13th Annual International

Mars Society Convention

www.marssociety.org

Reaching HIGHER

Dayton, Ohio

August 5th - 8th, 2010

13th International Mars Society Convention
August 5 – 8, 2010
Dayton Marriott – Dayton Ohio

Wednesday – August 4, 2010

Tradewinds

2:00 pm – 5:30 pm	Early Registration Vendor and Display set-up
1:00 pm – 5:00 pm	Tour - Museum of the United States Air Force (meet in hotel lobby)

Thursday – August 5, 2010

Tradewinds

7:30 am – Convention opens, registration, check-in
Vendor and Display set-up

Plenary Sessions – Ballroom

8:30 – 9:30 am	**Opening/Welcome**, **Dr. Robert Zubrin**, President, Mars Society
9:30 – 10:30 am	**William Borucki**, Principal Investigator, NASA Kepler Space Telescope mission
10:30 – 11:30 am	**Dr. Geoffrey Landis,** NASA Glenn Research Center - *Six Years on Mars*: *The Continuing Journey of the Mars Exploration Rovers*
11:30 – 12:30 pm	**Charles Doarn,** University of Cincinnati - *Telerobotic Surgery in Extreme Environments*
12:~~00~~ – 1:30 pm	**Lunch Break**
1:30 - 5:00 pm	**Track Sessions**

Special Activities

Sharkey's (poolside)

6:30 – 8:00 pm **Reception** (light food/cash bar) and **Town Hall**

Ballroom

8:00 – 10:00 pm **Panel: Is Aviation History Repeating Itself?** -
T.A. Heppenheimer, author of '*A Brief History of Flight: From Balloons to Mach 3 and Beyond*' and '*Turbulent Skies: the History of Commercial* Aviation'; **Dr. Janet R. Daly Bednarek**, Professor of History at the University of Dayton, and author of '*Dreams of Flight: General Aviation in the United States';* and **Tim Gaffney**, aviation writer and photographer, and editor and publisher of AviationDayton.com; Jeff Foust, Editor and Publisher, *The Space Review*

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Thursday, August 5, 2010

Time	Track 1 *Salon F*	Track 2 *Salon G*	Track 3 *Salon H*
1:30 – 2:00	***J. Heasley*** – Making Martians	***M. Barnes*** – Technocogninetic Methods to Reduce Psychological Threats to Surviving Voyages To Mars	***P. Chabrian –*** Would a Real Lady Fly an Airplane?
2:00 – 2:30	***S. Heck***– Teachers in Space Pathfinder Astronaut - Inspiring the Mars Generation	***T. Czarnik*** – A Doctor on Mars: Ten Years of Medical Operations with the Mars Society	***J. Brandenburg*** – The Geopolitics of Space
2:30 – 3:00	***continued***	***B. Rai*** – Facial sensation and taste in simulated microgravity: A dentist on Mars	***J. Herholz –*** The Project ARCHIMEDES of the Mars Society Germany- Where Do We Go?
3:00 – 3:30	***L. Kelly*** – Exploring Mars – what to take with you (school class demo)	***S. Bell*** – The Colonies, 2084	***continued***
3:30 – 4:00	***S. Bohle*** – Send Your Avatar's Name to Mars	***M. Turzillo*** – Can Science Fiction Save the Space Program?	***J. Strickland –*** Access to Mars: Space Transport and the Human Mars Enterprise
4:00 – 4:30	***B. Mackenzie –*** What if you had taken a "Junior Year Abroad / Off-Planet" during college ?	***T. Muscatello*** – Fermi's Paradox Explained – 42 Reasons Why We'll Never Be a Spacefaring Civilization and What to Do About It	***D. Roffman –*** Enigma of the Martian Atmosphere: Higher than Advertised Air Pressure?

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Tradewinds

8:00 am – Registration, check-in
Vendors and Displays

Plenary Sessions – Ballroom

9:00 – 10:00am	**David D. Levine**, author – *Mission to 'Mars' My Experience on MDRS Crew 88*
10:00 –11:00 am	**Dr. Ian O'Neill** Space Science Producer, Discovery News - *Using Social Media to Communicate, Promote and Build the Scientific* Message
11:00 – 12:00 pm	**Panel** - The Vasimr Drive: Silver Bullet or Hoax ?
12:00 – 1:00 pm	**Lunch Break**
1:00 – 2:00 pm	**Mike Griffin**, former NASA Administrator
2:00 - 4:30 pm	**Track Sessions**

Special Activities

4:30 – 6:30 pm	**Carillion Park Tour (meet in hotel lobby at 4:30p)**
8:30 – 11:00 pm	**Steering Committee Meeting**, Salon D

Ballroom

6:30 – 8:30 pm	**Mars in Science Fiction - Author's Panel, Robert Zubrin**, author of '*First Landing*', '*How to Live on Mars*'; **Geoffrey Landis**, author of '*Mars Crossing*', '*Impact Parameter and Other Quantum Realities*; **Mary Turzillo**, author of '*Mars is No Place for Children*', '*An Old Fashioned Martian Girl*'; **David D. Levine** author of '*Space Magic*'
8:30 – 11:00 pm	**Martian Film Festival,** Gerry Williams, creator of the MarsMovieGuide.com will present "A Century of Mars in the Movies"

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Friday, August 6, 2010

Time	**Track 1** *Salon F*	**Track 2** *Salon G*	**Track 3** *Salon H*
2:00 – 2:30	***G. Landis –*** The Case for Venus	***K. Freelain –*** Application of a Natural Law to the Social Sciences on Mars	***M. Cooper –*** Mars Manned Mission A Conceptual Design
2:30 – 3:00	***B. Mackenzie –*** 3-D Printing and Custom Manufacturing on Mars	***M. Hilton –*** The Real Reason for an International Mission to Mars	***K. Nebergall*** Microcolony Agriculture: Self-Sufficient Architecture in Minimal Spaces
3:00 – 3:30	***E. Kennell –*** Implications of Water on the Moon for Interplanetary Exploration	***J. Fitzsimmons –*** Mars Settlement as a Moral Imperative	***R. Hunter –*** Communicating With Mars
3:30 – 4:00	***J. Black –*** *Human Missions to Near Earth Asteroids*	***W. Kramer –*** First Extraterrestrial Encounters – An opportunity for reconsidering obligations to future generations	***D. Haslam –*** From Children to Champions
4:00 – 4:30	***J. Brown –*** Terraforming Mars the fast cheap way	***R. Zubrin –*** Astronauts: Explorers or Guinea Pigs? A Discussion of the Proper Ethical Basis for a Human Spaceflight Program	***L. Land –*** Mars Society: Set the Course for Mars

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Saturday, August 7, 2010

Tradewinds

8:00 am – Registration, check-in
Vendors and Displays

Plenary Sessions – Ballroom

9:00 – 10:00 am	**Carol Stoker,** NASA Ames Research Center - *Drilling on the Moon and Mars in Human Exploration field tests at Mars Desert Research Station*
10:00 – 11:00 am	**Panel** – Obama's New Space Policy: Breakthrough or Dead End?
11:00 – 12:00 pm	**Carol Stoker,** NASA Ames Research Center - *Habitability of the Phoenix Lander Site*
12:00 – 1:30 pm	**Lunch Break**
1:30 - 3:30 pm	**Track Sessions**
10:00 - 4:00 pm	**Special Programming: Mars Camp** free and open to the public, aimed at children and families promoting STEM education. It will include flight simulators, hands-on displays and special guest speakers -- all aimed at educating and inspiring the next generation of space explorers.

Special Activities

Ballroom

6:00 p.m. – 7:00 p.m. – Appetizers/Bar

7:00 p.m. – 11:00 p.m. – 12th Annual Mars Society Banquet, ***Ian O'Neill***, Space Science Producer of Discovery Space, Master of Ceremonies, ***Dr. Carolyn Porco***, Director of CICLOPS, Saturn Imaging Team, Featured Speaker

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Time	Track 1 *Salon F*	Track 2 *Salon G*	Track 3 *Salon H*
1:30 – 2:00	***J. Heiser –*** Faith and Community: Moving Beyond LEO	***J. Brandenburg –*** The CI Carbonaceous Chondrites as the Missing Old Meteorites of Mars and their Implications for Biology on Early Mars	***K. Griffith –*** Commercial Mars Exploration and Development in the Next 40 Years Presentation
2:00 – 2:30	***continued***	***T. Muscatello –*** The 2010 Field Demonstration of the Solar Carbothermal Reduction of Regolith to Produce OXYGEN.	***Continued***
2:30 – 3:00	***A. Swanson –*** Air Force Responsive Space Access Vehicles and Structures	***J. Silverman –*** Visiting Near-Earth Asteroid 2000 SG344: A Logical Step on the Way to Mars	***J. Hemmelgarn –*** A Proposal for transiting from Low Earth Orbit to Mars Orbit III
3:00 – 3:30	***OPEN***	***G. Landis –*** HERRO: TeleRobotic Exploration of Mars	***D. Chipman –*** Mars to Go: A Minimal Manned Mars Sample Return Mission Concept

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Mars Camp

10:00 am – 4:00 pm - Tradewinds Pavilion

Mars Camp will include flight simulators, hands-on displays and special guest speakers -- all aimed at educating and inspiring the next generation of space explorers

Air Force Research Lab
Presentation: Rocketry (plus brief test firings)

American Institute of Aeronautics and Astronautics
Straw Rocket Design/Build/Fly

Boonshoft Museum of Discovery
Hands on Astronomy – Relative sizes of the sun and planets
Mars Atmosphere/Meteorites
Skylab Planetarium
Presentations:
Be a Mars Rover – exercise in rover programming
Kepler's Orbit of Mars
Phobos Rising

Challenger Learning Center - Dayton
Space careers
Robotic arm w/joysticks

Inventors Council of Dayton
Wind Tunnel Aircraft Stability demo
Rocket Guidance Systems demo
Presentations:
Rocket Guidance Systems
Wright Flyer Undulation Problem

First to Fly Foundation
The Basics of Flight

InfoSciTex
Land the Plane (game simulation)

iSpace
Astronaut Photo Booth.
EVA working in space

Presentation:
Paper Rocket Build and Fly (w/air compressor vertical launch)

L-3 Communications of Cincinnati
Models of products that went to Mars

Mars Society Ohio Chapter
Mars Globes
Gravity Jugs

Ohio's "Teachers in Space" Pathfinder Astronauts Steve Heck and Chantelle Rose
Meet and Greet
Presentations:
Inspiring the Mars Generation

Safe Water Science
Build Your Own Water Filter
Water Needs on a Trip to Mars
PUR Purification of Water

The Autumn Society
Mars Coloring Book and Crayons

University of Dayton Advanced Rocket Team
Rocket and components, videos and rocket motor display

Women in Aviation International
Presentation:
Careers in Aviation and Aerospace

Wright "B" Flyer
Wright 'B' Flyer flight simulator

Xenia Kids and Robots
Lego robots -- Mars FIRST Lego setup, plus more.

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Sunday, August 8, 2010

Tradewinds

9:00 am – Registration, check-in
Vendors and Displays
1:00 pm Registration closes, Vendors and Displays begin breakdown

Plenary Sessions – Ballroom

9:00 – 10:00 am	**David Chuss,** NASA Goddard Space Flight Center, Research Astrophysicist - *The Early Universe*
10:00 – 11:00 am	**Kevin Sloan,** TASC University Rover Challenge
11:00 – 12:00 pm	**Joseph Palaia,** New Space Center
12:00 – 1:00 pm	**Lunch Break**
1:00 – 3:00 pm	**Track Sessions**

3:00 – 4:00 pm Closing Meeting, Dr. Robert Zubrin

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Time	Track 1 *Salon F*	Track 2 *Salon G*	Track 3 *Salon H*
1:00 – 1:30	***B. Mackenzie*** – Mars Settlement Projects: You Can Make a Difference	***T. Chatterton*** – Processing Drinking Water On Mars	***J. Brown*** – Need for Earth Orbit spinning Mars Habitat now
1:30 – 2:00	***J. Taggart*** – Exercise Equipment and Methods to Prevent Hip Bone Loss in Space	***J. Gedra*** – Motivation to Settle Space - Space Settlement Survey	***J. Brandenburg*** – Evidence for a Large Natural Nuclear Reactor in Mars Past
2:00 – 2:30	***R. Zubrin*** – Mars the Hard Way: A Critique of NASA's Current Plan to Implement President Obama's Call to Send Humans to Mars	***D. Robertson*** – Recycling Shower and Habitat Water Quality	***K. Hemmelgarn*** – A Proposal for Lifting Payloads to Low Earth Orbit III
2:30 – 3:00	***T. Muscatello*** – Has the Mars Society Failed? If So, Now What?	***B. Gardiner*** – Making Getting Healthy Enough to go to Mars a Model for Getting Healthy Enough to Stay on Earth	***S. Bell*** – The Colonies: 2084