

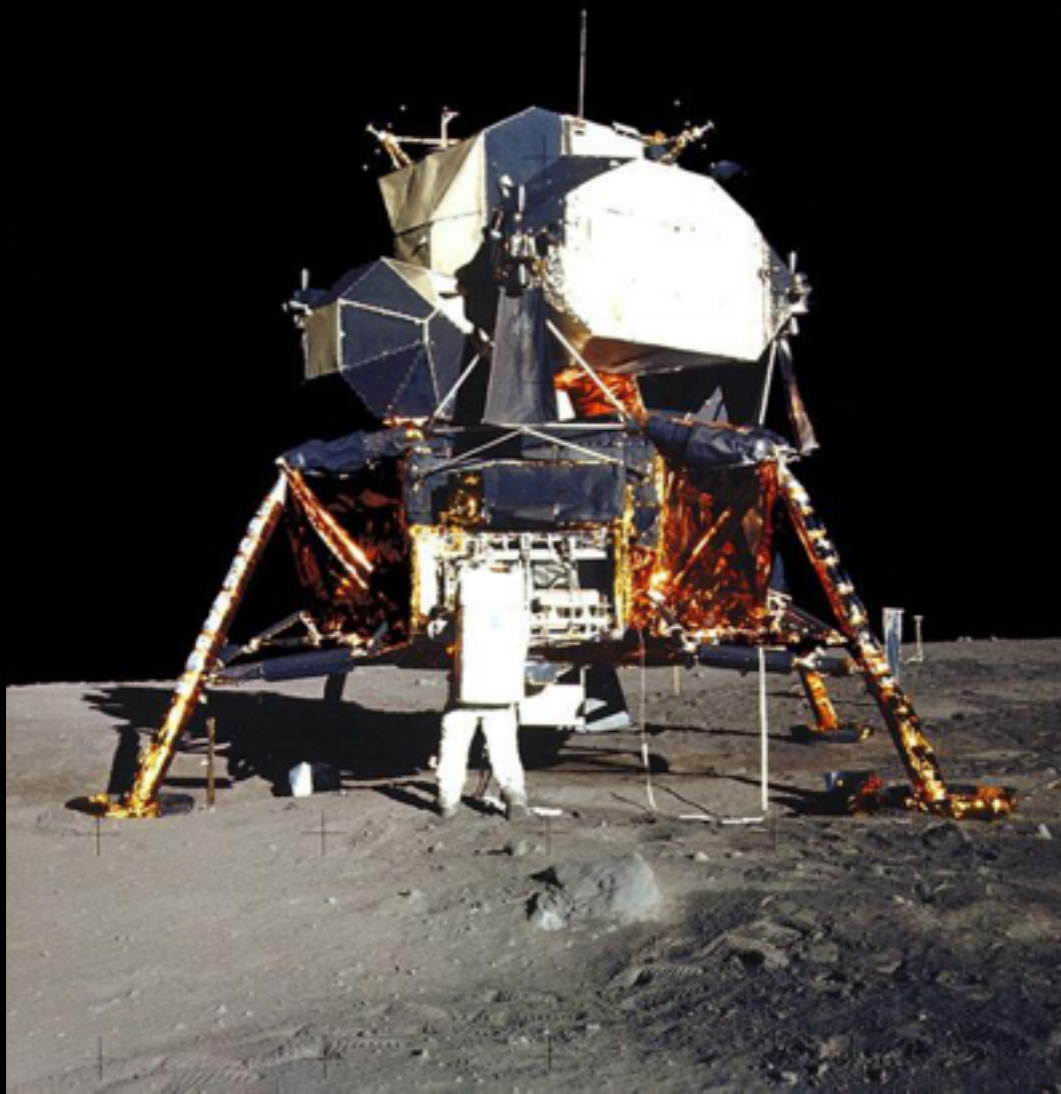
Presentation to the COPUOS Subcommittee on Science
and Technology

February 2016

David Dunlop Chair, NSS International Committee
representing
The International Lunar Decade Working Group









HERE MEN FROM THE PLANET EARTH
FIRST SET FOOT UPON THE MOON
JULY 1969, A. D.

WE CAME IN PEACE FOR ALL MANKIND

Neil A. Armstrong

Edwin E. "Buzz" Aldrin Jr.

Michael Collins

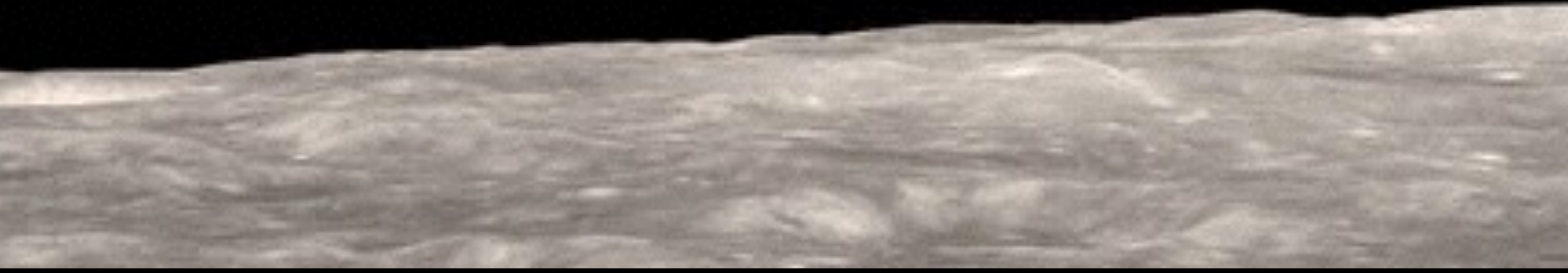
MISSION DIRECTOR
NASA

James A. Lovell
MISSION SPECIALIST
ASTOROR

William S. Pogue
ASTOROR



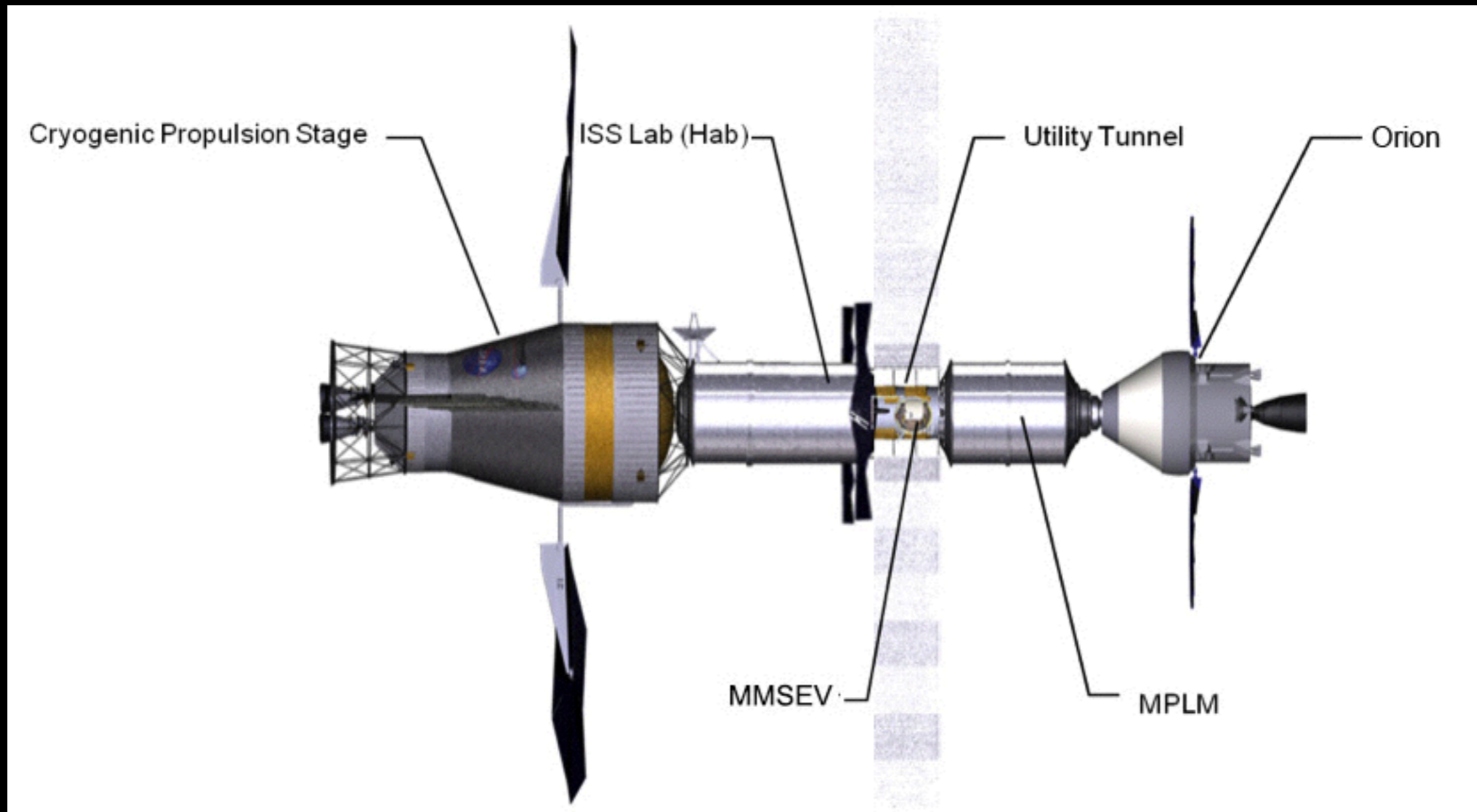
We Return to the Moon
in Peace
With All Mankind



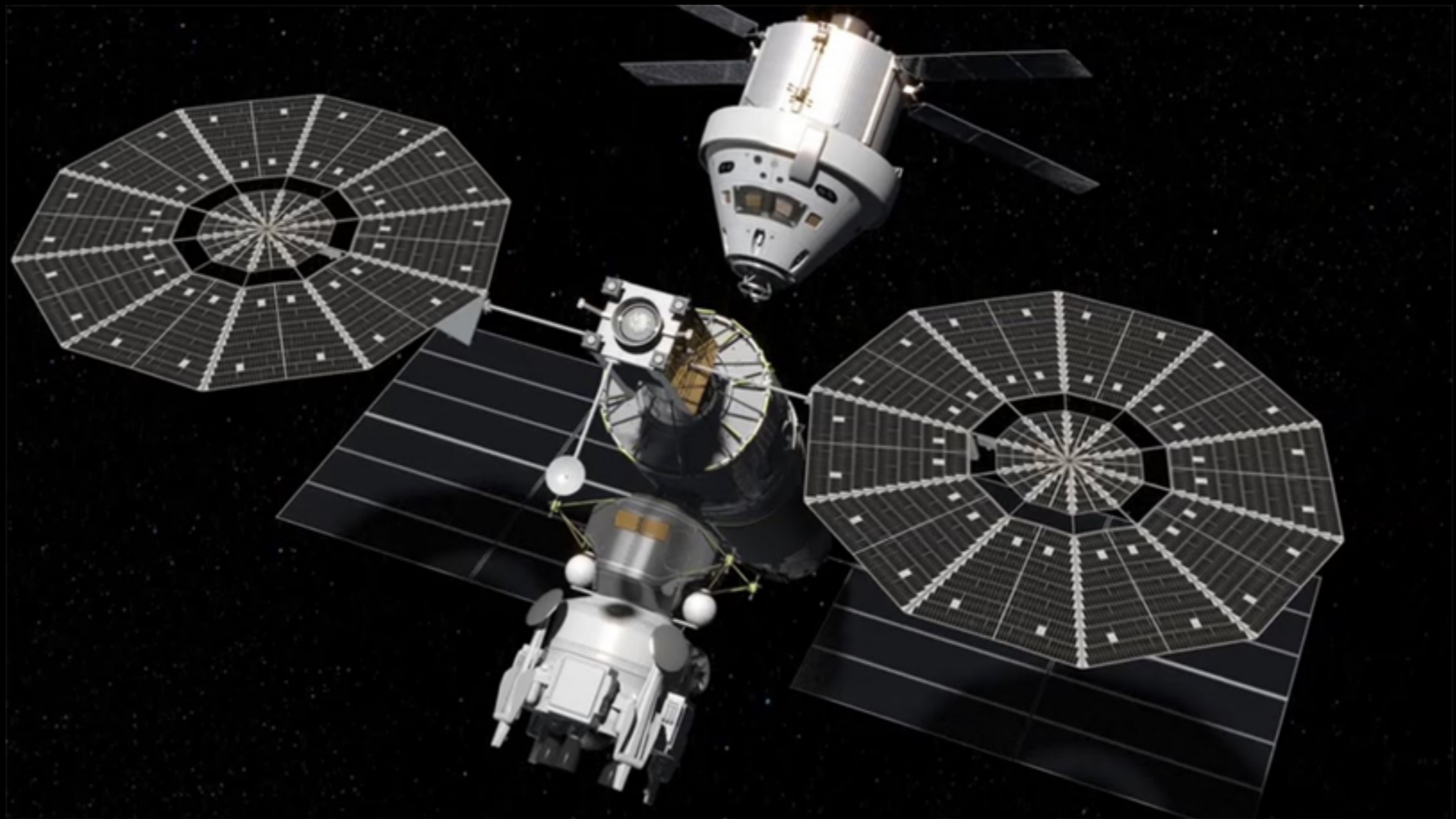


The International Lunar Decade Campaign for a new sustainable path using cislunar space resources

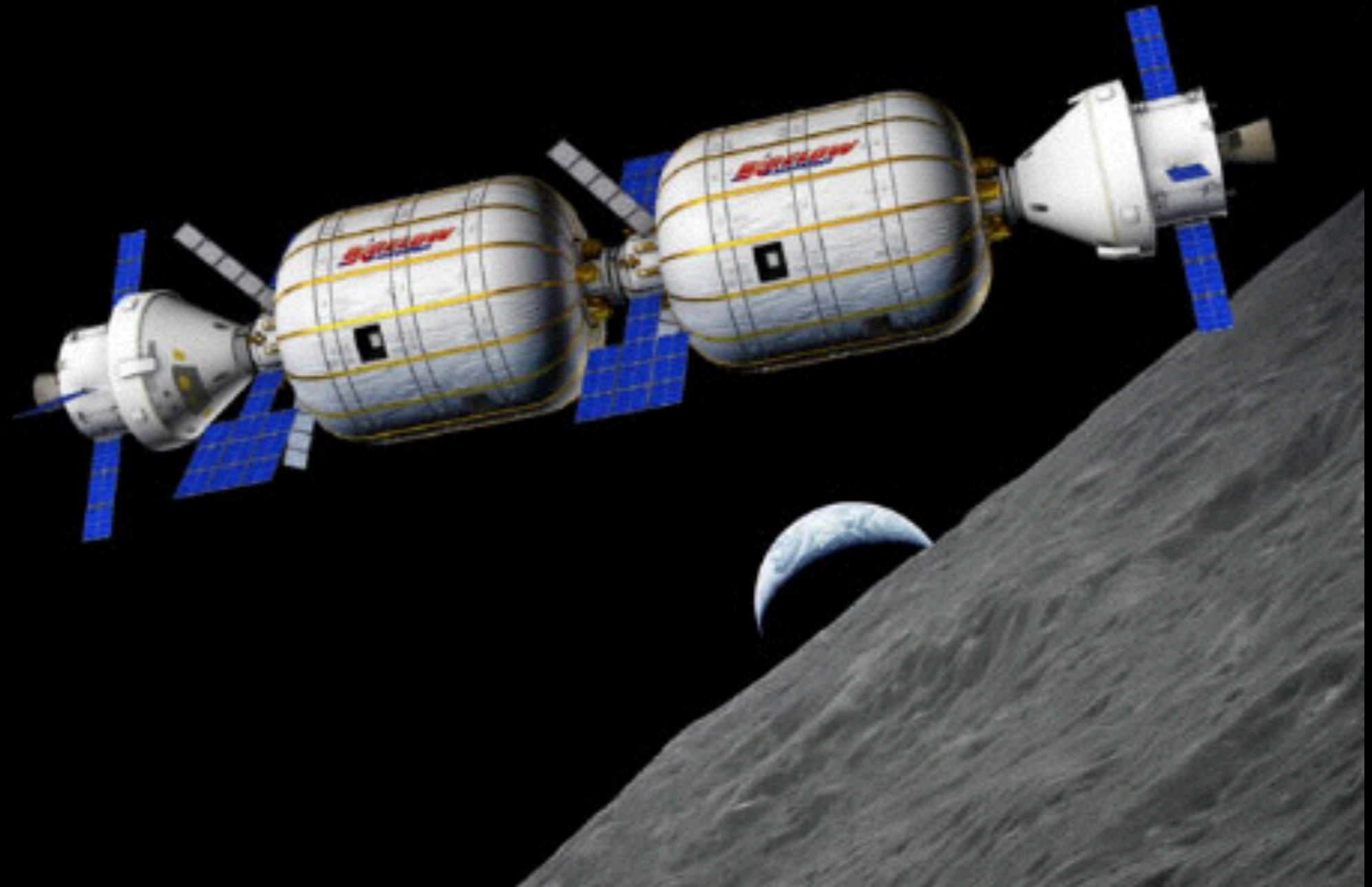
Deep Space Habitation Facility



Orion Arriving at Deep Space Habitat



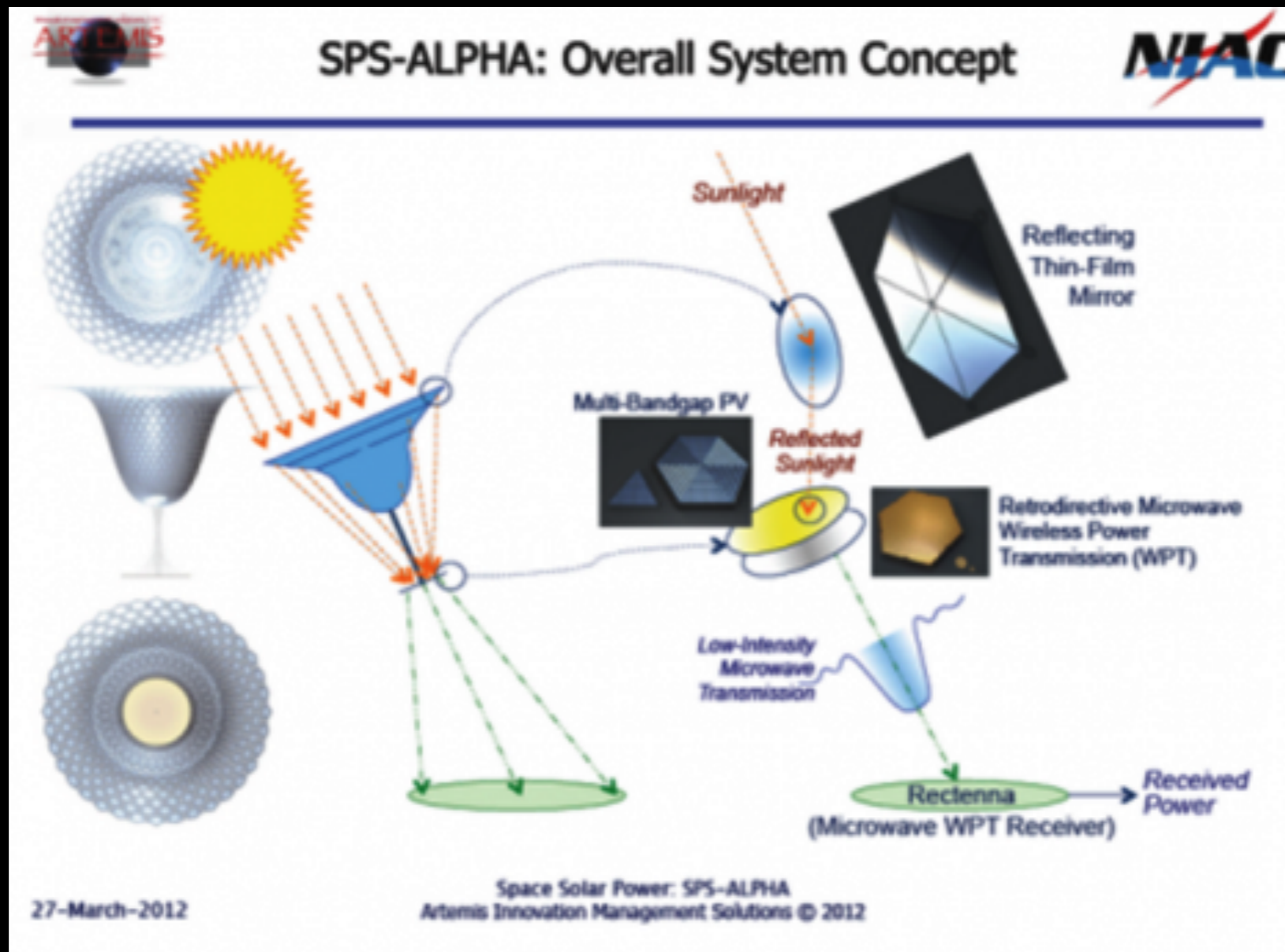
Bigelow Deep Space Habitat



COPUOS Members have the Economic and Technical Resources to Begin the ILD Campaign



Proposed Space Solar Power Satellite



Air Pollution in Mexico City, Beijing, Dehli, Los Angeles



Species Imperiled by Climate Change



Lunar Icecube Will Search for Lunar Water



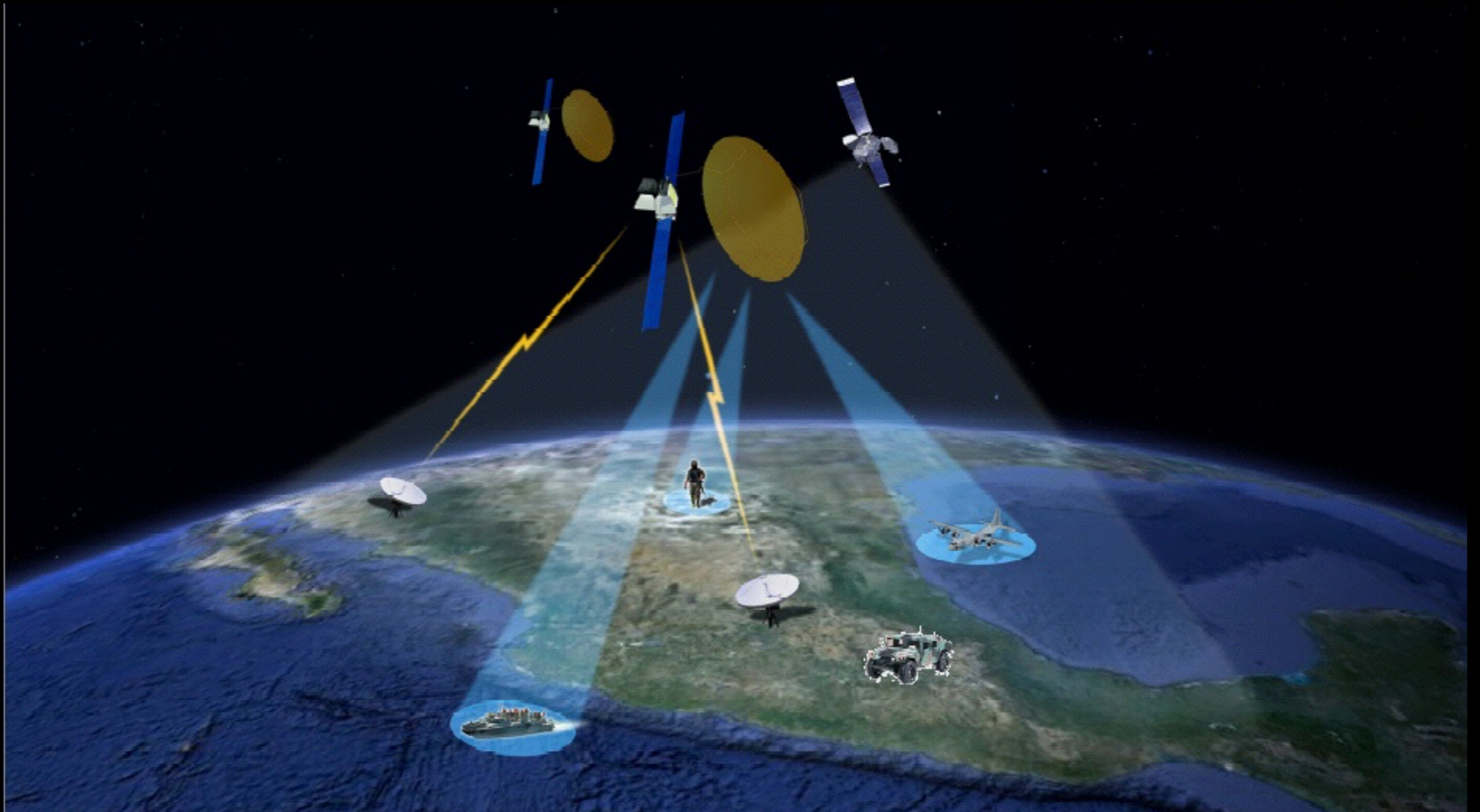
Young Engineers Showing Affordable CubeSats Are Now Mainstream



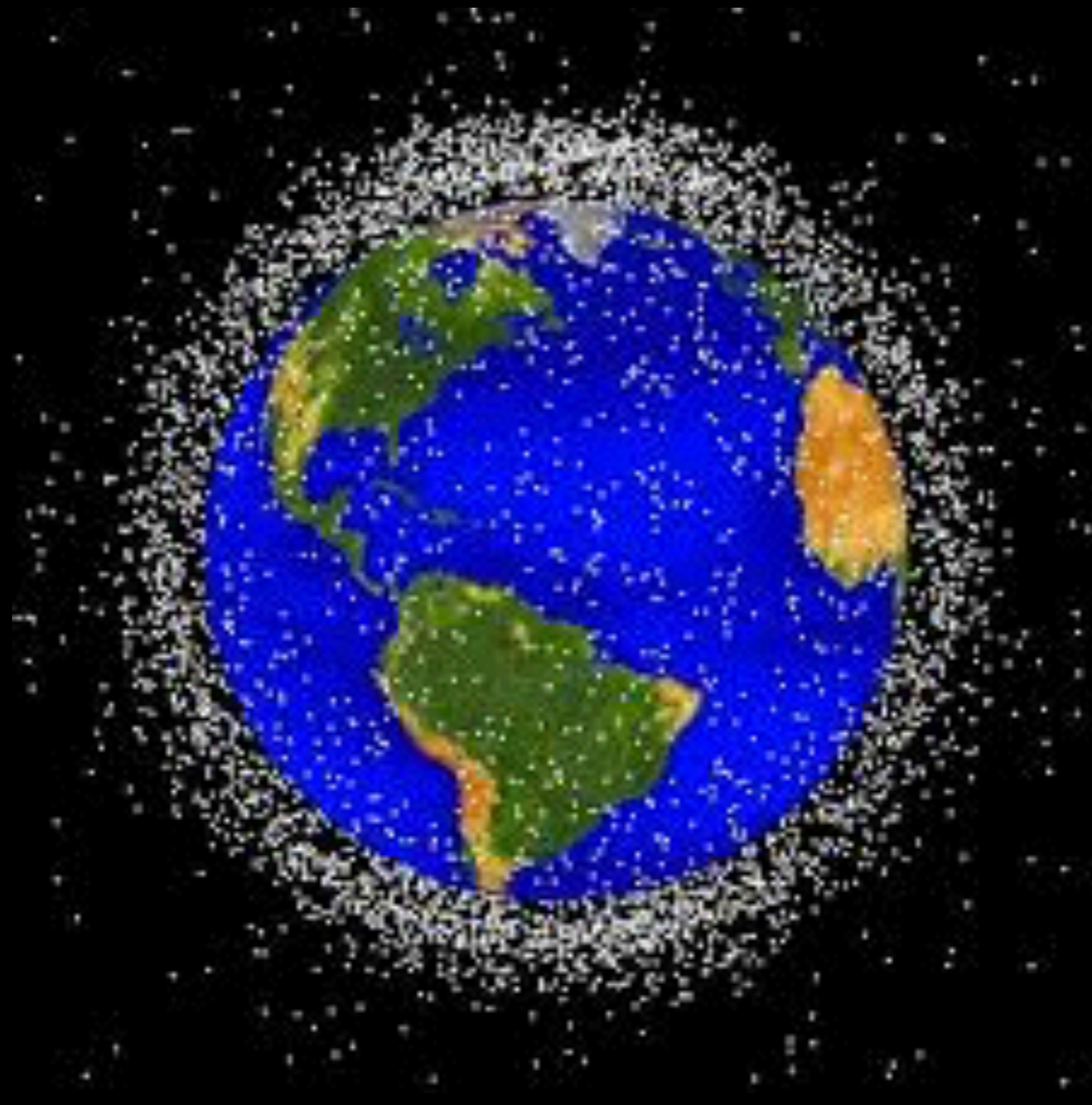
Senior Managers from ISECG Agencies Meet at ESA in Oct 2015



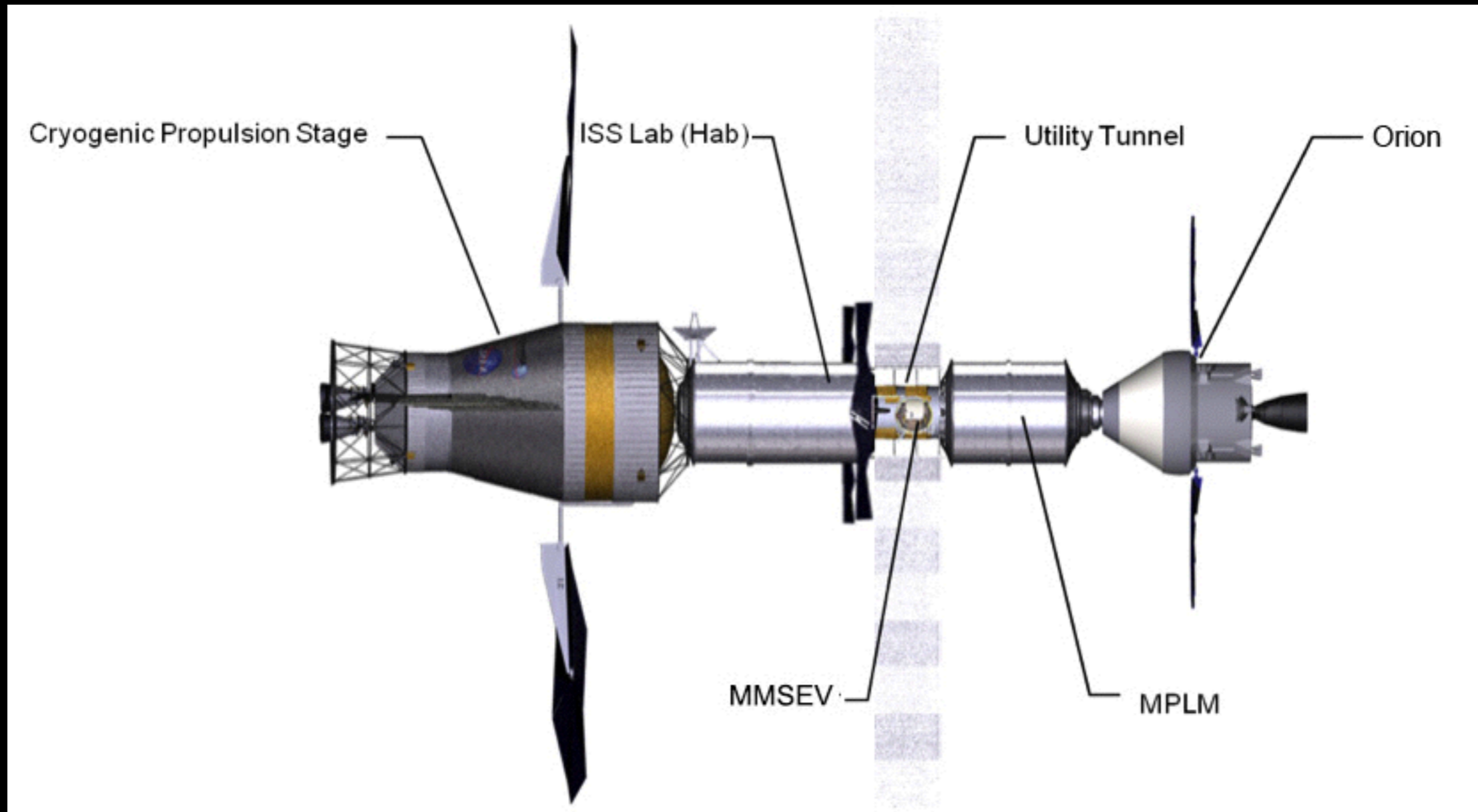
Communications Satellite



More than 500,000 Objects Space Debris Cloud



Deep Space Habitation Facility



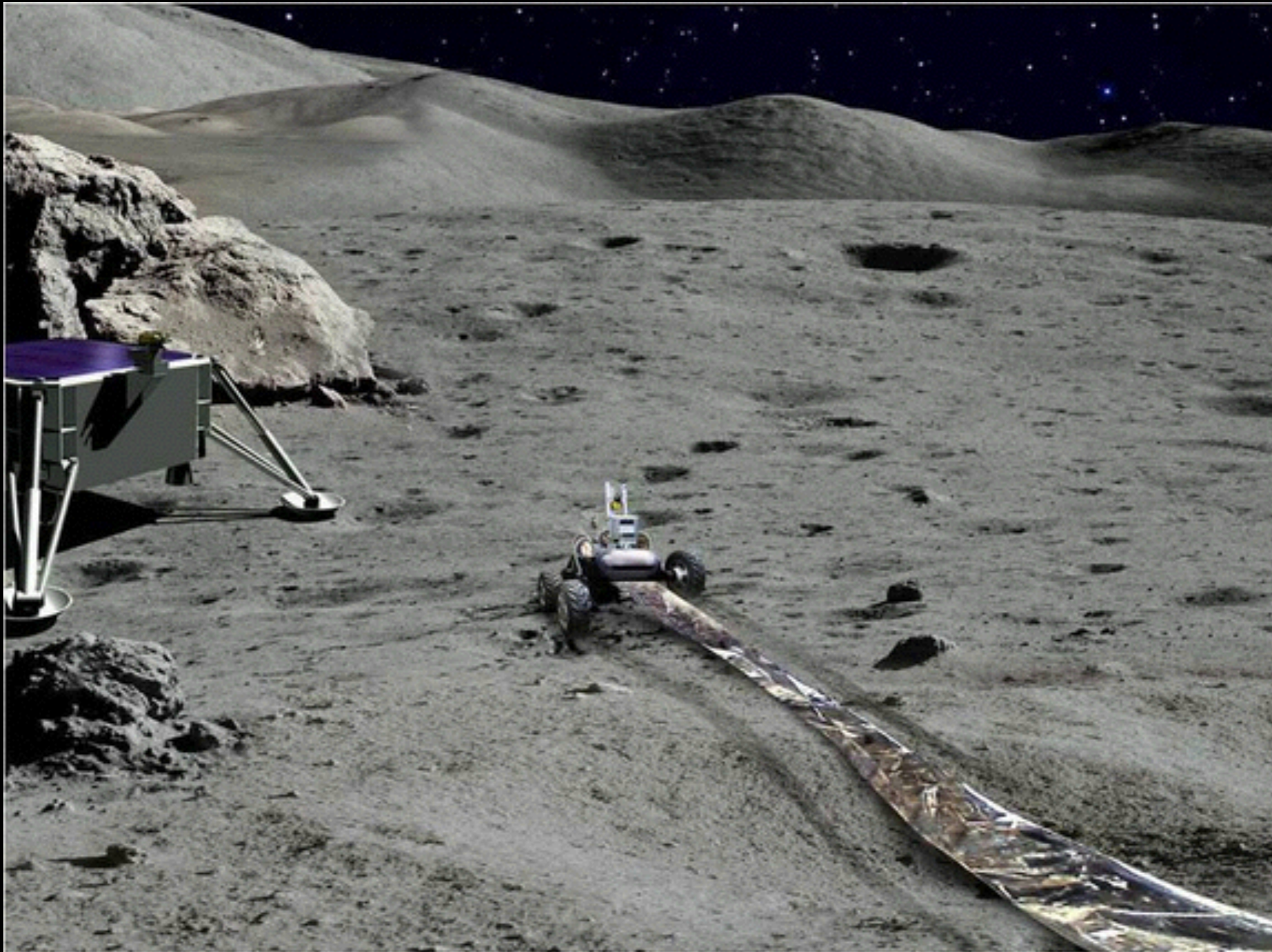
Proposed Moon Village



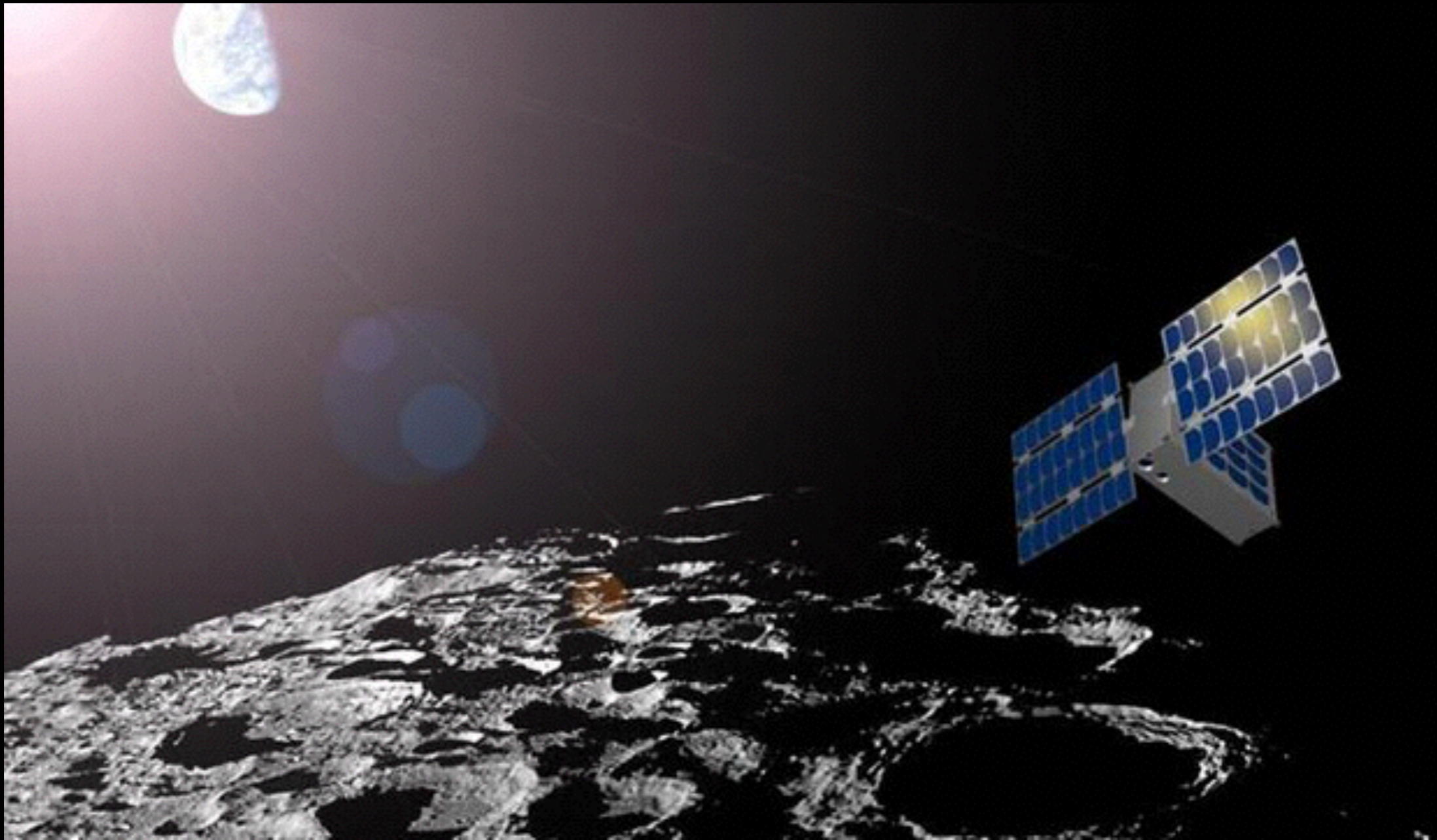
Golden Spike Proposed Lunar Facility



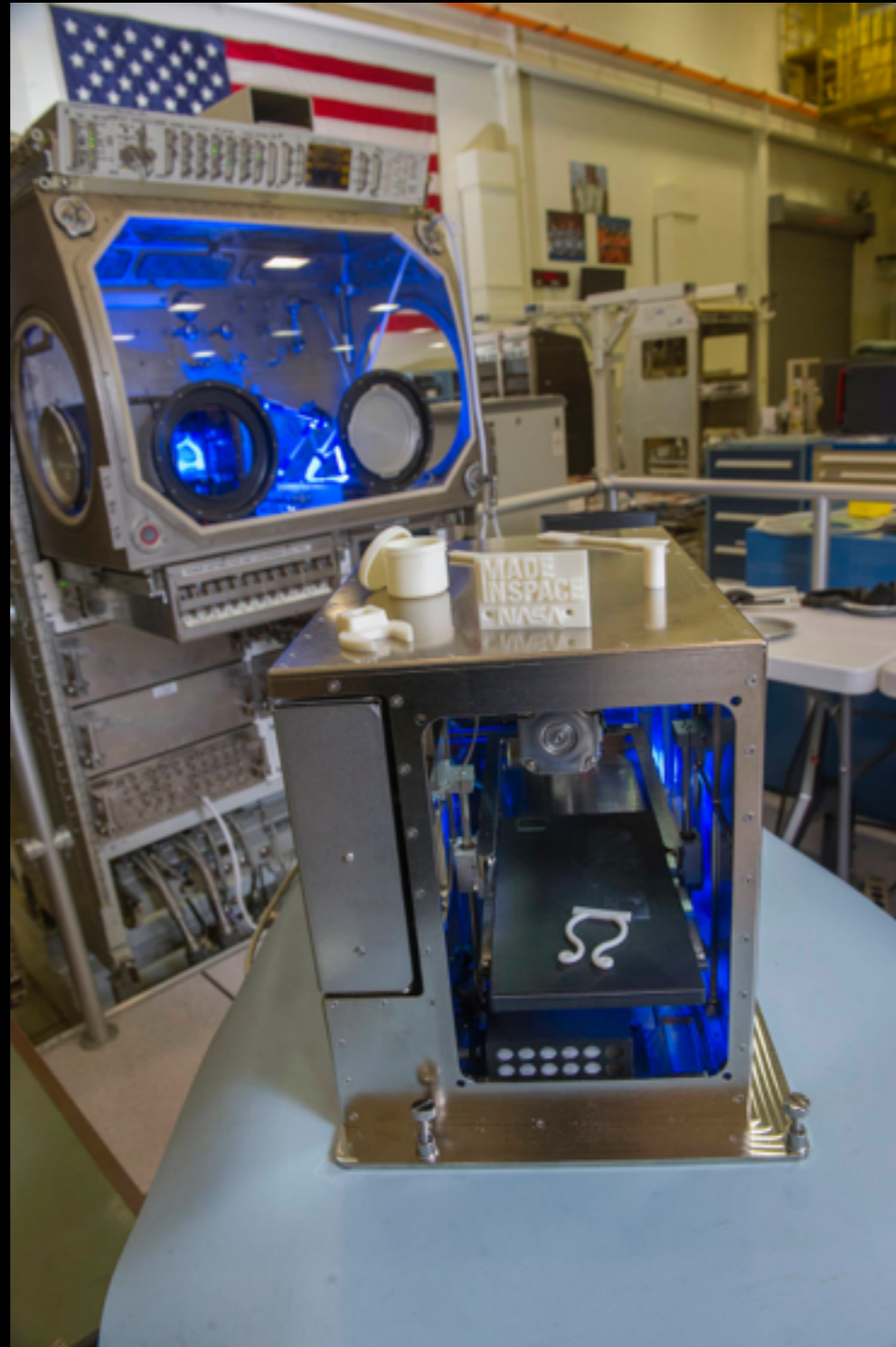
A Proposed Radio Telescope Deploying on the Lunar Farside



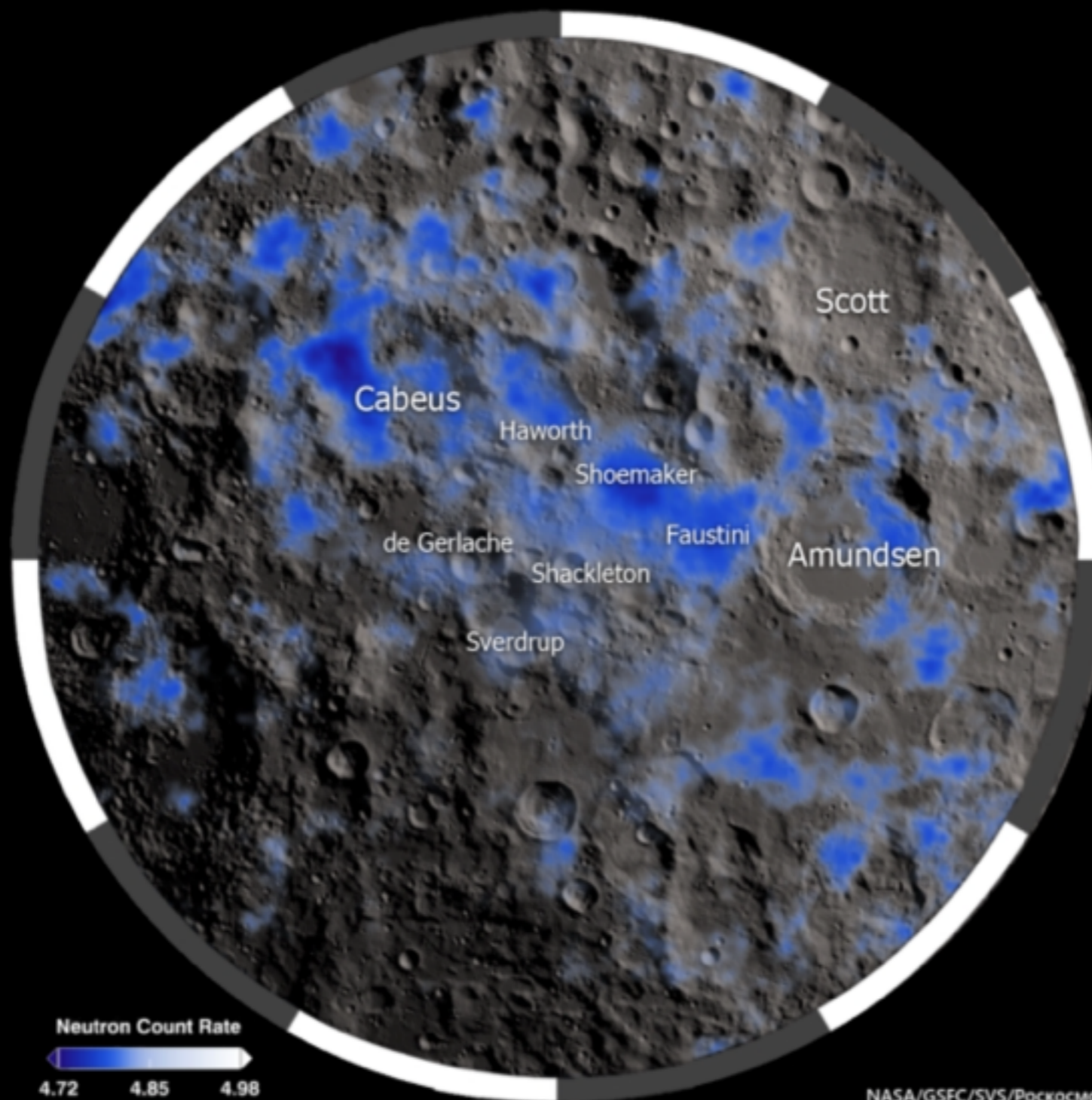
ASU LunarH-Map Cube Satellite Looking For Ice



3 D Printed Objects Made in The ISS by “Made in Space”



Investigating the origin and location of the Moon's water



Neutron Count Rate
4.72 4.85 4.98

NASA/GSFC/SVS/Роскосмос

Map of energetic neutron absorption centered on the lunar South Pole on the rim of Shackleton crater and prepared by NASA (GSFC) using neutron absorption data collected by the Russian LEND experiment aboard LRO. The map shows areas where water ice is most

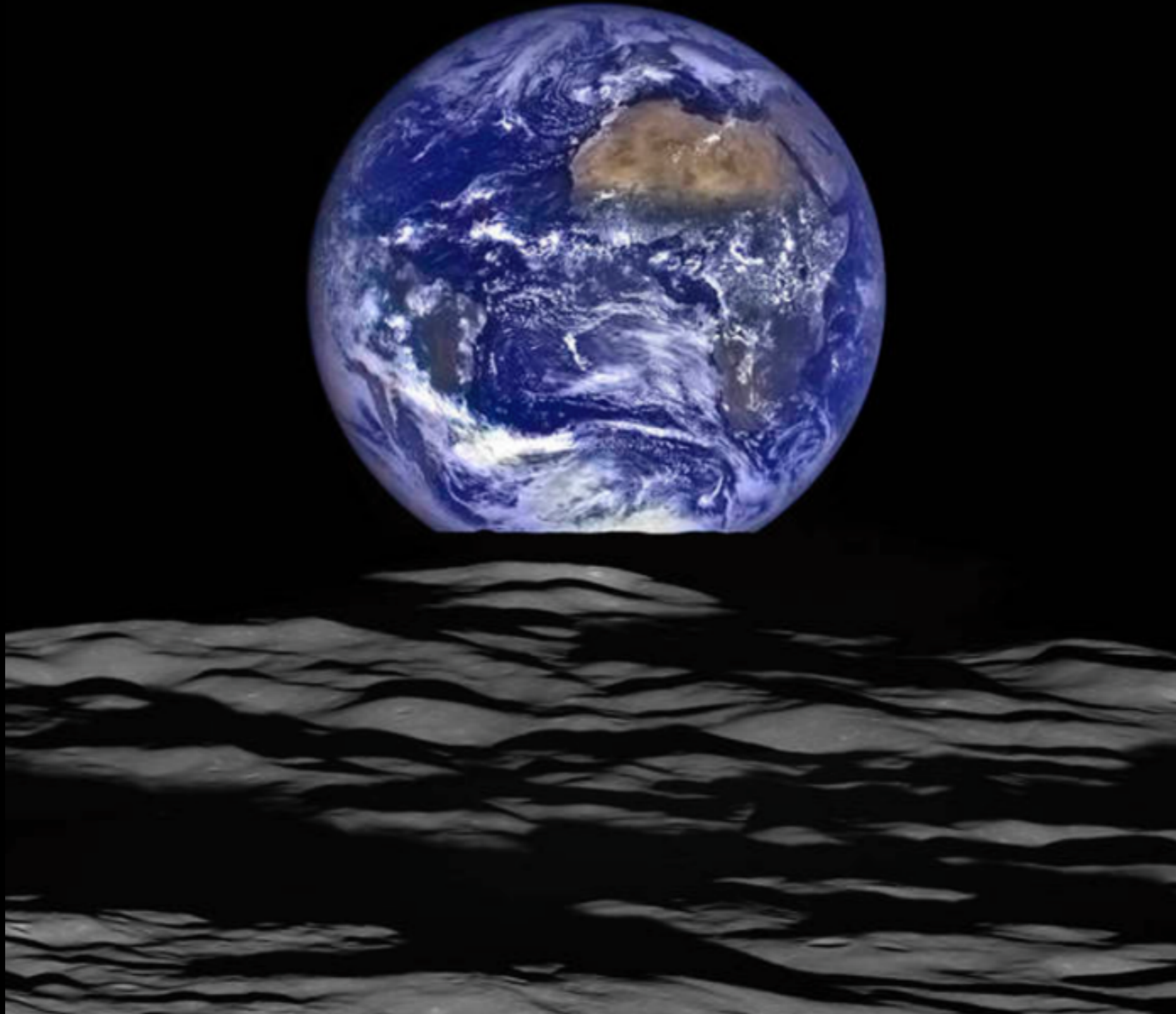
Resources Prospector Ground Test Unit

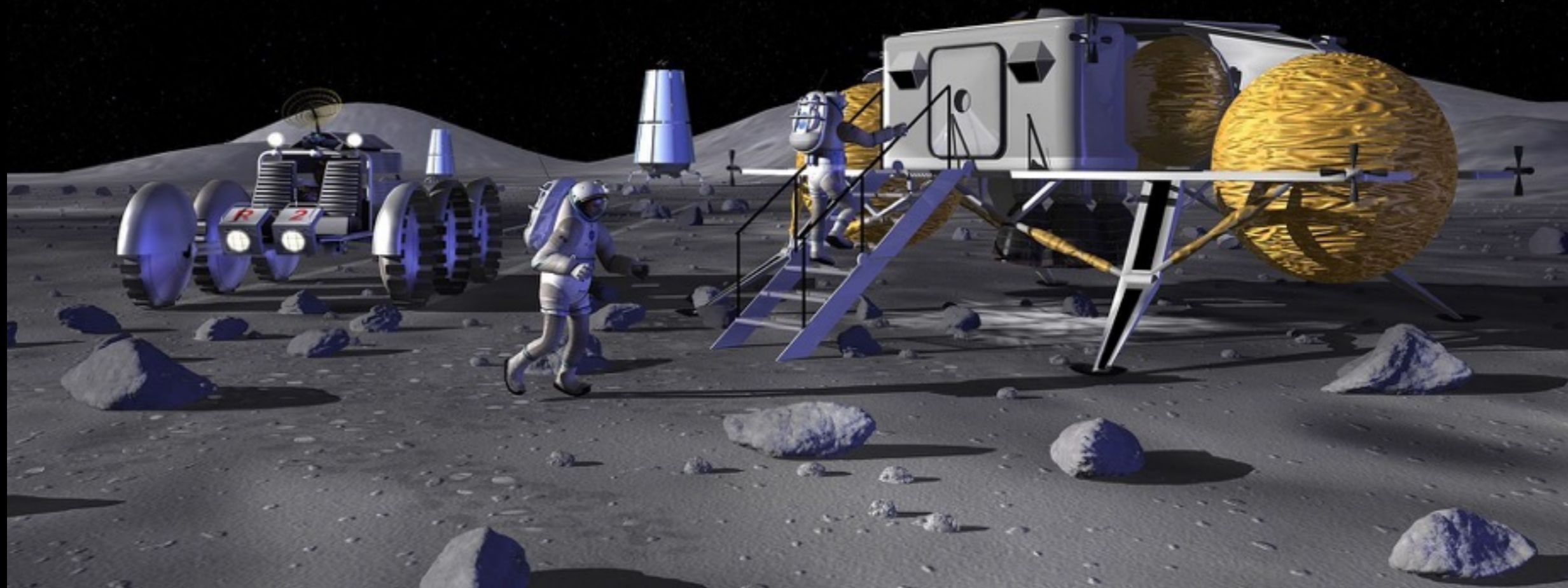


American, French-Italian, Indian, and Chinese Antarctic Bases

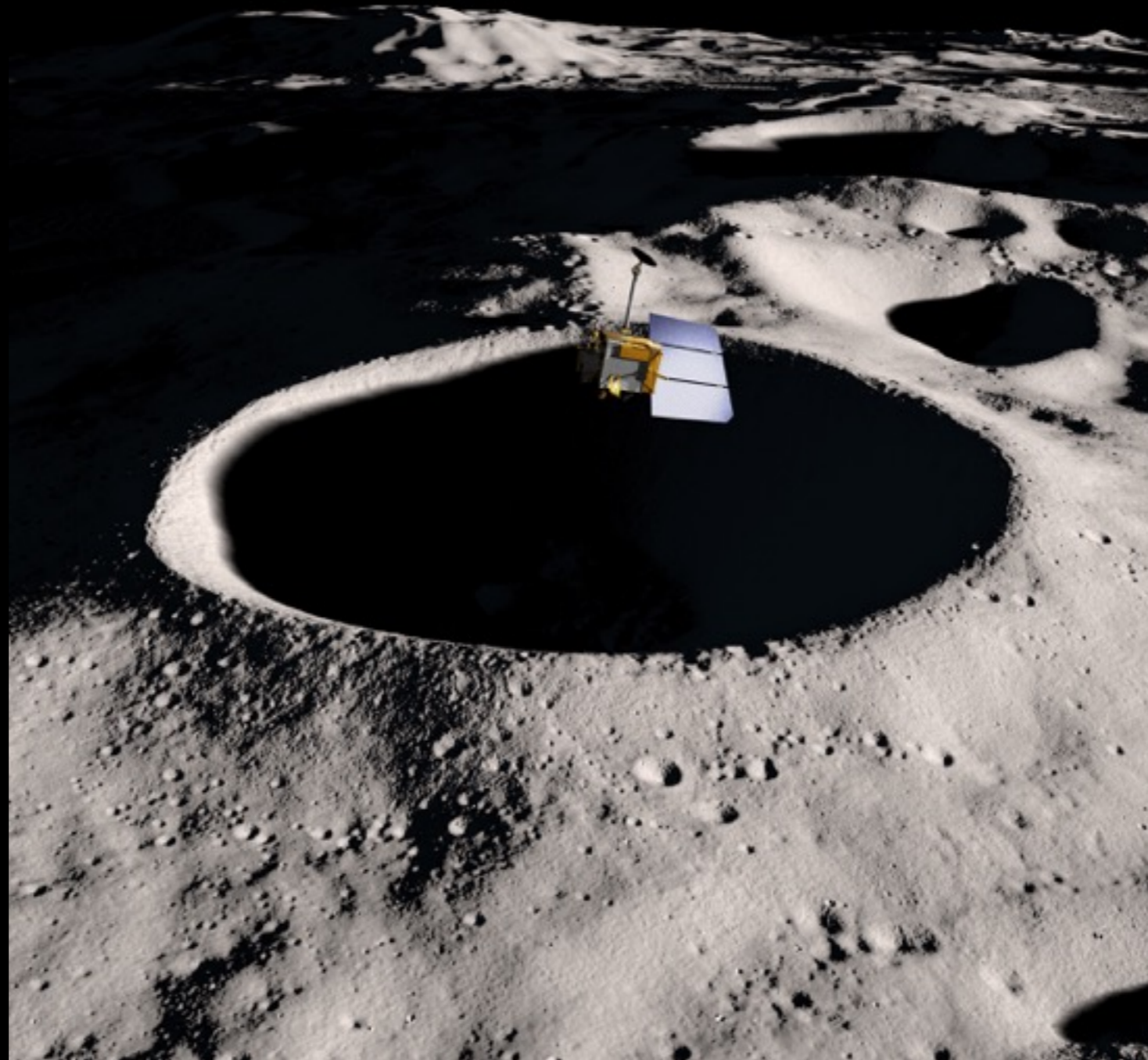


International Lunar Decade Areas for Collaborative Policy Development

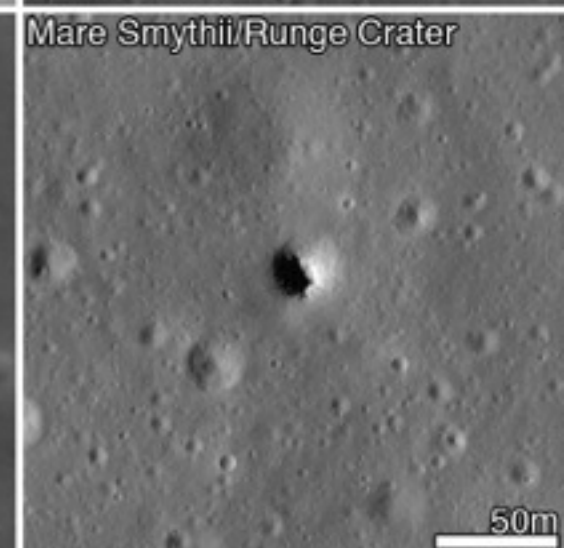
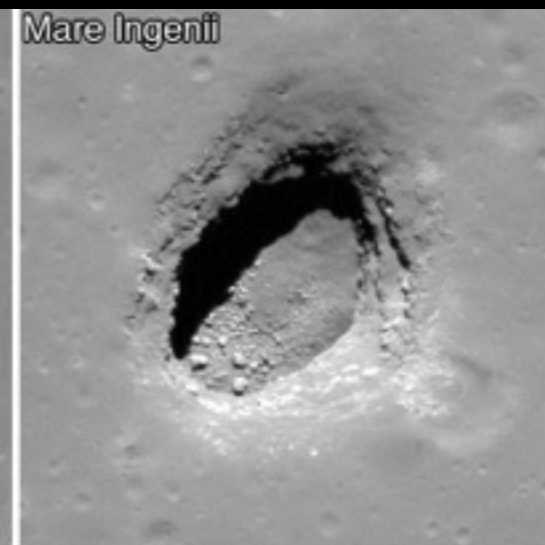
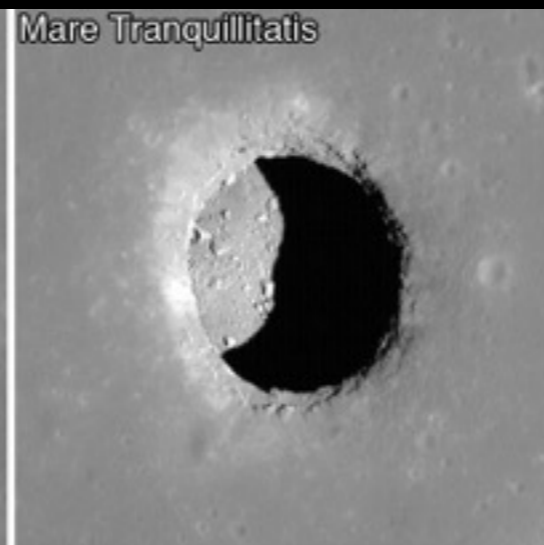




Lunar Reconnaissance Orbiter over peaks of extended illumination



Lunar Lava Pits Exploration Targets





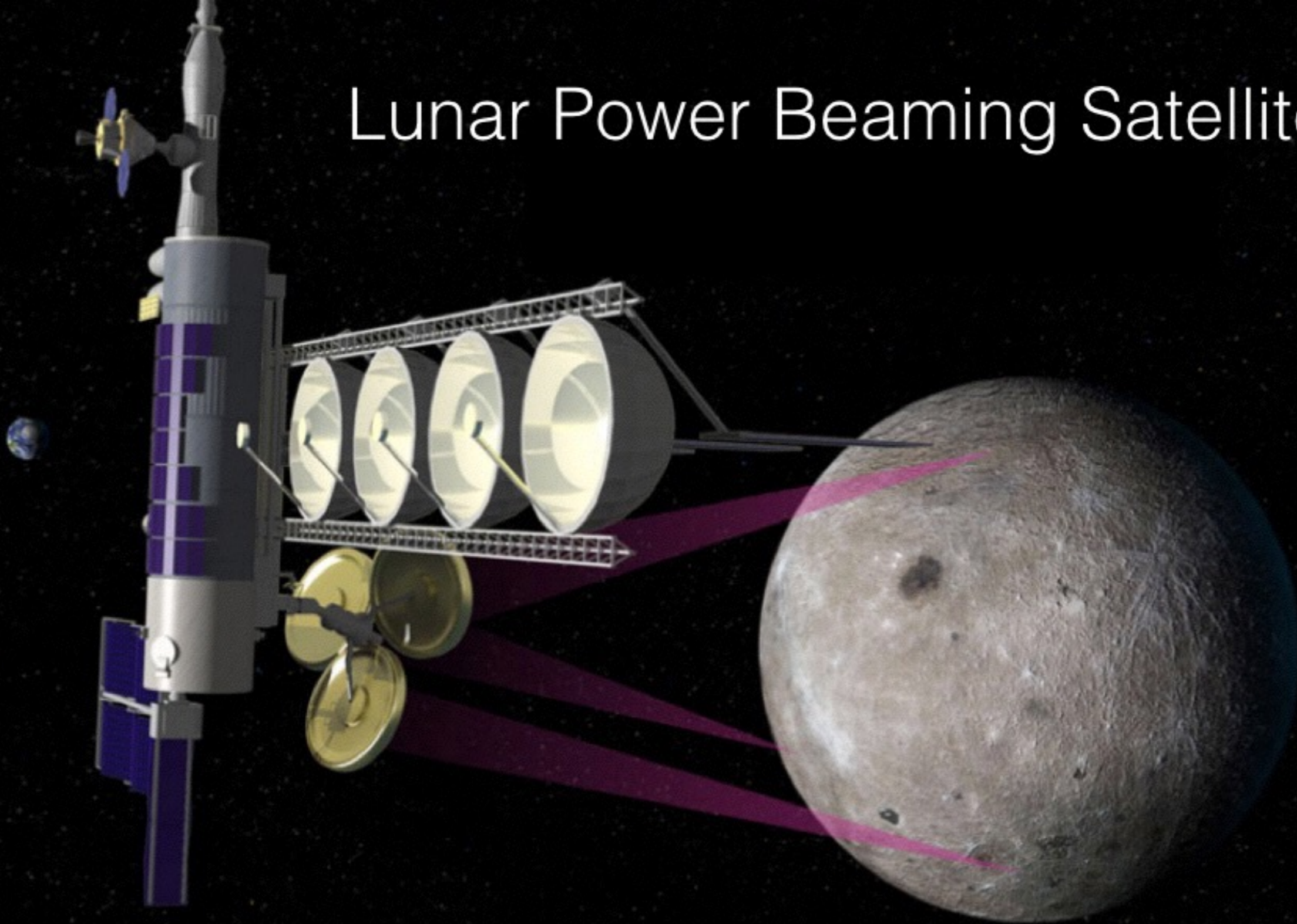
Zaartari Refugee Camp Jordan, Dadaab Refugee Camp in Kenya, and Jalozi Refugee Camp Peshawar



The UN Platform for Space-based Information for Disaster Management and Emergency Response (UN SPIDER):



Lunar Power Beaming Satellite



Lunar surface energy and material resources can further address human requirements.



AN ILD CAMPAIGN WORKING TOGETHER



INTERNATIONAL LUNAR DECADE CAMPAIGN THANK YOU



Note additional members of the International Lunar Decade Working Group:

Al Anzaldua	National Space Society
Gary Barnhard	XISP Inc., Space Development Foundation
Vid Beldavs,	Photonika Institute, University of Latvia
Brad Blair	Planet Miner LLC
Dr. Pamela Clark,	Jet Propulsion Lab & Catholic University
Russell Cox,	The Lunar Initiatives and Flexure Engineering
Jim Crisafulli,	Hawaii Aerospace Office, Hawaii Dept of Economic Development & Transportation
Dave Dunlop,	National Space Society & Space Development Foundation
Dr. Bernard Foing	European Space Agency
Bruce Pittman,	Space Portal at NASA AMES and NSS
Chip Proser,	Celestial Mechanics
Dan Rasky	Space Portal at NASA AMES
Mark Nall,	NASA Marshal Space Flight Center

Gary Barnhard	XISP
Vid Beldavs	U of Latvia
Ben Brazeau	Technical Support Green Bay Area Schools
Jim Crisafulli	Hawaii Aerospace Office
Bernard Foing	ESA
Celestine Jefferies	Green Bay Area Schools
David Kendall -	COPUOS Chair
Chip Proser	Celestial Mechanics