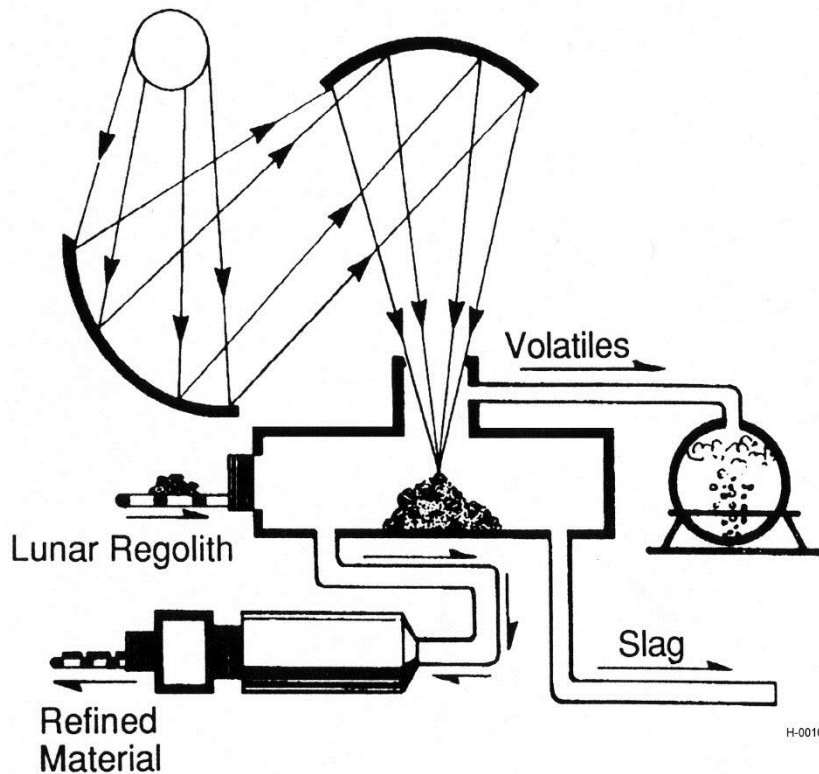


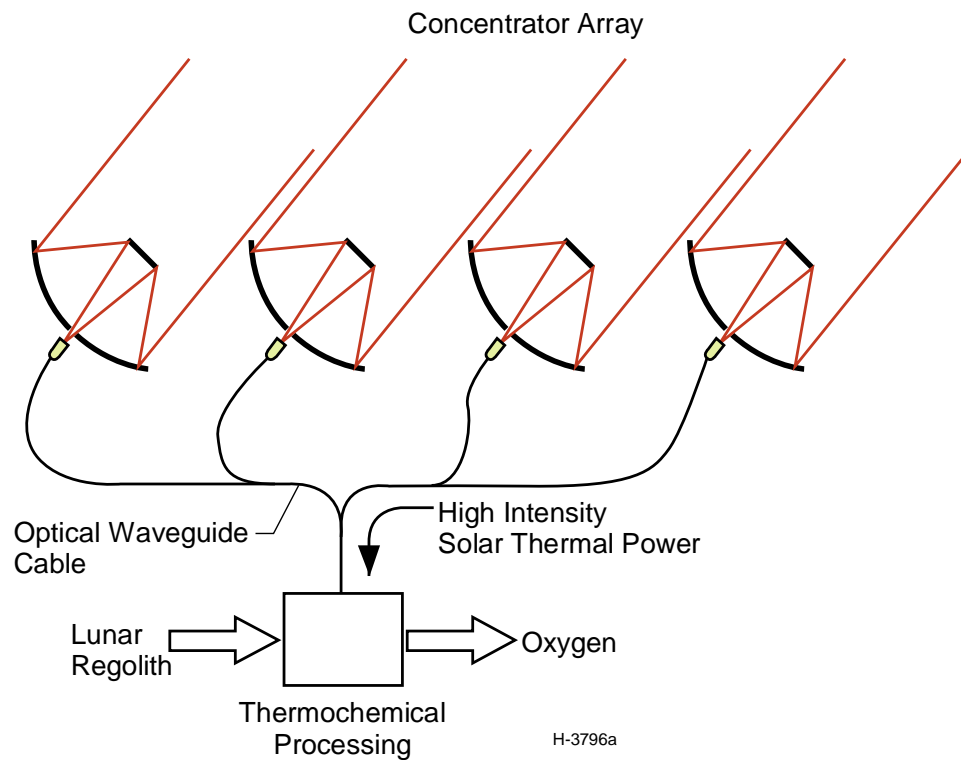


Optical Waveguide Solar Thermal System for Oxygen Production from Lunar Regolith



H-0010

Figure by NASA/JSC (ca. 1992)



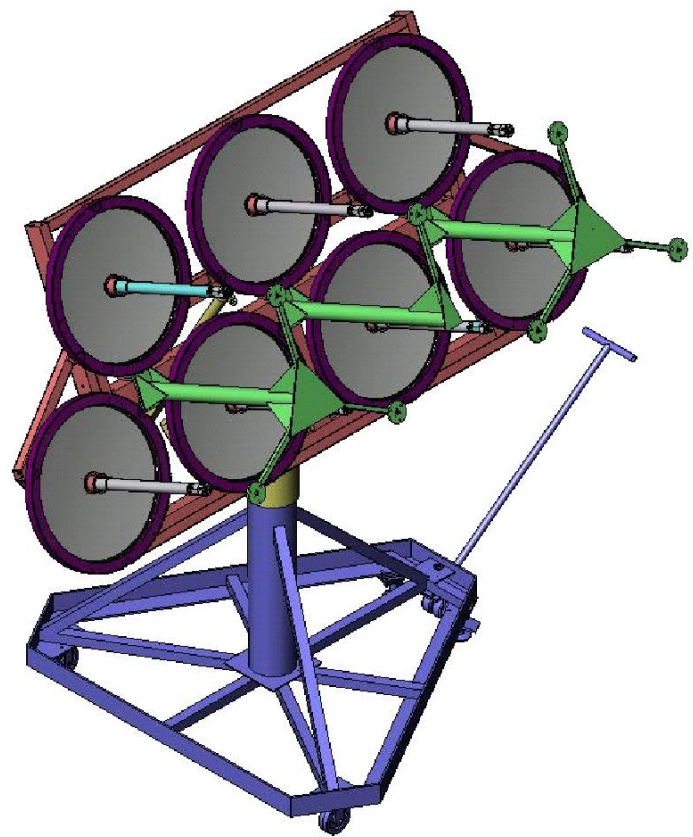
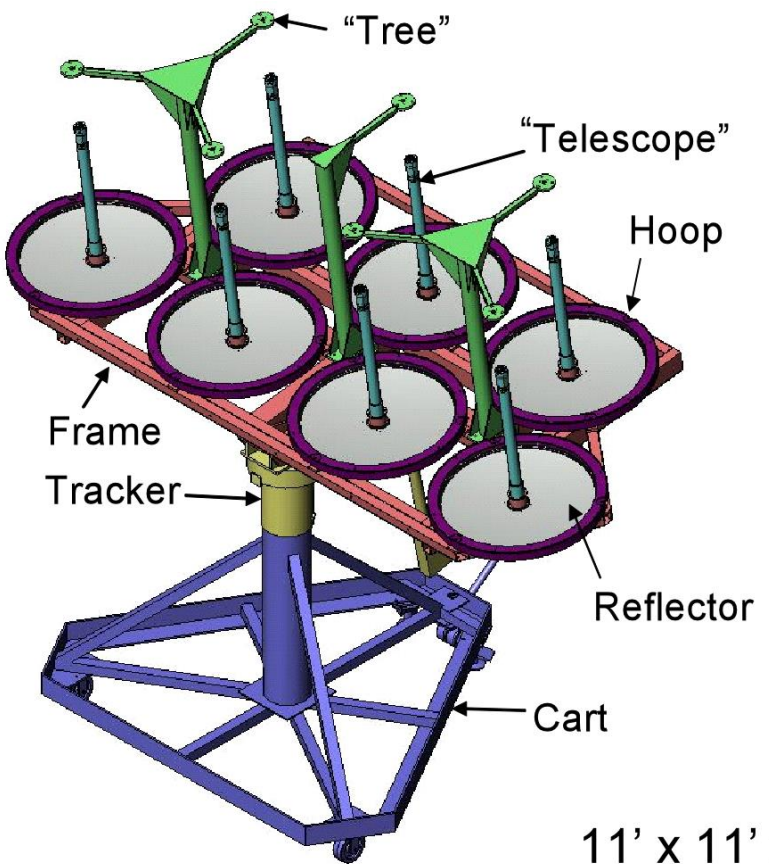
H-3796a



Solar Concentrator Array with Seven Reflectors



VG10-267-1



11' x 11' x 7'
~1400 lbs

Noon Position

Stowed Position

J-8153



Solar Concentrator Tested at PSI: March 2009



K-0295

Seven concentrators mounted on the tracking array



K-0297

Back of the array with reactor interface

Solar to thermal conversion efficiency

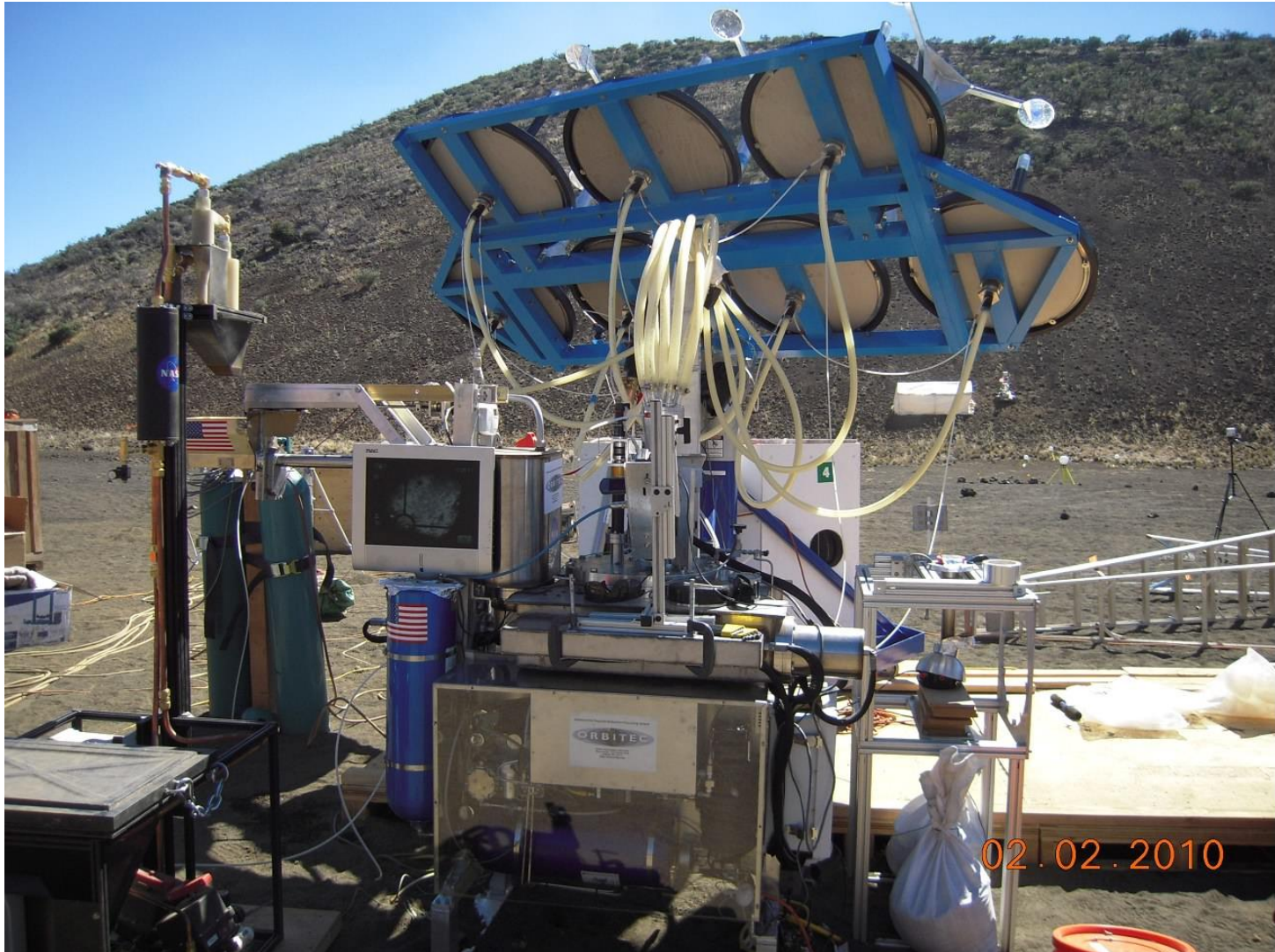
- As built ~38%
- With upgrades: ~75%



PSI Solar Concentrator Integrated with ORBITEC Carbothermal Reactor



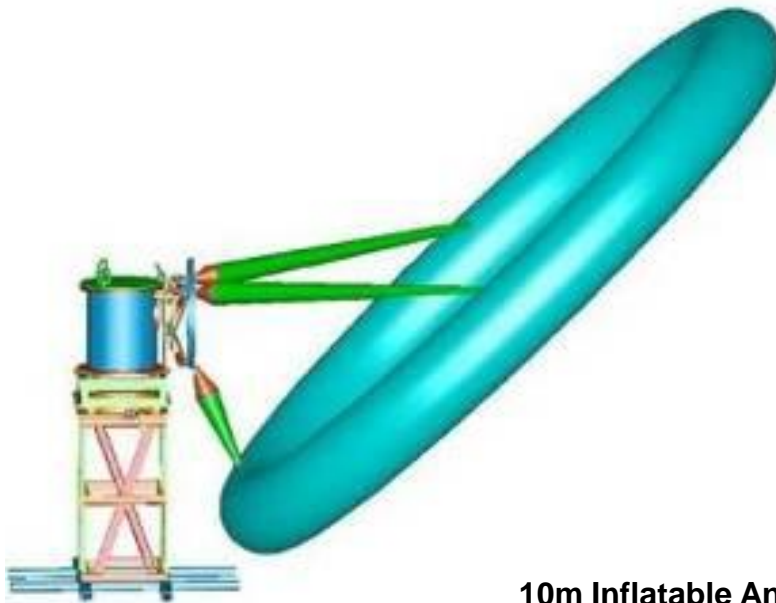
VG10-267-3



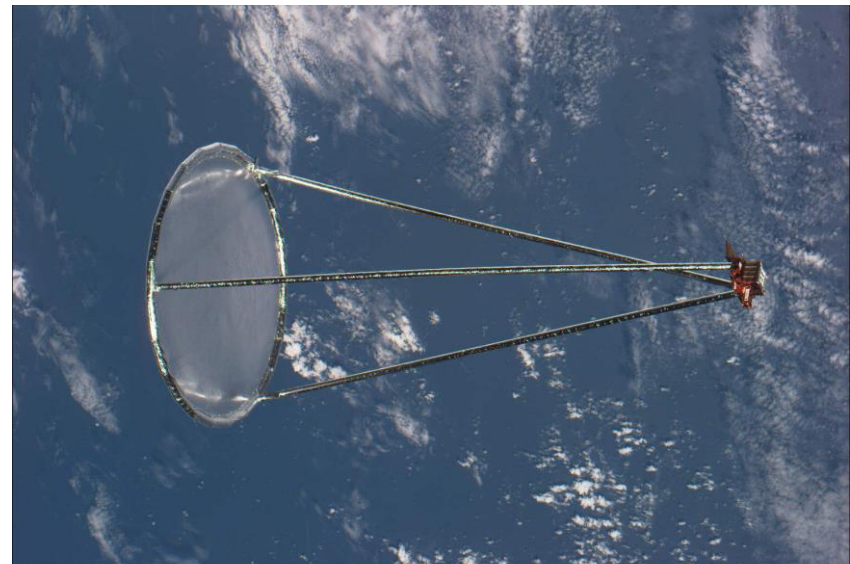
K-3575



Inflatable Concentrators



10m Inflatable Antenna Flight Experiment





Bioreactors

