

Title of the thesis:	Determination of Influence of a Spoiler and a Flap on Standard Airfoils
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Type of thesis:	bakalářská
Faculty:	Fakulta strojní (FS)
Department:	Ústav mechaniky tekutin a termodynamiky
Reviewer:	Ing. Ludmila Nováková, Ph.D.

The topic of this Bachelor's thesis is an analysis of the influence of mechanization components of a wing. Experimental study is aimed to determination of the effect of flap and spoiler on two specific types of airfoil. The assignment involves both literature review and experimental study. In general the required assignment is fulfilled. The objectives are well defined and they are in conformity with the aim of the thesis. The introductory part sets out a clear background study of the influence of mechanical means of affecting lift and drag of airfoils. Theoretical knowledge is well synthesized. The practical part describes the experimental set-up and methodology followed by the discussions of the obtained results.

The literature review is comprehensive, relevant to the topic. Enough literature and extensive website references have been used and they provide the theoretical base for the student's own experimental work. The methodology of the experiment is well chosen. The experimental data give indication of the effect of the spoiler and flap. However, experimental results show high discrepancies with numerically obtained data (taken over from literature). By author, this fact is caused by the problems connected with relatively small test section of the available wind tunnel.

The thesis has 28 pages (35 pictures, no attachment). The format and structure of the thesis is of standard which included all necessary sections with a summary that covered all relevant issues. Some unusual symbols are used to represent basic quantities. For example pressure is represented by the symbol "q".

The thesis is well structured and well presented. It provides a very good summary of mechanization components of a wing. The influence of each component is clearly described. The experimental results show the flap and spoiler affect on the drag and lift coefficient in line with expectations.

DEFENSE OF THESIS: recommended
FINAL CLASSIFICATION PROPOSAL: A

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