

## A THRILLING TRUE STORY

# Observers Thrill as New Franklin Auto Motor Lifts Plane From Mud to Clouds

## First Flight In History Made With Stock Automobile Motor In Stock Airplane, Amazes Aviation Experts

A cheer bursting simultaneously from the lips of blase newspaper men, news-reel photographers and mechanics of an experimental flying station as a Waco three-place biplane powered by one of the new airplane-type Franklin automobile motors lifted its wheels from the ground and slanted rapidly upward during a recent test at the municipal airport in Dayton, revealed the importance which these calloused observers attached to the feat.

### Great Significance Attached to Flight

First time that a regular stock automobile engine has ever been put in a regular stock airplane and successfully flown in its first attempt, the test was rated by aviation experts as one of the most significant contributions to flying progress that has been made since the Wright brothers took the first heavier-than-air machine from the ground.

The Department of Commerce representative from Washington who licensed the plane and engine, said: "after inspecting the motor and ship, I felt no hesitancy in issuing the license.

"This will probably result in a reduction in the price of all airplane engines," he declared after the test, stating that "it brings into the field a maker who understands the economical building of engines on a production basis. I should not be surprised to see in a very short time as much as a 50% reduction on ships now costing \$4000 and more," he said.

E. A. Johnson, president of the Johnson Flying Service, Inc., who took the plane into the air: first virtually dragging the field to make certain that the engine would not cut out in the extreme cold that prevailed; next going aloft but remaining within gliding distance of the field as a precaution against a forced landing, and lastly gaining confidence

as the engine purred smoother than a 300 horse power unit, and lifting her nose sent the ship to an altitude where it became but a vermilion speck against a high cloud bank into which it disappeared, later to emerge and swing about the outskirts of Dayton.

"For the first time in my life I have been in a vibrationless ship," Johnson, who has had more than 4,000 hours in the air, remarked as he stepped from the cockpit at the conclusion of the tests. "Even with my bare hand pressed against the metal fuselage between the cockpit and the engine compartment, I was unable to detect the slightest tremble although it is always possible to feel vibration at that point when flying with an ordinary airplane motor."

The speed with which the Franklin-powered Waco took off, startled even the mechanics who made the installation. Many believed that an automobile motor would be unable to lift the relatively large plane from the sticky mud and slush into which the wheels sank for a depth of six inches.

Just before the Waco took off, another well-known ship powered by a well-known aviation engine charged down the runway with a roaring exhaust and covered almost half the distance across the field before daylight appeared beneath its wheels.

As if accepting the challenge, the Franklin-powered machine lifted its tail out of the mud and went racing after. Everyone watching the ship as it careened through the flying mud and water believed that the automobile power plant would require a much longer run than the standard-engined ship. Instead before it had covered half the distance required by the other, the Waco's wheels were in the air and it was 50 feet off the ground before it had passed the end of the tracks where the first ship had lifted.

It reached the 200 foot mark with a strong, steady climb, and here Pilot Johnson kicked the rudder and flipped the stick for a bank and turn. Watchers on the ground held their breath as the left wing dipped and the ship came around, the engine pulling with a strong beat as the plane circled. Without a slip it righted again and pursued its course in the new direction.

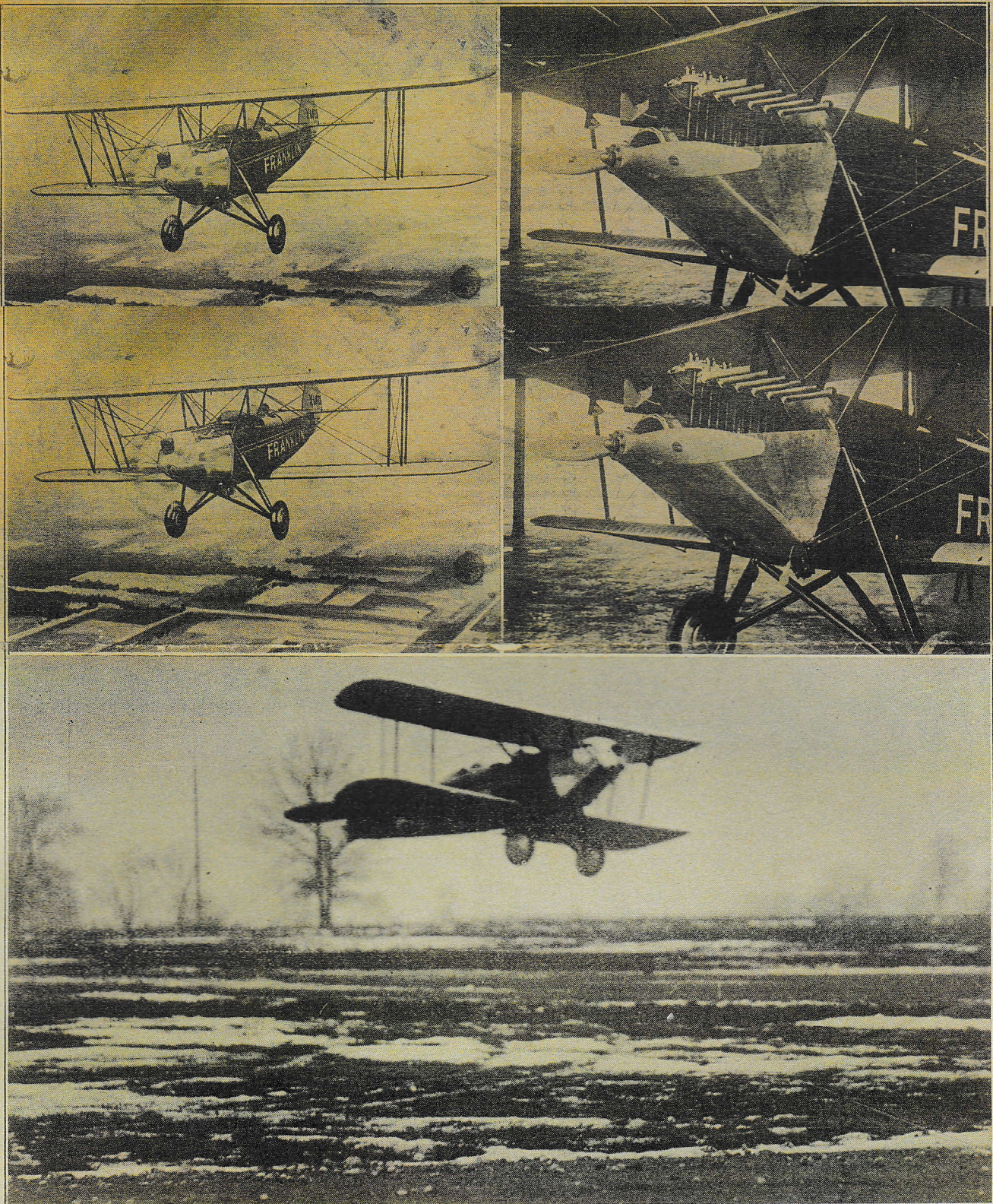
### Climbs in Steep Bank

Again and again the maneuver was repeated, Johnson climbing the ship in a wide spiral which gradually tightened until the nosing up and change of direction were very close to an Immelman turn.

Performance during the closing flight of the tests was most impressive. Here in the take-off, Johnson deliberately held the nose of the ship down, later pulling it up into a steep zoom. He alternately climbed and dove, proving the carburetion efficiency of the motor and its ability to take full throttle after running free, without the slightest sign of choking or loading up.

Veteran news men who have covered the "flying beat" almost since the time of the Wright brothers, and who were thoroughly alert to the significance of the tests being made, declared the event even held greater significance for the future of aviation than anything which has happened since the flight of Lindbergh.

## Views of Franklin's Record-Setting Flight at Dayton



Over the same fields where the Wright brothers built the first heavier-than-air machine actually to fly, a Franklin airplane-type air-cooled automobile motor, the original prototype of which dates back to the Wrights' early experiments, lifted

right shows the installation of the standard Franklin automobile engine on the engine bearers of the standard Waco airplane. Below is the plane rising sharply from the muddy runway after a preliminary run much shorter than that re-