

By Richard Fenton

APTAIN FRANK M. HAWKS swooped down from a clear, cold sky to land at Roosevelt Field, New York, and break the transcontinental non-stop flight record by 36 minutes and 1 second, at the same time giving the first long distance test to the new type of cowling for radial motors, developed by the National Advisory Committee on Aeronautics.

It was disagreeable and cold, and only a few hundred people were there to greet him, as he climbed slowly from his open cockpit where he had held the controls for over eighteen hours. A big raccoon coat had shielded him from freezing but his mechanic had fared worse in the cabin, having frozen two fingers and taken sick during the flight.

Commenting on the record breaking flight and the nearly disastrous weather, Captain Hawks said, "There were times when I thought we would be lucky to get down alive. It was so bad after we passed Rosswell, I was almost tempted to turn back. I didn't expect it to be all roses. Now that it is all over, I don't see how it could have been much worse. This is a most treacherous time of the year to attempt transcontinental record breaking.

"I tried to get up over the clouds. Past Rosswell I began to climb and traveled at altitudes from 8,000 feet to 14,000 feet. The fog was terrible. I couldn't see anything. Hour after hour I flew by my compass and tried to stay on the course. For twelve hours it was so thick I thought we were never going to see earth again. At eight o'clock in the morning I saw land for the first time in many a mile. It was rough mountainous country and I recognized it immediately as West Virginia. I was far south of the course, as I had expected to cross Kentucky. I veered to the north and again ran into a white wall of fog. I came down to a lower altitude, as I knew the country well over which, I was flying, and struck a regular blizzard of sleet and snow. We plowed through this for some time and suddenly it cleared. Early in the afternoon I looked down and was relieved to find

the small towns and cities rather close together. I opened the throttle wider and settled soon after on Roosevelt field for an easy finish.

"We had a wonderful experience with the new type cowling. It is unquestionably a decided step forward in solving the aeronautical problem of resistance. The Pratt and Whitney Wasp functioned perfectly and was cool all the way. The oiling system was noticeably improved also by the cowling, never rising over 70 degrees Centigrade."

The Lockheed "Air Express" is the first commercial aircraft to be equipped with the new cowling, which was originally developed by the National Advisory Committee on Aeronautics, and in the record flight succeeded in increasing the speed of the plane about 25 miles an hour.

Mr. Lockheed, designer of the "Air Express" made the following statement regarding the cowling, "We obtained the specifications of the new type cowling from the National Advisory Committee for Aeronautics and have spent several



Oscar Grubb, mechanic, and Capt. Frank Hawks, pilot, with the record-breaking Lockheed monoplane.

months of experimentation to adopt this
advanced aeronautic development to our
aircraft. The success of the new type
e owling has certainly been demonstrated in the remarkable record breaking flight made by Captain Frank
Hawks. We are very proud of Captain
Hawks and his mechanic, Oscar Grubb."

Captain Frank M. Hawks, early in his air career, was an instructor and test pilot in the United States Army, serving there for a period of two years. He next became an air mail pilot and followed the mail routes in fair weather and foul for some time when the urge to be up and away possessed him, as it always appears to do, when there are new difficulties to overcome, new dangers to face and conquer. "The Hawk" began seeking new fields, and found them in Mexico, where he transported payrolls by air for the Texas Oil Company. California called next and Hawks answered. He purchased a sister ship to Colonel Lindbergh's Spirit of St. Louis and entered the National Air Tour of 1927. He placed well and then jumped to Spokane where he won first place in the Detroit News Air Transport event.

Last year "The Hawk" became technical advisor on aeronautics for the Texas Oil Company. Flying a huge tri-motored Ford plane of the Texas Oil Company, he won second honors in the 1928 National Air Tour. During that year Captain Hawks carried over 7,200 passengers as guests of the Texas Company without a single mishap.

Now, Captain Hawks, to climax an unusually interesting and eventful life, lowers the transcontinental non-stop record; gives a real test to aviation's latest development, steps from his plane. removes his flying boots and fur coat and dressed in a plain, well tailored business suit, remarks that he didn't have time to eat during his long "trick" at the con-

The red and silver monoplane "Air Express" consumed, during its record breaking flight, 400 gallons of gasoline, and 22 gallons of oil. The plane was not equipped with special tanks, the surplus gasoline and oil needed being carried in the cabin and handled by Captain Hawks' mechanic, Oscar Grubb. The fuel was stored in the cabin in five gallon cans to facilitate handling. There were found to be 50 gallons of gasoline left in the tanks and it was estimated that the "Air Express" could have flown for nearly three hours longer, as the plane was considerably lighter nearer the finish.

Captain Hawks got his heavy craft off the ground at Los Angeles after a run of 2,300 feet, with a load of 3,502 pounds, exclusive of the weight of the ship, which is 2,500 pounds unloaded.

The flight took 18 hours, 21 minutes, and 59 seconds and beat the previous record held by Colonel Arthur Goebel by 36 minutes, and 1 second. The average speed for the approximately 2,700 mile flight was 150 miles an hour. The take off was from Metropolitan Field, Los Angeles, California, at 5.37:30 p. m., Monday, February 4th, 1929 and the finish was at Roosevelt Field, New York, at 2.59:29 p. m., Tuesday, February 5th, 1929.

It is worthy of note that the record previously held by Colonel Goebel was also made with a Lockheed monoplane, though the Yankee Doodle was not equipped with auxiliary cowling or fairing.

Joe Nikrent, who clocked the Question Mark endurance test, timed the flight for the National Aeronautic Association.

Capt. Hawk's Air Express model Lockheed before installation of the cowling.

