



# TORPEDO TEAM

Alexandria University



## Company Specs

**Name:** TORPEDO

**Country:** Egypt

**Distance required to travel to the**

**international competition:** 6,984 km

Our company "Torpedo" has been established in order to contribute in the field of Robotics and mainly the industry improvement of marine vehicles (ROVs).

Although "Torpedo" is still a new comer to the field, all members are heavily experienced with previous robotics projects and solid mechatronics base. The company got wide variety of specializations as Mechanical, Electrical, Software, Naval and Industrial engineers in order to produce a reliable vehicle that can compete and perform the required tasks with high efficiency.

"Teamwork" and "Responsibility taking" are the main aspects of our company members. Heavy Brainstorming took the major time in our schedule and after that came the design procedure.

## **Members**

Mohamed Abusetta (CEO – '17)

Mohamed Yousry (CFO – '17)

Saber Ashraf (Elec. Leader – '17)

Mohamed Mostafa (Copilot – '17)

Ahmed Ibrahim (2<sup>nd</sup> Pilot – '17)

Mohamed Moubarak (Electronics – '17)

Mohamed Naser (Programmer – '17)

Mahmoud Salah Salem (Pilot – '17)

Ahmed Hady (Mech. Leader – '16)

Ehab AbdelRahman (CAD/Graphic Design – '16)

Hamdy Dabos (CAD Designer – '16)

Mahmoud Reda (Head of Manufacturing – '17)

AbdulRahman Mohamed (Manufacturing – '17)

**Mentor:** Mahmoud G. Ali

**Supervisor:** Prof/ Kamel El Shorbagy



## ROV Specs

**Name:** Bismarck

**ROV Net Cost:** \$2,355.50

**Total Cost:** \$27,151.50

## **Safety Features**

- Feedback system for motors have been applied to the GUI for supervision.
- Warning stickers have been placed in front of any probable source of danger.
- All hardware circuits are connected to fuses according to the maximum load.
- No Sharp edges.

## **Special Features:**

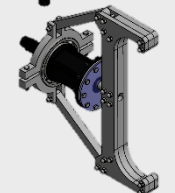
Sample Catcher

For collecting samples beneath solid ice layers – based on camera lens mechanism.



Revolver

For dealing with valves & rotational locks.



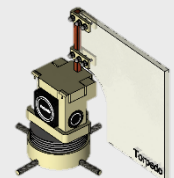
Lift line

For dealing with heavy loads – can be detached then manually pulled towards surface.



Flow rate sensor

Can recognize flow direction to obtain accurate current measurement.



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