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Study programme: Technology in Transportation and Telecommunications

Study field: Professional Pilot

REPORT OF BACHELOR'S THESIS REVIEWER

Student: Rao Xinpei

Thesis: Assessment of hazards during and after the low operation regime at the airports

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.	24			
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.	20			
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.	24			
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).	5			
5.	Total score:	73			

Comments:

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

The aim of the bachelor's thesis was to identify and analyze potential safety hazards, caused by changes in the intensity of the traffic and overall operations (during and after COVID pandemic). This includes following risk assessment and safety mitigations proposal.

Applied methodology includes application of the STPA method based on the STAMP model. While method is primarily designed to support hazard identification and assessment, its application within the thesis is appropriate. Following risk assessment was performed using standard ICAO risk matrix.

Student used the results of the analysis as the basis of the evaluation of the hazards in the context of the low- regime operations, which was described through several parameters. Author clearly defines entities involved, relevant processes, responsibilities, etc. Results are presented clearly in a form of the tables containing defined unsafe control actions and scenarious.

While reached results are relevant, further elaboration could significantly extend their applicability. Even though author clearly limits the scope of the analysis, it still remains unclear which entity is in the focus, e.i. who is capable of implementing reached results into the safety management agenda. This aspect is important in terms of mitigations design and their application, monitoring or revision. Risk assessment was performed on the selected risks and contains brief description. While risk assessment is primarily effective within the safety management of the partucular entity, presented results could be interpreted as a general assessment.

Structure of the thesis is clear and logically arranged. As mentioned before, some points, like the results descriptions, could be richer in content. Same case is in terms of used references. Some errors in grammar and style were found.

The thesis is evaluated with the mark C.

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 C and I do recommend the thesis for defence.

Questions for the defense:

- 1. Which of the defined entities is the main subject who is able to use presented results and how?
- 2. Are the results applicable globally or defined only for a particular region?
- 3. While pandemic state is officially over, was it possible to compare results with the applied practicies from the industry?

Name: Ing. Radomír Havíř, PhD

Organization: Letiště Praha

Signature:

Date: 22. 08. 2023