



Parachutist

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DEAR MEMBER:

No, you didn't miss the July or August issue of PARACHUTIST. It is just catching up after the Nationals and the International Meet at Orange, Massachusetts. The September Issue will consist of the official program of the International Meet plus a complete rundown on the final results and we know you'll be pleased. Meanwhile.....let's catch up.....

SITUATION ON MILITARY SURPLUS PARACHUTES: As most of you are aware, the Defense Department recently cut off the sale of surplus parachutes to civilian agencies by clamping down on regulations to destroy outdated and unserviceable parachutes.

PCA immediately instigated a program to determine why this occurred and, after much **double** talk by officials of the Defense Department, finally concluded that it was hazily based around the cost of sending out search parties when a pilot or citizen reported seeing an orange and white canopy either in the air or on the ground. We don't feel this to be a justifiable reason, but it is significant therefore that all jumpers should publicize their jumping activities in advance to prevent such reports being sent in.

We, and Sky Diver Magazine, asked that all parachutists write in to the Defense Department and their congressman protesting the destruction of surplus parachutes. Many members did and the result was that the DD had to hire (again, your tax dollar!) additional clerks to handle the complaints.

Mr. George Gividen, Tri-State Skydivers, finally arranged a meeting with top officials of the FAA, PCA, and all the military service representatives in Washington. He received permission to represent PCA at this meeting and PCA's President, Mr. Joe Crane of New York, felt that actions taken here were significant enough to every member to require his participation in the meeting

The meeting was held on 17 May 1962 in the Munitions Building, Washington D.C. The purpose was to ascertain the reasons for destroying parachutes and to discuss the DD policy regarding this action.

PCA recommended:

- a. That surplus parachutes be offered for sale as items subject to a physical inspection by a FAA Certificated Rigger.
- b. That a physical inspection of parachutes by an FAA Certificated Rigger be made after award.
- c. That only those parachutes determined serviceable by the FAA Certificated Rigger be made available to the buyer. Parachutes determined unserviceable to be re-offered for sale after mutilation.
- d. Expenses of physical inspection of all parachutes awarded be borne by the buyer.

It was apparent throughout the meeting that the FAA, Army, Navy, and the Defense Department representatives were amenable to releasing all serviceable surplus and outdated parachutes intact to civilian sources. Only the Air Force appeared to object to such releases.

The meeting was concluded and in middle June PCA received the following information in a

letter from the Chief, Utilization and Marketing Division, Logistics Services, Defense Supply Agency, Washington, D.C.:

"We are certainly aware of your interest in the disposal of parachutes and can understand your anxiety with regard to future policy on this subject. You can be assured that we are also anxious to arrive at a solution which will not be contrary to the public safety and will be of mutual benefit to the Government and your organization. Future policy for disposal of surplus parachutes, if considered necessary, will be established only after proper coordination with interested Government agencies. We feel that a decision on this subject should be made within 45 days."

Any decisions reached by this agency will be published in the PARACHUTIST.

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NEW PART 38 OF THE CIVIL AIR REGULATIONS: Up to this writing, this new regulation, covering sport parachuting, has not been finalized and placed into effect.

We sent 200 copies to the major clubs and safety officers throughout the country, asking for comments and recommendations, and received only twenty replies by the deadline date! This leads us to believe that either (1) an overwhelming majority of clubs and parachutists will agree to allow the FAA to write any rules they wish to govern sport parachuting, or, (2) that they feel that PCA is capable of looking out for their interests so they don't bother to communicate. Believing the latter to be true we forwarded the following recommendation to the FAA prior to their deadline:

"Gentlemen:

The Parachute Club of America respects and appreciates the need for the proposed new part 38 of the Civil Air Regulations.

The Parachute Club of America considers the proposal well thought out and reasonable with the exception of part 38.12(b). The wording of this part should be changed from:

A request for authorization to make a parachute jump.....

TO:

Written notification for making a parachute jump.....

REASON: Parachute jumps are made only under VFR conditions, as covered in paragraph 38.13. Neither FAA traffic control facilities nor FAA flight service stations have positive control of traffic in controlled air space in VFR weather.

A flight service station would have no basis for granting or refusing permission to make a parachute jump in controlled air space other than a controlled zone. (The control zone situation is specifically covered by part 38.12(a).) Furthermore, granting of authorization would imply responsibility on the part of FAA officials for a situation over which they have no control.

On the other hand, since parachuting traffic is generally vertical and air traffic is generally horizontal, it is reasonable to require that formal notice be given of parachuting activities, particularly when the exact location of this activity may be pin-pointed in controlled air space. The Parachute Club of America therefore recommends that prior notification of parachute jumps scheduled in controlled air space be made mandatory.

Very truly yours,

Joe Crane, President."

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CANCELLATION OF FAA-USAF PHYSIOLOGICAL FLIGHT TRAINING: Last year PCA arranged to send many civilian sport parachutists thru USAF Physiological Flight Training Courses. We were given a quota of only twenty: however, we sent many more and the Air Force trained all those sent. PCA certainly appreciates the efforts of all the governmental personnel involved and as a result we now have many civilian members capable of operating safely at the higher altitudes.

Unfortunately, the FAA has notified us that they cannot, at this time, accept any more applications for attendance at the USAF PFT schools and that they will return all applications submitted.

We know that the personnel who have attended these courses found them worthwhile and hope that they will act as Instructors for all other parachutists in their area.

Actually, in addition to the Air Force, there are some civilian organizations which conduct the same training. These agencies are:

1. Ohio State University, Dr. William K. Ashe, Columbus, Ohio.
2. Oklahoma City University, Dr. E. Earl Phillips, Okla. City, Oklahoma.
3. Lockheed Aircraft, Dr. Charles Barron, Burbank, Calif.

Anyone interested may contact the above organizations.

PCA's future plans include a continued effort to have civilian parachutists attend the USAF training courses from time to time as is consistent with USAF training requirements and budgets. Our ultimate goal is to have all B, C, and D license holders qualified in high altitude operations.

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MORE INFORMATION ON SUPPLEMENTAL TYPE CERTIFICATES (STCs): The following STCs for parachuting purposes have been procured and are available as indicated:

<u>AIRCRAFT:</u>	<u>CAN BE PROCURED FROM:</u>	<u>COST:</u>
Stinson, Universal, Model 108-3 (Stn. Wgn.) (STC SA2-1567)	Cowtown Sky Divers 4114 Creech Fort Worth, Texas	\$5.00
Cessna 172B, 172C, 175, 175A, 175B, 175C (STC SA4-1601)	Air Oasis Company Municipal Airport Long Beach, Calif.	Unknown
Beech AT-11 (STC SA4WE)	Schaefer's Air Service 4627 Beverly Blvd. Los Angeles, Calif.	Unknown
Cessna 150, 150A, 150B (STC SA17WE)	Peterson Aviation 3100 Airport Ave. Santa Monica, Calif.	Unknown
Stinson Model V-77 (STC SA4-1620)	Lawrence Parks 2880 Kietzke Ln. Reno, Nevada	Unknown
PA-16 (Piper Clipper)	David M. Christman 101 Endlich Ave. Mt. Penn, Reading, Pa.	\$10.00
PA-20, PA-20"115, PA-20"135" (STC SA25EA)	J. Arlington Myers 331 N. Water St. Mill Hall, Pa.	Unknown

<u>AIRCRAFT:</u>	<u>CAN BE PROCURED FROM:</u>	<u>COST:</u>
PA-22, PA-22"135", PA-22"150", PA-22"160"	Piper Aircraft Corp Service Dept. Lockhaven, Pa.	Unknown
PA-22, 135, 150, 160	C. L. Haeseker Lincoln Aviation Institute, Inc. Box 4168 Havelock Station Lincoln, Nebr.	Unknown
Piper Tri-Pacer	Charles Dame 51 Linden St. Rochester, N.H.	Unknown
Cessna 172, 182, 182A Landplanes (STC SA1-193)	PCA	No charge
Cessna 170, 170A, 170B, 180, 180A Land. (STC SA1-188)	PCA	No charge
Aeronca 15AC (STC SA4-1593)	PCA	No charge
Piper PA-12 (STC SA217WE)	PCA	No charge

PENDING FROM PCA BUT NOT AVAILABLE NOW: Cessna Series 140, 185, 190-195, 182E, Nordyne Norseman, Fairchild 24, Beech C45G, Aeronca Sedan, Aero Commander, some types of Stinson, and Cessna 210.

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CALIFORNIA AERONAUTICS DIVISION (CAD) PARACHUTING RULES: The latest information received from the CAD regarding proposed state rules for governing sport parachuting in California indicates that some administrative legal procedures have rendered the first proposals unusable and more work still lies ahead in setting up the governing regulations. The original date of implementation has been cancelled and future state and public meetings, as necessary, will be announced in advance by the CAD.

PCA still contends that the first step, and the one most easily made, state rule-making bodies should make is the adoption or endorsement of the Basic Safety Regulations. This gives them a firm line of departure, establishes a minimum safety standard in line with other states and on a national pattern, and eliminates the need for repeating parallel guidance rules. To the BSRs each state could add the necessary administrative controls desired by that state and the control problems would be solved. The same procedure could be applied in recognizing the International Licenses issued by PCA and thus eliminate requirements for states to set up standards of their own to insure that safety is maintained.

The big bug-a-boo among Federal and State officials seems to be some sort of law which, broadly interpreted, says that governmental groups must never endorse the work or actions of any private group! To hell with whether or not such an endorsement would be good for the public, the state, and the participants involved.....that's inconsequential! The fact that our safety regulations are based on five years of hard work, experience, training, study.... and deaths.....apparently matters not! Sort of a ridiculous situation when you think about it!

* * * * *

NATIONAL AERONAUTIC ASSOCIATION MEETING: There will be an annual general meeting of all NAA members at the Statler Hilton Hotel in Washington, D.C., October 22-23-24. This meeting will mark NAA's 40th Anniversary and will serve as a platform to launch their new program, "Flight Plan '63". This year's meeting will be interesting and important, and NAA is seeking a large attendance from all Chapters and Divisions. PCA will be represented by its officers

and Board Members; however, we wish to urge all PCA members who are members of NAA to attend if possible. Details of the meeting are in the National Aeronautics Magazine along with a registration and reservation form. Additional forms may be obtained from NAA, 1025 Connecticut Ave., N.W., Washington 6, D.C.

Some matters which will be discussed by PCA with NAA at this meeting will be surplus parachute situation, promoting funds for the U. S. Parachute Team, coordinating efforts on record attempts, etc.

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PCA INTERPRETATION RELATIVE TO BSR #6: PCA desires that all students (less than a Class B licensee) be under the supervision of a jumpmaster at all times wherever possible. However, there are instances when four-place aircraft are not economically feasible. In these cases, students may be permitted to jump from two-place aircraft, provided that they have been previously trained (under the supervision of a jumpmaster) to drop their own wind streamer and to accurately select their own exit point. When the student is proficient in this phase, the PCA appointed CLUB Safety Officer may grant the individual permission to jump from two-place aircraft and so certify in the individual's log.

Let us stress that PCA desires that all students be under the direct supervision of a jumpmaster at all times.

Under NO circumstances should static-line students be allowed to jump without jumpmaster supervision. Pilots of two-place aircraft MUST NOT double as jumpmasters of static-line students.

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COMMERCIAL CENTER SAFETY OFFICERS: PCA's plan to appoint commercial center Area Safety Officers has run into some legal entanglements which must be clarified by an attorney prior to any appointments. It appears that through such an appointment PCA can be held liable for actions within the center; thus, it behooves us to generate a legal joint-agreement, binding each center to a minimum code of operation, prior to granting a center PCA sanction (which in effect, is what happens) through the appointment and recognition of an appointed PCA Safety Officer.

The attorney is working on such an agreement now and plans are to publish further information as soon as possible. Meanwhile, NO appointments have been made, and WILL NOT be made, until the matter is legally clarified.

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JULY PCA BOARD OF DIRECTORS MEETING: A quorum of the PCA Board met in New York prior to the World Meet in order to make any last minute decisions regarding the 6th World Parachuting Competition.

Progress of sport parachuting has rendered the Constitution of PCA inadequate and needed changes were discussed. It was decided that Mr. Deke Sonnichsen, Mr. Dave Burt, and Mr. Russ Gunby would meet in California after the World Meet and draw up a new constitution for presentation to the Board and a legal review. Definitely concurred in by all was a plan to have local parachutist representation on the Board by electing one man from each PCA Conference Area to sit as a Director on the Board of Directors, plus ten nationally elected Directors. It was also felt that a new election should be held prior to December and the committee will endeavor to meet this time schedule.

Also under discussion was the fact that the Kansas City National Competition cost PCA quite a bundle and the Directors must take firm action to cut down the cost of future meets, secure sponsors, and insure that all expenditures are properly budgeted in advance. It also appears that PCA should (and probably will) seek bids to host and sponsor the Nationals and award it to the area or group which can offer the most for the least as opposed to merely selecting a centrally located spot in the U.S. Also, another method of selecting contestants in the Nationals must be devised because it is not financially or operationally feasible to conduct a first class national competition with more than 75 contestants. There will be more on this in the later issues and if you have any suggestions along these lines

we'd be happy to hear them.

Another meeting was scheduled for September at the conclusion of World Competition and the report will be in the October issue.

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Publications:

NEW NAVY RIGGERS MANUAL: We have just received a newly revised edition of the US Navy's "Parachute Rigger 3 & 2 Manual (NAVPERS 10358-A) and are pleased to report that it is a beauty. While pertaining to only military parachutes, the amount of details concerning parachutes, high altitude clothing, equipment, and operation, and the refinements of rigging, maintenance, and "how-to" connected with such, makes this an excellent reference for both the serious student and master parachutist. Copies may be purchased from: Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. (\$2.50 per copy).

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NEW MAGAZINE: We have been advised that a new parachutist magazine, PARACHUTE, will hit the mails toward the end of September. We were interested to note in a promotional letter that the Editor, Mr. Ron Simons, indicated, "Parachute Magazine will not subscribe to petty feuds, false or misleading advertising, or poorly written and prejudicial material, nor will it be found in this new publication at any time." He promises that the publication will be of the very best quality possible, to include the editorial context, layout, type of paper, etc. Mr. Simmons also stated that they had a definite need for technical articles and photos and anything concerning the use of a parachute or relative to a parachute. They are not merely interested in routine parachuting articles and photos but desire coverage in such areas as parachute centers, photo articles on different types of equipment. Right now they are in the process of working up payment rates for articles and materials used, so all you budding writers get busy. (Subscription rates: \$5.00, 1 yr., \$9.00, 2 years).

The Parachute Club of America welcomes this new publication and wishes Mr. Simons the best of luck. We believe that with the tremendous growth possibilities there is definitely a need and room for two commercial publications, plus our own official membership newsletter. We certainly intend to assist all publications to the best of our ability, first because we are understaffed, and second because all publications have the capability of improving the safety and growth of parachuting by properly informing their readers. For those interested a subscription blank for both Sky Diver Magazine and Parachute Magazine are reproduced herein.

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CAUTION ON ALTIMETERS: Mr. R. L. Johnson of North Kingstown, R.I. has directed our attention to a pertinent note, applicable to sport parachutists, published in "Approach Magazine":

"One airline reports that a few altimeters on jet aircraft have been removed because of

indication errors or flight crew reports of a tendency to hang-up during climb or descent.

Shop analysis, in many cases, reveals a damaged nylon gear. This can be induced by rotating the barometric pressure adjusting knob beyond either the 27-inch or 31-inch setting. The induced error will be of the same magnitude as the degree of rotation beyond the adjustable range."

* * * * *

PARACHUTE THIEVES LOOSE: McElfish Parachute Service at Love Field, Dallas, Texas, informs us that the southern area is having a rash of parachute thefts involving sport gear, parts, and supplies. Three centers have been burglarized and the folks down there are becoming alarmed. McElfish is offering a \$100 reward for the return of one or \$500 reward for the return of all his equipment stolen. The most distinctive item was a Telsan Titan, 32-foot blue and white circular pattern canopy, S/N456057, and brand new. Three B5s, S/N460160, 33164, and 460157; a P-5-B S/N357645, and S-FF-1-A-24 S/N150200. In addition, helmets, jumpsuits, instrument panels, etc. have been taken. Should anyone have any information on these items please contact Mr. McElfish (P.O. Box 7011). It looks like we now have more than one type of "outlaw" in our midst.....

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ON THE LIGHTER SIDE: PARACHUTE SONG: Since the inception of parachuting as a sport many poems and songs (?) have originated, been sung, and disappeared into oblivion. Almost all of us are familiar with the Army's "Blood Upon the Risers" and "Beautiful Streamer" which evolved during WW II and is still with us today. PCA, after informally searching for a national parachutists song for use in informal post-DZ activities, has failed to turn up anything with a national character. Consequently, we're forced to write our own. We envision that every member should have a hand in this writing, so we have composed one verse and one chorus as a starting point. The tune? We wanted a tune which was conducive to telling a story, easy to learn and sing, and one that most people are familiar with; thus we selected music of "The Wabash Cannon Ball"!

The opening verse tells of a man (could be a woman) who saw his first skydiver at an airport and his immediate reaction. The chorus is used as a toast to all skydivers and ends with a general bit of philosophy. What we'd now like is for each of you to continue the story whereby this new observer becomes interested in parachuting, joins a club, takes his training, has this and that experience, and, in general tells about his jumping experiences. Verses should be, at once, both humorous and satirical. Members and clubs should send their verses into PCA and each month we will publish the best verses. As the favorites are selected (through use at post-DZ sessions) a national jump song will evolve and will be so published. So, don't hide yer talent, jot down that verse that's been running thru your head and make the saga of the parachutist ring throughout the land.....! Here's the starting verse:

(Tune of the Wabash Cannon Ball)

1. "One day while at the airport, with nothing else to do,
I saw a man come falling, diving down from out the blue.
I knew that he would surely die, I stood there frozen mute!
'Til I heard the snap, the whip and the crack of his opening parachute.

CHORUS: Here's to those sky-diver boys that fly down from the blue.
May their fall be ever stable, may their rip-cord pull be true.
May their canopy never falter, as they hurtle to the ground;
And if they die, don't fret and cry, just pass their gear around."

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FOREIGN PARACHUTING ACTIVITIES: We recently received the following report from Bulgaria which is included as another step to keep all members current in matters of parachuting, including the activities in foreign countries:

"SPORTS PARACHUTING IN BULGARIA

Sport parachuting is new in Bulgaria. Up to 1944 no conditions whatsoever existed for the development of this sport. In 1946, on the initiative of the newly formed Sky Diving People's Union, the first sky diving courses were organized. Among the participants figure the names of the now famous Engineer Kiril Vodenicharov-Honored Master of Sports, Ivan Noikov-Master of Sports, Teofana Kiril, Ivanka Stoeva, Minka Gencheva and Donka Vracheva.

The first Republic Competitions were carried out in 1952, and in 1953, for the first time, Bulgarian parachutists appeared in the international sports field in Ostrava, Czechoslovakia, and took part in a three-way contest between the Soviet Union, Bulgaria, and Czechoslovakia. The Bulgarian parachutists won second place, while the contestant Peter Parapounov was placed first in the 1000-meter altitude accuracy jump. He scored an average of a 5.53-meter deviation from the center of the two jumps, with which he broke the official world record at the time - 6.71 meters - established by the Soviet parachutist M. Shaipov.

The Bulgarian Jumpers displayed great skill at the two international competitions for the Adriatic cup at Tivat, Yugoslavia. At the first competition in 1957 they were awarded 8 medals and were placed second after the Soviet parachutists/ taking into consideration the number of medals/; in 1959 they won the greatest number of medals - 9 of a total of 24. The Honored Master of sports Kiril Vodenicharov was classified first and became the bearer of the Adriatic cup for men.

Bulgaria was host to the Fifth World Championship in 1960. At that competition Bulgarian jumpers were classified third. This achievement was quite satisfactory considering the number of contestants and especially such strong ones as the Czechoslovak, the Soviet, French and American parachutists.

Every year Bulgaria organizes a Republic Parachuting Championship with over a 100 participants. Outstanding achievements were gained in the 1961 Championship, - 45, 1000 - meter altitude jumps and 40, 1500 - meter altitude jumps with an average 5-meter deviation from the center of the control circle. Champion of this competition was the Master of Sports, Konstantine Tzankov from the Kolarovgrad Aero Club.

Bulgarian parachutists have won 21 of the world records. They have displayed an extraordinary courage in gaining the high altitude world records. The Honored Master of sports Stefan Kalapchiev scored a 13,738-meter daytime high altitude jump and a 12,023-meter nighttime high altitude jump; the Honored Master of Sports Stefan Kalapchiev, the Master of Sports George Filipov and Encho Dobrev accomplished a 12,308-meter nighttime three-group high altitude jump; the Honored Master of Sports Stefan Kalapchiev, the Master of Sports Ivan Kroumov and the Master of Sports Hinko Iliev scored a 13,067-meter daytime three-group high altitude jump.

Every year Bulgaria trains more than 20,000 parachutists - men and women both."

(See page 9 for photos regarding parachuting in Bulgaria.)



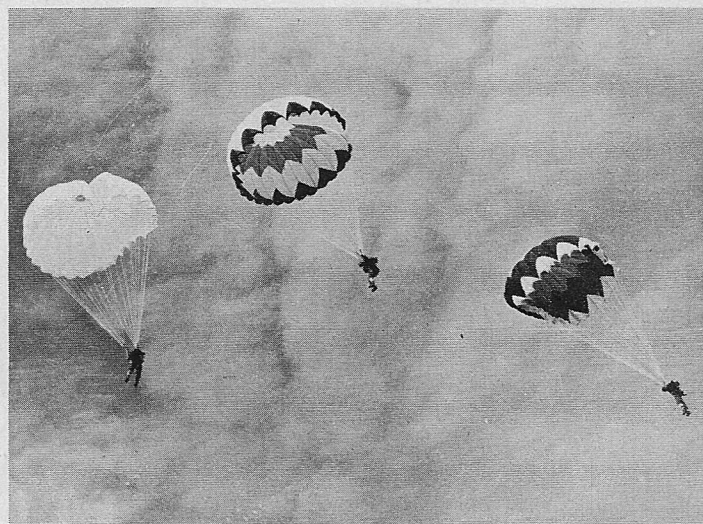
"The Honored Master of Sports Engineer Maria Velcheva, one of the most renowned contestants in sport parachuting."



"Kiro Zahariyev—at the 1959 International Championship."

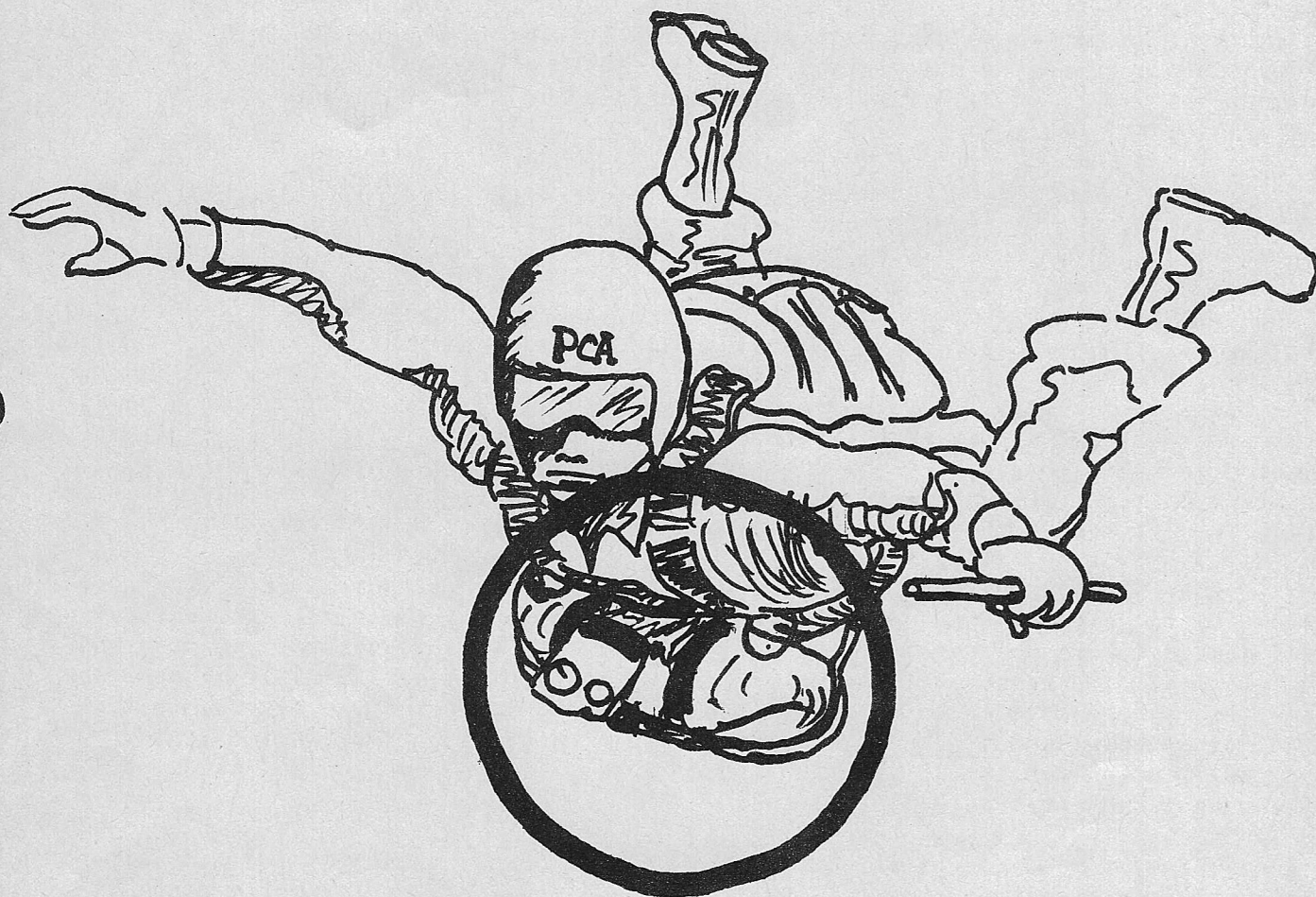


"Honored Master of Sports Engineer Kiril Vodenucharov, holder of the Adriatic Cup for 1959."



"A group accuracy jump by the team from the Peoples Republic of Bulgaria."

RESERVE
PARACHUTES



MODIFICATION OF RESERVE PARACHUTES

The rules governing all parachutes, as to quality and standards, are spelled out in FAA's Technical Standard Order C-23, dated October 10, 1950. This quality control document includes the reserve parachutes used by sport parachutists.

The rules governing who may modify parachutes, including reserves, are contained in FAA's CAR 25.

All reserves in popular use today are either surplus military parachutes or copies of them. The most popular is the T-7, barrel or breadroll type or the Navy's square, flat NC-3 type. Also becoming more popular is the conical canopy in a smaller container and similar in appearance to the T-7 type.

Prior to going further let's get one fact straight; the only person authorized to make a modification on these parachutes is a Master Rigger. And, when a deviation is made by a Master Rigger from the manner in which the manufacturer intended and certified the parachute (any part of it which effects the basic airworthiness of the component) a request for deviation from, or waiver of, the original requirements, as registered under TSO C-23 must be requested from the FAA, and preferably through the original manufacturer.

As of this writing (August 1962) it must be honestly stated that most reserve parachutes in use by sport parachutists today are technically illegal! The reason that this is so is because we are forced by the high price of civilian parachutes to procure the military surplus parachutes. Since the military parachutes were designed for one type of use they don't fit into sport parachuting without ~~some~~ sort of modification. PCA does not hold that these modifications are unsafe, merely illegal. We do know, however, that the majority of the people making modifications are not qualified to do so.....and, in too many cases, modify improperly and create unsafe equipment. For example, once you have an aircraft properly certified for flight, it can be modified for other uses by obtaining supplemental type certificates. The same applies to modification of parachutes but, to our knowledge, this procedure has not been accomplished by the manufacturers, dealers, or users, and therein lies the illegality.

PCA is the rightful coordinator to accomplish such technical certification; however, to date, PCA has not received the cooperation of those making modifications and does not have the personnel or equipment at this time to conduct research and development. Therefore, if we are ever going to become legal, it will be necessary for the members to document the modifications properly so that we may submit them to FAA for approval and national acceptance. Once accepted by the FAA the proper method of modification can then be published and used by everyone authorized to do so throughout the country.

When you remove a pilot chute, that chute does not then meet the manufacturer's original specifications and is illegal! When you reverse the butterfly snaps, fold the canopy differently, move the ripcord, change the cones, add lower snap fasteners, etc., the parachute is illegal unless a request for deviation has been submitted to FAA and they have approved such modification!

It is PCA's desire to represent all parachutists in a coordinated program to regain the legality of all parachutes by submitting all requests for deviation to the FAA. Your assistance is needed to draw up the diagrams of your modification, explain its purpose and need, show the strengths of materials used, and how it was tested for airworthiness and how many times. We'll take it from there.

As a starter, the following recent modifications are published both for your information and to indicate how we are working this program through the efforts of our serious members.

By Ken Hirschberg, D-74

First of all, let me say that the center-pull idea is neither new nor original. Center-pull ripcord release devices were in common use before the "conventional" ripcord handles of today came into being. It is not surprising that when early designers developed the chest parachute, they located the release device on top of the pack and in the center; a logical place - easy to see, easy to get at, and not likely to accidentally get caught on anything.

Some years later, when U. S. Army paratroopers appeared on the scene, the center-pull carriers somehow faded out of the picture. The troopers jumped with their hands on the sides of the reserve; by moving the ripcord handle to the side of the container, it was felt that grasping the handle would be easier and more natural. Which side? Well, most people are right-handed; the others can learn! So there you have it - the right-side-pull ripcord handle; fine for paratroopers - fine for skydivers, too. But watch that door, watch that strut, watch that other jumper - keep your hand over that thing every second, or you're liable to get sucked right out the door!

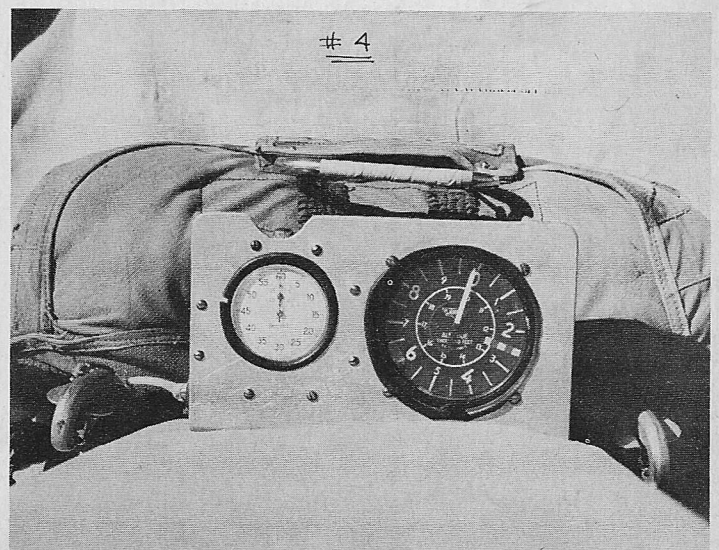
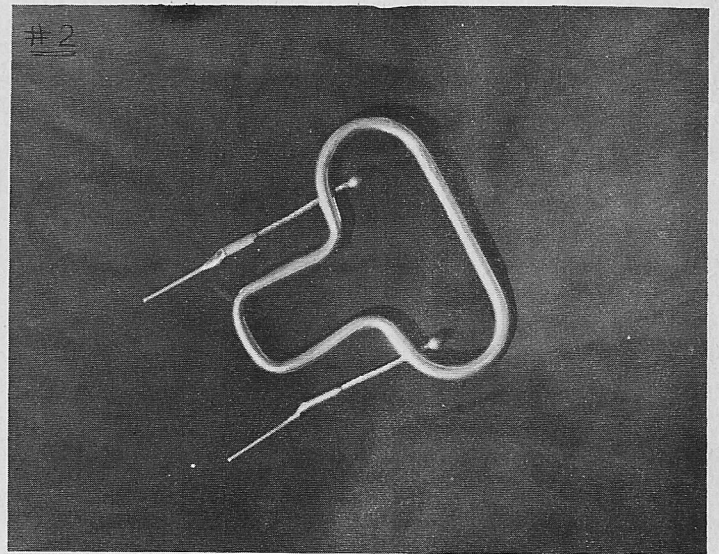
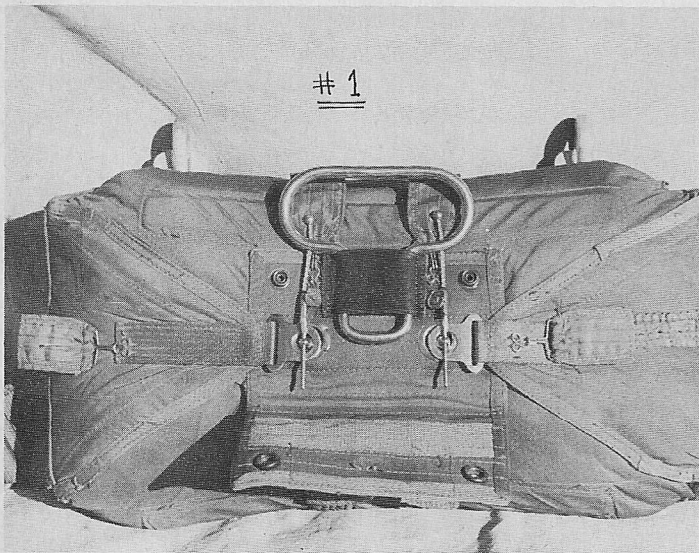
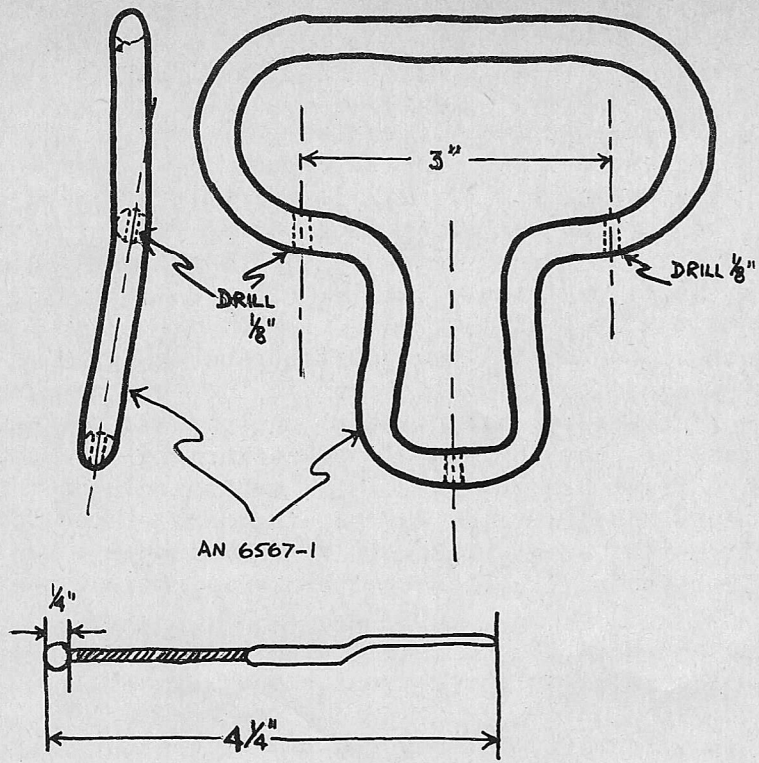
Scary? It doesn't have to be. Here, take a look at the advantages and disadvantages of grandpa's old center-pull reserve for sport jumping:

1. Safety in the aircraft - by far the most important aspect of the center-pull handle. Even if one is careful about his own movements, the right-side pull reserve may be accidentally opened by other jumpers moving about, getting up to spot, etc. This is not impossible with a center-pull, but it is far less likely, since the person, object, or what-have-you that could snag the ripcord would have to be in front of the jumper and would probably be apparent to him.
2. Safety when leaving the aircraft - certainly, anyone who has watched a reserve ripcord handle brush against something or someone as the jumper left (and who hasn't?) will realize the advantage of a center-pull here.
3. A center-pull ripcord can be used with either hand or with both hands if the need arises. If either shoulder, arm, or hand is injured during a jump, the center-pull is still operable.
4. The center-pull is always in plain sight of the jumper. Every time a jumper looks at his instruments, he is reminded of just where that handle is.

Disadvantages:

1. The center-pull handle is not compatible with all types of instrument panels. A certain minimum clearance ($1\frac{1}{2}$ ") is required between the panel and handle for safety, and some panel designs do not allow this.
2. The center-pull arrangement is not presently compatible with the Sentinel emergency opener, however, I have made and have been using for the past year, a center-pull version of the Sentinel power ripcord handle. This handle was made for my personal use during free fall photography, where I wanted the advantages of both the Sentinel and the center-pull. It has proven itself, but I still consider it to be experimental.

You say it looks good, but you were trained with a right-side pull - and you're a little skeptical of changing over this late in the game? Well, if you have to pull your reserve often enough to make a habit out of doing it, and in addition, you think that you might panic the next time and not look, then you had better stick with what you have. I don't think for a second that the psychological aspect of changing the position of a ripcord should be taken lightly. However, I do believe that since a



person doesn't often pull a reserve, he will have no difficulty adjusting to a new ripcord position. I also think that even if a center-pull equipped jumper did initially feel for a right-hand-pull handle, he would immediately realize his mistake, at least by feel, and certainly by sight if he has been properly trained to look at the ripcord handle while pulling it.

The conversion from "conventional" to center-pull is neat and simple - no change to the container is required. A qualified rigger merely rotates the locking cones 90 degrees and sews a piece of elastic webbing (MIL-W-5664, 1 $\frac{1}{2}$ ") on the container as shown in Photo No. 1. The 3/4" phenolic stiffener under the cones should be replaced with a 2" wide stiffener to prevent the cones from rocking vertically as well as horizontally. This stiffener is drilled and hand tacked into place as was the original. (The authority on this modification is the Security Parachute Company, San Leandro, California.) This modification should cost about \$3.00. The handle itself can be modified for approximately \$5.00.

Conversion to the Center-Pull Handle:

Obtain an AN-6567-1 clover-leaf ripcord handle, and obtain or make up two cable assemblies as shown on the enclosed drawings. The latter can be made by cutting the end pin off of the clover-leaf handle, close to the other pin and likewise from another clover-leaf or seat pack ripcord. The length from the tip of the pin to the cut end of the cable must be 4-3/8" or longer. The pins and cables must be perfect in every detail, and the pins should be identical. It is necessary to cut the old cable assembly out of the handle. This is best done with a cold chisel against a block of lead. The cut is just next to the round ball swage, between the ball and the inside of the handle. The next step is drilling the handle. Two 1/8" holes are to be drilled 3" apart as shown in the drawings. It is important that the axes of these holes be parallel in all respects to the axis of the original hole in the end of the handle. Drilling round stock is tricky - the drilling must be left to a competent machinist. The hole must be thoroughly deburred. The next step is swaging the cable assemblies into the handle. This must also be done by an expert, preferably at an FAA certified cable shop. The only acceptable swage is the 1/4" ball swage (same as original.) When the swages have been completed, the ends of the cables protruding should be ground down flush with the ball. The overall length of the cable assemblies should now be 4-1/4". The bend of the handle, as is, is perfect; don't change it. The chute is packed with the handle bending in; i. e. following the curvature of the container. The center-pull handle is sealed with two separate rigger's seals, since it is possible to withdraw one pin separately and tamper with the chute.

I have made over 150 jumps with center-pull handle reserves, and to be quite frank, I would now be apprehensive about jumping with anything else. I did jump a "conventional" reserve several months ago, and I recall spending the whole ride up protecting and worrying about that darn handle.

During the last two years, I have made up several center-pull reserves for other members of the California Parachute Club. I have made it a point to "follow up" the use of these reserves by occasionally asking each owner how he likes it, how much he thinks about "where it is," and for any other comments he may have. So far, all these jumpers feel that it is a much safer, convenient reserve, and not one has changed back to the right-side-pull. Only once has the center-pull reserve been used in an emergency in our club. The jumper, John Percival, D-64, reported that he experienced no delay, hesitation, or confusion in pulling.

In summary, I would like to say that in my estimation, the center-pull ripcord handle is, in most respects, advantageous over the present ripcord system. The modification of "conventional" reserves to a center-pull type is simple and inexpensive. I sincerely hope that as the years go by, jumping and jumping equipment will become even safer than they are now; I believe that the center-pull reserve is a step in the right direction.

K. H.

RESERVE MODIFICATION

SUBMITTED BY WILLIAM T. JONES III

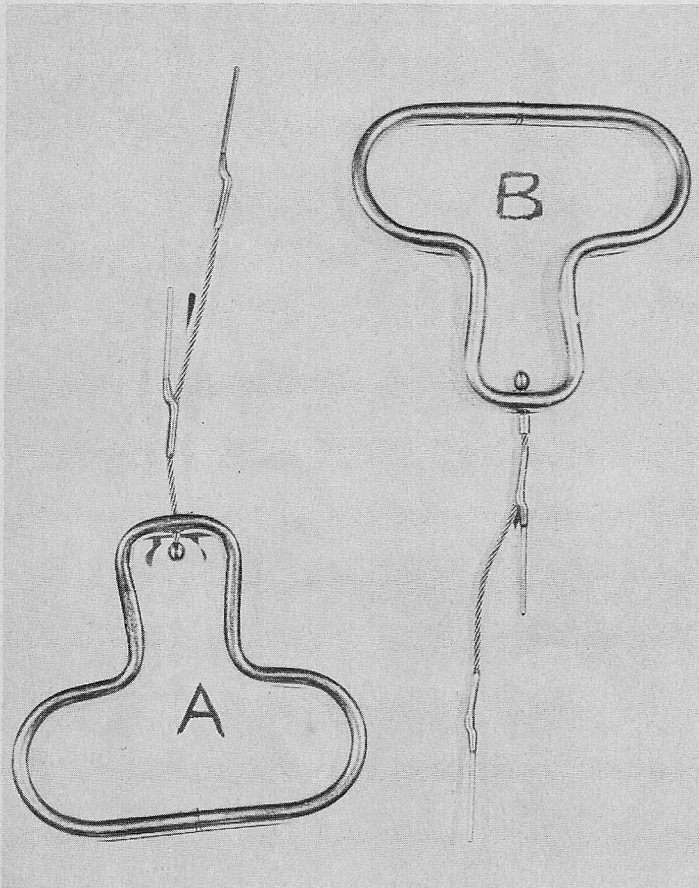
"In regard to your letter requesting photographs of the modification on the T-7 and T-7A reserve handles the enclosed photographs and description will clarify this matter for you,

Description:

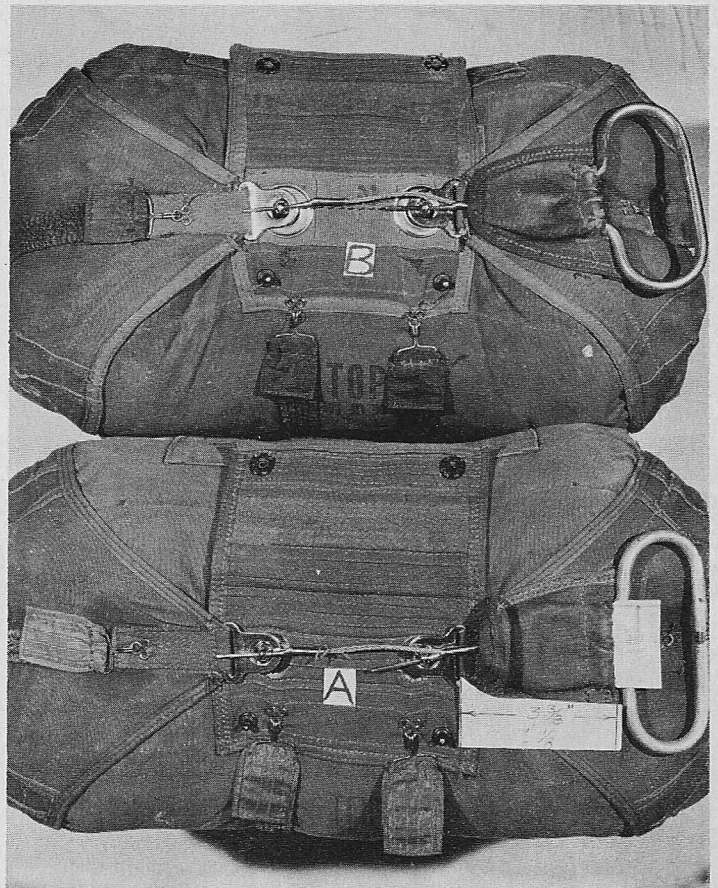
- Step 1: Check position of ripcord pocket to conform to measurements of parachute "A" in photograph (note: some parachutes may already conform to these measurements)
- Step 2: Remove pocket and reposition to said measurements using size "E" nylon thread Spec MIL-T-7807. Seven to eleven stitches per inch
- Step 3: Check ripcord handle to determine that it is of Type "A" pictured. This type handle will have bent handle installed with bend down.

Handle designated as type "B" in picture should never be used. As cable and pins will move when ever handle is touched also some jumpers are using this type with inner swaged removed this does not stop this condition because of the shortness in the cable between last pin and handle. As may be observed in photograph parachute "B" (unmodified) straight handle does not lay flat against pack and pins do not go fully into cones.

William T. Jones III"



1



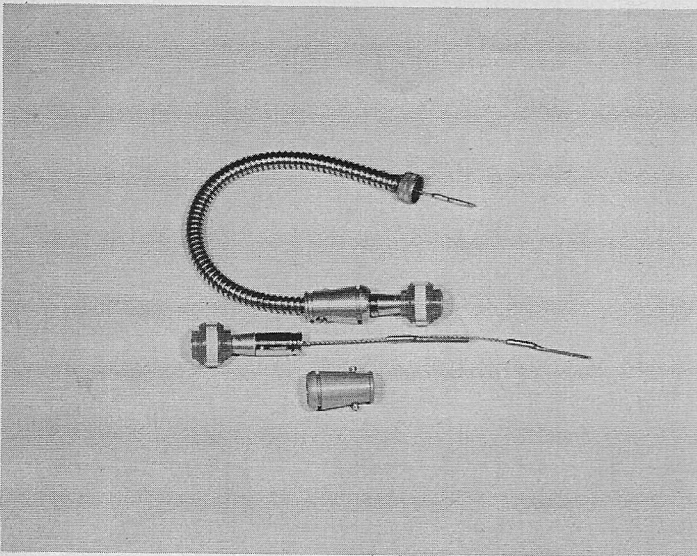
2

RESERVE MODIFICATION

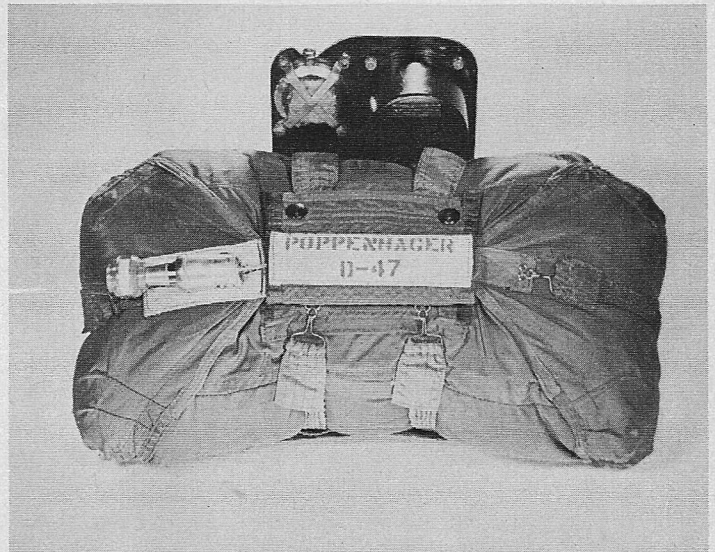
SUBMITTED BY PAUL J. POPPENHAGER

"Enclosed are some photos of my new "anti-Snag reserve ripcord handle", One photo of the components used to make the handle and the other two of the finished product. There are two types of handles which can be used. The new A. F. Anti Wind Blast handle and the standard auto-opener Lolly-Pop handle. It takes from 5 to 7 pounds of shock pressure to release the reserve and 15 to 20 pounds of steady pressure to release. I have tried it and it works real nice and above all lessens the chance of accidental deployment.

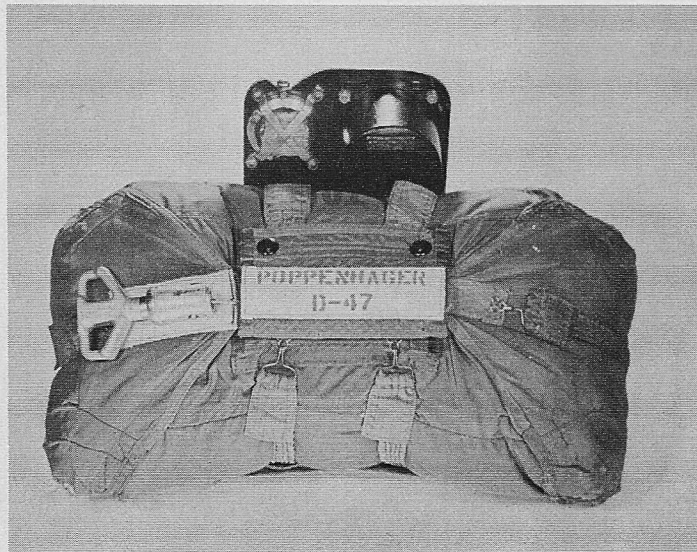
Paul J. Poppenhager"



Components



"Lolly-Pop" Assembly



Wind Blast Assembly

FATALITY

Name: Paul Rempel Age: 18
 Date: 10 June 1962
 Place: Walla Walla, Washington
 PCA Member: No.
 Club: Walla Walla Sky Divers Club
 Previous Jumps: 22 - types unknown
 Type Jump: 30-second Delay
 Cause of Death: Pulled ripcord too late.

DESCRIPTION: (Newspaper - AP)

"Paul Rempel's 23d parachute jump was his last. Rempel was one of three members of the Walla Walla Skydivers Club who leaped from a small plane between 7000 and 8000 feet over farmland northwest of here on June 10th. They were making free fall jumps in which the opening of the chute is delayed until below 2,500 feet. Rempel apparently delayed too long. The ripcord still was gripped in his hand when companions reached his body. The pilot chute had opened, but the regular chute did not open. Mr. Bernie Sutliff, head of the club and one of the men making the jump, said that another 100 feet would have probably saved his life. Rempel had been jumping for more than a year."

PCA NOTE: The Seattle Area Safety Officer endeavored to obtain a direct report from this group and thus far we have not received one. Opinion among jumpers from Yakima, Seattle, Spokane, and Moses Lake is that the Walla Walla group conducts an unsafe operation, that they cannot be told anything, and are using bat wings. They have indicated that PCA isn't worth their time or effort. We feel that the saving of lives is worth time and effort. Efforts to clarify the situation at Walla Walla are continuing.

* * * * *

FATALITY

Name: Richard T. Lagassa Age: 34
 Date: 16 June 1962
 Place: Detroit, Mich.
 PCA Member: Yes (as of previous day!)
 Club: All American SPC of Detroit
 Previous Jumps: None
 Type Jump: Student Jumper - first static line jump.
 Winds: 8-10 MPH
 Cause of death: Improper canopy manipulation and downwind landing in hazardous area.

DESCRIPTION: (ASO)

Student's jump was normal up to canopy inflation. At this point the student turned his chute and ran downwind for the target area. Immediately over the target area the student turned to hold but apparently saw that his single "T" canopy modification would not offer enough holding power to enable him to make the target. He then turned downwind again, making his run toward the packing and parking area. When the man on the loudspeaker system saw this, he gave instructions for the jumper in the air to turn his canopy into the wind and hold. The student made no effort to turn his canopy, but instead continued his downwind run. It was the opinion of those jumpers present that had the student turned and held, he would have landed about 500 feet short of the parking area.

The student hit the ground going downwind at an estimated speed of 15 MPH. The

portion of his face impacted with the rear bumper of a parked car, resulting in severe brain damage. Within ten minutes the student was in an ambulance and rushed to the hospital about 10 miles away. After a series of x-rays, the injured student was later moved to another hospital, where, on 18 June, he succumbed to the head injuries without ever regaining consciousness.

The series of events leading to this fatality seem to infer a lack of proper training; however, I have intimate knowledge of the training program offered by this club and I was also present at most of the training classes which the deceased student attended and, even now, I cannot find fault with the training program in relation to the death of this student.

PCA NOTE: From the above report it appears that the student (1) ran for target instead of holding initially, (2) misjudged the holding power of his parachute, (3) misjudged his altitude, and (4) disregarded loudspeaker instructions (and can we be certain that he positively heard them?) and (5) landed running downwind.

Regarding (1), above, most clubs teach students to hold initially, not run, for the obvious reasons. Regarding (2), above, we question whether the student was well trained in this aspect. Regarding (3), above, the same. Perhaps we should require an altimeter on all students? Regarding (4), above, did he actually hear? Who knows? Regarding (5), above, we venture to say that he broke the cardinal rule, "Face into the wind on landing"!

Unless the deceased was a below average person, both in mentality and physically, we would disagree with the ASO in stating that he can find no fault with the training. How else can (1), (2), and (5) be explained?

On the other side of the coin, there are students who show up very well during training and then totally disregard everything once they're in the air. This, then, goes back to PCA's hue and cry that we need some means to determine aerial reactions prior to placing him in the air! The problem is how?!!

* * * * *

FATALITY

Name: Roger J. Roy Age: 31
 Date: 24 June 1962
 Place: Lucedale, Miss.
 PCA Member: No
 Club: Biloxi Sky Divers & Gulf Coast Parachute Assn.
 Previous jumps: 18 (5-S/L, 4-5 Sec., 1-10 Sec., 5-15 Sec., 3-20 Sec.)
 Type jump: Static line pass at 2500' to drop student. Proceed to 7200' for mass (3 man) exit, Roy to be last man out. Purpose of jump: accuracy in landing.
 Cause of death: Improper opening position followed by reserve entanglement.

DESCRIPTION: (ASO)

The first two men opened at 2700 and 2800 feet. Observers stated that Roy appeared to activate his parachute somewhat higher, apparently pulling on the deployment of the lower two jumpers. Roy's fall appeared to be stable until he reached in to pull, at which time he lost control, going onto his back in a head-up, 45 degree angle, and spinning in that position.

His canopy did not leave the deployment sleeve. Roy appeared to work with it for about 4 seconds before activating his reserve parachute at an estimated altitude of 1800-2000 feet. He was seen to throw the reserve but it wrapped around the main's suspension lines and failed to develop.

Examination of the equipment at the scene showed one riser group of lines had

encircled the entire main canopy about 8 inches above the lower lateral band in such a manner as to prevent air from entering. The canopy was completely free of the sleeve at this time suggesting the sleeve had also been entangled but had worked loose at the last second, possibly from brushing a tree top. The reserve lines were wrapped around the main suspension lines four complete turns with only about 20 inches separating the twists from the reserve skirt.

For lack of a better explanation the cause of the original malfunction has been placed on improper opening position. The reserve malfunction obviously was a result of the continuing spin.

NOTE: Mr. Tom Pritchard has since sent us a letter which is an excellent critique on this type of malfunction. It is quoted as follows:

"Recently we have had two fatal accidents in our area. They were not connected but were strikingly similar. Researching old copies of PARACHUTIST for a possible answer to the cause I came again to the summary of 1961 deaths in a current issue. Four jumpers (one of whom actually pulled the main too late) met death and the blame placed on "Improper Opening Position", complicated by the reserve (improperly deployed?) wrapping the main's lines.

Uncontrolled fall at time of activating was no doubt a factor in one of our area fatalities. I can't comment on the other as a complete report has not reached me as yet. Both jumpers activated the reserve by throwing it from themselves while trailing their main canopies which, in both cases, did not leave the sleeve. Eye-witnesses in both cases state the jumper was spinning below his sleeve and/or main suspension lines when the reserve first showed.

These accidents were not a case of pulling the reserve too late. They both continued to work with their entangled chutes until impact. Writing the fatalities off to improper opening position is not enough. Most of us experience this occurrence on occasion. And if poor position should cause a "Streamer" what can we do to properly correct? We are very concerned with the recognized emergency procedures that were apparently followed, as well as possible under the circumstances, without the desired effect. Two, and possibly five deaths from reserve entanglement in such a short time has led to much speculation. The "no pilot chute on reserves" policy has come under fire. This policy was formed some years ago. Was it tested thoroughly? Is it possible that you have the means to test drop deliberate streamers on a dummy equipped with an automatic reserve, both with and without a pilot chute? Air to air movies of this test might be enlightening.

The procedure for activating the reserve with a "Mae West" malfunction may be outdated too. With a flat circular, no problem. With a modification you apparently always experience a varying degree of spin which complicates deployment. In either or both cases is it at all feasible to disengage the capewells, fall free, then activate the reserve? How much time and pressure should it take?

These questions are being asked. One of our area students (currently back on S/L) went 10 sec. on his first free-fall and stated he hesitated to pull as his position was bad.

What are your recommendations on the length of the pilot bridle? Can the main pilot chute be attached directly to the sleeve top?

We are seriously and urgently concerned with better answers and procedures than we presently have. If you can offer advice please do so. In the meantime we have, needless to say, urged better training but improper openings will continue as long as jumpers jump. A malfunction need not be fatal. Help us find some answers."

PCA NOTE: PCA is in complete agreement with Mr. Pritchard. Sport parachuting needs its own

research and development and PCA is the rightful agency to coordinate such activities. However, the problem is simple: money! We want to test drop five canopies to determine rate of descent. The lowest bid we received was \$3500. It is not enough to merely test parachutes but to have the proper recording and measuring equipment and these are expensive.

PCA intends to put every cent possible into research such as Mr. Pritchard suggests during 1963, particularly the problem in question. Meanwhile, any facts that other clubs have on this particular malfunction should be sent in to PCA for collation with what is already known. It's every jumper's problem and every little bit of information helps.

* * * * *

AIRCRAFT ACCIDENT: We regret to report our first sport parachuting aircraft accident which took the lives of two PCA members. We feel that it is significant to publish because most of us are quite blasé about the aircraft we jump from and too often ignore general safety precautions relative to flying.

We would like to thank Mr. Joseph W. Cooper for his honest report and we hope that you may learn from it and not learn later the hard way.

Date: 30 May 1962
Place: North Lawrence, Ohio
Time: 7:30 PM

Type of Aircraft: Stinson V-77
Load aboard: 1 Pilot, 4 Jumpers.

Description of Incident: Plane crash on take off.

Personnel Killed: Donald Kiggans, Age, 31. Member of Skydiving Unlimited. PCA Member, Yes. FAI License C-514. Previous Experience: Sport Jumps, 150. No military jumps.

Marvin Axelrod, Age, 23, Member of Skydiving Unlimited. PCA Member, Yes. FAI License, none. Previous Experience: 21 sport jumps, No military jumps. Marvin was our primary pilot.

Personnel Injured: Richard Mangus, Age, 28. PCA, No. Pilot employed by Skydiving Unlimited on the part time bases. Non-Jumper.

Joseph Cooper, Age, 26. Member of Skydiving Unlimited. PCA Member, Yes. FAI License C-513. Previous Experience 132 sport jumps. 28 military jumps.

James States, Age, 25. Member of Skydiving Unlimited. PCA Member, Yes. FAI License B-853. Previous Experience: 70 sport jumps. No military jumps.

Description of Accident: We purchased the aircraft May 20, 1962 at Lufkin, Texas. We had not put it to full jump use. We were still checking it out for student type exits, mass exits and pilots. The pilot flying the aircraft, Richard Mangus, has a commercial license. His total hours of flying time, at this time, unknown but estimated at better than 1500 hours and he had flown many types of aircraft. He had previously flown this particular aircraft earlier in the week. He had flown jumpers off and on for the past two months. This was his second lift in the Stinson that day with jumpers.

The apparent reason for the crash — stall out on take-off. Reason for stall out on take-off not as yet determined. The accident is being investigated by an FAA team from Chicago. The run up and take off seemed normal to me, to the point where we had just cleared the runway and were about 20 feet in the air, at this time the left wing dipped viciously toward the ground. The pilot corrected this attitude but at this time we were already going in. The plane crashed nose in about 120 yards off the runway. It came to rest facing the runway with the engine completely unattached and about 3/4ths on our right side with the right

wing tank ruptured with gas flowing to the engine lying on the ground. As soon as the plane had stopped I stepped out of the plane walked about 25 yards and sat down. I was followed out by Jim States and at this time neither of us realized the others were in serious trouble. The plane caught on fire. Jim and I removed our parachutes and got Dick Mangus out of the wreckage and deposited him on the ground under the wing of the plane. Then we attempted to get Don Kiggans and Marvin Axelrod out. Although it is believed they were dead, they were entangled in the wreckage and we were unable to remove them from the crash. At this time the plane was burning badly. We moved Dick Mangus to a safe distance. Then Jim States called the fire department at North Lawrence for the ambulance and fire truck. From the time of take-off run until Jim called the fire department was less than 5 minutes.

It has to be stated at this time that the pilot was the only one wearing a seat belt and he received face fractures and cuts, broken jaw and lost his teeth. He is still in the hospital, and no visitors allowed, so I have been unable to speak with him. I received a broken ankle, wrist, nose, and severe cuts on the face. Jim States received burns of the hand and a twisted knee.

I would like to point out that Skydiving Unlimited had just purchased this airplane and we had not yet gotten the longer seat belts installed necessary for sky diving. Don Kiggans was wearing the football type helmet and, although it seems to be a good skydiving helmet, it is insufficient in a plane crash. (PCA Note: We have asked Mr. Cooper for further details on this matter.) As for the aircraft itself, evidently it is an over-rated ship and if used in sport parachuting it should be used with extreme caution. Due to the safety record in relation with the parachute center, Skydiving Unlimited is quite out of business as a Sport Parachuting Center even though the two remaining members intend to keep on jumping and we will give limited instruction on a personal basis and the selling of equipment. We will keep the safety of the sport and the promotion of Skydiving as a sport our No. 1 goal. We will let you know the results of the FAA investigation. Here's hoping I'm still a PCA member in good standing.

Sincerely yours,
Joseph W. Cooper"

* * * * *

MONTHLY PHOTO:

The monthly photo for framing comes from Mr. George Shook of the Memphis Paraflyers, Memphis, Tenn. Charles Cady is airborne with George Shook leaving the door and Herbert Rea moving forward on a three man exit. The pilot is Mr. M. L. Perry and photo by Bob Williams from a chase aircraft. Both the photography and the exit is well done.

* * * * *

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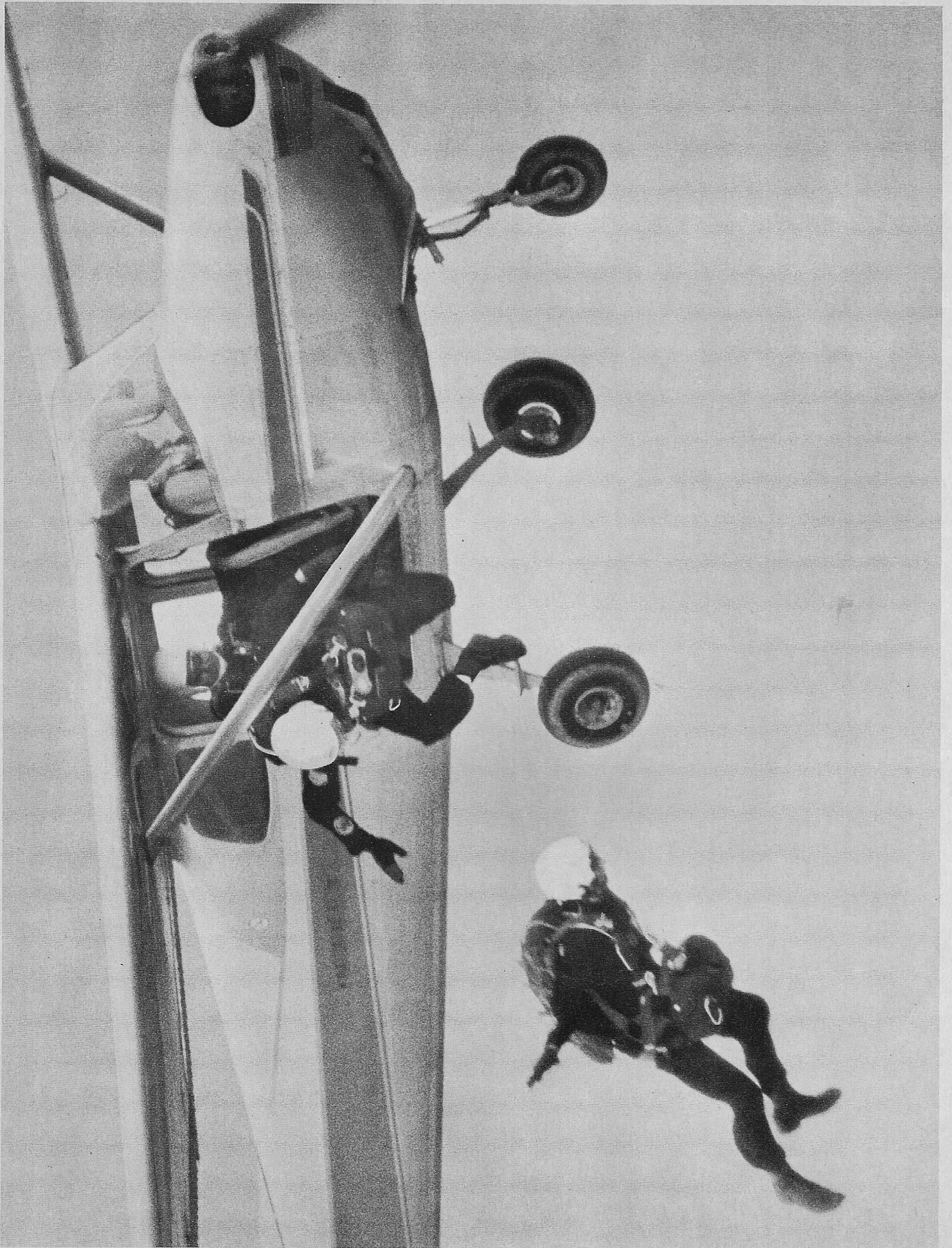
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