

## **DIPLOMA THESIS**

### **Documentation**

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| Form<br>Academic year | 5BHET 2020/21  |
| Topic                 | Hovercraft   |
| Co-operation partners |  |

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| Assignment of tasks | The aim of this diploma thesis is the construction of an electric hovercraft. The base for the construction is a rubber dinghy. The hovercraft should be able to transport an adult above land and water. |
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| Realisation | <p>The structure is implemented as a lightweight construction on top of a rubber dinghy.</p> <p>The airflow required for hovering is generated by a 10kW electric motor attached to a 6-blade propeller. The second propeller points to the back and therefore produces forward thrust. In order to steer the hovercraft, there are three servo-controlled fins behind the propeller to redirect the airflow.</p> <p>The driver is able to steer the vehicle with a handlebar and two thumb throttles.</p> <p>To charge the batteries, the charger must be connected to the prepared cables.</p> |
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| Results | At the time of delivery, the construction of the hovercraft is completed, and the electronic system implemented and tested. Therefore, the hovercraft is ready to use, and the first test runs have been done. |
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Illustrative graph, photo  
(incl. explanation)



Participation in competitions  
Awards

Approval  
(date / signature)

Examiner

Head of College / Department