

**CTU**CZECH TECHNICAL
UNIVERSITY
IN PRAGUEFACULTY OF TRANSPORTATION SCIENCES
DEPARTMENT OF AIR TRANSPORTCzech Technical University in Prague
Faculty of Transportation Sciences
Department of Air Transport
Horská 3, 128 03, Prague 2

e-mail: hanakle1@fd.cvut.cz, sochavla@fd.cvut.cz

Study programme: Technology in Transportation and Telecommunications

Study field: Professional Pilot

REPORT OF BACHELOR'S THESIS ADVISOR

Student: Joshua Nicholas Ramos

Thesis: Modeling Pilot Situational Awareness in Runway Incursions

Thesis assignment: Thesis does not violate CTU methodological instructions (link) Minimum report length is met (min. 35 pages) Thesis assignment fulfilled with each assignment point clearly addressed

	Bachelor's thesis evaluation criteria	Score
1.	Formal and technical aspects. (0 – 30) Evaluate meeting the thesis goal and overall quality of the report with respect to the assigned topic. Excellently addressed assignment evaluate with maximum points. Reduce evaluation proportionally to the extent of the assignment not being addressed properly.	30
2.	Theoretical part and literature review. (0 – 30) Evaluate the relevance of theoretical part with respect to the assignment, extent of the literature review and systematic presentation of the information. If directly copied information dominates (given no violation of citation ethics), reduce at least by 15 points. Another reason for reduction is insufficient choice and presentation of theoretical background, literature, and resources.	30
3.	Extent of implementation works (SW, HW), application of knowledge, methodology appropriateness and thesis conclusion. (0 – 30) A complex and flawless report suitable for publication receives total of 30 points. This aspect is evaluated in terms of contribution to the theoretical knowledge with practical implications. Especially positively perceived are created models, SW products, technical implementations and validated methodologies. Minor methodological flaws may reduce evaluation by maximum of 5 points. Methodological inconsistency with theoretical background, unclear or only partly adequate technical approach reduce evaluation by minimum of 15 points. Further reduction of evaluation can be due to insufficient discussion and conclusions.	27
4.	Formal aspects and thesis structure (writing, text structure, graphs, figures, citations, references etc.). (0 – 10) Evaluated are formal requirements with respect to the rules of writing and thesis attributes, i.e. text formatting, report structure, reference list, inclusion of graphs and tables, citation style. Violating individual requirements evaluate by reduction of 2 points for each violated aspect. Grammar errors, typos or inadequate stylistics or terminology leads to reduction of 2 to 4 points. The report shall include only standard and technical terminology (evaluate the capability to use technical terminology – 2 points), graphs follow standard rules (2 points) and, similar to tables, include legend and are clearly readable (2 points). ISO690 and ISO690-2 citation rules are obeyed (2 points).	10
5.	Total score:	97

Comments:

If more space is needed, attach to this report additional text on separate pages.

The presented thesis deals with the issue of pilot situational awareness by means of a novel perception theory - the Interface Theory of Perception (ITP). The student analyzed the theory and applied it to the runway incursion scenario at Prague airport. The results show a novel way of dealing with human factors by means of flight simulation with virtual reality, and a novel way of explaining different behaviours of humans in the aviation. I consider the thesis very successful in achieving its goals, the student worked largely independently despite the advanced nature of the ITP. The only limitation stems from inability to run more robust evaluation, but this was mainly due to external factors unrelated to the work of the student (e.g. simulator measurements).

Overall thesis grading:

	A (excellent)	B (very good)	C (good)	D (satisfactory)	E (sufficient)	F (failed)
Score:	100 - 90	89 - 80	79 - 70	69 - 60	59 - 50	< 50
	X					

Note: Please justify your evaluation with your comments above

Bachelor's thesis overall evaluation is A and I do recommend the thesis for defence.

Name: doc. Ing. Andrej Lališ, Ph.D.

Signature:



Organization: CTU in Prague, Faculty of Transportation Sciences

Date: 30. 08. 2021