

Engineering & Communication: Technical Report

Team name and # AS IT APPEARS ON THE TEAM LIST:

Judge's name:

1 0 = Yes (1) or No (0) 2 1 0 = 2: Excellent, 1: Good, 0: Poor or missing

SCORE

Overall Presentation **10 pts max**

Report is 2 MB or less	1 0
Report is 20 pages or less	1 0
Measurements are in SI units (exceptions include 1/2-inch PVC, etc.)	1 0
Report is well thought out, organized, and professional	1 0
Report is "professional" and well written (e.g. attention to spelling, grammar, sentence structure)	2 1 0
Report indicates development over the course of time (i.e. is not a last minute product)	2 1 0
Report makes good use of references and properly attributes information to its original source	2 1 0

Title Page Contains **4 pts max**

Project/ROV name	1 0
School, club, or team name	1 0
List of team members	1 0
Names of instructor(s) and/or mentors	1 0

Abstract **3 pts max**

Is 250 words or less	1 0
Concise and clear summary of the teams work	2 1 0

Photos of ROV **6 pts max**

Complete, intact vehicle photo	2 1 0
Photo descriptions accompany photos	2 1 0
A mechanical drawing or sketch is included (may be of a sub-system)	2 1 0

Budget/Expense Sheet **7 pts max**

Math accurate	1 0
Detailed accounting of funds	2 1 0
Donations listed	2 1 0
Expenditures listed	2 1 0

Electrical Schematic **6 pts max**

Neatly hand-drawn or created using CAD	2 1 0
Discloses presence of fuse/circuit breaker	2 1 0
Clearly represents the electrical system	2 1 0

Design Rationale **8 pts max**

Documents features to accomplish missions	2 1 0
Presented in a clear and logical manner	2 1 0
Demonstrates step-by-step planning process	2 1 0
A flowchart describes the software flow or why a hardware only approach was selected	2 1 0

Vehicle Systems (score one) **2 pts max**

Team presents own, original work	2 1 0
Team mentions that work was done by commercial companies and/or instructors or mentors	0 -1 -2

Challenges **4 pts max**

Describe at least one challenge faced	2 1 0
Method used to overcome the challenge	2 1 0

Troubleshooting Techniques

Explains a troubleshooting technique(s)
What was used to identify and solve the problem

4 pts max

2 1 0
2 1 0

Payload Description

Design and function of payload tools is clearly described
Discussion of tooling alternatives is provided

4 pts max

2 1 0
2 1 0

Future Improvement

Thoughtful and logical discussion for one improvement

2 pts max

2 1 0

Lessons Learned

Lesson learned or skill gained relating to the process - technical
Lesson learned or skill gained relating to the process – interpersonal

4 pts max

2 1 0
2 1 0

Description of a submarine rescue system OR an organization or program that is involved with submarine rescue

Mentions a sub rescue system or organization
At least two sources cited
Photos or graphics
Description is well-written and informative

5 pts max

1 0
1 0
1 0
2 1 0

Reflections

Personal or professional accomplishments from competition participation
Point of view includes the team as a whole or its individual members

4 pts max

2 1 0
2 1 0

Teamwork

Team demonstrates that the vehicle (and the report) was a team effort
Team designed and built vehicle, particularly electrical and software

4 pts max

2 1 0
2 1 0

Acknowledgements

List companies, organizations or individuals
Recognizes donations of funds, supplies and time

3 pts max

2 1 0
1 0 -1

Technical Report Score:

Discretionary Points

Bonus points for extraordinary work - grammatically correct, showed extra effort to overcome obstacles, etc.

5 pts max

5 4 3 2 1

Deductions

Lacks software block diagram or flow chart, if applicable
Over use of appendices

-4 pts max

-2
-3

Technical Report Total Score: