

At the bottom of the hull there are four tapped holes which can be used for e.g. having an Ethernet cable through the hull for manual control of Naiad or for connecting peripherals from outside of the hull.

The group from previous years had also designed a prototype of how the design of tool plate and front tool plate could look like but the design was not finish to be manufactured. The design suggested also where the pneumatic box and the gripper could be placed, see figure ?? below. There where also a prototype of how the gripper and the pneumatic box could look like, but even these designs were not ready to be manufactured. Both the gripper and the pneumatic box needed to be redesigned.

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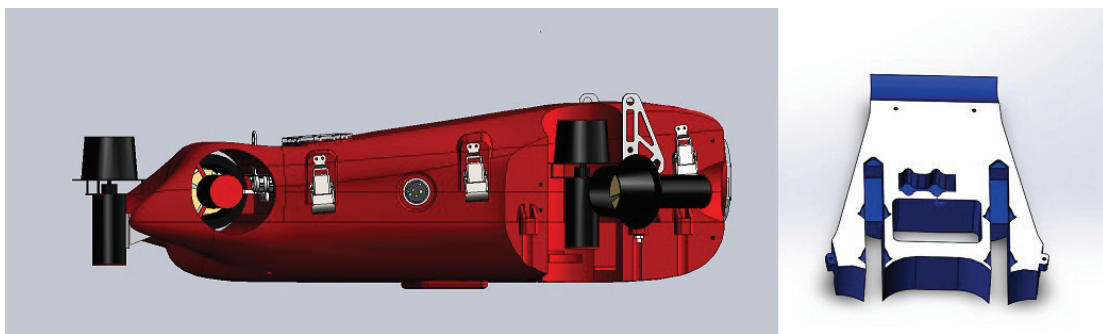


Figure 5: A and B shows the old design of tool plate.

### 7.1.2 Thruster configuration

To allow Naiad AUV to move underwater in all three directions x, y and z six thrusters were mounted. The configuration of the thrusters was made by the previous group and it is believed to be more agile and responsive than the configuration Vasa had. However the thrusters were never tested in the water. ~~was their belief that this configuration is~~ last year.

Figure 6: The six thrusters which allows NAIAD AUV to move underwater in all three planes.

The previous group, using the Solidwork model, created also a matrix of the relative effect of each thruster on each component, see figure ?? below. The matrix were used to convert the thrusters value from the optimal thruster to ~~the~~ a real thruster configuration. More information about thruster configuration read Naiad AUV motion control system. ~~KÄLLA!~~ can be read in

## 7.2 Equipment

Naiad should be equipped with two droppable markers. This requirement is for the RoboSub competition. The previous design of the marker assembly consists of two PMMA pipes, one short and one longer, each connected to a top and a bottom plate. The short tube is connected to the top plate on which there are screw holes for attachment to the tool plate. The bottom plate acts as a stabilizing bottom and holder for the other pipe. The design can be seen in Figure 8.

According to this design they are to be operated by a pneumatic system. However, it was decided that using pneumatics for the markers would be overly complicated for the sole purpose of moving