

[- SA Poll of the Month: answer this month's question here -](#)

## News and Announcement

**[SATC]:** Student project **"Wii in Zero G"** - your support is needed.

**[AIAA Space]: September 10-12:** AIAA Space 2013 Conference & Exposition at [San Diego Convention Centre](#), San Diego, California, USA.

**[AIAA Space]: Detailed Program** for SPACE 2013 is now available.

**[IAC]: September 23-27:** the 64th IAC at [China National Convention Centre](#), Beijing, China.

**[IAC]: Technical Program** for IAC 2013 is now available.

### Mailing list highlights:

[Should SATC continue its presence at ICES 2014 and beyond?](#)

[Ideas for 2014/15 AIAA Design Competitions.](#)

## Poll of the Month

### August 2013 Poll Results

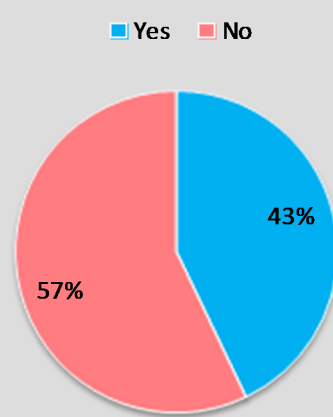
The latest poll result suggested that there is no consensus from the space architecture community on whether human presence is required for any extra-terrestrial mining operations.

For those who stated that human presence would be necessary, many believed human inputs could not be easily replaced by automations for some tasks such as initial site investigation, maintenance, on-site decision making and adaptation of the machines. However, given the high cost of human habitation in space (both in terms of economic as well as physiological), human presence is likely to remain minimal and may eventually be replaced by tele-presence or even automations in the long run.

For those who considered human presence would not be required, it was suggested that scale could be a key factor, and that mining operations at the smaller scale (such as sample return missions) should be possible to be fully automated. Even on larger scale, once a reliable automated mining operation process is created, human presence may be required only at observation stations located away from the mining process.

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

**QUESTION: Do you think physical human presence is required for any extra-terrestrial mining operations?**



poll counts =14

### September 2013 Question:

Many within the Space Architecture community earn their entire income as employees of space agencies or laboratories; others have their own companies that generate all or some of their income from space-related contracts or grants; some are academics with occasional grants, but their space-themed courses don't really affect their income (they would be paid the same by their institutions if they taught other electives); for some, space architecture is just a hobby that earns them nothing or possibly even costs them money (they pay more for membership fees and conference expenses than they earn from space architecture).



### What is the financial significance for you to work in the field of Space Architecture?

- it generates a significant part of my income (>50% total income)
- it generates only a portion of my income (25-49% total income)
- it is more or less financially neutral (0-24% total income)
- it costs more to work in the field than it generates (<0%)
- it does not affect my finance directly.

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

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

## Theme of the Month



**Inflatable**

Prototypes of Bigelow Aerospace's Sundancer habitat , Source: [Bigelow Aerospace](#).

21 articles can be found within the [spacearchitect.org](#) publication archive by searching under the keyword: **"inflat\*"**.

Adams, Constance M.; Petrov, Georgi (2005 July). [Variants on the TransHab Paradigm \(2\): The Surface Endoskeletal Inflatable Module \(SEIM\)](#) (SAE 2005-01-2847).

Cameron, Elizabeth A.; Duston, John A.; Lee, David D. (1990). [Design of Internal Support Structures for an Inflatable Lunar Habitat](#) (NASA CR-189996).

Campbell, Anthony; Barido, Richard; Knudsen, Jeff; MacKnight, Allen; Lerner, Robert; Heppel, Peter; Dalland, Todd; Jarvis, Christine; Raines, Tom; Trevino, Luis (2002 July). [Advanced Inflatable Airlock System for EVA](#) (SAE 2002-01-2314).

Di Capua, Massimiliano; Akin, David L.; Davis, Kevin (2011 July). [Design, Development, and Testing of an Inflatable Habitat Element for NASA Lunar Analogue Studies](#) (AIAA 2011-5044).

Häuplik-Meusburger, Sandra; Sommer, Bernhard; Aguzzi, Manuela (2009 September). [Inflatable Technologies: Adaptability from Dream to Reality](#). In, *Acta Astronautica* (vol. 65, no. 5-6, p. 841-852).

Herman, Matthew (2002 October). [Architectural Design Method for the Configuration of a Manned Inflatable Spacecraft](#) (AIAA 2002-6104).

Howe, A. Scott; Kennedy, Kriss J.; Guirgis, Peggy; Boyle, Robert; Lynch, Amanda; Toups, Larry; Gill, Tracy; Tri, Terry O.; Walsh, Ed; Smitherman, David; Liolios, Sotirios (2011 July). [A Dual-Chamber Hybrid Inflatable Suitlock \(DCIS\) for Planetary Surfaces or Deep Space](#) (AIAA 2011-5064).

Kennedy, Kriss J.; Adams, Constance M. (2000 February). [International Space Station \(ISS\) TransHab: An Inflatable Habitat](#). In S. Johnson, K. Chua, R. Galloway, P. Richter (Eds.), *Space 2000* (p. 89-100).

Lowe, James D. (2006 July). [How to Make an Anchor-Free, Flat-Floor Inflatable Habitat for the Moon or Mars](#) (SAE 2006-01-2100).

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Lowe, James D. (2009). [Flat-Floor Inflatable Structures](#). In A. S. Howe, B. Sherwood (Eds.), *Out of This World: The New Field of Space Architecture* (Chapter 20, p. 271-278).

Nixon, David; Larter, Nicholas; Dalton, Tara (2002 July). [Low Cost Space Experiments to Generate Performance Data on Inflatable Space Structures](#) (SAE 2002-01-2424).

Petrov, Georgi; Adams, Constance M.; Steinfeld, Kyle; Jajich, Dmitri (2006 July). [Constraints Driven Design of a Surface Inflatable Habitat Module](#) (SAE 2006-01-2101).

Petrov, Georgi; Park, Kat S.; Adams, Constance M. (2010 July). [Optimization of Inflatable Spacecraft Interior Volume Using Constraints Driven Design](#) (AIAA 2010-6070).

Pinni, Martina (2005 July). ["Space-BEE: Space Biomedical Exercise Environment" – A Personal Centrifuge within an Inflatable Structure](#) (SAE 2005-01-3049).

Sinn, Thomas; Doule, Ondřej (2012 July). [Inflatable Structures for Mars Base 10](#) (AIAA 2012-3557).

Stavrev, Valentin; Tomassian, Raffi (2008 June). [High Transparency Inflatable Modules for Space Habitats](#) (SAE 2008-01-2025).

Versteeg, Meindert (2003 September). [Semi Rigid Inflatable Mobile – An Interior Design Concept](#) (AIAA 2003-6283).

Vogler, Andreas (2002 May). [Modular Inflatable Space Habitats](#) (ESA WPP-200). In, *First European Workshop on Inflatable Space Structures* (p. 199-206). ESA/ESTEC, Noordwijk, The Netherlands, 21-22 May 2002.

Wong, Nathan; Doule, Ondřej; Cermack, Milan; Saleny, Vratislav (2012 July). [Inflatable Land Shelter Demonstrator](#) (AIAA 2012-3558).

Yin, Paul K. (1989 August 18). [A Preliminary Design of Interior Structure and Foundation of an Inflatable Lunar Habitat](#) (NGT 44-001-800). In, *Proceedings of the NASA/ASEE Summer Faculty Fellowship Program* (p. 26-1-26-10).