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# TRANSLATION

TWO STAGES INTO THE SKY

By

V. Krivosheyev and Bor. Semenov

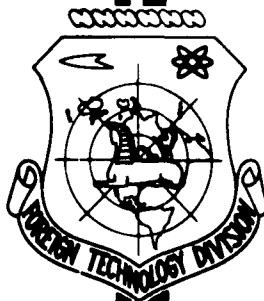
## FOREIGN TECHNOLOGY DIVISION

AIR FORCE SYSTEMS COMMAND

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## UNEDITED ROUGH DRAFT TRANSLATION

TWO STAGES INTO THE SKY

BY: V. Krivosheyev and Bor. Semenov

English Pages: 7

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16, 1962, 1 p

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## TWO STAGES INTO THE SKY

by

V. Krivosheyev and Bor. Semenov

Special Correspondents of the "Izvestiya"

World Record of P. Ostapenko: altitude, 22,689 m; speed, 2,500 k/hr

On the fourth of September of this year the aviator V. S. Il'yushin set a new world record. In horizontal flight <sup>he attained</sup> 2,100 kilometers per hour soaring at the same time to an altitude of 21,300 meters. The record flight was made on the aircraft "T-431." This is the same aircraft with the triangular wing on which several years ago already set an absolute altitude record.

The readers of the "Izvestiya" has asked us to tell about the details of the heroic flight. The correspondents of the newspaper went to Vladimir Il'yushin immediately after the occurrence, but he steadfastly warded off the "onslaught" and smilingly added, "Be a little patient; this is only the first stage."

It was clear that his record would be exceeded.

By whom? When?

"By whom? By my friend. When? Records are set at dawn!" Vladimir smiled and turned the conversation to another subject. "Let us rather drink tea." He did not wish to talk about the record any more.

In the rules of the International Aeronautical Federation this is this condition. A new world record is accredited only in the case where it exceeds the previous one by not less than 3 per cent. What does this mean? The altitude record set in December of 1961 by J. Ellis on one of the newer American aircraft McDonnell B4E-1F equalled 20,250 meters. In order to beat this Il'yushin would have to climb higher by not less than 607.5 meters. He rose

to 21,300 giving him a reserve of 442.5 meters.

Now we knew--the person who would set the next record would have to get his aircraft up to not less than 31,939 meters. The records are set at dawn when the sun is lighting up the aircraft and it is easier for the cinematic theodolites to follow them.

And Vladimir Il'yushin and the other record man George Mosolov like to say, "It is not so difficult to set a record in the air as it is to establish it on the ground."

While waiting for the "necessary" dawn every cloudless night (as there are few of them this autumn) we kept going to one of the stations near Moscow

for observing record flights. And each time unrewarded for our pains we went back home. The station was under lock and key. And the days went by. Finally not holding out longer we one late night telephoned Il'yushin. Could he still

V. Il'yushin

say something? Who? When?

The telephone was picked up by his wife. She is always sweet and obliging, but this time she was categorical, "Volodya is asleep and I won't waken him. When does he get up ... "

"At dawn!"

We looked up at the sky. Billions of stars unhid by clouds were winking maliciously at us. It's time to get to the airfield. And again our auto rushed through the empty night streets of Moscow. And again our chauffeur grinned, "Let's roll past the houses!"

Aha! Ahead of us there was a black Volga with Il'yushin's number. Could it be that he is going to beat the record.

"Overtake him," we demanded.

The cinematic theodolite records: altitude 22,100 ... An instant more and there will be a world record

Overtaking Il'yushin on the ground is no great accomplishment. He held the speedometer at "50."

But the airfield, as they say, lives in its own usual fashion. The technicians has already uncovered the silver-colored machine. Later there stepped up to it an aviator dressed in an altitude flying suit. The mechanic gave the word--the machine is ready for flight!

Distance and the predawn haze made the face of the pilot unrecognizable, and the high-altitude suit, clumsy from the ground dweller's viewpoint, changed the gait, covered up the figure. So, who is this then? Il'yushin? Mosolov? Vasin?

The ether was filled with signal calls, some kind of figures, and reports in one word--"ready!", "ready!", "ready!" This was reported by the cinematic theodolite stations, whose duty it was to record on film every stage of the flight. Finally we heard the voice of the pilot,

"Request permission to start."

The machine trembled, a long tongue of flame licked the concrete, the air waves reached the distant grass and pressed it to the earth. The air fairly trembled from the roar. This time the pilot is going for a record. What does he need for this?

A known Soviet record-holding aviator expressed it thus,

"The record is a flower. Too bad that only one may pluck it. You see the flowers grow on the soil plowed and watered by many--the soil of all of our records, the discoveries of science, the attainments of engineering, the daring of the designers, the labor of the workmen."

But we knew something else. The record is the engineering knowledge of the pilot multiplied by inquisitive mind, will, courage.

Our pilots possess all these qualities. In his day George Mosolov brilliantly (with distinction) finished the course at the Moscow Aviation Institute. The head designer constantly confers with him.

Courage? At times untried machines which the test pilot Sergey Nikolayevich Anokhin was flying refused to subject themselves to the pilot, but Anokhin even in the worst cases compelled the machine to return to the airfield.

Will? Two years ago a drunken hooligan driver smashed into Vladimir Il'yushin's Volga. Multiple fractures with dislocations, plaster casts, crutches. The doctors--"Getting back to normal is questionable." For him there was no question. Six hours a day on crutches on a stairway from the fifth floor and back. Up and down; up and down. Exercises bringing pain every second, but he walked. And after a year he was already back at the airfield. The doctors--"Fit for air duty without restrictions."

At the observation station which met us there precious nights with locked gates they bared a snow-white apparatus and the tube of the cinematic theodolite was pointing upward.

From the loudspeaker there was wafted to us, "Takeoff permitted."

"Order un'arstood," answered the pilot, and the aircraft having pierced the white low-hanging fog shot upwards. We saw a flying "stick." How does one fly on such a thing? But the machine ascended almost vertically.

A few seconds passed and on the ground was heard the sonic boom. With the naked eye the aircraft was no longer visible.

A flying "stick?" This is only on the outside. In fact it is altogether not so. At the time of his illness, distressed by his separation from the air, Vladimir Il'yushin wrote a number of stories. In it P. Ostapenko there are detailed instances from the life of a test pilot. Among the stories there is an episode:

"The aircraft was gaining altitude. And suddenly there was a shock. No, not a shock. A shot over the ear! And then a jolting from which one is dazed. The life of the engine is cut short.

"I bring the machine into a glide, at first slowly, and then more impulsively the aircraft begins to go down. The altitude is 2,000 meters. Landing gear? No, rather soon. But now it's time. Altitude 500 meters. Smoothly I begin to pull the machine out of the gliding angle and reduce rate of descent. The descent is finished. The machine is already rushing over the concrete and having lost its speed its wheels touch. Down!"

That is what the Soviet aircraft are like. That is what the courage of our pilots is like.

But now the ground continues the conversation with the air. The machine passes through all points of observation with the precision of a hundredth part of a geographic second.

"The course is correct," the ground says.

Instead of the regulation "I understood you," the air answers "Understood."

Having attained the stratosphere the aircraft rushes forward in strict horizontal flight with constant speed.

A few minutes later we saw how the machine came to land. It moved to-

ward the concrete strip almost vertically.

The machine stopped. The transparent hood was thrown back. From the aircraft emerged the pilot. From different points of the airfield there rushed to him friends, pilots, mechanics, engineers. So who is this? Mosolov, Il'yushin, Vasin? The pilot removed his helmet and everybody saw his happy distracted smile. A blond fellow of medium height, strongly built; we did not know him at all.

Afterwards we found out. This was Peter Ostapenko. On the aircraft Ye-166 he had set a new world record, having reached a speed of 2,500 kilometers per hour he brought the machine into level flight at 22,680 meters.

We asked the chief designer in aviation engineering to tell us about the new world record holder.

"He is a remarkable lad," exclaimed the chief designer. "Comparatively recently he was a military pilot. Now he is a civilian pilot; he was discharged and has come to work with us. He became a test pilot. He is a solid flyer; you saw it yourself, but he wants to fly still better. He also wants to know still better. Therefore he is studying in the institute. Soon to his diploma of a pilot he will add the diploma of an engineer. He is a remarkable lad," the chief designer repeated, "and the same can be said of his teacher, George Molosov."

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Thus in the course of ten days in September there were established two new outstanding world records. Soviet aviation has moved upward by two gigantic strides.

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