

iSAT ConOps Graphical Storyboard: 20 m Segmented UV/V/NIR Telescope (approach applicable to smaller sizes as well)

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Delivery ConOps

Disposable Cargo Delivery Vehicle (CDV)

Observatory spacecraft bus and robotics on orbit

CDV RPO Grappled by Assemblage

Assemblage robotics berth CDV, remove cargo, releases CDV

Observatory Maneuver to SEL2

CDV maneuver to acquire assembly orbit

Empty CDV Disposal to Helio-centric

CDV Separation

Fairing Separation

2nd Stage Disposal to heliocentric

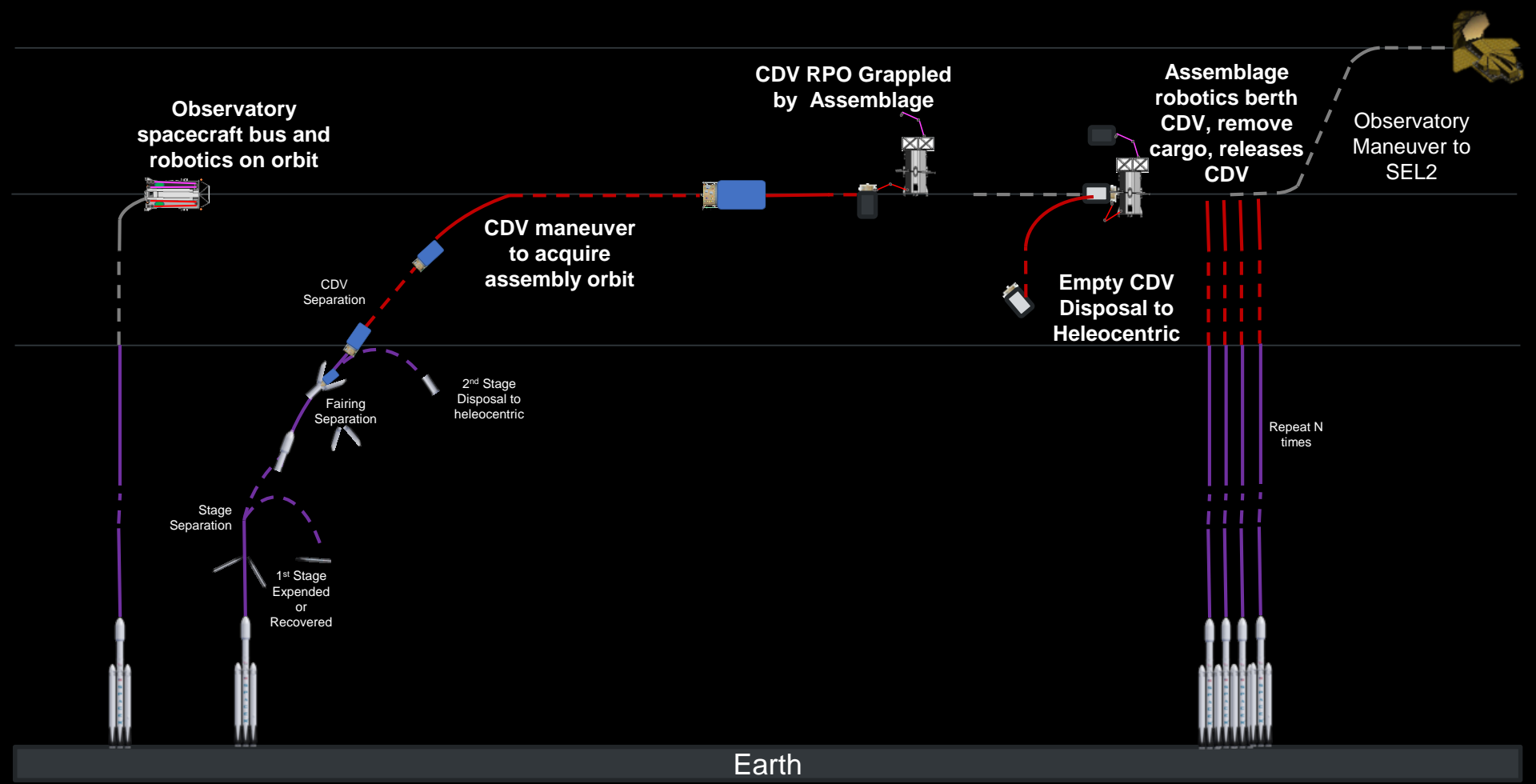
Stage Separation

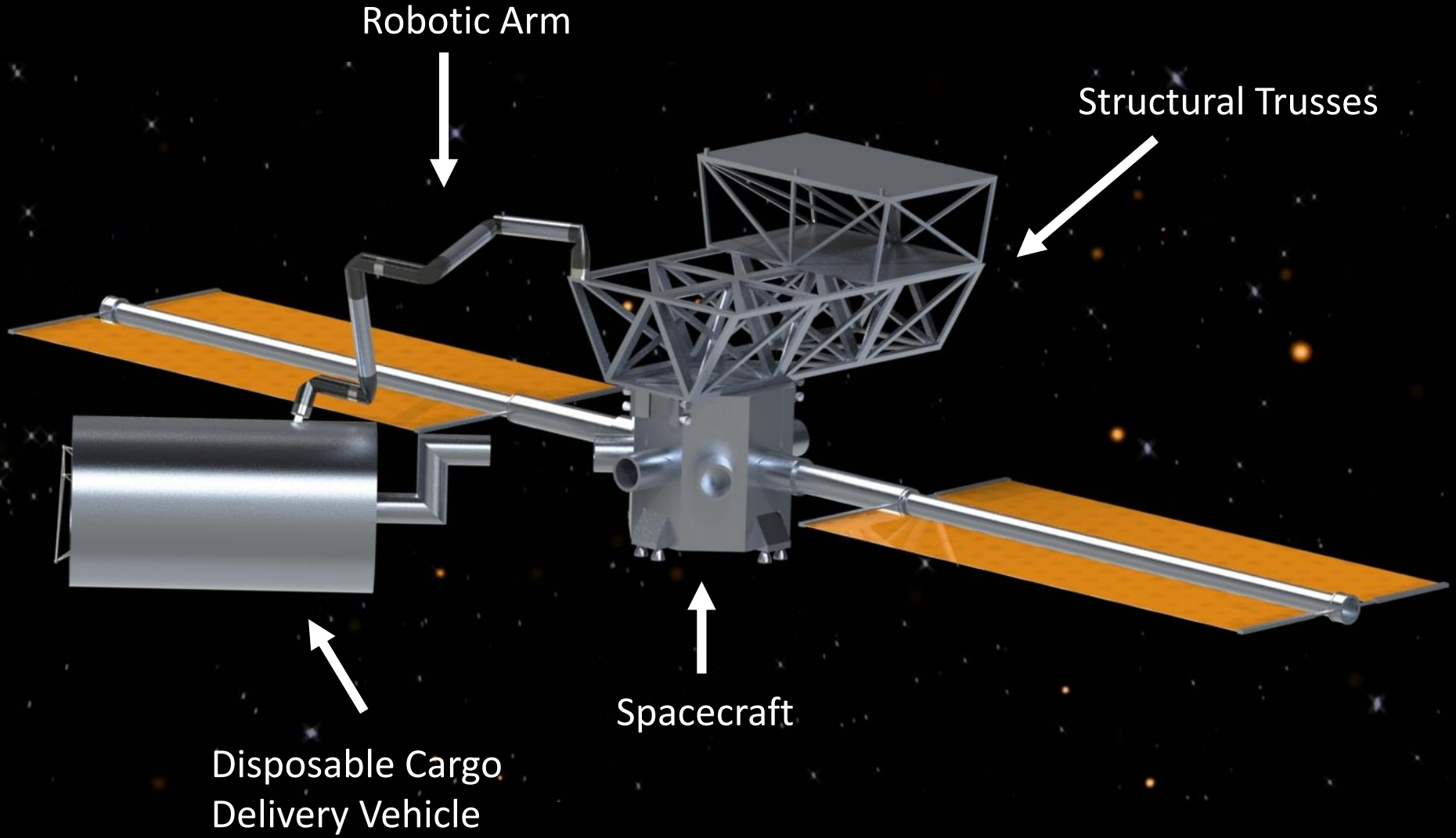
1st Stage Expended or Recovered

Repeat N times

Earth

Illustration: Bo Naasz (NASA GSFC)



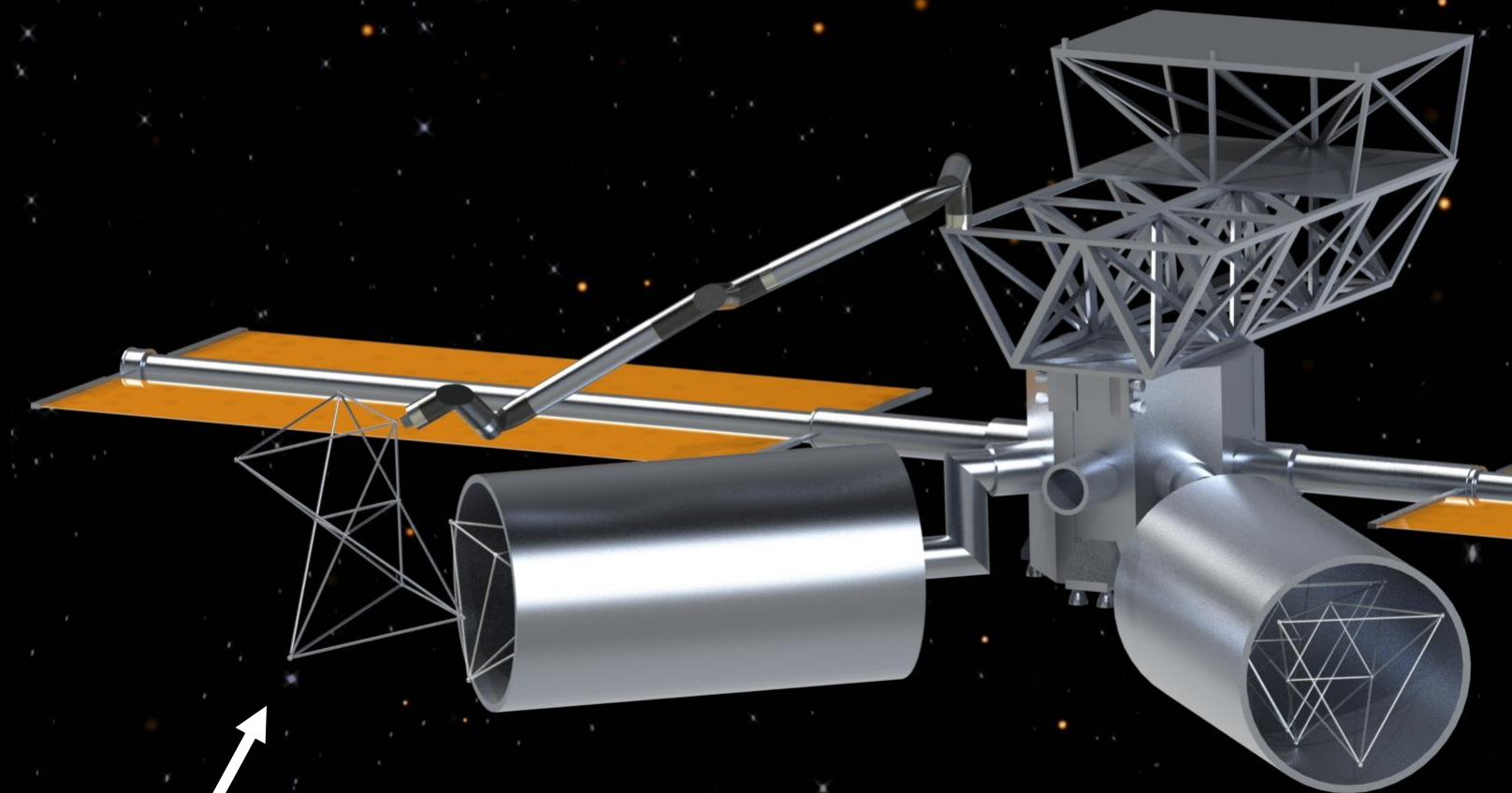


Robotic Arm

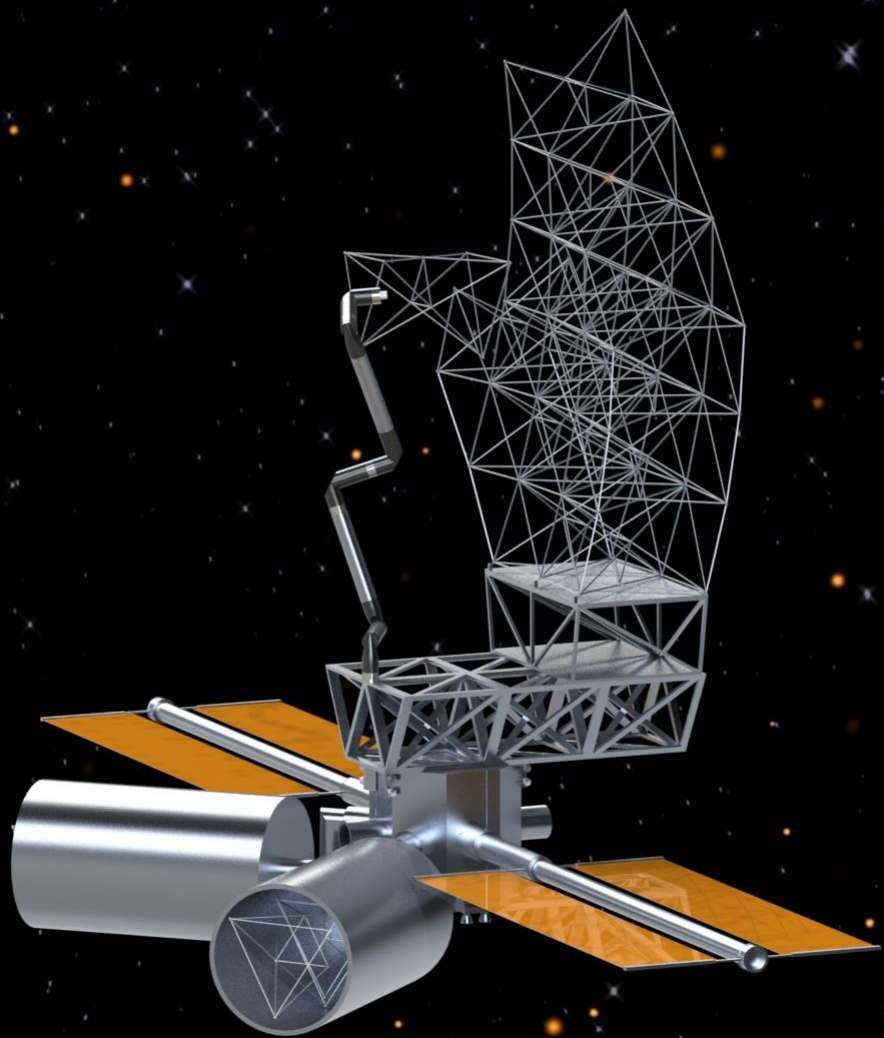
Structural Trusses

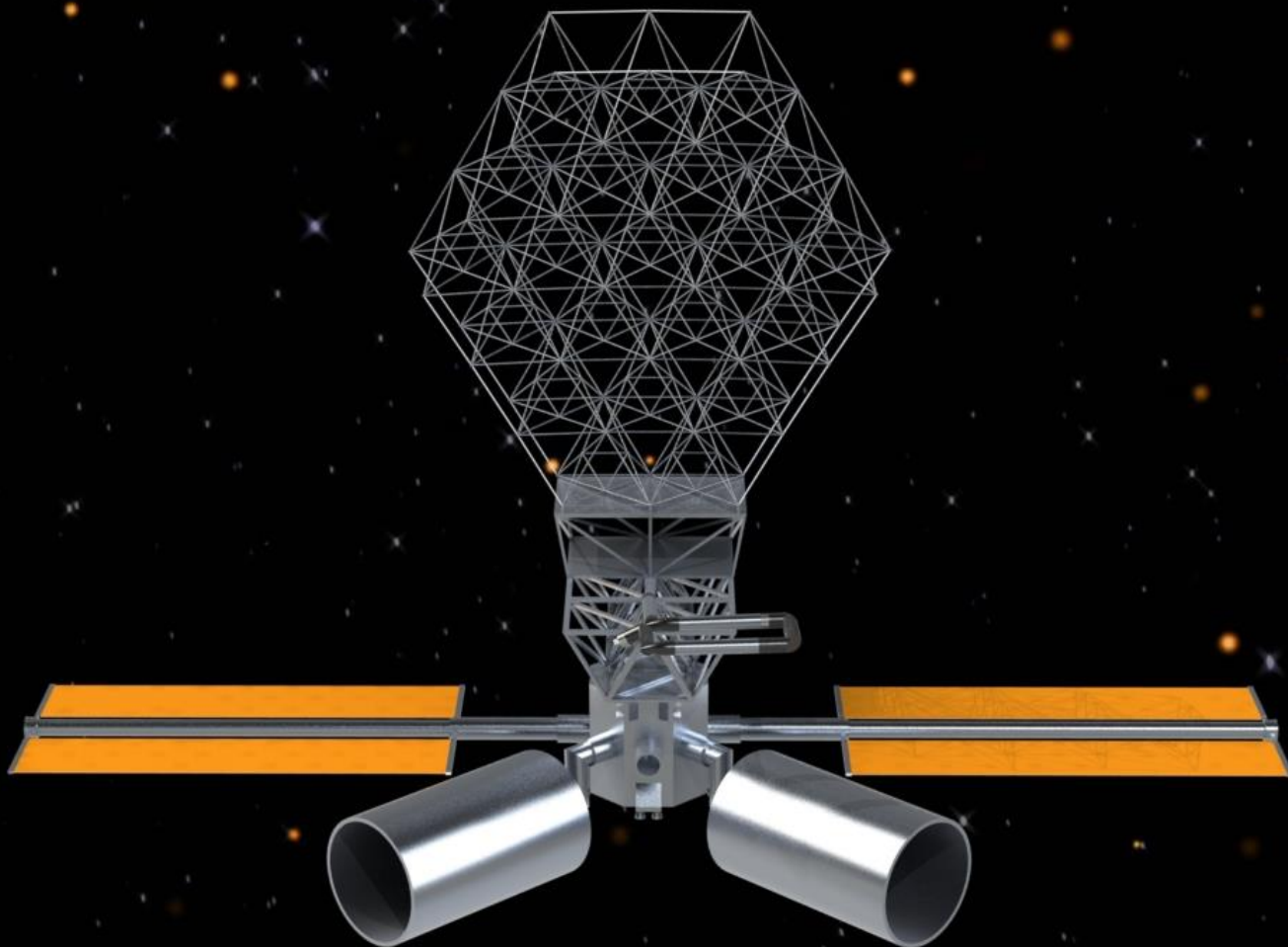
Spacecraft

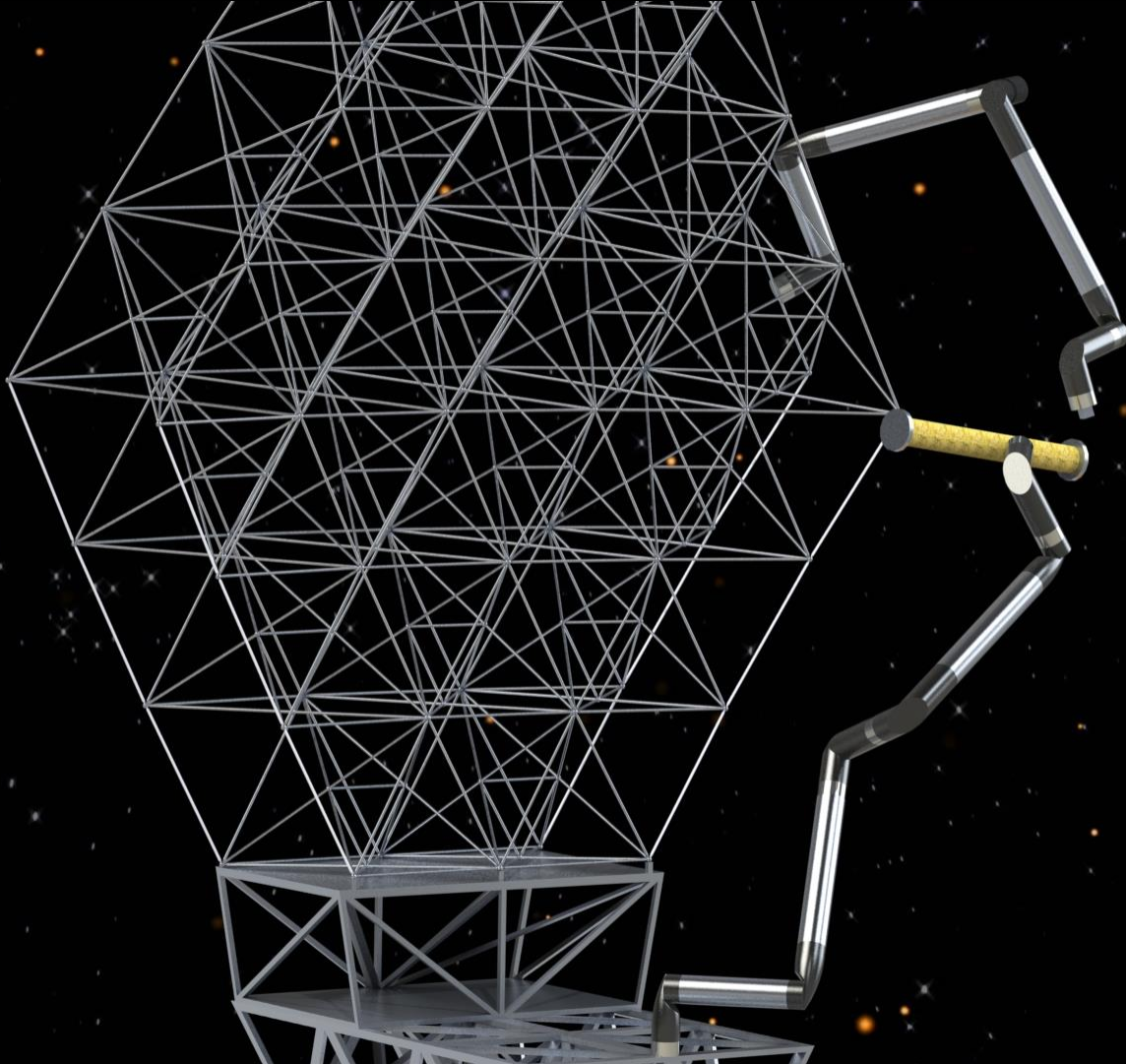
Disposable Cargo
Delivery Vehicle



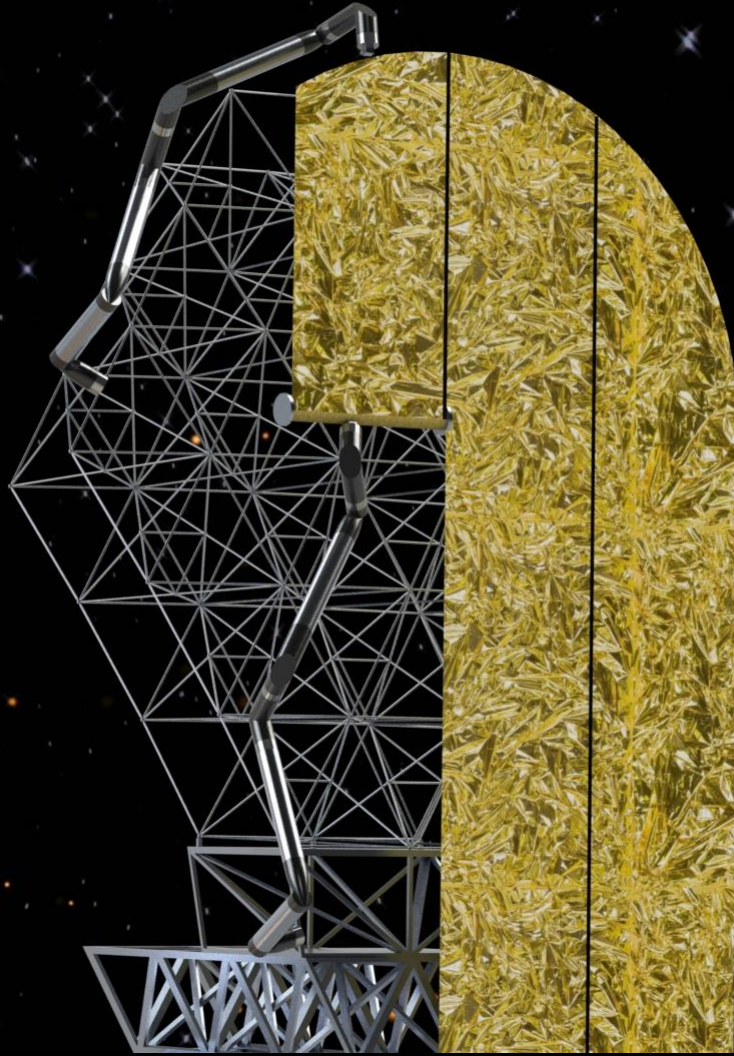
telescope
backplane truss

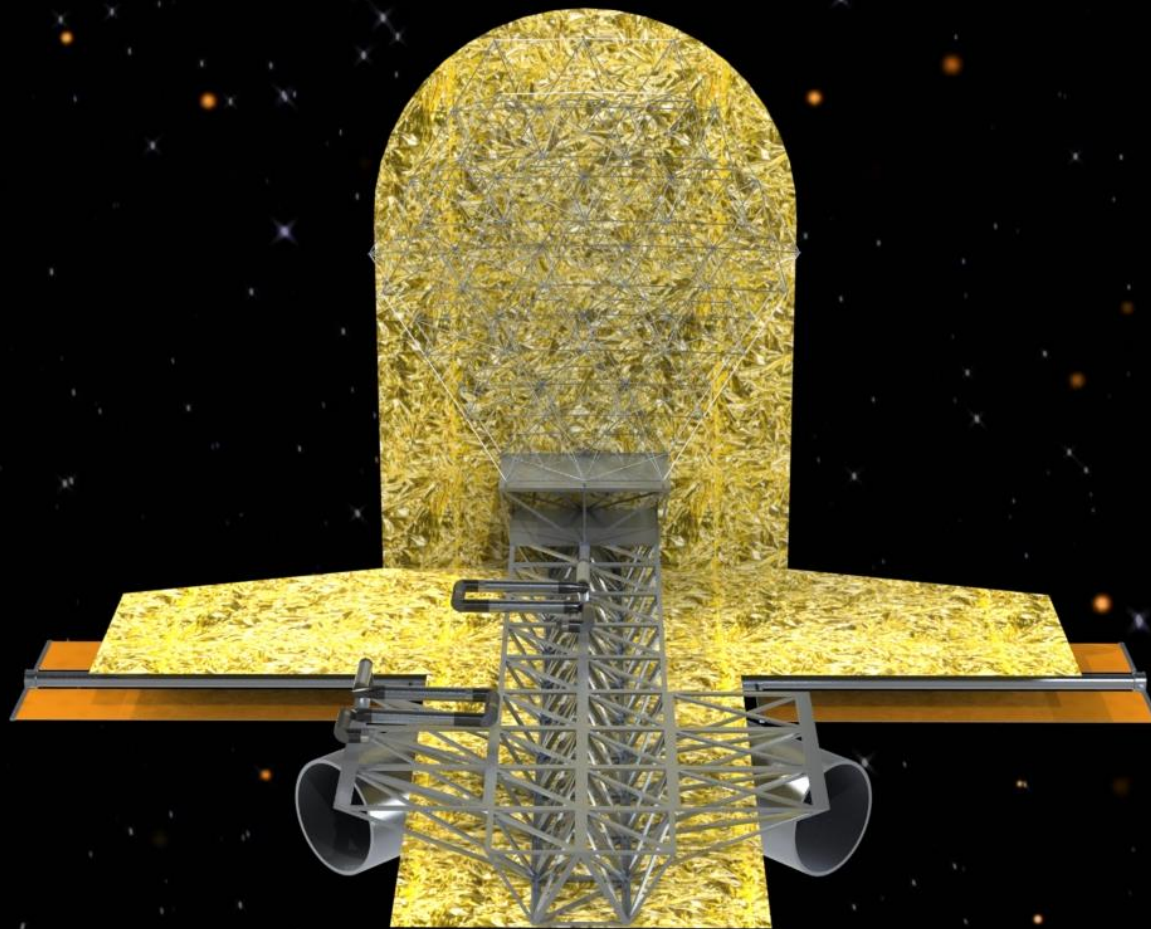




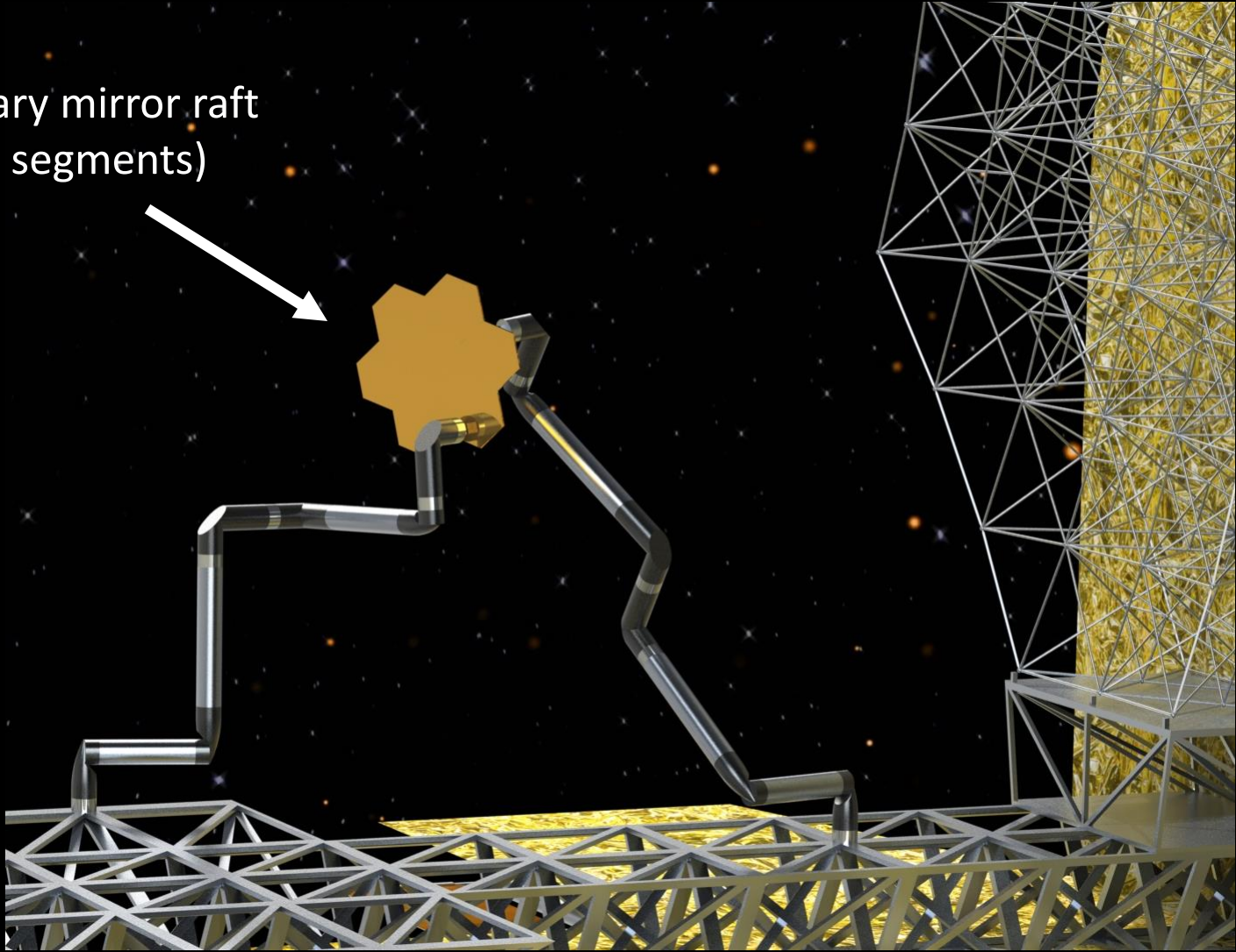


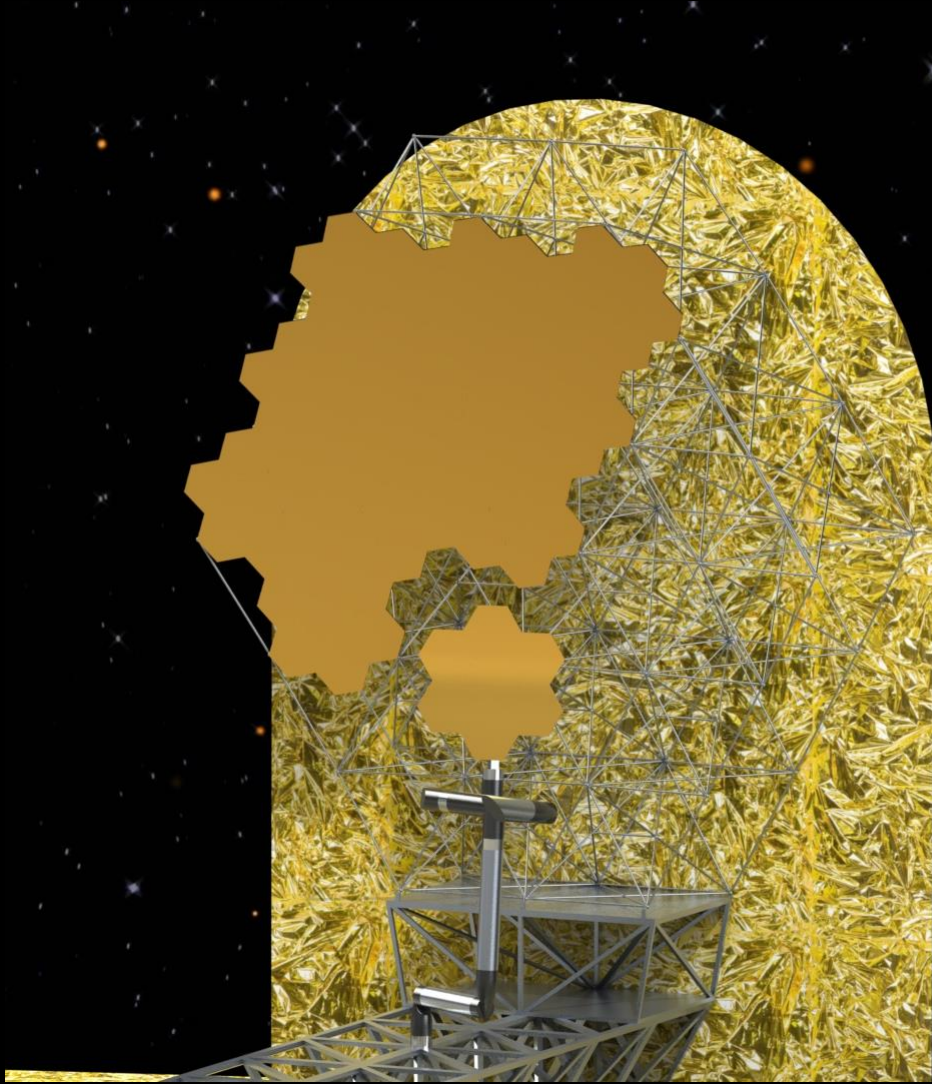
Sunshade dispenser



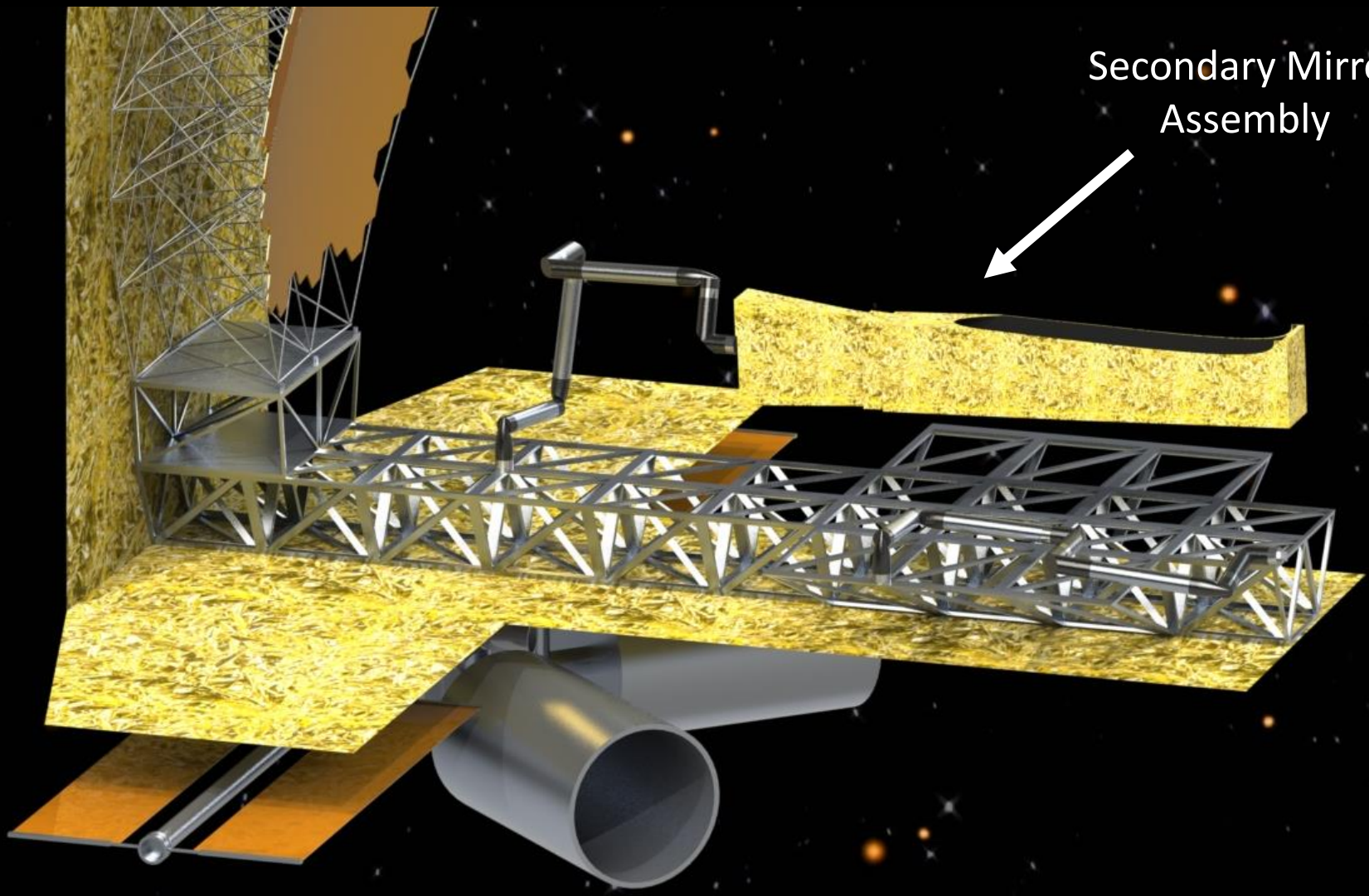
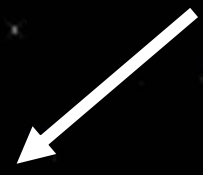


Primary mirror raft
(7 segments)





Secondary Mirror
Assembly



Science Instrument
Module

