

PARACHUTIST

JANUARY-FEBRUARY, 1958

TWENTY-FIVE CENTS



*Special enclosure:
Complete Rules for
U.S. Team Tryouts and
1958 World Championship*



PARACHUTE DESIGNER HONORED

Air Safety Award Presented by General Gavin

The Wings Club had to move its January 15th luncheon meeting upstairs from its regular rooms to the more spacious ballroom of New York City's Hotel Biltmore. The space was needed to accommodate more than 600 guests and a crowd of photographers and reporters. The occasion was, nominally, the awarding of the A. Leo Stevens Award to Dr. Helmut G. Heinrich, professor of aeronautical engineering at the University of Minnesota and one of the country's outstanding parachute design specialists. It was no slight to Dr. Heinrich that a large part of the crowd were on hand to see a better known parachute personality, Lt. Gen. James M. Gavin, the Army's controversial and soon to retire chief of research and development and a famous airborne commander of World War II. (Also editorial author of the last issue of the *Parachutist*.)

General Gavin made the presentation, the tenth awarding since Joe Crane, president of the Parachute Club of America, first won the air safety trophy in 1948. Dr. Heinrich was praised for his development of the guide surface canopy, described as an "outstanding contribution to the saving of life" and as a significant advance generally in the field of "aerodynamic retardation." The specially designed parachute, which is now used extensively for jet bail outs, employs aerodynamic principles to keep the canopy closed at very high speeds which would otherwise cause it to burn under the extreme friction. When the person or cargo has reached a safe speed, the canopy opens gradually and thereafter operates like a standard parachute.

On hand to view the presentation was the first person to jump the guide surface canopy, Air Force Major Robert L. Oakley, chief of the parachute branch, Wright Air Development Center, Wright Field, Ohio. Other luncheon guests included Arthur Godfrey,

radio and television star and amateur pilot; Eddie Rickenbacker, president of Eastern Airlines and celebrated hero of the two World Wars; and two former Stevens awardees, PCA President Crane and Brig. Gen. Harold Harris (USAF Ret.), former president of Northwest Airlines.

In receiving the award, Dr. Heinrich, who has been a consultant on the recently publicized re-entry problem for outer space missiles, told the gathering that however far aerodynamic developments take us, we will always have to provide recovery systems to save lives. "No matter how fancy these recovery systems become," the specialist said, "we will have descendants of the old fashioned parachute."



PARACHUTIST

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COVER—Miss Betty Odell, of the Los Alamos (New Mexico) Parachute Club, drifts silently down toward the sun-parched earth at Ryan Field, Tucson, Ariz. Nevada Skydiver Paul Tindall strolls to meet her. It was Miss Odell's first jump, made when the Los Alamos club visited Tucson in December. See page 17 for more on parachuting in the Southwest. (Photo courtesy of Los Alamos Parachute Club.)

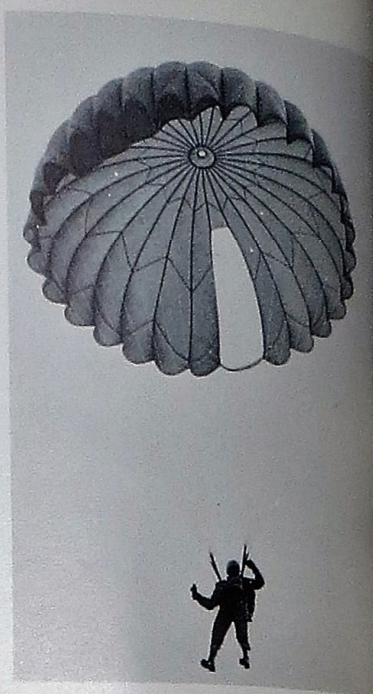
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PCA Names New Directors

Three new directors of the Parachute Club of America were chosen at the club's annual board meeting, January 6, at the Wings Club in New York City. One of the three, Lewis B. Sanborn, was also named secretary-treasurer of the organization. Other new directors are Wolfgang Lieschke and George Flinn. All three of the new board members are young, active sport parachutists. Sanborn was high-scoring American in the 1956 World Championship and in the Adriatic Cup meet last August. Lieschke is a New York City advertising art director and like Sanborn, a veteran paratrooper. Flinn returned to Yale University last fall after serving in the Marine Corps. He founded and is captain of the Yale Parachuting Club.

The directors' meeting also modified by-laws for club affiliation in the PCA, as follows: The petitioning club must have five or more active members, with 100 per cent individual enrollment in the PCA. The club must agree to abide by all PCA rules and regulations. To maintain affiliation, all club members must remain PCA members in good standing.

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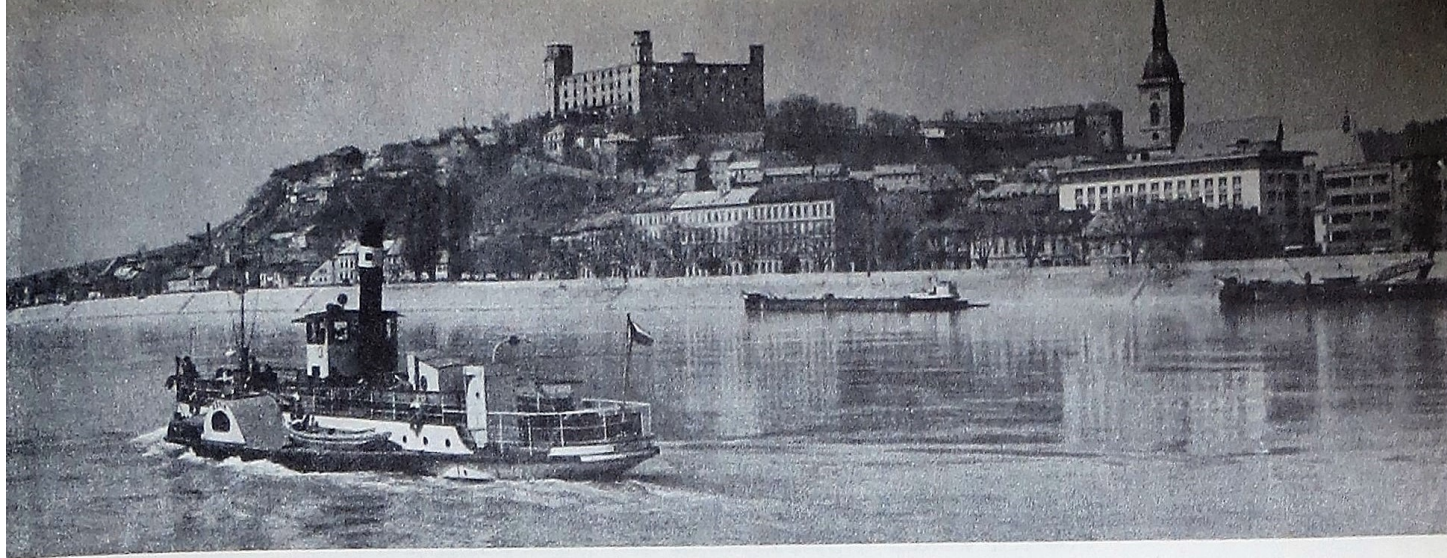
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The Danube flows by the ancient Slavic capital, Bratislava, seat of the Fourth World Parachuting Championship.

PCA ANNOUNCES 1958 U.S. TEAM TRYOUTS

**Vancouver, British Columbia, will host eliminations, June 15-25.
International Commission sets time and place for world contest.**

This June, fifty American parachutists will converge on Vancouver, British Columbia. Their purpose in gathering will be to compete for berths on a five-man United States team for the Fourth World Parachuting Championship. The biennial international competition will be held this August in Czechoslovakia.

(Final selection of the sites and dates of both the American tryouts and the world championship were announced in January following winter meetings of the Parachute Club of America and the International Parachute Commission. Complete official rules for both events are printed in the following pages. The highlights are given here.)

The fifty American parachute aficionados, to be selected principally by clubs affiliated with the Parachute Club of America, will come to this West Coast Canadian city at the invitation of the British Columbia Centennial Committee. The tryouts will be held between June 15th and 25th. Bed, board, a token travel allowance, aircraft and grounds will be provided for the eliminations by the generous host.

The tryouts will have three parts. The first round, with all fifty contestants competing, will include three jumps from 7,000 feet. In two, each man will freefall for 27 to 33 seconds, then open his chute and land as close as he can to a ground target. He will be judged on landing accuracy and style of fall. The third jump of the first round will require the jumper to perform a figure eight, a horizontal turn to the left followed by one to the right, while freefalling. The top twenty men in this round will go on to the second round, a run-through of the first three events of the world championship. The top ten men from the second round will then compete in the third and final elimination, a repeat run-through of the championship events. With the last phase completed, the high-scoring five

will take their place as members of the 1958 United States Parachuting Team.

The five selected team members will go into training for about a month. Then, sometime near the end of July, they will leave the United States for Czechoslovakia. The Fourth World Parachuting Championship will be held in the ancient Danube port city of Bratislava between August 1st and 14th.

FUNDS NEEDED

The Americans' trip this summer will be the second made by an American parachuting team—provided the funds can be raised to pay the way. The 1956 United States team,

practicing on a small airfield with a single borrowed plane, barely had enough money to get to Moscow for the Third World Championship. Despite a continual struggle against financial obstacles, however, the Americans that year managed to better four government backed teams, in a field of ten nations. The 1958 United States team will probably face the same competition this year. Bulgaria, Czechoslovakia, France, Hungary, Poland, Rumania, the USSR and Yugoslavia have already committed for the meet. The parachuting team from each of these countries will come to Bratislava with the strong support (of the cold hard cash type) of its government. To stand up to this field, the American team must have backing, and in the American sports tradition, it must come entirely from private sources.

The chances for victory are much better than they were two years ago, when sport parachuting techniques were virtually unknown in the United States. But the tremendous growth in parachuting as a sport which this country has seen since then will be a meaningless advance if the world's wealthiest nation cannot afford to send a team to represent it. Money is needed to buy parachutes and stop watches and altimeters, helmets and uniforms. It is needed for training expenses. Finally, it is needed to transport an American team 4,250 miles, for a second crack at the world parachuting championship. The Parachute Club of America is asking for this money.

(All contributions toward American participation in the Fourth World Championship are tax deductible. Checks should be made out to the National Aeronautic Association-Parachute Fund, and sent to the NAA at 1025 Connecticut Ave., N.W., Washington 6, D.C. It is requested that contributions be received before June 15th.)



Aerial view shows Vancouver—where American team tryouts will be held—Burrard Inlet and No. Vancouver, background.

PARACHUTE CLUB OF AMERICA

P. O. BOX 212
MOUNT KISCO, NEW YORK

OFFICIAL RULES AND REGULATIONS FOR TRY OUTS OF 1958 UNITED STATES PARACHUTING TEAM

and

OFFICIAL RULES AND REGULATIONS FOR THE FOURTH WORLD CHAMPIONSHIP OF PARACHUTING

The British Columbia Centennial Committee has graciously invited the Parachute Club of America to hold the official Try Outs for the 1958 United States Parachuting Team in Vancouver, British Columbia. The Parachute Club of America wishes to express its gratitude and takes pleasure in accepting this most generous and sportsmanlike offer.

OFFICIAL RULES AND REGULATIONS FOR TRY OUTS FOR 1958 UNITED STATES PARACHUTING TEAM

PURPOSE OF TRY OUTS To ensure the best selection of parachutists for the United States Parachuting Team at the Fourth World Championship of Parachuting, Bratislava, Czechoslovakia, 1-16 August 1958.

SELECTION The five man United States Parachuting Team will be selected in accordance with the Rules and Regulations of the Try Out published by the Parachute Club of America from 50 pre-selected candidates who will compete in the Try Outs.

PRE-SELECTION Fifty candidates will be selected by the Parachute Club of America as entrants in the Try Outs. The policy of the Parachute Club of America will be to select 35 to 40 candidates from recommendations of affiliated club or chapter presidents and 5 to 15 candidates from the membership at large. The number of candidates selected from each geographical area will be based upon the following factors:

1. number of members of PCA in particular area
2. experience and past performance of individual applicants

APPLICATION FOR ENTRANCE TO TRY OUTS Each applicant desiring to take part in the Try Outs MUST

1. Be a member in good standing of the PCA
2. Hold at least a Class B International license issued by PCA and validated by 1958 Sports Registration
3. Apply in writing to PCA before 25 April 1958. Application must include:

- a. Personal information, previous parachuting experience and best performances.
 - b. Statement that, if selected for 1958 United States team, applicant will spend the month of July, 1958, in training with the team at location designated by the PCA.
 - c. If member of club or chapter, a letter of recommendation from club or chapter president.
 - d. State intended point of departure for token travel allowance.
4. Provide his own set of parachutes, helmet, boots, coveralls, stopwatch and packing equipment.

NOTIFICATION The fifty selected entrants for the Try Outs will be notified by the PCA on or before 10 May 1958.

PASSPORTS All selected entrants should be in possession of a passport upon arrival in Vancouver. The passports of team members must be airmailed for visas to Embassy of Czechoslovakia no later than 27 June 1958.

SELECTION OF WOMEN'S TEAM In view of limited experience of potential candidates, any applicant for the 1958 Women's Parachuting Team shall apply by letter to the PCA.

Candidates must give brief biographical sketch and state parachuting experience.

If sufficient applications are received, Women's Try Outs will be held at the same time and place as Men's Try Outs.

All applications must be in by 25 April 1958.

LOCATION OF TRY OUTS Vancouver, British Columbia, Canada

DATE 15-25 June 1958. Selected candidates should plan to arrive in Vancouver on 14 June before 10 a.m.

LIVING EXPENSES Room and board for the 50 selected men and any selected women candidates shall be provided by the British Columbia Centennial Committee at no expense to the candidates.

TRAVEL EXPENSES A token travel allowance will be paid to each selected candidate upon arrival in Vancouver in accordance with the following schedule:

Straight Line Distance to Vancouver from Departure Point or Club of Candidate

<u>Statute Miles</u>	<u>Dollars</u>
0-150	10.00
150-300	20.00
300-600	30.00
600-1000	40.00
1000-1400	50.00
1400-1800	60.00
1800-2200	80.00
over 2200	100.00

Selected candidates may pool their allowances and travel by car, hence covering full travel costs.

The PCA will publish a list of selected candidates not later than 10 May and mail this list to all clubs and selected applicants in order to assist the formation of car pools.

The five finally selected U. S. Team members will receive additional travel expenses.

AIRCRAFT Aircraft shall be provided for the Try Outs at no expense to the candidates.

EQUIPMENT a. Selected candidates must provide their own parachutes, helmets, boots, coveralls, stopwatches and parachute packing equipment.
b. Altimeters and goggles may be used by contestants.
c. All parachutes must meet the safety standards of the PCA, Civil Aeronautics Administration and Department of Transport of Canada.
d. Homemade or European palm releases may not be used.

RULES AND REGULATIONS The Try Outs will be governed by the official rules and regulations published by the PCA and be conducted in accordance with the Basic Safety Regulations of the PCA and such regulations of the Civil Aeronautics Administration and Department of Transport of Canada as may be applicable.

Paragraphs #7, 12, 15, 21, 27, 28 (substitute word individual for word team in first sentence), 29, 30, 32-36, 38, 39, 40, 40A, 41 (substitute word inch for centimeter), 42-48, 79 of the official rules and regulations of the World Championship (see following pages) will apply to the Try Outs.

Paragraphs #50-70 inclusive of the rules for the World Championship will apply only to Phase II and Phase III of the Try Outs. If necessary minor changes or additions to the rules and regulations may be made by the PCA and officially announced prior to the start of the Try Outs.

RESPONSIBILITY The PCA, its officers and official agents, and the British Columbia Centennial Committee waive all responsibility in case of accident, injury, or property damage to the contestants or other parties in connection with the Try Outs of the 1958 United States Parachuting Team and the subsequent training and competition of this team except in the case of wilfull negligence on the part of the PCA or the British Columbia Centennial Committee.

All contestants shall sign a waiver form prepared jointly by the PCA and the British Columbia Centennial Committee before taking part in the Try Outs.

JUDGING The Try Outs will be judged by a commission of three judges. The three judges may appoint such assistants as are necessary for practical measurement work. The Chief Judge will be Mr. Joe CRANE, president of the PCA and president of the International Parachuting Commission. Mr. Gerard VANDERMEERSCH, French government parachute instructor and Lt. Col. J. AWDRY, British Parachute Regiment liaison officer at Fort Bragg, N. C., have tentatively accepted to serve as judges.

No candidate taking part in the Try Outs shall serve either as a judge or as an assistant.

The decision of the commission of judges will be final.

PROGRAM FOR TRY OUTS The Try Outs will be held in three phases.
All fifty candidates will enter

PHASE I

3 JUMPS

15-18 June

to be executed and scored as follows:

JUMPS #1 and #2

Performance The parachutist will leave the aircraft at 7000' and immediately stabilize face to earth, arms and legs spread. He will perform a stable delayed fall for 27 to 33 seconds. He will be allowed two changes of heading, each 180 degrees or less. He will attempt to land as close as possible to the center of the target.

<u>Score</u> Accuracy in landing	150 points
Style	100 points
Maximum total each jump	250 points

Penalty for error in timing 50 points
(opening either before 27th second or after 33rd second)

Judging Accuracy in landing will be judged as follows:

loss of 2 points per yard from center of cross

loss of .1 point per inch or fraction thereof

Measurement is from first point of contact with ground

Style will be judged as follows:

Buffeting - loss of 5 points each movement

Fishtailing - loss of 5 points each movement

Instability or loss of control - loss of 10 points per second up to 5 seconds during fall

Over 5 seconds-0 points for style

Body inclined on side at more than 45 degrees to earth will be counted as instability

Turns after first two authorized in jump will count as instability

Style will not be judged during last two seconds of free fall

JUMP #3

Performance The parachutist will leave the aircraft at 7000' and immediately stabilize face to earth, arms and legs spread. He will fall for at least 10 seconds on a heading indicated by an arrow on the ground. Starting on the tenth second and not later than the twelfth second the parachutist will execute a figure "8" terminating on heading of arrow. The figure "8" must be completed in 7 seconds or less. The total time of delayed fall will be 27 to 33 seconds. The parachutist must wait at least two seconds between end of figure "8" and beginning of any intentional change of direction. The parachutist will then attempt to land as close as possible to the center of the cross.

Score The jump will be scored like jumps #1 and #2 with the following exceptions:

Figure "8" completed in 7 seconds or less	50 points
total possible for jump	300 points

Judging The jump will be judged like jumps #1 and #2 except that an incomplete figure "8" will score no points.

This jump will complete Phase I of Try Outs.

Only the 20 highest scorers in Phase I will go on to Phase II.

PHASE II 6 JUMPS 19-22 June

Phase II will consist of the first three events of the World Championship and will be scored in the same manner as the Championship.

The 10 highest scorers in Phase II will go on to Phase III.

PHASE III 6 JUMPS 22-25 June

Phase III will be indential to Phase II.

THE 5 HIGHEST SCORERS FOR PHASE II AND PHASE III COMBINED WILL BE THE MEMBERS OF THE 1958 UNITED STATES PARACHUTING TEAM.

QUESTIONS Any questions regarding these regulations should be addressed to:
Parachute Club of America
Box 212
Mount Kisco, New York.

OFFICIAL RULES AND REGULATIONS FOR
FOURTH WORLD CHAMPIONSHIP OF PARACHUTING
prepared by
AEROKLUB REPUBLIKY CESHOSLOVENSKE
reproduced by
PARACHUTE CLUB OF AMERICA

FOURTH WORLD CHAMPIONSHIP OF PARACHUTING 1958

The Aeroklub Republiky Ceshoslovenske hereby gives notice that in accordance with the plan of the Federation Aeronautique Internationale the Fourth World Championship of Parachuting will be held in Bratislava, on the Dvorniky airfield, from the 1st August to the 16th August, 1958.

The Aeroklub Republiky Ceshoslovenske invites a team from the national air club of your country to take part in the World Championship of Parachuting..

P R O G R A M

- August 1st - Arrival of contestants in Bratislava
Friday
- August 2nd - 9 a.m. Conference of team leaders on the conduct of the
Saturday Championship and Meeting of the judges.
- From 10 a.m. to 6 p.m. Practice by the different teams
and preparations for the Aviation Day.
- 8 p.m. Reception of contestants by the president of the
Aeroklub Republiky Ceskoslovenske.
- August 3rd - From 7 a.m. to 10 a.m. Practice by the different teams and
Sunday preparation for the Aviation Day.
- From 7:30 a.m. to 10 a.m. Preparations for the jumping compe-
titions, Conference of team leaders and Meeting of the judges.
- From 2:30 p.m. to 5:30 p.m. Aviation Day, Participation of the
foreign parachute jumping teams.
- August 4th - From 7 a.m. to 6:30 p.m. Contests according to Regulations
Monday
up to
- August 11th - Conclusion of contests
Monday
- August 12th - Spare day in case of bad weather
Tuesday
- August 13th - Spare day in case of bad weather
Wednesday
- August 14th - From 9 a.m. to 11 a.m. Solemn conclusion of the Championship,
Announcement of winners, distribution of prizes.
- From 2 p.m. to 6 p.m. Preparation of teams for departure.
- August 15th - Free day for participants, eventually visit of Bratislava
Friday or Praha.
- August 16th - Departure of delegations
Saturday

There may be partial alterations to the program.

Karl Grepl
President of the Aeroklub Republiky
Ceskoslovenske

OFFICIAL REGULATIONS OF THE FOURTH WORLD PARACHUTING CHAMPIONSHIP 1958

(Adopted at Paris on February 6th and 7th, 1957, and on December 18th and 19th, 1957, by the International Parachute Commission of the Federation Aeronautique Internationale.)

I GENERAL

1. The Federation Aeronautique Internationale has charged the Aeroklub Republiky Ceskoslovenske with organizing the 1958 World Championship of Parachuting.

II PURPOSE

2. The purpose of the contest is:
 - to establish new world records
 - to encourage the sport of parachuting
 - to improve parachuting performances
 - to exchange parachuting information
 - to increase international good will.

III TIME AND PLACE

3. The Fourth World Championship of Parachuting will be held from the 1st August to the 16th August, 1958, in Bratislava, on the Dvorniky airfield.
The World Championship of Parachuting will be inaugurated on the 3rd August, 1958, by the Aviation Day.

IV MANAGEMENT

4. The Fourth World Championship of Parachuting will be organized and conducted by the Aeroklub Republiky Ceskoslovenske.
5. The Aeroklub Republiky Ceskoslovenske has been charged with the supervision of the Championship.
6. All disputes shall be settled by a Board, comprising members of the International Parachute Commission of the FAI present at the contest. The decisions shall be taken in accordance with FAI Sporting Code.
7. Protests, reclamations concerning decisions on whatever event shall be submitted immediately. All reclamations concerning decisions on the classification of the contestants shall be submitted within 24 hours from the publication of the results, at the latest.

In the case of reclamations, Part I, Chapter 7 of the Sporting Code of the FAI shall be applied.

8 Czech, French, Russian and English shall be the official languages of the Championship.

V PARTICIPATION

9. In conformity with the FAI Sporting Code, Part I, Chapter 2, art. 2,1,3, contestants of national aero clubs that are members of the FAI may take part at the World Championship of Parachuting.

10. Each country, member of the FAI, may send two teams: a team of five men and a team of three women which may take part in the contest for individuals and in the contest for teams.

A team of men shall consist of at least three men, a women's team of at least two women. In the case of a lesser number of contestants, the entered country shall participate in the contest for individuals only. After the beginning of the Championship, no team shall be completed by substitutes even for injured contestants.

In addition to the sports teams, the delegation shall include a leader of the delegation, a coach or captain, a pilot and the parachute packer, i.e., twelve persons altogether, at the most. The interpreter will be provided by the organizer of the Championship.

11. The World Parachuting Championship for women and men shall be held if at least six national men's teams and three national women's teams will be taking part in them. In case the number of male teams is less than six national teams and if there are three or more women's national teams, the women's Championship only will be held. If six or more men's national teams and less than three women's national teams participate, the men's Championship only will take place.
 12. The contestants may, at their own discretion, enter all or some of the events.
 13. An entered country shall likewise be admitted even if represented only by one parachutist, but may take part in the contests for individuals only.
 14. In order to be admitted to the contests, contestants shall have a Sporting license of the FAI, issued by the respective national aero club. In addition, every leader of delegation will have to submit a medical certificate testifying as to the physical fitness for parachuting of the participants.
- The team pilot shall have a sporting pilot's certificate, issued by an authorized organization in his country and valid for the current year.
15. Contestants shall not be under 18 years of age.

VI MATERIAL PROVISIONS

16. All national delegations taking part in the contests shall be guests of the Aeroklub Republiky Cechoslovenske which will provide them free board and lodging for the entire period of the sojourn.
17. Travelling expenses to and from the contest shall be paid by the participating aero clubs.
18. Contestants shall have the following equipment: main and reserve parachutes, dark dull overalls with the emblem of their national aero club or their country, crash helmets and boots. Teams may use chronometers and altimeters.
19. Parachutes may be of any type, provided they are approved for jumping by the competent national organization, and may consist of a main and a reserve parachute. The leaders of delegations or the captains are held responsible for this clause.
20. The optional use of the auxiliary device to ensure the opening of the parachute during the free fall will be decided upon by the leader of the delegation or the captain of the team.
21. Each contestant may have several parachutes of one or different types.
22. A sufficient number of AN-2 aircraft shall be placed at the disposal of the contestants. The aircraft will be assigned for the different jumps by the organizer. These aircraft have double controls. Thus, each team may fly with

its own pilot. The co-pilot shall be a Czechoslovak airman.

A sufficient number of parachute packing tables shall be placed at the disposal of the contestants.

23. Prior to the opening of the contests, the contestants shall be given the opportunity of effecting two trial jumps at the most, provided they have presented themselves in time according to the program of the Championship.

24. The organizers of the contests shall bear no material responsibility for accidents that occur during the contests through no fault of theirs. All damage suffered by outsiders shall be compensated by the organizers.

25. Each member of a delegation shall pay an entry fee of 35 dollars. This fee must be transferred to the Aeroklub Republiky Ceskoslovenske through the Statni banka CSR, simultaneously with the entry for the Championship. The organizational expenses shall be borne by the Aeroklub Republiky Ceskoslovenske.

VII PROGRAM

26. The program of the Championship includes the following events:

- a. Event 1: Individual jump from an altitude of 1,000 meters for precision landing.
- b. Event 2: Individual jump from an altitude of 1,500 meters for precision landing with style, with a 15-23 second parachute-opening delay.
- c. Event 3: Individual jump from an altitude of 2,500 meters with a 35-43 second free fall, execution of figures and estimation of style.
- d. Event 4: Team jump from an altitude of 1,500 meters for precision landing with a 15-23 second parachute-opening delay.

VII CONDITIONS

27. The contests shall be held at a ground wind velocity not exceeding 8 meters per second for men and 6 meters per second for women.

28. The order of jumping for the teams shall be determined for each event by lots. The order of jumping in a team shall be determined by its captain or team manager.

29. The weather report shall be announced 30 minutes before the beginning of the contests; wind direction and velocity data shall be displayed on a board at the starting place every 30 minutes during the contests.

30. Before each event is started or in case the interval between jumps exceeds 30 minutes, a trial parachute shall be dropped or a non-contestant parachutist shall make a trial jump.

In case of serious changes of weather conditions, the organizer together with the commission of the FAI may decide whether the Championship should be interrupted or whether they should continue. They will decide alike whether an already started event should continue regardless of the number of jumps that have been effected, or whether the event should be interrupted for the respective day.

31. The altitude at which the jumper shall leave the plane in events 1, 2 and 4 shall be controlled by a barograph installed in the aircraft in a place that is visible to both the pilot and the jumper. The maximum altitude error for a jump shall be -50 meters.
32. Jumps with delayed parachute opening shall be timed by three stopwatches and a reserve stopwatch as well as by optical instruments and shall be determined from the moment the feet of the jumper clear the plane to the moment the pilot parachute appears.
33. The time of the delay shall be determined either by three stopwatches showing the same time or by one of them showing the mean time. If there is a deviation of more than 0.5 second, the result shown by the control stopwatch, i.e., the fourth stopwatch, shall be counted and not the results indicated by a stopwatch registering such a deviation.
34. Glissade on a parachute shall be permitted down to an altitude of 100 meters, below which only harness pulling shall be permitted.
35. Records established in the course of the contests shall be recognized provided all the requirements provided for such recognition in the FAI Code are satisfied.
36. The landing point shall be marked by a cross made from two white tilts placed in the center of a circle with a diameter of 150 meters. The size of the cross shall conform with Part V, pages 12 and 13 of the FAI Code.
37. Precision landing jumps in event 1 shall be carried out the automatic or manual method of parachute opening. The choice of method shall be left to the jumper.
38. In a jump with non-delayed parachute opening, the pilot parachute must appear not later than 3 seconds after the jumper clears the aircraft.
39. In parachute-delay jumps, the manual method of opening parachutes shall be used.
40. The pilot parachute must appear at an altitude of not less than 400 meters. If the pilot parachute appears at an altitude below 400 meters, the contestant shall be disqualified for the event.
- 40A. In precision landing jumps a peg shall be driven into the ground to mark the place where the jumper first touches the ground. The place where the jumper first touches the ground closest to the center of the circle shall be considered as the place where he first lands.
41. Distance shall be measured from the cross of the circle with a surveyor's chain with a precision of up to one centimeter.
42. Not more than 2 approaches of the aircraft shall be allowed for a precision-landing jump.

If the contestant jumps after these two approaches, he automatically loses the right to score points but the attempt shall be registered as a jump.

43. The direction of the flight and the point where the jumper clears the plane shall be left to the discretion of the contestant.

44. In the event of danger, the jumper shall use his reserve parachute and if the judges deem it necessary he may permit him another attempt.

45. The contestant shall have the right to use two parachutes simultaneously.

46. Glissade means changing the form of the canopy by pulling in the shroud or shortening lines by more than one meter or by using a special device for regulating the speed of the parachute descent.

47. Pulling means shortening the free ends of the harness and shroud lines or any special devices by not more than one meter.

48. Control of the events: Free fall time and the distance covered shall be measured from the moment the jumper's feet clear the aircraft to the moment the pilot parachute appears. The free fall shall be measured with optical instruments and chronometers.

49. The Aeroklub Republiky Ceskoslovenske shall provide the Commissaries of the FAI with optical instruments for control purposes.

IX EVENT AND SCORE

50. The results that have been obtained by the contestants shall be estimated according to a system of points for each event separately.

<u>EVENT 1</u>	Individual precision-landing jump from an altitude of 1,000 meters.
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51. Two jumps shall be made. Landing in the center of the circle shall be estimated at 150 points. Every meter away from the center shall reduce the score by one point. For every centimeter away from the center the score shall be diminished by 0.01 point. Each jump shall be estimated separately.

52. The contestants must open the parachute not later than 3 seconds after clearing the plane. If the parachute opens later than after 3 seconds, the jump will be considered as executed but the contestant shall not receive any points.

53. The maximum score for these jumps in this event is 300 points.

<u>EVENT 2</u>	Individual jump from an altitude of 1,500 meters for precision landing and style of the free fall, with a 15-23 seconds parachute-opening delay.
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54. Two jumps shall be made. The estimation of the precision of the landing will be the same as for event 1, the maximum score for one jump being 150 points. The style shall be estimated at 150 points at the most for one jump.

55. Execution: Immediately after clearing the aircraft, the contestant shall assume a horizontal position, face down, arms outstretched in the direction of the flight of the plane. He shall maintain this position during the whole

of the free fall. After the opening of the parachute he shall land in the circle.

56. The contestants may open the parachute during the period after the 15th second up to the 23rd second of the free fall. A change of direction by 30 degrees to the right or to the left may be effected during the free fall. The angle of the inclination of the body to the horizontal plane shall not exceed 45 degrees. The style of the free fall shall not be estimated during the last two seconds before the opening of the parachute. The estimation of the precision of the landing will be the same as for event 1. The score for the entire event will be the total sum of the points for the free fall, 150 points at the most, and for the precision of landing, 150 points at the most. The maximum score for one jump shall be 300 points, for both the jumps 600 points.

57. Penalty: If the contestant opens the parachute before a 15 second free fall or after a 23 second free fall, he will be fined 50 points. If he opens the parachute below an altitude of 400 meters, he will be excluded from the respective event.

58. For violating style of free falling, the contestant shall be fined:
-every second of violation of the horizontal position and of the direction will be fined 5 points; every turn to the side will be fined 5 points;
-5 points for every dive or sway;
-150 points for a back fall, somersault, spiral, spin or disorderly fall.

EVENT 3 Individual jump from an altitude of 2,500 meters, with 35-43 second free fall, execution of figures and estimation of style.

59. Two jumps shall be made.

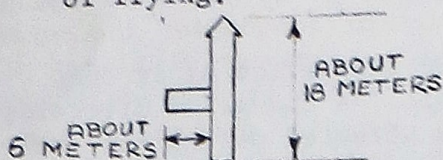
Execution: After clearing the aircraft the contestant shall within 5 seconds assume a horizontal position, face down, arms outstretched, in the direction of the arrow. A white arrow, visibly marked on the soil, about 18 meters in length and 2 meters wide, shall be placed on the airfield near the landing place.

60. The way of clearing the aircraft shall be left to the discretion of the contestant. During the free fall the head of the contestant shall be in the direction of the white arrow.

61. At the 10th second of the free fall, a signal will be displayed by the arrow indicating the complex of turns or figures he has to execute. The signal will be a white tilt about 6 meters in length and 2 meters wide, which will be laid out by the arrow. This signal will be displayed up to the 15th second of the free fall, i.e., during 5 seconds.

62. Immediately after the above signal has been given, i.e., not sooner than at the 10th second of the free fall, the contestant may begin to execute the indicated turns or figures as follow:

- a. Signal laid out to the left in the direction of flying:



two left turns, 360 each
one right turn 360
one left turn 360
two right turns, 360 each

- b. Signal laid out to the right in the direction of flying:



one right turn 360
one left turn 360
two right turns, 360 each
two left turns, 360 each

- c. Signal laid out to the right and to the left side, a cross:



one left turn 360
two right turns, 360 each
two left turns, 360 each
one right turn 360

63. All the turns or figures shall be executed within 20 seconds, i.e., up to the 35th second of the free fall. After every turn or figure the contestant shall revert to the original direction, i.e., to the direction of the arrow. It will be left to the discretion of the contestant whether to execute the turns or figures fluently or separately.

64. Score: The time of the free fall shall not be estimated and the contestant may open the parachute between the 35th and 43rd second of the free fall. The opening of the parachute before the 35th second or after the 43rd second shall be fined 50 points. If the contestant opens the parachute below 400 meters, he will be excluded from the respective event.

65. The style of the free fall shall be estimated at 150 points. Every second of delay in assuming the horizontal position and the direction after clearing the aircraft, even after the completion of the turns, shall be fined 5 points.

66. For violating the style of the free falling the contestant shall be fined:
- every second of violation of the horizontal position and of the direction will be fined 5 points, every turn to the side will be fined 5 points;
 - 5 points for every dive or sway;
 - 150 points for a back fall, somersault, spiral, spin or disorderly fall.

67. The execution of a turn or figure will be estimated at 150 points provided the whole complex of turns or figures has been executed. Every turn or figure which has not been completed or which has been increased by more than 45 degrees shall be fined 25 points. The turns shall not be estimated if the contestant fails to execute the prescribed complex of turns or figures according to the signal or if he executes them with an inclination exceeding 45 degrees.

68. In case the whole complex of turns or figures has been completed before the 35th second of the free fall, the contestant shall be awarded 5 points for every second. On the contrary, if he completes it after the 35th second, he will be fined 5 points for every second.

69. Before the aircraft takes off, the contestant shall indicate whether he intends to execute turns or figures. If he does not execute turns or figures he shall maintain the horizontal position in the set direction for the duration of the free fall.

70. The score for the entire event shall be as follows: 150 points for the style of the free fall, at the most; 150 points, at the most, for the turns or figures. In addition, the points awarded for the earlier completion.

The maximum score for two jumps shall be 600 points and, in addition, the points awarded for the earlier completion of the turns or figures.

If the contestant does not execute turns or figures, the maximum score for the two jumps, for the style of the free fall, shall be 300 points.

EVENT 4

Team jumping from an altitude of 1,500 meters for precision landing with a 15-23 second parachute-opening delay.

71. Every contestant shall open the parachute in the period from the 15th to the 23rd second after clearing the aircraft. Every team shall execute two jumps.

72. Neither the style nor the time of the free fall shall be estimated. The contestant shall not open the parachute before the 15th and after the 23rd second of the free fall.

73. The precision of landing only shall be estimated and the points shall be awarded according to the system indicated for event 1.

The maximum score for two jumps shall be 300 points.

If the contestant opens the parachute below 400 meters, he will be excluded from this event.

74. Men's teams shall comprise a minimum of 3 and a maximum of 5 contestants. This rule applies to all events. The points shall be awarded with account of the three best results.

Women's teams shall comprise a minimum of two and a maximum of three contestants.

The point shall be awarded with account of the two best results.

75. The score for the entire event shall be made up of a total of the following points:

300 x 3 - 900 points for a men's team, at the most

300 x 2 - 600 points for a women's team, at the most

The maximum score for both jumps shall be 1800 points for men and 1200 points for women.

76. If a contestant opens the parachute before the 15th or after the 23rd second, his team shall be fined 50 points for every contestant who made this mistake.

77. This event will be taken into account for the total classification of individuals.

X COMPLETION OF THE CHAMPIONSHIP

78. The Championship will be considered as completed provided at least three of the four prescribed events have been carried out.

XI DETERMINING CONTEST RESULTS

79. A classification of individuals for every event shall be established according to these Regulations.

The results are determined by the total points scored in all the jumps.

80. If the same number of points is scored by the three leading contestants, the first prize shall be awarded to the contestant winning the most best places.

81. Team and individual Championships of men and women shall be determined separately.

XII DETERMINING OF THE WORLD CHAMPIONSHIP OF PARACHUTING

82. The personal title of World Champion shall be awarded to the contestant who gains the most points in all events, separate for men and women.

83. The team title of World Champion shall be awarded to the team that gains the most points in personal and team events, separate for men and women. For the men's teams the result shall be determined by the 3 best results; for the women's teams, by the 2 best results.

84. In addition, the winner, separately for men and women, shall be determined in each event and shall be awarded a prize of the Aeroklub Republiky Československe.

XIII AWARDS

85. Contestants placing first, second and third in each event shall be awarded FAI medals and art prizes presented by the Aeroklub Republiky Československe.

The winning team shall be awarded FAI diplomas and cups.

XIV APPLICATIONS

86. National air clubs shall submit their applications for participation in the Fourth World Championship for Parachuting to the Aeroklub Republiky Československe, Smeky Nr. 22, Praha II, Czechoslovakia, not later than 50 days before the contests open.

87. The list of contestants may be changed not later than one day before the contests open.

AEROKLUB REPUBLIKY ČESKOSLOVENSKE

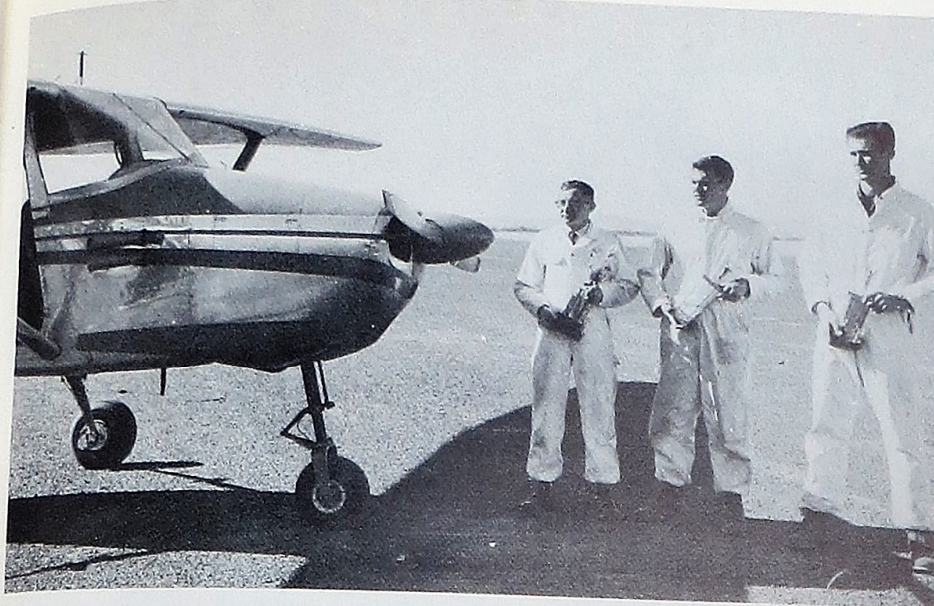
ACCIDENT CORNER

The Facts: Raymond C. Swanger of the Lancaster County (Pa.) Parachute Club was critically injured while making a parachute jump, January 5, 1958, at Donegal Airport near Mt. Joy, Pennsylvania.

The Findings: (A Parachute Club of America investigation was made by Lewis B. Sanborn, secretary-treasurer. The following is a summary of Sanborn's report from interviews with eye-witnesses and Swanger.) Swanger was practicing a short (two or three second) delay. He left the jump plane, a Cessna 172, at 2,300 feet. It was his second jump that day, his seventh with the same chute, and the 47th of his life. The chute was rip cord deployed and its canopy was encased in a sleeve. Witnesses all stated that Swanger pulled his rip cord within a few seconds after leaving the plane, that the sleeve extended and pulled off, but that the canopy did not open fully. Swanger appeared to be trying to work the chute fully open during the first part of his fall. At a low altitude, estimated at around 100 feet above the ground, he pulled his emergency chute. Swanger, who is hospitalized with three cracked vertebrae, made the following statement to Sanborn: "I noticed that my lines were twisted and that several were over the canopy. I looked down and realized that my rate of descent was faster than normal, but thought I had time to try to get a couple more turns out before I would use the chest pack. When I pulled the chest chute, I threw it out from my body, but realized it was too late." The main chute was said to have been packed meticulously. Investigation of the apparent malfunction is still pending. But everyone, including Swanger, agreed that injury could have been averted if he had followed the rule of using the emergency chute immediately when needed.



Raymond C. Swanger poses shortly before disabling jump. (Photo by J. M. Perry)



WINNING TRIO in Southwestern parachute meet are (l-r) Bill Lane, who accepted for Los Alamos; and event winners, Don Edwards, Tucson, and Ron Sharp, Los Alamos.

"EACH JUMPER ATE DIRT"

New Mexican parachutists, with high-scoring young lady, down Arizonians in windy contest.

Members of both teams, the Los Alamos Parachute Club and the Arizona Parachute Association, sat it out for a day as 35-mile-per-hour winds whipped the dry fog across their contest grounds, an airfield 11 miles west of Tucson. Dust storms are one of the things a jumper has to take in stride in the mountain-studded desertland near the Santa Cruz.

The parachutists were still waiting the following morning, December 1, as shifting gusts registered up to 20 mph. But the wind dropped slowly and seemed to steady between 12 and 15, so finally, after more than an hour and a day of postponement, the meet was under way. Unofficial title to Southwest parachuting supremacy was the prize. The contestants were 11 men and one young lady.

"In all my experience," said Los Alamos President George Mulcahy "this was the roughest contest I ever witnessed. Each jumper ate a considerable amount of dirt while being dragged about by the wind." It was so rough that it was obvious from the start that scoring methods would have to be modified. Some special events were dropped altogether.

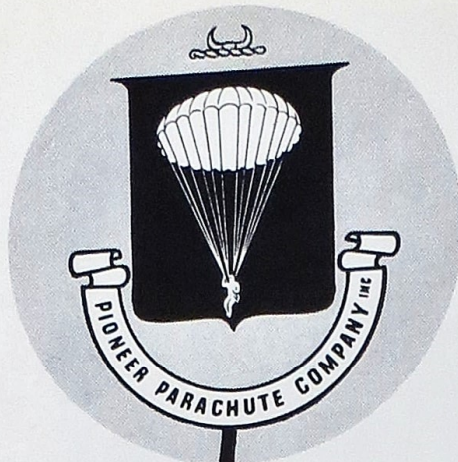
The final scoring system for Event No. 1, a spot jump from 2,000 feet, gave 500 points for a dead center landing with one point deducted for each yard off center. Ron Sharp of the Los Alamos Club made the best landing, 31 yards from the spot. Second place

went to Miss Jerry Wilson. The 19-year-old New Mexican secretary filled in at the last moment when one of her teammates became ill. She had only jumped once before, but undaunted, she rode the nylon to within 70 yards of the target cross, bettering six of her seven (male) contenders.

The second event was a two-man jump from 3,300 feet. An originally planned precision free fall was eliminated because of the wind. Tucson jumper Don Edwards went far ahead of the field scoring 444 points for a 56 yard landing. When the scores for both the events were added up, Los Alamos was the winner by a modest margin, 1974 to 1833.

Nearly 1,000 spectators were on hand to watch the contest. Extra attractions were provided by Paul Tindall of the Nevada Skydivers, an infant organization in Carlin, Nevada, and by Arizona President Curtis Hughes. The two veteran parachutists performed 16 and 20 second sky dives, respectively. Bob Archuleta, also of the Nevada club, jumped wind dummy at the start of the contest.

The meet was the first major competition for the two clubs, both of which have only been in existence since last spring. Members of both organizations expressed the hope that their dusty contest heralds a dynamic future for sport parachuting in the Southwest.



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