# PARACHUMIST

SEPTEMBER, 1957

THIRTY-FIVE CENTS



### **EDITORIAL**

The PARACHUTIST is a magazine about America's newest sport. It is for men and women who parachute. It is for those who want to parachute. Finally, the PARACHUTIST hopes to reach many who have never heard of parachuting as a sport.

Parachuting is growing in this country. The PARACHUTIST will report this growth.

We will work in close cooperation with the Parachute Club of America. Our editorial policy can be expected to reflect PCA thinking on such ideas as safety, licensing and non-commercialism.

The PARACHUTIST will supplant Joe Crane's monthly news letter which he has put out so selflessly all these years as president of the National Parachute Jumpers and Riggers. The full and happy future of this magazine depends on our subscribers' cooperation in furnishing information of parachuting activities.

As a final word for this opening issue let us say that our major goals are that more Americans, more jumpers and the PARACHUTIST will get off the ground.

COVER — George Saris of the New York Parachute Club sky dives over Woodbury, Conn. Picture was taken from nearby plane. The jumper is 2500 feet above the ground and is making a ten second free fall. Photographer: Wolfgang Lieschke

## POINTING FOR PRAGUE

by Jacques A. Istel, Captain of the 1956 U. S. Parachuting Team

As the Fourth World Parachute Championship looms ever closer, with less than a year to go before the American Team leaps into the summer sky over Prague, Czechoslovakia, Americans are beginning to ask themselves the big question.

What are our chances for '58?

What are the chances of improving our 1956 standing—sixth out of ten nations—good enough for a starter, but not enough to impress the world for long.

The answer is simple. Our chances are good if we get to work. At this midpoint between the biennial world championships, it's worth a look at our weaknesses, to see where the work is needed. On the top of this list is precision free fall—pointing.

Pointing is important. The rules for the 1958 Championship place a premium on the combined talents of this difficult art. Two of the four events and a majority of the points will be based on it.

Pointing is also difficult. The parachutist must be both pilot and navigator—using his body's glide to bring him to the point in the sky where he wants to open his chute. He must be an expert in two techniques. He must be able to sky dive from high altitudes and, more than this, be able to use his sky dive to direct himself to the parachute opening point.

From this point—figured before he jumps—the parachutist will be able to hit his ground target. Pointing can be contrasted to spot jumping from low altitudes where a plane carries the jumper to his opening point.

In addition to sky diving problems, the pointing parachutist is faced with other special difficulties. At high altitudes, the jumper has trouble telling his exact position in relation to the ground. As he sky dives, he must constantly maneuver so that when he reaches a certain altitude—normally 2,000 feet—he will be above a selected landmark. Unlike the sailor with his buoys and the racing pilot with his pylons, there are no obvious markers to aim for.

Difficult though it is, pointing must be mastered if America is to stand the competition at Prague next summer. In event No. 2, each contestant will make two jumps from 4950 feet (1500 meters). These jumps will include sky dives of not less than 15 sectods nor longer than 23. Half the points will be awarded for precision landing, half for style of fall.



Jacques A. Istel

The fourth event again will test our pointing ability. It will be a group jump from 6600 feet (2000 meters) including a 15 to 23 second sky dive. This event will be judged solely on landing accuracy.

In both these events, pointing is the key to success. The meet's other two events will be competitions in style and low altitude spot jumping, where we are better off.

In event No. 3, the rules provide a startling innovation. The jumper leaves the plane at 8250 feet (2500 meters). After a ten second sky dive he receives a signal from the ground. If it is red the jumper will make four turns to the left and two to the right. If the signal is green the jumper will simply make three figure eights. Finally, if it is yellow, he will make three turns to the left and three to the right. The jump will be judged on style of free fall but the jumper will be able to add to his total points by making fast turns. That is, if he completes his turns in less than 20 seconds, he will receive five points for every second under the limit. If his turns are slow, he is docked five points for every second over the established 20.

There is only one event, the first, in which low

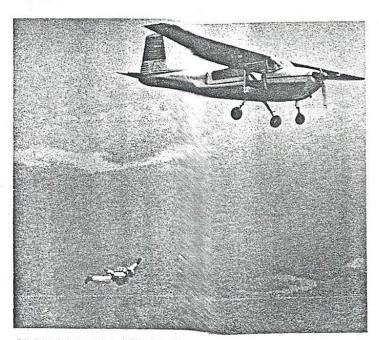
altitude spotting is inpurtant. This is a jump-and-pull from 3300 feet (1000 meters). Our chances are good in this event, At the Intercollegiate Meet held in Woodbury, Conn., this spring, the winner landed only a few inches more than nine feet from the center of the target, A nine foot jump is excellent in any man's league.

We have slim grounds for overconfidence in any area, but there is no question that the situation is constantly improving. In 1956, before the meet in Russia, there was no sports parachuting equipment in the United States. We have it now. A year ago there were few clubs and training grounds. The number of clubs is constantly growing.

Best of all, we have young blood. For example, this year's beginners at the Intercollegiate Meet will be serious competitors by the spring of 1958. The parachute clubs of Arizona and California, as well as the Seattle Sky Divers, are turning out competent parachutists. Darrell Branstetter's crew of unreconstructed Southerners from Georgia Tech are becoming seasoned.

At the same time, our veterans are constantly improving. Lew Sanborn and Lyle Hoffman, two stalwarts of the 1956 Team, can be counted on to give the youngsters a hard fight.

We have the manpower and we have the equipment. As we begin pointing for Vague what we need is practice—systematic practice. This means keeping records, measuring accurately and having competent judges on the ground.



HIGH SCORING AMERICAN (\*\*) last summer's Moscow meet, Lou Sanborn, dives the sky with precision and grace.

Pointing still remains the big question, but whard work and careful practice, perhaps we can sthe parachuting world a few surprises at Prague July of 1958.

#### POINTS AT PRAGUE

The rules for the Fourth World Parachute Ch pionship were drawn up by the International Parac Commission meeting last winter in Paris.

Split second timing accuracy—which was the to last summer's parachute championship at Mos—has, to a large degree been dropped from the Praprogram. The International Parachute Commis felt that timing was a mechanical reaction and had to do with good parachuting. Each jumper, howe is to be docked 50 points for being either over or u the broad time limits established for each event.

Event No. 1—Individual event where the jur leaves the plane at 3300 feet (1000 meters) and mediately opens his parachute. The event to be just solely on accuracy of landing. Each jumper m two jumps. Top score for each jump—150 pc

Event No. 2—Another individual event. The opetitor jumps from 4950 feet (1500 meters). As a sky dive of more than 15 seconds and less that seconds he opens his parachute. Judged on styl fall and accuracy of landing. Each jumper makes jumps. Top score for each jump—300 points.

Event No. 3-Also an individual event. The jui leaves the plane at 8250 feet (2500 meters). a 10 to 15 second sky dive on a specified heading receives a signal from the ground. The signal is § by having the judges uncover a large ground I -either red, green or yellow. If the signal is the jumper makes four turns to the left and two to the right. If green, he makes three figure ei Finally, if the signal is yellow, he makes three to the left followed by three turns to the right. jumper is timed from the start of his turns. ] can complete them in 20 seconds, he gets 150 pc If he can complete them in less than 20 seconds, awarded five points for every second saved. If slow, he is docked five seconds for every second The jumper can also earn a possible 150 points for of fall. Each jumper makes two jumps. Top for each jump-300 points.

Event No. 4—A group jump with the whole going out at 6600 feet (2000 meters). The free falls from 15 to 23 seconds. The event is just solely on accuracy of landing. Team makes two just Top score for each jump—300 points.





A FULL TIME MARINE and part time parachutist, Lieutenant J. M. Perry (left), stands on the CAA approved jump step. He demonstrates the standard exit position. On the right, June Cuddeback of New York is making her second static line jump. The pilot chute has filled with air and is about to extract her main canopy. The static line is faintly visible against the side of the plane.

## SKY DIVING-DANGER OR DELIGHT?

Man wants to fly. To soar in the air, free and unencumbered, has always been his dream.

The ancient Chinese dreamed of the air and flew brightly painted dancing kites. The medieval knight dreamed and watched his hunting falcon soar. Finally, fifty years ago, man built the flying machine, a contraption of noise and wire, which would carry him aloft. He had almost achieved his dream.

But had he? Does today's jet ace, encumbered with a tight fitting pressure suit and encased in a cramped instrument-jammed cockpit, realize man's ancient dream of flight?

A small but growing number of Americans think not. Their answer is to parachute. Not only to parachute but to dive the sky, to glide smoothly toward the carth for ten, twelve, thirty or sixty seconds. That is what some are doing and others are learning to do.

What is sky diving? Is it a danger or delight?

When asked the question recently, Dick Tomkins, young team captain of the Cambridge Parachute Club, answered, "Mostly delight. Take a standard jump. If you follow the safety rules, there's no danger."

You rig up.

"Maybe this is the most important rule," Tomkins went on to say, "Always use equipment that's in top condition. Fooling around with ratty parachutes is risky. Along the same line, always use the right parachute. That is, a regular T-10 static line chute should not be used from a light plane. Its snatch force is too great for most small planes and the static line may foul on the stabilizer."

You check the wind and climb aboard your plane.

Tomkins continued, "On your first few free falls always have a good jumpmaster aboard the plane besides the pilot. He'll help you spot and make a last minute safety check. Your jumpmaster-instructor should have at least a Class C International License."

You take off. After gaining altitude you toss out a streamer to check driftage. It's time to jump and you exit.

"Never try a free fall until you've pulled the dummy handle on five static line jumps," continued Tomkins. "Making regular static line jumps won't teach you a darn thing about free fall. Remember, a lot of former paratroopers have killed themselves on their first free fall."

You leap out, spread-eagled in your air like a swimmer in his ocean. It is quiet, the ground slowly rises to meet you. It's time to open your chute. You bring your right hand slowly to the rip cord and pull.

"In free fall, the sleeve is just about a necessity. It does two things," Tomkins explained. "First, if you open without a sleeve while on your back, the canopy may wrap around you. Second, the sleeve eliminates opening shock after a long free fall."

You are 2000 feet from the earth, the canopy is tight and bright above you, red and white panels glistening in the sun. Below, the grass is dark blue green; above, the blue sky and the piling clouds blaze against each other. The ground comes up and you hit and tumble and the jump is over. Delight instead of danger.

#### WHAT'S UP

#### Behind the curtain

During the third week in August, the city of Tivat, Yugoslavia, is playing host for an individual parachute meet. Darrell Branstetter, winner of the 1957 North-South Meet, Jacques Istel, Captain of the 1956 U.S. Team, Lew Sanborn, high scoring American at 1956's Moscow meet and Darrell C. Sonnichsen, president of the California Parachute Club will participate. One of the four events is over water.

#### The ladies, God bless'em

Peggy Polk is continuing her young jumping career this summer at Goodhill Farm in Woodbury, Conn. She began last spring with the Cambridge Parachute Club. Maria Magdalena Rodriguez Cazeres has made her first jump. Mrs. Clover Stayskal of Jamestown, N. Y., recently made an 18 second free fall from 5000 feet. June Cuddeback, a New York fashion stylist, has completed three static line jumps so far.

#### Across the Mason-Dixon

The Rebels conquered the Yankees in the North-South Meet held in Athens, Tenn., this June. Darrell Branstetter, Southern leader made the best leap—35 feet. Senator Estes Kefauver and Lieutenant Colonel Rene de Bordas, French Air Attache, were present. The latter accepted a painting symbolizing the friend-ship between American and French parachutists. Joe Crane, president of the Parachute Club of America, presented the painting.

#### Separating the men from the boys

Out in Seattle, Wash., a gentleman by the name of H. L. Whittier, age 69, is still jumping to beat the band. He recently started using the sleeve to lessen the opening shock. He says it makes all the difference.



JUMPERS ALL — Maria Cazeres (right) gets hand Jacques Istel with the chin strap of her jumping he



AFTER THE JUMP — Mrs. Claudia Istel, June Cuddel and Maria scan the jump field. Claudia Istel made first leap in France last summer.

#### It's that first step

Seven miles down is a long way, no matter how figure it. Navy Lieutenant (jg) Thomas W. Jack had to go to the infirmary—he had scratched his c—after quitting his jet when it developed eng trouble some 35,000 feet above Tracy, Cal. It was first jump.

#### Bad actor

Roger Steel, an aspiring actor who'll try anyth for publicity, has received absolutely no support fr the California Parachute Club. Steele announced will attempt to make a jump using the corner of Ho wood and Vine as his target.

#### A GLOSSARY

free fall—The parachutist's fall before he opens his chute. In the jumper's parlance, it usually refers to a jump where the parachutist pulls his own rip cord as opposed to—

static line jump—Here the parachute is opened automatically. Paratroopers use the static line exclusively. In sport parachuting, it is used solely for training.

sky diving—Controlled free fall, where the parachutist uses his body to maintain a stable horizontal position and employs his arms and trunk aerodynamically for gliding maneuvers.

spot jumping—An exercise where the jumper tries to land on a ground target, also referred to as precision landing.

pointing—The use of sky diving for high altitude spot jumping, in which the jumper directs his free fall to a pre-determined point in relation to the target where he opens his chute. This point is found by—

spotting—Determining the point in the sky where the jumper opens his chute in order to hit the ground target. This point varies according to wind conditions.

driftage—The sidewards movement of an open parachute caused by wind.

streamer—A device to determine driftage, so constructed that it will fall at the same rate as an open parachute.

#### The Accident Corner

The Facts: Sergeant James E. Thorton, a nine jump veteran with the 82nd Airborne Division, killed himself on the afternoon of June 2, 1957. He jumped from 2000 feet. After a 1000 foot delay, he pulled his reserve parachute instead of his main. The reserve broke from its fastenings and Thorton plunged to his death.

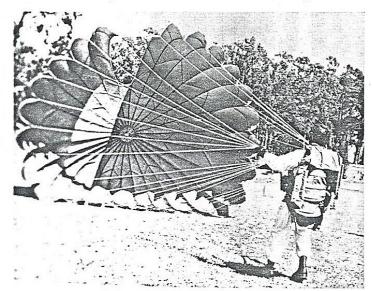
The Findings: According to the report filed with the Civil Aeronautics Administration, Thorton killed himself through negligence. His equipment was faulty. The reserve, instead of the usual D ring fasteners, was attached to his harness by survival kit straps. Having been trained to a static line, Thorton did not have the presence of mind to open his main chute. Instead, he yanked his reserve. This accident could have been prevented if (1) Thorton had used proper sports equipment, (2) he had made five jumps with a static line parachute, mounted with a practice rip cord handle and (3) a qualified jumpmaster had been checking equipment and instructing.

#### THE BLANK GORE PARACHUTE.

There are all sorts of parachutes. They range in size from the smallest metal ribbed pilot chute to the huge 100 foot cargo chute. They come in all colors, from camouflage green to bright white and red. They come in all shapes, from circular to square.

Latest chute on the American scene, however, is the blank gore. Originally conceived and used in the United States during the twenties, the blank gore dropped from use during the thirties. There was no need for its agility. With the renaissance of parachuting in this country the blank gore parachute has revived.

At first glance it seems normal. Then the onlooker notices a large gash in the canopy. The gash is not an accidental rip; the chute was made that way.



The blank gore parachute

The dark blue blank gore parachute is 28 feet in diameter. Two thirds of one of its panels is open space. The gap in the canopy works much like the tail pipe of a jet in that it funnels the escaping air and gives the parachute horizontal motion.

On a windless day the descending parachute moves sideways at eight miles per hour. This horizontal movement can be directed and allows the parachutist to either counteract or work with the wind. Besides giving horizontal movement, the gap also actually increases the lift.

In addition to the aerodynamic lift qualities built into the blank gore parachute's design, the manufacturers have also used a specially processed canopy fabric.

All canopy fabrics are assigned rates of porosity. This rate is established by measuring the amount of air passing through a square yard of material in a given time under a specified pressure. The nylon used on the blank gore chute-has a porosity rate of 20. The usual rating for personnel chutes is between 80 and 120.

The combination of good design and better cloth means that the blank gore parachute has a slower rate of descent than any parachute of comparable size. For example, the standard 28 foot parachute falls at 20 feet per second or about 14 miles per hour. The blank gore falls at 16 to 18 feet per second or 11 to 12 miles per hour. This slower rate of descent, combined with a design which enables the jumper to cancel or lessen the effects of the wind, has taken the jolt from parachuting.

## A MESSAGE FROM THE PRESIDENT OF THE PARACHUTE CLUB OF AMERICA

Back in 1932, 46 parachutists jumped at an air meet held at Roosevelt Field, N.Y. They decided to form a national club. It was named the National Parachute Jumper's Association.

Fifteen years later, in 1947, we incorporated and changed the name of the club to the National Parachute Jumpers and Riggers, Inc. Licensed riggers—whether they had jumped or not—could join.

Through our efforts we were able to get the National Aeronautic Association interested in the sport of parachuting. We were instrumental in having the Federation Aeronautique Internationale include a parachute category in the world record classification. We held meets in this country and the first international competition was held in Yugoslavia in 1949.

Now we have reached another milestone. We have

changed the name of our organization to the Parachute Club of America. The by-laws have been overhauled to include all persons interested in parachuting.

I have been proud to act as secretary or president for these past 25 years. I am also very happy to see another significant step ahead for parachuting this year. This step is a regular magazine for parachutists. All members of the PCA will receive the "Parachutist" with their membership in place of my monthly bulletins. This is a great relief as in the past few years the amount of work I have had to do has been heavy and has increased.

There are a few more issues of the Caterpillar Stories to complete the series which were supplied to me by our own General Harris and I will continue to send these out for the next two or three months.

To the editors of the "Parachutist," many thanks and the best of luck to the new magazine.

Joe Crane
President, Parachute Club of America

#### THE PARACHUTE CLUB OF AMERICA

A non-profit Organization
P. O. BOX 212, MOUNT KISCO, N. Y.

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this application. Active membership limited to jumpers.)