

Meridiani Base: The 2nd Mars Expedition Planning Workshop

**Hosted by the Association of Mars Explorers
and Mars Society Canada**

Saturday, August 6, 2005:

8:00 – 8:30	Registration and Refreshments
8:30 – 9:00	Welcome and Introduction (R. Persaud, A. Schuerger)
Field Science, Instruments and Operations for Meridiani and Surrounds	
9:00 – 9:20	Presentation – R. Persaud: Field Geology Goals for a Meridiani Expedition
9:20 – 9:40	Presentation – C.S. Cockell: Field and Laboratory Strategies In the Search for Chemolithotrophy in the Meridiani Region.
9:40 – 10:00	Presentation – D.J. Ellender, J. Palaia and B. MacKenzie: Requirements for Establishment of Site Data for a Permanent Mars Settlement.
10:00 – 10:20	Presentation – D. Fudge: Developing In-Situ Material Utilization (ISMU) for the Colonization of Mars.
10:20 – 10:30	Break
10:30 – 10:40	Discussion – J.D.A. Clarke, C.F. Pain and M. Thomas: Regolith Landform Mapping of Meridiani Planum and Surrounds. (Paper-only submission for discussion; reviewed by R. Persaud)
10:40 – 11:00	Presentation – A.N. Drew: Martian Moths: The Use of Simple, Robust, Single Parameter Sensors To Map Physical Characteristics of the Martian Plains.
11:00 – 11:20	Presentation – N. Soper: A Biomimetic Approach To The Design Of A Climbing Robot For Planetary Exploration
11:20 – 12:00	Group Discussion – the Science Campaign for the Meridiani Expedition.
12:00 – 1:00	Boxed Lunch

Expedition Mobility, Exploration Technology and Tactics	
1:00 – 1:20	Presentation – N.J. Wilkinson: Topographic Considerations for Base-Camp Site Selection.
1:20 – 1:30	Discussion – J.D.A. Clarke and D. Willson: Exploration Radii for a Crewed Mission to a Human Landing at Terra Meridiani.
1:30 – 1:40	Discussion – G.A. Mann: Exploration Mobility Within Driveback Constraints: The Case of Meridiani Planum 2019.
1:40 – 2:00	Presentation – I. Wagner, M. VanKirk, C. Rowland, and H. Hamut: Universal Chassis for Modular Planetary Exploration Vehicles.
2:00 – 2:40	Group Discussion – Base Site Selection and Mobility Options
2:40 – 3:00	Break
3:00 – 3:20	Presentation – N. Soper: Wireless Power Transmission And The Effect Of Its Development On Planetary Exploration.
3:20 – 3:40	Presentation – N.J. Wilkinson: Traversing the Meridiani Region
3:40 – 4:20	Group Discussion – Options for Expedition Mobility, Exploration Technology and Tactics.
4:20 – 4:40	Break
Mars Analogs on the Earth and the Moon	
4:40 – 5:00	Presentation – G.R. Osinski and A. Berinstain: Terrestrial Analogues of Mars: A Review and Outline of the Canadian Analogue Research Network.
5:00 – 5:20	Presentation – P.J. Boston: Surface Indicators of Subsurface Environments
5:20 – 5:40	Presentation – A.H. Lasslop and S. Asturias: How to use the Moon as a Testbed to Compose the Correct Crew for an Exploratory Mission to Mars.
5:40 – 6:00	Group Discussion – Meridiani Analogs and Simulations.

Sunday, August 7, 2005:

8:00 – 8:30	Refreshments
8:30 – 9:00	Workshop Recap
Human Factors, Crew-Centred Operations and Mobile Communications	
9:00 – 9:20	Presentation – W.J. Clancey, M. Sierhuis, M. Sims, and G. Briggs (2005) Expedition Memory: Towards Agent-Based Web Services for Creating and Using Mars Exploration Data.
9:20 – 9:40	Presentation – S.M. Rupert: The Role of Remote Science Teams: Sustainability of Earth / Mars Communication and Collaboration During an Extended Mars Surface Science Expedition.
9:40 – 10:00	Presentation -- T. Velasco and L. Nikulasdottir: Data Relay Systems for a Mars Human Base in Meridiani Planum.
10:00 – 10:40	Group Discussion – Crew-Centred Operations with Remote Support
10:40 – 10:50	Break
10:50 – 11:10	Presentation – J. Whitehead and M. Slater (2005) Issues and Infrastructure for Mars Mission Science Data Transport.
11:10 – 11:30	Presentation – A. Solignac: Mediated Communications in Extreme Isolation.
11:30 – 12:00	Group Discussion – Mobile Communications and Human Factors.
12:00 – 1:00	Boxed Lunch
1:00 – 1:20	Presentation – S.L. Bishop: Choosing Teams for Long Duration Space Missions: From Issues to Answers.
1:20 – 1:40	Presentation -- S.B.F. Paletz and J. Orasanu: Individual and Team Selection for Mars Missions.
1:40 – 2:20	Group Discussion – Team Size and Skill Sets Required for the Meridiani Campaign.
2:20 – 2:30	Break

Exploration Ethics, Risk Mitigation and Planetary Protection	
2:30 – 2:50	Presentation -- A.C. Schuerger: The Harsh Mars Surface Environment May Mitigate Against the Forward Contamination of Mars During Robotic and Human Missions.
2:50 – 3:10	Presentation – C.S. Cockell: A Land Use Philosophy for the Meridiani Region, With Application to the Rest of Mars
3:10 – 3:30	Presentation – J.H. Laing: Tourism to the Red Planet: Considerations for Early Martian Expedition Planning.
3:30 – 4:10	Group Discussion – How Risk Mitigation, Planetary Protection and Exploration Ethics Issues Affect the Meridiani Campaign.
Workshop Wrap-Up	
4:10 – 4:30	Group Discussion – Publishing the Proceedings with a Meridiani Campaign Plan.
4:30 – 5:00	Future Mars Expedition Planning Workshops