



***DARPA*Tech**

2002 Symposium

Transforming
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Space Tactical Imaging DARPA Tech 2002

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Attributes of Space Tactical Imaging

Broad Area Collection



High Resolution Imaging

Attributes of Space Tactical Imaging

▶ Availability

- Tasked by battlefield commander
- Quick results

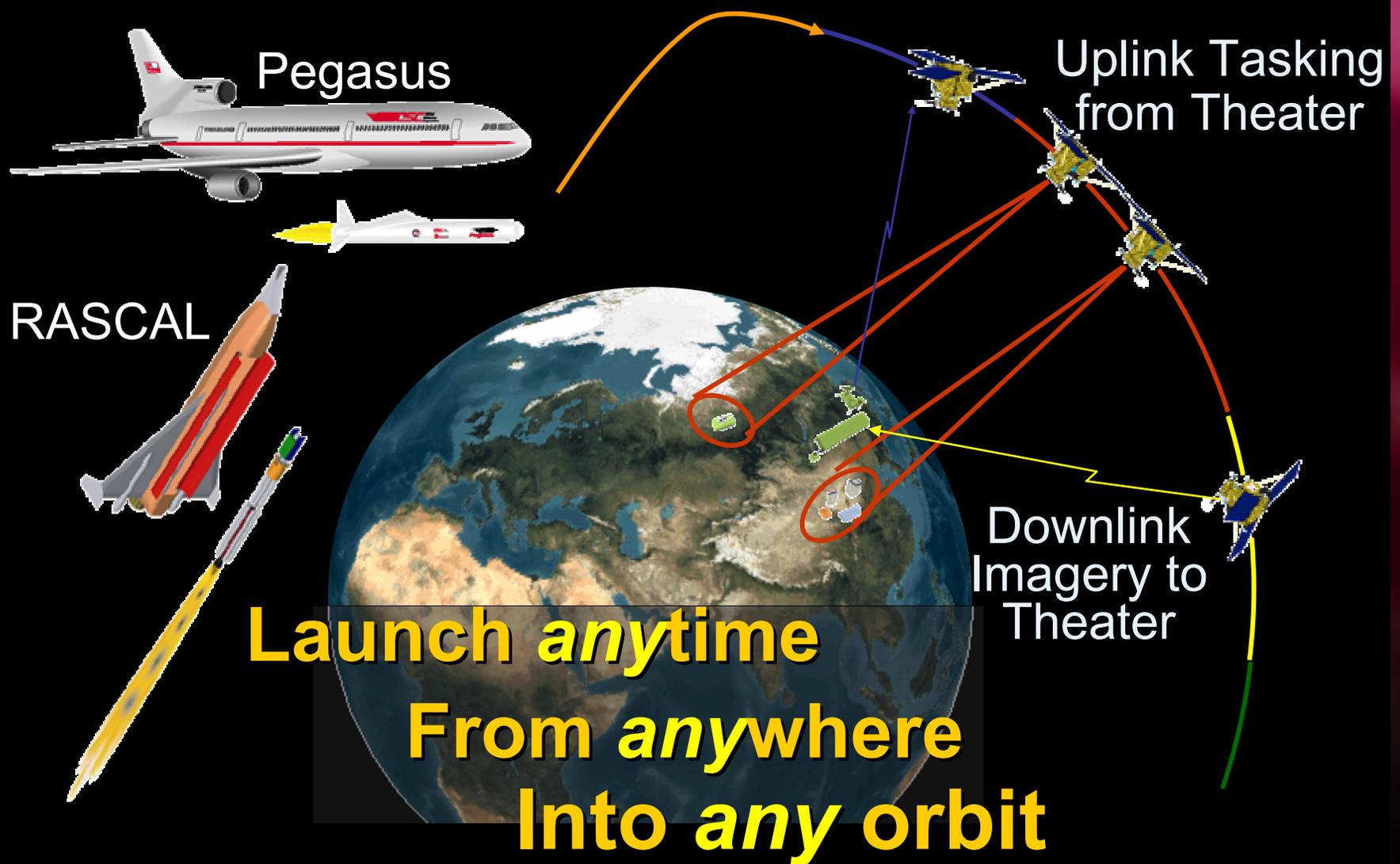
▶ Persistence

- Nearly continuous coverage of battlefield area

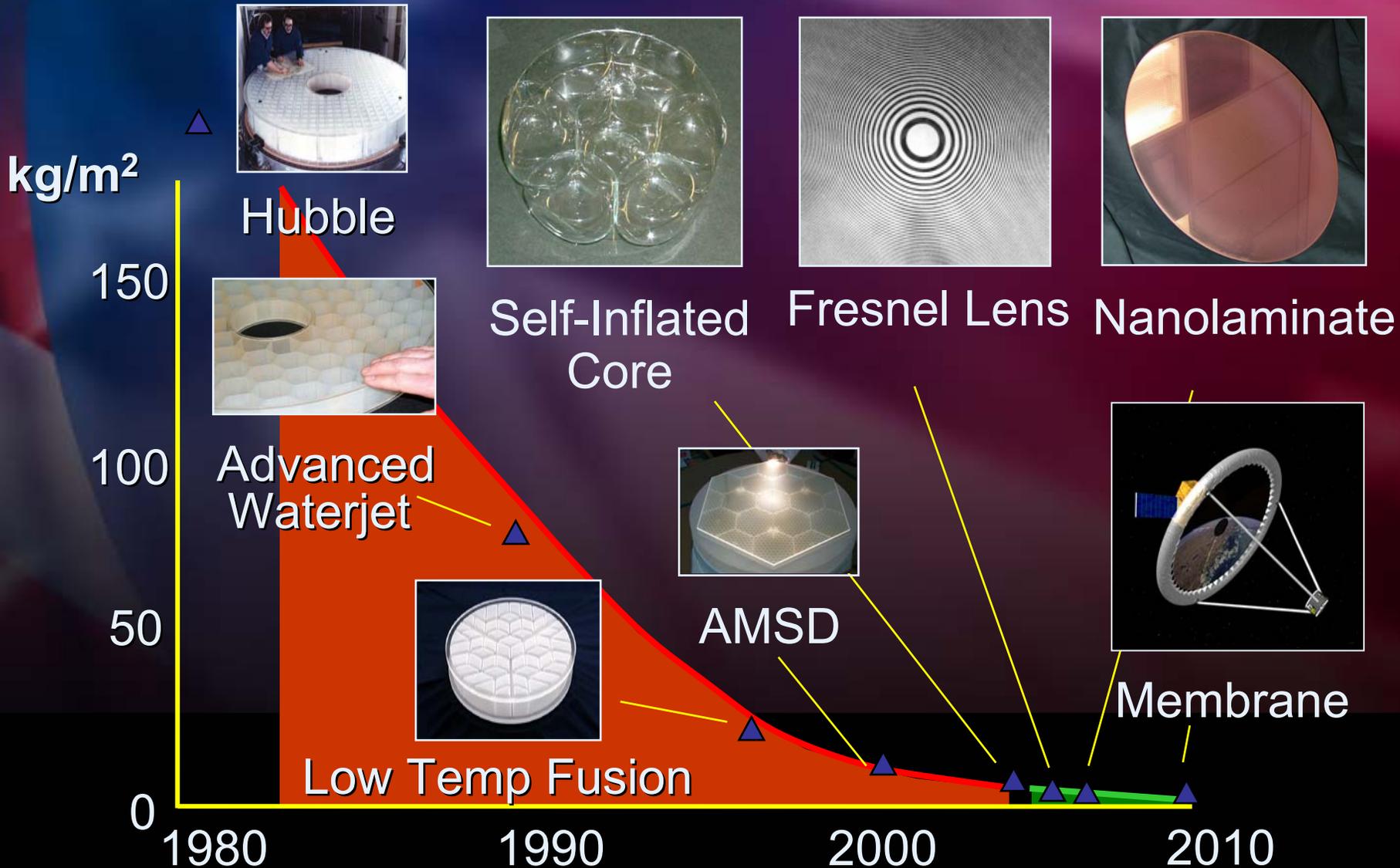
▶ Flexibility

- Broad area surveillance
- High-resolution imaging

Low-Cost Tactical Imager (LCTI)



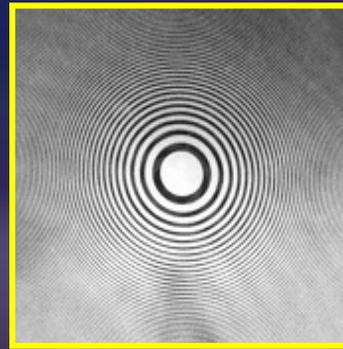
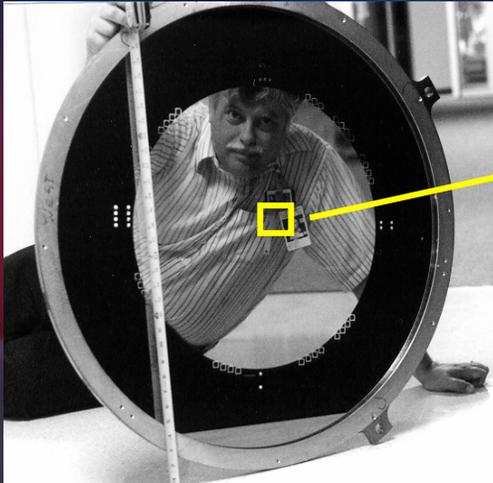
Lightweight Optics



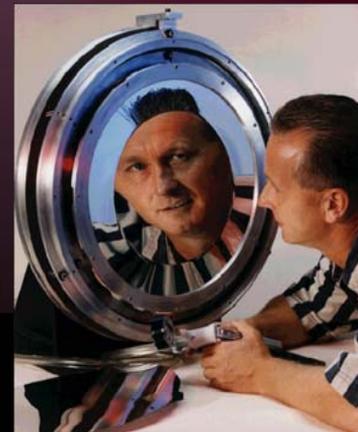
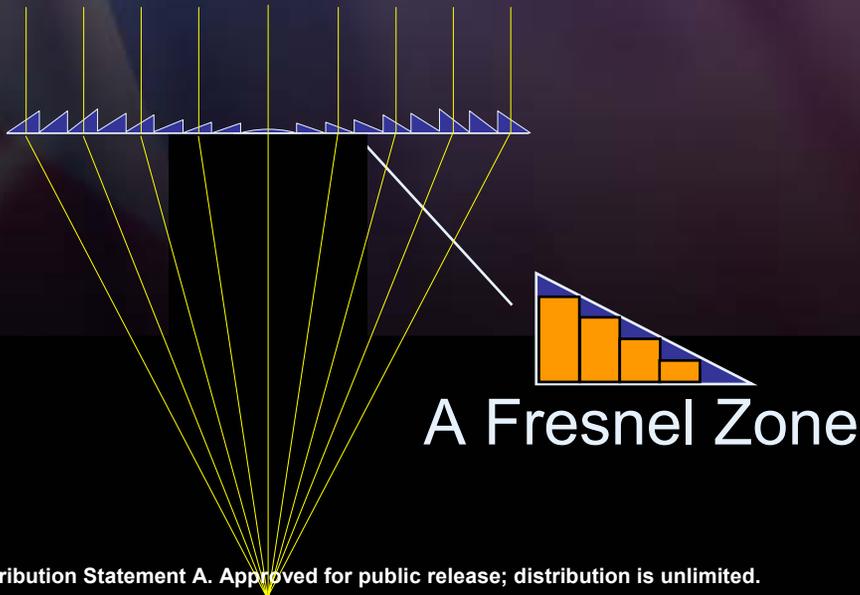
Lightweight Optics Challenges

Fresnel Diffractive Lens

Membrane Mirror



Membrane in relaxed state



Membrane under vacuum



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