A FOUR THOUSAND MILE TRIP BY AIR



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By RALPH W. CRAM



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The morning of June 27, 1927, was a busy one at Ford Airport, Dearborn, Mich. Sixteen airplanes were about to leave on a 16-day flying schedule—one that would take them over a large part of the country, from Boston on the East to Omaha on the West, from Canada to Texas. The more than 50 pilots, mechanics and passengers who were to travel in them were assembled. It was my privilege to be among the passengers, who included government officials, newspaper men, business men—some of them owners of certain of the planes; ladies, and one child, winsome Rose Marie Schlee, whose cabled plea to her father, some 10 weeks later, was to have a part in halting an airplane trip around the world. It was an interesting company of people, lively with anticipation of what was to be a most successful and epochmarking tour.

The cruise upon which we were about to embark was the third annual National Air Tour. For a time it was called, for short, the Ford Tour, because Mr. Edsel Ford had provided the very handsome trophy which is competed for by the airplanes taking part in the Tour. As the donor of the cup expressed it, the Tours were projected "to demonstrate the reliability of travel by air on a predetermined schedule regardless of intermediate ground facilities."

THE GLIDDEN TOURS RECALLED

Frequently they have been compared to the Glidden Tours in the early history of the automobile, strenuous cross-country runs

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which tested the early makes of motor cars of a quarter of a century ago, leaving many of them stuck in the mud along the way while others plowed thru to a goal a week or two's journey from the starting point.

It is a good comparison, for rules governing the Air Tours make them more of an efficiency contest than a race. If speed alone were involved, the matter could be settled without leaving the airport on which we were gathered, that June morning, for the start of the long cruise. There had, in fact, already been speed tests of all the competing planes; but these were only one item in several to be used in the formula which would determine the "merit factor" of each plane. Under this formula, the winner of the Tour would be the airplane which carried the greatest load, with the least horsepower, at the highest speed, plus the ability to get off the ground quickly and to stop in the shortest distance when landing.

THE SIXTEEN TOURING PLANES

Of a somewhat larger number of entries, 14 airplanes are ready for the start, as competitors for the cup. To be exact, one should be deducted from this number, for it has been announced that the big Ford plane will fly the Tour and be scored, but being the only tri-motor plane in the lot, will not claim the trophy if it should win. An Army and a Navy plane accompanying the group increase its number to 16.

Anyone who has seen the planes which flew in the two previous Air Tours will note at once the improvement each year is bringing about in planes and motors. Of this we shall have more to say later. Let us here introduce the contesting pilots and planes. In the order in which they drew their numbers for the start, they are:

1. A Buhl Airsedan; pilot, Louis Meister. The Buhl planes are made in Detroit. This Airsedan is a closed cabin biplane, a five-

passenger job, the pilot an old Army flyer who dubbed the writer one of his "regular customers" when he was in charge of Airways operations at Dayton.

- 2. A Hamilton monoplane, the most original design in the group, with its all-metal, full cantilever or internally braced wings set into the top of the fuselage. This brought the passengers' heads right up into the wings, and the cabin windows were transparent panels set in the wing root instead of the sides of the fuselage. The plane is made in Milwaukee. R. G. Page, a veteran air mail flyer, was its pilot.
- 3 and 4. Eaglerocks, made in Denver, the first with a Wright J5 or Whirlwind engine, the second with an 0X5. C. P. Clevenger, known as "Clever Clev," piloted the Whirlwind job and Paul Braniff was at the stick of the entry with the wartime motor.
- 5. A Pitcairn Mailwing. This was a new type of plane designed for air mail service, and was the only plane on the Tour that did not carry a passenger. Its front cockpit had been loaded with 570 pounds of ballast and sealed. Jim Ray, one of the best of the Pitcairn flying organization, was its pilot. The Pitcairns are wealthy Philadelphians who are going heavily into the aircraft game, both in production and operation.
- 7. A Mercury, Jr., made in Hammondsport, N.Y., H.G. Mummert pilot. Mr. Mummert had the distinction of being the only pilot who had flown in all three tours. He had had bad luck in the others, but was to fare better this time. He flew the same biplane as in 1925, when it had a perfect score until it was forced down in the last lap due to a storm.
- 8, 10, 11 and 12. Waco 10's—the latest Waco planes. Wacos are made in Troy, Ohio, by the Advance Aircraft Corporation, and were such a popular three-place plane that the company was first in one's mind when one spoke of factories being way behind their orders, a few months ago. The distinction is not so great at present, when every factory making a good plane is similarly

swamped. The veteran flyer, E.W. Cleveland, piloted No. 8, and C.W. Meyers, J.P. Wood and J.P. Riddle, alert young pilots, held the stick in the others in the order named.

- 13. A Stinson Detroiter. This cabin biplane is owned by Detroit business men belonging to a club called the Wise Birds, and several of them flew the Tour in it. It was piloted by Leonard Flo.
- 22. A Ryan Monoplane. Piloted by F.M. Hawks with his bride of a fortnight as one of his several passengers, this gold-finished cabin plane attracted much attention. This was a sister-plane to "the one that Lindy flew." It is built in San Diego.
- 23. Ford Monoplane. This was one of the big tri-motor, all metal, 10-passenger cabin planes designed by Wm. B. Stout and built by the airplane division of the Ford Motor Company. It was piloted by Dean Burford, with Harry Russell as expert engine man.
- 24. A Stinson Monoplane. This is a later development than the biplane, No. 13, of the planes made by the Detroit company headed by Edward A. Stinson. It is owned by the Wayco Oil Company, of which Edward A. Schlee is president, and Mr. Schlee and his wife and daughter were among the passengers. Parenthetically, we may say here that the same plane was later flown around the world by William S. Brock and Mr. Schlee. On the Tour, its pilot was the famous Eddie Stinson, himself.

All were strictly modern planes flown by experienced pilots, whom I have named because of the interesting personnel, and because many of their names have since been prominent in the news reports of the New York to Spokane air races, the National Air Races at Spokane and other notable aerial achievements.

ARMY AND NAVY COOPERATION

Of the two courtesy planes accompanying the Tour, the Army

plane was piloted by Lieutenant R.G. Breene, and carried Referee Ray Collins of Detroit around the circuit in advance of the contestants. The Navy plane was a big all-metal three-motor plane bought from the Stout-Ford Company. It was identical except for interior fittings with the big Ford plane which was entered for the Tour, and with the airplane Stanolind, owned by the Standard Oil Company. The latter plane was also on the field, and later accompanied the tourists a few miles as a friendly gesture.

As the Tour started, two of the passengers in the Navy ship were Dr. Edward P. Warner, Assistant Secretary of the Navy for Aeronautics, and William P. MacCracken, Jr., Assistant Secretary of Commerce for Aeronautics. The writer was so fortunate as to be among the other passengers in this plane, the total being ten, including the crew. Our capable pilots were Lieutenant Commander A. C. Miles and Lieutenant H. R. Bowes.

PRELIMINARY TESTS

As I have already stated, the long cruise for which these planes are lining up is but one factor of the formula which will decide the winner. The preliminary tests they had been undergoing for two or three days past largely determined which would show the best total performance, barring ill fortune on the Tour.

The Whirlwind Eaglerock had shown the greatest speed, 130.2 miles per hour. All except the 0X5 Eaglerock were over 111 miles per hour. Under the rules each plane would be credited with a perfect score on each leg of the Tour that it flew at 85 per cent of the speed made on this test flight. A few pilots purposely refrained from opening their motors clear out on the test, figuring that their standing would be improved by their increased ability en route to fly at 85 per cent of their test speed. As speed X load was an important factor in the formula, however, the wisdom of the course was open to question.

The starting and stopping tests are known technically as stick

and unstick. Unstick is the time from the start of the roll until the plane leaves the ground. The Whirlwind Eaglerock was the quickest off, in 9.96 seconds; all got off in an average of 14. In landing, the Hamilton monoplane did the shortest roll, stopping in 5.93 seconds, and the average of all the planes was but little slower. Brakes helped most of them make their good showing here.

This leaves only load carried to complete our scrutiny of the preliminary scores. Here we find the big cabin jobs able to take on extra poundage that helps them a lot in the final showdown. The Stinson monoplane capped them all with a load of 1,500 pounds, about all live weight, the pilot and six passengers. When he "gave her the gun" and showed 124.3 miles per hour with such a load on the test flight, the wise ones opined that the race was Eddie's if he had no ill luck en route. And they were right.

The Hamilton carried 1,200 pounds, the Ryan monoplane and the Buhl and Stinson biplanes 1,000 each, the smaller planes from 500 to 700 pounds apiece. The big Ford plane carried an average of eight passengers and their baggage and a heavy radio receiving and sending set, which was in touch with the Dearborn field all thru the Tour.

THE FORD AIRPORT

Just a word, before we start, about where we are. Ford Airport, this point of assembly for the Tour, is one of the finest airports in the country. It was set apart as a landing field by the Ford Motor Company shortly after Henry and Edsel Ford began to show an interest in aviation. Six hundred acres of level ground afford runways 3,500 and 3,400 feet in length.

At one side of the field is the factory in which the big Stout-Ford all-metal airplanes are being made. When I landed on the field two years before, the factory was a small affair, with work progressing on two single-motor planes similar to the initial Maid of Detroit, which was put into the air in 1924. Now the factory has multiplied in size, and is in production on big tri-motor, ten passenger planes.

In the air we saw the Ford Flivver plane performing—a little, one-place affair, not yet in production. We strolled thru hangars 300x150 feet in size, into which planes for a whole army air squadron could be rolled. One realized why friends of aviation say the Fords with their millions are doing for it what no one else could, or at least what no one else has done.

Within sight, just off one corner of the field, was the 240 foot mooring mast which the Fords erected a couple of years ago, and which was the last word in mooring masts at the time. The Los Angeles has been moored to it. An elevator runs to its top. It stands for Detroit's interest in lighter-than-air craft, which is as notable as its activities in heavier-than-air. Its Aircraft Development Corporation has a contract to build for the Navy a dirigible—not of the old type, but an all-metal craft that the new light alloy, duralinum, makes possible.

WE ARE OFF!

With time and place and pilots and planes properly introduced—we are off! First the Army plane, bearing Ray Collins, the referee. Then our Navy plane; soon afterward the contestants, one minute apart. Only one hop today the first stop Buffalo, 232 miles away. Traveling almost due east, we are above Canada most of the way, along the north shore of Lake Erie. In a little over two hours the big Buffalo airport is beneath us, we land for lunch at the field, are driven to our hotel, are given a dinner in the evening, followed by the theater. Lincoln cars take us back to the field the next morning; and this is a fair sample of the hospitality extended by some 25 cities all around the circle. At 15 we stopped overnight, and at 10 only for luncheon.

Buffalo has an enormous municipal airport of 518 acres. It was typical of what many of the bigger cities have or are aiming for.

Next morning we hopped to a typical smaller but airminded town—Geneva. This beautiful little city, on the shore of Lake Seneca, has lately acquired a smaller, L-shaped field, which proved adequate for the big ships, but they used all of it. A feature of this stop was the manner in which the entire countryside had turned out to greet the planes, making a crowd larger than at some of the bigger cities, where flying is more commonplace. In the afternoon a flight of 160 miles took us to Schenectady.

FOG BREAKS THE MONOTONY

All without incident, so far-but not so next day, when fog over the Berkshires made it a hard piece of flying to get to Boston. Five of the planes had forced landings at various points, but after getting their bearings made the Boston airport, which is on the bayfront. There is only 60 acres of it, but it is easy of approach as water on all sides offers no obstruction.

Having reached our farthest-east point at Boston, we headed southeast the following day, for New York. The landing there was on Curtiss field, which with Roosevelt and Mitchel fields have figured in the news so much this year as the starting point of the various Atlantic flights.

At Philadelphia next day Harold Pitcairn and various notables greeted us, for we landed on the Pitcairn field, close by their new factory. It was only a luncheon stop, followed by a 95-mile hop to Baltimore. After dinner that evening, part of the entertainment was Colonel H.H. Blee's illustrated talk on aviation, closing a tour that had started at Moline two months before, and had taken him out to the west coast and back. By coincidence I heard his first and last lecture of his tour.

Over the mountains to Pittsburgh the following day always good for a thrill. In good weather the Alleghenies are in no sense formidable, but their green ridges lying at right angles to our course for some 75 miles are beautiful and picturesque. At

Pittsburgh we find we are quartered only a couple of blocks from the ball park, and we see the Pirates defeat the Cardinals in a good uphill game, in the afternoon.

It is Sunday when we take off next morning for Cleveland, so we do only 120 miles.

AT ORVILLE WRIGHT'S TOWN

Not so on Monday, which happens to be also the Fourth of July. We are off for Kalamazoo in the morning, our big tri-motor plane (I am traveling in the Ford entry just now) striking boldly out across Lake Erie without regard for the coast line. It is perfectly safe, thanks to our three motors, for two would carry us along if one should stop. After lunch at Kalamazoo we double back to the southeast, and wind up the Fourth in Orville Wright's city, Dayton, Ohio. Mr. Wright is one of the many prominent citizens of Dayton at the dinner that evening, and is the most beloved citizen of the town.

Short flights to Columbus and Cincinnati fill in another day, and then we fly to Louisville, to be greeted with genuine Southern hospitality, and realize that we are at the portals of the South.

Several of the planes landed for gas next day, for the scheduled hop of 317 miles to Memphis was the longest of the trip. It took us across the blue grass regions of Kentucky and finally across much of the recently flooded lands along the Mississippi.

As we fly to Pine Bluff we look down on the prairie land which now yields a rice crop that makes Arkansas the third rice state in the Union. We stop only for luncheon, but Senator Joe Robinson of Arkansas is there to help dedicate their new airport. It is a busy day, for in the afternoon we fly 271 miles to Dallas. Mayor Burt greets us there, and tells us that only the day before he had signed the contract by which the city became owner of Love field, the big airport with a dozen immense hangers that was a wartime training field.

OVER THE COTTON FIELDS

Up north now across cotton country to Oklahoma City and across oil country to Tulsa, where the evening banquet is on the hotel roof garden—a delightful change, for it was hot in July in Dallas. We see the big Kansas wheat fields on the way to Wichita, and land on a field there beside the Travel Air factory-a reminder of Wichita's early start and prominent place in Western aircraft manufacture. Lunch was served in the factory, and we flew 250 miles to Omaha in the afternoon.

Omaha, too, dedicated a new municipal field with our coming. After we left it, next morning, we crossed Iowa to land at Moline for lunch. and Illinois to spend the night at Hammond, Ind. One more day took us to Grand Rapids and then the Tour ended in a thrilling storm at Detroit. Some very nice work by the pilots brought 15 planes back on the field from which we had started 16 days before-the finish to an accompaniment of thunder and lightning and rain and a 40-mile wind.

ACCIDENTS-NOTHING DOING!

Not a person had been scratched, and hardly a plane. The Eaglerocks had been pursued by a jinx. A broken rod in the motor of the Whirlwind job compelled Pilot Clevenger to make a quick hillside landing just out of Pittsburgh. A new engine was the best repair, and it took a couple of days to get and install one, so we missed him and his two passengers for a time; but they rejoined us at Memphis and finished the Tour. Braniff in the other Eaglerock was handicapped by his low-power motor, which was not new by any means at the start. So when he arrived at Oklahoma City, his home town, he dropped out, after a sporting cruise of 3,000 miles.

EDDIE STINSON WINS

Finally, when the more than 50 people who had made the Tour joined with several hundred citizens in the grand wind-up banquet at Detroit, Edsel Ford presented the cup to Eddie Stinson, the winner of the Tour. The Stinson monoplane had a large margin on points at the finish. The real race had been between the Hamilton metal plane and the Mercury for second place, their scores zigzagging till the end. The Wacos had done well, No. 11 with Wood up showing an average speed of over 130 miles an hour for the Tour.

It is just as important, of course, that the weak points of engines and planes be discovered as well as the strong points, and that is one of the purposes of these annual tours. It was gratifying, therefore, that landings were forced by only two cases of major motor trouble, the Hamilton plane having some ill luck as well as the Eaglerock. The long grind caused some trouble with valve springs, of which the enginemen on the Tour took due notice.

SOME PLANE FACTS

Those interested in a comparative study of the planes in the three annual Tours found much that was pleasing. In the first Tour, in 1925, there were 16 planes powered with motors of the OX5 type; last year there were 10 planes using this engine; and this year but one. It was a good water-cooled engine in wartime training planes, and has been in use since because we had thousands of them on hand, as we had of the bigger Liberties, at the close of the war. Now they are being succeeded by the modern air-cooled engines.

Of the latter the well-known Whirlwind, "like Lindy used," was earliest in the field in the 225-horse power class, and we find one plane, a Fokker, using three of them in the first Tour, five equipped with them in the second, and 12 planes using a total of

14 of them this year. They accounted for the high speed at which the Tour was flown this year, and the manner in which the schedule was maintained

Last year only two planes were equipped with brakes. This year eight had them.

The first year there was one cabin plane, last year there were four, this year five. There would have been more, but many manufacturers were so busy they did not enter in the Tour at all.

THE NEW ATTITUDE TOWARD FLYING

Most significant of all, to a layman, and I think to anyone, was the new attitude toward flying, that we found everywhere on the Tour. It isn't so very long since the individual who went aloft in an airplane was regarded by his neighbors and his family as reckless, to put it mildly. For two members of a family to "go up" at once was regarded as almost criminal. But this Tour started with one whole family, the Schlees, father, mother and daughter, in one plane, a bride and groom in another, groups of business men in others, booked for the whole Tour, and two prominent government officials, Assistant Secretaries MacCracken and Warner, traveling with us for a time.

THE LADIES

Nor is that half of it. Seats were vacated from time to time, as busy business men returned to their desks, and their places were taken by the ladies. And they surely do like to fly. By the time the Tour finished, there were a dozen ladies in the party.

Tourists invited their lady friends, along the way, to join them. Ladies prominent in entertaining the party were invited to come along, and never refused. Wives of pilots appeared, here and there, and joined their husbands. Bandboxes leaned against Gladstones in the luggage pile. There was demand for curling irons and flesh-colored face powder and other essentials of

feminine pulchritude, at each control; and had the Tour lasted another 4,000 miles, apparently the only men left would have been the pilots. As it was, at the finish we were prepared to support the proposition that the Tour was the greatest traveling beauty show that ever hit the high spots of the country via the air route.

JUST AIR TRAVEL

The fact is that, as my narrative I hope has made clear, we were simply traveling by air a few hours each day. The rest of the time we were a part of the life of the 25 cities we visited, and that life was going on as usual, some thousands of people at most points, we hope, sensing the fact that something unusual was occurring, but having ceased to look upon people who travel the air lanes as at all different from themselves. Here is another function of the Air Tours, that of education, making the people familiar with the fact that the age of air travel is not only at hand, but is actually here.

Within another day, at the end of the Tour, next year's was being planned, and Manager Ray Cooper of Detroit, who arranged this one, was appointed to begin preparations at once for a bigger and better Tour for 1928.

THE SIGNIFICANCE OF IT ALL

Now I have been telling you, in a somewhat rambling way, of an Air Tour in which "a good time was had" by a large party of nice people, averaging over 50 in number all around the circle. It had not been all fun for the pilots and machine men; for them it was a good deal of a grind. Each of them was intent, of course, on making the best showing possible for his ship. And how well they had done was shown by the fact that, except for the plane that stopped at its home port in Oklahoma, every plane landed in good flying condition, capable of flying farther indefinitely, at the end of the long cruise.

I submit that such an achievement was vital and significant, in a year in which there have been other great successes and some deplorable tragedies, but in which this Tour demonstrated the safety of air travel on schedule between regular air terminals on land.