

Thesis Proposal

Conceptualization of Automatic Maintenance Drone



Description

Maintenance on an airfield is very time consuming, requires extreme caution and thorough planning. One of the ways, identified by ADB Safegate, which could decrease the complexity of airport maintenance could be by introducing an automated drone fleet that handles routine maintenance. The aim of this master thesis is to investigate the benefits and drawbacks of this concept, to find the maintenance tasks that would be most suited to include in a final product and create a proof of concept solution which could perform at least one of the intended maintenance tasks identified. The master thesis should also give an indication on how to proceed in the implementation of a large and autonomous drone fleet, potential problems and a realistic cost and savings estimation.

The master thesis is most suited for two students working together. It will be based in Malmö and may also include visits to other offices and testing on site at an airport.

Tasks within the project:

- ▶ Investigate maintenance tasks that could be automated
- ▶ Research existing techniques for automated drones
- ▶ Create a prototype solution
- ▶ Propose a fully working theoretical solution
- ▶ Calculate costs/savings – Find benefits/problems

Application

Please send your application by December 1st 2017 to thesis@adbsafegate.com.

Title your email “**Master Thesis - Conceptualization of Automatic Maintenance Drone**”

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