by one jump, according to a story in *British Sport Parachutist* last month.

Parchment set the record in a successful effort to raise a million pounds for a senior citizen's charity called Age Concern. He was aided by a team of 32 parachute packers, 34 rigs, three aircraft, six pilots, retrieving vehicles, doctors, dentists, mechanics and official observers.

He established a pace of one jump every 4½ minutes and maintained it until he had amassed over 220 jumps in little over fifteen hours. At that point he

dislocated his shoulder during a hard landing and took a break before completing his effort.

The jumps will not count towards any license or award: every one of them was a static line jump. Parchment hopped out of the Cessna 206s in the "airborne" tucked position.

Pelicanland to Lose DC-3

Pelicanland Drop Zone near Ridgely, Md., is losing the DC-3 that they've had for only a month. The owners of the aircraft, commonly called "Pacific Galactic," are taking it out West, probably to Yolo Drop Zone near Sacramento, Calif.

Several members of the Pelican Skydivers, the club that oversees the operation of the drop zone, told *Skydiving* that the DC-3 wasn't adequately supported by the jumpers since it started flying there in early August. Pelicanland had been shut down since last winter and apparently jumpers are taking their time in returning to the nicely furnished DZ.

The exact departure date of the DC-3 isn't known. Pelicanland will still have a fulltime Twin Beech and Cessna 180.

The DZ is hosting an Oktoberfest on October 6-8 to celebrate the re-opening of the facility. Several large aircraft will be on hand, according to the announcement the club is circulating. A party with a live band and movies will also be held. ●

Skydiving

Parachuting's Newsmagazine

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World Meet

(continued from page 1)

attempt seven maneuvers. "That jump really made Mirror Image get serious," U.S. Judge Sherry Schrimsher told *Skydiving*. "China really turned them on." Mirror Image went up and also scored nine.

Ten rounds of each of the two events were run. Mirror Image dominated its event and finished with 66 points, 17 more than runner-up Canada. (The team's 6.6 average per jump was slightly better than the 6.33 points it averaged to win the U.S. nationals.)

Schrimsher, who was 8-way event judge, reported that Mirror Image's jumps were very smooth and precise. "They flowed all the way through," she commented.

Tesseract, from Athol, Id., had problems in the 4-way event, however. A questionable transition resulted in a low score of five points after their first jump. The score seemed to demoralize them, according to an observer, and their performance for the rest of the competition was lackluster. The team had internal difficulties — one member was ill and none of the four seemed to be getting along. To compound the problems, it was the team's first international meet, and one source said Tesseract seemed to be "in awe" of the situation.

The meet was judged with video with two separate cameras recording each jump. The judges sat in a darkened

room and observed a jump on the TV monitor in real time and then again immediately while the Nord made its four-minute go-around. A judge could submit his score sheet then if he was satisfied he had adequately viewed the jump. If not, he could request up to six more replays before finally assigning a score.

This is slightly different from the procedures used at the U.S. nationals this year, where a judge could request an unlimited number of replays.

Schrimsher said that Mirror Image was so precise that "almost always the judges would turn their sheets in after seeing the jump only twice. There was hardly ever any question of their performance."

"the quality of judging wasn't as high as that seen at the U.S. Nationals."

The video system wasn't ideal, however, as the powerful lenses had such a narrow angle of view that formations built a lower altitudes would extend out of the screen. Schrimsher also feels that optical telemeters are more useful to observe exits, and that perhaps the use of telemeters shouldn't be totally stopped. She also mentioned

that she didn't attend this year nationals, so she doesn't know the capabilities of the two systems used there.

The fact that no official protests were lodged gives a good indication that the meet was run well. Eliff Ness, a judge and a long time CIP official, said that this was the best run World-level RW meet since the first World Cup was held in Ft. Bragg, N.C., in 1973. Schrimsher said the overall quality of the judging wasn't as high as that seen at the U.S. national, since many of the FAI judges don't have all that much experience.

China was the only communist country to enter the meet, although the USSR sent a judge who is also a world-class style and accuracy competitor with some 6,000 jumps. Most observers feel that the USSR and several other communist nations will enter the next world RW meet in 1981.

The competitors from China jumped conventional gear with chest-mounted reserves. Photographer Andy Keech told *Skydiving* that the gear resembled East German designs with complex canopy releases and round pack opening bands. The jumpsuits, however, had bells and moderate wing area. Main canopies were Chinese-built 7-cell ram-airs constructed from silk and deployed with a copy of Para-Flite's "rings and ropes" pilot chute controlled reefing system.

Schrimsher reported that although the Chinese were obviously very competent skydivers, they "scrambled" in the air and didn't display the controlled precision shown by many teams. As a result, the Chinese did better in the set sequences than in the random rounds.

Keech said both the French and the Canadians have been working with the Chinese for the past few years to teach them modern skydiving techniques.

Observers also told of an obvious emphasis on the 8-way event. They reported that the French have very little enthusiasm for 4-way and that this bias was evident in the way the meet was run.

Skydiving also received several comments about the facilities provided by the hosts. Some teams felt they were treated more poorly than others.

One example was the accommodations both on and off the drop zone. Each team was given a little hut at the DZ that served as the "team tent" during the meet. The huts were laid out in a long line, and hut assignments were made in alphabetical order according to the way the country's name is spelled in French. (Germany, for instance, is "Aleman.") All the countries names were translated into French except one, the United States. As a result, the U.S. Team was given the last hut, a half mile from the loading area and three-quarters of a mile from the restrooms.

And although some teams received motel rooms, some teams, including the U.S., were housed in army barracks. There were four to eight people to a room, with one shower per room.

Many of the fun jumps and record attempts planned after the meet were never made as the hosts became reluctant to use the 60 flight hours that were budgeted but not used during the meet. The situation became ugly when Dave Singer, an American who attended the meet on his own and served as scoring judge, was "punched out in front of 400 spectators by the French manifestor."

Aside from these disappointments, the overall experience was a good one for the U.S. Team. The trip overseas took 26 days, qualifying it for lower airline excursion fares. This saved money for the USPA, who sponsored the team. (The organization relies mostly on donations from its members and businesses to defray much of the \$30,000 required to field a team.)

Keech reported that 7-cell ram-airs were the most popular canopies, with "maybe one in twenty being a 5-cell." And the Chinese made a demo jump with an annular ring canopy with a 15-foot apex.

The site of the 1981 meet has not yet been decided. Brazil has officially notified the CIP that it wants to host the competition, but many Europeans are reluctant to endorse the idea because of the cost of traveling to that country. There is speculation that the U.S. might bid on hosting the meet, although USPA Executive Director Bill Ottley is against the proposal. He feels it would cost the organization from \$50,000 to \$150,000. Several parachute centers are actively pursuing the possibility of providing the facilities if the USPA is convinced by early 1980 that the event could be held here with minimal financial drain on the association.

GQ Security into Hang Gliding Parachutes

GQ Security of San Leandro, Calif., manufacturer of the Unit main canopy, SAC reserve and System harness/container system, has branched out into hang gliding. Marketing Director Bob Peterson reported that the company has begun to build an emergency parachute system for hang glider pilots for the High Flight company of Monterey, Calif.

GQ Security is providing harnesses as well as parachutes. They've delivered 50 assemblies so far and expect to ship 100 during September.

The parachute is similar to the high-profile SAC aeroconical that the company recently began offering to skydivers. It has fewer gores and other weight-saving features that bring the parachute's weight down to about 4.4 lbs.

Peterson stressed that his is acting only as manufacturers, with all marketing being done by High Flight.

Collegiate Bids Sought

Al King, director of the National Collegiate Parachuting League, has announced that he is accepting bids to host the annual National Collegiate Parachuting Championships.

This year's meet will be different in that the NCPL has invited all member countries of the FAI to send a collegiate team to the event. The meet will in effect be the first world collegiate parachuting championships, although that status is unofficial.

Canada has sent teams to U.S. collegiates in recent years. Past-NCPL Director Bruce Deville even invited the USSR in the early 1970's, but the invitation was respectively declined.

Clubs and centers should promptly contact King at (202) 347-5773 for procedures on submitting bids.

Skydiving, September 29, 1979/3

Results

2nd World Parachuting Championships of Relative Work Chateauroux, France, August, 1979

8-Man

Place	Country	Round										Total
		1	2	3	4	5	6	7	8	9	10	
1	United States	9	6	8	4	8	5	7	7	6	6	66
2	Canada	6	4	8	3	3	3	6	6	4	6	49
3	France	7	6	8	3	6	3	3	4	1	5	46
4	China	9	3	7	3	1	4	3	3	2	2	37
5	Great Britain	5	4	5	3	1	4	2	3	3	3	33
6	Fed. Rep. of Germany	3	3	6	2	2	1	3	2	2	3	27
6	Australia	7	4	4	2	2	2	1	0	2	3	27
8	Holland	3	2	4	1	1	1	1	0	1	2	16
9	Switzerland	3	2	0	1	1	0	2	0	1	1	11
10	Denmark	1	1	1	0	1	0	1	0	1	0	6
11	Austria	2	0	0	1	1	0	0	0	1	0	5

4-Man

1	Canada	6	10	6	8	10	10	7	8	9	8	82
2	Great Britain	6	9	7	7	8	10	7	7	8	8	77
3	Australia	5	8	6	8	9	8	4	8	9	8	73
4	China	7	9	6	2	5	10	7	9	8	7	70
5	United States	5	5	5	7	9	8	6	7	6	7	65
6	France	4	6	4	6	7	7	5	7	6	5	57
7	Norway	4	6	4	4	6	6	5	6	6	5	52
7	Switzerland	4	7	5	4	7	6	4	6	4	5	52
9	Belgium	5	4	4	6	6	6	4	4	6	2	47
10	Fed. Rep. of Germany	5	1	3	4	6	5	4	4	6	4	42
10	New Zealand	5	7	3	3	3	7	4	3	5	2	42
12	Sweden	4	5	2	4	4	4	2	5	5	1	36
12	Denmark	3	4	3	3	6	4	2	5	4	2	36
14	Finland	5	3	3	3	6	3	3	3	1	3	33
15	Holland	4	4	2	4	2	4	1	4	5	2	32
16	Austria	2	4	3	3	3	3	2	2	4	2	28
17	Spain	0	1	0	1	1	1	2	2	2	1	11
17	Peru	0	1	0	1	0	2	1	1	3	2	11
18	Mexico	1	2	1	1	0	1	1	0	1	0	8

U.S. Wins Fifth Straight CISM; Dermaine First

The U.S. Army Parachute Team won the 11th International Military Sport Parachuting Championships last July, making it the fifth year in a row that the U.S. has won what is commonly referred to as the CISM meet.

Although the U.S. won the overall country title, a Frenchman won the overall individual title and the style event.

The Army's Cheryl Stearns, the current U.S. overall women's champion, won individual accuracy by scoring a dead center in all eight rounds. The U.S. also won the team accuracy event and finished second behind Switzerland in the 4-way RW.

The meet was hosted by Sweden and plagued by poor weather. In spite of the poor weather, all competition rounds were completed by using DC-3s. Sixteen Free World countries sent teams selected from the ranks of their armed forces.

The U.S. team was comprised of Stearns, Dwight Reynolds, Phil Munden, Danny Durden and Bob Von Dereau, with Maurice Fernandez as alternate. These jumpers earned the privilege of representing the U.S. by being the top six military parachutists at this year's U.S. nationals. USAPT Commander Jerry Fry served as head of delegation and Bill Knight was U.S. FAI judge.

The meet was weathered out during the first five days of the competition.

Stearns was not only the first female to ever enter a CISM meet, she was also the first person to win accuracy with eight

consecutive dead centers. An electronic scoring pad was used for the accuracy event.

There was a jump-off for second in accuracy between Durden and Jean Dermaine of France. In order to expedite the jump-off, the electronic scoring pad was calibrated to score a hit in the center five centimeters of the disc, instead of the standard 10 cm. Although any landing on the 10 cm. disc would still be a dead center, a strike in the center five cm. would be scored higher.

Durden punched the center five centimeters while Dermaine stepped on the "standard" disc, giving the bronze medal to Durden and the U.S.

Team accuracy was run concurrently with individual accuracy: the four members of each team exited the DC-3 on the same pass and opened in a stack for the pit. Each individual's score was counted for both the team and individual events. The U.S. won the team event with a total score of only 0.08 meters after eight rounds (or 32 individual jumps). The team consisted of Stearns, Munden, Reynolds, and Von Dereau. France as second with a 0.24 meter total.

France dominated style, with Dermaine winning with a 6.72 sec. average, followed by teammate Lubbe with a 6.89 average. Munden from the U.S. was third with a 7.07.

Dermaine also won the individual overall title, with Lubbe in second and Munden in third.

Relative work was an "experimental" event this year, as it has never been run



Cheryl Stearns steers her North American Para-Foil to the electronic scoring pad. Stearns won the accuracy event at the CISM championships.

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- Copies of *Wings of Man: The Theory of Freefall Flight*

Pat Works has taught relative work in five countries over the past four years. He is dedicated to promoting good skydiving by relating techniques that would normally take many jumps to learn by trial and error. An author of several books and articles, Pat is involved with teaching skydivers RW based on his own experience enabling them to take the present knowledge of flight techniques and expand on it. Pat teaches RW seminars every Sunday at 9:00 a.m. at Perris. These seminars are provided to Perris jumpers by Perris Valley Paracenter, at no charge.

TO REGISTER CALL PAT WORKS AT (714) 990-0369 OR PERRIS AT (714) 657-8727 FEE: \$52.00 (jumps not included)

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at the CISM meet before. The Swiss 4-way team won it, with the U.S. in second. A spokesman for the Army team told *Skydiving* that additional emphasis was being put on training the "style and accuracy" team in RW, since most major international military parachuting meets now include some sort of RW. The Army's 4-way RW team will do the instruction.

Although the U.S. won the overall title, the results were very close. France was second by only the equivalent of 0.15 meters in accuracy or 1.5 seconds in style total.

The Army Parachute Team's next competition was in Germany in early September, when the team sent its less experienced members to give them some exposure to international competition.

Party in Paradise Progressing

James Whiting, coordinator of the Party in Paradise adventure sport vacation in Hawaii, reports that plans for the week-long event are going well. The Party in Paradise will be held for the third year on the island of Oahu, Hawaii, on January 25-31. Activities such as skydiving, hang gliding, aerobatics, scuba diving, surfing, and a variety of other sports are included in the program. Participants are housed in a modern YMCA complex on an isolated sandy beach.

Learn advanced relative work by reading

UNITED WE FALL

By Pat and Jan Works

United We Fall brings you 366 information-packed pages on every aspect of relative work: skydiving, sequential, competition, CRW, gear and more. Pat and Jan Works, the authors of *The Art of Freefall Relative Work*, have compiled the best work of 20 writers-sky divers into one volume. Not only does *United We Fall* contain useful "how to" information, it provides for many hours of entertaining, thoughtful reading. Profusely illustrated throughout.

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We're pleased that jumpers everywhere think so much of our Wonderhog that they've ordered almost 5,000 of them. The U.S. Relative Work Team selected Wonderhogs again this year.

(Since Wonderhogs are custom built, each member of the team was able to receive his rig with the pilot chute mounted exactly where he wanted: on the belly band, on the leg strap, or even on the container. Some of the rigs had belly bands, some didn't. Every member of the team ordered our new Sprint model of the Wonderhog, a small, flat rig designed especially for today's ultralight canopies.)

What We're Giving Away

We're going to celebrate the production of the 5,000th Wonderhog by giving the entire order—Wonderhog, main and reserve—to whom-ever orders it. If you order it, it's yours. If you order a Wonderhog and no canopies, or with one canopy, you'll get that.

Read the Rules

We've written some very official rules to help insure this giveaway is done to everyone's satisfaction. So please read them, paying special attention to the deadlines.

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If you're thinking about ordering a Wonderhog, and perhaps a canopy or two to pack into it, now's the time to do it. If your order gets logged in as number 5,000, the gear — as little or as much as you've ordered — is yours, free.

Rules

1. Only retail orders from individuals placed directly with the Relative Workshop are eligible for consideration.
2. Orders must be postmarked from September 1 to October 31, 1979, and received by November 10th to be eligible. All orders must be in writing; you may phone your order in as always, but your deposit must be received by the above date, November 10th.
3. In addition to ordering a Wonderhog harness and container system, you may include a main or reserve canopy (or both) with your order. We're giving away Wonderhog #5,000 and whatever canopies have been ordered with it.
4. Your order must be accompanied by the standard \$100 non-refundable deposit for your Wonderhog and at least \$100 for each canopy, if you order a main and/or a reserve. If your order is #5,000, we'll send you a check for the deposits you've placed.
5. You may order any brand and model of canopies you desire, in any stock or custom color patterns available. Your Wonderhog will be custom built for the canopies and colors you specify.
6. No snivels. We're giving away Wonderhog #5,000. If your order falls on #5,000 in our production log, the rig and everything else you've ordered to fill it will be given to you free. If your order doesn't fall on #5,000, you'll still receive the rig that offers the safety, performance, fit and appearance that only a Wonderhog provides. Except you'll have to pay for it. Still, this is one contest where everyone wins.
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Skydiving, September 29, 1979/5

Freakbrother Convention Draws 600

The Freakbrother Convention at Bigfoot Airport in Walworth Wisc., on the weekend of August 12-13 was a big success as over 600 jumpers showed up to collectively make about 2,000 jumps. Unlike last year, the weather was generally excellent, "and everyone had a good time," according to Organizer Carl Nelson.

Freakbrother Conventions have been held for the past several years and tend to emphasize the social rewards of sport parachuting. The Freakbrothers are simply a loose organization of relative workers that was founded by Carl and Roger Nelson, two brothers active in the sport in the Midwest.

The 1979 convention was supported by

a Skyvan, two DC-3s and a Twin Beech. The Skyvan flew 44 loads of 17-20 jumpers each while the two DC-3s combined to make 17 lifts of 30 to 40 jumpers each. All three of the larger twin-engine aircraft were grounded at least once during the weekend due to mechanical problems.

"I'm sure sold on turbo-props," Nelson reported. "They fixed the Skyvan with two screwdrivers and a volt meter, while the mechanics were up to their elbows in grease working on the DC-3s."

Heavy rains on the Thursday before the convention wetted down the airport's sod runway so much that the organizers were forced to shuttle jumpers between Bigfoot and the nearest airport in better condition. The runway

later dried out enough so that the Skyvan and one of the two DC-3s could safely operate from it.

The aircraft breakdowns put a crimp into the jumping plans of some of the jumpers, although most could make three or four lifts a day.

Nelson explained he and his brother's approach to the convention: "It's a family picnic. Roger's wife Jeannie and our parents handled the food, which included hundreds of pounds of meat and 25 half-barrels of beer. What's different about this picnic is that we invite everyone and supply aircraft for the jumpers."

The convention also offered a 2600 sq. ft. tent, 10 hours of live music, four Pinkerton Security Guards and all-night

parties on the airport under the tent.

Several 36-way diamond loads were organized and attempted, but most of the jumps at Bigfoot were smaller loads.

Although it was rumored that this would be the last Freakbrother Convention, Nelson told *Skydiving* that there would be another in 1980.

Jumpers traveled from as far away as California, Texas and Oklahoma this year.

Keech, Boenish to Visit Colorado

Andy Keech, photographer and publisher of *Skies Call*, and Carl Boenish, photographer and producer of films such as *Skydive!* and *Masters of the Sky*, are traveling to Colorado in late September to film a series of jumps from balloons. The site of the filming will be The Balloon Ranch near the town of Del Norte. Keech is gathering material for the third volume of *Skies Call*.

The Balloon Ranch is owned and operated by David Levin. Levin told *Skydiving* that he is looking forward to the visits by the photographers, saying, "I've been using my balloons for dropping jumpers for several years and have a number of ideas for filming that should result in some spectacular footage." Levin arranges visits to his ranch—which includes facilities such as saunas, horseback riding and snowmobiling as well as jumping and ballooning—for only \$50. The \$50 includes lodging, food and a balloon jump.

Plans for the filming include having a jumper climb to the top of an inflated balloon in flight and skydiving off.

Livingston to McElfish

Randy Livingston is moving from Oregon to Dallas, Tex., to fill the position of loft manager of McElfish Parachute Service. Livingston, an FAA Master Rigger with 1900 jumps, is active in freefall photography and judging.

Parachutes May Go Metric

The AIAA Aerodynamic Deceleration and Balloon Technology Committee is considering the problems associated with adopting the metric system units as the standard unit of measure for the parachute and balloon industry.

The committee has prepared a paper that identifies the problems and offers suggested solutions. Interested members of the industry should contact Jay Boone, P.O. Box 845, Seeley, Calif. 92273 for a copy of the paper. Comments on the proposal should be received by October 1, 1979.

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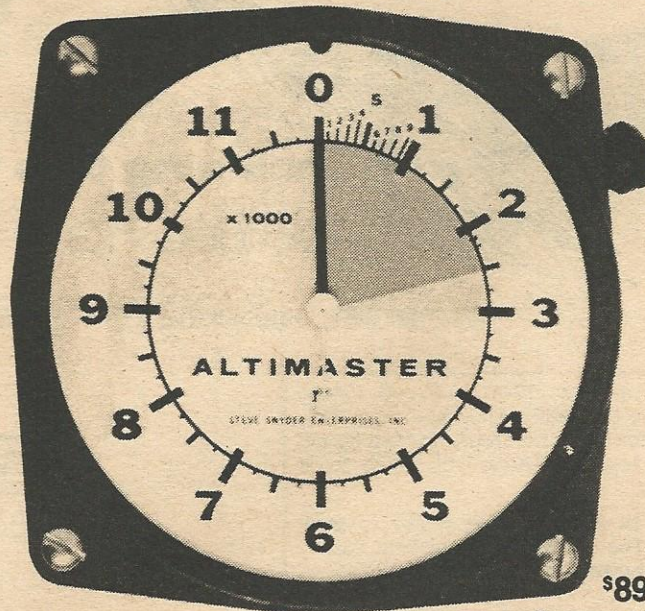
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Herd Labor Day Boogie Features Aircraft, Good Weather

The 1979 Herd Labor Day Boogie offered its 400+ participants good weather, a variety of big aircraft and excellent management. Although no spectacular dives were completed, the three day event was nonetheless very enjoyable.

Two tragedies marred the boogie, however. Carl Nelson of Chicago, a freefall photographer and co-founder of the Freakbrother organization, was killed when his reserve entangled with the dangling toggles of his still-packed main. And Barry Wise of New Jersey died after being struck by a hit-and-run driver late one night near the site of the Herd's party.

The Herd Boogie is an annual affair and attracted over 800 jumpers last year to jump out of the four Short Brothers Skyvans. This year the sponsors, the United Parachute Club based at New Hanover, Penn., changed the name to Herd Boogie as the Skyvan was no longer the predominate aircraft. This boogie is sort of a last-fling-before-fall meet that attracts jumpers from the entire eastern half of the country.

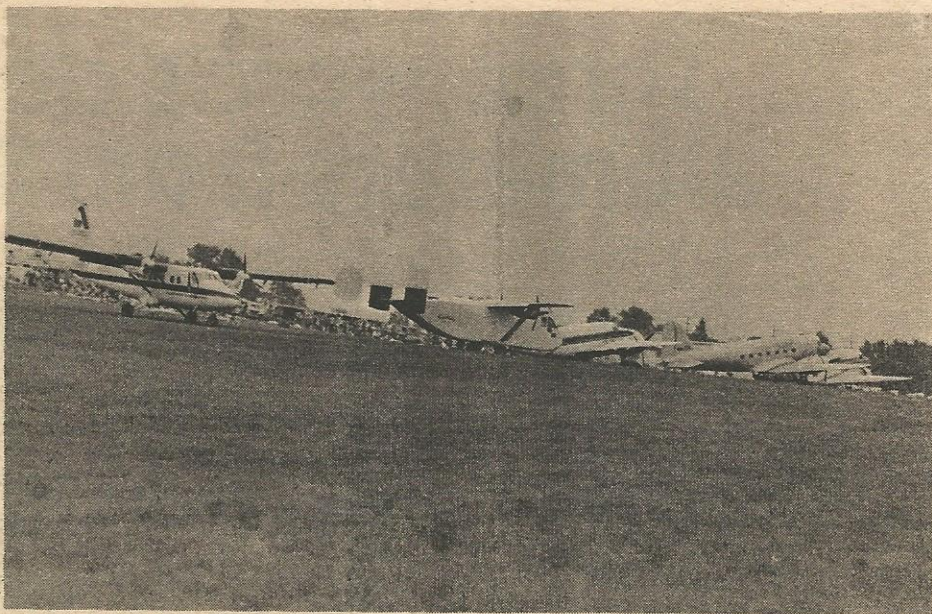
Summit Airlines, the company that owned the Skyvans the club has been using on a regular basis for many years, sold the aircraft last spring. The club scrambled to find replacements and eventually signed a contract with Ransome Airlines of Philadelphia to provide a De Havilland Twin Otter.

The Twin Otter was on the flight line at Limerick Airport, the site of the club's boogies. It wasn't alone, however, as a Skyvan, two DC-3s, a Lockheed L-18 Lodestar and several Twin Beeches were lined up next to it.

The weather wasn't perfect, as it was cloudy every morning until about noon. But it was otherwise warm and dry, with little wind. Occasional mid-day clouds slowed the jumping several times, but still most jumpers could make as many jumps as they could organize and dirt dive—the manifest was continually announcing open slots on the aircraft.

Most of the loads took advantage of the capacity of the large aircraft and took 16 jumpers or more, although plenty of smaller loads were seen, too. The Skyvan seemed to be the aircraft in the greatest demand, followed by the Twin Otter, the DC-3s and finally the Lodestar. Manifest would accommodate jumper's aircraft preference as much as possible.

Unlike past boogies at Limerick and elsewhere, there wasn't a series of record attempts or other special jumps that dominated the drop zone. The largest jump was a 48-way static formation that went up late Monday afternoon, but the jump represented a considerable reduction in size from the 72-way that several members of the Herd had been planning to try. The jump was a one-shot at-



This flight line awaited the 400-plus jumpers who attended the Herd Boogie in Pennsylvania.

tempt, with no practice for the base. It went quite well from 16,000 feet, building smoothly and being held until the preplanned breakoff altitude. Unfortunately four jumpers went irretrievably low.

Likewise, there was no one person or group that called the shots during the boogie. Many jumpers were seen running around with manifest slips and pencils, and jumpers intermingled freely.

This casual approach made for a relaxed atmosphere. It also resulted in many incomplete dives.

Mary Todd from New York organized an all-woman large formation of about 24 divers, but it appeared that the formation never built beyond an 8-way or so.

Roger Ponce de Leon from Connecticut organized several good 16-to 21-way loads, all involving sequential.

A 20-way no-jumpsuit round star was tried that built to about 16.

Carl Nelson died on the no-jumpsuit load. According to witnesses in freefall with him, his main steering lines were flapping over his back, extending out of his container for a distance of "several feet." The situation was pointed out to him in freefall. After break-off, he apparently pulled his reserve immediately, which entangled with the lines and their soft toggles and did not inflate. It is possible he could not pull his main first, that there was something wrong with the pull-out deployment system, although it was pointed out that he was
(continued on page 9)

RUMBLESEAT MEET

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DC-3s, catered food, beer, band, boogie at the DZ's saloon. Swimming pool, snack bar, etc. Lotsa sunshine.

Coming at the new, improved Perris Valley Paracenter: Thanksgiving Boogie

& RW Training Camp. Nov. 17-25. R.W. Seminars by Pat Works — Skydancing — CRW — Don't miss it!

Special thanks to the following generous friends of skydivers who donated prizes for the top nine 10-way teams:

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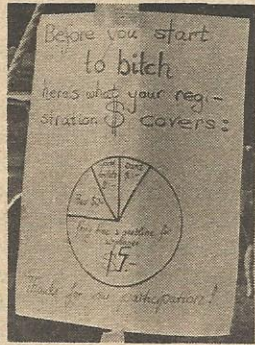
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(continued from page 8)

jumping the same rig he had owned for several years. The accident is still being investigated.

There were several impressive CRW attempts. On one, a clean 9-stack was built, held for a while and then sequentially broke into three 3-stacks.

The nightly parties were held at the club's facilities in New Hanover, a town about six miles from Limerick. (The United Parachute Club normally operates at the small airport at New Hanover, moving to Limerick when they have big aircraft.) Sunday's party was the big one, with plenty of food, beer, live rock and roll and movies. Several men earned their Herd Underwear by donning them on stage with the help of a gang of women who delighted in being the organizers of the presentation.



The sign that greeted registrants

Rande DeLuca showed his new movie, one he filmed last summer of Mirror Image practicing at Pope Valley, Calif., for the U.S. nationals. The film shows the excellent precision of the team that went on to win the 8-way event at the World Meet in France three weeks ago.

Although the 400+ jumpers collectively spent many thousands of dollars over the weekend, the club ended up keeping very little, if any, of it. Organizer Walt Schneider frankly told *Skydiving* that the Herd lost money on the Skyvan and probably lost money on

the Twin Otter, in spite of the fact that the Twin Otter flew 23 lifts of 20 jumpers who paid \$9 each for a ride to 12,500'. The Twin Otter pilot confirmed this fact when he was completing the paperwork after the weekend. The club rents the turboprop for \$350 per flight hour (not engine-running hour) with a four hour per day minimum. The Twin Otter flew those 23 loads in 9.3 hours, and quick calculations showed that the 12 hours of time the Herd must pay for will not be covered by their gross receipts.

The DC-3s were there under a dif-

ferent arrangement, with the Herd getting one dollar "off the top" of every lift ticket purchased. Such an arrangement still isn't that lucrative, as the club also paid for the pilots' motel room and meals.

Each jumper paid a \$9 fee to register. A chart by the registration showed that the \$9 went to the party (\$3), for aircraft ferry time (\$5) and portolets (\$1).

Operations on the field were run practically flawlessly. There was no confusion, no high pressure from the microphone and clean facilities.

(continued on page 19)

Netherlands Parachuting Statistics

Statistics compiled by the Netherlands Aero Club indicate that 25% of that country's first jump students remain with the sport long enough to log at least eight jumps, the minimum number needed for the association's A license.

Only 10% are still jumping three years after their first jump.

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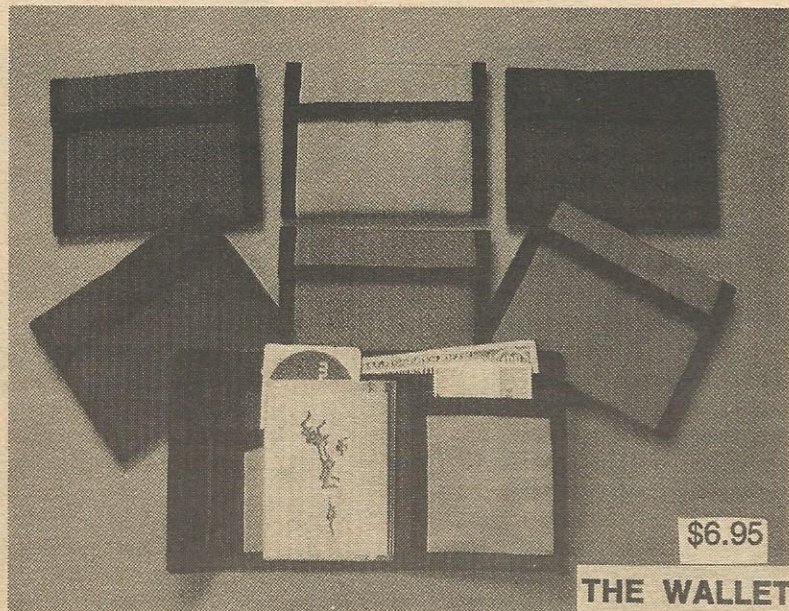
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10/Skydiving, September 29, 1979

Tennis shoes a "total loss"

Jumper Injured in El Capitan Jump

One skydiver was injured slightly during a relative work attempt on a jump from El Capitan on August 26th. Andy Anderson, Dennis Murphy, Hector Aponte and Raymond "X-Ray" Hebert jumped from the 3,000-foot cliff in Yosemite National park with plans to build a 4-man diamond. Stability problems during the low-speed freefall prevented completion of the maneuver.

Hebert was injured after opening his canopy. Due to the relative work, he had not tracked far from the cliff's face. And then, after he deployed his main, he released only one brake lock, causing the canopy to turn violently towards the wall.

"It was just a dumb mistake," he said. "I pulled the left brake off before I even had the other toggle in my hand." The surging canopy twisted the lines a bit and Hebert was unable to immediately turn the canopy away from the cliff. He released the other brake and stalled the parachute at the last mo-

ment. The canopy missed the granite but Hebert was swung into the wall.

"I got my feet up in time to push off from the wall as the canopy turned away, so I didn't get hurt very much," he said. Hebert injured one foot slightly but had to write off his \$30 tennis shoes which he termed a "total loss."

To date, 35 people have made the jump from El Capitan, and more jumps are expected in the next month before snow prevents access to the cliff this fall.

Liability Problems May Be Eased

The U.S. Commerce Department, with the backing of the Carter Administration, has proposed legislation to ease the product liability problems of manufacturers, distributors and retailers. The proposal, called the Risk Retention Act, was sent to Congress in early September. It would permit groups of businesses—such as associations—to establish captive insurance groups or to jointly purchase product liability insurance from commercial insurers.

Currently it is difficult for businesses such as parachute manufacturers and other small companies that deal with specialized products to obtain product liability insurance at realistic rates. The proposed law would allow such companies to negotiate with insurance companies for group rates, which are generally much lower than individual coverage. It would also permit the formation of self-insurance groups where several companies would establish their own insurance fund to be used if needed.

The proposal has the backing of the National Association of Wholesaler-Distributors which feels the measure will "encourage premium structures based on actual risk," and result in more competitive product liability insurance rates.



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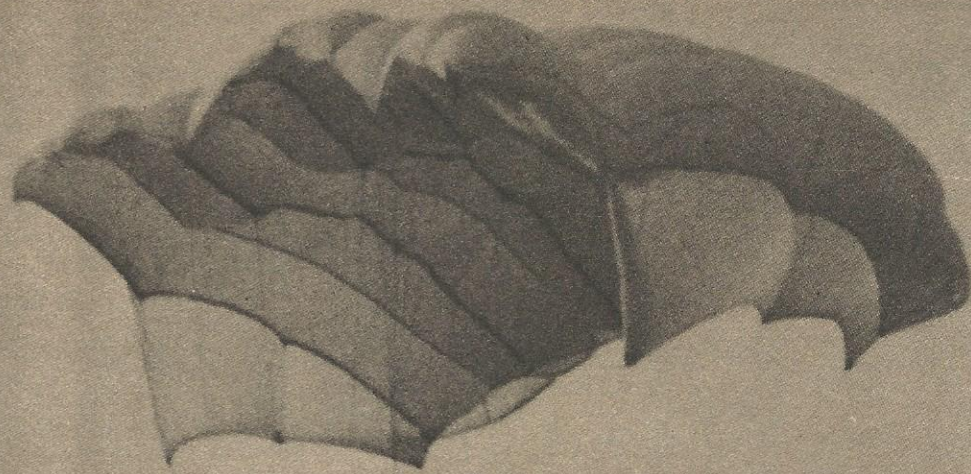
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Canopy deployment times and distances are comparable to round sport reserves. Flight characteristics are the same as the Strato-Flyer (see the specifications below). It is recommended that the jumper have about 25 ram-air jumps before he or she begins to wear a Safety-Flyer.

SPECIFICATIONS

Wing span: 14' Wing chord: 12' (approx.)
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\$540 includes canopy, pilot chute, and deployment bag.

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From the Loft

This column is written by Bob Stroud, a Master Parachute Rigger and DPRE from Edmond, Okla., who has extensive sport parachute rigging — and jumping experience. Bob will be happy to answer your equipment and rigging questions. Address them to Bob Stroud, c/o Skydiving, P.O. Box 189, Deltona, Fla. 32725.

Strong Lopo Reserves

All owners of Strong Enterprises Lopo reserves with serial numbers of 3000 to 4000 should contact the factory immediately. Approximately 200 to 250 of the canopies manufactured in this serial number range have latex-coated

suspension lines that may require a higher than desirable force at the apex to release the diaper.

Apparently the mill that manufactures the line changed the coating compound from a resin-based material to a latex base substitute without the knowledge of Strong Enterprises. The latex base can cause the lines to "brick up" (stick together) if packed tightly and subjected to humid conditions. If this occurs, the deployment diaper won't release until 25 lbs. or more of force is applied at the apex. Thus, the diaper might not release and the canopy might not open immediately if the reserve is manually deployed or

deployed after a low-speed main malfunction.

Strong Enterprises has a special process to remove the latex coating of affected reserves. The company is devising guidelines so that riggers in the field can determine if the canopy should be sent to the manufacturer for processing.

The company's address is 11236 Satellite Blvd., Orlando, Fla. 32809. Telephone is (305) 859-9317.

On Trim Tabs

I recently jumped a rig with Phildo's Phlite Tabs on the front risers. These devices have two toggles that the jumper can use to adjust the angle of attack of his ram-air to make it descend and fly faster; they're especially useful for chasing stacks during CRW. Anyway, the tabs are easy to install and work really well, although they're a little bulky.

They might be the solution for a jumper who tends to float while doing CRW.

On Replacing Velcro

Riggers should replace the Velcro on protector flaps, riser keepers, bridles, pull-out handles and so forth on a regular basis. Velcro wears out: the little hooks break the little loops of the pile after many uses. It happens so gradually that the owner usually doesn't notice it.

Wonderhog Labels

The Relative Workshop is delivering its Wonderhog 2 with a caution label advising the owner not to stuff any part of a freepacked canopy between the top flap of the main container and the inside divider flap that separates the reserve and main containers.

Bill Booth, president of the company, told *Skydiving* that participants at a jumpmaster training course reported they were able to make the reserve container experience a total malfunction by stuffing a portion of the canopy into the space between the flaps. Booth and his staff tried to duplicate the situation at his plant, and were able to restrict the action of the bottom reserve flap only after "great gobs of fabric and lines were crammed into the space." Still, the reserve container opened.

Booth went on to explain that normal packing procedures wouldn't cause the problem, that the jumper would have to "go out of his way" to pack in such a manner. There have been no reports that a jumper has done this in the field.

Nonetheless, Booth ordered the installation of the labels on the inside of the main container.

Rubber Bands

Para-Flite, Inc., reacting to reports of "melted" rubber stow bands in reserves that had been packed for a while, is shipping its Safety-Flyer ram-air reserve with butylrate rubber "O" rings. The O rings can tolerate both higher and lower temperatures than the gum or synthetic rubber bands commonly used to hold stowed suspension lines, and are much less likely to deteriorate in a rig that has been packed for several months and subjected to a variety of environmental conditions.

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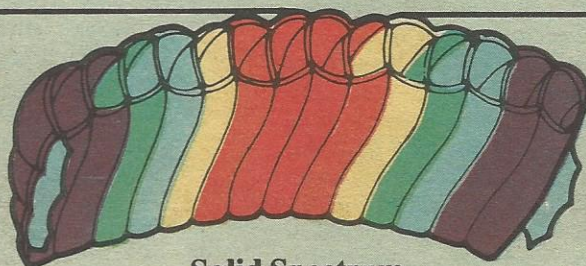
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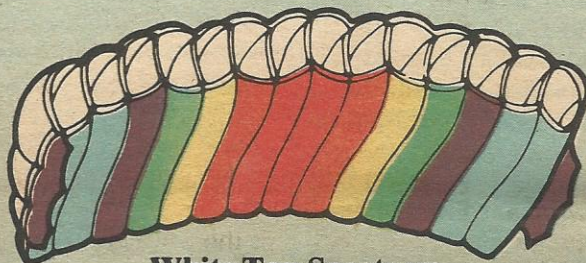
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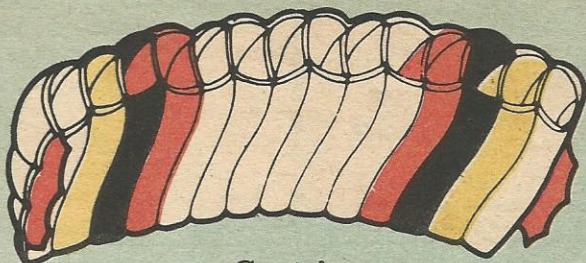
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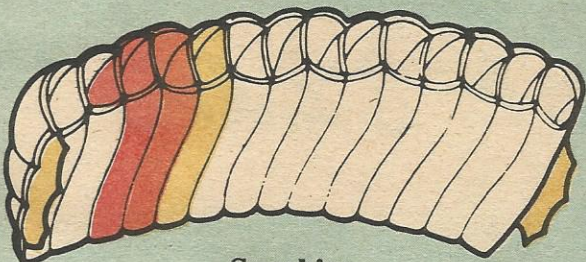
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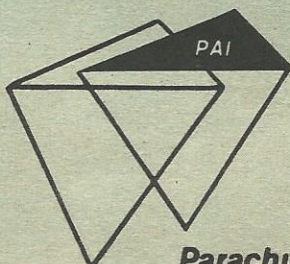
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Canopy Relative Work for Beginners

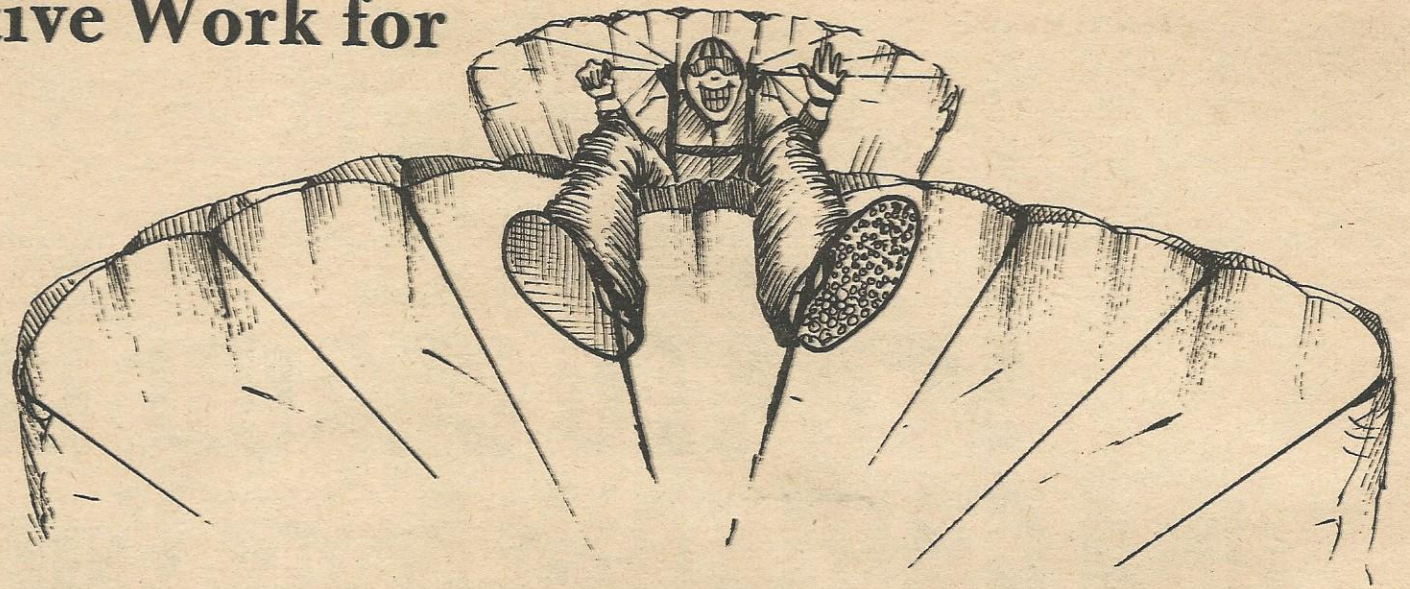
by Robin Heid, CCS 37

Slower, more leisurely and easier to do than freefall relative work, canopy relative work is proving to be an increasingly popular form of sport parachuting. Unfortunately, the level of interest is far outpacing available instruction in the basics and the results are scores of frustrated jumpers unable to get a decent hookup and some others needing a reserve repack after getting too hooked up.

This article will attempt to provide some basic instruction for novice canopy relative workers who have no one experienced in CRW at their drop zone. Follow the outlined procedures in order and you'll stay safe and learn CRW more quickly.

Equipment

A hook knife is the most important piece of basic equipment a canopy relative worker can have. Hook knives have positively saved a couple of people, reduced injury to several others and prevented innumerable breakaways. As a safety device, a hook knife is more important to a CRW jumper than a helmet. Carry one (or two) without fail. And make sure it's attached to your rig — a hook knife in the pocket of the jumpsuit you left on the ground isn't very useful.



Helmets should be worn, but they must not restrict your hearing. It's better to leave a motorcycle helmet or French hat on the ground than fly around saying, "What?"

Avoid hiking boots or any footwear with hooks or eyelets that can snag on canopies. The excitement of kicking out of a stack at ten feet only to have your feet stay in place and you nose become your first point of contact in no fun. Additionally, boots of any kind limit the ability to feel what's going on when you're hooked into a canopy. Tennis shoes allow the extra dexterity necessary for good CRW. And always wear socks. Canopy lines are very abrasive to exposed ankles.

Carry an altimeter. In canopy relative work, you must always be aware of your altitude, and it's impossible to

check your partner's altimeter when he's 15 feet above or below you.

Know Your Canopy

Before you can do competent, safe canopy relative work, you must know how your canopy behaves in all control modes. The first thing to do is send off for a new flight manual to replace the one you threw away when you bought your canopy. Then *read* it. It will provide information about your canopy's flight characteristics you may not be familiar with.

After that, start learning how your canopy actually flies. After relative work jumps, do some riser dives, riser turns, turns from brakes. Stall your canopy — pull your toggles all the way down, slowly. Feel how the speed and stability of the canopy changes with different brake settings. Pull them down rapidly, and as soon as the canopy rocks back, release them just as rapidly. Your canopy will surge forward violently, fold up on itself, fling you around wildly, then reinflate with flapping end cells. The first time you do this, it will probably scare the hell out of you, because it looks *bad*. However, this is an important exercise for building confidence in your gear. Under normal conditions, the only time we see deflated canopies is on opening and on the ground. A deflated parachute with you under it can be unnerving until you get used to it.

By collapsing your canopy intentionally, you'll learn to some extent what it can recover from, and that knowledge may come in handy some day when you're tangled up with somebody. Knowing what to keep and what to get rid of will help you keep your pulse rate down and your rigger happy.

After you've experimented with your canopy on your own, go up to 7,500, with another jumper and fly side-by-side 15-25 feet apart. Take turns making riser dives and turns, and using your brakes in various settings. By flying in formation this way, you'll be able to see what your canopy does *in relation to another canopy* in different control settings. Make sure you dirt dive this exercise before you do it so there's no confusion over who's doing what when.

Planning The Hookup

After a few no contact canopy dances, you should be ready for a hookup. Figure out who will be target and who will be aggressor. Next, decide on the commands you'll use. **KEEP THEM SIMPLE.** "Right," "left," "come up," "let it fly," "hold on," and "drop me" should be sufficient. The turn commands refer to a *small* turn — no more than two to three inches of toggle. (Note: let up on the toggle *before* the point you want to stop. it will take some time and distance to dissipate your momentum). "Come up" means to add *more* brakes, which decreases your rate of descent, causing your canopy to "come up" in relation to the other one. "Let it fly" means to let up on your toggles completely. "Hold on" and "drop me" are used in the event of entanglement or collapsed canopies.

Once you've established these things, it's time to dirt dive the actual pin procedure. We'll call the following method the Circle Pin.

Decide before exit how long a delay you'll take — one man's hop-and-pop may be another man's five second delay, and 500 ft. vertical separation just wastes time. Exit a second or two apart, get squared away, then set up side by side *at the same altitude* (Figure 1). If

(continued on the next page)



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(continued from the previous page)

you have 20 feet or more of vertical separation, make a riser S-turn away, then back toward your partner. This will allow you to lose altitude while maintaining the proper position. If only five to ten feet high, do the same S-turn with toggles.

After achieving the correct position, jumper #1 begins calling out "right" commands to jumper #2. As the turn progresses, #1 will pull ahead of #2 by virtue of his inside track on the turn (Figure 2).

At this point, #1 straightens out his turn while #2 continues. Flight paths will then intersect, with jumper #1 passing a few feet in front of #2 (Figure 3).

As soon as jumper #1 passes the right cell of #2 with his left cell, he should smoothly apply brakes. His canopy will rise in relation to #2 and slow down. When properly done, the result is the center cell of the target canopy hitting you in the thighs (Figure 4).

If you miss the leading edge however, and end up in the middle of the canopy, get away quickly—sitting on the canopy may cause it to collapse around you. Additionally, bridle cords have a tendency to loop around arms, legs and risers. If you find yourself sitting in the middle of a canopy, apply deep brakes. This will give you a strong upward and backward surge away from the canopy. Watch out for the bridle cord as you go, then try for the hookup again.

When the leading edge is within reach, let go of your toggles and grab it with both hands—your canopy will fly just fine without you. Don't reach until it is within your grasp. If you do, you may alter the flight path of your canopy as you twist in the harness and have to start all over. Grab the canopy and hold on tight. The jumper on the bottom should

Fig. 1



Fig. 2

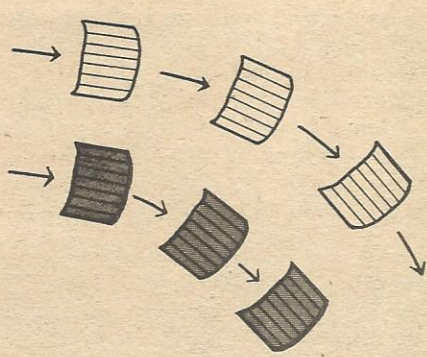


Fig. 3

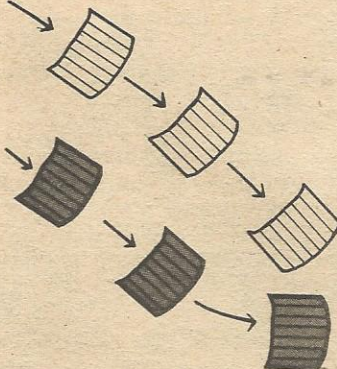
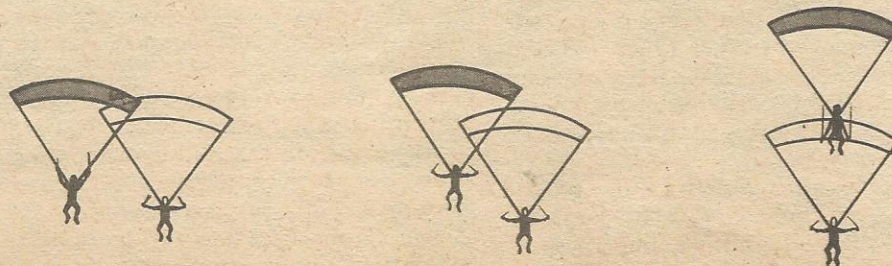


Fig. 4



Note position of brakes: #1 steadily increases brakes, #2 maintains one setting

let up on his toggles at this time to prevent his canopy from floating up into you. Look over the edge of the canopy and find the middle cell. Then place a leg behind and around the A-line on each side of the cell (see page 14). Line docks are more secure, subject the canopy to less wear and tear, and are more stable than cell docks. As soon as your feet are set, grab your toggles and head for the drop zone—it's no fun to walk a mile after your first stack.

Collapsed Cells

If at the dock, the bottom canopy partially deflates, don't worry about it unless it is totally collapsed (at which point you release it so it can reinflate, and try again). Go ahead and get your feet set. Make sure the bottom man lets his canopy fly. He should not pump his brakes—that only makes things worse.

When the top man's feet are set, he should take his toggles and apply moderate brakes—in most cases, this will reinflate the bottom canopy. If it doesn't, the top man should reach out on the leading edge as far as possible, and pull the material toward him until he has the end cell in his hand. Hold the end cell open as wide as you can—it will inflate and pop out of your hand, reinflating the rest of that side. Repeat the procedure on the other side if necessary.

If you have the altitude for it after the dock, play around with your stack; turn it, spin it, get a feel for it. Have some fun—you just made your first stack!

Landing

Landing a stack involves more awareness than a solo landing, but it's not much more difficult. Be sure to allow extra room to maneuver your stack and set up into the wind earlier

(continued on page 18)

Crested Butte Aerial Weekend

Against a spectacular backdrop of 12,000-foot mountains, the 5th Annual Crested Butte Aerial Weekend was held August 11th and 12th. The meet, conducted near the sleepy mountain town of Crested Butte, Col., has drawn scores of skydivers, balloonists, hang glider pilots and friends from all over the

country for the past five years for a weekend of mountain air, good company and wild parties.

Hosted this year by Mike Pilert, Dan Brothers and Dave Bachman, the skydiving segment of the weekend consisted of a 2-way TRAC event (a combination of RW and accuracy). Sixteen

teams entered the two rounds of competition, done from an altitude of 5,000' AGL. Since the field elevation at "the Butte" is 8,950' MSL, freefall times and aircraft performance are limited. It also affects a canopy performance substantially, causing higher rates of descent, longer recovery times from turns and stalls and a host of other effects that can make landings hard if proper care is not taken.

An awards banquet was held after the competition to give prizes to the top competitors in each of three categories. Emcees Pilert and Brothers presided over the affair, a rowdy event of which the Herd from Pennsylvania would have been proud. Balloonists, hang glider enthusiasts and jumpers all mingled at the party, each group clearly identified by a t-shirt carrying the name of their respective sport. Each group did their damndest to "outparty" the others—a

contest that was won by the skydivers, of course.

Revelers straggled out to the DZ on Sunday morning with bleary expressions and eyes blinking owlishly in the bright mountain sun. The rest of the day was spent making fun jumps and enjoying the mountain scenery.

Fun jumps are the by word at Crested Butte. The high altitude and resulting aircraft non-performance makes "serious" jumping out of the question. But still, every jumper lands yelling and laughing, as turned on by a 30-second skydive with three people as he would be after ten maneuvers on a 16-way jump at Zephyrhills.

The combination of mountains, people and margaritas has made Crested Butte a special place to be in August for the last five years, and it'll be a place to visit next year if you have the chance. ●

5th annual Crested Butte Aerial Weekend Skydiving Competition (Two rounds).

Relative work (2-way sequential)

NAME	SCORE	AWARD
1. Jay Bird and Pam	900 points	two breakfasts
2. Barry Brooks, Bob Taylor	840 points	two pair Photo-Ray sunglasses
3. Alf Humphries		
Froggie Galloway	480 points	one case of beer
3. Mike Pilert, Dan Brothers	480 points	one case of beer
3. Jack and Marcia Horn	480 points	one case of beer

Accuracy

1. Alf Humphries	3 inches	casting reel
2. Bob Taylor	7 inches	Belt buckle
3. Barney Barnett	8½ inches	\$10 gift certificate
4. Scott Hamilton	4 feet	Poster
5. Mike Pilert	4 feet 2 inches	Nothing

Overall

1. Jay Bird and Pam	960	\$25 Gift certificate and a helmet
2. Barry Brooks, bob Taylor	953	Two lunches
3. Alf Humphries		
Froggie Galloway	597	Two breakfasts
4. Mike Pilert, Dan Brothers	550	Moldy meat and bread
5. Jack and Marcia Horn	480	Two lunches

Last place overall

Jim Archuletta	0	
Bill Brown	0	Two pies

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Labor Day Boogie at Pope Valley

Labor Day at Pope Valley, California, was an average weekend. Despite some earlier reports to the contrary, no boogie was intended for the long weekend, and few out-of-staters or jumpers from Southern California visited the drop zone.

The pace of jumping was leisurely but steady, with Beech loads of early risers starting things off each day, followed by five or six DC-3 loads.

Jumps at Pope are rarely larger than ten or twelve and Labor Day was no exception, with many passes going with as few as five or six people. Challenging skydives appear to be the major motivation there—if a slot can be made

more difficult to execute properly, it often is, resulting in more satisfying jumps and increased skill. The working philosophy at Pope seems to be, "Why do a straight shot when you can do a backin?"

The skydiving is diverse, too, with canopy loads, sequential, no-grip sequential and skydance, along with some wild variations like pylon races, where two jumpers take up stationary positions and others race around them in a figure-eight pattern. Two such races were held on Labor Day, with teams consisting of three people who raced in whatever formation they deemed most effective.

In the first race, Richard Kjar, X-ray Hebert and Robin Heid bested Don Balch, Ray Ferrell and Joel Hendryx when the latter team "spun out" at the starting gate while the former got off the line quickly. Both teams used wedge formations which flew well in the straightaways and reasonably well in turns.

The second race saw Balch and Ferrell teamed with Heid, while Claire Meredith, Debbie Dana and Sparky Gregory formed another team and Dan O'Brien, Cindy Frueh and Cheryl Creson made up a third. Ferrill's team got a quick start, pulling way ahead in the first turn, but O'Brien's crew came

on strong, taking the inside track on the second turn and threatening to pull ahead. At that point, Ferrell's group crossed over the top of O'Brien's team as the latter swung wide on the turn, funneling both formations. O'Brien's group lost grips (a disqualifying condition) and Ferrell's team went on to win. Mean-while, Meredith and company were trying to make it around first-pylon man Scott Carbone, who insisted on geeking the trio with his fangs, causing him to backslide almost as fast as the team was flying.

The innovative, progressive atmosphere these jumps create at Pope probably leave a bigger impression on visitors than the high general level of skill among the regulars or even the scenic beauty of the place. New ways of experiencing freefall are continually discussed—so much so that even late at night, when liquor and lies flow freely, swashbuckling jump stories take a back seat to theories and ideas in most conversations. And perhaps the most unusual thing about Pope is that these wild ideas get tried out the next day.

Pope is planning a boogie for both Thanksgiving and Christmas. Undoubtedly, a lot of people will be there and a lot of good jumps made. Yet even a normal weekend at Pope is a treat. Hot skydives, new skydives, fun skydives and good company can all be had at Pope Valley.

Illinois Considers Radical AD Bill

Legislation passed by the Illinois legislature and now awaiting the signature of Gov. James Thompson would require aircraft manufacturers to reimburse the owner of an aircraft for the cost of parts, labor and related expenses necessary to comply with FAA airworthiness directives (ADs).

The bill would limit the reimbursement requirement "to a five-year period following the date of first delivery by the manufacturer or his agent to the first registered owner of the aircraft." The bill was introduced by Sen. John Davidson, who sponsored a similar bill two years ago that failed to clear the Illinois Senate. It is not known how the governor feels about the current bill.

Officials of the General Aviation Manufacturers Association, a trade group located in Washington, D.C., recently found out about the bill and wrote to Thompson, asking him to veto it. The association pointed out in its letter that the impact of the bill is far reaching and that neither GAMA nor any of its member companies was invited to testify on the measure.

GAMA also reminded Thompson that AD's are handled on a case-by-case basis, with manufacturers sometimes paying for the cost of compliance and sometimes the owner being required to pay. GAMA is also concerned that out-of-state owners could register their aircraft in Illinois for the purpose of getting an AD-related repair done for nothing.

Industry observers have often wondered why such legislation has yet to be passed for aircraft repairs. The automobile industry has long been required to bear the cost of repairing safety-related defects in their products, while frequently the aircraft manufacturer does not.



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Fatality in New York

A first jump student was killed in New York recently after an unstable exit put him on his back and allowed him to grab the main pilot chute. This caused the sleeve-deployed main parachute to horseshoe. The jumper held on to the pilot chute until impact and apparently made no attempt to pull his reserve ripcord.

The accident is not the first fatality in the U.S. in recent years that has resulted when an unstable novice jumper grabbed either the sleeve or pilot chute and prevented the deployment of the main canopy. Some drop zones have stopped using pilot chute deployed static line rigs and converted to direct bag systems to help prevent such incidents.

Advanced Air Studies Reserve

Jim Handbury of Advanced Air Sports Products, Elsinore, Calif., working with Irvin Parachute Company and testing an annular ring reserve. (An annular ring parachute is a round canopy with a big apex; it resembles a donut cut in half like a bagel.) Although annular ring canopies are used for cargo applications, they have received little attention for personal parachutes.

The design's primary attraction is its low volume and weight for its rate of descent: Handbury's prototype is said to have a six foot-per-second rate of descent and weigh about six pounds.

Handbury has progressed to the point

where he's trying different modifications for steerability and forward speed. He's also jumping it with intentionally cut lines to see how such a malfunction would affect performance.

The canopy is presently deployed from a bag.

Poynter Honored

Dan Poynter, an author who has published several technical and instructional books on sport parachuting, has been awarded a diploma from the International Aeronautics Federation (FAI) for his "outstanding contribution" to hang gliding. The award is the first diploma issued by the hang gliding committee of the FAI.

Poynter became active in hang gliding in the early 1970's, when the sport was still in its infancy. He wrote and published the first handbook on hang gliding and served in several leadership positions in the sport.

Skydivers recognize Poynter as the author of the *Parachute Manual* and several other parachuting publications. A longtime member of the USPA Board of Directors, Poynter also was active in guiding the growth of parachuting since the early 1960's.

The diploma will be presented to Poynter when the FAI meets in Cyprus in late October.

Coast Guard Hires Pigeons

U.S. Coast Guard has placed three pigeons on active duty and one in reserve status as lookouts in this day of high technology and advances in search radar. The Coast Guard has found that pigeons can be trained to spot the international orange color used in lifejackets and lifevests. Three hungry pigeons are placed in a plastic bubble divided into three sections and located below the cockpit of a helicopter. The pigeons, once spotting a target, peck at a switch that releases food and illuminates a section light in the cockpit. Once the aircraft is turned toward the target, both the forward port and starboard pigeons should be pecking away.

During recent flight tests, the pigeons spotted the target on the first pass 96 percent of the time, while humans could achieve only 35 percent. In 66 percent of the passes, the pigeon was the first to spot the target in the water. The Coast Guard is developing a simulator to train the pigeons at less cost.

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CALENDAR

September 29-30: Bounce Back Boogie, Coolidge, Ariz. 8-, 10- and 12-way progressive RW meet, tracking contest, camping, hot showers, etc. FFI: Arizona Parachute Ranch, P.O. Box 1807, Coolidge, AZ 85228. (602) 723-5336.

September 29-30, Women's Weekend, DeLand, Fla. Organized WSCR dives, all around good dives from Mr. Douglas, party. All women - and men - are welcome. FFI: Sheila Whitten, (904) 736-7589 days, or (904) 985-5152 eves.

October 6-8: Pelicanland's Oktoberfest, Ridgely, Md. Large aircraft, live band, movies and more. FFI: (301) 634-2997.

October 13-14: Original Rumbleseat Meet, Perris Valley, Calif. 10-way speed creative sequential and team accuracy in each jump. Three rounds. \$37 includes jumps, party, etc. FFI: Diane Kelley, (714) 674-5380.

October 19-21, USPA Board of Directors Meeting, Washington, D.C. FFI: USPA, 806 15th Street NW, Washington, DC 20005, (202) 347-5773.

October 20-21, DeLand Para-Ski Meet, Lake Winnemesett, Fla. Slalom water skiing, accuracy on land. Hosted by Bill Booth and his jet boat. FFI: Bill Booth, Relative Workshop, 1050 Flite Line, De Land, FL 32720. (904) 746-7589.

October 27 — November 4: Zhills Pumpkin Meet, Zephyrhills, Fla. 8-way sequential, 16-way speed formations, and 10- and 20-way speed star events. FFI: Zhills Parachute Center, P.O. Box 1101, Zephyrhills, Fla. 33599. (813) 782-2918.

October 27-28: Halloween Party, Pope Valley, Calif. FFI: Pope Valley Parachute Center, P.O. Box 166, Pope Valley, CA 92567. (707) 965-3400.

October 28-November 3, Plenary Session of the 72nd General Conference of the FAI, Nicosia, Cyprus. FFI: FAA, 821 15th Street NW, Suite 430, Washington, DC 20005. (202) 347-2808.

November 17-21: RW Training Camp, Perris Valley Parachute Center, Perris, Calif. Pat Works will teach his method of RW instruction using video, seminars, and freefall classes.

FFI: RWU, 1656 Beechwood Ave., Fullerton, CA 92635.

November 17-25: Zhills Turkey Boogie, Zephyrhills, Fla. FFI: Jim Hooper, Zhills Parachute Center, P.O. Box 1101, Zephyrhills, Fla. 33599. (813) 782-2918.

November 17-25: Turkey Day Boogie, Pope Valley Calif. FFI: Pope Valley Parachute Center, P.O. Box 166, Pope Valley, CA 92567. (707) 965-3400.

December 2-6: SAFE Symposium, Las Vegas, Nev. FFI: SAFE, P.O. Box 631, Canoga Park, CA 91303. (213) 340-3961.

December 22 — January 2, DeLand Christmas Boogie, DeLand, Fla. DC-3, Cessna, showers, warm weather, clean airport, good vibes. FFI: DeLand Air Sports, P.O. Box 1657, DeLand, Fla. 32720. (904) 734-5867.

December 22 — January 6: Christmas and New Year's Boogie, Pope Valley, Calif. FFI: Pope Valley Parachute Center, P.O. Box 166, Pope Valley, CA 94567. (707) 965-3400.

Readers are encouraged to supply information for calendar listings. Information on upcoming events should be supplied as far in advance as possible to Box 189, Deltona, Fla. 32725.

CRW

(continued from page 15)

than you would for a single canopy. As landing approaches, the bottom man will yell up to the top man, "NOW", when he wants him to kick out. At that point, the top man releases the bottom canopy and lands a few feet in front of him.

There you have it. You may not get together on the first try, or even the first jump, but if you follow these instructions, your first hookups will come more quickly, and they'll be safer.

Entanglements

Funneling a CRW jump can be very exciting, but like the nose dive mentioned earlier, an experience we'd rather do without. However, entanglements do occur, and knowing how to deal with one effectively may save a reserve repack or your life.

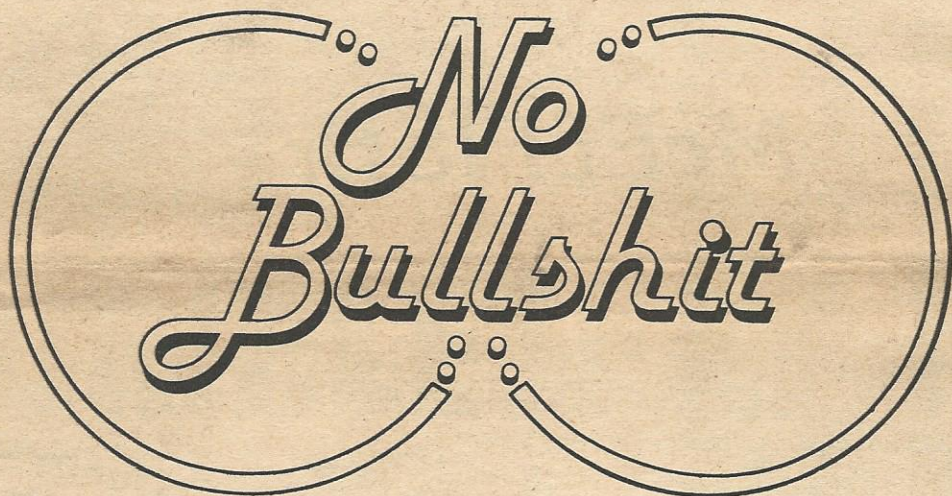
The most important aspect of canopy entanglements is *awareness of altitude*. Know your altitude at all times, for altitude will often dictate the course of action you'll take in the event of entanglement. If, for example, you find yourself at 7,000 feet, enveloped in rainbow colors and flapping nylon, you'll probably have time to get out of the predicament. You can untangle bridle cords, unwrap suspension lines and drop the canopy in plenty of time to avoid a breakaway.

If that entanglement occurs at 1,500 feet though, your course of action will probably be different. Whatever the case, you need to know your altitude in order to make the correct decision.

When entanglement occurs in canopy relative work, you must be prepared to react instantly and *creatively*, for in many cases, the emergency is one you can't prepare for in the hanging harness—it may even be a problem no one imagined could happen.

The best method for dealing with entanglements, of course, is avoidance. By flying slow, making non-momentum docks, and aborting bad approaches, your canopy relative work jumps will be safer and more enjoyable.

Next issue: The Floating Pin and docking on stacks.



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Herd Boogie

(continued from page 9)

Airborne operations weren't quite as smooth, as frequently several aircraft found themselves at altitude at the same time, requiring expensive loitering. One taxiing DC-3 clipped the wingtip of the Otter, doing superficial damage. The Twin Otter left early one day, too, when fuel flow problems made the pilots decide to return to home base to have the mechanics check it. Both pilots were back in time for the party, however, as the Herd insisted on shuttling them back with their Cessna 185.

The starting system of the "Koolaid" DC-3 went out early in the weekend. Fortunately, the aircraft, recently purchased from Guyana Airways in Central America, was equipped with a hand-cranked flywheel starter that worked well.

The Herd Boogie also was a good opportunity to compare the four main jump aircraft from the jumping standpoint.

The Twin Otter and the Skyvan are very similar aircraft in that they are both twin-turboprop, fixed-gear aircraft designed to haul about 20 passengers or an equivalent amount of cargo. The Twin Otter is a short takeoff and landing (STOL) airplane, and Pilot Don Beach was landing the empty Otter in distances of 200-400 feet. Beach, a captain for Ransome airlines, reported that his aircraft was out-climbing the Skyvan.

The Twin Otter has a cabin that has about the same width as a Twin Beech. It is a little wider and has more headroom, but it doesn't come close to the spaciousness of the Skyvan (or DC-3). Its door has similar dimensions as a cargo door Twin Beech—lower than a DC-3, but wider. The smaller door keeps the cabin warmer during the climb to altitude. It's also quieter and much smoother in the Twin Otter cabin than it is in the Skyvan.

But the Skyvan has that big tailgate that is so much fun to exit from and that allows twenty jumpers to exit in a tight glob.

The Twin Otter, the Skyvan and one of the DC-3s were used to haul the 48-way attempt to 16,000 feet. The

three-ship formation was easily handled by all three aircraft and their crews, with the Skyvan in the lead position.

The boogie's organizers were surprised that only about 430 jumpers showed up. The same event attracted about 800 registrants in 1978.

Organizer Walt Schneider told *Skydiving* that he believes the decreased attendance was primarily the result of the gas shortage. He noted that five northeastern states were still on odd-even rationing over labor Day and that many people are unwilling to drive long distances, especially at night, when gas supplies are uncertain.

(The Herd Boogie wasn't the only event that suffered significantly reduced attendance this year. The USPA Boogie, held right after the nationals last July in Richmond, Ind., drew 600

registrants, greatly down from the 900+ that participated in 1978. The Elsinore SCR Scrambles, held in Southern California over Labor Day, pulled in only 26 8-way teams compared to about 40 last year.)

Schneider added that the United Parachute Club is still considering whether it should host another boogie next Memorial Day. The last two in 1979 and 1978 were nearly rained out.

There were several pieces of equipment shown off at Limerick. Michael Cerasoli, president of Sky Supplies in DeLand, Fla., was jumping a prototype Rapid Transit System that he let jumpers try on. The Rapid Transit System is a harness and container system of Cerasoli's design that has not yet received TSO approval. It will be offered in a wide variety of colors, with

the buyer able to choose from several deployment systems—hand deploy, pull out and spring pilot chute—as well as three types of canopy releases. Cerasoli hopes to have the TSO completed "in several weeks." Price will be \$375.

Mike Mount from Maryland had a 7-cell ram-air available that jumpers could try. Called a Para-Mount, the canopy had about 225 sq. ft. of surface area, a low pack volume and low price tag. *Skydiving* put a jump on the canopy and was impressed with the canopy's opening characteristics and soft landing. The Para-Mount seemed to be noticeably more sluggish than several of the mid-size 7-cells on the market in full flight, turns and deep brakes. Mount custom builds each canopy for the owner, and workmanship appeared to be excellent. ●

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Sky Supplies is putting the final touches on its new harness and container system, which will be available upon TSO approval.

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Jumping Off El Capitan Requires Planning, Work and Daring

I wanted to jump off El Capitan since I learned it was possible ten years ago. Since then, I always intentionally left my gear at home when I went to Yosemite, just to avoid temptation, because the two guys that did it in 1966 ended up with five broken limbs and one of the jumpers is still in a wheelchair.

When I jumped, I didn't know that Carl Boenish was issuing numbers, but those two back in 1966 should get #1 and #2. They used round canopies and reportedly repeatedly bounced off the cliff due to winds.

The next guy skied off, about three different times, wearing a Security Thunderbow, a canopy much like a PC except it's triangular. He landed in the trees at least once. That didn't sound very appealing to me, although I now realize that's the best place to land if you were under a reserve. Otherwise, you have to land in *big* boulders. Anyway, this guy got #3.

Then came Carl Boenish. He told me recently that he's hiked to the top of the cliff eight times carrying 75 lb. loads. Sometimes these hikes were at night to keep from getting his film confiscated.

He studied the park, arranged for hot-air balloon jumps for no-wind tracking practice (which isn't all that necessary) and has come to feel almost religious about the cliff. Yosemite seems to affect a lot of us that way.

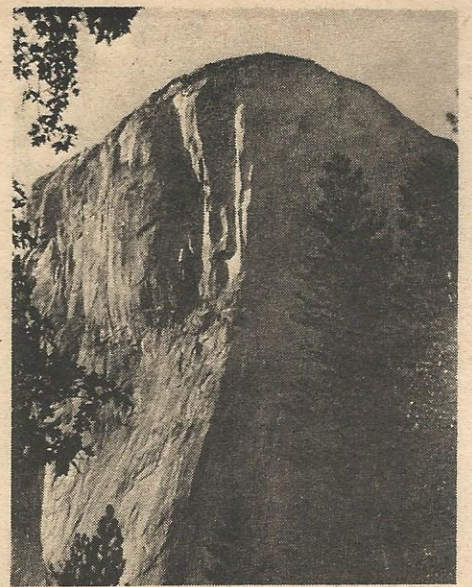
Anyway, the films of him dangling out over the cliff on a boom, filming people jumping out at him from the cliff were taken in August, 1978, and shown at the Labor Day Elsinore Scrambles. They created a sensation—they blew everyone's minds—and photographer Ray Cottingham told me they were the best films he has ever seen. So, Carl, of course, went right back up and did it again, this time with 2-man "passes."

This time, however, they got caught. They jumped at 9 AM on a Saturday morning, in full view of a tour bus and on the way down, in freefall, they passed a party of rock climbers (which included a ranger with a radio) who thought they were committing suicide. Think about it: nailed to a vertical wall of rock, with six bodies sailing past in a full-tilt boogie! Anyway, to quote Joe Morgan, "There were sure a lot of rangers down there!"

The rap was "hang gliding without a permit," and those jumpers who fought it beat it, while those that didn't paid the \$250 fine. Carl was in extra trouble, though, as he was still on probation from taking that hang glider off Half Dome, and, in addition, commercial filming in the park without a permit is illegal. There is some indication that Chief Ranger Wendt purposely wrote a bum ticket—he used to be a smoke jumper and really wants to see some of Carl's films. (I talked to him about two weeks after I made my jump, to seek permission, and he turned me down, saying that there was no chance as long as a case was still in court. He said people will be cited if caught, so I suggest not getting caught.)

During the week, it is very quiet in the valley around sunrise, and unless you're filming, there is no reason to wait until 9 AM. You *do* have to jump in the morning, as the winds get really squirrely as the 3,000 foot canyon heats up.

This means you have to camp out overnight on the rock, which also means you need a wilderness permit when you enter the park. It's easy to get, but I



A view of El Capitan from the valley. The cliff is 3,000' above the floor.

suggest that one of the support people (someone who isn't going to jump) sign it: it's got a statement about agreeing to follow the rules.

You drive up the back way, park at Tamarack Flat Campground and start to walk. My pack weight 55 lbs., completely concealed my rig, and drew some strange looks. Take a helmet and boots in case you run into the boulders at the bottom of the cliff. As for not being able to track in boots, I say bullshit. I'm the only one who has any real track time off the rock, and I would strongly suggest you stay stable, get into a track position to get what horizontal distance you can, but don't really get into it or keep going past terminal.

Set your altimeter at 3,000' and it will be zero when you get to the valley floor.

"Take three easy steps and you'll be in freefall. You'll love the view."

Pull at ten seconds (or about two grand), or as you approach the towers next to the cliff, which reach to 1500'. Pull any lower and you'll be dodging tall trees that are unsympathetic to square parachutes. If, after you're open, you're not sure you can make it to a clearing, consider transferring to your round reserve and putting it into a tree. I don't know what a Safety-Flyer reserve would do with no clear area to land in. I had ten jumps on my Strato-Cloud and would recommend a higher level of experience than that.

(continued on page 21)

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(continued from page 20)

And you *have* to jump a square canopy on this jump.

The walk in took me six hours—you climb two thousand feet in a distance of two miles and it's a killer. Give yourself all day to do it; we left at one o'clock. It's a bummer because there are patches of bare granite and you can easily get lost. There are piles of rocks, called carins, to show you the trail, but taking a topographic map along will keep you going the right way.

Take a CB radio along to contact your get-away crew, so everyone knows what's happening. But be cool with your air talk by keeping it brief and vague.

Two jumpers came all the way from Sweden just to make the jump, Rich and Sylvia. They jumped onto the rock, packed up and jumped off, so there is a way to avoid all that hiking hassle. Of course, doing it that way means you have to land at 6,500 MSL in uncertain conditions, and the pilot is risking losing his license as he's violating specific federal laws. Hiking in and jumping off is like a disturbing the peace rap. Take your pick.

No matter how you do it, someone has to clean up after you. If you pack in alone and leave a backpack, sleeping bag, etc., behind, the stuff will stay up there forever. So if you do it alone, you have to burn the stuff in one of the fire pits. One sure way to get very unpopular in Yosemite is not take care of your own mess.

I called Skratz Garrison a week in advance, spent one night at his place and couldn't talk anyone into going along, either as a jumper or a support person. So I scrounged two backpackers from a tai chi camp I was attending and got the young son of another tai-chier to pick me up. But the cliff crew got scared and wouldn't come down to the launch point and my ride got stuck. It's good he did, though, as I jumped later than I said I would and he would have left before I jumped and stranded me. Like I said, use radios. Also, get a get-away crew with a working tire jack, in case you get stuck.

The walk to the launch point from the top of El Cap is about twenty minutes, some of which you spend sliding on your butt. By this time, you've been at 6,500' for about 12 hours and are pretty hypoxic, so take it slow and keep it simple.

If you've seen the films, you'll recognize the four-foot carin that signifies the launch point—if you haven't you ought to! If the thought goes through your mind, "I wonder if this is

really the right place," as it did mine, look for the 10 cm. disc that says "Benchmark 5729, U.S. Coast and Geodetic Survey"—and you'll still wonder because you can't see over the edge!

Put on your gear, tighten it, then sit down and rest a minute. Let the sun get to the bottom of the valley.

Then take three easy steps to the left of the carin, and you'll be in freefall. You'll love the view.

I went head down and thought I was going to do a complete frontloop, but then I started to hear some wind and gained control. I got belly to earth, hit a track and geeked out sight-seeing. I never did get groundrush, probably due to the hypoxia and lack of light in the valley below. I opened, pulled mightily on my left riser to pop out the end cell and keep from turning into the cliff. Then I looked at my altimeter, said the ritualistic, "Oh, shit!" and released the brakes and took aim for a little notch between the trees far away on the horizon.

As I went sailing through the notch between 80-foot pine trees, I felt branches brushing against my body and the canopy quivered as it struck the trees, but I said to myself, "I'm gonna make it!"

Just then a big bird, or a tree or something reached out and grabbed my canopy, throwing me into a hard turn towards the trees. I carefully panicked, steered during the last 30 feet as any novice would do in his first cheapo accuracy meet, and PLFed next to those trees.

I got up, pulled the canopy out of the branches and stashed it behind the tree. I only had to walk about 50 yards to the road, trying to look innocent. My ride came running up, showed me the stuck car and we spent an hour getting it unstuck. A ranger came by, waved, and didn't even stop.

It took my cliff party eight hours to hike down—it took me only two minutes.

Next time I'd really like to have: 1) permission, paranoia's a bummer, 2) radio contact, 3) a mule to carry the heavy stuff. Yes, there will be a next time.

Once off the launch point, it's amazing how clear you are from the rock. Even if you frontloop as someone did in Boenish's film from too hard of a pushoff, you'll still clear the cliff. I wouldn't suggest hop and pops—I think that's how the first two guys got hurt.

It's a neat jump, one that gives you a whole new perspective on your environment. Skydivers don't *have* to jump out of airplanes. ●

Group Studies Possibility of "Legalizing" Jumps into Gorge

In the aftermath of the Royal Gorge bridge jump in Colorado last month, the four skydivers involved have found their actions greeted favorably by the mayor and city council of Canon City, in whose jurisdiction the jump took place. John Noak, Dave Blattel, Robin Heid and Carl Boenish leaped from the 1,053-foot high span on August 11th and since then Mayor John Fry has been working with Heid and three other Denver jumpers to draft an ordinance that would allow qualified parachutists to make jumps off the bridge.

Scott Hamilton, Troy Loney and Scott Brady and Heid are holding discussions on wind limits, gear requirements and jumper qualifications necessary to insure safe jumps into

Royal Gorge. So far they have determined that freefall jumps are too risky and that only static line jumps will be allowed from the bridge.

Heid told *Skydiving* that he hopes jumpers will refrain from leaping off the bridge until the legislation is acted on. He said city officials have been cooperative and enthusiastic, and unauthorized jumps at this point would put the legalization plan in jeopardy.

Carl Boenish termed the residents and officials of the southern Colorado town "unbelievably friendly," in sharp contrast to the chilly reception he received after he leaped off El Capitan in Yosemite National Park last year. Boenish is still involved in a legal dispute resulting from the jump.

About the Author

Al Warsh, SCR 125, jumped off El Capitan on July 23, 1979. He was the 15th person to do it and, according to Carl Boenish, some 20 people have done it since, including two women. Warsh normally jumps at Perris Valley Paracenter in California and has logged about 1120 jumps. Warsh says there is some possibility that jumps from the cliff will become legal if individuals demand the rights now given hang gliders, rock climbers and other park users.



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EDITORIAL...

Dark Pessimism v. Blind Optimism

There are signs that jumping in the U.S. is slacking off, that jumpers are traveling less and buying less gear. Some people, especially those involved in the business end of the sport, are becoming mildly alarmed. Sure, there's cause for concern, but there's also danger of making the situation worse, of talking ourselves into more trouble.

Jumping and jumpers are bound to feel the effects of the economic recession into which the U.S. is sliding. As skydivers react to the recession and spend what money they have more conservatively, they are less likely to buy a new \$1500 rig or spend \$1000 to attend a distant boogie. Harder times also means that less money will be spent at the local DZ, too, so everyone begins to feel the pinch.

This situation isn't a good one, and it's one that won't be solved overnight. It'll take months, perhaps even longer, to turn the recession around. But it will get better. And even the main cause of the recession can be cured if we can only come to grips with our pigish energy habits and free-spending government.

But if you listen to some people, including some highly visible leaders of our sport, parachuting is headed for hell in a hand basket. The sport is caught between the recession, the fuel situation and continuous threats of regulatory restrictions. Some of these "experts" are predicting the slow death of jumping, or at least the end of big aircraft, long freefalls and the \$5 jump. Such predictions are sparked by ignorance and fanned by the continuous stream of bad news we all hear. The problem with such predictions, aside from being wrong, is that they tend to make the situation worse by scaring us even more.

And if the consumer is scared, he pulls in his horns. ("If jumping is dying, maybe I shouldn't buy that new canopy; I'll wait and see what happens.") So the situation deteriorates, or at least recovers more slowly than it would have otherwise.

Our sport is not in a graveyard spiral. It is being rocked by a shaky economy, and we can expect things to get somewhat worse before they get better. The cost of everything—bread, meat, gas, skydives and gear—will continue to rise faster than

the incomes of most of us. But the situation isn't hopeless. Jumpers have always had to fight tooth and nail for their sport, whether it was for airspace, drop zones or recognition. We're going to have to continue to do so, so what's new?

Rather than continue to wring our hands, we should look for ways to improve the situation. A couple of hours with your checkbook and calculator will show you that you can still buy the gear you need, make the jumps you want and travel widely. You'll probably have to slack off a little here and there, and perhaps consider options like "van pooling," airline travel and buying one less jumpsuit this year. But the adjustments can be relatively minor and insignificant.

As a group, we must continue to fight to insure we receive the airspace and avgas we need. We must insist that our sport's leaders face the future and plan ways to cope with it. We need to cooperate with drop zone owners to help them keep their costs down, realizing that we have places to jump because of their willingness to tolerate the risks and hassles to try to make a living running a DZ.

There's no question that our lifestyles are changing in response to the direct and indirect effects of the energy situation. And until we curb our huge appetite for oil, the situation won't really improve.

But rather than sit around and blame others—OPEC, the oil companies, Carter or Congress—and wait for "them" to solve the problem, we have to individually reduce our gas guzzling. And if Washington seems unwilling or unable to provide the leadership, we should consider getting new leaders, perhaps some with a little more force who can get this complex and extremely difficult job done.

Meanwhile, we have to continue to remind ourselves that the job *can* be done. And when we consider our own little world of parachutes and the clean air at 12,000 feet, we have to remember that the sport will wither only if we let it. We cannot afford to be unrealistically optimistic or pessimistic, but it's even worse to bury our heads in the sand and do nothing. There is cause for concern—and action—but there is no cause for immobilizing panic. **MFT**

LETTERS.....

Round Two

I'm writing in response to Elek Puskas' reply to Van Warren's letter concerning lightweight ram-air falling apart after a few jumps due to improper assembly (*Skydiving*, No.1).

Mr. Puskas, president of Para-Flite, wrote: "Since to build perfect parachutes is not possible, and to build near-perfect parachutes would make the price of the parachute too high, we have to settle for the next best thing. That is to compensate for the few main parachutes that slip through quality control with a 'no hassles' customer service policy."

This is a bunch of manure. Anyone who would knowingly tolerate a quality control system where "...a few main parachutes (can) slip through quality control..." ought to be making hula hoops, not parachutes.

What you've got on when you go out the door is what you'll save your ass with.

This is what we're up against, folks; parachute manufacturing not aimed at making each and every single canopy as airworthy as possible. It's not like manufacturing hula hoops; human lives are at stake.

It's a sad state of affairs when the first thing one must do, upon opening a factory-fresh box of skydiving equipment, is to seek out a rigger to either be reassured the junk will work as intended and stand up to continued use, or to have the damn thing "repaired" and/or modified prior to use.

How about a federal law requiring that parachute manufacturers individually drop test their products?

This might either eliminate some incompetent "design engineers" by force, or it may result in equipment which does not self-destruct on opening (canopies whose seams split, reserve containers which do not open, reserve risers which separate from the harness, etc.)

Either this, or pro-rate to all buyers/users a "test jumper discount," with insurance and funeral benefits, since that's what you and I are: test jumpers for the parachute equipment manufacturers.

There was a time when you pretty much got what you paid for, a time when the concepts of quality and craftsmanship meant something.

Then came greed...

Dean "Ragman" Frazier
FAA Master Rigger
Honolulu, HI

Para-Flite responds:

Having had the opportunity to correspond with Mr. Frazier prior to this exchange about similar matters, allows me to read his irresponsibly stated opinions with amusement.

Faulty sewing can and does result in split seams. However, at least with Para-Flite, Inc. products, this has never been catastrophic, and in most cases goes unnoticed for several jumps. The Cruisair with the torn rib referred to by Mr. Warren's letter, would have saved Mr. Frazier's "ass".

Mr. Frazier fails to differentiate between main and reserve parachutes. Reserve parachutes are manufactured under a much tighter Q.C. system, and are tested in accordance with Federal regulations.

He also fails to take into consideration that we skydive with two parachutes and there is a second chance to "save your ass."

Mr. Frazier's righteous statement about "human lives at stake" implies that human lives are being lost because of poor quality control. This is completely untrue, and the statement is offensive to me personally because I am quite certain that I, as well as all Para-Flite, Inc. employees, are at least as

concerned about "human lives" as Mr. Frazier.

Ignoring economics is idealistically nice, but realistically impossible.

If Mr. Frazier is willing to pay a surcharge, I personally will put my "ass" in his parachute and test it for him.

Mr. Frazier is concerned about safety, and so are we. If he is looking for perfect safety, he should sell his skydiving equipment, and order a Hula Hoop from Para-Flite, Inc.

If Federal law required us to test jump each and every parachute, the dozen or so skydivers working here would love it. But it would not provide the perfect safety that Mr. Frazier is looking for. Parachutes can get damaged and seams can split on other than just the first jumps.

Maybe if we jumped them ten times each? There could still be some that blew on the eleventh jump. How about 100 jumps on each parachute before delivery?

Since this entire exchange started with quality control problems like seams splitting, how did Mr. Frazier drift to "design engineer" incompetency? Design engineers generally are not the ones doing the sewing.

About the old times when quality and craftsmanship meant something: I was there, and I can assure Mr. Frazier that parachutes have never been safer and more reliable than they are now.

Elek Puskas
President
Para-Flite, Inc.
Pennsauken, N.J.

my drop zone to much of the same situation. We had to sell out Cessna 170 and may lose our Beech D-18 this year...what a bitch!

I sent Hatley \$50. It gets expensive fighting those irrational, heartless bim-bos. I hope others will, too.

Greg Swank
West Richland, Wash.

Where is Russia?

Maybe you can answer a question that has been bugging me for years:

The Russians claim both male and female world records in speed star relative work. So how come the Ruskies never show up at the world RW meets?

If world record making is as easy as just publishing low times, I claim we built a 10-way in 1.4 seconds here in Austin last weekend. When are our "comrades" going to show their stuff?

Joel Shively
Austin, Tex.

Apparently the communist bloc countries have governmental policies that prohibit their athletes from entering meets that also accept South African competitors. Although France surprised the world parachuting community this year by denying entry to South Africa at the World RW Championships they hosted several weeks ago, no Soviet bloc countries entered the meet. The People's Republic of China, however, sent a full team.

Land Grab

Please keep up the fine work with *Skydiving*. We especially need articles such as the one on Ralph Hatley's problem (in Issue #2). Last year I lost

Skydiving's "Letters" column is the place to publish your tips, suggestions, announcements, observations, corrections and amplifications.

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