The Cyberspace Domain and Its Challenges to Space Systems Architecture

A "Birds of a Feather" Session

Frank Belz	The Aerospace Corporation [Moderator]
Nick Combs	EMC Federal
Josh Haines	MIT Lincoln Labs
Daryl Hild	MITRE

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Agenda

5:30 Panelist Introductions and presentations [1:00]

6:30 Q&A with panelists [:30]

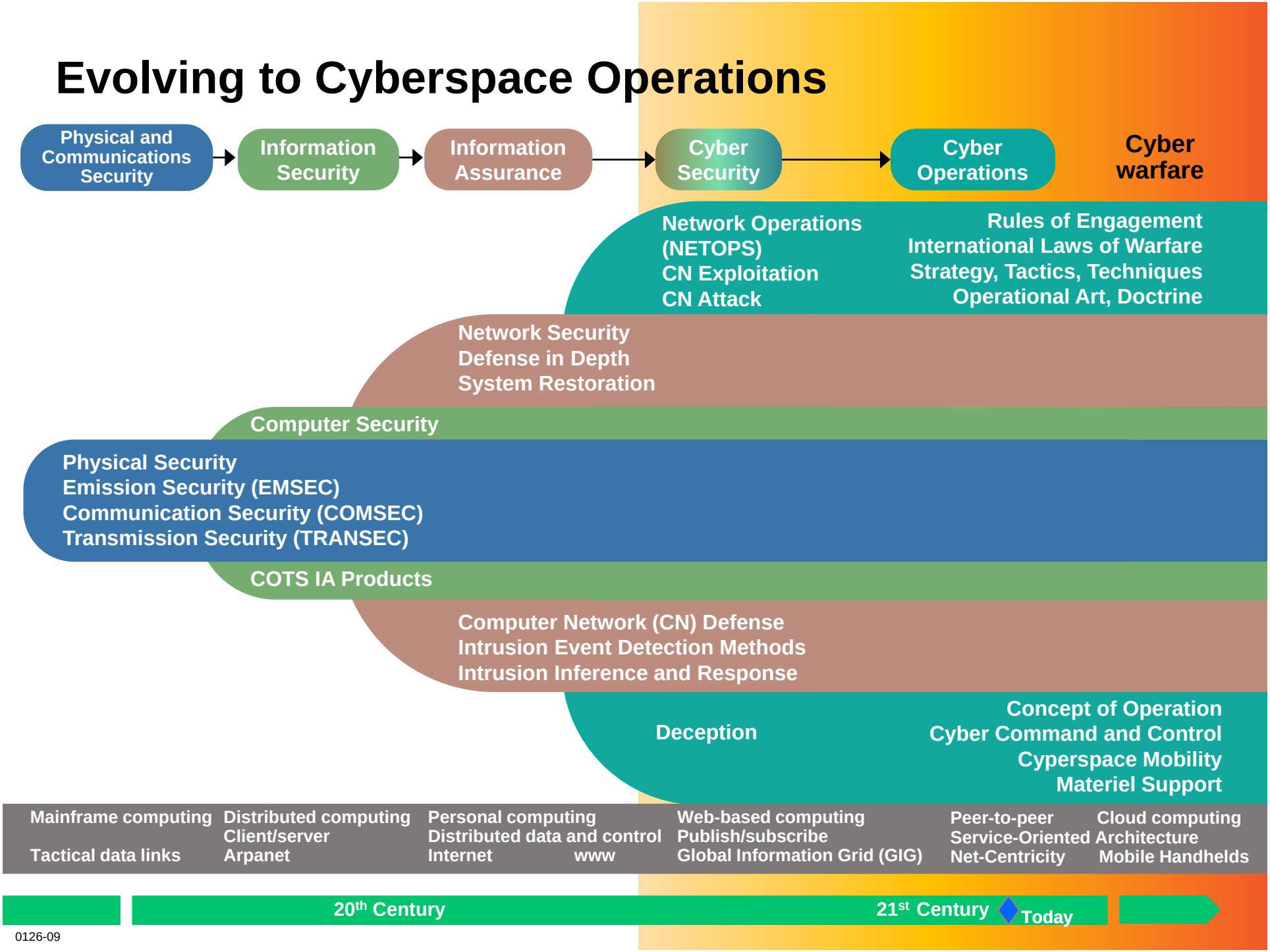
7:00 Break [:15]

7:15 Moderated discussion among all participants

What is the Cyberspace Domain? Why do we care?

- **Cyberspace Domain: Interdependent distributed infrastructure of sensor, computer and network, hardware and software and transmission media that collects, carries, stores, transforms and uses information**
- **The Cyberspace Domain is essential to effect operations in land, maritime, air and space domains**
- **Mission success must be achieved even when under Cyber attack**
- **Asymmetric battlespace: advantage goes to the offense today and for the foreseeable future**
- **Achieving and maintaining supremacy in Cyberspace is very challenging**

Evolving to Cyberspace Operations



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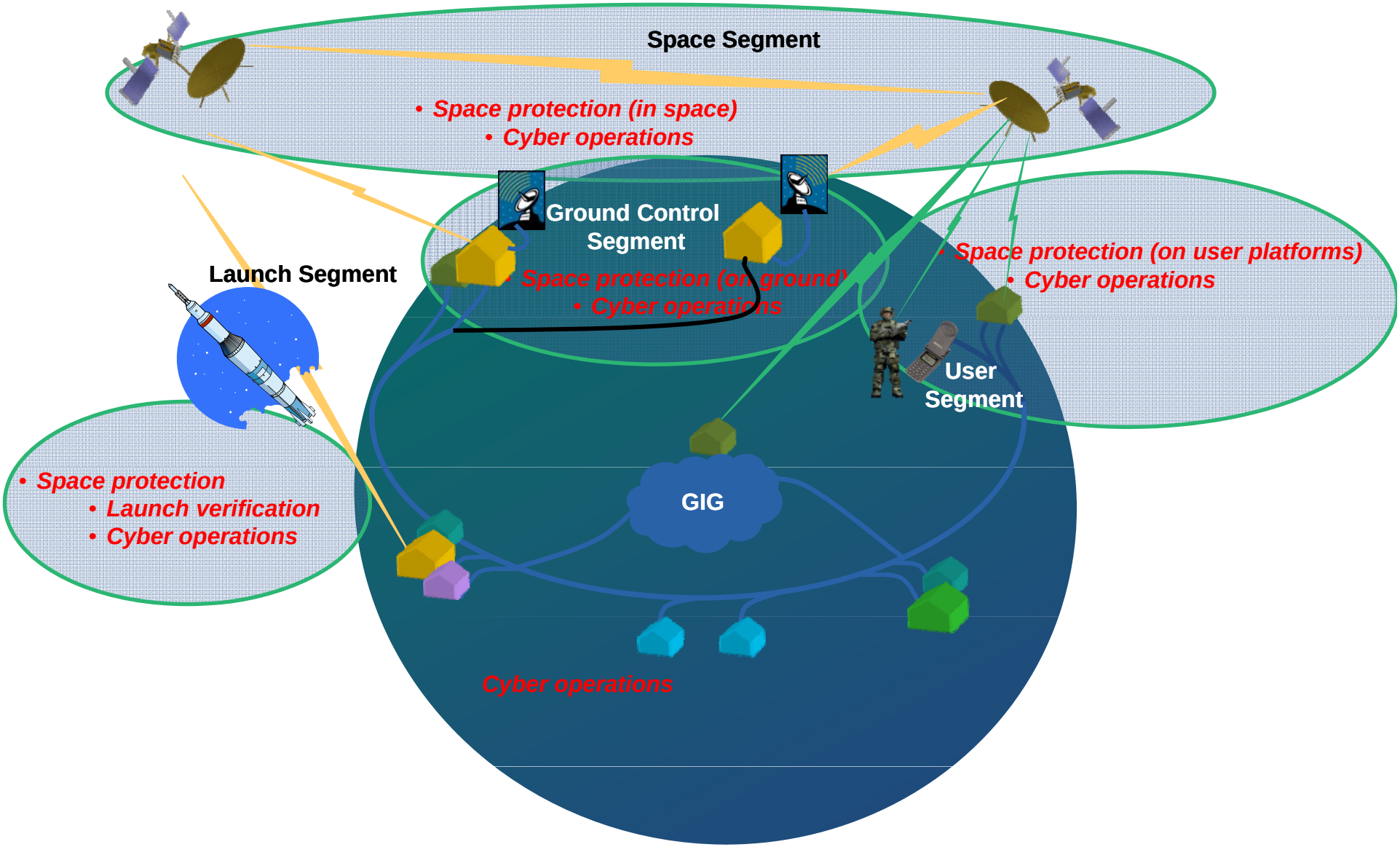
Space Cyber Spans All Space Segments



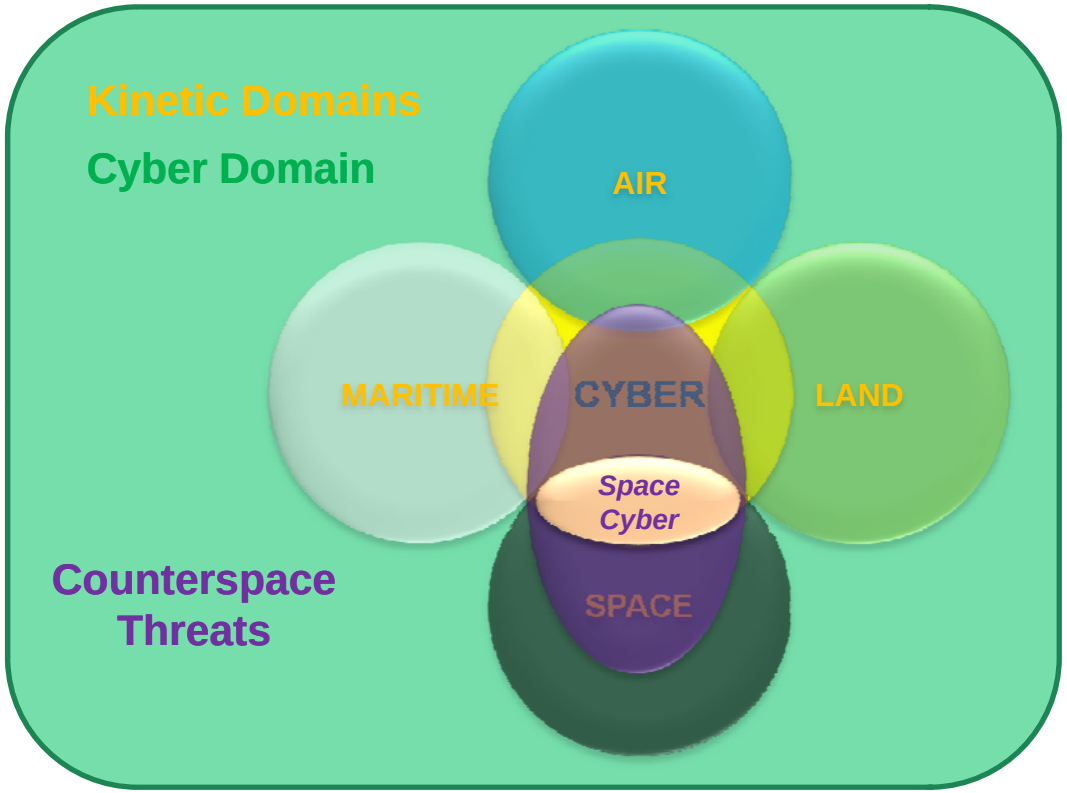
AEROSPACE

Speakers

- **Nick Combs, Chief Technology Officer, EMC Federal**
  - ***Access Control & Security in Virtualized & Cloud Systems***
- **Josh Haines, Ass't Group Leader, MIT Lincoln Labs**
  - ***Cyber Mission Survivability***
- **Daryl Hild, MITRE**
  - ***Mission, Systems, Information, & Cyber Assurance***

Backup Charts

Space Cyber Emphasis



Traditional Domains are characterized by kinetic activity

Cyberspace Domain is embedded in traditional domains, but is characterized by “virtual activity ”

Threats against NSS assets and information may involve any/all domains

Gen. Kehler: *“…look at the intersection of Cyberspace and Space Domains”*