

# Tactical Technology Office

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DARPA Tactical Technology Office (TTO)

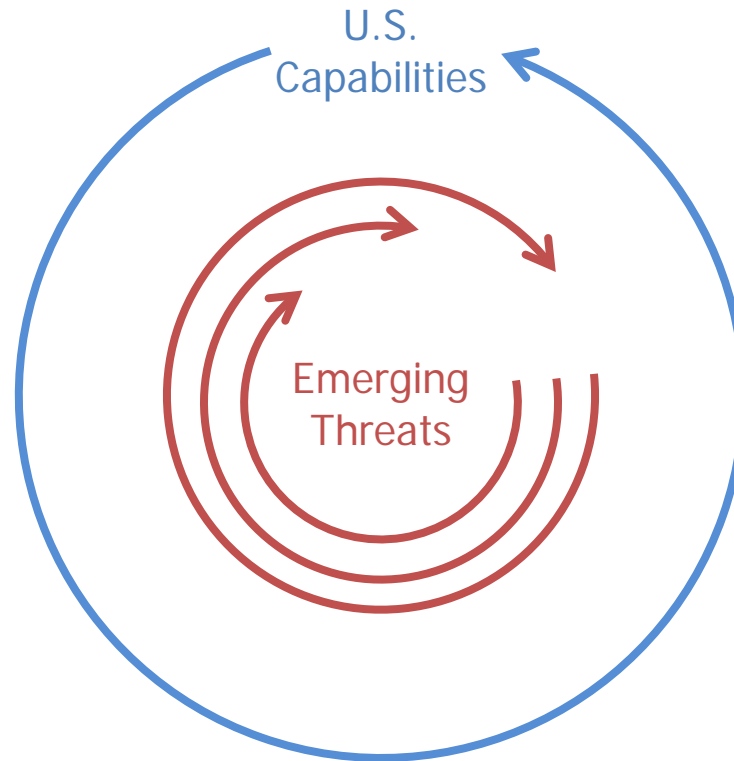
Briefing prepared for Aeronautics and Space Engineering Board (ASEB) and  
Space Studies Board (SSB)

April 30, 2018





# The Enterprise Disruption Imperative



**Our adversaries are out-innovating us**



# Disrupting Warfare



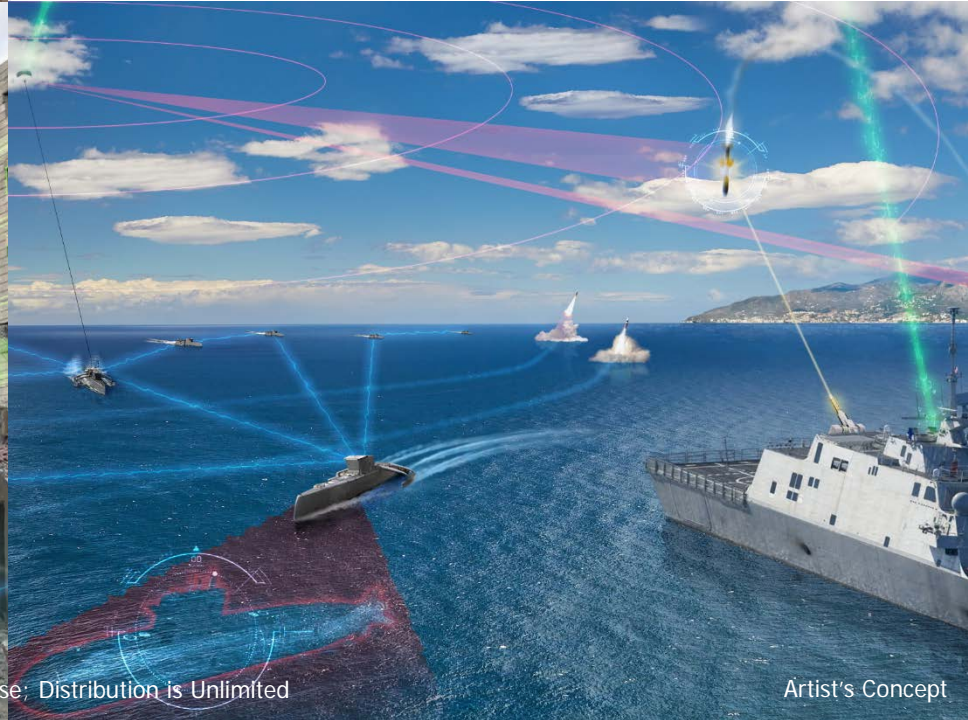
Artist's Concept



Artist's Concept



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Artist's Concept

Approved for Public Release; Distribution is Unlimited



# Hypersonic Air-Breathing Weapons Concept (HAWC)



# Tactical Boost Glide (TBG)





# Blackjack

Resilience

Low Latency

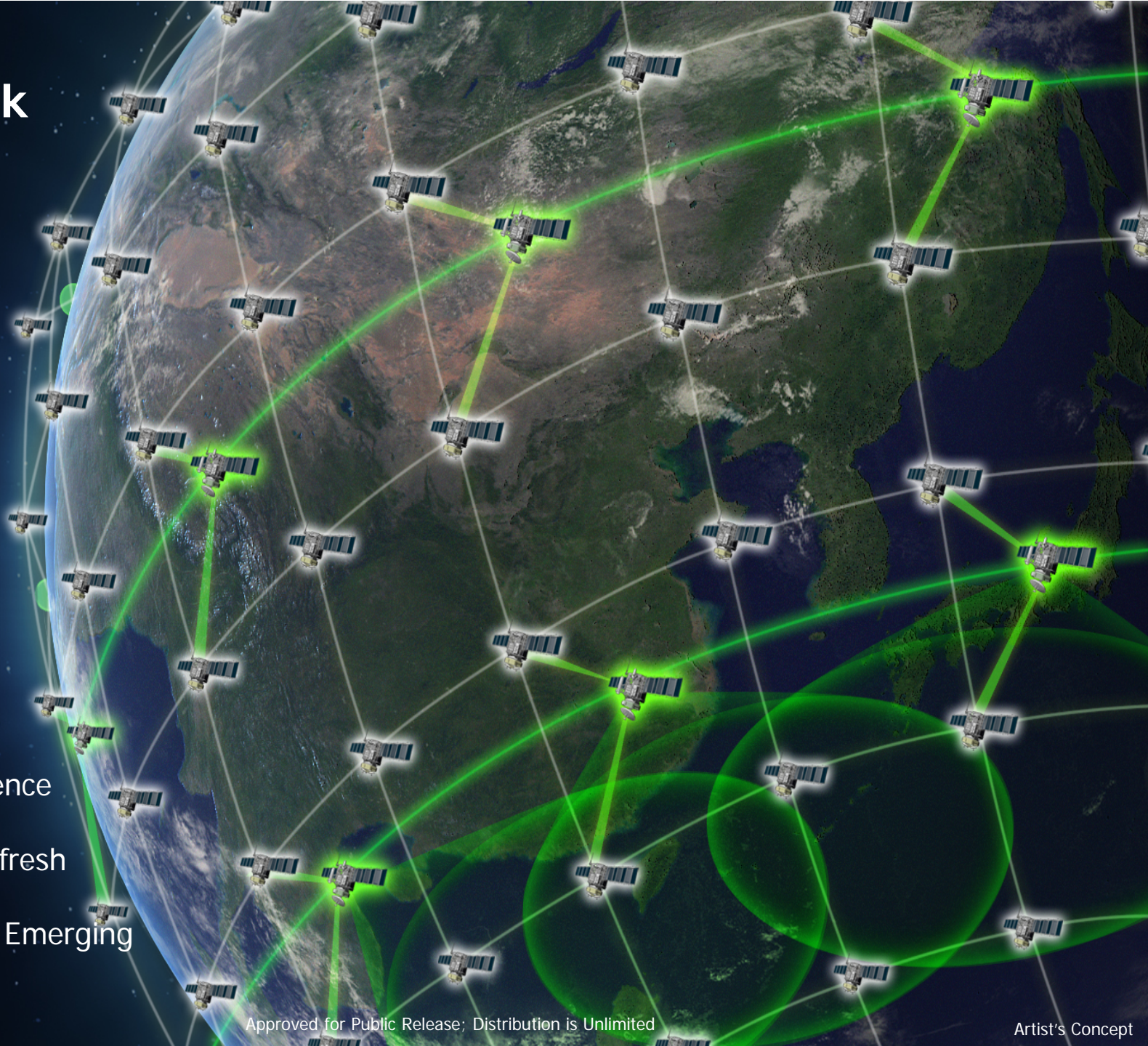
Global Persistence

Rapid Tech Refresh

Responsive to Emerging  
Threats

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Artist's Concept





# Experimental Spaceplane (XSP)



# DARPA LAUNCH CHALLENGE

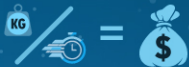
WILL YOU MEET THE CHALLENGE?



LAUNCH FAST

## PRIZES

### PAYLOAD BONUS



1<sup>ST</sup>, 2<sup>ND</sup>, AND 3<sup>RD</sup> PLACE  
BASED ON  
PAYLOAD WEIGHT  
&  
TIME TO LAUNCH

Challenge  
Announcement

04.2018

Challenge  
Applications  
Close

12.2018

Participants  
Announced

Q1.2019

Launches  
1 & 2

Q4.2019

### QUALIFY



\$400K



### LAUNCH 1



\$2M



### LAUNCH 2



1ST  
\$10M



2ND  
\$9M



3RD  
\$8M

Competitors Day- May 23<sup>rd</sup>, 2018  
Los Angeles, CA

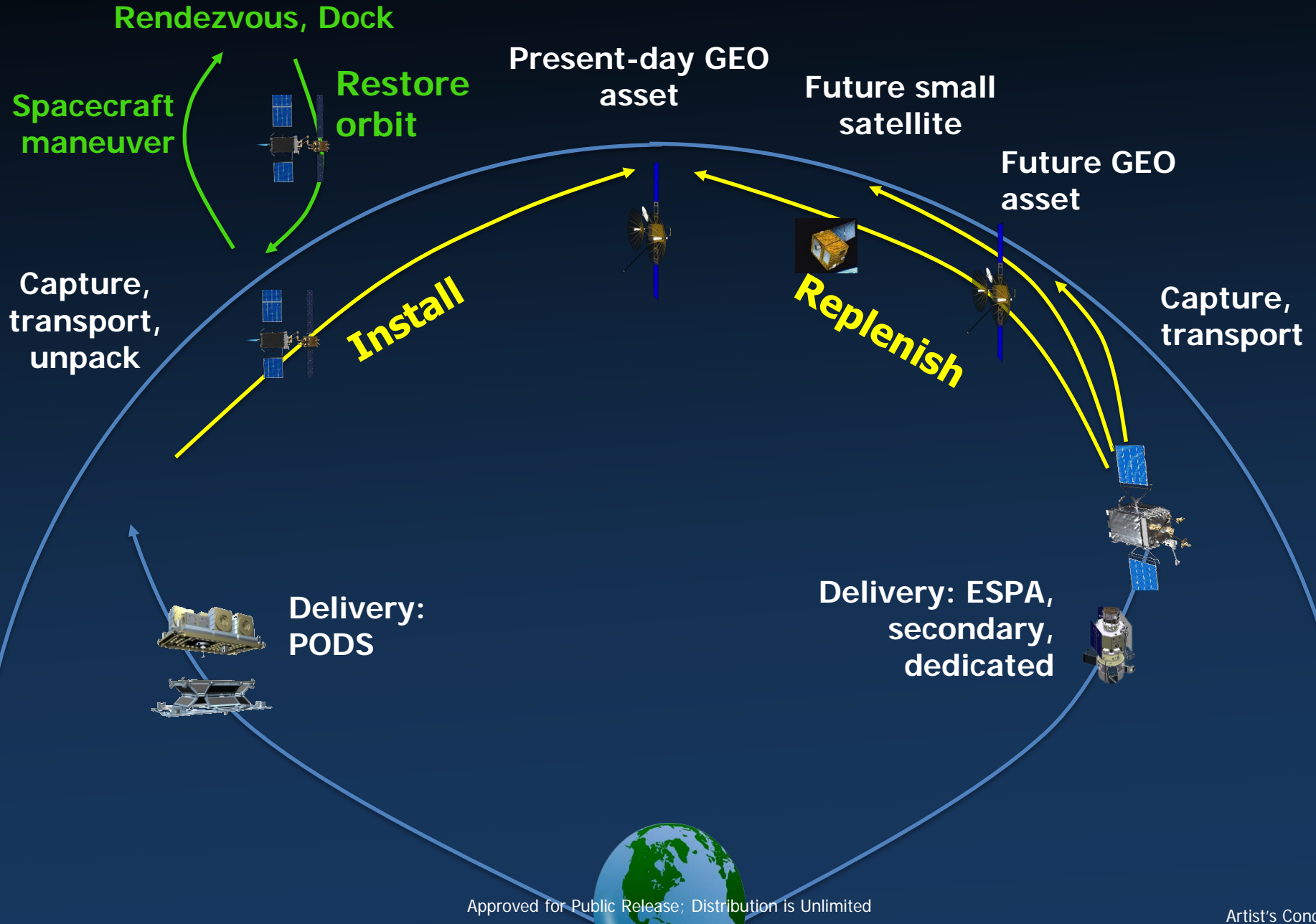
[www.DARPALaunchChallenge.org](http://www.DARPALaunchChallenge.org)





[www.darpa.mil](http://www.darpa.mil)

# Robotic Servicing of Geosynchronous Satellites (RSGS)







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## Artist's Concept

# Gremlins

Demonstrate limited-life, volley-quantity, air-launched, recoverable unmanned platforms to expand options for conducting distributed air operations and drive to lower per-mission costs.

Gremlins Air Vehicle



Artist's Concept

Recovery System



Artist's Concept



# OFFensive Swarm-Enabled Tactics (OFFSET)

