# 1NC

## 1NC—Topicality “Human”

### Exploration requires human travel.

Wright 8 (Edward, Project Manager – Teachers in Space, Former President – X-Rocket, LLC, and Programming Writer – Microsoft Corporation, Comment on “A Move Against ‘Mars Mission Funding’”, Space Politics, 6-28, <http://www.spacepolitics.com/2006/06/28/a-move-against-mars-mission-funding/>)

> No it doesn’t, the article showed democratic support for further unmanned mars missions?

Unmanned missions are not exploration, they are merely reconnaissance. The dictionary defines exploration as “travel for purposes of discovery.” Sitting in a control room looking at pictures of Mars on a TV set is not exploration because it does not involve travel.

Calling unmanned space “exploration” and unmanned probes “spaceships” is just an attempt to co-opt the language.

Mark further confuses the issue by defined “space exploration” to mean only missions conducted by NASA, ignoring the fact that the private sector is also working on space exploration.

### And space development is colonization.

Aldrin et al. No Date (Declan J. O’Donnell, attorney practicing general trial law in Colorado; President of the World Space Bar Association; President of United Societies in Space, Inc, Thomas L. Matula, Ph.D., Assistant Professor of Marketing, School of Business Administration, University of Houston-Victoria, Buzz Aldrin, astronaut, second human being to set foot on the Moon, Received a Doctorate of Science in Astronautics at MIT ,“International Space Development Authority Corporation: The Proposed Structure,” http://space-law.org/ISDAC/ISDAC.html, ngoetz)

The combined legislative procedures should be determined by these 500 or fewer legislators. Its agenda is expected to focus on outer space development as opposed to research, and exploration. That means eventual colonization. Rules of the road and the plan of development must be worked out well in advance of the first settlers arriving in space. Until these things are clearly defined by the Authority, colonization cannot hope to commence. See Diagram No. 3.

### The plan does not meet this interpretation—

It doesn’t involve human travel or colonization of space.

### Vote negative—

### First, limits—

Allowing the aff to do anything in space is unpredictable. The aff would race to the smallest possible aff barely related to space. Only we force the aff to have predictable mechanism – that’s is the key internal link to education because predictability is a prerequisite to research and clash.

### Second, ground—

We lose all space science based generics because they also earth science, which is perceived very differently – Small satellites don’t link to spending or trade off disads.

# 2NC/1NR

## 2NC Limits

### They under limit –

They allow for any type of satellites which could look way from earth for space science, look back at earth for weather, climate, spy, or anything else, be used for communication or military applications. They could also send unmanned deep space probes or anything else into space. That destroys predictability because each additional category has its own literature base and discards. Predictability is the biggest internal link to education – without it we don’t get pre round education because we don’t know what to research and fall back on hyper generic research. We also lose in round education because it destroys our ability to clash. The stable mechanism of humans helps isolate the part of space activities we need to prepare for.

### We don’t over limit – we allow a 4 categories:

1. Just colonization – it gets to the heart of the topic and guaranteed to be a very large aff. They could do mars, the moon, asteroids, orbital colonies, or even distant planets.

2. Propulsion – these can claim advantages based off spin off technology as well as getting there. There are lots of different types they can choose from, each having their own advantages like solar or nuclear technologies.

3. Bases – these could have unique advantages based off their utility, like military, asteroid detection of deflection, or mining on the moon.

4. Research – they could use humans to go many places do get samples and do tests. The ISS proves they don’t even have to leave orbit. The retirement of the shuttle makes this a key point of contestation in the literature.

### There’s an almost unlimited range of passive observation projects

NRC 3 (National Research Council Committee on Exploration of the Seas, Exploration of the seas: voyage into the unknown, Google Books, By National Research Council (U.S.). Committee on Exploration of the Seas)

The division produces 60-70 reports per year. These reports are unique, authoritative expert evaluations. Each report is produced by a committee of experts selected by the Academy to address a particular statement of task and is subject to a rigorous, independent peer review. The experts who volunteer their time participating on study committees are vetted to make sure that the committee has the range of expertise needed to address the task, that they have a balance of perspectives, and to identify and eliminate members with conflicts of interest. All reports undergo a rigorous, independent peer review to assure that the statement of task has been addressed, that conclusions are adequately supported, and that all important issues raised by the reviewers are addressed. Thus, while the reports represent views of the committee, they also are endorsed by the Academy.

As defined by the President's Panel on Ocean Exploration (National Oceanic and Atmospheric Administration, 2000), exploration is discovery through disciplined, diverse observations and the recording of findings. Ocean exploration has included rigorous, systematic observation and docu- mentation of the biological, chemical, physical, geological, and archaeo- logical aspects of the ocean in the three dimensions of space and in time. This definition of exploration is much broader than the definition one would find, for example, within the context for the extractive industries, where exploration is a search for hydrocarbon or mineral deposits.

## 2NC Development – Interpretation

### **Extend Aldrin -** space development is colonization – this is critical to separate it from research and exploration.

### That means they must colonize space within 100 years and use space science

Aldrin et al No Date (Declan J. O’Donnell, attorney practicing general trial law in Colorado; President of the World Space Bar Association; President of United Societies in Space, Inc, Thomas L. Matula, Ph.D., Assistant Professor of Marketing, School of Business Administration, University of Houston-Victoria, Buzz Aldrin, astronaut, second human being to set foot on the Moon, Received a Doctorate of Science in Astronautics at MIT ,“International Space Development Authority Corporation: The Proposed Structure,” http://space-law.org/ISDAC/ISDAC.html, ngoetz)

The recommended modification is to create a royalty-style pool of rental income on space resources administered by ISDAC. This pool of money can be borrowed by developing nations to establish their space agencies and space industrial infrastructure, space education, and launch facilities. When they appear in space to develop space resources reserved for them the loans are converted to grants and all prior loans would be forgiven on a formula basis, (the exact terms to be agreed upon when the first loans are made). This scheme broadens the base of national participation in the ISDAC program, avoids a taxation regime, and encourages developing nations to develop space economically, to utilize space science and technology and to find a way to enter space during the first 100 years of this mission, (in order to receive the benefit).[12]

## 2NC Exploration – Interpretation

Wright 8 -- watching a TV with picture of mars is not actually exploration – there is a necessary human travel requirement

### Best limits define space exploration as human travel on a craft

Corking 6 (2-10, <http://www.ecademy.com/module.php?mod=club&t=401626>, Founder and Principal Corking Project Corking Project Limited is an independent project management business. We deliver excellence in IT and robotic system integration for ambitious clients, including manufacturers and distributors)

By the way - we haven't had a "what is exploration?" thread yet either. I have quietly been defining it as exploration by travelling on a spacecraft. I personally have not been using the wider definition of exploration with telescopes, space telescopes or radio telescopes.

# 

# Affirmative

## Development Is What You Think It Is

### Space development is design, production, launch, and operation of space objects

ROK 5 (31 May 2005, ROK, This English version is an unofficial translation by Yoon Lee. “SPACE DEVELOPMENT PROMOTION ACT OF THE REPUBLIC OF KOREA,” ngoetz)

(a) The term “space development” means one of the following:

(i) Research and technology development activities related to design, production, launch, operation, etc. of space objects;

(ii) Use and exploration of outer space and activities to facilitate them;

(b) The term “space development project” means a project to promote space development or a project to pursue the development of education, technology, information, industry, etc. related to space development;

(c) The term “space object” means an object designed and manufactured for use in outer space, including a launch vehicle, a satellite, a space ship and their components;