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June 20, 2014

BY ELECTRONIC POSTING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Bigelow Aerospace, LLC
Notice of Ex Parte Presentation in ET Docket No. 13-115

Dear Ms. Dortch:

This letter is submitted in accordance with Section 1.1206(b) of the Commission's Rules (47 C.F.R. § 1.1206(b)) to report an *ex parte* meeting on Wednesday, June 18, 2014 concerning the above-referenced rulemaking proceeding among Michael N. Gold, Director of D.C. Operations for Bigelow Aerospace, LLC ("Bigelow Aerospace") and the undersigned counsel; Julius Knapp, Mark Settle, Jamison Prime, and Nicholas Oros of the Commission's Office of Engineering and Technology; and Karl Kensinger, Robert Nelson and Chip Fleming of the FCC's International Bureau. The meeting was devoted largely to describing the development of Bigelow Aerospace's expandable space habitat program over the course of the past decade, its plans for Low Earth Orbit ("LEO") and beyond LEO deployments over the next five to ten years, and the need for the Commission to initiate a proceeding to allocate spectrum for future commercial space stations.

A summary of the information communicated is contained in the attached slide deck that was the basis for the presentation. Pages 16-18 of the attachment summarize the current spectrum use by the company, largely pursuant to FCC-issued experimental licenses; the current deployment of transmit/receive ground stations within the U.S.; and the company's estimate of the near-term spectrum needs necessary to support the operation of multiple crewed orbital space stations.

Bigelow Aerospace also emphasized the importance of moving quickly to initiate a Notice of Proposed Rule Making ("NPRM") to address spectrum allocations for crewed space

stations operating in non-geostationary orbit. Such an NPRM is the next necessary step toward implementation of the company's plans to provide access to on-orbit commercial research and development facilities for national space agencies, private companies and research organizations agencies. Spectrum allocation, however, is not the only required step, as the Commission will also need to address, preferably concurrently with the consideration of spectrum allocations, the regulatory classification and service rules applicable to crewed commercial space station operations.

Please direct any questions concerning this submission to the undersigned counsel.

Respectfully submitted,

s/ David S. Keir

David S. Keir
Counsel to Bigelow Aerospace, LLC

cc: Julius Knapp
Mark Settle
Jamison Prime
Nicholas Oros
Karl Kensinger
Robert Nelson
Chip Fleming

Expanding Opportunities in the Final Frontier:
The Bigelow Aerospace Story

FCC Meeting
ET Docket No. 13-115
Washington, DC, June 18, 2014

The Genesis Missions

Mission Control
Las Vegas Nevada
BIGELOW

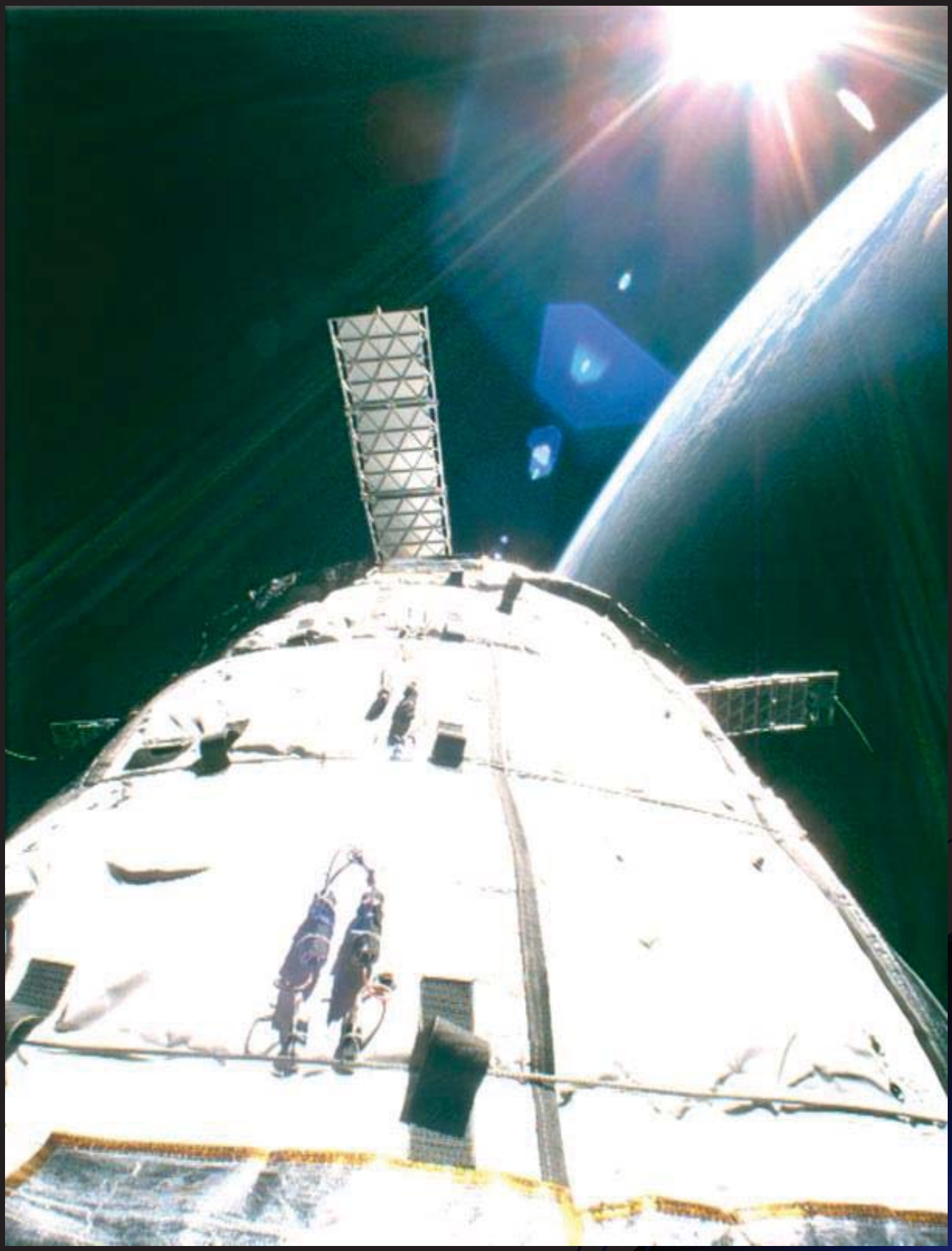
Genesis I

- Launched on July 12, 2006 by ISC Kosmotras from the new Yasny Launch Base in the Orenburg Region of Russia
- Genesis I validated BA's fundamental engineering concepts and proved the deployment process
- Genesis I demonstrated expandable habitats' long-term durability and provided BA flight controllers with invaluable experience in on-orbit operations

Genesis I Firsts

- First launch by Bigelow Aerospace
- First launch of an expandable space habitat prototype into orbit
- First launch of a single, large payload aboard the Dnepr
- First launch from the new Yasny Cosmodrome in Russia

Genesis I

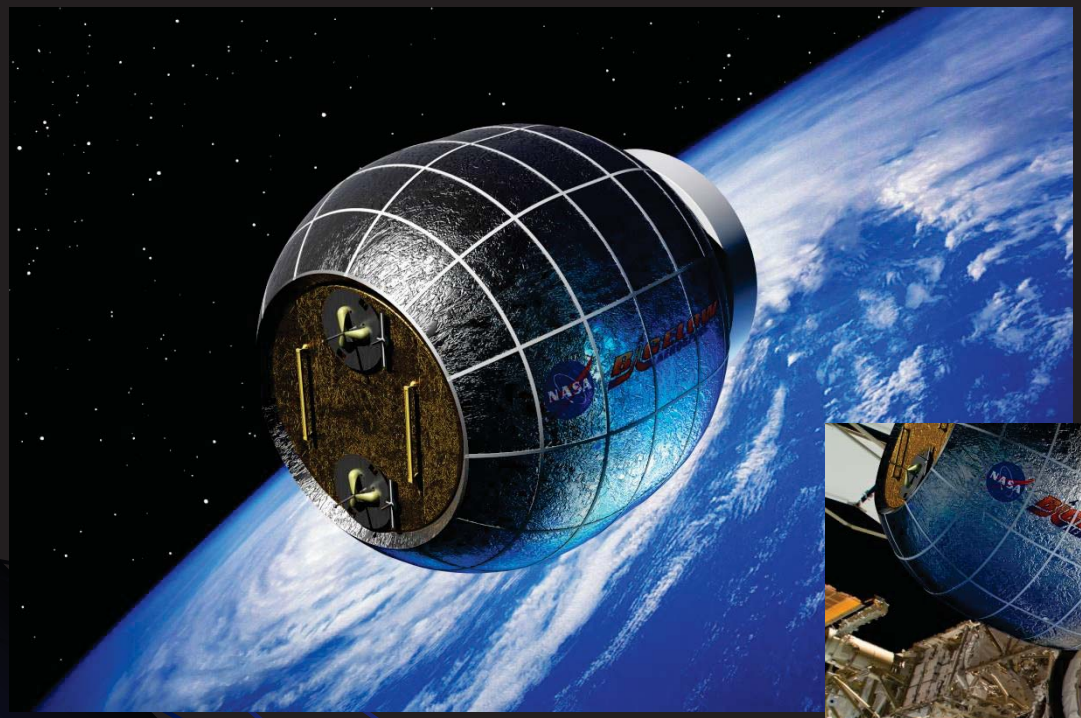


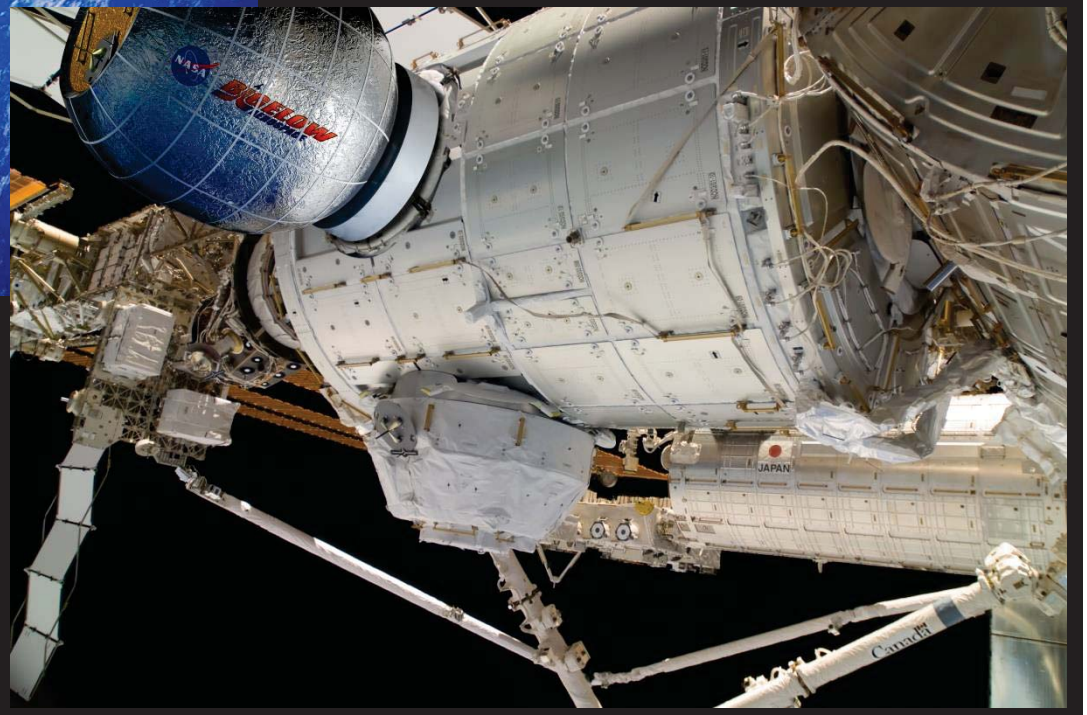
Launch of Genesis II on Dnepr LV from Yasny Launch Base

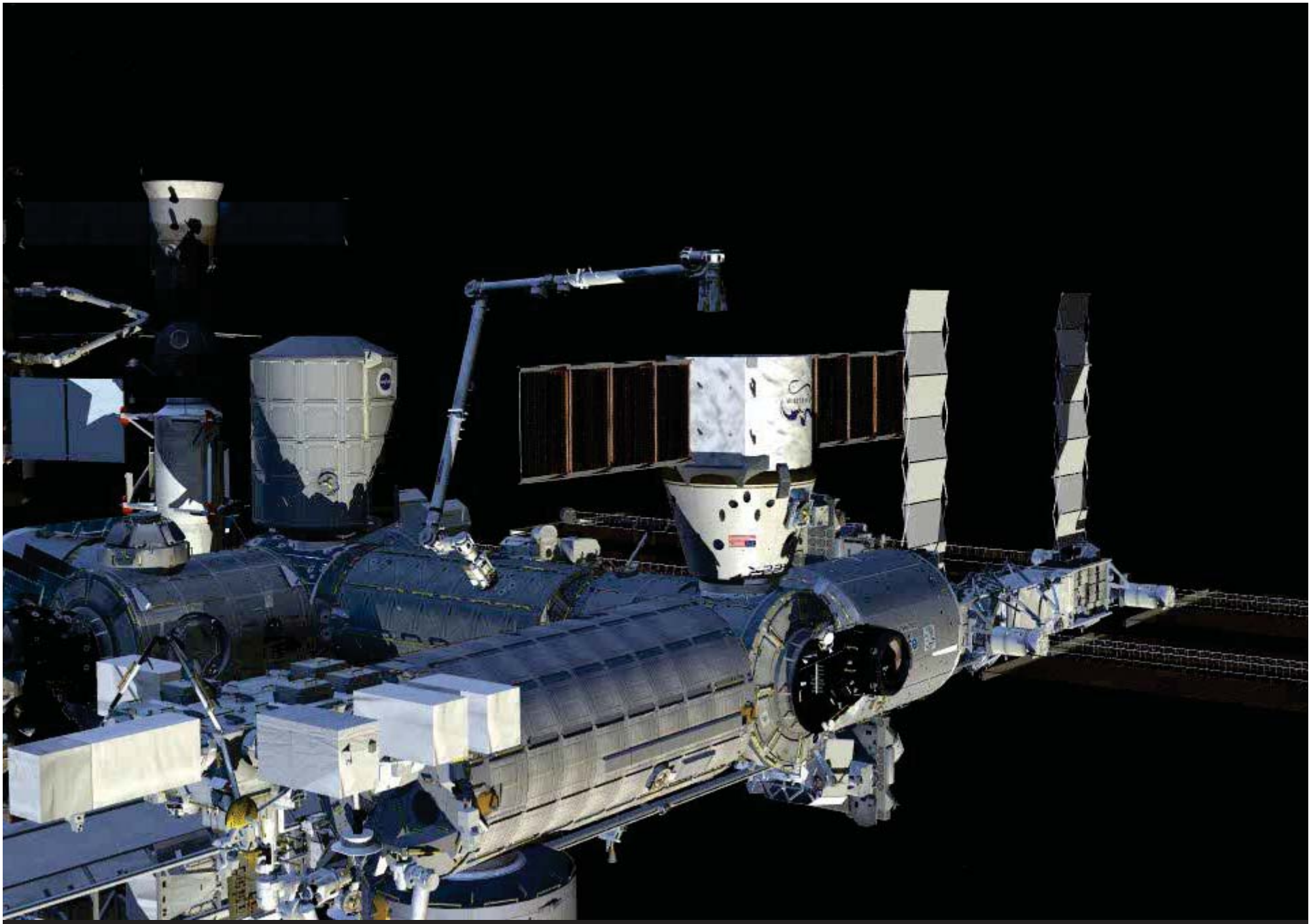
Genesis II

Genesis II Surprise

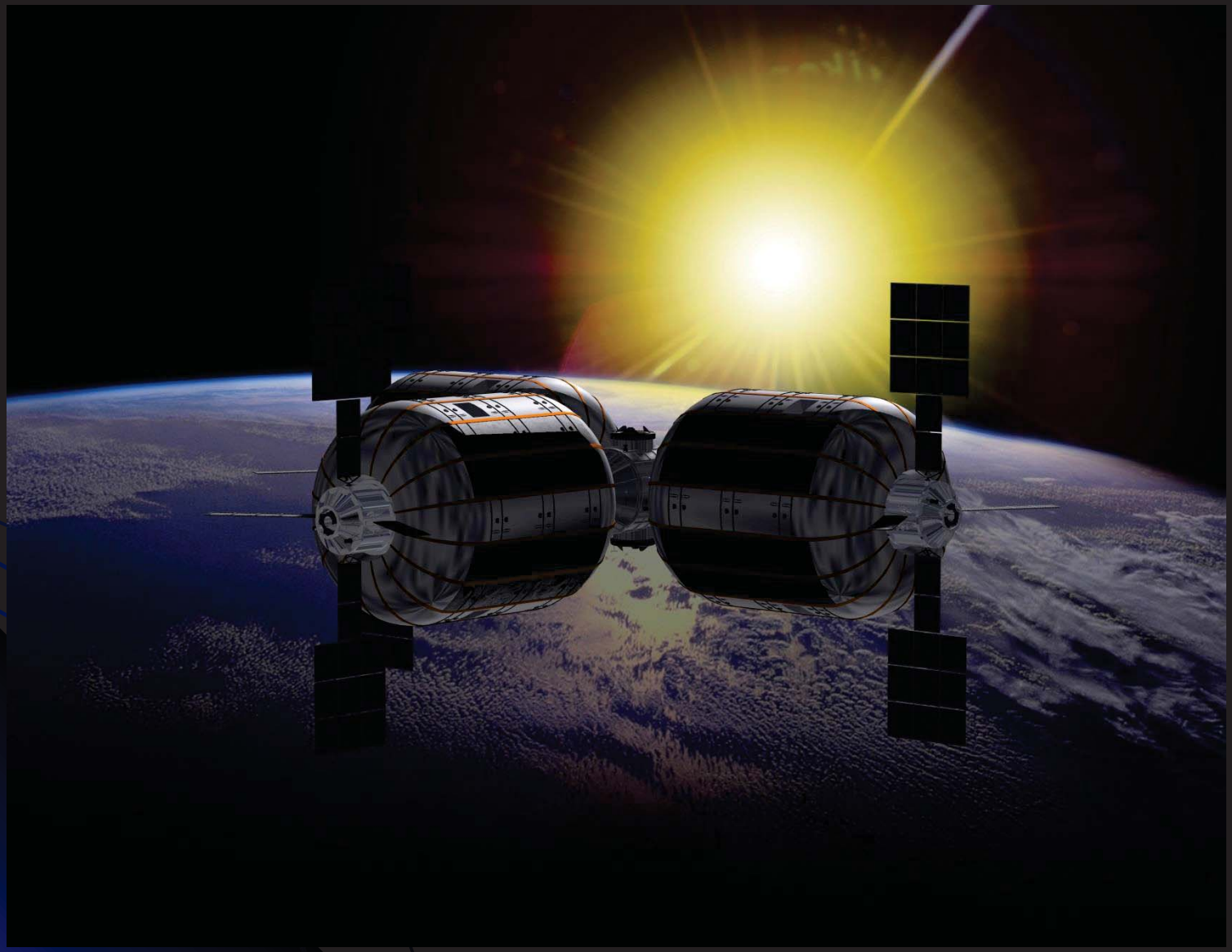
BEAM Me Up





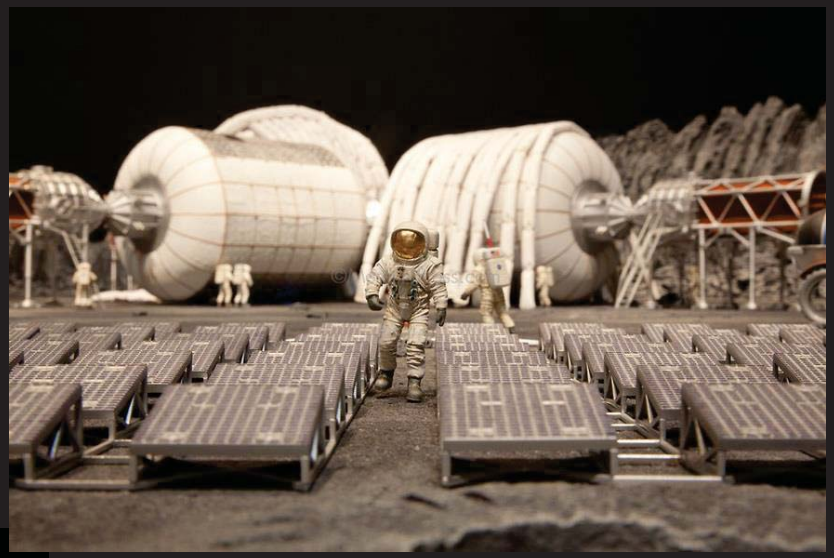


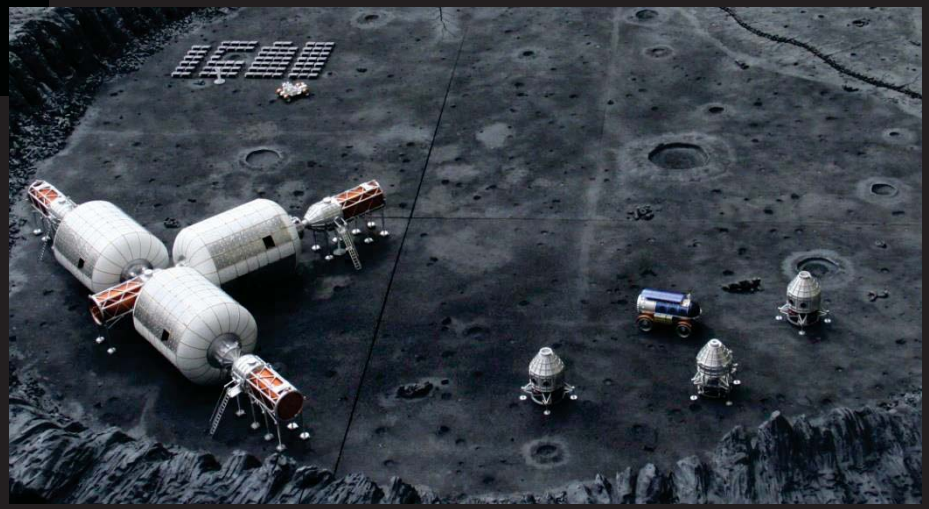
BA 330



Beyond LEO Exploration

- Volume
- Radiation
- Physical Debris
- Trace Contaminants
- Less Mass
- Less Money





Current Bigelow Aerospace Spectrum Use

- VHF @ 145-146 MHz under OET Experimental License (Call Sign WD2XWW)
- UHF @ 401-401.7 MHz & 402.4-403 MHz under OET Experimental License (Call Sign WD2XND)
- X-Band @ 8483-8492 MHz under OET Experimental License (Call Sign WE2XFH)

Ground Station Locations

- Na'alehu, Hawaii
- North Pole, Alaska
- North Las Vegas, Nevada
- Loring Air Force Base near Limestone, Maine

Suggested Spectrum Allocations for Future Space Operations

- VHF Uplink – 150 kHz (emergency audio, data and back-up communications)
- UHF Downlink – 150 kHz (emergency audio, data and back-up communications)
- S-Band Downlink – 25 MHz (telemetry)
- S-Band Uplink – 25 MHz (telecommand)
- X-Band Downlink – 50 MHz (on-orbit customer video and data downlinks)
- C-Band/X-Band Uplink – 25 MHz (customer video and data links to space stations)

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