htl bildung mit zukunft	**HÖHERE TECHNISCHE BUNDESLEHRANSTALT St. PÖLTEN** **COLLEGE of ENGINEERING**
	Department: **Electrical Engineering**

DIPLOMA THESIS
Documentation

Author(s)	Stefan Deimel Philipp Eilmsteiner Julia Stöger
Form Academic year	5BHET 2020/21
Topic	Hovercraft
Co-operation partners	

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 above water.

Realisation	The structure is implemented as a lightweight construction on top of a rubber dinghy. 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. The driver is able to steer the vehicle with a handlebar and two thumb throttles. To charge the batteries, the charger must be connected to the prepared cables.

Results	At the time of delivery, the construction of the hovercraft was completed, and the electronic system was implemented and tested. Therefore, the hovercraft was operational, and the first test runs have been done.

Illustrative graph, photo (incl. explanation)	 

Participation in competitions Awards	

Approval (date / signature)	Examiner	Head of College / Department