



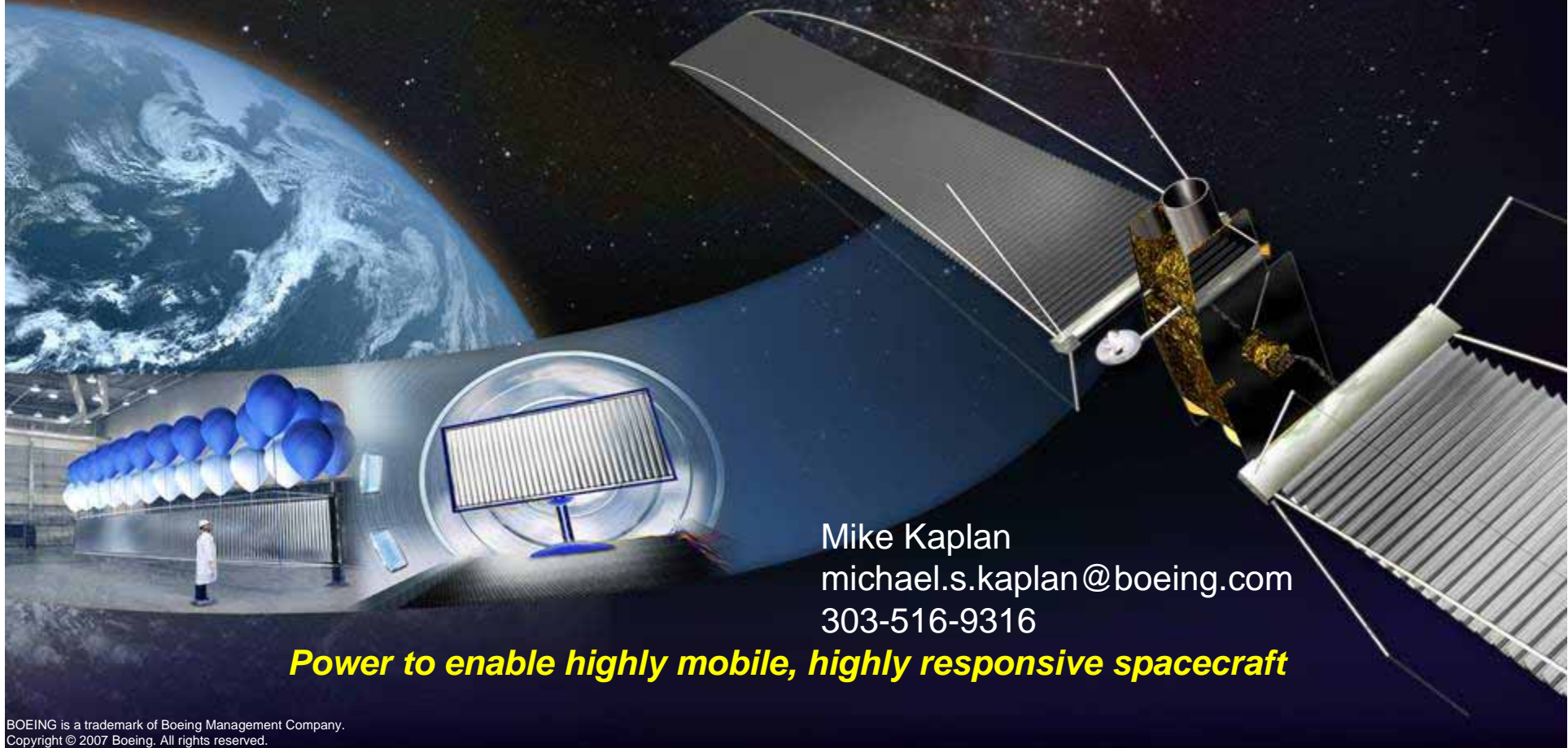
Interim Design Review (IDR)

Fast Access Spacecraft Testbed

FAST



BOEING
DR TECHNOLOGIES
TEXAS A&M

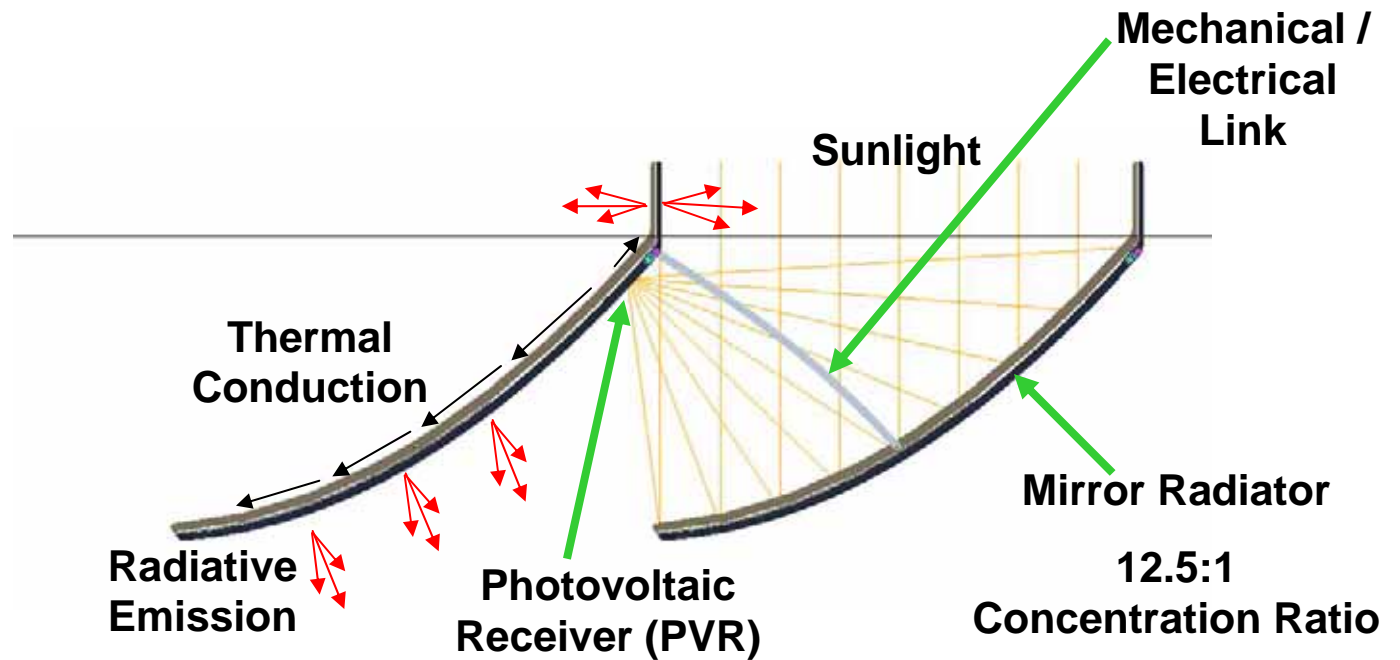


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Power to enable highly mobile, highly responsive spacecraft

Boeing Solar Concentration Concept

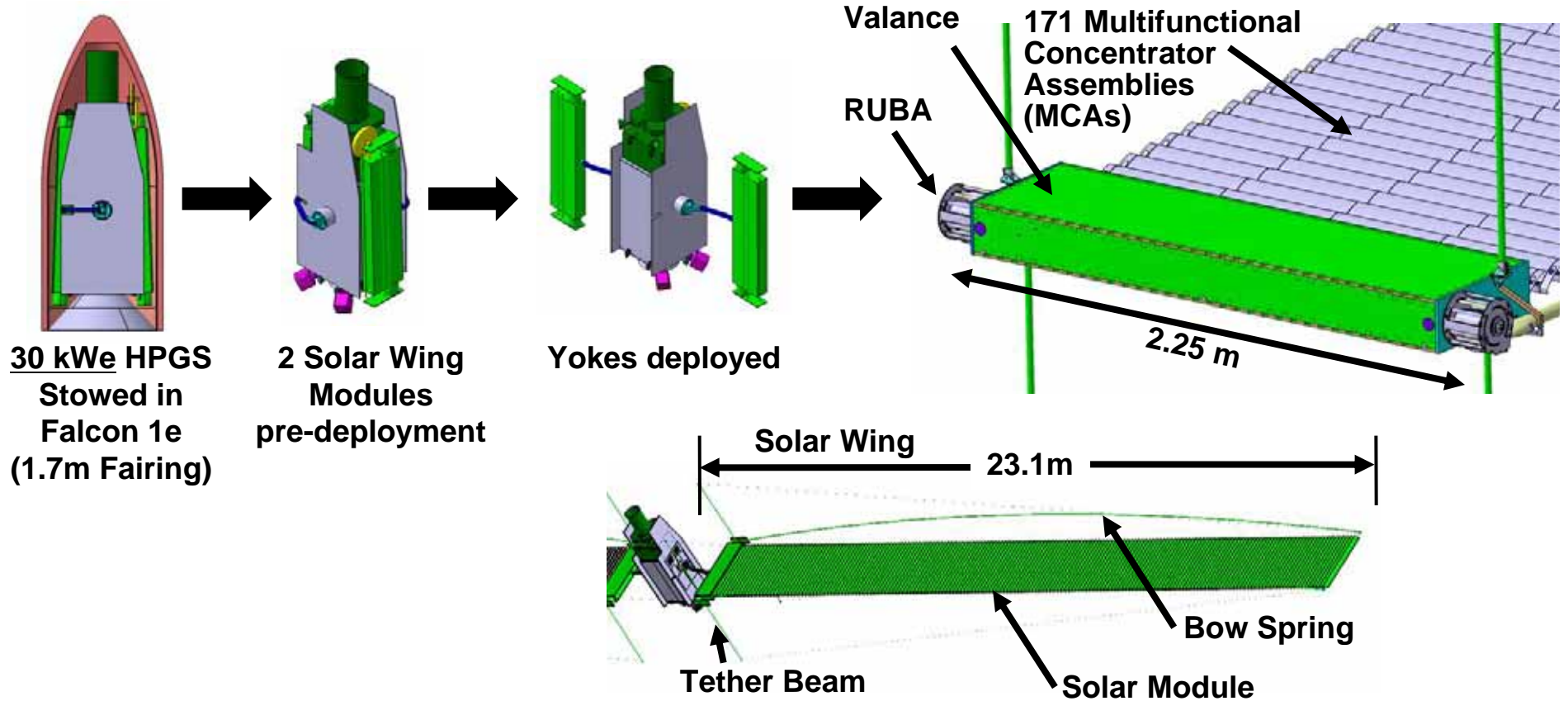
Advanced Space Exploration



Our innovative design achieves high performance and high reliability through design simplicity and inherent multifunctionality

Boeing FAST HPGS Design – A Highly Efficient Integrated System

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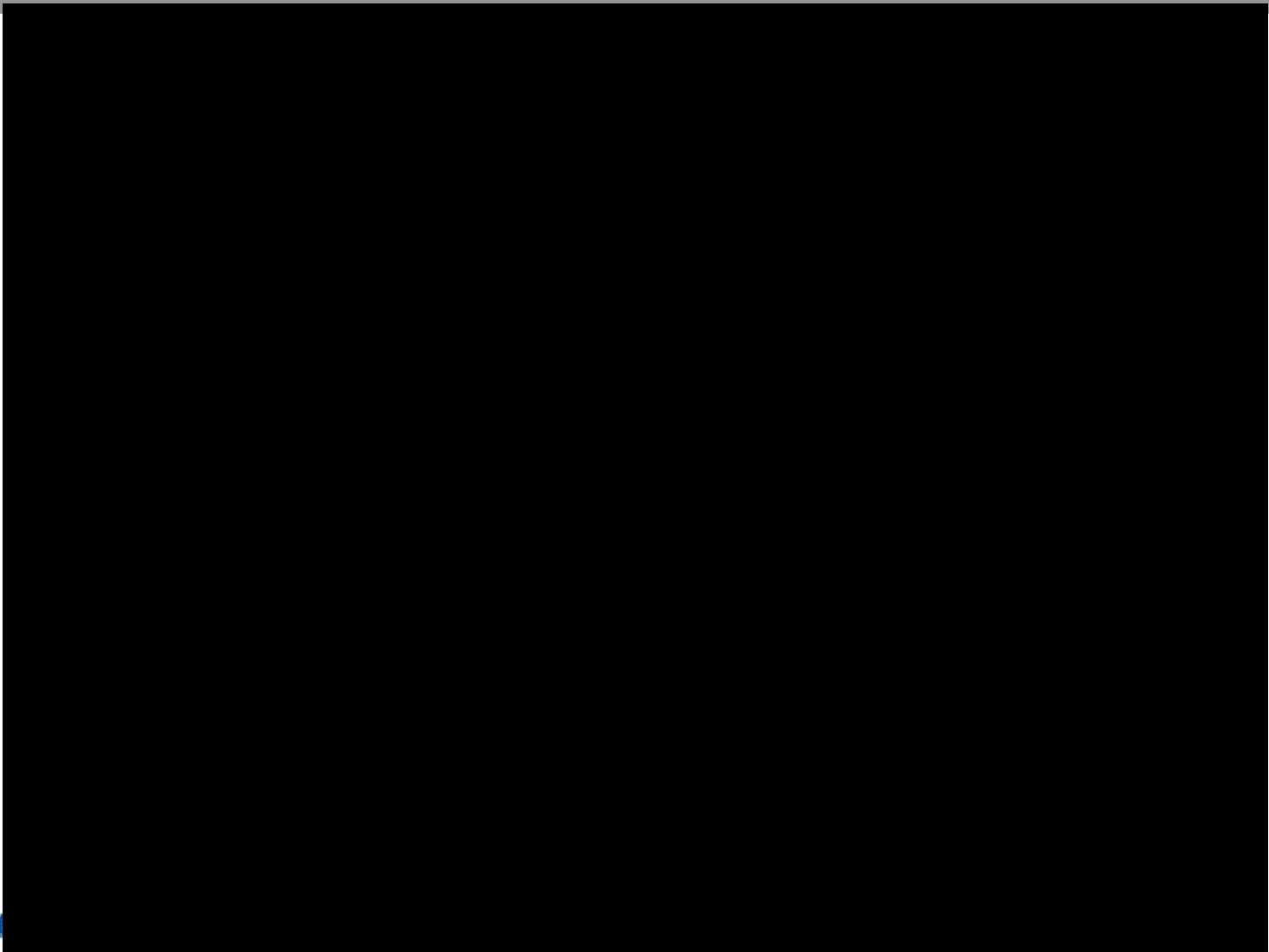
Falcon 1e delivered Spacecraft provides 29.3 kWe at 136 W/kg (BOL LEO including mass growth)

Fast Access Spacecraft Testbed

FAST Video



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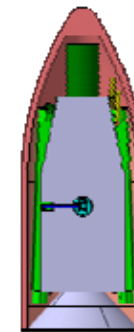


FAST Architecture Provides Significant Scalability

Advanced Space Exploration

Inherent Scalability

- Boeing design is both modular and scalable
 - Modularity allows graceful performance degradation over mission life
 - Boeing FAST HPGS packaging allows 6x more stowing efficiency compared to state-of-the-art
- Boeing HPGS modules (flight proven by DARPA) support up to 175 kW
 - 30 kW HPGS fits in 1.7 meter Falcon 1e
 - 175 kW HPGS fits in 5 meter fairing (EELV, Atlas, etc)
- Boeing HPGS design is geometrically scalable to 720 kW and beyond
 - 720 kW HPGS comfortably fits in 10 meter fairing (ARES V)



30 kW HPGS Stowed in Falcon 1e 1.7m fairing



175 kW HPGS Conceptual Rendition