THESIS SUPERVISOR'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**Replanning of Collision-Free Trajectories for Unmanned Aerial Vehicle**
Author's name:	**Kryštof Teissing**
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Cybernetics
Thesis reviewer:	Robert Pěnička
Reviewer's department:	Department of Cybernetics

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment **challenging**

How demanding was the assigned project?

I consider the master project's assignment to be challenging.

Fulfilment of assignment **fulfilled**

How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.

All parts of the assignment were fulfilled.

Activity and independence when creating final thesis **A - excellent.**

Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.

The student was very independent in solving the assignment with own ideas on how to advance the proposed methodology.

Technical level **A - excellent.**

Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?

The technical level of the thesis is excellent.

Formal level and language level, scope of thesis **A - excellent.**

Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?

The formal level is great and the thesis is well organized. The work is written in good English and although quite talkative it is well-readable.

Selection of sources, citation correctness **A - excellent.**

Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

The selection of references is adequate and the bibliographic standards are met.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

The student proposed a new way of planning minimum-time trajectories for point-mass model with limited acceleration over multiple waypoints. The method is shown to surpass the existing methods in both the trajectory quality and the computational time. We plan to publish the method and thus contribute to the community of trajectory planning for aerial robots.
Therefore, the grade that I award for the thesis is **A - excellent.**

Date: **29.5.2023** Signature: