

# Team 1640 Sab-BOT-age

## 2011 Logomotion Strategy Brainstorm

AUTONOMOUS	
Votes	Concept
Necessary	Score Ubertube on top row
Necessary	Line following
7	Be the robot that can score the 3 <sup>rd</sup> Ubertube with two line-following robots
4	Autonomous presets L/O/R(/other)

SCORING (TELEOP)	
Votes	Concept
Necessary	Score Game Pieces on top row (all rows)
7	Preset heights for scoring (w/ manual over-ride)
5	Claw allows for adjustment of Game Piece orientation (1-axis)
5	Arm with shoulder & elbow <sup>1</sup>
4	Vision assisted aim-drive
3	Telescoping Lift <sup>1</sup>
3	Vision assisted height adjustment
2	Sensor detects when in scoring position (when to drop the game piece)
1	Pneumatic gripper <sup>1</sup>
	Scissor lift <sup>1</sup>

<sup>1</sup>Really a solution rather than a strategy

GAME PIECE PICK-UP	
Votes	Concept
8	Able to pick game pieces off floor & load from Human Player
8	Red/White/Blue lights on Claw to signal Human Player for Game Piece
2	Sensor detects when game piece is in claw (when to close claw)
2	Vacuum assisted claw
1	Preset heights for pick-up (floor or loading station)
	Vacuum pick-up
	Able to pick-up deflated game pieces
	Floor pick-up only
	Human player loading only

DRIVE-TRAIN	
Votes	Concept
7	Pivot Drive <sup>2</sup>
2	6WD <sup>2</sup>
Necessary	Keep GC low
	Sensor guidance down loading lane
	3-wheel pointy Pivot Drive (to enable autonomous 3 <sup>rd</sup> Ubertube goal)
	Minimum need for defense

<sup>2</sup>This score does not accurately reflect team concern over Pivot Drive difficulties versus simplicity of a 6WD drive-train

MINIBOT	
Votes	Concept
Necessary	Have a Minibot
4	FAST!!!
4	"Strongman" strategy, if legal
3	Minibot drops after scoring
1	Robot shape pre-aligns with base
1	Magnets
1	Standardize with other teams (via CD)

MISCELLANEOUS	
Votes	Concept
4	Pick up fallen robots