

Mars & Mars Planning ON THE WEB

Mars Links Pages

http://members.aol.com/Tanstaafiz/petesmars_links.htm

MARS Society

Society homepage - <http://www.marsociety.org>

New Mars Online Magazine - <http://www.newmars.com>

Mars News Updates - <http://www.marsnews.com>

The Mars Declaration -

http://www.marsociety.org/content/founding_declaration.asp

The Mars Petition - <http://www.marsociety.org/content/marspetition.asp>

M.A.R.S. Mars Arctic Research Station

Arctic Base - <http://www.marssociety.org/arctic/index.asp>

Devon Links - http://members.aol.com/Tanstaafiz/petesmars_Devon.htm

Where is it - http://members.aol.com/Tanstaafiz/toMARS_map.gif

M.D.R.S. Mars Desert Research Station

Utah Base - <http://www.marssociety.org/mdrs/>

Wisconsin Mars Society

Our website - <http://chapters.marssociety.org/usa/wi>

Information about Mars

Explore Mars - <http://www.astrodigintal/mars/mars.html>

Where is Mars? - <http://mars.jpl.nasa.gov/mgs/target/solarupdate.html>

<http://www.seds.org/nineplanets/nineplanets/mars.html>

Mars Image Gallery - <http://marswatch.tn.cornell.edu/mars.html>

“The best way to predict the future is to be busy creating it.”

“Always listen to experts.

They’ll tell you what can’t be done and why. Then do it.” - Heinlein

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Mars! What is it really like?

From the Mars Society Founding Declaration:

Mars is a world with a surface area equal to all the continents of Earth combined, possessing all the elements that are needed to support not only life, but technological society.

Just the facts:

- Mars is a bit more than half the diameter of Earth, but without oceans, its surface is as vast as all Earth’s continents put together
- Its atmosphere is thin and dry, mostly carbon dioxide and nitrogen
- Its climate ranges from cool to the cold of our Antarctic winters - but without chilling rain or snow
- Mars varies from 150 to 400 times as far away as the Moon. It takes 6-9 months travel time to get there. Launch windows open every 2 years.

Resources on Mars:

- Building materials: the soil is rich in the chemicals we need to make metal alloys, ceramics, concrete, and glass. We can expand our settlements with modules built on Mars from Mars stuffs
- Life support: the thin atmosphere has carbon, oxygen, and hydrogen; everything we need for food production, clothing, plastics, and more.
- Interplanetary trade: to pay for importing things the settlers cannot yet provide for themselves, they can export goods made on Mars to other locations in space: Earth orbit, the Moon, asteroid miners.

How we could settle in:

- Living underground will shield us from the cold, cosmic rays and solar flares. But unlike moles, we’ll bring the sun and views down with us.
- “Look, ma, no space suits!” - all habitat structures and pressurized streets will be interconnected. Surface vehicles will dock directly.
- Resourcefulness and creativity will be the hallmark of the settlers.

Restoring the Mars of its youth:

- “Terraforming”: some people dream of making Mars wetter, warmer, with a thicker atmosphere - more like Earth. It would take centuries and a monumental effort, but is possible in theory.
- “Rejuvenation”: in fact, Mars *was* wetter, warmer, and had a thicker atmosphere in the first billion years of its existence. Maybe instead of trying to make Mars like Earth, we should try to restore it to its youth.
- “Accommodation”: the settlers will decide, not us. As they change to fit Mars. Mars will have to change less to fit them.

Mars Preparations Here on Earth

Learning to make return flight fuel from Mars' air

Can you imagine how much more expensive it would be to fly anywhere if the plane could not refuel but instead had to carry with it all the fuel needed for the return trip? That was how NASA planned Mars missions, and why an expedition to Mars was costed so high when President Bush asked for an estimate ten years ago.

Thanks to **Robert Zubrin** who demonstrated the process convincingly, we can now send an unmanned probe to Mars two years ahead of the scheduled manned landing, equipped with a **sabatier reactor** which would transform the carbon dioxide of the Martian atmosphere into methane and oxygen which could be used as fuel to return the human crew home. They will arrive on Mars, with their return flight assured.

Simulating a Mars Base in Canada's Arctic

On Devon Island, high in the Canadian arctic, 2200 miles straight north of Milwaukee, lies a 20 mile crater impact made in an asteroid hit 15 million years ago. Haughton crater is strikingly "Marslike" in its terrain, and in its cold, dry climate. There have been three NASA missions to the location, the last one together with Mars Society personnel.

In summer 2000 there was something new in Haughton crater. The Mars Arctic Research Station - M.A.R.S. - was erected by the Mars Society to allow simulations of the Mars experience and to see what we can learn that we wouldn't think of from behind a computer.

Below is a drawing of the selected design, being built in Denver.



A second such station was erected in southern Utah in 2001.