NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS.

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TECHNICAL MEMORANDUM 184

RULES AND REGULATIONS OF THE 1922 RHÖN SOARING FLIGHT CONTEST.

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RULES AND REGULATIONS OF THE 1922 RHÖN SOARING-FLIGHT CONTEST.*

Art. 1. Management, Time and Place of Contest, Business Office.- The "Deutscher Modell- und Segelflug-Verband," D.M.S.V. (German Model and Soaring-Flight Club) and the "Südwest-Gruppe des Deutschen Luftfahrer-Verbandes," S.G.D.L.V. (Southwest Group of the German Aviators Club) will hold, August 19-24, 1922, a soaring-flight contest on the slopes of the Wasserkuppe and neighboring heights of the Rhön mountains. The management reserves the right to extend the contest to a date not later than August 31, 1922.

The office will be in Frankfort-on-the-Main (Bahnhofsplatz 8) till August 5, in Gersfeld (Rhön) from August 6 to September 4, and thereafter again in Frankfort

Art. 2. Kind, Name, and Sponsor of Contest.- The utilization of the natural energy of the wind is required, without engine drive.

It shall be called the "Rhön Segelflug Wettbewerb 1922" (1922 Rhön Soaring-Flight Contest) and will be held under the auspices of the "Wissenschaftliche Gesellschaft für Luftfahrt" (W.G.L.).

Art. 3. Aircraft.- Aircraft without engine drive are admitted to the contest. They are classified as "gliders" and "soarers."

* Pamphlet published by the "Wissenschaftliche Gesellschaft für Luftfahrt," (W.G.L.), Berlin, 1922.

Aircraft, which can make a flight of at least 300 m (984 ft), or of 30 seconds' duration, with a smooth landing, are considered "gliders."

Rudder-steered aircraft, capable of making two flights of at least 600 m (1968.5 ft) or of at least 60 seconds' duration, with an average sinking speed of not over 1.5 m (4 ft 11 in) per second, are called "soarers."

The proof of the minimum performance must be shown by a certificate from one of the examiners appointed for this purpose by the management.

Devices for utilizing the muscular strength of the occupants do not count as engine drive. Any manner of "take-off" is permissible, even with external aid.

The employment of materials prohibited under paragraph 202 of the peace treaty is forbidden.

Art. 4. Entries.- Entries may be made, up to 12 o'clock noon, July 14, 1922, at the office of the management, by the owner of the aircraft or his authorized representative.

The entry fee of 200 marks for each aircraft must be paid before the close of the entries, either at the office of the management or at the bank, "Direktion der Diskonto-Depositenkasse," 10 Bahnhofsplatz, Frankfort-on-the-Main, account of "Rhön-Segelflug." One-half of the entry fee will be returned after the admission of the aircraft (See par. 5).

"Late entries" are permissible up to 12 o'clock noon, July 30,

1922. A "late-entry" fee of 200 marks, in addition to the regular entry fee, is required for each aircraft. "The "late-entry" fee will not be refunded.

The retained entry fees are placed at the disposal of the judges for use as prizes (See Art. 7, D).

On a written request, accompanying the entry application and giving reasons therefor, the entire entry fee may be refunded at the discretion of the management (Art. 8), as likewise the cost of maintenance of the aircraft, in whole or in part (Art. 13).

All participants in the contest must agree, on entering, to conform to the regulations published by the management. They must also renounce, in writing, all claims, against the management and its representatives, to indemnities for injuries or damages of any kind. For minors or wards, the renunciation must be signed by their legal representatives. Recourse to law is excluded, even in case of negligence on the part of the management or its representatives.

Art. 5. Strength and Acceptance Tests.- The strength of the aircraft must be vouched for by a certificate made out by one of the examiners appointed by the W.G.L. (Office at 17 Blumeshof, Berlin) for this purpose. The tests must be made at the place of building. Only aircraft with such strength certificates can be kept in the shelters provided by the management. They must arrive by 12 o'clock noon, August 6, 1922, at the latest.

The aircraft must be brought before the Technical Committee

on August 7 and 8, 1922, (Art. 11), for the acceptance test. The bases of this test, namely:

a) A description of the construction, in duplicate, on a form obtainable at the office of the management;

b) A set of unmounted photographs, in duplicate, with inscriptions on their backs, showing the aircraft from different viewpoints;

c) Strength certificate; must reach the office not later than 12 o'clock noon, July 30, 1922. If no objections are raised and after passing in

d) certificate of minimum performance (Art. 3) at the office not later than 12 o'clock noon, August 19, 1922, the aircraft may be admitted to either the glider or soarer class. The aircraft receives a distinctive mark. (An aircraft first admitted as a "glider" may be transferred to the "soarer" class, up to August 19.)

a and b shall serve as bases for reports concerning the contests Any partial or complete suppression of the same must be requested when they are handed in.

Injuries to or modifications in any aircraft during the contest must be reported to the Technical Committee. The latter can prohibit participation and conduct a new test.

The Technical Committee is empowered to prohibit participation in the contest in cases of manifest lack of airworthiness.

Art. 6. Pilots.- The aircraft may only be flown by the pilots entered for them. Several pilots may be entered for the same aircraft.

A pilot's permit for the "glider" class (Art. 3a) is granted if either the certificate of the "Deutscher Modell- und Segelflug-Verband" is presented, or if a flight of at least 300 m or of 30 seconds' duration is certified by one of the examiners appointed by the management for this purpose.

A pilot may enter for the "soarer" class, if he has made, on a "soarer" (Art. 3b), two flights of at least 600 meters or 30 seconds, with an average sinking speed of not over 1.5 m/sec and with smooth landings, certified as above.

The pilot's test may be made in connection with the minimum performance test of the aircraft (Art. 3).

The entry of the pilot, with the presentation of the required certificates, must take place before 12 o'clock noon, August 19, 1922, at the office of the management

Art. 7. Prizes.- The following prizes will be awarded.

A-group, open to soarers.

I. 1922 Grand Soaring Prize, 50000 Marks.- This prize will be awarded to the contestant, who, in a single flight, remains longest in the air, not less, however, than 10 minutes, with an average sinking speed of not over 0.2 m/sec.

Flight duration and sinking speed may also be indicated by a barograph approved by the technical committee.

Example:

Pilot A, with the monoplane soarer "Möve," makes a flight of 14 min. 32 sec. and lands 166 m below the starting point. His av-

erage sinking speed is 0.19 m/s. The flight fulfils the conditions for the prize in question.

Pilot B, on the other hand, with the biplane soarer "Pelican" makes a flight of 32 min. 17 sec. but has to land 426 meters below his starting point. His average sinking speed is 0.22 m/s, thereby exceeding the maximum of 0.2 m/s, so that this flight, in spite of its greater duration, must be excluded in awarding the prize.

II. Prizes for the smallest average sinking speed in a flight of not less than 100 seconds. For every 100 seconds of flight duration, 0.01 m/s will be deducted. Total amount of prizes 30000 marks, awarded as follows: 1st prize, 15000, 2nd prize 9000, and 3rd prize 6000 marks.

III. Prizes for the longest distance flights.- Total amount 22000 marks, divided as follows: 1st prize 12000,* 2nd prize 6000, and 3rd prize 4000 marks.

Prizes of group A cannot be won simultaneously with prizes of group B.

B-group, open to gliders steered by rudders.

I. Prizes for the greatest total flight duration, made with the same aircraft and in different flights with smooth landings. Total amount of prizes 22000 marks, divided as follows:

Class "a", open for flights of at least 30 seconds. Total amount 15000 marks, divided as follows: 1st prize 6000, 2nd prize 4000, 3rd prize 3000, and 4th prize 2000 marks.

Class "b", open for flights of at least 15 seconds, by pilots

* "Lilienthal Prize," founded by the Berlin-Munich Aerial Photograph Company.

not holding licenses for piloting engine-driven airplanes. Total amount 7000 marks, divided as follows: 1st prize 4000 and 2nd prize 3000 marks.

Prizes of classes "a" and "b" cannot be won simultaneously.

II. Prizes for the longest distance flights.- Total amount 18000 marks.

Class "a" 15000 marks, as follows: 1st prize 6000, 2nd prize 4000, 3rd prize 3000, and 4th prize 2000 marks.

Class "b", open to pilots who do not have licenses for piloting engine-driven airplanes.

Prize 3000 marks.

Prizes of classes "a" and "b" cannot be won at the same time.

C-group, open to gliders controlled by shifting the weight of the body.

Prizes for the greatest total flight duration, made with the same pilot on different aircraft in flights of at least 15 seconds' duration with smooth landings. Total amount 12000 marks, as follows: 1st prize 5000, 2nd prize 3000, 3rd prize 2500, 4th prize 1500 marks.

D-group, at the discretion of the judges, open to both soarers and gliders controlled by rudders or by shifting the weight of the body

Total amount 18000 marks.

Art. 8. Contest Committee.- The management transfers its authority during the contest to the Contest Committee. This committee stands at the head of the governing board and exercises during the

contest, the rights and duties of said board, appoints subcommittees or new members and mediates between them.

Art. 9. Board of Judges.- This board awards the prizes, on the basis of the data supplied by the Sport Committee and Technical Committee (See Arts. 10 and 11), by a simple plurality vote of the members present. In case of a tie, the chairman casts the deciding vote. The decisions of this board are final.

The board is empowered to reserve unwon prizes for future contests.

Art. 10. Sport Committee. Sport Assistants.- The Sport Committee superintends the carrying out of the program. The sport officer in charge at the time is responsible for carrying on the contest in accordance with the rules. He has assistants and a "Measuring Gang" at his disposal (See Art. 11, last paragraph). The Sport Committee announces a flight program and, in conjunction with the Technical Committee, a flight-test program, by hanging out notices on the field.

The flight and test results are also announced by the Sport Committee and Technical Committee.

Protests against the decisions must be presented at the office in writing within 24 hours after their announcement.

Art. 11. Technical Committee. Measuring Gang.- The Technical Committee conducts the aircraft acceptance tests (Art. 5) and its decision is final, in cases of injuries to the aircraft or manifest unairworthiness as to further participation in the contest.