

BUSINESS INNOVATION SYMPOSIUM (E6)  
Case Studies and Prizes in Commercial Space (1)

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SPACE HABITAT IS HUMAN HABITAT AFTER ALL: BOLDLY GOING WHERE HAVE NOT GONE  
BEFORE

**Abstract**

We propose a new prize be established for applications of Space Habitat to terrestrial needs. In its January 5, 2013 issue, the Economist ran an editorial stating that despite all the money and efforts poured in Haiti after the earthquake, what is most needed is speedy and cheap housing. This is not just a “third World” problem. Too many New Yorkers still do not have housing after Hurricane Sandy. Ironically, we in the space community may know how to solve that problem. Space Habitat is designed to be robust, speedily deployed, and reasonably long- lasting under remarkably adverse conditions. If it could be adapted to terrestrial needs, it would make a major contribution towards solving a pressing human need and would do much to create high visibility positive media coverage and a likely increase in global public support for space agencies.

In this case study, we will document and analyze our experience as seek to create this prize for applications of space habitat to disaster relief. We will look at the requirements for Haitian and other mid- to long-term housing for victims of disaster. We then look at examples of approaches to space habitat to have potential intersections with those needs. (We shall also look at implications for ong-term housing. Finally we look at advances in low cost materials to see whether adaptations of experimental space habitats can be be expected to be realistically produced at costs that work here on Earth for this application.

Along the way we will learn how to think about terrestrial applications for space technology, how to reach out to new user communities for information and stakeholder and funder support to determine if it is feasible to go forward; how to find the right people in other scientific and engineering communities as collaborators to make it viable to go forward; and how to evaluate whether there are new funding sources to support the prize or other approaches to this work.