Abstract

EVALUATION OF PARAGLIDING THEORY TEST ITEMS FOR PILOT LICENSE APPLICANTS

Objectives: The aim of this work is to evaluate and optimize a set of paragliding the theoretical items appropriate for testing pilot license applicants of LAA ČR.

Methods: This aim is realized by means of the theory of testing. Basic methods of testing form the background research of this work. The items were designed as multiple-choice, to select one correct answer. These items were assigned to the applicants for pilot licenses and were evaluated by the apparatus of testing. Microsoft Excel 2003 was used for collecting data and results evaluation. The computation according to the formulas in the theoretical part was performed in Matlab 2007b. Based on this analysis, the results were presented and optimization of these items was proposed.

Results: Three hypotheses were examined in this work. The first dealt with a relation between evaluated difficulty of test items and their points value, which was assigned by the LAA ČR. The second hypothesis concerned the number of used distractors. The third hypothesis was focused on the sensitivity of the items. The evaluated difficulty of test items matched items point value in 26 % of the number of items. 92 % of the alternatives were used and sufficient sensitivity had 78 % of items. The reliability of the test by Kudera-Richardson was 0,8.

Keywords: test, multiple-choice test, evaluation of multiple-choice tests, test reliability