

Skydiving™

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Georgia Council Plans First Meet

The Georgia Parachute Council, dormant for several years, was reborn earlier this month and has already scheduled a parachute meet.

Several interested jumpers met with jumper Steve Chalfant in Atlanta to discuss the possibility of reactivating the council to conduct regional parachute meets. The meeting resulted in the election of officers for the council and definite plans for a meet this March.

George Galloway was selected as president, with Ralph Hartman filling in as vice president, Chalfant as secretary and Gail Oliphant as treasurer. The organization set membership dues at a nominal \$5 per year.

Much discussion was spent planning the council's first meet. The group settled on offering four events — accuracy, 4-way RW, 4-way CRW and 10-way speed stars — for the first meet which will be held March 22-23 at the Greene County Atlanta parachute center near Jenkinsburg, Ga., 40 miles south of Atlanta off Interstate 75. Registration and practice will be done on March 21st.

The 4-way sequential RW event will be divided into three categories based on the combined number of jumps of the members of the team. A team with a combined total of 500 or less jumps will compete in the novice category, while the intermediate category will consist of teams with a total of 501 to 2000 jumps. A team with more than 2,000 combined jumps will compete in the advanced category. The novice category will consist of two rounds, but the intermediate and advanced teams will make four jumps each.

The CRW event will be 4-way rotation, similar to the event run at the Zephyrhills Pumpkin Meet last October (*Skydiving*, Issue #6).

The 10-man event will consist of two rounds. Up to three floaters may climb



Photographer Rick Snow contributed this untitled shot of a jumper simply enjoying a skydive.

outside the aircraft. The Jenkinsburg drop zone currently has a Twin Beech.

Prizes will probably consist of metal beer mugs, popular prizes of both the old Georgia and Florida parachute councils.

The leaders of the new organization have scheduled a general meeting for February 15th to iron out details and recruit members. More information about the council and the first meet will be available then, and Chalfant stressed that competitors should contact him for complete details. His telephone number is (404) 755-4814.

Hard work by Manager Hooper pays off

World Meet Awarded to ZHills

After some intense lobbying by delegations from the United States and Brazil, the International Parachuting Committee of the FAI narrowly voted to conduct the next World Parachuting Championships of Relative Work in the U.S. at Zephyrhills Parachute Center. The meet will be held in 1981, probably in October, although a firm date will not be determined for some time.

"It was a long, hard, uphill struggle," was how Zephyrhills Manager Jim Hooper described the U.S. delegation's efforts to convince the CIP to accept America's bid and reject the one from Brazil. Brazil, at the last minute, substantially lowered the entry fees they proposed to charge participating countries, bringing the country's bid "well below" that of the U.S.

But price was not the only consideration. Some delegates questioned Brazil's ability to successfully host an international competition, since the country has little experience running big parachute meets. Other representatives noted Zephyrhills' reputation as an "international" parachute center that has held the biggest meets the sport has known.

And although the costs of entering the meet in Brazil might be less, the

savings would be substantially reduced or eliminated by the increased air fares required to travel to the southern hemisphere from Europe, Asia and North America.

The 26 countries at the CIP meeting voted by secret ballot after hearing

(continued on page 17)

PEIA Schedules Meeting

The Parachute Equipment Industry Association has scheduled its semi-annual winter meeting for April 2, 1980, immediately prior to the USPA board meeting in Salt Lake City.

PEIA's meetings and banquet are open only to the association's 23 member firms. But the organization has scheduled an open meeting with the USPA safety & training committee to discuss student equipment, particularly the new student piggybacks that have recently been marketed. The joint meeting scheduled for April 3, and equipment will be on hand.

USPA's board meeting will follow on April 4-6. More information is available from the USPA at 806 15th Street NW, Washington, DC 20005.

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Plans for Coolidge 'Money' Meet Scaled Back; Emphasis on Fun

Early plans for the Coolidge RW Money Meet have been revised substantially as the management of the Coolidge Parachute Center in Arizona has made several changes to make the meet fit in with the center's annual Easter Boogie. Initial plans for a big, serious, expensive money meet that focused on a 6-way event were scapped for a more casual and less expensive affair that will include 8-way RW and 4-way CRW.

Zing Engstrom, who manages the center with John Janes, circulated an announcement in early February that detailed the plans for the competition.

The competition will be held on April 5 and 6. Four rounds of 8-way RW will be run from 10,500 feet. Rules are relatively simple: "Show the required formation to the judges. Sequence to the next formation any way you like except where interim maneuvers are specified, i.e., flying pieces, specified breaks, etc. All 8-way maneuvers will be based on the random pool of USPA Part 50."

Judging will be by three ground-based judges with "FAI ratings," according to Engstrom. A video couldn't be located.

The CRW event will also be run from 10,500 feet with break off at 1,000 feet. Rounds #1 and #2 will be stack rotation, while round # 2 will be "CRW sequential," where each team will attempt to go from a stack to a quadraplane followed by complete separation to a diamond. If altitude remains, the sequence can be repeated.

Cash prizes will be awarded for the top two teams in the RW event and the top team in the CRW competition. The announcement says "All proceeds above the cost of the lift tickets go for cash prizes."

Engstrom told *Skydiving* that they'll be "no raffle, no deposits, no exorbitant entry fees ... just skydiving at as small an expense as I can manage. This is supposed to be a fun boogie. The cash prizes are just extra. Last year the first place 8-way team got \$400. I hope to beat that amount substantially this year."

As an aside, Engstrom said the drop zone recently changed its name from Arizona Parachute Ranch to Coolidge Parachute Center simple "because the new name reflects our location and activities better."

Collegiates Build Night Star

Nine collegiate skydivers built a round star over Marana, Ariz., in the night of December 31, 1979, to earn the first A.C.N.E. awards — All Collegiate Night Eight-way. The participants included Nancy Smith, Willie Caldwell, Tim Garlington, Ralph Blank, Mike Milota, N.W. Scott, Mike Windsor, Dundley Bancke and Larry Kelly.

The jumps were made after the National Collegiate Parachuting Championships held in Marana a few days before.



Fred Chrisman prepares to plow the peas at the First Annual Combined Services Sport Parachute Meet held at the Yuma Proving Grounds in Arizona late last summer. Military jumpers from Texas, Arizona, New Mexico, California, Oklahoma, and New Mexico attended the TRAC-type meet. A team from Desert Sun Sport Parachute Club, Yuma, Ariz., tied with a team from Ft. Huachuca, for first place honors. Photo by Ted Ockrassa, U.S. Army.

Golden Knight Killed in Collision

A new member of the U.S. Army Parachute Team died last month after being knocked unconscious in a freefall collision with another jumper. Tim Ziegler of San Diego and Randy Matthews collided while practicing the diamond track jump. The diamond track is a routine where two jumpers spend several thousand feet tracking away from each other in freefall and then perform 180-degree turns and track back. The jump is quite impressive from the ground, especially if the jumpers wear smoke grenades to mark their

paths.

Ziegler was apparently knocked unconscious as he made no attempt to pull his parachutes. Matthews suffered bone chips in an arm and a leg. Ziegler had recently joined the team and had made about 700 jumps, while Matthews has logged about 2,600.

The team, stationed at Ft. Bragg, N.C., was in Arizona for a training session. It performs demonstration jumps, attends parachute meets and provides many other services for the Army.

ZHills Plans World Cup of CRW

Jim Hooper, manager of Zephyrhills Parachute Center, recently informed *Skydiving* of his plans to host the First World Cup of Canopy Relative Work this Fall. The meet will be scheduled for the end of October.

Two events occurred in 1979 which encouraged Hooper to decide to host the meet. The first was the successful CRW competition his drop zone hosted as part of the annual Zephyrhills Pumpkin Meet. The event was the first major CRW meet and all concerned — judges, spectators, competitors and drop zone management — were pleased with the pioneering effort. Rules were drafted for the competition (and published in Issue #5 of *Skydiving*) that may serve as a foundation for sport-wide standards.

The second event which prompted Hooper to host a world cup this year was his recent decision to combine the Pumpkin Meet. 1978 and 1979 were the first years of splitting the competition and boogie into two separate events, a move which apparently decreased overall attendance.

With the end of October "free" again, Hooper chose to pursue the CRW world cup concept. He plans to seek official USPA/FAI sanction for the event, but will proceed with his plans whether these organizations bless the idea or not.

Hooper sees a great future for CRW. It is much more interesting to spectators who find it difficult to spot freefall for-

mations miles over their heads. It lends itself more to sponsorship, as corporate backers can advertise prominently on the inflated canopies. It is also somewhat simpler to judge, for the moment, making it easier to reliably score a CRW meet.

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Skydiving

Parachuting's Newsmagazine

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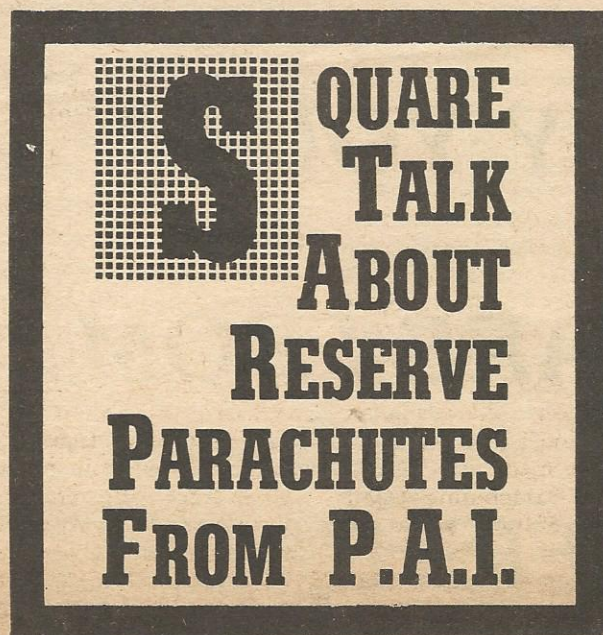
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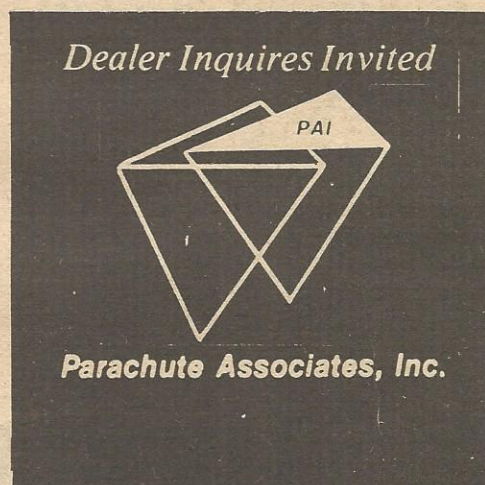
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No Conference Championships for Mideastern Conference

Mike Horan, director of the Mideastern Conference of the U.S. Parachute Association, recently announced that his area will not host a conference meet this year. Instead, those jumpers who reside in the conference who wish to qualify for the U.S. Nationals should contact a USPA-rated judge and perform the necessary qualifying jumps before the official.

Horan's decision came as a result of polling 159 members of Indiana, Kentucky, Michigan and Ohio, the states that make up his area. He reported in his conference's newsletter that 105 of

jumpers responding "do not want these meets and would not attend." He also reported that almost half of the competitors from his conference who attended the 1979 Nationals did not qualify at the conference meet. Instead, the skydivers qualified in other ways as provided by USPA.

Some of the jumpers responding to Horan's poll cited worry over gasoline supplies as a reason for not being enthusiastic about attending their conference meet.

Conference meets have been an integral part of USPA's competition program

for many years. Not only do the meets select and recognize the association's regional champions, they also determine who was eligible to attend this year's Nationals.

In recent years, however, the organization changed its competition rules to provide other ways to qualify for the Nationals. Competitors can now attend and qualify at other conference meets. They can also demonstrate to an appropriately rated judge that they can meet the minimum performance standards required to enter the national championships.

Attendance at some conference meets has been on the decline in the past few years, causing conference directors to question whether the effort required to plan and host the meets was worth it.

In the case of the Mideastern Conference, apparently it isn't.

Southern California POPS Championships Planned

Dates have been set for the eighth annual Southern California POPS Meet. Pat Moorehead has announced the meet will be held at Elsinore Paracenter outside of Los Angeles on May 3-4, 1980.

The competition will include the perennial POPS favorite events: hit and rock, accuracy and 3-man RW.

POPS is an acronym for Parachutists Over Phorty Society, an informal international organization open to anyone who has made at least one parachute jump and is at least 40 years old.

More information on the competition is available from Moorehead at (213) 630-5229 or Len Zak, (213) 542-3030.

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ParaMount Ram-Airs Built Under License

Mike Mount has teamed up with Keith Mayes to set up a loft in Rockville, Md., to manufacture ParaMount canopies. Production at the new facility was scheduled to begin in mid-December.

Mount has been building and selling a lightweight 7-cell canopy for about a year. Owners report the 225 sq. ft. canopy performs very well, with soft landings being the most commonly mentioned feature. Pack volume is very small.

As *Skydiving* went to press, the partnership reported it had completed negotiations with Para-Flite, Inc., and now has a license to manufacture ParaMounts without infringing upon the patents owned by that corporation.

The 7-cell ParaMount, constructed from F-111 fabric and complete with 3-ring risers and soft toggles, weighs 8.2 lbs. and retails for \$725.

The 5-cell model retails for only \$599 and weighs in at 6.1 lbs. The partnership claims the canopy has "lightning fast turns, full control range for accuracy and super-soft landings."

Mount's evening phone is (301) 493-9449.

Details Provided for Fifth Pam Am Cup

The Argentine Parachuting Federation has announced details of the 5th Pan American Parachuting Championships by circulating a bulletin to the fifteen member countries of the organization.

The meet will be held from April 9 through April 20 at the Alta Gracia airport in Argentina. Events will include style, accuracy and 4-way sequential RW. Teams must be sanctioned by their national aero club to attend, and each member of the country's delegation (including team judge, head of delegation, interpreter and coach as well as up to 15 competitors) are required to pay a \$300 per person entry fee.

Countries that are not members of the FAI or the Pan American Parachuting Federation will also be allowed to attend the meet, although their scores will not be counted in the official results.

FAI Sporting Code rules will apply. Member countries of the Pan American Parachuting Federation include Brazil, Argentina, Canada, Colombia, Costa Rica, Cuba, Chile, Ecuador, Mexico, Panama, Peru, Dominican Republic, Uruguay, Venezuela and the United States.



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The 1979 U. S. Parachute Team had this to say about the rigs they jumped at the World Meet:

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R-3 Canopy Release Fails; Jumper Injured

A jumper when seriously injured when his R-3 canopy release failed to work properly, causing him to land under a partially inflated canopy. Ron Tippet suffered a broken hip and a long cut under his chin when he crashed to the asphalt runway at Zephyrhills Parachute Center in Florida on January 19th.

Tippet opened at a normal altitude after an RW jump with a few other skydivers and discovered a steering line entanglement of his completely inflated Para-Flite Strato-Cloud. He elected to breakaway and simultaneously activated both R-3 canopy releases on his new Jump Shack SST Racer. Only one riser released, however, causing the col-

lapse of half of the 7-cell canopy and putting it into an unstable fast descent.

He pulled his reserve ripcord but the pilot chute immediately entangled with the slider of the main canopy.

Jim Hooper, manager of the center, called the local rescue squad within seconds after Tippet landed and hopped in a pickup truck to ride to the scene.

Inspection of Tippet's equipment revealed that the three aluminum rivets that attach the activation webbing to the release's modified locking lever had pulled out. The locking lever was still completely closed, although it could be released fairly easily by pulling it down with two fingers.

A rigger took the other R-3, the one that was activated successfully, and pulled the rivets out of the lever by applying a steady pull of 20 to 40 lbs.

In an interview later, Tippet revealed he had practiced breakaway procedures with the rig several times. A representative of the manufacturer speculated that the release may have been damaged during this practice, with the rivets being loosened when Tippet jerked the activation webbing down during practice.

Tippet was familiar with the operation of the R-3 release and was aware of the need to pull the activation webbing in a more-less downward direction.

One observer suggested that stronger rivets should be used to manufacture

the R-3 release.

The R-3 release is a Capewell canopy release that has been modified for sport use. The metal safety cover is removed and the locking lever shortened. A length of type 12 webbing is then riveted to the shortened locking lever and secured in position with Velcro tape. The result is a release that may be activated in a single action and is less likely to jam. Lanyard style Capewells, called "1½ shots" by jumpers, can jam if they are dirty, improperly adjusted or improperly assembled.

Tippet's accident, according to one witness, illustrated the importance of jumpers knowing their gear. He explained how the R-3 release can be easily operated even if the rivets fail by pulling the level down with the fingers. He also mentioned that some jumpers never inspect their equipment for worn components that may cause a problem in the air.

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New TSO Standards Still Being Written

The final draft of AS 8015, the performance standards on which a new Technical Standard Order on parachutes would be based, has met with several objections and has been returned to the TSO Committee of the PEIA for further and revision. Until everyone involved in the approval process—members of the committee, the FAA, and others—can agree on one version of the aerospace standard, the Society of Automotive Engineers will not accept the document and a new FAA TSO will still be a goal rather than reality.

Major objections focused two areas, maximum ripcord pull forces and environmental tests.

As it is currently written, AS 8015 would require that manufacturers test emergency and reserve parachutes to prove that they would function at both high and low temperatures. One member of the committee objected to several specific points of the latest draft.

Also, the FAA wants the maximum ripcord pull force to be lowered from the proposed 22 lbs. to 15 lbs. The FAA bases its proposal on an Australian report which concluded that a significant percentage of the population wasn't capable of pulling a ripcord with a force of 22 lbs. or more. The 22 lb. force has been a standard for many decades.

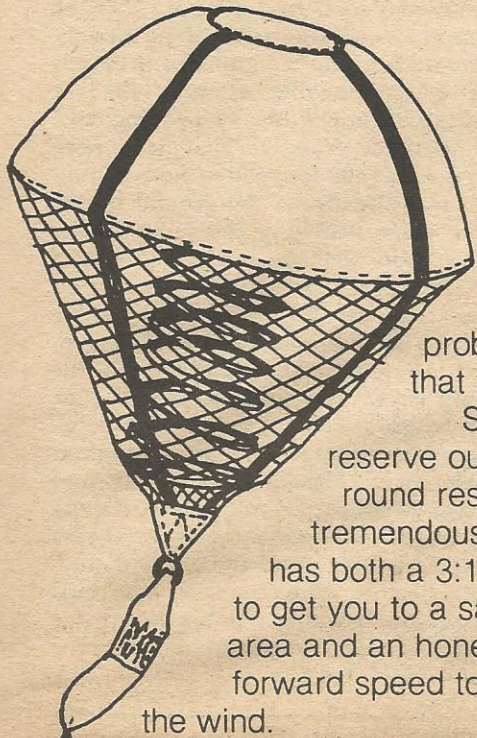
TSO Committee Chairman Elek Puskas explained that it will up to the committee to dispute the Australian report and provide the FAA with data that supports the committee's contention that the lower standard isn't necessary, if indeed it isn't.

He further reported that U.S. Air Force statisticians at Wright Patterson Air force Base are presently analyzing data collected by John Sherman. Sherman tested the ability of jumpers at the U.S. Nationals last year to pull a ripcord that was connected to a strain gauge.

Puskas has asked all interested parties to make final comments on the proposed standards as soon as possible. It is difficult to get any committee to agree completely with any document, and Puskas seems eager to spur his committee to complete the six-year-old project.

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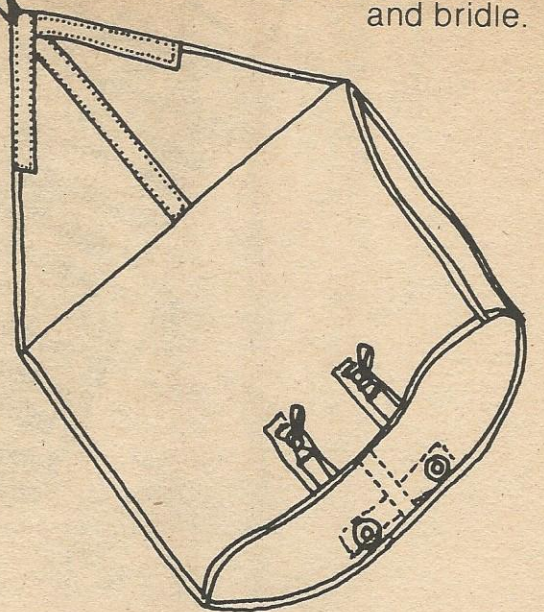
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Academies Dominate Collegiate Championships

by Robin Heid

The skies were clear and the winds calm for this year's collegiate championships, held December 27-30 at Marana, Arizona. Unlike sometimes in the past, the weather caused no problems for competitors or meet officials and the competition proceeded smoothly throughout the four-day event. Indeed, drop zone manager Tony Frost appeared to be the only source of difficulty during the whole meet, angering judges, competitors and spectators with his blunt personality and threatening a number of times to stop the competition when things occurred that displeased him. Meet Director Al King kept things under control, however, and all events took place without major interruptions.

Marana Air Park is a former CIA base and currently a repository for aging jetliners being reconditioned or modified, and occasional flights of unmarked high-performance jet aircraft which appear in the evening and leave before the following dawn. A guard shack and gate manned 24 hours a day greets visitors and truck patrols keep tabs on activity around the big birds. Once inside, a maze of roads leads to the motel and restaurant area where the jumpers were housed.

The facilities are impressive. Arranged in a U-shaped configuration, there were dormitories for the competitors, apartments for the staff, and a restaurant, bar and banquet room fit

for a good hotel.

The DZ facilities are equally outstanding. A snack bar, packing area and manifest desk are housed in one building, along with a large room used during the meet by the judges as a video viewing room. Outside, a covered waiting area and huge cement tarmac provide a pleasant place to pack and dirt dive.

It was raining and cloudy the morning of December 27, the designated practice day. Veterans of previous collegiate meets couldn't believe the nasty weather had followed them to supposedly sunny Arizona, but it turned out well, as the rain quickly stopped and the clouds proved high enough to do RW.

The practice jumping went smoothly, with four Cessnas and Marana's beautiful Twin Beech running steadily. At the same time, the judges were familiarizing themselves with the video system provided by the U.S. Army Parachute Team, and competitors got accustomed to the pace and procedures that would be used during the actual competition.

Hummers and Helicopters

The first day of competition dawned sunny and cool. At 7:30 a.m., a "wind dummy" load consisting of staff members went up for a jump and promptly set a questionable example for the youthful competitors by opening low. Jump Pilot Valerie Thal was open highest at 1500 feet; judge Steve Hamilton was already on the ground by the time those watching the jump in the video room walked outside.

The meet started soon thereafter. The four-way RW event and novice style (a half-set) was run first. The competition progressed rapidly, with the jump aircraft spending almost no time on the ground, a tribute to the competent manifesting of Marana regular Dave Dale. Meet Director King and Judge Dave Singer both praised Dale as an important reason the meet ran so well. "I hung around to help him out," said Singer, "but even though he'd never run anything this big before, he had it under complete control — he didn't need any help."

"Many novice stylists failed to maintain stability after their backloops."

Things came to an abrupt halt for a while in the early afternoon, though, when a jumper injured himself on landing, prompting Tony Frost to shut down the meet until a medevac helicopter could take the jumper to a Tucson hospital. After a 45 minute break in the action, the meet continued at a brisk pace. The end of the first day saw the novice style event and 24 teams complete two rounds of RW competition.

The skill level of the relative work competitors was pretty low. USPA C license qualification was required and several competitors barely made that — with many teams having difficulty completing the first formation. And many of the novice stylists failed to maintain stability after completing their back loop. Nevertheless, the competition was spirited and the collegians enjoyed themselves immensely while picking up valuable meet experience. Next year these same jumpers will probably do much better.

A 10-Second Reserve Ride

The second day of competition began with another wind dummy load and it also set an example for competitors of what *not* to do. Everyone opened above 2000' on this one except King Morton, who couldn't find the handle for the main pilot chute of his SST Racer. He looked for it until about 300 feet, where he pulled his reserve and was rewarded with a ten-second canopy ride.

The rest of the competition was less eventful. The relative work was finished

(continued on page 20)

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Changes to fuel system, turbocharger door

NTSB Recommends Cessna Fix

The National Transportation Safety Board told the FAA it should require a redesign of the fuel systems in all Cessna 200-series aircraft. Apparently the NTSB feels the fuel reservoir fittings of several aircraft, including a Cessna 206 that was involved in a fatal accident, are "considerably below specified

tolerance." Undersized fittings "may allow vapor build-up in the fuel system by restricting purging of fuel vapor to the main tank." The board recommended, as an interim measure, that the FAA issue an airworthiness directive requiring inspection of forward fuel lines for proper bend radius and tube diameter in the bend and fuel lines inside the engine compartment for proper separation from the exhaust system and other heat sources.

In a separate recommendation, the NTSB recommended that the FAA alert the owners of certain turbocharged 200-series aircraft. Apparently there have been several instances of expensive turbocharger damage resulting from "the deterioration of the alternate air

door's 'piano-type' aluminum hinge," resulting in "the hinge pin sleeves breaking away and being ingested by the turbocharger."

The hinge was changed from aluminum to steel in June 1969, but the NTSB said Cessna has not issued any service information regarding the hinge

failure problem and its consequences.

Cessna 200 series aircraft, including the 205, 206 and 207, are popular jump aircraft capable of hauling five or more jumpers. The turbocharged models are popular at high-altitude drop zones as the engines perform better in the less dense atmosphere.

Military Ejections Still Dangerous

Major William D. Harrison, writing in the Fall issue of the *SAFE Journal*, reports that the chances of successfully ejecting from a military aircraft have not appreciably improved since the first U.S. Air Force emergency ejection in 1949.

In the entire 27-year period, over 4,400 aircrews have abandoned their aircraft using an explosive ejection system (as opposed to bailing out through an open hatch). Approximately 82% of the personnel survived. But during the last seven years, from 1971 through 1977, only 81% survived out of 583 ejections.

Of those that survived in the last seven years, 18% were uninjured, 45% received minimal injuries, 10% received minor injuries and 27% received major injuries.

The greatest cause of the major injuries was the ejection force which caused injuries such as spinal compressions. 29% of the major injuries were from this cause, while 27% resulted from PLFs, with the remainder being caused by windblast, entanglement, landing on the survival kit and miscellaneous causes.

Sharp Logs 2000th

A 64-year-old skydiver recently logged his 2,000 sport parachute jump. George Sharp of Union, N.J., made the milestone leap over Lakewood, N.J., on October 21, 1979, after nearly 14 years of active involvement in parachuting. He made his first jump in late 1965 — at age 50.

Sharp is a retired employee of the Colgate Palmolive Company and pursues other hobbies besides skydiving. He is an active long distance runner, with several Boston Marathons behind him, and pursues flying, theater and jumping with equal vigor. He holds an instructor's rating and has earned his SCR award.

Sharp was presented with his USPA Diamond Wings at the offices of Parachute Associates, Inc., in Lakewood, N.J., last month.

George Sharp receives his 2000-Jump Award from PAI President Bob Young.



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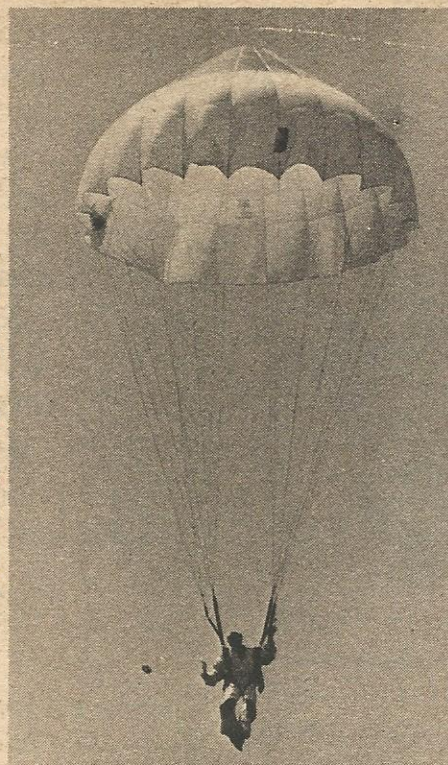
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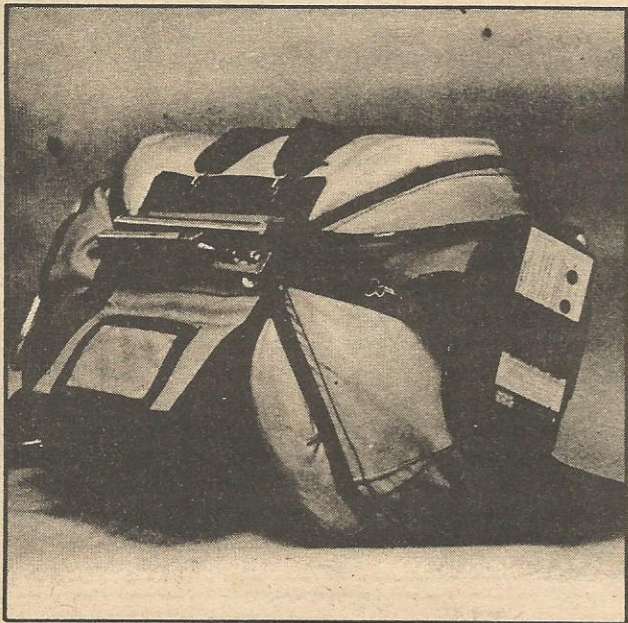
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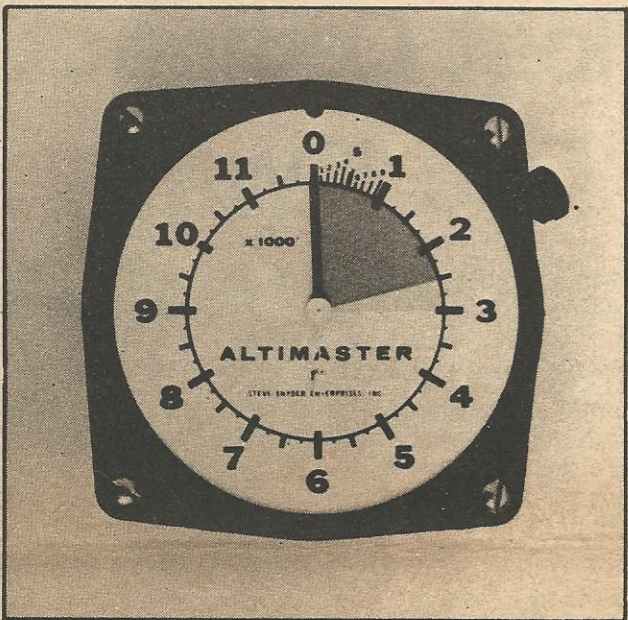
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From the Loft

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.

Rapide Link Tested

Recent tests of the popular #5 Rapide Link show it is stronger than most manufacturers and riggers thought. The #5 link, found on most modern ram-air main parachutes, is rated at 750 lbs. load limit, the limit at which permanent deformation is supposed to occur.

Laboratory tests, however, show that the link doesn't permanently deform until loads of about 1400 lbs. are applied. And although it will deform at greater loads, it won't completely fail until a load of about 3700 lbs is applied.

The testing also showed the importance of screwing the locking barrel completely onto the threads. Even a quarter of turn less than the required full 3.7 turns has a significant effect.

The study concluded that the #5 Rapide Link is adequate for personnel


Sellick Prepares New Book on Sport

Bud Sellick, author of two books on parachuting, is writing another. He is requesting photographs for his latest effort, a book that will be sold in bookstores across the United States.

Sellick told *Skydiving* that his new book will be similar to the two that were published in 1961 and 1971. That is, the book is aimed primarily at the non-jumper who is interested in making a parachute jump. It will contain chapters on techniques, history, equipment, training and competition.

Sellick needs B&W prints or transparencies of photographs "that tell a story to a whuffo," as he put it. He's especially interested in unusual and attention-grabbing shots. A small budget exists to pay for some photos; full credit will be given in any case. He stressed that photographers should contact him no later than March 1, 1980, at P.O. Box 110872, Nashville, TN 37211.

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canopies with four risers as its design limit realistically appears to be about 1200 lbs.

The Para-Flite Safety-Flyer, the only reserve which uses Rapide Links, uses the #6 version, which is even stronger.

Strong Still Recalling Lops

Strong Enterprises of Orlando, Fla., is still requesting that owners of Strong Lopo reserve canopies with serial numbers between 3000 and 4000 contact the


company.

The reserves were recalled several months ago when it was discovered improperly coated suspension line was installed on some of the canopies. The improper coating can require a higher than normal force to release the deployment diaper, thus delaying or preventing canopy inflation.

Strong Enterprises will remove the coating at no charge to the owner.

Riggers and lofts should stay on the look out for these canopies, as it is unlikely every owner is aware of the situation.

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

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Skydiving, February 29, 1980/11

Meet Director Refutes Rumbleseat Meet Article

A report on the 11th Annual Rumbleseat Meet that appeared in Issue #7 of *Skydiving* enraged that meet's organizer, resulting in her refuting several of the statements made by Ansel Eisenstadt, the author of the article.

Diane Kelly, who has run the meet in Southern California since 1974, was particularly upset over Eisenstadt's proclamations that the awards given at the meet were "a bit short of the mark."

In a long letter to *Skydiving*, she explained how she solicited prizes from parachute manufacturers and dealers. Over 215 individual prizes were awarded at the meet, including joggers wallets, medallions, t-shirts, free jumps, altimeter mounts, belt buckles, trim tabs, carrying bags, art prints, and hats. Most of these prizes were donated in multiples of 10.

The prizes were awarded so individual members of the top three teams picked up to four or five prizes each. Since the entry fee of \$37 included three jumps from 12,500 feet, a free party, and prizes, Kelly felt that no one got "ripped off." Even the last place team was given prizes, she said.

Kelly felt the "parachute companies got a kick in the teeth when Ansel called the free gifts 'inferior awards.'" She listed the contributing companies as Dean Westgaard Parachute Enterprise, Dar Vader Enterprises, Embury Sky Systems, Kelly Gear, Elsinore Paracenter, Perris Valley Paracenter, Para-Innovators, Advanced Air Sports Products, Ocean Pacific Sportswear, RW Underground Publications, and the Chee Chee Club Bar.

Kelly's criticism of the article wasn't limited to the statements about the awards. She pointed out that 11, not 10, teams entered the meet.

She also said "we just can't win" trying to please the jumpers' desire to party in the evening. Keeping the entry fees low

means the management cannot afford to hire the best bands. "And I've never seen any meet band that could compete effectively with skydiving movies," Kelly said.

She also explained that the rules are designed to increase competition.

Eisenstadt criticized the party, but, likes the meet's rule.



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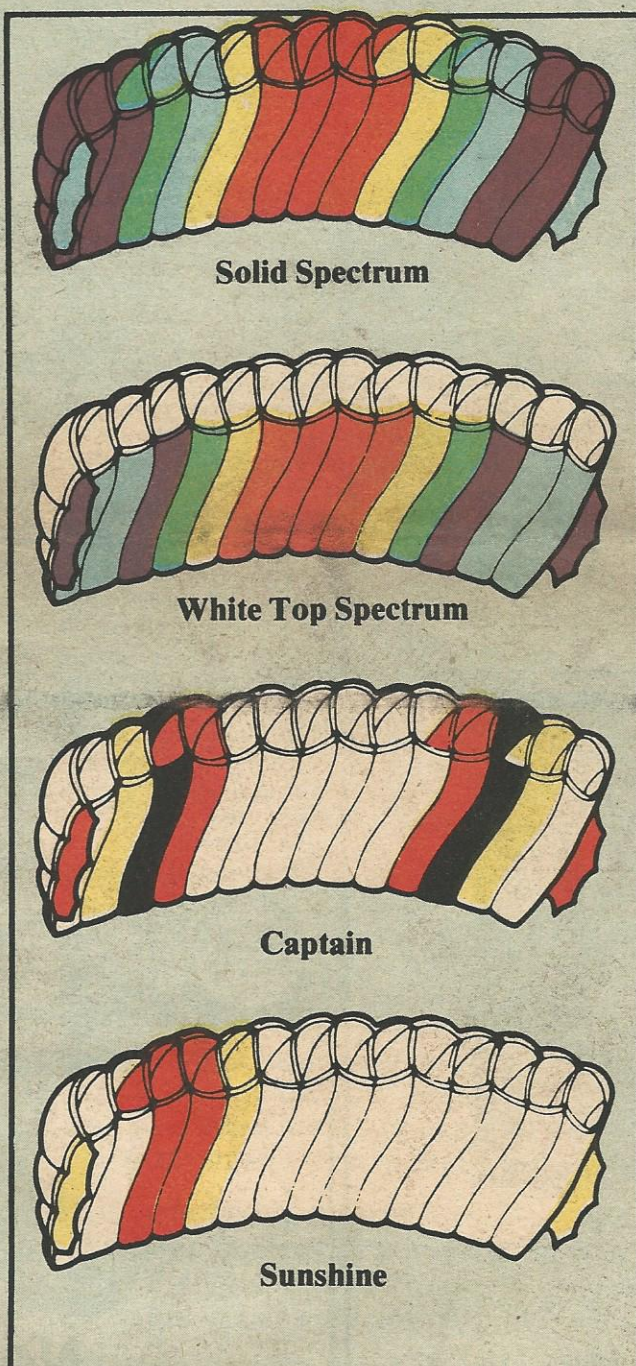
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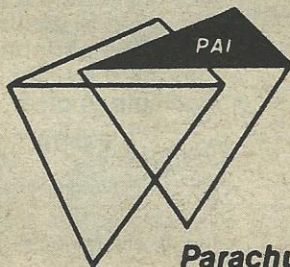
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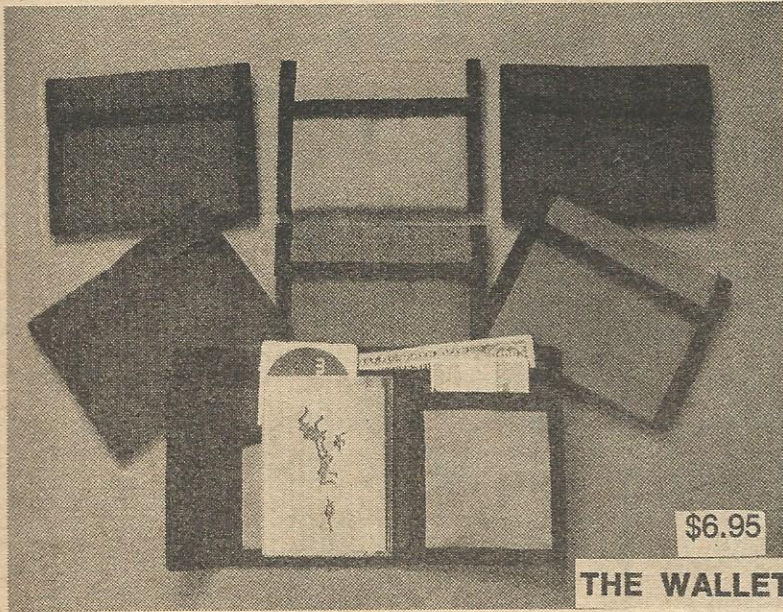


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14/Skydiving, February 29, 1980

Advanced Air Sports to Offer Piggyback for Novice Jumpers

Advanced Air Sports of Elsinore, California, is now developing a tandem container system for student use which will also be compatible with the lightest main and reserve canopies on the market.

Jim Handbury, president of Advanced Air, said the system will utilize a single-operation system for releasing the main and activating the reserve, and feature a main container small enough to fit lightweight squares. "We're testing a new main canopy we hope to use with the system," said Handbury. "It is a 28 foot canopy with Lemoigne steering slots that's flatter than a normal 28, made of Harris F-111 material. It's too early to tell if it will be satisfactory for student use, but we've found its rate of descent to be slower than a Paradactyl, and it packs in a Strato-Flyer-sized container."

Handbury is also planning to film malfunctions and breakaways with a 200 frames-per-second camera. "We'll be able to view almost every conceivable thing a canopy does during a malfunction," he said.

Advanced Air's SOS features a 3-ring canopy release cable attached directly to a metal Martin-Baker reserve handle. The ripcord cable also runs through the handle, with approximately nine inches of cable protruding from it. A small velcro ball is attached to the cable end. According to Handbury, this system allows a full range of alternatives to jumpers using it. For students and most situations in which experienced jumpers find themselves, Handbury recommends pulling it all at once. For emergencies where immediate reserve activation after breakaway is not desirable, the system has enough ripcord travel between riser release and reserve activation that a staged deployment is easy to achieve. And for situations where riser release is not necessary, the velcro ball can be pulled, leaving the risers and SOS handle in place.

Handbury has also modified the 3-ring system he produces under license from the Relative Workshop. He uses a silicon-based PVC coated cable for the release system instead of the cable the

Relative Workshop provides. "It costs four times as much," said Handbury, "but it's not as sticky and gummy as the other cable." He said Advanced Air has had rigs come in with cables so sticky they couldn't be pulled. "There were people with my rigs who couldn't pull them, so we changed it," Handbury said.



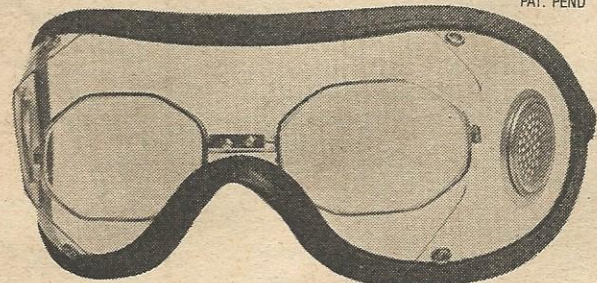
In other developments, Advanced Air's annular ring reserve has been put on the back burner for the time being. Made with cascaded lines with a huge apex, the projected weight of the reserve to make it steerable created problems.

"The annular ring creates a vortex so strong, it's almost as good as material," said Handbury. "But we found that modifications upset the air flow, increasing the rate of descent to an unacceptable level. Additionally, the modifications warped the canopy and created oscillations."

Changes are in the works for the 1980 version of Handbury's popular tandem rig. The top flap has been extended a few inches for cosmetic reasons, and the top of the reserve container has been tapered, thereby internalizing the ripcord and cable release housing, and giving a generally cleaner appearance to the system.

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Barish Beta Offers Fast, Flat Glide

Barish Associates, Inc., is preparing to market a new ram-air canopy after more than 15 years of development. Called the Barish Beta, the new canopy will offer skydivers unique performance characteristics as it opens, flies and lands like no other. *Skydiving* recently had the opportunity to evaluate the Beta and found that the canopy was indeed different.

The most obvious feature of the Beta is its nearly solid leading edge. Rather than having completely open cells at the front of the canopy, the Beta is mostly enclosed, with small openings on either side of the ribs.

Other than the new leading edge, the Beta outwardly resembles a typical ram-air sport parachute.

Closer examination reveals other differences, however. The deployment slider is small, about the size and shape of a shoebox top and the outermost suspension lines do not pass through the grommets of the slider. The suspension lines are made of 750-lb. test Kevlar. The fabric is a coated nylon ripstop that is quite stiff, resembling the fabric used on the old Aero-Foil Systems Para-Sled. The prototype canopy had but two steering lines on each side instead of the more typical four.

Each load-bearing rib is reinforced by a "catenary," an S-shaped length of nylon tape that functions as the "crows' feet" reinforcement of other canopies. The Beta is cross-ported throughout.

Hadden Wood toured the Eastern Seaboard in January, demonstrating the canopy to potential customers, including the U.S. Army Parachute Team.

Wood described other major design features. The airfoil has a spanwise twist, or "washout," to aid both the

flight and stall characteristics. The cell shape is thus "tailored" — everyone is different. The canopy is also a bit wider along the nose than along the trailing edge.

The zero-porosity fabric, Kevlar lines and cross porting are all essential to the performance of the Beta, Wood explained. The canopy is "super pressurized" and is therefore more rigid and more efficient in flight. Trim is important, and the stretch resistance of Kevlar helps keep the canopy from developing built-in turns. The catenaries are said to keep the airfoil shape smoother, resulting in a better glide angle and more forward speed.

The manufacturer claims the 200 sq. ft. Beta has a glide ratio that exceeds 3.5 to 1 and a forward speed of 25 knots

plus. Both specifications, if true, are substantially greater than other modern ram-airs.

The prototype that *Skydiving* jumped was a 200 sq. ft. moden with a wingspan of about 21 feet and a chord of about 9.5 feet. It weighed, with 3-ring risers, about 8.5 lbs. It was freepacked into a Wonderhog, and the stiff fabric resulted in a packed volume that was considerably greater than expected for an 8½ lb. canopy.

The canopy was then jumped by Bill Booth, president of the Relative Workshop. At 200 lbs., Booth normally jumps a Para-Flite Strato-Cloud. The weather was cool and clear, with a steady 5-10 mph breeze at DeLand, Fla., the site of the demonstration.

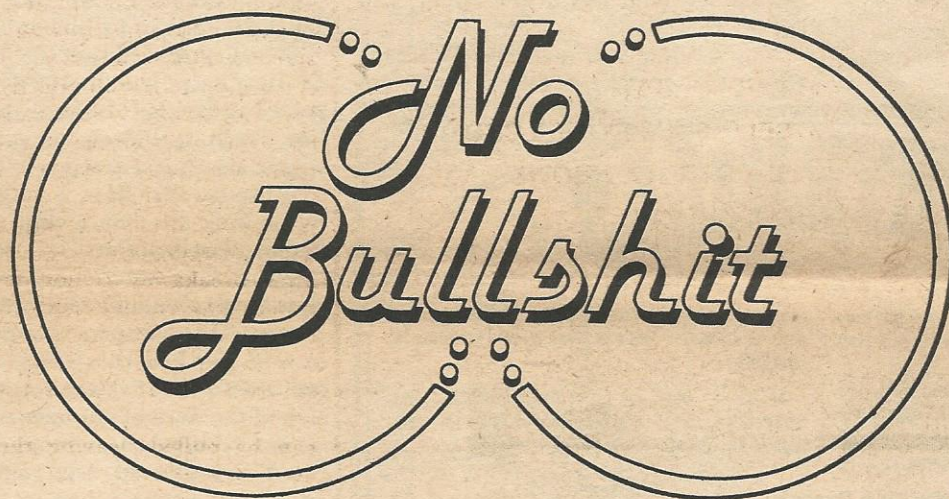
Booth did a short delay. The opening

appeared smooth and clean. He turned and stalled the canopy, and later reported that toggle pressures were extremely light. Stalls were also gentle, with only moderate surge if the toggles were quickly returned to their keepers. He was sharing the air with a 135-lb. skydiver under a Strato-Cloud, and the lighter jumper landed about a minute before him, in spite of both initially being opened at the same altitude.

Booth's landing was acceptable, although it appeared that the Beta did not have significant flare capability. Wood, who observed the jump, said Booth did not have the toggles at the keepers when he initiated his flare, thus he tried to flare an already slowed-down canopy.

After the jump, Booth agreed with Wood's claims that the canopy skidded and slipped less in turns than other ram-airs. He said it seemed to lose less altitude in a gentle turn. A spiral turn,

(continued on the next page)



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(continued from the previous page)

however, resulted in rapid loss of altitude and very noticeable G-forces. Booth compared its turn and spiral performance to that of the Para-Flite Delta 2, a Rogallo wing canopy no longer in production.

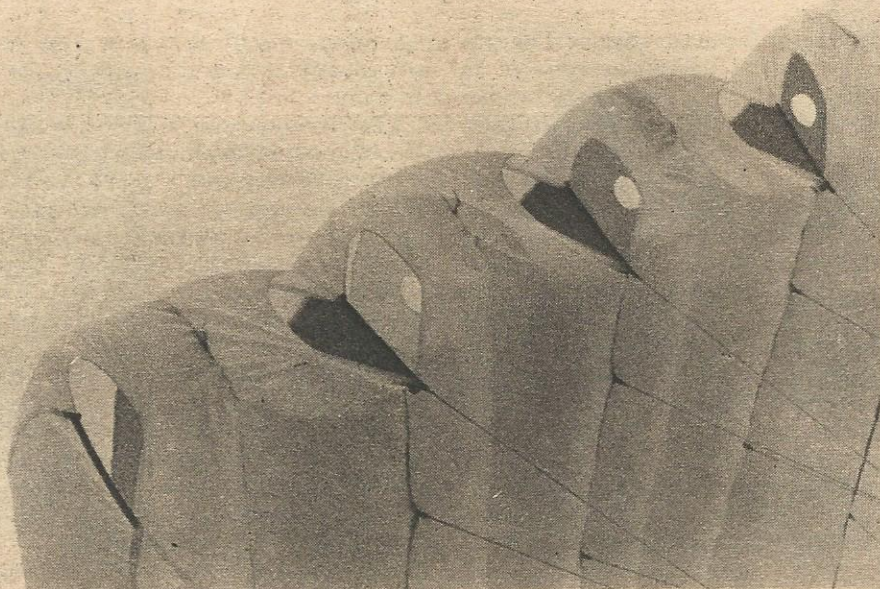
Booth also said the opening was extremely comfortable and "staged," as cell inflation lagged behind canopy spread by several seconds. He speculated that the canopy might be jumpable without a slider or any reefing system whatsoever.

Skydiving's evaluation jump then followed. Mike Cerasoli, president of Sky Supplies, went along, jumping a Pioneer Merlin with Kevlar lines, a canopy with excellent glide and forward speed. The jumper under the Beta weighed about 145 lbs., as does Cerasoli.

The opening after a delay of at least ten seconds was excellent — smooth, gentle and clean, with no tendency to "snivel." Adequate forward speed was obvious by the sound of the air rushing by.

Skydiving confirmed that the canopy had excellent turn response and light toggle pressures throughout most of its control range.

Cerasoli and the jumper under the Beta performed some compensating turns to get next to each other at the same altitude. The Merlin had equal or even slightly superior forward speed, but it sunk out of the sky much more rapidly than the Beta, demonstrating the much flatter glide of the prototype Beta.



The photograph on the left shows the unique construction of the Barish Beta's leading edge. To the right is Bill Booth of the Relative Workshop landing under the canopy.



Several full stalls were performed. The stall was gentle and recovery was easy. The Beta has less tendency to surge after a stall than other canopies. The jumper couldn't determine if the canopy slipped or skidded less than the competition.

The Beta was stable, although it rocked gently at times and didn't display the solid feel of the larger, 230 sq. ft. ram-airs.

The landing was made into a steady breeze of 5-10 mph, excellent conditions

for ram-air landings. Toggles were kept up until the last possible moment, when they were "buried" at an altitude of about ten feet. The canopy stopped and began to drop back, but a floating flare was not achieved with this technique. The touchdown was very acceptable, however.

The accuracy ability of the canopy wasn't evaluated, nor was its flight characteristics in turbulent air.

Wood explained that the latest model of the Beta has a 100% reliability record so far. He also said the company has abuilt a 180 sq. ft. version that weighs much less and packs smaller.

Although the Beta is indeed a fast, flat-gliding parachute with exceptional deployment characteristics, its relatively large pack volume and lack of significant flare capability decreases its attractiveness. The jumpers who participated in and watched the jumps at DeLand last month felt that a much smaller version of the Beta might have more promise as a relative work canopy, if the flare could be improved. One suggested that additional steering lines to the trailing edge might be helpful.

Wood emphasized that the design of the canopy has not yet been "frozen" and that the company is still actively developing the Beta. Other fabrics have been tried, and smaller Kevlar suspension lines will probably be investigated.

The company plans to begin selling the Beta this Spring at a retail price of \$750 or so.

Barish Associates, Inc., is owned by David Barish, an aeronautical engineer with extensive experience in parachute design. He developed the Barish Sailing in the early 1960s, one of the first truly high performance man-rated canopies. (The design, however, was not successful as reliable openings were never achieved.) Since then, he has continued to experiment with different designs.

The company's address is Dept. S, 54 East 11th Street, New York, NY 10003.

Reward Offered for Gear Thief

The owners and jumpers at Perris ley Paracenter in Perris, California, are offering a reward for information "leading to the apprehension and dismemberment of the Gear Thief," an unsavory individual who has been stealing gear from the drop zone at infrequent intervals. According to DZ Manager Joe Morgan, "\$500 will be paid to the people who help us catch the thief." For description information on the rigs stolen, call Morgan at (714) 657-8727.

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ZHills World Meet Site

(continued from page 1)

presentations by Brazil and then the U.S.

Brazil received 11 votes, the U.S. got 13 and two countries abstained. Three communist countries voted for the U.S.: Yugoslavia, East Germany and China.

Hooper praised the "real team effort" of B.J. Worth, William Ottley, Larry Bagley, and Craig Fronk. Worth is the United States' official CIP delegate, while USPA Executive Director Ottley serves as the alternate delegate. Bagley and Fronk serve on the USPA Competition Committee, of which Bagley is chairman.

A delegate of China heartily congratulated Hooper for his winning bid and expressed his country's eagerness to travel to Florida. At that point in the conversation, according to Hooper, he pulled out a world map and asked to be shown exactly where Florida is.

Hooper also reported that the delegate from the USSR told him his

country plans to send a team to the world RW meet. The Soviets have not attended a world RW meet.

The delegation from the U.S. was surprised at the enthusiasm the CIP displayed for CRW. Hooper distributed sets of proposed rules for a world-level CRW meet to the delegates, asking that they consider adopting the rules and pave the way towards an official world CRW event.

The RW subcommittee of the CIP had already been at work in a similar area, drafting procedures and standards for CRW world records. The subcommittee presented the proposal to the full CIP body for approval.

At that point the president of the FAI, the parent organization of the CIP, "blew a gasket," according to Hooper. The official angrily explained that such rules couldn't be adopted without first being considered by the FAI, and that efforts by the CIP to circumvent the FAI's authority would be dealt with harshly.

The CIP took a different tack and tabled adopting any rules until Zephyr-

hills hosts its CRW "World Cup" in late 1980. This meet, as explained elsewhere in this issue of *Skydiving*, is not officially sanctioned by the CIP, but it will be viewed with interest by the organization. It will, in effect, serve as a testbed for CRW rules and meet conduct.

The delegate from East Germany then asked that Hooper report on the CRW meet at the CIP meeting in January, 1981. Apparently several countries, including East Germany, are eager to have official rules and competi-

tions sanctioned by the CIP.

Hooper agreed to file such a report. He told *Skydiving* that he would greatly appreciate input from meet directors and other personnel involved with CRW meets so that he can prepare a thorough, useful report. He needs suggested formations, judging considerations and so forth.

Hooper said that Tom Courbat of Redding, Calif., did most of the work in drafting both the suggested competition rules and record procedures.


Southwest May Face Avgas Crunch

A serious shortage of aviation gasoline could occur as a result of a fire and explosion that closed the Phillips Petroleum refinery in Borger, Tex., last January. The major impact of the loss of the refinery — which may take up to six months to repair and reopen — will be felt in the Midwest and Southwest.

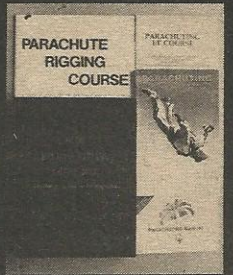
This grim news was announced in an FAA bulletin that advised pilots to be more diligent in their flight planning. The bulletin advised that pilots phone ahead to insure adequate fuel is available.

The loss of nearly all production capacity at Borger is particularly troublesome because Phillips produces about 25-30 percent of all avgas in the country. And, under a series of exchange agreements, the company provides avgas for a number of other major oil companies that do not refine their own avgas.

As a result of the fire, Phillips reduced its January allocation fraction from 100 to 35 percent. Some states may be hit especially hard — Phillips supplies 81% of the avgas sold in New Mexico, for example.



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An Interview with Jacques Istel

Despite the rancor with which some jumpers now view him, Jacques-Andre Istel has made many contributions to skydiving in the 25 years he has been associated with it. It was Istel who really began sport parachuting in the U.S. when, in 1955, he reorganized the three-week-long military training program into a half-day parachuting course in which the average person could participate. Soon after, borrowing ideas from various European countries, he cut out gores in the canopies and put sleeves on them, allowing parachutists to steer their canopies for the first time and experience opening shocks that didn't knock their socks off.

In 1957, Istel founded Parachutes Incorporated and two years later, opened the country's first commercial parachuting center at Orange, Massachusetts. Istel was also involved in the formation and development of the Para-

chute Club of America, which later became the United States Parachute Association, and in 1963, was elected president of the CIP, a position he still retains in an honorary capacity.

Jacques is only peripherally involved in parachuting these days, however. He is currently in the process of divesting himself of operational control of his drop zones, and though a lifetime member of USPA, has little to do with the organization since a falling out of sorts occurred back in the early '70s.

Istel is also admittedly out of touch with the sport's newest techniques and technology. Student training brochures feature found Para-Commanders and skin-tight jumpsuits, and relative work receives little attention.

But his dedication to a project of turning Elsinore into the world's first multi-airport complex is real. He showed Skydiving architectural drawings and

models, demonstrating the investment he has made in the planning of his project. He has other plans, too, under the umbrella of the Hall of Fame of Parachuting, Inc., plans that he is reluctant to discuss.

Istel is about 50, although he appears to be younger and in excellent physical condition in spite of reported medical problems. He and his gracious wife Felicity divide their time between California, New York and the Bahamas. Istel sold his familiar Piper Twin Comanche and is an active free diver who enjoys spearfishing.

Skydiving's Robin Heid visited Istel recently, to discuss the jumper/management situation at Elsinore, his plans for Skyworld, and get his views on the sport of which he was such a big part during its early days. His report:

"I found Jacques Istel to be a charming, witty man, and more than a little



arrogant. Nevertheless, he was cooperative and spoke frankly on every subject, except the frequency of his recent jumping, and the date of his last jump. He has 634, most of which were made in the '50s and early '60s, but that's all he would say."

SKYDIVING: Every skydiver we talked to said you were the reason they left Elsinore to jump at Perris. They claim you chased the experienced jumpers away.

ISTEL: Perris has developed for one reason. It was bought by the Conatsers, who have built it up and worked hard to make it a good drop zone — they have my highest respect. At Elsinore, our capital went into: reimbursement of long-term debt—now accomplished, buying land around the airport. We started with 193 acres and how have 273 — which we'll need for Skyworld, and basic planning for Skyworld. You have to have a plan before you can put money in it.

S: You've also been accused of being hostile toward the experienced jumpers at Elsinore. Is that true?

I: Elsinore was full of habits I considered despicable. We don't like being policemen, but we were faced with a jumper population that was unsafe, a large percentage of which had drug habits. If they felt a coolness on my part, it was because I desired a basic cleanup in those departments — this is a must for parachuting and all air sports.

(continued on next page)



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Number 1. Nationals preview, gas shortage survey, Paralert, NPRM, jump plane crash, Sky van Boogie, Fatality Report.

Number 2. Complete report on U.S. Nationals and USPA Boogie, CRW world record, trouble in Oregon, new DZ near Houston.

Number 3. U.S. Team training report, Strong Lopo Lite, Pelicanland open, Jumpshack moves, new TSO, Verrazano Bridge jump.

Number 4. World Meet results; U.S. Wins CISM Meet; Freakbrother Convention; Herd Boogie; Canopy RW for Beginners — Part I; Jumping Off El Capitan Requires Preparation.

Number 5. Safety-Flyer Evaluation; USPA Board Meeting; CPI Selects Strong Student Tandem; CRW for Beginners — Part 2; Django Pegasus Canopy; California Repeals Parachuting Regulations; Night RW off El Capitan.

Number 6: Women set RW record; SCS on Jum -7; Record Night Jump Over ZHills; Trim Tabs Evaluated; CRW Rules Proposed; Yosemite Authorizes El Cap Jump; XL Cloud Announced; Viking Superlite 2 Offered.

Number 7: Perris RW Seminar Report; Collegiate Meet Scores; Report on Rumbleseat Meet; Plastic Reserve Ripcord Breaks; Jumper Dragged Behind DC-3; FAR 125; Sky Suits Offers Thunderbolt Suit; Golden Knights Announce Seminars.

(continued from previous page)

I believe this has now been accomplished at Elsinore — we now have a clean, decent place to jump again.

S: But Jacques, hardly anyone jumps there anymore.

I: I believe the new management will be able to pick and choose, bring back and bring in good clients, and Elsinore will certainly have its share of parachuting activity. The basic reason is that it's a beautiful place to jump and people are sensitive to beauty.

S: There has been a lot of discussion about your Skyworld plans for Elsinore. What is Skyworld all about?

I: Skyworld is a solution to the problem of air sports. You see, air sports do not work. There are no major facilities for air sports anywhere in the world. Small operations eke out a living on marginal airports — there is no capital for expansion, good salaries or decent facilities. In the technical jargon loved by economists and bureaucrats, air sports do not remunerate the capital necessary for the real estate they require — in plain English, they cannot pay for the land they need. And air sports need a lot of land. Therefore, they require a subsidy from a rich patron. In China, France and Russia, this patron is the government, but the results are bureaucratic and the atmosphere disheartening.

In America, air sports exist by tolerance of land owners who welcome the activity in order to pay real estate taxes on marginal land. When the land appreciates sufficiently to plant valuable crops or build houses, the air sports are asked to move on. I believe our richest patron is the general public.

Air sports individually are a bore to watch, but just as fission occurs when critical mass is reached, so interest can be generated by sufficient concentration of activities. At Skyworld, the general public will participate while keeping both feet on the ground. Visitors will sit in simulators which will give them the feeling of flying an airplane. They will

take coordination tests given to WW II fighter pilots and know whether they would have qualified for fighter pilot training. They will learn to fold fancy airplanes from a sheet of paper. They will see parachutes and aircraft engines built right in front of them. They will see people engage in all the air sports, and at each station receive a ten-minute course of instruction summarizing the real course but excluding an actual leap into the void. Visitors will be entertained, stimulated and educated, and their admission fees and the souvenirs they buy will subsidize the first permanent location for air sports in the world.

S: That's a pretty ambitious plan. How do you propose to go about it?

I: As I said before, we're in the preparation and planning stages now. We've purchased the necessary land and spent over \$10,000 for design plans and other details preparatory to the beginning of the project.

S: What is the projected cost of Skyworld?

I: \$130 million.

S: When and where do you propose to procure that amount of money?

I: I will be meeting soon with the heads of three major corporations to set up the financial aspects of Skyworld.

S: Which corporations?

I: I cannot say at this time.

S: Why did you choose Elsinore for this project?

I: It is the perfect location for such a large undertaking. Elsinore is a beautiful place with the appropriate room for expansion, and it is near a very large population center.

S: A lot of people in this area are highly skeptical of Skyworld ever becoming a reality.

I: Admittedly, the chances of it coming about might be low. However, I like to do something interesting and accom-

plish something at the same time, and the possibilities of Skyworld are interesting. And you must remember, the concept of sport parachuting itself was a bizarre concept. When I suggested it to Lew Sanborn in 1955, he just laughed. He couldn't imagine anyone *paying* for the opportunity to experience back-breaking opening shocks and teeth-rattling landings. In the old days, parachuting was very hard on people's bodies.

S: When you do it, what kind of jumping do you like to do?

I: Jumping is a very private thing to me. I like to be alone in the air. When I jump again, it will be with my red & black modified cheapo, and I'll do it at some deserted airport at 6 in the morning. I'm hopelessly old-fashioned.

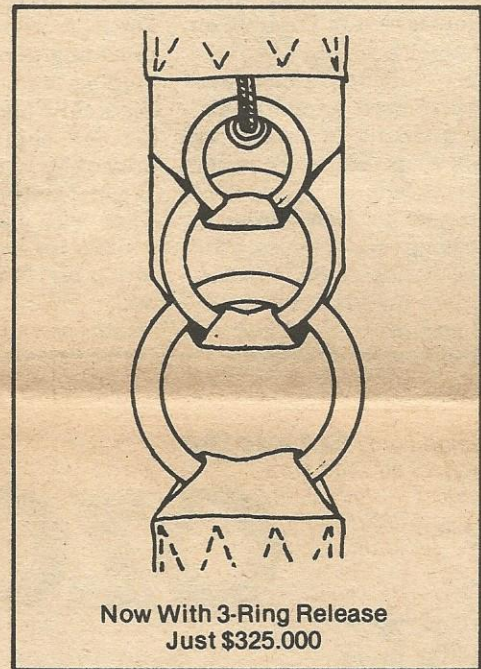
S: You were one of the founders of PCA and USPA in the early days of jumping. A few years back, however, the honor-

(continued on page 20)

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(continued from page 8)

any lifetime president title you held was abolished amid friction between you and the organization. What is your relationship with USPA at this time?

I: There is no friction between them and me at this time. I have a good working relationship with the USPA. Its executive director is another thing, however.

S: Jacques, along with your plans for Skyworld, your rather strong attitudes and opinions about people and activities in parachuting have brought a lot of flak down on you. How do you react to it?

I: I think I'm the only guy who has analyzed the problem of parachuting and other air sports AND made a commitment to a potentially workable solution ... and besides, the Don Quixote position has a certain charm to it. □

Ripcord Paracenter Opens DZ Near Haines City, Fla.

Ripcord Paracenter of Medford, N.J., has opened a drop zone near Haines City, Fla. Jon Baker, who has operated the center in New Jersey for several years, recently reported that his "southern operation" is open for business on weekends on a parcel of land owned by his family. Haines City is about thirty minutes west of Orlando on Interstate 4.

Ripcord offers student training and jumping for experienced jumpers. Aircraft consists of a Cessna 182 operating from a 1800-foot strip. The price of the first jump course is \$60.

Baker will return to New Jersey in mid-March, leaving his Haines City operation in the hands of his brother. Telephone numbers are (813) 422-2459, (813) 422-1419 and (813) 422-3390.

Collegiate Championships

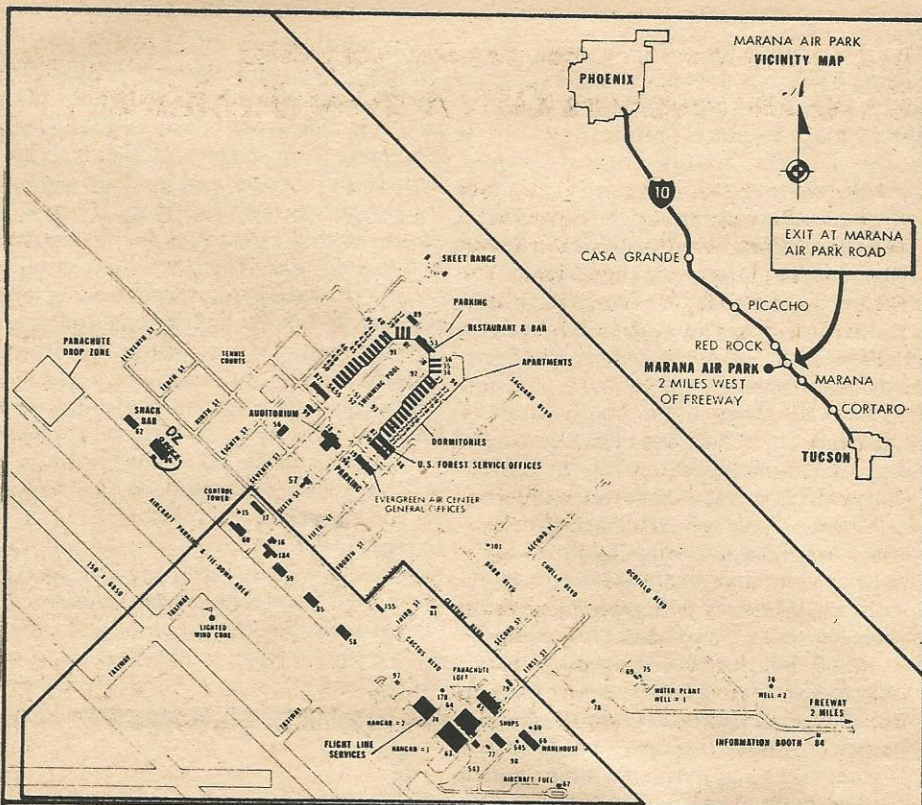
(continued from page 8)

up. Peanut Butter, a three-lady, one man-team from Tulane taking first place honors.

As the style and accuracy events progressed, it was clear the Air Force Academy and the U.S. Military Academy at West Point would dominate those areas, as they traditionally have. Bruce Florman, Mark Stringfellow, Sam Whiting and Robert Parker were the only civilians to finish in the top three of the twelve-division competition, which featured novice, intermediate, advanced and master categories in style, accuracy and overall.

Evenings during the competition were spent in the drop zone bar, watching videotapes of the competition. Several judges and staff members attempted to give critiques as the competitors watched the video, but the collegians appeared to be far more interested in drinking beer and laughing about their flying than in serious reflection over their errors.

The awards banquet was just as festive, as prizes were presented to deserving competitors and awards of appreciation bestowed upon those who helped to make the meet a success. The U.S. Army Parachute Team and Air Force received particular thanks for providing personnel and equipment for judging and ground/air communications. Al King than thanked Tony Frost for his support and hospitality by presenting him with a T-shirt that read, "I got Frostbit at the '79 Collegiates." King was also thanked by the competitors for his part as meet director — with a pie. "I must have done okay," he said. "They gave me real whipped cream instead of shaving cream." □



A map of Marana Air Park, the site of last year's National Collegiate Parachuting Championships. The facilities are excellent.

Personalities Stood Out at Marana

There were three people who stood out at this year's collegiate meet. DZ Manager Tony Frost, Meet Director Al King and Judge Lyle Cameron all contributed their special talents to make the 1979 meet a memorable one.

During the first two days of the meet, Frost, who admits he is not "people oriented," ordered a visiting Coolidge (Arizona) jumper escorted from the premises, "under armed guard and in handcuffs if necessary," attempted to confiscate film from USPA and Skydiving photographers, threatened to punch a competitor for disagreeing with him, then put his loft off limits to all competitors and staff members when Al King tried to mediate the dispute. Frost got into arguments with judges, pilots, competitors and even his own staff, leading most people there to chuckle over his antics when they weren't the target.

Al King on the other hand, had a tranquilizing effect on the whole operation. In addition to running the meet competently, Al always seemed to show up, right after the DZ manager had left someone fuming, to get people calmed down and back to business again. He finally managed to get Frost, who he

termed "a good DZ operator who just doesn't handle people very well," to direct his energies toward aircraft and logistics, and solved the problem. With the diplomatic skills he displayed at the meet, President Carter should send Al King to Iran — he would probably get Khomeini to release the hostages.

Lyle Cameron was another one of King's diplomatic achievements. One of the oldtimers of parachuting, Cameron was a USPA board member who was kicked out of the organization several years ago for being a "troublemaker," as one USPA official put it. Ever since, USPA officials and Cameron have not been on the best of terms. Consequently, it was quite a surprise to many to see Lyle show up, at Al King's invitation, to judge the meet. He was still in top form too, revealing himself to be a good judge and wonderful conversationalist (he started more than a few arguments with other judges just for the hell of it). Everyone agreed, however, that it was good to see the old fellow back in there, doing what he does best. Ahh, the good old days.

— Robin Heid

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Para-Innovators Offers New Products

Para-Innovators of Perris, Calif., has begun marketing several new products. President Hank Ascutto told *Skydiving* that his company has completed the design and testing of a new rig, a new reserve canopy and a set of riser trim tabs.

The Streamlite piggyback harness and container is a trimmer version of the Nova, a rig that has been popular in the Southern California region for the past several years. It features a tapered, one-pin reserve container, full-length riser covers, and is sized for lightweight main and reserve canopies.

The rig utilizes a hand deploy main pilot chute, built under license from the Relative Workshop. The pilot chute pouch is mounted on the main lift web under the arm. The Streamlite may be ordered with the 3-ring canopy release.

Jumpers at Perris Valley seemed generally pleased with both the appearance and comfort of the rig. Several, however, commented on its construction. Although it is very strongly made, the appearance of the Streamlite's stitching left something to be desired.

Para-Innovators' Featherlite reserve is an updated model of the company's R-2 conical. Constructed from Harris F-111 fabric, the new model is reported to weigh 5 lbs. 4 ozs. with four connector links. The Featherlite is block constructed and does not have skirt extensions. Deployment is from Para-Innovators patented diaper system.

The Featherlite is the lightest and smallest-packing reserve currently on the market, and sales are brisk, according to Ascutto.



The Streamlite by Para-Innovators of Perris Valley, Calif. The rig features fully covered risers, a main-lift-web-mounted hand deploy pilot chute and a choice of release systems. Photo by Robin Heid.

Para-Innovators is also offering front riser trim tabs this year. They are as lightweight as any now available and are well suited for any rig with riser covers. When used with rigs without riser covers, however, they tend to be a little sloppy.

One Lawsuit Dismissed, Another Filed

The lawsuit filed against Para-Flite, Inc., by Pioneer Parachute Company was recently dismissed by a U.S. District Court in New Jersey. Pioneer sued Para-Flite claiming that the New Jersey manufacturer had infringed upon one of Pioneer's patents pertaining to ram-air canopy design. Not only did the court dismiss the lawsuit, it assessed Pioneer with the costs of the action.

In other legal action relating to sport parachuting, Zephyrhills Parachute Center has told *Skydiving* it intends to

sue the firm from which it bought a remanufactured engine for the center's Douglas C-47. The engine failed in flight during the Pumpkin Meet last October after only a few hundred hours of use. According to Jim Hooper, the center's manager, tear-down and inspection of the engine revealed the standard parts and workmanship. A remanufactured engine for a C-47 (the military version of the DC-3) can cost up to about \$30,000.

Woman Record Accepted; Night in Doubt

Mike Horan, USPA Mideastern Conference director, reports that the International Aeronautic Federation (FAI) in France has officially accepted the 24-way formation built over Elsinore, Calif., last November as an official world parachuting record. (See *Skydiving*, Issue #6.) There had been some question over the documentation of the record, but the FAI was eventually con-

vinced the claim met all requirements.

But another record claimed by the U.S., a 24-way night formation, built over Zephyrhills, Fla., the same month is in trouble. Not only did the FAI question the qualifications of one of the observing judges, it doesn't like the fact that the second judge, Dave Singer, was a participant in the formation and not simply an outside observer.

CALENDAR

March 14-17: St. Patrick's Day Boogie, Palatka Paracenter, Fla. DC-3, Twin Beech, Cessnas, party, showers, camping, complete facilities. FMI: Palatka Paracenter, Kay Larkin Airport, Route 100, P.O. Box 1880J, Palatka, FL 32077. (904) 325-9381 or 328-7196.

March 22-23: Georgia Parachute Council Spring Meet, Jenkinsburg, Ga. 4-Way CRW, 4-Way Sequential RW, Accuracy, 10-Way Speed Stars. Three classes in accuracy and RW. Cost: \$5 entry fee plus jumps. Logbooks and legal reserves required to enter. FMI: Steve Chalfant, (404) 755-4814, or Greene County Atlanta: (404) 775-9067.

March 29-30, 1980: Jackson Hole Para-Ski Meet, Teton Village, Wyo. Two accuracy jumps from a helicopter and two Mastar runs. FFI: Ted Mayfield, P.O. Box 237, Sheridan, OR 97378.

April 3-6: USPA Board of Directors Meeting, Salt Lake City, UT. PEIA Meeting April 3-4. FMI: USPA, 806 15th Street NW, Suite 444, Washington, DC 20005. (202) 347-5773.

April 4-6: Perris Passover Party & Easter Boogie, Perris Valley, Calif. RW Seminars, sequential events, megamaddness, DC-3s, Twin Beeches, B-25, bunkhouse, pool, hot showers. \$5 registration fee includes party. FMI: Joe Morgan, Perris Valley Parachute Center, 2091 Goetz Road, Perris, CA 92370. (714) 657-3904 or 657-8727.

April 4-7: Easter Boogie, Coolidge, Ariz. Money Meet & Fun Boogie.

8-Way Sequential RW and 4-Way CRW. Free refreshments Saturday and Sunday. Hot showers, camping, rigging. FMI: Coolidge Parachute Center, P.O. Box 1807, Coolidge, AZ 85228. (602) 723-3753.

May 23-26: N.C.C. Get-Together; Osceola, Wisc. DC-3 (Skytrain), Twin Beech, Eight Cessnas, Pig Roast and Beer on Saturday night. FFI: Call Stickman, (612) 561-1887, or J.Q., (715) 294-2793.

May 24-26: Perris Valley Southern California Championships, Perris Valley, Calif. Nationals qualifications. FMI: Perris Valley Parachute Center, 2091 Goetz Road, Perris, CA 92370. (714) 657-3904 or 657-8727.

May 24-26: Midwest WSCR Memorial Day Weekend Boogie; Tecumseh, Mich. Camping and showers at DZ. First successful WSCR load is free and all others completed will be \$1 off. FFI: Harold Lange, Al Meyers Airport, Tecumseh, Mich. 49286. (517) 423-7720 or Ruth Rydstedt: (313) 823-1102.



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EDITORIAL... LETTERS.....

Good for Hoop

Jim Hooper is to be commended for his successful effort to have the 1981 World Parachuting Championships of Relative Work held in the U.S.

Hooper has long talked about hosting parachuting's premier event, but he didn't start pushing for it until he became manager of Zephyrhills Parachute Center a couple of years ago. He started lobbying hard in the latter half of 1979.

Several key people with USPA were at first against the idea. They know how much a world meet can cost the sponsoring national organization. They remember the financial and administrative burden carried by the association when the U.S. hosted its two world meets in 1962 and 1972.

But Hooper persistently pursued his goal. He finally received USPA approval, but only after entering into a complex legal agreement which, among other things, essentially insulates the organization from any financial drain whatsoever.

Last month the CIP narrowly voted to award the meet to Zephyrhills. Hooper's effort paid off.

Although Canada's superb performance at the 1979 world meet -- a gold medal in 4-way and a silver in 8-way -- showed it is the country to be reckoned with in world competition, the U.S. is still looked to as the RW Mecca of the world. So having the meet in Florida in 1981 will give jumpers in other countries just the excuse they need to visit America between now and then.

And a world meet can attract more than just foreign jumpers. The sport in the host country has an excellent opportunity to garner extensive national publicity. But this benefit will be realized between now and late 1981 only if Hooper and the USPA start making plans now.

Finally, American jumpers can look forward to seeing a world parachuting competition without having to spend hundreds of dollars and travel thousands of miles. Only an enviable handful of today's active jumpers in this country have ever been to a world meet.

Hooper pushed to host the meet primarily to help promote his parachute center. Although he is practically guaranteed of not making money off the event, he feels it will indelibly put Zephyrhills on the international parachuting map.

Already we sense jumpers both here and abroad are eagerly anticipating the meet, even though it is over 18 months away. This early excitement indicates the meet will be good for everyone: the competitors, the USPA, the spectators, the public - and maybe even Hooper and his crew.

— MFT

Comments on student gear

Here are a few comments on your editorial on student gear (Issue #3).

If it is our (USPA's, all who instruct, etc.) goal to offer a first timer the safest jump we can (within reason, of course), then possibly we should be looking at the statistics of those who have the best safety record.

From what I've read over the years, it's the Army Airborne School.

Now I agree, two weeks of upteen hundred push-ups is not a course that will attract a cross section of society. But let's look at what can be extracted:

- Direct bag deployment,
- Skirt netting,
- Chest pack reserves.

Now let's take it further (since sport students don't jump at 1200 feet) and add:

- Separation in event of malfunction,
- Single point release,
- Comfortable harness,
- High mounted reserve,
- Automatic opener on reserve.

As you can see, I don't agree with the trend to use back-mounted reserve for students. I'm not saying the back-mounted reserve is less safe; I'm saying we don't know. It is quite possible that in three years it will be determined to be as safe or safer than a chest mount. But if it isn't, who suffers? Not you and me; it will be the fatality figures that will develop the answer. In other words, we're going to make test jumpers out of the students.

In the event of a lawsuit due to a fatality somehow associated with the new jim-dandy three-color student tandem, I don't feel a strong defense could be made. If one uses tried and proven methods, I feel, you can develop a much stronger defense. You only have to look at the number of lawyers being graduated each year to see what the future holds. Damn few centers could withstand the attack of a sharp lawyer and most have something worth going after.

I commend you for your interest in convening a forum as this would at least

give all who are interested a chance to hear and be heard. If the conclusions were positive regarding the new gear, this would help in defending civil action. As to the "take charge leader," why not J. Scott Hamilton, since he started all this with his article in *Parachutist*?

Gerald Baumchen
US D-1543
Portland, Ore.

The USPA safety and training committee will meet with the organization's manufacturers' association (PEIA) this April to discuss the new student rigs.
—Ed.

The State of Kansas Deserves an Apology

You probably owe the state of Kansas an apology. In the article on the Sky Sports DC-3 Boogie, your rag (Issue #7) reported the record as a 15-way diamond. It should be corrected to a 16-way diamond. Everything else checks out.

John Schuman
Lawrence, Kan.

The size of the formation was incorrectly reported due to a typographical error. — Ed.

Schultz Never Lost License

Regarding "Schultz Gets License Back" in Issue #7, the fact is I never lost it (pilot's certificate). However, the FAA has appealed the NTSB ruling and I'm in the middle of that now. I'll keep you posted. But don't worry, they'll never take me alive.

Michael Schultz
Laurel, Md.

Questions judgment of novice SCS

This is in response to the article titled "Arizona Jumper Earns SCS on Seventh Jump." (Issue #6.)

My congratulations to Jim Slocum. I am awed by the achievement but appalled that a USPA-affiliated center (Arizona Parachute Ranch) would condone such a blatant disregard of USPA Doctrine and BSRs at its drop zone, and then have the gall to determine it to parachutists of America.

I can only wonder how the article might have read had Mr. Slocum become another statistic in the fatality report, or speculate on the effect of the resulting lawsuit on sport parachuting in the State of Arizona, or for that matter, throughout the United States.

Our sport requires, above all else, good judgment. USPA has been doing everything possible to present valid guidelines and criteria through doctrine and BSRs to provide that additional measure of experience and expertise with which to temper that judgment. The management of the Arizona Parachute Ranch has certainly demonstrated that it lacks, as a minimum, that "good judgment."

Leigh Fairbank
US D-6045, I-79
Ft. Bragg, N.C.

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BRAND NEW COMPLETE RIG. Wonderhob 2, solid black with throwaway pilot chute; Strato-Cloud Lite, white top spectrum, 26' Strong Lopo reserve with Hot Dog pilot chute. Ready to jump, no waiting, \$1475 value for \$1350. Call Wyoming County Parachute Center: (716) 457-9680. (9)

A 16-POUND PARACHUTE FOR \$399 TSO'd in STANDARD (hi-speed) CATEGORY? You bet! What's more - with our **EXCLUSIVE TRADE-IN POLICY** you get \$50 to \$130 credit for your military surplus backpack. Write or call today for complete details. Butler Parachute Systems, Inc. 401 E. Fawnridge Dr., Austin, TX 78753. (512) 837-4616. (9)

Rigging Services

SILLY SUITS, Rapid Transit Rigs, Racers, Merlins, Units, Piglets, Preserves, and more. Call J.Q. for your next rig. Oceola, Wisc. (715) 294-2793. (10)

KEVLAR LINE for your canopy. Reduce weight, bulk and drag substantially. Super strong, ultra thin. FFI, samples: Sean Collins, Rt. 4, Box 358, Moscow, Idaho. 83843. (208) 882-5822. (9)

Wanted

PARADACTYL. Please write with condition and price. Paul Cochran, 2709 Sherborne, Fort Wayne, Indiana 46805. (8)

NEWTON RING SIGHT. In good condition. Contact Jack Yule, PO Box 760, Elkford, B.C. Canada. 865-7625. (8)

SIERRA or RWPC CANOPIES. Paying up to \$175. Damaged ones acceptable. Contact Bob Wright, (519) 672-1744, 323 Hyman, London, Ontario, Canada. (9)

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PALATKA PARACENTER. Twin Beech, two Cessna 182s. Tuesday through Sunday, dawn to dusk. Master and Senior riggers, I/E and memorable parties. Hot skydives in the warm sun. FFI: Norm Ross, (904) 325-9381. Altitude South, Inc., Box 1880J, Kay Larkin Airport, Palatka, FL 32077. (1)

When in Minneapolis-St. Paul, Minnesota, skydive at **St. Croix Valley**. 40 miles from St. Paul, Osceola, Wisc. Cessna 180 and 182. 10 AM to dark, weekends. (715) 294-2433/2793. (1)

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Cruisair™

**SUPERB PERFORMANCE
FROM OPENING
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**JUMP,
AFTER JUMP,
AFTER JUMP.**

The Cruisair is a pretty impressive mid-size canopy. It opens cleanly. It flies fast with a flat glide angle. It lands you so softly that you'll think it's bigger than it actually is. Yet it packs very small.

Although we designed the Cruisair to fly well and pack small, we're also careful to build durability into every one we make. The result: this canopy flies straight, even after hundreds of jumps. Your Cruisair will hold up and be ready for your next jump.

(We believe a canopy is an investment, not something you'd buy on the spur of the moment. We want you to get your money's worth, to be completely happy with your Cruisair, no matter how much you jump it.)

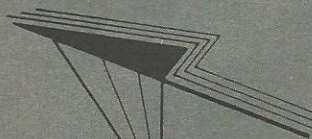
So the Cruisair is unique because it is designed for long life as well as great performance.

One jump on a Cruisair will show you what we mean when we say this canopy provides excellent performance from opening to landing.

And it's good to know you can expect to enjoy that same reliable and thrilling performance for hundreds of jumps after the first one.

You may have heard of the slogan "Para-Flite makes it right!" We've built thousands of unbeatable ram-airs for over ten years. The Cruisair is a canopy that's made right—so it will treat you right.

The Cruisair was the choice of the 1979 U.S. RW Parachute Team.



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