

Южно-Уральский государственный университет

Национальный исследовательский университет



Introducing myself in a presentation

Work of the STz-137 group student of Skvortsova V.D.





Good morning!

I am going to tell you about:

- myself and my hobby
- the company where I work
- my specialty
- •my value and the result of my work



About



myself

Let me introduce myself.

My name is Valya Skvortsova. I am 24 years old.

My hobby is sport orienteering. It is kind of sport where sportsman use a map and compass to run an unknown distance through checkpoints located in the forest.

I am going to get a master's degree in physical education in order to be a trainer in the future.





About



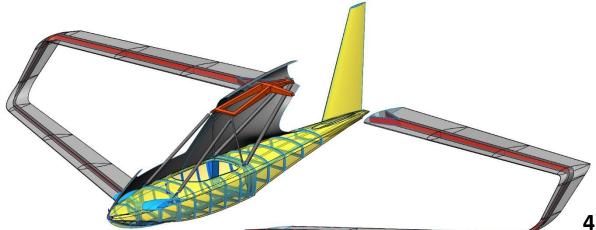
myself

I graduated from SUSU with a degree in aircraft and helicopter engineering in this year. The topic of my graduate work was Designing the wing of an ultralight hydroplane.











Company



At the present time I work as an engineer at the Chaplygin Siberian Aviation Research Institute (short name is SibNIA).





The aerodynamic configurations of the legendary An-2, A-57 and Su-27 aircraft have been worked out in the laboratories of the Institute. Strength and fatigue tests of more than 200 types of various aircraft were carried out, including the Tu-144 supersonic passenger aircraft and the "Buran" aerospace aircraft.

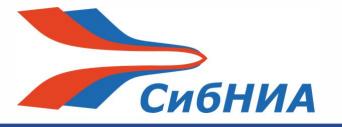




Now the main directions of the SibNIA's activities are improvement of flight performance, modification and certification of aircraft, design of local and regional airplanes.

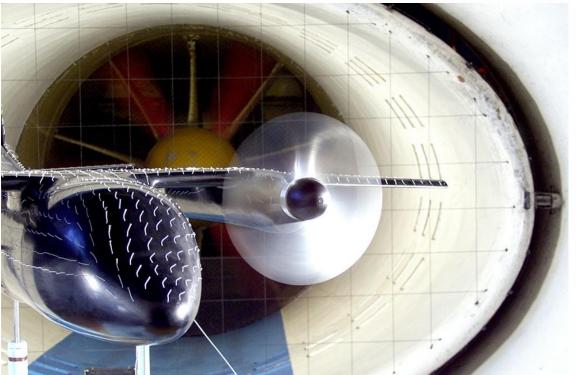


Company



I work in the experimental aerodynamics department. Design and production of aircraft models carried out here. We have wind tunnel of low subsonic speeds. It tests aircraft models and power plants. The interference of the airframe parts and engine on different flight modes is investigated here.







Results

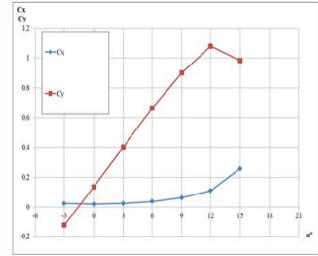


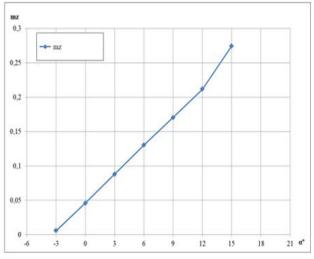
What about my value to work I design airplanes.

- •My task is to determine such basic parameters of the future aircraft as take-off weight, takeoff and landing speed and distance, minimum and maximum flight speed, flight range and height.
- •Also I choose engine parameters.
- •I calculate the forces and moments forces and moments acting on the plane using the formulas and plot graphs and diagrams.
- •I define configuration of plane and make 3D-model.

The aircraft I have designed must be safe and comfortable for passengers and crew, it must comply with technical specification.

Only a few of the designed aircraft are implemented in life, but it is very important at the development stage to determine the viability of a new idea.











Thanks for your attention!

I am ready to answer your questions