

- SA Poll of the Month: answer this month's question here -

News and Announcement

- [SATC]: **Minutes of the March 22 Telecon** is now available.
- [SATC]: **Seeking inputs for SATC Year-in-Review article for Aerospace America.**
- [ICES]: **July 14-18:** the 43rd ICES at [Vail Marriott](#), Vail, Colorado, USA.
Space Architecture session is **ICES 502**. Session scheduled for **8:30am-12:00pm, Thursday, July 18, at Grand Ballroom F.**
- [AIAA Space]: **September 10-12:** AIAA Space 2013 Conference & Exposition at [San Diego Convention Centre](#), San Diego, California, USA.
- [IAC]: **September 23-27:** the 64th IAC at [China National Convention Centre](#), Beijing, China.

Mailing list highlights:

- [AIAA New Committee on Standards seeks members.](#)
- [U.S. National Research Council seeks inputs to human spaceflight study.](#)
- [Wise Geek definition of "What is a Space Architect".](#)

you can start an email discussion thread on the news or mailing list items [here](#).

Poll of the Month

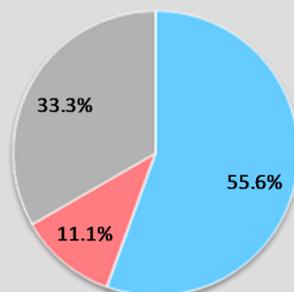
June 2013 Poll Results

Last month's poll results suggested that our community has a generally positive, if somewhat apprehensive view towards the Dutch company Mars One "one-way-trip-to-Mars" proposal.

Many respondents believed that it is highly unlikely that Mars One would achieve what it set out to do within the suggested timeframe, if at all. Nevertheless, respondents believed that ongoing progress and news about their activities could help attract the general public's attention to the inspirations and implications of human travelling into deep space. Their initiative might also usher a new wave of private human spaceflight missions in the long term. The full extract of the poll question comments can be found [here](#).

If you would like to discuss or comment on this topic, you can start an email discussion thread [here](#).

- Yes, I feel positive about it.
- No, I am sceptical about it.
- Not sure.



poll counts =18

July 2013 Question:

Power generation is a crucial aspect of any spacecraft or space architecture design. It is critically important to be planned and integrated into the design solution from the early stages.

There are currently three established categories of power generators that have been used for space applications: photovoltaics, fuel cells, and nuclear (radioisotope thermoelectric generators, or RTGs). Each of them have their specific strengths and limitations:

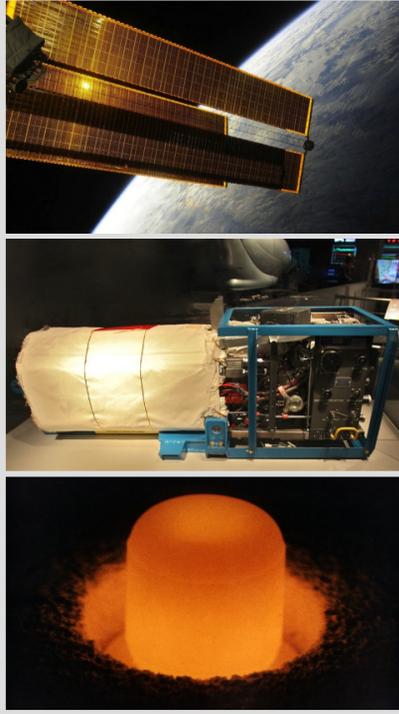
Which category of power generators would be your preferred choice for use in space architecture design?

And why?

- photovoltaics
- fuel cells
- nuclear (RTG)
- no preference / use what's economically available
- other

[Please answer the poll question here.](#)

You can also start an email discussion thread on this topic [here](#).



Images from top to above: ISS Solar Panels, by astronaut Doug Wheelock. NASA. Space Shuttle fuel cell. Source: [Wikimedia](#). Plutonium pellet used for RTG. Source: [Wikimedia](#).

Featured Profile

Company:

Liquifer Systems Group (LSG), Vienna, Austria

Managing Partners:

Barbara Imhof (SATC), Waltraut Hoheneder, Valentin Eder

Description:

Founded in 2004, LSG is a multidisciplinary platform that researches and designs both terrestrial and (outer) space systems for habitation, transportation and exploration. LSG specializes in architecture, design, human factors, systems engineering, robotics and satellite technologies for terrestrial and space applications. LSG clients, partners and sponsors include, among others, the European Space Agency, the European Union (7th framework programme), the industry and academia.

Images to the right:

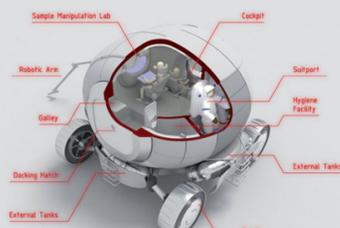
TOP: **MEDUSA**: the objective is to test critical elements in the design and utilization of future inflatable habitats for implementation in orbit and on Lunar/Martian surface. [\[video\]](#)

MIDDLE: **ISS-SLEEP-KIT**: Feasibility study, design and prototype development of a sleeping bag for zero gravity.

BOTTOM: **RAMA**: concept design for a pressurized rover capable of Lunar and Martian surface missions. [\[video\]](#)

www.liquifer.at

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Theme of the Month



Light & Lighting

Image extracted from music video *Space Oddity*, covered by Canadian Astronaut Chris Hadfield onboard ISS. Source: [YouTube](#). Editor's note: it is understood that some Photoshop lighting effects were applied during the video editing process, and that lighting onboard the ISS may not be as theatrical as it appears in the video. However, the intention of the video editor is clear: wouldn't it be amazing if lighting in the space station can be that dramatic?

2 articles can be found within the [spacearchitect.org publication archive](#) by searching under the keyword: "light | lighting".

Adams, Constance M.; Putcha, Lakshmi (2000 July). [Light System Design Studies for Space Habitats](#) (SAE 2000-01-2464).

Caballero-Arce, Carolina; Vigil-de-Insausti, Adolfo; Benlloch-Marco, Javier (2012 July). [Lighting of Space Habitats: Influence of Color Temperature on a Crew's Physical and Mental Health](#) (AIAA 2012-3615).