

PARACHUTIST

MAY-JUNE, 1958

TWENTY-FIVE CENTS



EDITORIAL

In the March-April issue of the *PARACHUTIST*, the need for Congressional action to prevent the senseless and avoidable death and injury of parachutists was pointed out. It was explained that under present laws, the Civil Aeronautic Administration is powerless to control parachuting because the legislation which empowers it does not include the word, parachutist, in its definition of an airman. This omission is correctible only through Congressional amendment.

Since this editorial was written, two more parachutists—neither connected with the PCA—have plunged to their deaths in accidents which strictly enforced safety regulations would have prevented. Coming on top of at least three similar fatalities last year, the urgent need for Congressional action has been tragically dramatized.

One of the deaths took place this April, near Youngstown, Ohio. The victim of indifference was Imre Horvath, a 22-year-old Freedom Fighter and former Hungarian Army paratrooper. Horvath died when he failed to open his parachute in time to stop his fall from 6,000 feet.

The fatality occurred during a routine practice jump of the Cleveland Parachute Club. Horvath, who had made more than 80 jumps, was undertaking a 30-second free fall with George Stone and Dale Gates, club members. According to a newspaper report, "Observers said Horvath was only 100 feet from the ground when his parachute partly opened, but not in time to even slow his fall. . . . Horvath's hand was still tightly clenched on the rip cord" when his body was recovered.

"Some felt that Horvath's delay was an attempt to impress his American jumping enthusiasts to whom he was handicapped in communicating because of his English language difficulties," the report said.

It is known that Horvath specialized in low openings—a daredevil type of parachuting display which is

strictly forbidden in the Parachute Club of America code. He was once penalized in Hungary for waiting until 300 feet before pulling his rip cord.

A simple computation with descent rates—the terminal velocity of 174 feet per second reached in most free falls—shows that less than two seconds remain at 300 feet, during which the jumper has a chance of checking his earthward rush. Yet there is no enforceable regulation in the United States today to prevent an overenthusiastic or ignorant parachutist from staking his life on an instant's margin. Even Communist Hungary seems to have more respect for a human life than this.

A second parachuting fatality occurred on May 5th near St. Petersburg, Florida. The jumper, Merrit S. Hurlbert, 31, was making his seventh jump—from 1,400 feet, well below the minimum altitude set by the PCA. The exact cause of the death is still under investigation.

By all indications, Hurlbert had received little, if any, instruction in sport parachuting. Or his instruction was misleading—worse than none. His dangerously low jumping altitude would seem to show that such was the case.

In Hurlbert's case, as in the Hungarian's, there of course could have been no law which would have prevented a fatal moment of foolhardiness. But a system of government licenses for all parachutists with special licenses for instructors, following the general outline of CAA pilot licensing, would at least insure that inexperienced parachutists could not jump at will. It would also insure that all those who did jump would be thoroughly acquainted with and aware of the danger in violating safety regulations, expertly considered limits within which no parachutist is risking death or maiming.

So again, in the face of violent reminders of the continuing toll of inaction, we repeat our urgent injunction: **CONGRESS MUST ACT.**

COVER—A Delaware Cup contestant comes in toward the target as judges wait on the far edge of the cross, ready to measure. Photographer in foreground took picture of landing, top of page 6.

Candidates For 1958 U.S. Team Selected

Twenty-one civilian and 11 military candidates for the 1958 U. S. Parachuting Team tryouts were chosen this May by the Parachute Club of America. They will compete in a series of elimination contests this June at Vancouver, British Columbia. The five finalists will represent the United States at the Fourth World Parachuting Championship to be held August 1 to 16, at Bratislava, Czechoslovakia.

Following the tryouts, which will take place between June 15th and 25th, at the invitation of the British Columbia Centennial Committee, the five team members will undergo intensive training in the month remaining before the world championship.

The tryouts will be held in three phases with a possible total of 15 jumps per candidate. Judges will be Joe Crane, president of the PCA; Gerard Vandermeersch of Liege, Belgium, a French government parachute instructor; and Lewis T. Vinson, chief test parachutist for the U. S. Navy at El Centro, California. Momentarily it is expected that Lt. Gen. James M. Gavin and Col. Edward P. F. Eagan, chairman of the People-to-People sports program, will be on hand to witness the competition.

CIVILIAN CONTESTANTS

The civilian contestants and a brief list of their qualifications are as follows:

James Eagon, 22, Seattle Sky Divers. A University of Washington freshman, Eagon is an ex-paratrooper and served for two seasons as a Forest Service smoke jumper.

George Flinn, 26, president, Yale Parachute Club. Flinn has made over 35 free

continued

Late Bulletin:

TEAM MEMBERS NAMED

VANCOUVER, British Columbia, June 25—The Parachute Club of America announced today that the following five tryout candidates will make up the 1958 United States Parachuting Team as high scorers in the completed eliminations:

Jacques A. Istel, Lewis B. Sanborn, Nathan Pond, Richard Tomkins and James Pearson. (A late entry, Pearson is a member of the Seattle Skydivers. No further information on the tryouts was available at press time.)

CONSTITUTION REWRITTEN AT SPECIAL MAY MEETING

The constitution of the Parachute Club of America was amended at a special meeting of the membership this May. Changes, principally aimed at removing the commercial emphasis of the old National Parachute Jumpers Riggers (predecessor of the PCA) constitution, were approved unanimously by a vote of 78 to 0.

Subsequent directives of the board of directors, spelling out the requirements for club affiliation with the PCA and sanctioning of competitions, have also been announced by the national organization. The directives were drawn up with an eye to the recent Army regulation which permits Army personnel to engage in sport parachuting—only with PCA affiliated clubs and only in competitions sanctioned by the PCA.

The constitution, as rewritten, defines the purposes of the Parachute Club of America, as follows:

"To encourage unity among all persons interested in parachuting; to promote safety in all parachuting activities in the United States; to sanction sport competitions and officially record all record attempts in the field of parachuting; to promote and encourage the study and knowledge of parachuting among the membership and the public at large; to cooperate with all governmental agencies connected with aeronautics or aeronautical activities; to test parachuting equipment for public safety; to compile information regarding the science of parachuting and to edit, publish and disseminate the same; to select and train the United States Parachuting Team for world competition; to develop stamina and civic responsibility among citizens with particular emphasis on young people through parachuting; to assist local and national authorities in any emergency; to encourage members to be useful in service to our country at all times."

The constitution also states that the principal office of the organization is in Mount Kisco, N. Y., a change from the Mineola, Long Island, headquarters.

Requirements for club affiliation with the PCA are spelled out in a standardized form which will be sent to all local organizations. It reads as follows:

1. We agree to enforce within our club, all rules and regulations of the PCA. The only exception will be rules waived in writing by the PCA.

2. We agree to abide by the spirit as well

as the letter of the constitution, by-laws, and basic safety regulations of the PCA.

3. We hereby state that . . . all . . . active members are members of the PCA in accordance with Section 3, Article IV of the by-laws of the PCA. (An active member is defined as a person who has made one or more parachute jumps.)

4. We agree that any Army personnel parachuting with our club shall comply with the Provisions of AR 95-19 (the Army regulation governing sport parachuting) as well as with the basic safety regulations of the PCA, and that other service personnel shall comply with such rules and regulations as may be established by their service in connection with sport parachuting activities.

5. We agree that the name, Parachute Club of America, will not be used or implied in connection with any profit making or professional parachuting activities that may be carried on by individual members of the club.

6. We agree to submit to the PCA a bi-annual statistical report of our parachuting activities and to immediately report in detail to the PCA any accident occurring to any members of our club in connection with parachuting activities.

7. We agree to submit advance notice to the PCA of any proposed competition in which our club may take part. We understand that we may take part in or organize *unsanctioned* competitions at our discretion. We also understand that at least sixty days advance notice must be given to the PCA in request for PCA sanctioned competitions and that our club must meet all PCA requirements for sanctioned competition with particular emphasis upon crowd liability insurance and disposition of funds collected at such events. We understand that military personnel may compete in PCA sanctioned competitions only.

8. We understand that our affiliation with the PCA is renewable at our request each year and may be terminated by either party upon ten days written notice.

Requirements for PCA Sanctioned Events

The board of directors specified that in order for a competitive parachuting meet to be sanctioned by the PCA, the following requirements must be met:

1. Adequate liability insurance must be provided covering personal injuries and property damage to spectators caused by aircraft

and parachutists.

2. In the event that any member of the military accepts an invitation to compete in any competition open to the public, the Department of Defense and the individual service concerned shall be notified not less than thirty days prior to the date of the meet and be advised of the amount of the liability insurance to be carried for the meet.

3. No meet shall have any purpose other than a competition or exhibition for sport, and no individual, partnership or corporation may profit in any way from either sponsoring or taking part in any meet, except that in the discretion of the board of directors of the PCA admission may be charged the spectators under special circumstances. If said board of directors votes to charge admission, and if it is contemplated that members of the military will be among the competitors, written notice of such decision shall be given to the Department of Defense and the individual service concerned not less than thirty days prior to the date of the meet. All receipts from admission to sanctioned competitions shall become the property of the Parachute Club of America and shall be used by it to further an approved PCA project such as the travel and training of the United States Parachuting Team. A report of all such financial transactions shall be audited by Certified Public Accountants and made public in the PCA annual report.

The board of directors also announced that as soon as the PCA completes classification of its membership into amateur, professional and military parachutists, it will restrict sanctioned competitions to amateur and military contestants.

Any questions on the constitution or recent directives should be addressed to the Parachute Club of America.

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falls. An ex-Marine sergeant, he is now studying industrial administration at Yale University.

C. Brodie Harrell, 30, president, Midnight Sun Sky Divers, Fairbanks, Alaska. Employed by Pan American Airways, Harrell has over 60 free falls.

Peter Haskell, 23, captain, Cambridge Parachute Club. A veteran of the 11th Airborne Division with 50 jumps, Haskell is an architecture student at Harvard University.

Charles Hillard, 21, independent. Hillard is a student of aeronautical engineering at Georgia Tech. He has 33 free falls.

Thomas E. Huebner, 22, California Parachute Club. A student at San Jose College, Huebner is an ex-paratrooper with over 60 jumps.

Jacques Istel, 29, executive vice president, PCA. Istel captained the 1956 U. S. Parachuting Team. He led U. S. representatives at the Adriatic Cup Championship last summer in Yugoslavia. A captain in the Marine Corps Reserve, Istel has logged over 200 free falls.

Robert J. McDonnall, 21, Jamestown Parachute Club, N. Y. McDonnall has made over 40 free falls.

Norman McKinley, 30, independent. An engineering student at Columbia University, McKinley has made 130 jumps, 72 of them free falls.

George Mulcahy, 29, president, Los Alamos Parachute Club. Mulcahy has made over 150 jumps. He is a security inspector for the U. S. Atomic Energy Commission at Los Alamos.

Raymond Nesbett, 19, Fairbanks Parachute Club, Fairbanks, Alaska. Nesbett has made 21 free falls.

Lawrence J. Pond, 21, Williams Parachute Club. Pond is a geology student at Williams College, Mass., with 47 free falls.

Nathan Pond, 25, Good Hill Parachute Club, Woodbury, Conn. Pond is an Air Force veteran and a graduate of Cornell University. He has logged over 100 free falls.

Stuart Rose, 19, independent. Rose was high scoring individual at the First Eastern Parachuting Championship this May. He majors in chemistry at Amherst College, Mass.

Lewis B. Sanborn, 28, secretary, PCA. High scoring member of the 1956 U.S. team and top American at the Adriatic Cup Championship, Sanborn has made over 225 jumps including those with the 82nd Airborne Division.

Bob Sinclair, 32, Fairbanks Parachute Club. A licensed rigger, Sinclair has made over 280 free falls.

Dana Paul Smith, 23, secretary, Good Hill Parachute Club. A former member of the Yale Parachute Club, Smith has over 80 free falls.

Richard Smith, 23, Middlebury Parachute Club. Smith has made 10 free falls since

discharge from the paratroopers. He is studying economics at Middlebury College, Vermont.

Stephen Snyder, 23, independent. Snyder is a student of aeronautical engineering at Georgia Tech. He has over 40 free falls.

Darrell C. Sonnichsen, 27, president, California Parachute Club. Sonnichsen competed in the Adriatic Cup Championship. He has made 60 jumps.

Richard C. Tomkins, 26, Cambridge Parachute Club. Tomkins has made 50 free falls. He majors in government at Harvard University.

MILITARY CONTESTANTS

The tentative list of military contestants, principally from the 101st and 82nd Airborne Divisions and the 77th Special Forces, is as follows:

Capt. James Kovach, SFC Danny Byard, SP/3 Linwood Pate and PFC Loy B. Brydon, 77th Special Forces; Capt. Robert Vranish, SFC Lava English, SFC Arno Land, 101st Airborne; Capt. Merrill Shepard, Lt. James Perry and SFC Herschel Rourke, 82nd Airborne; and Capt. Louis Peterka, Yuma Test Station, Arizona.

Assisting in judging the tryouts will be Mrs. Lucienne Vandermeerch, wife of judge Gerard Vandermeerch and a top parachutist in her own right; and Lyle J. Hoffman, president of the Seattle Sky Divers.

OFFICIAL NOTICE

From time to time the United States has been asked to field teams to international parachuting events held between world championships. The selection of a United States Parachuting Team is a difficult and expensive proposition. Such selections will be held every two years, prior to the world championship. The membership of the Parachute Club of America will be notified at least three months before such a selection, as was done in 1958, so that all interested persons may compete for a berth on the team. Once a United States Team is selected, the individual members of this team will represent the United States in any international competition until such a time as the next United States Team is selected. Should only one or two men be invited overseas, the choice will be given to the United States team members in order of their individual scores in the world championship. Should selected personnel be unwilling or unable to participate in an off year international competition, first choice for such a trip would be given to winners of major Parachute Club of America sanctioned competitions during the previous year.

PARACHUTE CLUB OF AMERICA

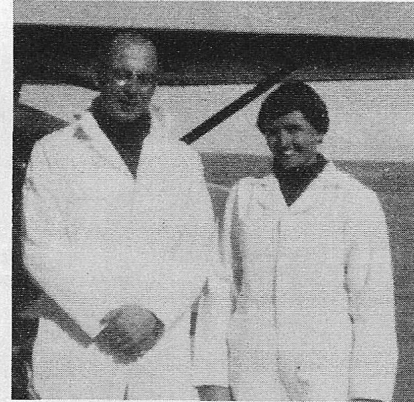
Lewis B. Sanborn, Secretary

PARACHUTING PAIR

A nuclear rocket specialist tells how he and his wife started parachuting this year—with random notes on training and public relations

by JOHN C. ROWLEY, Ph.D.

PUBLIC INFORMATION OFFICER
LOS ALAMOS PARACHUTE CLUB



"Want to try sport parachuting?" When I first heard the question, I was amazed that there actually existed a *sport* of parachuting. I imagine that my reaction might have been similar to someone hearing about skiing for the first time.

My wife, Mary, and I thought about it for a few days. We asked ourselves whether parachuting is a sport at all. To our way of thinking, a sport must require the learning and sharpening of new skills, give a sense of challenge and a feeling of accomplishment after progressively more difficult phases of the sport are mastered.

We decided that parachuting definitely fulfills these requirements, with the additional advantage, in our eyes, of being an outdoors sport. We said we'd like to try it.

Both Mary and I are people who like to try new things, and for my part, I had an additional motive in giving sport parachuting a try. I am employed in the nuclear rocket propulsion division of the Los Alamos Scientific Laboratory. Our business is pointed directly toward space flight. The question of how man feels during a period of free fall in unaccelerated flight in space has always intrigued me. Here was a chance to get some first hand data.

So we went to the Los Alamos Parachute Club and became students of sport parachuting. The Los Alamos Club has an extensive training program, so we had to be pretty sure we wanted to try jumping. After getting a copy of the training manual that the club supplies, we started learning parachute landing falls, an important part of the training here at an altitude of 6,000 feet where the rate of descent makes landing a little rough.

In the rest periods between jumping off a four-foot platform onto gym mats, the safety rule and regulations, emergency procedures, details of equipment and the general language of parachuting were drilled into us by repeated lectures and demonstrations. At first there were bruises and sore muscles,

but at the end of about six hours the falls became nearly automatic and we found that we could go off the platform in any direction and land smoothly and painlessly. After a written test covering the training, we were ready for our jumps.

Mary and I made our first jumps on the eighth of February, this year, at the club's drop zone at Espanola Valley Airport. We went out of a Cessna 195 at 2,200 feet—with static lines, of course. We had standard T-7 28-foot flat circular canopy chutes, regular reserves, white coveralls, sturdy high jump boots, goggles and football helmets.

Before each of us jumped we were given a careful briefing which covered the high points of safety regulations, emergency procedures, exit from the aircraft, and spotting of the plane over the target. Finally a complete safety check was made of our equipment.

Our first jumps went smoothly, but no words can describe my feelings on that initiation. Only those who have tried it know the amazing floating sensation and feeling of freedom that comes with parachuting.

With our jumps completed, we were eligible to join the Los Alamos Club. After an initiation fee of \$10, six months' dues in advance at \$1 per month, and application for membership in the PCA, we became members of the club.

A few weeks later, the club decided at one of the regular first-Friday-in-the-month meetings that what we needed was better public relations. I was tagged as the new public relations officer.

I was a complete novice at the game, but it seemed clear that the first thing I needed was information. So I set up the following files:

(1) Newspaper clippings about the club. (2) Photographs of club members and club activities. (3) Clippings from newspapers and magazines about sport parachuting in general. (4) Personal data on all members

of the club with as complete details as possible. (5) List of useful contacts such as local radio stations, newspapers, Chamber of Commerce, and flying clubs; and general information on personalities associated with news media to make personal approaches easier.

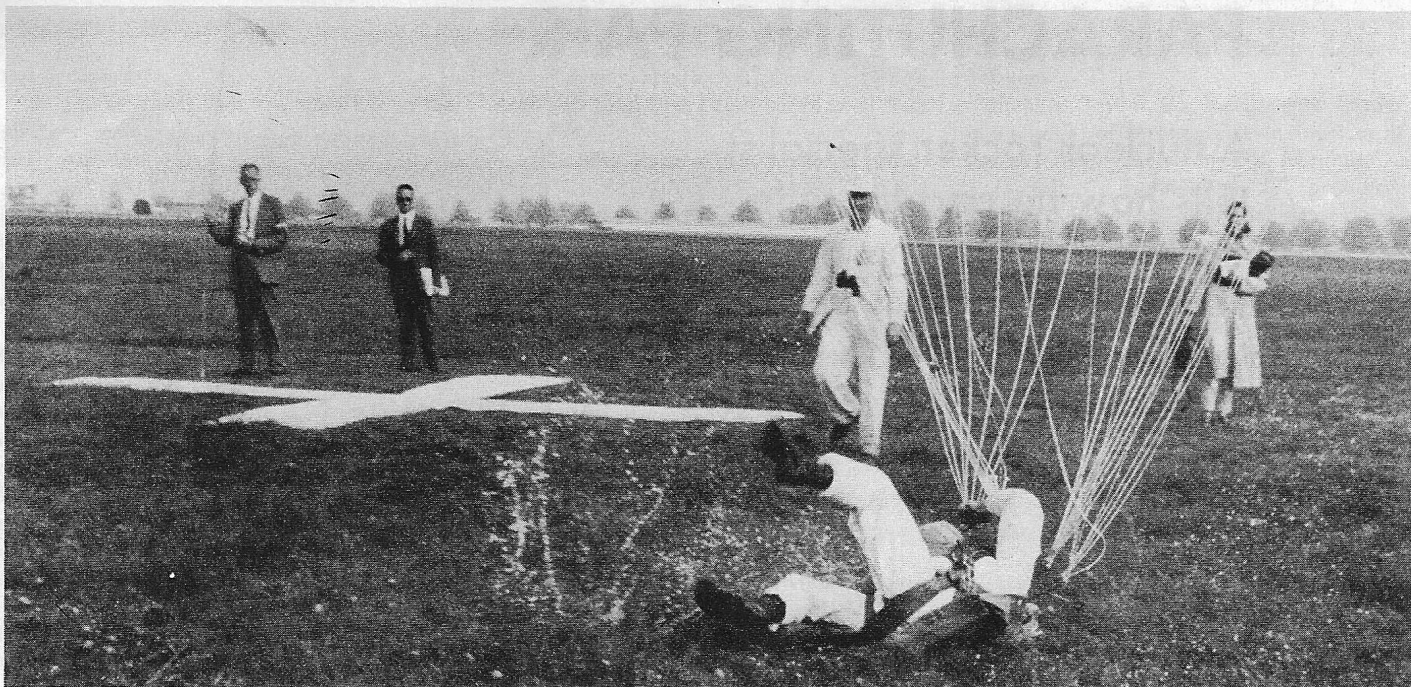
I have tried to approach each of the local news media personally and make it a general rule to have a specific story or matter to discuss. I have been carrying on a particular campaign with the local sports editors in an attempt to have our activities reported in the sports pages—an uphill battle.

The question of photos for publicity purposes had been a bothersome one. Several of the club members have good cameras and take a lot of pictures of club events. But I find it better to have the club rent a camera and purchase its own film. Thus all pictures are property of the club as a whole.

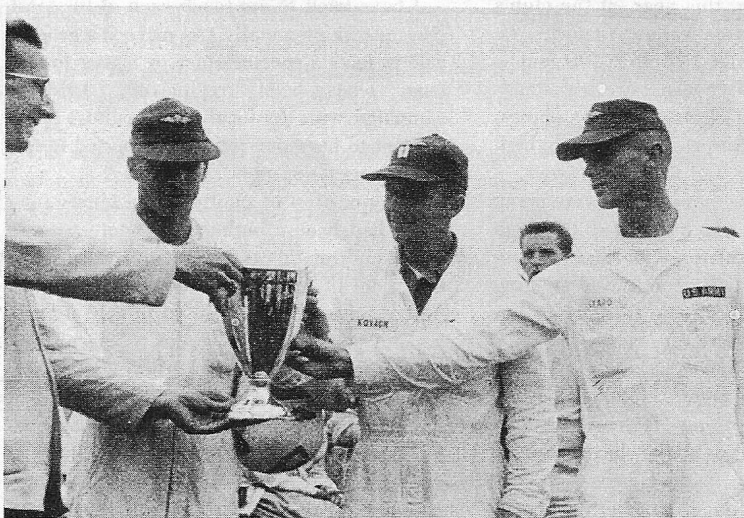
I find that club members are verbally generous with their personal negatives and photographs but a promised picture may not show up in time for a deadline or a cherished negative may be lost or not returned by a busy editor. These can lead to considerable friction and frustration. The help of a willing wife for aid in telephoning, typing, etc., can make the PIO job nearly painless.

One of my big jobs since becoming public information officer was to negotiate for a permit with the San Juan Indian Pueblo for the use of their land adjacent to the Espanola Valley Airport for the location of our drop zone. The embryo PIO files were a great aid in establishing an understanding on the part of the Pueblo's council of our club's objectives. Organized information files can be of help for competitions, understanding on the part of pilots and airport administrators, and in many other areas.

So much for public relations. Mary and I are now confirmed parachutists. Here's a wish for more and better jumping to others who have recently discovered the fascinating challenge of sport parachuting.



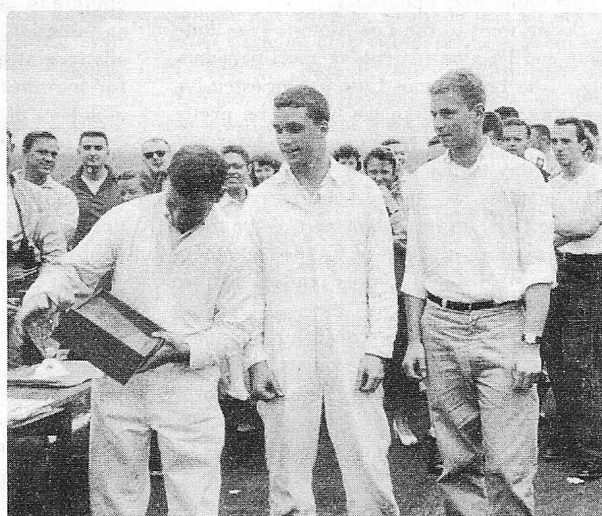
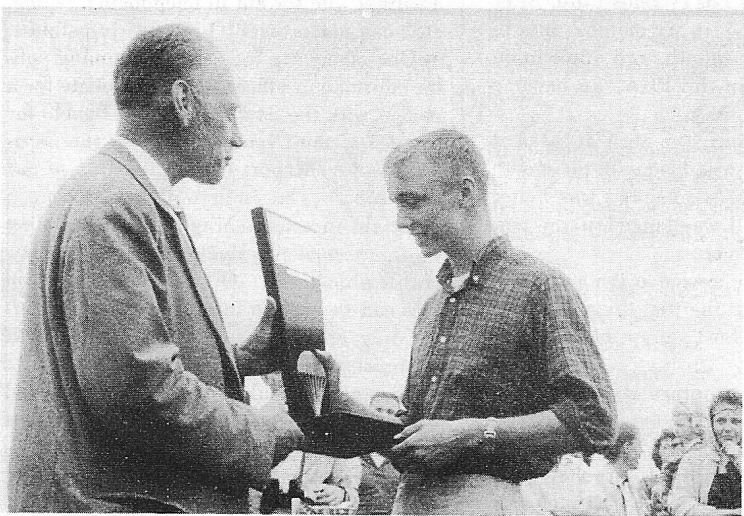
Kim Massie



WET LANDING (above) by unidentified contestant brings spray up from the rain-soaked field. After the curtailed contest came the prizes. Left—The Delaware Cup is presented by the president of the Wilmington Junior Chamber of Commerce, sponsor of the meet, to (l-r) SP/3 Linwood Pate, Capt. James Kovach and SFC Danny Byard, members of the high-scoring 77th Special Forces team.

Lower left—PCA President Joe Crane gives Mason Memorial Trophy to Stuart Rose of Amherst, best individual scorer.

Lower right—Williams College team, Larry Pond, Tony Harwood and George Erlanger, pick up the Gavin Gavel, which was awarded by Col. William T. Ryder, for the high-scoring college team.



THE DELAWARE CUP

The weather, and the jumping, could have been better

Youth had a field day May 4th at the Delaware Cup-First Eastern Parachuting Championship, taking home all the prizes in the largest sport parachuting event ever held in this country.

The youngest contestant, 19-year-old Stuart Rose of Amherst College and New York City, walked away with the Mason Memorial Trophy for the highest individual score. He landed 14 feet, six inches from the cross's center, on the muddy field at New Castle County airport.

One of the country's youngest teams—in length of existence—took the Delaware Cup team prize. Less than a month old, the 77th Special Forces Sport Parachuting Club won the title trophy with a best-two-out-of-three average of 58 feet, three inches.

Even in the college race, twice-champion Harvard gave way to a younger Williams College team whose two high scorers averaged 108 feet.

A day and a half of rain—out of two scheduled for the meet—kept the scores from being too significant. Instead of two jumps in each of two events, weather permitted only one runthrough of the first, and barely that. Limited to a single spot jump from 2,300 feet, only one thing was very clear: the jumping as a whole was nothing to brag about.

Less than half the contestants managed to land within the 75-yard-wide scoring radius. Even for the 17 out of 41 contestants who did, an average landing mark nearly 40 yards off center left an unimpressive record.

Shifting winds may have accounted for part of the trouble, but qualified observers agreed that most of it was in the spotting. Many of the contestants showed good work in maneuvering the open gore parachute—used by all but a few—but too many left the jump planes where no chute could have brought them within scoring distance.

In an attempt to attune the jumpers to world championship standards, only two streamers were used, one at the beginning of the meet and one after a mid-meet thunder shower. An over-reliance on individual streamers may have been at the core of many of the jumpers' weak showings.

The first day of the championship, Saturday, May 3, was rained out entirely. It was called off officially at 1 p.m., after five hours of wishful waiting. It looked for a while Sunday morning as if the whole meet would be rained out, but after intermittent breakthroughs, the sun finally shone through an

adequate ceiling. The first jump, scheduled for 10 a.m., was made three hours late.

Even after weather uncertainties, the meet drew a paying crowd of 800. Among the spectators were General Van Kann, assistant division commander of the 82nd Airborne; and the governor of Delaware.

Judging the meet were PCA President Joe Crane, French parachute instructor Gerard Vandermeerch, and Col. William T. Ryder, leader of the Army's original airborne test platoon. Jacques Istel was meet director; Lew Sanborn, chief safety officer. Lynn S. Probst of Haddonfield, N. J., represented the CAA at the meet. His post-meet observation—in an official capacity—was probably representative:

"We were well pleased with the planning and execution of the entire contest. The event was well planned, briefings were complete and all concerned were safety conscious and cooperative.

"Personally, we enjoyed the meet and regret that weather did not permit accomplishment of the full program."

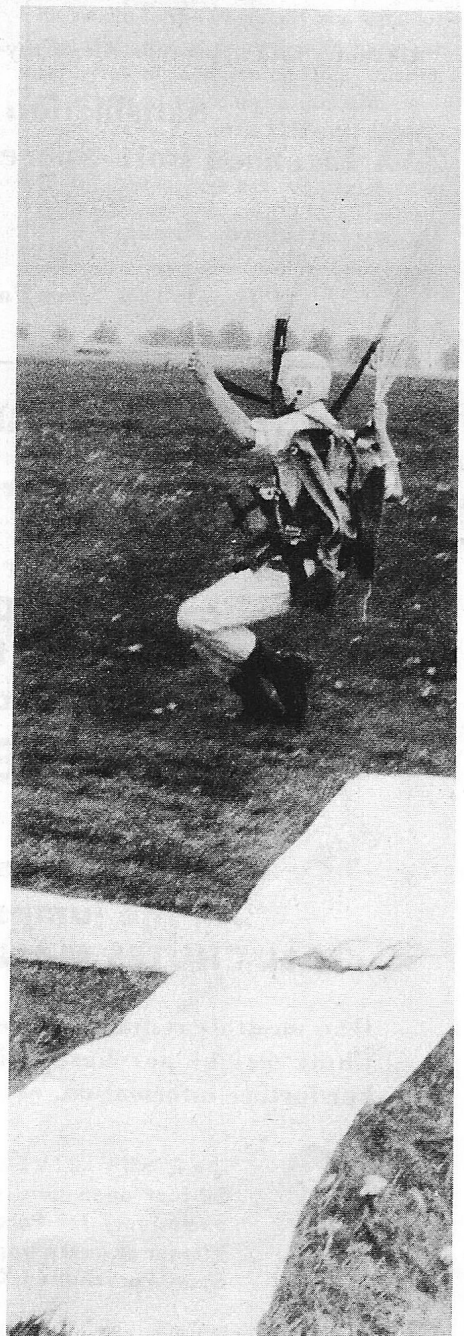
DELAWARE CUP TEAM SCORES

| | |
|---------------------|-------|
| 77TH SPECIAL FORCES | 222.3 |
| 101ST AIRBORNE | 186.3 |
| WILLIAMS COLLEGE | 156.1 |
| CAMBRIDGE (HARVARD) | 106.6 |
| MARINE CORPS | 92.5 |
| CLEVELAND | 69.1 |
| CINCINNATI | 44.9 |
| KENTUCKY | 16.6 |
| YALE UNIVERSITY | 14.7 |
| JAMESTOWN | 0 |
| 82ND AIRBORNE | 0 |
| GOOD HILL | 0 |

INDIVIDUAL SCORES

| | | |
|--------------------|-------|-------------------|
| Stuart Rose | 140.3 | NO MEASURE |
| Larry Pond | 122.2 | |
| Alva English | 121.2 | Dale Gates |
| Linwood Patc | 119.3 | Norm McKinley |
| Peter Haskell | 106.6 | Nathan Pond |
| James Kovach | 103.0 | Dana Smith |
| Ellsworth Getchell | 99.9 | Merrill Shepard |
| Charles Hillard | 93.9 | Herschel Rourk |
| Harry Schubach | 92.5 | Jim Perry |
| George Stone | 69.1 | Joe Norman |
| Arno Land | 65.1 | Robert Vranish |
| Roel Garza | 44.9 | Lyle Hoffman |
| Daniel Byard | 40.4 | Richard Davis |
| Tony Harwood | 33.9 | A. J. Mednis |
| George Flinn | 14.7 | Conrad Richardson |
| Thomas Kirtley | 10.0 | John McGlosson |
| Harvey Lips | 6.6 | Brad Straus |
| | | Dick Tomkins |
| | | Peter Carleton |
| | | Sergei Givotovsky |
| | | George Erlanger |
| | | Joe Fischer |
| | | Bob Myers |
| | | Dick Smith |
| | | Richard Page |
| | | Frank Falcjczyk |

HAPPY LANDING by Stuart Rose, Amherst College sophomore, brings him 14 feet, 6 inches from cross's center, the winning mark of the meet. It was only the 19th jump for the young parachutist. "I didn't think I could do it," he said shortly after touching down.



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*THE SKY DIVER sport parachute with 28-foot open gore steerable canopy, made exclusively for Parachutes Inc. by Pioneer. Winner of every trophy at the Delaware Cup Sport Parachuting Championship this May.

SPORT PARACHUTISTS AROUND THE COUNTRY

The following list is published in response to the many requests for names and addresses to contact in connection with parachuting in different parts of the country. It was drawn up by the PCA, and in most cases the locality given carries the title name of a parachute club. For instance, Arizona is represented by the Arizona Parachute Assn., Seattle by the Seattle Sky Divers, etc.

| | |
|--|---|
| ARIZONA Jay Miller 6502 E. Santa Aurelia Route 4, Box 98 Tucson, Arizona | UNIV. OF FLORIDA A. Graham J. Knox 1238 S.W. 3rd Avenue Gainesville, Florida |
| CALIFORNIA Darrell C. Sonnichsen 879 Roble Ave. Apt. 1 Menlo Park, California | UNIV. OF TEXAS William Cassin 2501 San Gabriel #5 Austin, Texas |
| CINCINNATI John McGlosson 506 East 4th Street Cincinnati, Ohio | UTAH Lawrence Brown (No address available) |
| CAMBRIDGE Richard C. Tomkins 48 Boynton St. Apt. 20 Cambridge 38, Mass. | WILLIAMS J. Lawrence Pond Williams College Williamstown, Mass. |
| CLEVELAND Floyd Hobby 205 Chestnut St. Elyria, Ohio | YALE George H. Flinn II 1187 Yale Station New Haven, Conn. |
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TYPE CERTIFICATES AVAILABLE

The PCA has available Supplemental Type Certificates (copies) issued by the Civil Aeronautics Administration, certifying changes allowable in aircraft for sport parachuting. Removal of right or left door, attachment of static line, removal of right or left front seat, etc. Copies of this certificate are available from the PCA at the cost of \$10.00 each. (The price is to defray the costs incurred obtaining the certificate.)

ELEMENTARY TURNS DURING FREE FALL

by JACQUES ISTEL

This article was prompted by a series of letters to the Parachute Club of America requesting information on turns and figure "8's." This is a discussion of very basic turns. Only arm and trunk movements from the "face to earth" stable position will be examined.

The beginner in free fall must first learn to hold a heading.

After leaving the aircraft, arms and legs spread, back arched, head back, the body may tend to buffet during the first five seconds. These difficult first seconds will be the subject of a later article. After five seconds the parachutist should be in stable fall on the same heading as the aircraft he has left.

The most common errors at this point are the following:

1. *Buffeting.* Correct by pulling arms down until hands are even with and approximately two feet from waistline. The head will drop slightly and the body will glide forward. This position is called the medium delta.
2. *Uncontrolled turn.* If the arms are even and you are turning, the legs are not even. Placing one leg higher than the other will cause a turn. Consciously keep your legs even with each other. Stay relaxed—do not make your body rigid.
3. *Uncontrolled fall.* Correction: Relax, arch, head back. Check the symmetry of arms and legs. Wait four seconds in this position.

After the parachutist has learned stable fall he is ready to start turns. The first attempts at turns should be made during free falls of at least 12 seconds.

After 8 seconds the body is near terminal velocity and is well settled on a cushion of air. The parachutist must already have learned to select a point of reference on the ground.

Starting from the medium delta position, after seven seconds he should bring his right hand steadily over his head, arm curved and parallel to his body. The left arm should be kept outstretched with hand at waist level. The body will start a turn to the left.

This turn can be made more rapid by bending the waist to the left. The turn can be further accelerated by two other means which will be discussed in advanced turns.

The parachutist should now be ready to counter the turn by straightening his torso, drawing back his right arm and, if necessary, and it normally is, advancing the left arm. When the turn is stopped both arms should be replaced in the desired position of descent, the medium delta in this case.

The medium delta position was selected in this example because it is the easiest position from which to start turns. In the slow fall (arms forward position) the body tends to buffet and turns are hard to start.

In the full delta (maximum glide position) turns are rapid and violent—the beginner tends to over-control his turns.

The parachutist must learn to lead his body. When changing airfoil, there will be a delay before the change in configuration is fully effective. The parachutist desiring to turn left must thus hold the right arm overhead for a second before the speed of turn builds up. Conversely, he will have to stop his turn before arriving on his new heading since he must take into account the inertia of his rotating body.

Students should practice 360° turns to the left and right. They should start a slow countering action after about three quarters of the turn. The exact time to start the countering action depends, of course, upon the speed of the turn.

In the figure "8" the parachutist simply makes a 360° turn to his left (or right), stops on original heading and immediately makes a 360° turn in the opposite direction, ending again on heading. The arm movement described above with a slight sideways bend at the waist will give a 360° turn in 3½ seconds or less and a complete figure "8" in the seven seconds required for Jump #3, Phase I, of the Tryouts.

One word of caution—do not become so absorbed with practice that you lose track of time or altitude. Pull at 2100 ft. and know that you have many jumps ahead in which to improve your technique.

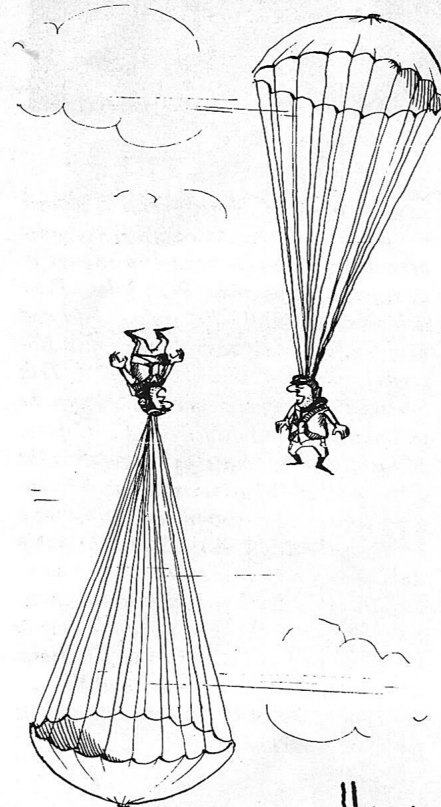
ARMY CHUTE MISSING (Letter to the Editor)

On the 3rd and 4th of May, 1958, the 77th Special Forces Group, (ABN) Sport Parachute Team participated in the First Eastern Sport Parachuting Championship at Wilmington, Delaware. The parachutes used by the above mentioned team were Pioneer 28 foot red canopy blank-gore parachutes, property of the United States Army. At the conclusion of the meet, when the trophies were being awarded, some unknown person or persons stole a "main" parachute. The parachute is government property and clearly marked US Army, serial No. T442215. I doubt whether the person who stole this parachute realizes the seriousness of his actions and the consequent penalties resulting from such an action.

I would like to request that you place an article in the Parachute magazine for me asking your readers who have any information concerning this missing parachute to write me at this address—Capt. James H. Kovach, Rigger Detachment, 77th SF Gp., Abn., Fort Bragg, N. C., or if anyone has this parachute in their possession to send it to me collect.

Capt. James H. Kovach

"I said, one of us is in trouble!"



The Princeton Tiger

"I said, one of us is in trouble!"



This April, the Department of Defense issued Army Regulation 95-19, the order permitting Army personnel to engage in sport parachuting under PCA rules. Prior to issuance of AR 95-19, Jacques Istel and Lew Sanborn spent several weeks, last November, teaching a select group of 77th Special Forces officers and enlisted men the techniques of controlled free fall. Captain Kovach, who has since participated in the Delaware Cup Championship (on the winning team) and is now competing for a berth on the 1958 World Championship team, was one of these students. As a member of this nucleus, he has been instrumental in spreading the sport of parachuting to the 82nd and 101st Airborne Divisions. Several hundred paratroopers and SF men are now active in, or on the waiting lists for sport parachuting.

THE ARMY JUMPS IN

by CAPT. JAMES H. KOVACH
77th Special Forces

With the Department of the Army giving its stamp of approval to the body stabilization technique or "free fall" as it is more commonly tabbed, military parachuting clubs will begin to mushroom in size.

Much of the credit for this long-hoped-for action must go to the U. S. Army Special Warfare Center, commanded by Col. George M. Jones. In 1954, the 77th Special Forces Group (Airborne), the paratroop branch of the Special Warfare Center, under the direction of DA, initiated a program for the development of a steerable parachute to aid guerrilla teams to drop in small, unmarked and uncleared zones during hostilities.

Great battles such as Normandy, Ardennes and Sicily in World War II and Sukchon in Korea showed the value of mass jumping of paratroopers. It was these jumps that provided the basis for the study of pinpoint landing techniques needed in unconventional warfare.

After four years of study and practice with members of the Army, Navy, Air Force and Marines and civilian "skydiving" experts such as Jacques Istel and Lew Sanborn, the 77th decided to put its findings to full use.

In March, 1958, concentrated training, conducted by personnel of the 77th for selected jumpers of the 82nd and 101st Airborne Divisions in addition to members of

the 77th, was initiated. The instructors had qualified for their class "C" licenses under the tutelage of Istel and Sanborn.

Eighteen students began preliminary training at Bragg's Holland Drop Zone, using the Pioneer Open Gore parachute with static line. Each student was given six static line jumps, making five dummy rip cord pulls.

Student evaluations were made and ten students grasping this technique most rapidly were selected to continue the free fall jumping.

Students were given five-second delay opening assignments on their initial jump, climbing progressively to 10, 15, 20 and 30 second delays. No difficulty was encountered on 180 and 360 degree turns.

Training was accomplished in 15 days suitable for jumping. Ten students completed the course of instruction and qualified for the class "C" International Parachutist license. A total of 350 jumps were made during the course with an impeccable safety record—one minor ankle sprain.

Because of this tremendous showing of success, enthusiasm has reached a new high for participation in the challenging sport. With the fast approaching Parachuting Olympics, the United States should show vastly improved ability and become a first-rate power in the highly precise art.

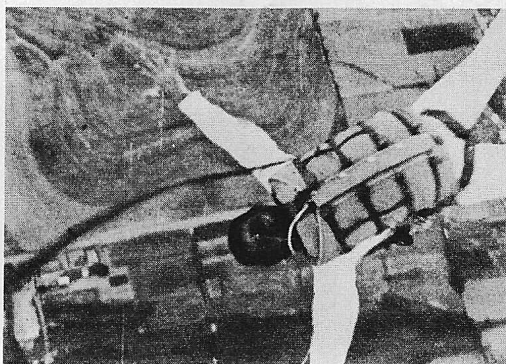
SLEEVE DEPLOYMENT

By the numbers

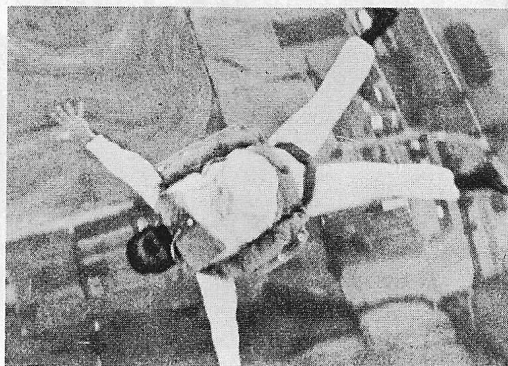
The unusual set of photographs at the right is believed to be the only complete sequence picturing the deployment of a sleeve-encased canopy. These shots were taken with a 16 millimeter movie camera, from the door of the jump plane, altitude approximately 2,300 feet. The camera was run at 64 frames per second to stop what to the human eye would look like a continuous interaction between man, sky and equipment. The jumper is Gerald Fisher of the Lancaster County Parachute Club. It was his first jump and, as the photos show, a remarkably well executed one.

The sleeve was developed in Germany between the two World Wars. The Russians have used it for many years for sport parachuting and Jacques Istel and Lew Sanborn have been instrumental in the last year in introducing and improving it for this purpose in the United States. With the development of free fall, the sleeve is now generally considered a necessary piece of equipment for sport parachuting.

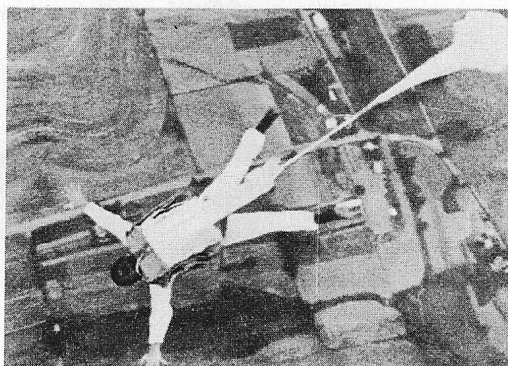
Safety and comfort are said to be the main reasons for use of the sleeve. Encasing the canopy like an umbrella cover, it prevents air from entering the canopy until the attached pilot chute fully stretches the lines (picture 5). Then the pilot chute gradually draws off the sleeve (pictures 6, 7 and 8) and the air finally enters the canopy. The abrupt brake-like action of the regularly deployed canopy is considerably reduced and the jumper suffers none of the pains or dangers of severe opening shock. Notice also that the jumper is drawn into an upright position before the parachute blossoms, hence minimizing the snatch force. Other advantages of the sleeve are said to be its clean deployment features—notice how the lines must be fully extended in order to unlock the sleeve and free deployment of the canopy. This feature prevents a man opening on his back from wrapping in his canopy. Also, because the sleeve pulls free of the canopy, the danger of entanglement with the aircraft is eliminated.



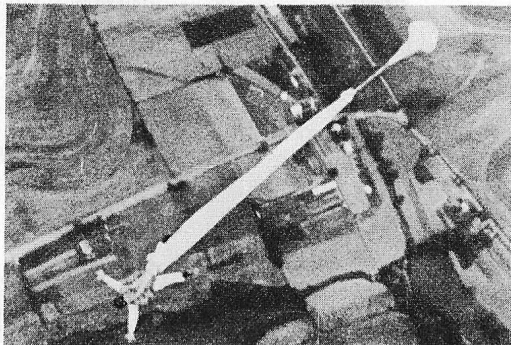
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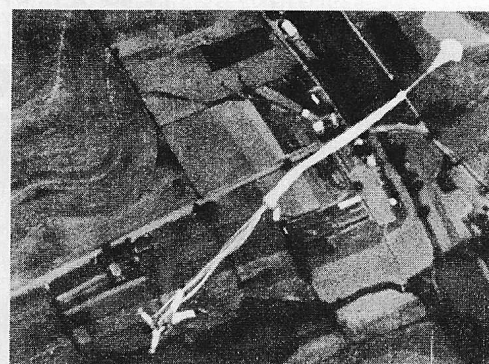
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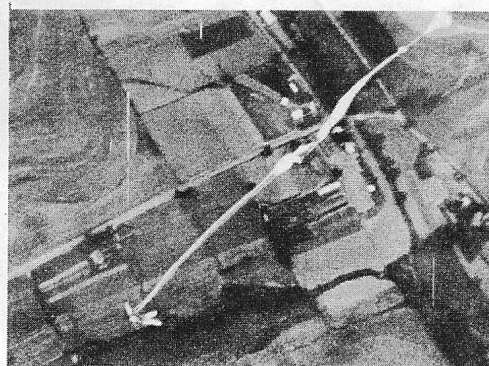
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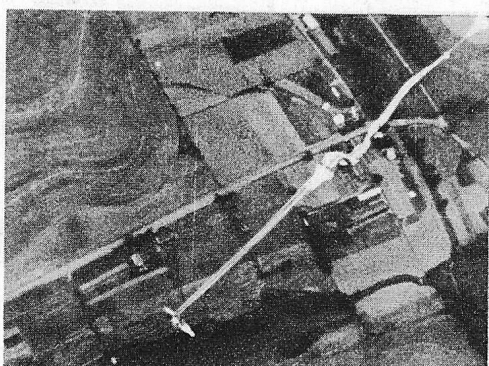
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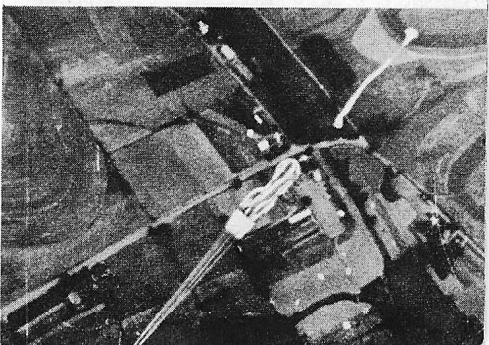
five



six



seven



eight

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