**2015 MATE ROV Competition Sales Presentation Evaluation Rubric** Judge:_____

Class (circle one): NAVIGATOR SCOUT Team#:_____ School Name and #:_____

| **Team Presentation** | | | | | |
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| **Category** | **Scoring Criteria** | | | | **Points** |
| **Teamwork** | **3 - Excellent** | **2 - Very Good** | **1 - Good** | **0 – Poor or missing** | |
| Preparation of presentation and required documentation | Strong whole team effort, exceptionally prepared, documentation very strong | Clearly prepared, organized, articulate, each team member contributed, documentation in order | Prepared, fairly organized, partial team effort, good documentation | Underprepared, not well organized, lack of whole team effort, poor or missing documentation | |
| **Originality/Salesmanship** | | | | | |
| Style of presentation, effective salesmanship | Dynamic presentation, team went above and beyond expectations, tied presentation well into theme/mission | Good presentation, satisfied expectations, make links to theme | Lackluster presentation, below expectations, vague mention of theme | Poor presentation, lacked any salesmanship or connection to theme | |
| **Insight/Creativity** | | | | | |
| Innovations, challenges faced, lessons learned, determination to resolve challenges | Innovative/creative solutions presented to well described challenges and lessons learned, tenacity quite evident | Interesting solutions, not necessarily novel, described challenges faced, demonstrated tenacity | Solutions demonstrated for challenges faced, but not particularly creative, did not demonstrate tenacity | Did not face challenges well, did not understand challenges or solutions well enough to describe | |
| **Understanding** | | | | | |
| Demonstration of ROV systems, science, operation and mission theme | Strong understanding of ROV systems, provided much detail of underlying science, and application to theme | Good understanding of ROV systems, provided some detail of underlying science, and application to theme | Some understanding of ROV systems, underlying science, and application to theme | Little understanding of ROV systems, underlying science, and application to theme | |
| **Budget/Acknowledgements** | | | | | |
| How was budget developed and adhered to, and acknowledges all levels of support | Description of budget planning and following, acknowledgement of donations, excellent use of funds | Some issues with budget planning and follow through, acknowledgement of donations, good use of funds | Loose description of budget planning and faltering, mediocre use of funds | Poor description, poor use of funds, no acknowledgement of donations | |

| Overall Presentation | | | |
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| Overall presentation skills, preparedness, poise, cohesiveness | Team displayed good presentation skills (looked people in the eye, did not mumble, stumble), well prepared, presentation was logical/cohesive (did not skip around), team displayed impressive poise for age and ability level,<br>**Total = 5 Points** | Several team members could improve presentation skills (-1 point)<br>Team clearly needed more practice of presentation (-1 point)<br>Presentation logic and cohesion needed work (-1 point)<br>Several team members lacked poise, clearly uncomfortable (-1 point)<br>Some team members did not speak (-1 point) | |

| Category | Scoring Criteria | | | | Points |
|---|---|---|---|---|---|
| **Design/Workmanship** | **3 - Excellent** | **2 - Very Good** | **1 - Good** | **0 – Poor or missing** | |
| Strengths of the overall design, aesthetically pleasing, and application to mission | Excellent overall design, well-conceived, elegant design, aesthetically pleasing in addition to excellent functionality; clearly understands the mission and reflected it in vehicle design | Very good overall design, nice features to make the vehicle attractive as well as functional; somewhat understands the mission and reflected it in vehicle design | Good overall design, functional, but some better design choices could have been made, as well as a bit more effort to make the vehicle attractive as well as functional; vehicle design does not strongly correlate to the mission | Poor overall design, many better decisions could have been made, very clunky, unattractive design; no attention to mission requirements with respect to design | |
| Robustness, craftsmanship, maintenance, and water ready | Tested vehicle prior to event, durable, easy to maintain and/or service, strong attention to craftsmanship and marketability | Tested vehicle prior to event, some issues with maintenance or parts access, attention to craftsmanship and marketability | Tested components prior to event, mediocre craftsmanship, parts inaccessible for maintenance, some attention to marketability | Did not test before event, vehicle does not appear to be robust, no attention to mission or marketability | |
| Conception, design, build and troubleshooting | Team clearly described how the company brainstormed ideas, their design and troubleshooting process, and why their solution is mission specific | Team provided some description of the thought, design and troubleshooting, but not fully clear, no strong attention to mission specific choices | Team provided vague description of thought, design, and troubleshooting process | No detail provided, skeptical of whole team effort or potential over involvement of an adult | |

| Safety | 3 - Excellent | 2 - Very Good | 1 - Good | 0 – Poor or missing | |
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| Warning labels and safeguards on potentially hazardous parts, other vehicle specific safety precautions, passed safety inspection | Clearly marked warning labels, safeguards clearly in place, fuses in place, thoroughly described other safety precautions, passed safety inspection | Warning labels, safeguards in place, not as well marked as could be, fuses in place, mentioned safety precautions, passed safety inspection | Some warning labels, safeguards in place, fuses in place, no mention of safety precautions, did not pass safety inspection | No warning labels, did not pass safety inspection | |

| System Design and Vehicle Inspection | | | | | |
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| **Category** | **Scoring Criteria** | | | | **Points** |
| **Engineering design rationale** | **3 - Excellent** | **2 - Very Good** | **1 - Good** | **0 – Poor or missing** | |
| Description of how functionality increased with design or component selection, understanding of how control system works | Excellent description in a clear, logical manner of how vehicle was built to perform specific tasks, decisions on shape and materials used, clearly explained how the control system works | Good description of how vehicle was built to perform specific tasks, decisions on shape and materials used, could have been a bit more organized and detailed in descriptions of decision making process, good explanation of control system | Fair description of how vehicle was built to task, decisions on materials used, descriptions needed more detail or made some weak design choices, or weak materials choices, better organization of information needed, did not demonstrate full understanding of control system | Poor description or understanding of vehicle design, no understanding of control system | |

| Buoyancy and Ballast | 3 - Excellent | 2 - Very Good | 1 - Good | 0 – Poor or missing | |
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| Description of system and rationale | Accurately describes how the system works and application and importance to mission, full demonstration of knowledge of selection and use of system | Provides a description of the system and importance to vehicle, demonstration of knowledge of selection and use of system | Provides a description of the system, demonstration of knowledge of system | Cannot provide a substantive description of the system, cannot provide a substantive demonstration of knowledge of the system | |
| **Propulsion** | | | | | |
| Thruster location and rationale | Thrusters securely attached, do not obstruct water flow, waterproofed and protected<br>**Total = 3 points** | Thrusters not secured (-1 point)<br>Water flow obstructed (-1 point)<br>Not waterproofed or protected (-1 point) | | | |

| **Tether** | | | | | |
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| Tether management system | Tether is securely attached (1 point), neatly bundled (1 point), and excellent tether management protocol developed (1 point) **Total = 3 points** | Tether is not securely attached (-1 point), Tether is not neatly bundled (-1 point), Deficient tether management or no protocol developed (-1 point) | | | |
| **Payload Tools** | **3 - Excellent** | **2 - Very Good** | **1 - Good** | **0 – Poor or missing** | |
| Payload tools used | Payload tools are original, designed, built by team or unique modifications | Some payload tools are original | COTS tools used | No payload tools | |
| Application to mission | Clearly understands the design and purpose of appropriate tools selected for mission | Somewhat understands the design and purpose of appropriate tools selected for mission | Additional tools do not strongly correlate to the mission | No payload tools | |
| | | | | | |
| **Score Sub-Total (50 points max)** | | | | | |

| **Discretionary Points (3 points max)** | | | | |
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| **Originality** | **3 - Excellent** | **2 - Very Good** | **1 - Good** | **Points** |
| Vehicle and/or systems exhibit unique concepts or innovations | Exceptional innovation demonstrated in vehicle design, tools or other feature | Very clever innovation in vehicle design, tools or other feature | Interesting innovation in vehicle design, tools or other feature | |
| **Deductions (-15 points max)** | | | | |
| **Deductions** | **- 5 Extreme** | **- 3 Moderate** | **- 1 Minor** | |
| Commercial assistance | Vehicle was designed/created by a commercial company and lack of any justification | Some assistance was provided by a commercial company and some justification | Minor assistance was provided by a commercial company and with justification | |
| Interference | Significant interference by coaches, mentors, parents providing assistance during presentation (with exception of language barriers) | Some interference by coaches, mentors, parents providing assistance during presentation (with exception of language barriers) | Minor prompting by coaches, mentors, parents providing assistance during presentation (exception of language barriers) | |
| Overuse of | Significant overuse of commercial | Overuse of commercial components | Some use of commercial | |

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| components | components without adequate justification and/or overuse of re-used components without adequate justification | without adequate justification and/or overuse of re-used components without adequate justification | components without adequate justification and/or overuse of re-used components without adequate justification | |
| | | | | |
| | | | **TOTAL SALES PRESENTATION SCORE** | |

**Sample Questions:**

What was your company's "work breakdown structure" (tasks, time, and people)?
What were the greatest constraints (schedule, budget, equipment, labor, logistics, etc.) on your design process?
What were the most important design decisions you made and why?
Did you have a noteworthy troubleshooting experience?