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ROCKET PLANE SOARS IN UNCANNY FLIGHT; WRECKED IN LANDING

Spectators Shiver in Awe When New German Craft Sweeps Through Air, Gushing Fire.

1¼ MILES IN 75 SECONDS

Rear Winds Keep Plane From Rising Above 49 Feet, Preventing Safe Glide to Earth.

VON OPEL TELLS THRILLS

He Feels a Sense of Tremendous Pressure and Then Elation—Predicts World Flight.

The first flight of an airplane propelled by rockets was achieved yesterday by Fritz von Opel at Frankfort, Germany. In the air for a thrilling minute and a quarter, von Opel covered a distance of about a mile and a quarter at an average altitude of 49 feet.

The machine was wrecked at landing, when strong rear winds prevented the pilot from attaining sufficient height to insure a safe glide to earth. Von Opel escaped unhurt.

The successful flight followed two attempts to get off the ground, in each of which the ignition wires failed to set off the rockets.

Following is the aviator's own story of his emotions and the thrills of his flight.

By FRITZ VON OPEL.

Special Cable to The New York Times.

FRANKFORT, Germany, Sept. 30.—My first rocket flight! You want to hear something about my impressions and emotions ten minutes after my flight, when I myself can scarcely grasp my joy!

That other rocket trip of mine with a motor car at Avus was critical, too, but then at any rate I had four wheels beneath me and I was not suspended between heaven and earth.

For today's flight I have trained for a year, determined to solve the problem of how to shoot an airplane aloft without carriage or motor, but from rails, and how to drive this plane forward with rockets. All this now sounds simple, but prior to the year of actual training another year was passed in studies and tests with models. But now the technical side is uninteresting. Now I suppose it is my emotions that count—what this poor mortal thought, say, ten seconds before he was shot into the air.

Carefully Inspects Wires.

I do not possess more courage than any one else. I always have an uneasy feeling when I steer a strange car or boat. But gradually I gain confidence as my instinct follows my careful preparations and informs me everything is going well.

For an hour before this morning's start I inspected the course and personally went over every detail of the plane—cables, gears, fittings and rockets. I touched every single rocket and each wire. That was the most important of all. Two opposing ignition wires touching would spell "finish."

At last I give orders to place the machine on the starting course. I climb to the narrow seat and am fastened to it. I start the instruments, send the mechanicians back and set the main gears. Now I have got the current in the wires and am ready to start. Sander runs to me and shakes hands once more. We have always cooperated so well! I can see he is worried about me. All will go well, I tell him—that is the great idea for which we have worked.

Now my heart is beating after all. The visibility is not good. Clouds hang low over the valley. I must start right into that mist. I hesitate for a moment. Finally I draw a deep

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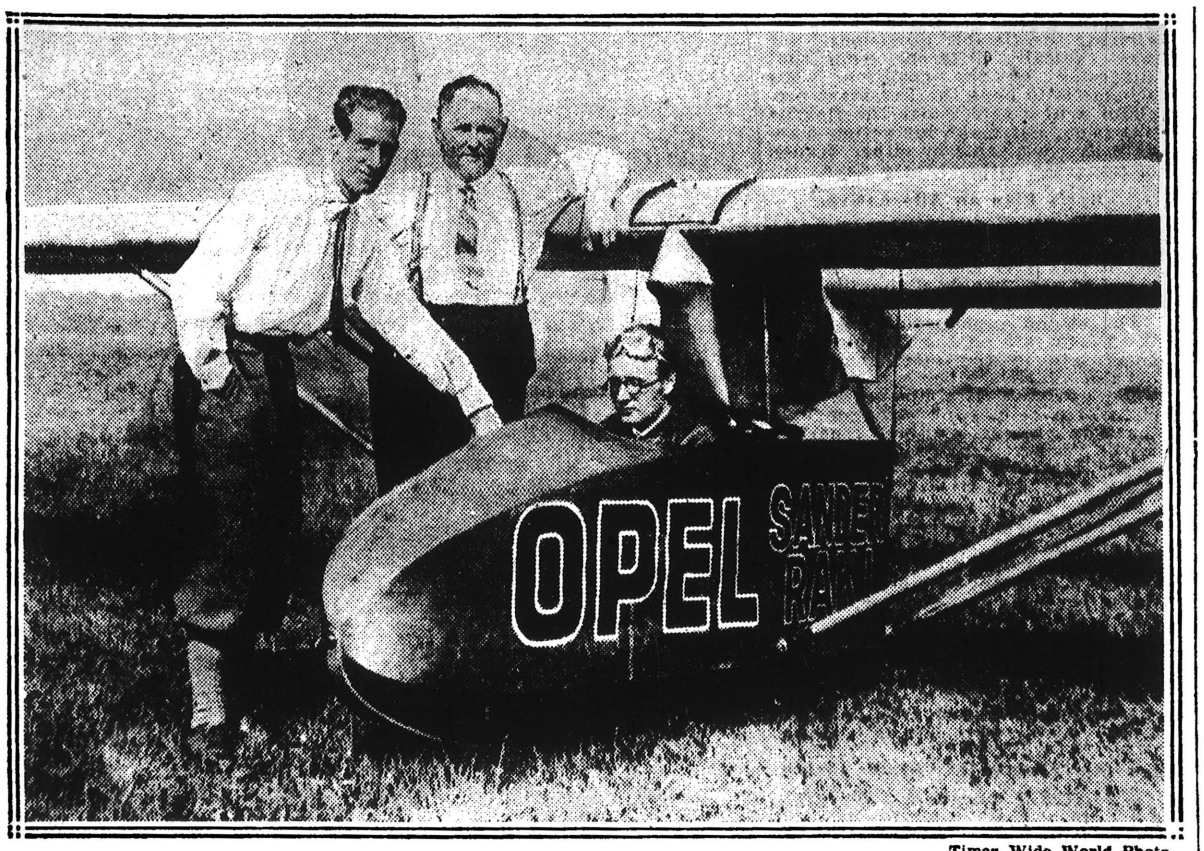

Times Wide World Photo.

THE ROCKET PLANE WHICH MADE A FLIGHT YESTERDAY.
Fritz von Opel at the Controls of the Unusual Aircraft Which Is Propelled by the Explosion of Rockets.

ROCKET PLANE SOARS IN UNCANNY FLIGHT

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breath and then ignite. Tremendous pressure! I feel the machine racing forward. It tries to rear like a horse. I feel amidst the hissing of the charge that the wings may break under the immense pressure.

A short stroke and the machine jumps clear into the air. The suffocating pressure eases and I can breath again. I am the master once more. I ignite and force the machine sharply upward. It mounts as if driven by a giant force. At the great speed I can hear only an even roar. The landscape races beneath me.

It is marvelous to fly like this, driven entirely by fire gases which escape from the nozzles at a speed of 8,000 kilometers (about 5,000 miles) an hour. When we are able to make full use of this gas we shall be able to fly around the world in under five hours. I know that time will come, and I see, as in a vision, the world traffic of the future which will amalgamate all the peoples of the globe into one.

Plane Seems to Fly Itself.

Thus I race into space as in a dream, without any feeling for space or time. The machine practically flies itself. I scarcely need to touch the wheel. I only feel the boundless intoxicating joy of making a flight such as man has never made before.

Suddenly—corresponding to a second with the time marked on my watch—every noise ceases. The force of the rockets has expired. Visions cease; actuality calls. I must return to earth. I press the machine to a steep gliding flight. Never before did pastures and meadows appear to me so earthly. I look for a landing place. I surmount a row of trees, using a reserve rocket, and come in a side-slip to 150 feet off the ground, and tough ground. Gliding with terrible bumps along the ground, the plane comes to a halt.

How curious is this feeling of standing still, quite still, immovable! Numb, I crouch down into the seat and feel like crying. Is it the elementary joy of still being alive, the joy of success or regret that everything is over?

Then some people come, run around the machine.

"Where is the motor?" they ask When I told them I had flown with rockets they refused to believe I was not joking.

ROCKET PLANE FLIES 1¼ MILES

Von Opel Keeps Aloft 75 Seconds in Thrilling Trial.

Wireless to THE NEW YORK TIMES.

FRANKFORT, Sept. 30.—Piloting his flying inferno, the Opel-Sanders rocket plane, at an average altitude of fifteen meters (about forty-nine feet) Fritz von Opel late this afternoon gave a spectacular trial demonstration of motorless aviation by keeping his rocket-driven baby plane aloft for seventy-five thrilling seconds.

The flight, covering a distance of two kilometers (about one and a fourth miles) ended with the wreckage of the machine when strong rear winds prevented him from lifting his plane to an altitude which would have assured him a safe path for landing. The pilot escaped unhurt, and had sufficient rocket ammunition on hand to cover another minute's flight.

Twice earlier in the day Opel tried to have himself hurled into the air by powerful starting rockets, but each time the ignition wires failed to set off the rockets properly and both attempts only carried the plane about 100 feet forward.

After six hours' experimenting and consultation with his fellow-rocket expert, Friedrich Wilhelm Sanders, Opel announced at 4 P. M. that he was determined to make a third attempt.

He waved the signal to an electrician, who set off three powerful rockets and the motorless plane was swept off the track with a swishing of sound and fire as uncanny as it was magnificent. A tail of furiously rushing flames marked the plane's path as it shot along and higher with each fresh push from another exploding rocket. Its lurid trail only ended when Opel decided to turn off his ignition batteries and brought it down in a cloud of black smoke in a corner of the flying field.

The youngish-looking aviator—bold enough when it comes to taking risks on land, water or in the air—hopped out of his seat just as the plane smashed on the hard turf. Brushing back his towsled fair hair, Opel nonchalantly surveyed the wreck, still with a smile of satisfaction. Then he welcomed a score of spectators, who gathered up broken bits of the plane's wings and fusilage on which the pilot wrote his autograph. Only a minute earlier he was being swept through the air on a wave of roaring sound and gushing fire which made the onlookers shiver with fear and sent the women and children scuttling for safety.

The Opel-Sanders rocket plane, which today established a record for motorless flying with the aid of rocket propulsion, is a combination of a glider and baby plane. It weighs 250 pounds. It has an abruptly abbreviated body which terminates in a magazine containing spaces for sixteen rockets, each eighteen inches long and three inches in diameter. Two steering fins are attached behind the wings, which have a spread of about thirty fset.

After trying out various methods of getting his rocket plane under way, Opel adopted a running track, about fifty feet long. From it the plane which, with pilot and a full load of rockets weighs about 500 pounds, is shot into the air by three rockets weighing ten pounds each and possessing a lifting or propulsion pressure equal to twice the weight of the machine. These rockets carry an extra heavy load of powder and burn exactly two seconds each, long enough to shoot the carriage on which the plane rests down the starting track.

Here the plane is catapulted into the air by the explosion of the rockets fired by the pilot. These rockets, which carry the machine through the air, burn for only twenty-five seconds, during which time they generate lifting power of twenty-four kilograms (about fifty-three pounds) per second. The plane shoots off the running track at a speed variously estimated at 120 to 150 kilometers (about 75 to 94 miles) an hour. Its pace when in midair is controlled by the intervals between the firing of the rockets. When the ammunition is exhausted the plane can be brought to earth on the glider principle.

Opel, with the aid of Sanders, hopes to develop the rocket principle sufficiently to demonstrate its uses in connection with starting airplanes and with acting as a brake. His chief difficulties today were caused by his inability to fire off his magazine of rockets in proper progression. He overcame this by improving his system of batteries and ignition wires.

Despite his victory and his undaunted faith in the rocket's future, Opel modestly insisted the demonstration was wholly in the nature of a trial, and that much experimentation is still needed to bring the rocket to the stage of practical perfection.

His chief collaborator, Friedrich W. Sanders, views today's flight as a vindication of his power rocket, although he predicts the liquid rocket will succeed the present method for propulsion purposes.

Today's demonstration by Opel marks the climax of a series of spectacular experiments, both in public and private, with the rocket apparatus. A year ago last Spring he startled the public with three tryouts of his rocket car which inspired further exploration of the rocket theory. He now proposes to concentrate on the use of rockets in connection with commercial aviation.

NEW ROCKET CAR METHOD.

Valier Drives One With Liquefied Gas Instead of Powder.

Wireless to THE NEW YORK TIMES.

LESSEN, Germany, Sept. 30.—Max Valier, noted for his repeated tests with rocket motor cars, made another attempt today, this time using liquefied gas instead of powder for the rockets.

The new vehicle he used is a long-stretched carriage on four wheels to which three steel plates are fixed behind containing the gas. Before starting the valves are opened and the gas escapes, driving the car forward.

Herr Valier succeeded in developing a speed of 64 kilometers (40 miles) an hour, which, according to a statement by him, was all he expected, his chief aim having been to test and demonstrate the new principle, which differs entirely from the old method. He expects to beat all existing world records after the new method has been developed properly, especially with airplanes.