

The National Air Races

The Event of the Year

ON September 21 at 2:17 p. m. the watchers at Felts Fields, Spokane, Wash., were rewarded for the hours of waiting by seeing N. C. Lippiatt, in a Travelair, cross the finish line as the winner of the Class "A" division in the race from San Francisco.

From that time until long after five o'clock the Air Derby entrants from both San Francisco and New York arrived at intervals. Of the fifteen starters from New York in Class "A," for planes of greater than 100 horsepower, the first four to place were:

- C. W. Holman, St. Paul (Laird).
- E. E. Ballough, Chicago (Laird).
- N. B. Mamer, Spokane (Buhl).
- J. P. Wood, Wausau, Wis. (Waco).

Of the twenty-five starters in Class "B" that left New York the first four to place were:

- C. W. Meyers, Detroit (Waco).
- J. S. Charles, Richmond (Eaglerock).
- E. Dettmers, Tarrytown (Travelair).
- L. Miller, Des Moines (Eaglerock).

Four of the five entries in Class "A" from San Francisco finished in the following order:

- N. C. Lippiatt (Travelair).
- Lee Schoenhair (International).
- Vance Breese (Breese).
- Jack Frye (Fokker).

The first three arrivals from San Francisco in Class "B" were:

- C. L. Langdon (International).
- D. C. Warren (Travelair).
- Lee Willey (Eaglerock).

The flyers from San Francisco reported good flying all the way, with the exception of the Columbia Valley, which was rather foggy. However, the New York racers had many experiences that made the race a hard one. Holman lost a tire taking off at Butte and had to land at Spokane on one wheel. Dettmers finished third in spite of much trouble, flying a straight compass course at nearly 8,000 feet elevation. At one time his magneto became water soaked and he had to make a forced landing and waste nearly half an hour in repairs. He lost another fifteen minutes repairing a gasoline feed line. At Missoula he blew a tire in landing.

The non-stop flight from New York to Spokane was not finished. The two entrants were compelled to land and thus disqualify themselves.

In the Aviation Town and Country Club event, for speed and efficiency,



Charles ("Speed") Holman, winner of the Class "A" race from New York to Spokane, piloting a Laird Commercial.

held on the 23d, James Ray of Willow Grove, Pa., in a Pitcairn sesquiplane, raced to first place with an average speed of 138.394 miles per hour, with E. E. Ballough of Chicago winning second with 132.361 miles per hour, in his Laird Commercial. The same two then proceeded to win the Seattle Chamber of Commerce trophy races in the same order.

Lieut. W. C. Cornelius of Selfridge Field, Mich., flying in the first event for military planes, won the pursuit race with an average speed of 155.412 miles per hour. Lieut. I. A. Woodring was second with 155.046 miles per hour for the sixty-mile race around the six-mile course. Lieut. L. C. Mallory was third with an average speed of 153.66 miles per hour.

In the speed and efficiency race for commercial ships for the trophy offered

by the Detroit News, F. N. Hawks of Houston, Texas, won first place in his Ryan brougham, with an average speed of 104.837 miles per hour. Jack Frye, Los Angeles, in a Fokker Universal, was second, with 100.065 miles per hour, and John H. Miller, Milwaukee, third, in a Hamilton at 96.509 miles per hour.

The following day in the speed contest for the Liberty engine builder's trophy, two specially motored Curtiss ships won the first two places with ease. Lieut. H. A. Johnson of Wright Field won first with 170.156 miles per hour, with Lieut. G. A. McHenry of Fort Crockett, Texas, second.

The race for commercial planes was won by Eugene Dettmers of Tarrytown, N. Y., in a Travelair, who averaged 102.548 miles per hour for 80 miles. Paul Richter, Jr., of Los Angeles, won second in his Eaglerock, and C. W. Meyers, of Troy, Ohio, in a Waco, was third.

The army's giant tri-motored Fokker from Bolling Field, Washington, piloted by Lieut. W. H. Beaton, of Langley Field, won the Packard Motor Company trophy race for capacity planes over a distance of sixty miles. The speed average was 115.198 miles per hour. Lieut. W. H. Doolittle of Selfridge Field came in second in the Douglas transport, with an average of 100.343 miles per hour, while Lieut. T. K. Koenig of Crissy Field, was third in a Douglas, with an average of 81.285 miles per hour.

E. B. Heath of Chicago won two races without competition in his midget Heath parasol, owing to the withdrawal of Jack Irwin of Sacramento, Cal.

Immediately at the close of the races at Spokane the field of over 65 planes left for Portland, Ore., for the additional races that were to be held at that city as a dedication of the new Swan Island Airport.

"Speed" Holman was the first airman to arrive, making the trip from Spokane in order to look the route of the race over before making the attempt the following day. On September 27 the military planes arrived in Portland

and the inhabitants were treated to formation and stunt flying by the crack flyers of the army and national guard.

In the afternoon the racers in both Class A and B began to arrive, Holman winning first place by 27 seconds. E. E. Ballough was second and Nick Mamer third, with Lippiatt and Schoenhair coming in fourth and fifth.

Terrific rains in both Seattle and Portland led to the postponement of the Class B race. A temporary decision to postpone the Class A race left several of the entrants out of it, and they retired from the field without being notified later that the Class A race would be held.

Defying adverse weather conditions, Portland's air derby was carried out on September 30th and witnessed by thousands of spectators who waited for the flyers for hours in a drenching rain on Swan Island aviation field.

The first to cross the finish line in the Class "B" events, Spokane to Portland race, was Leslie C. Miller of Des Moines, Ia., in his Eaglerock biplane. Close behind Miller came the winner of second place, C. W. Meyers of Detroit, flying a Waco biplane. Others of the 13 contestants continued to arrive during the afternoon.

The crowd at all times was intensely interested in the speedy field pro-

N. C. Lippiatt, of Los Angeles, who won the Class "A" race from San Francisco in his Travelair monoplane.



E. E. Ballough of Chicago (right) with Charles M. Dickinson, his passenger and backer, who has been flying for 17 years. Tony Mankiewitz is the other passenger.



Nick Mamer, who won third place in the New York to Spokane race in Class "A" in his Buhl Airster.

gram, which was run off in nice shape despite the heavy rain. At one time there were 65 machines lined up along the field, and each the best of its type.

The stunt contest between Lieut. Doolittle of the army and Lieut. Sanderson of the marine corps proved most popular, as they both turned loose everything they had in the pursuit plane race. While the race was won by Lieut. Jeter flying a navy Boeing, the big performance of the race was staged by Doolittle, who



The Fokker Universal used by Jack Frye.

pressed Jeter all the way and showed his rudder to the other two navy contestants, both piloting planes of superior power.

Doolittle was piloting an army Curtiss, with a H. P. of 435 as compared with the 512 H. P. of the navy planes. Theoretically fourth place was the best the stunt flyer could expect.



Charles Meyers of Detroit (right) and his passenger, Thomas A. Colby, taken on their arrival at Chicago.

But theory was not traveling as a passenger with the determined and misnamed Mr. Doolittle. He made up for his lack of power by skillful handling. He flew close to the ground along the river every foot of the 35-mile race—about 500 feet lower than the other pilots. He banked at steep



C. L. Langdon, of San Francisco, who finished with the winners in his International.

J. S. Charles, Richmond, Va., in his Eaglerock entry for the Class "B" races.



Lieut. Harold W. Beaton

angles on the turns. The net results was that he came in on the heels of his faster rival with an average speed of 140.93 miles an hour. Lieut. Jeter averaged 146.96 miles an hour for the course. Another army flyer, Lieut. Cornelius, made a great race against Lieut. Regan of the navy, but the faster plane won third with an average speed of 140.41. Cornelius was fourth with an average of 136.16. Lieut. Woodring came in fifth and Lieut. Commander Bogan of the navy sixth.

Despite continuous downpour both the army and navy stunt flyers entertained the huge crowd and it was difficult for the judges to pick out the winner, both Sanderson and Doolittle's work being practically on a



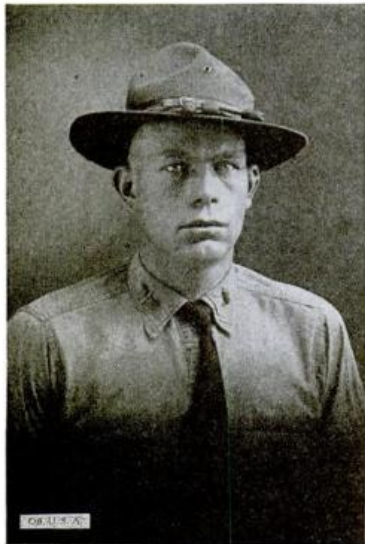
Lieut. W. L. Cornelius

par. However Doolittle was given first place on account of his entering all events of the day.

In the ten-lap speed race for commercial airplanes J. P. Wood of Wausau, Wis., flying a white Waco, won with an average time of 111.3 miles an hour. M. B. (Nick) Mamer of Spokane, flying a Buhl airster, was second, averaging 100.04 miles an hour.

The race for observation planes, a strictly military event, brought out a

Lieut. Harry A. Johnson



dozen army, navy and marine corps biplanes, evenly divided between DeHavilands and Douglas o-2s. The ten-lap race was won by Lieut. Taylor of the army in a Douglas. A DeHaviland, piloted by Lieut. Beverly of the army, annexed second, and two Douglasses, with Lieuts. Burgess and Grant, both army, got third and fourth. Taylor's average for the distance was 106.92 miles an hour.

Only three planes were entered in the small commercial ox5 race, which was won by C. W. Meyers, Detroit, in a Waco 10 biplane. Paul E. Richter, Jr., Los Angeles, flying his Eagle-rock biplane, took second. Tex Ran-



Lieut. G. W. McHenry

kin, third entrant, dropped out before the completion of the race, when he saw that his low-powered Waco was unable to keep up the pace. Myers made the five laps in 13 minutes 26.27 seconds for an average of 83.87 miles an hour. Richter made the course in 13 minutes and 40.63 seconds, an average of 82.45 miles an hour. Prizes were \$100 and \$50.

Guiding Planes by Radio

A FEW days ago Earl C. Hanson, formerly of the Radio Division, Bureau of Engineering, Navy Department, Washington, D. C., walked into the offices of POPULAR AVIATION and treated the staff to a demonstration of one of the latest developments in

radio design, particularly as applied to aircraft use.

Mr. Hanson, who is the inventor of the radio piloting cable in use in harbors for the guidance of ships, and the Panatrope, a radio-phonograph improvement, brought his entire apparatus with him in a traveling bag. He has designed and built a small, light and compact radio receiving and transmitting set, especially adapted for use in aircraft.

The one tube receiver is as compact as a camera, and not much larger, weighing, fully equipped with batteries, about 8 pounds. The sending set occupies about the same space and has the same weight, being operated by two 4½ volt "C" batteries.

A steel skeletoned building in the Chicago loop district is one of the poorest places in the country to test a radio, but to make a further handicap Mr. Hanson both sent and received messages over an antennae of hair wire, a tiny strand of enameled copper wire so fine that it is thinner than hair. Messages came through with perfect clarity and with no distortion; and to simulate conditions in a moving airplane the receiver was shaken about while in operation and given severe jars, such as might be received in landing. Neither shakes nor jars had an effect on reception and did not cause any microphonic noises or distortion.

The application of this new device, of which we had the first public demonstration, to the field of aircraft, can follow several lines. As a sending set, nothing need be said, for the utility of a transmitter weighing less than two gallons of gasoline, even with batteries, needs no explanation. The receiving set, however, is capable of being used in several different ways. It is so arranged, in the first place, that it does not take an electrician to make replacements of the tube or batteries. No wires need be attached to the batteries, as they are pushed into place and connections are made automatically. The set carries a spare tube which can be replaced in less than one minute. This means that any flyer can keep the set in order. There are only two controls to manipulate, and they will give the full range from the 50 meter stations upwards.

This small receiver can be readily adapted to the inventors plan for using the radio cable piloting device.

(Continued on page 61)