STRATEGY

GAME ANALYSIS

This year's Challenge had several major tasks: the manipulation and placement of *two* game pieces (hatch panels and cargo) and a platform climbing element. To determine our strategy and objectives for this season, we had to weigh the value of each potential action against our build capabilities and resource constraints. Our primary goal was to identify a simple strategy that would be reliable and within our means to build, but still competitive. For our team, this meant prioritizing some of the game's tasks and forgoing others.

POINT VALUE ANALYSIS

To help us discuss our game strategy, we identified all possible point-scoring opportunities and quantified the value of each action with a point value matrix, taking raw point value, estimated success rate, and time into account.

SANDSTORM	POINT VALUE	CHANCE	# of Times	TOTAL POINTS
Sandstorm 1	3	1	1	3
Sandstorm 2	6	1	1	6
Hatch	2	0.7	2	2.8
Cargo	3	0.6	2	3.6

TELEOP	POINT VALUE	CHANCE	# of Times	TOTAL POINTS	MAX POINTS
Hatch	2	0.8	8	12.8	36
Cargo	3	0.65	8	15.6	54
HAB 1	3	1	1	3	12
HAB 2	6	0.7	1	4.2	12
HAB 3	12	0.5	1	6	12

RP	Points	Chance	# of Times	Total
Rocket	1	0.7	1	0.7
Win	2	0.5	1	1
HAB	1	0.8	1	0.8