2003 CHALLENGE MISSIONS & SCORING

MISSION: MARS

7/23/03

See the Field Mat diagra

Exit The Tetrahedron Base... For this mission, starting position is with the robot touching only the rectangular platform. The robot must lower the ramp and move completely off the platform and the ramp before the match or the Mission Attempt is ended, otherwise the referee resets the ramp. The platform is considered a valid alternative Base for other missions, but the ramp is not.	Ramp Permanently Down	**39** pts.
Launch The Sample Canister... The Sample Canister must be launched from the MAV Launcher. Activating the Launcher while it's empty is considered a no load test, and is worth partial points.	Canister Launched	**39** pts.
	Launcher Activated Empty	27 pts.
Clear The Solar Panel... The dust must be cleared from the top surfaces of the Solar Panel. Any amount of partial clearing is worth partial points.	Dust Completely Cleared	**43** pts.
	Dust Partially Cleared	31 pts.
Connect The 180° and 90° Habitation Modules... There are two 180° Habitation Modules in Base. They must be connected to the 90° Habitation Module, such that the magnets or their holding forks are in contact. Two connections in line are worth more than one, and a V-shaped arrangement is worth even more.	V-Shaped Module Connection	**49** pts.
	Two Module Connections In Line	31 pts.
	One Module Connection	27 pts.
Complete The Alliance Habitation Module... The Alliance Habitation Module halves must be connected, such that that the magnets or their holding forks are in contact. Once connected, the Alliance Habitation Module is worth equal points for both teams in the match.	Alliance Modules Connected	**43** pts.
Free The Rover... The Rover is stuck on a Sand Dune. The Rover must be freed so that it remains on its wheels but no longer touches the Sand Dune. More points can be earned if the Rover is moved to Base, on or off it's wheels.	Rover In Base	**43** pts.
	Rover Off Dune + On Wheels	31 pts.
Move Ice Cores To Base... Three Ice Cores must be moved to base. Moving fewer is worth partial points.	3 Ice Cores In Base	**49** pts.
	2 Ice Cores In Base	31 pts.
	1 Ice Core In Base	27 pts.
Move Boulders Into The Launch Circle... The Boulders (Bonus Objects) are worth free points as long as they remain anywhere on the field, but Boulders that end up in the Launch Circle are worth the most. Each time the Robot has to be transported to Base by hand for a restart, Boulders will be taken off the field (Bonus Loss) one at a time, in order of increasing distance from Base.	Boulders In The Launch Circle (the match starts with two already there)	**14** pts. each
	Boulders On The Field Outside The Circle (the match starts with two already there)	8 pts. each
All Terrain Vehicle Test... The robot must prove its ability to move across rugged terrain by moving into the Crater (where the Ice Cores are sampled). At the end of the match, the robot must end up completely in or on the Crater, such that nothing is touching the field outside the Crater.	Robot In Crater	**39** pts.

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3M
18.0° S
20.0° S
22.0° S
24.0° S
26.0° S
28.0° S
30.0° S
32.0° S
34.0° S
- 183.0 W
- 181.0 W
- 179.0 W
- 177.0 W
- 175.0 W
14.0° S
16.0° S