

## FOREWORD



The science of aviation is one the most exciting areas of human knowledge. Modern aviation as we know it has been made possible as a result of vast scientific research that has been carried out in different countries over the last century.

This book gives its readers the opportunity to learn about the history of the science of aviation in Russia, from the early beginnings to the present time. This history is inherently connected with the history of the Central Aerohydrodynamic Institute named after Professor N.E. Zhukovsky (TsAGI) which is presently one of the leading research centers worldwide. This book will open to the reader some previously unknown pages, which for different reasons were kept secret until recently.

The book tells the story of science through the life stories of individual people, who have contributed to its progress in different periods of time. The book also tells the story of the creation of

one of the most important testing facilities in the world which is still operational and which has made great strides in aerospace research.

Since this book is based on native Russian material, the reader may find some differences not only in setting out common subjects but also in conventional characters. For example, in place of  $C_L$  widely used in Western countries  $C_Y$  is used in Russia, instead of  $C_D$  we use  $C_X$ , while “lift-to-drag ratio” is referred to in Russia as “aerodynamic quality” designated by the letter  $K$ .

This book is based on the Russian Edition\* dedicated to the 90<sup>th</sup> Anniversary of TsAGI. The idea to create an English version belongs to one of us, but we enthusiastically worked together as a single team to make it happen. We would like to express our appreciation to our colleagues who previously contributed to several chapters of this book. They are: Evgeny Vozhdaev, Vladimir Sokoliansky, Anatoly Munin, Sergey Kusakin, Konstantin Kosminkov and others. Our profound gratitude goes to them for their efforts.

Now, when science in general, and the science of aviation in particular, are assuming an ever more global dimension, transcending national boundaries, the authors hope that this book will be a stimulus for expanding cooperation between TsAGI and its foreign partners, as well as establishing new contacts to which TsAGI’s scientists are always open.

Hopefully you will enjoy reading this book.

Sincerely Yours,  
Georgy Bushgens & Sergey Chernyshev  
Moscow, 2011

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\* G.S. Bushgens, E.L. Bedrzhitsky “At the Turn of Two Centuries”, “NAUKA” Publishing, Moscow 2008.