

## Rubric for N-STAR project - Technical Challenges - Team Evaluation

This rubric is used to evaluate team performance on the technical challenges.

Technical				
Basic	1 - SAILOR	2 - MASTER CHIEF	3 - LIEUTENANT	4 - COMMANDER
<p>Team accomplishment of engineering tasks. (iMovie video includes statement of intentions of programming prior to filming the behavior of the robot and running the program.)</p>	<p>iMovie film shows:  Team builds robot, attaches sensors.  The robot does not move in response to a program or programs are not written.</p>	<p>iMovie film shows:  Robot moves forward and backward in response to program.  Robot moves in a straight line and stops at a designated point (within one centimeter).</p>	<p>iMovie film shows:  Robot moves and uses light sensor to detect lines.  Robot moves in response to input from touch sensor.</p>	<p>iMovie film shows:  Robot uses light sensor to follow a straight line on the board.  The robot uses the touch sensor to go to the end of the board and turn in either direction.  The robot uses a combination of light and touch sensor(s) to follow a line, touch the wall, turn around, and follow the line back.</p>
Advanced	5- CAPTAIN	6 - COMMODORE	7 - ADMIRAL	8 - CHIEF OF NAVAL OPERATIONS
<p>(Use iMovie to verify claims.)</p>	<p>The robot locates, gathers, and brings a visible mine back to base.</p>	<p>The robot locates, gathers, and brings all visible mines back to base.</p>	<p>Robot locates a hidden mine, signals find, and returns to base.</p>	<p>Robot locates all hidden mines, signals finds, and returns to base.</p>

N-STAR Instructional team (Matkins, Hardinge, Inge, Matheson, Mason, Southall), 2005. From, Hilary McLeod, Peel DSB. Adapted from "The Education Technology Journal", Jamie McKenzie, Vol. 7, No 2, October 1997

Criterion for achieving rank - At each rank, teams must achieve two out of three of the tasks to have the rank. In order to move to a higher rank, the team must accomplish all the tasks in the current tank.

iMovie team video should be no more than 10 minutes total with Technical Challenges AND Real World Application.