

Obst Hydro

By HARRY SCHULTZ

The hydroaeroplane model herein shown and described was constructed by Mr. Charles V. Obst, of Cypress Hills, Long Island. Mr. Obst was lately elected president of the Long Island Model Aero Club and it may be well stated that he is very capable of filling that office. Mr. Obst is one of the neatest constructors of model aeroplanes in America today, and all his models are original with him, and are worked out on a scientific basis.

The model shown in the accompanying drawing holds the world's record for single propeller hydros, having made a duration of 30 seconds; and, in fact, is the first successful single propeller hydro model in the world, with the possible exception of the Bragg Smith model of England.

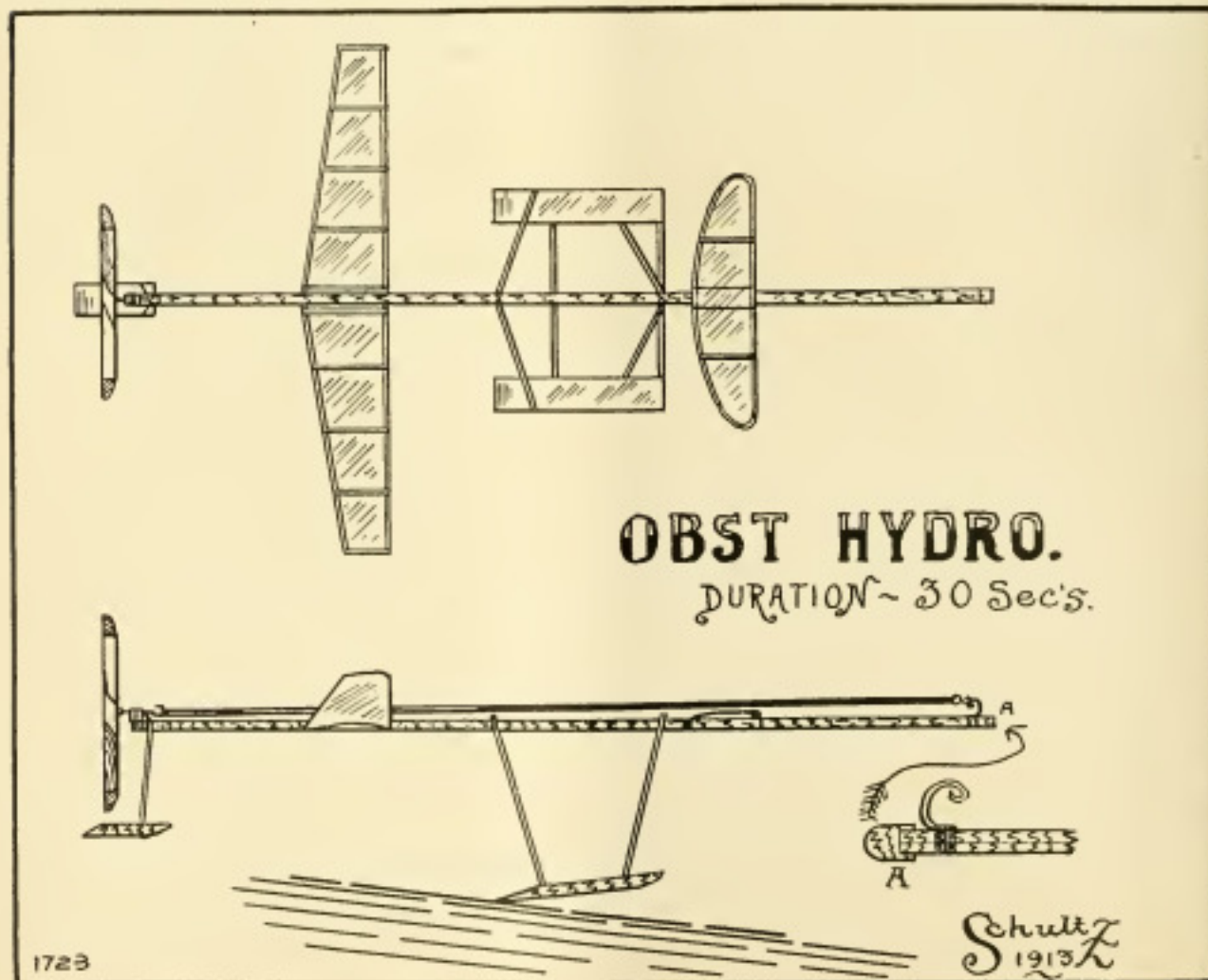
The fuselage consists of a single stick of balsa wood, one-half inch square at the middle, tapering to one-half by one-quarter of an inch at the ends. The stick is 40 inches long and is made of two pieces of wood $\frac{1}{2}$ inch by $\frac{1}{4}$ inch laminated together for strength. A small pine plug is fitted to the front of the stick as shown at "A" to protect the same, as balsa

wood is very soft. The bearing for the propeller is placed on the rear end of the stick as shown, and the stick is given a coat of shellac.

The planes are constructed of bamboo, the main plane having a span of $23\frac{3}{4}$ inches, the chord at the center being 4 inches and at the tips 2 inches; area 69 square inches. The elevator has a span of 12 inches and a chord of 3 inches at the center. The main plane has a dihedral angle of 150 degrees, and in the center of the same a slot is left for the center stick to fit in. Both planes are covered on the under side with silk fibre paper treated with Ambroid.

The propeller is nine inches in diameter and has a pitch of $11\frac{1}{2}$ inches. The width of the blade is $1\frac{1}{8}$ inches. The propeller revolves at 1,160 R. P. M., gives a thrust of $3\frac{1}{4}$ ounces and is driven by 18 strands of $\frac{1}{8}$ inch flat rubber, the rubber being carried above the single stick.

The pontoons are constructed of $\frac{3}{8}$ inch spruce and are covered with double thickness of silk fibre paper coated with Ambroid.



The main or front pontoons each measure $7\frac{3}{4}$ inches in length, $1\frac{1}{2}$ inches in width and $\frac{1}{2}$ inch in depth, and are divided up in five airtight compartments, these compartments being constructed or formed by double thicknesses of silk fibre fastened across from upper to lower braces. The rear pontoon measures $3\frac{3}{4}$ inches in length, $1\frac{1}{2}$ inches in width and $\frac{1}{2}$ inch in depth, and is divided into two airtight compartments in the same manner as the main pontoons.

The main pontoons are fastened to the frame by rubber bands, are held $6\frac{1}{2}$ inches below the main stick by diagonal bamboo braces as shown at an angle of 10 degrees to the water level. The rear pontoon is placed at the extreme rear, extending under the propeller and is fastened to the main stick by two upright bamboo sticks as shown.

The model rises in 4 or 5 feet, flies at an altitude of 30 or 40 feet and is a fast, steady flyer. Complete and ready for flight, it weighs $4\frac{1}{2}$ ounces.

MODEL NOTES BY HARRY SCHULTZ

In the first interclub contest in America which was held a few weeks ago at Ralph and Church Avenues, Brooklyn, N. Y., the following clubs entered: N. Y. Model Aero Club, Long Island Model Aero Club, Bay Ridge Model Aero Club and Summit Model Aero Club. Owing to the inclement weather and many other obstacles the Summit and New York clubs became discouraged and fell out of the race, leaving the contest to be bitterly fought out between the Long Island and Bay Ridge clubs.

The following are the results of the contests, it being seen that the Bay Ridge club

is the winner, it having 94.41 points to 93.02 points of the Long Island Model Aero Club.

	L. I. Points	Bay Ridge Points
Distance from hand	20	14.53
Duration, hand	20	19.88
" ground	19.38	20
Distance "	14.89	20
Duration, water	18.75	20

The cup for which the above contests were held, was kindly offered by Mr. Francis A. Collins of New York.

In order that all records for model flying may be held by America it has been decided to hold an interclub tractor contest, the record for tractors now being held by England. All persons interested kindly communicate with Mr. Edward Durant, Aeronautical Bureau, World Bldg., New York City.

Great interest has been aroused among the model enthusiasts by a contest to be held shortly, known as the Scientific Contest. The models must weigh 8 ounces without the rubber, and must be a scale model or a prototype of a full size machine. In order that models may be studied from a more scientific point of view and that the so-called "flying stick" may be done away with, a club to be known as the Scientific Model Aero Club is now in the process of formation. The meeting will be held in the board room of the World Building. All persons interested in this branch of model aeronautics should communicate with Mr. Edward A. Durant for particulars regarding the club.

Model flying contests are held every Sunday afternoon at the field of the Long Island Model Aero Club, Old Mill Park, Crescent Ave., Brooklyn, N. Y.

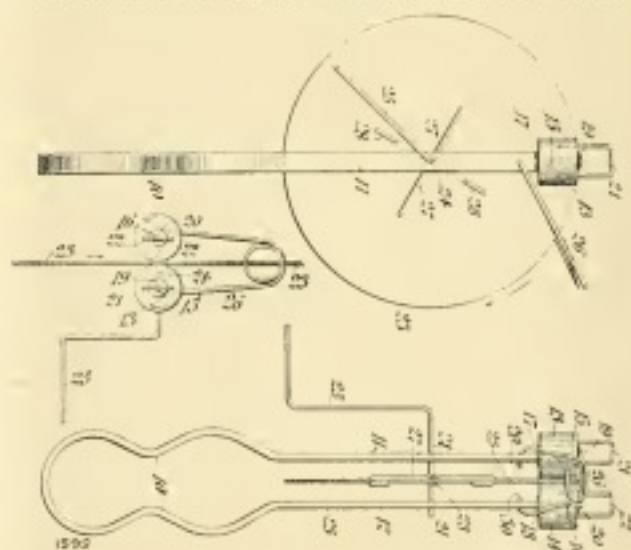
NEW WORLD DISTANCE RECORD

The world's model distance was broken June 14, 1913, at the Cicero Aerodrome, by Arthur Nealy, former President of the Illinois Model Aero Club, according to the Aero Club of Illinois of the Windy City. "The distance made was 2,740 feet and duration was 72 seconds. The model was a very fast one and a very good climber as the average altitude was 400 feet. The distance was taken by the officials of the Illinois Model Aero Club. This was the final meet for distance machines and the club is now devoting its time to hydros.

STRAND TWISTING DEVICE

Model flyers will be interested in the device of Montague Palmer, of New York, for winding up rubber power plants. In the device shown in the illustration there are two friction wheels each of which carries an eye consisting of a U-shaped piece of wire secured at its ends in the wheel, thus the wheels with these eyes form twisting heads to which the elastic strands of twin propeller machines are attached. These small wheels are driven in opposite directions by friction from a driving wheel 23, which wheel is retained in engagement with a spring as shown. Proper bearings are provided for these wheels and the shafts. In winding, the two strands of rubber

are secured by their hooks in the eyes 21 and 22 and turning the crank operates the small wheels in opposite directions. When wound the strands are disengaged by removing their hooks one at a time from the eyes. In this



way both strands are wound up the same number of revolutions simultaneously. The patent has been assigned to H. Rosenstein of the Ideal model concern.