Military Satellite Communications

Delivering Capability Today, Architecting for Tomorrow

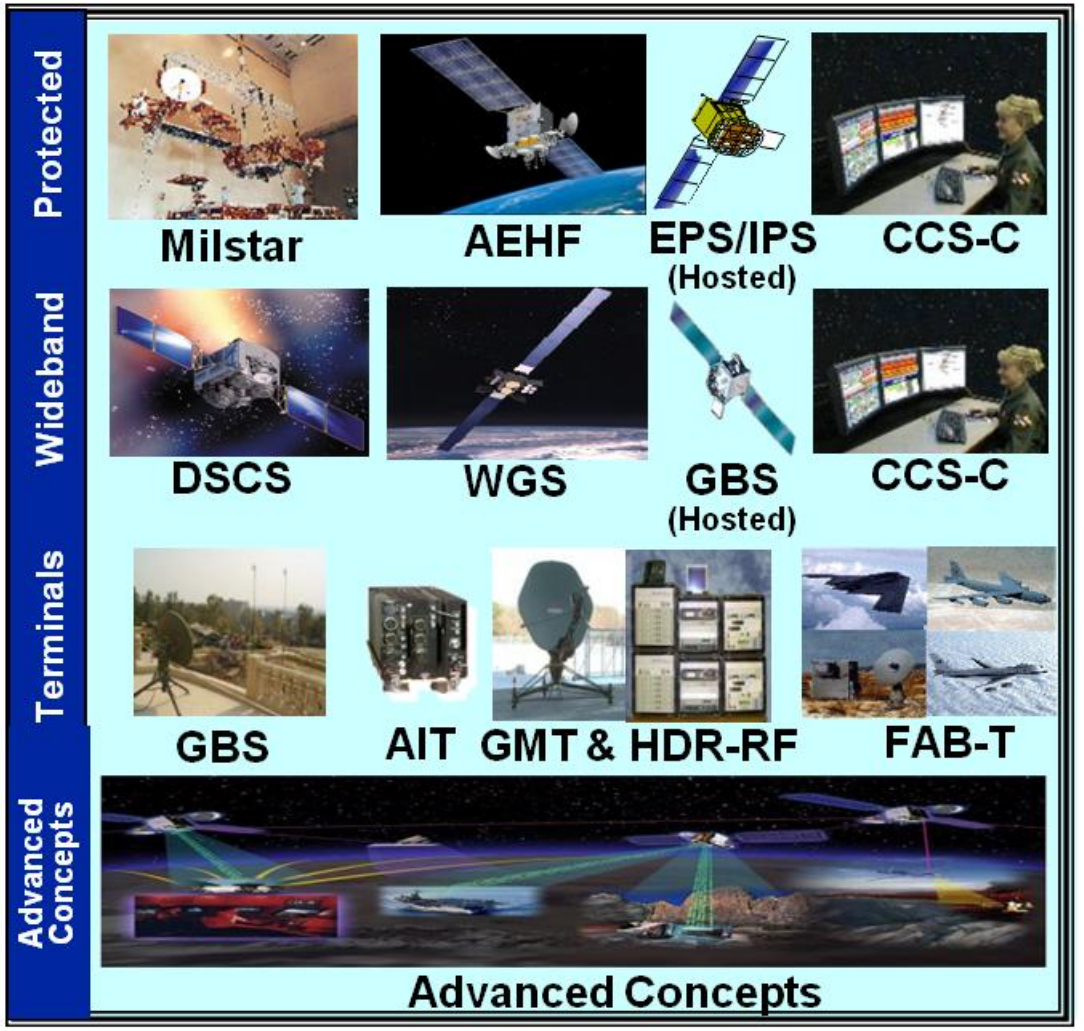
Colonel Mike Sarchet

Chief, Protected SATCOM Division

Military Satellite Communications Systems Directorate

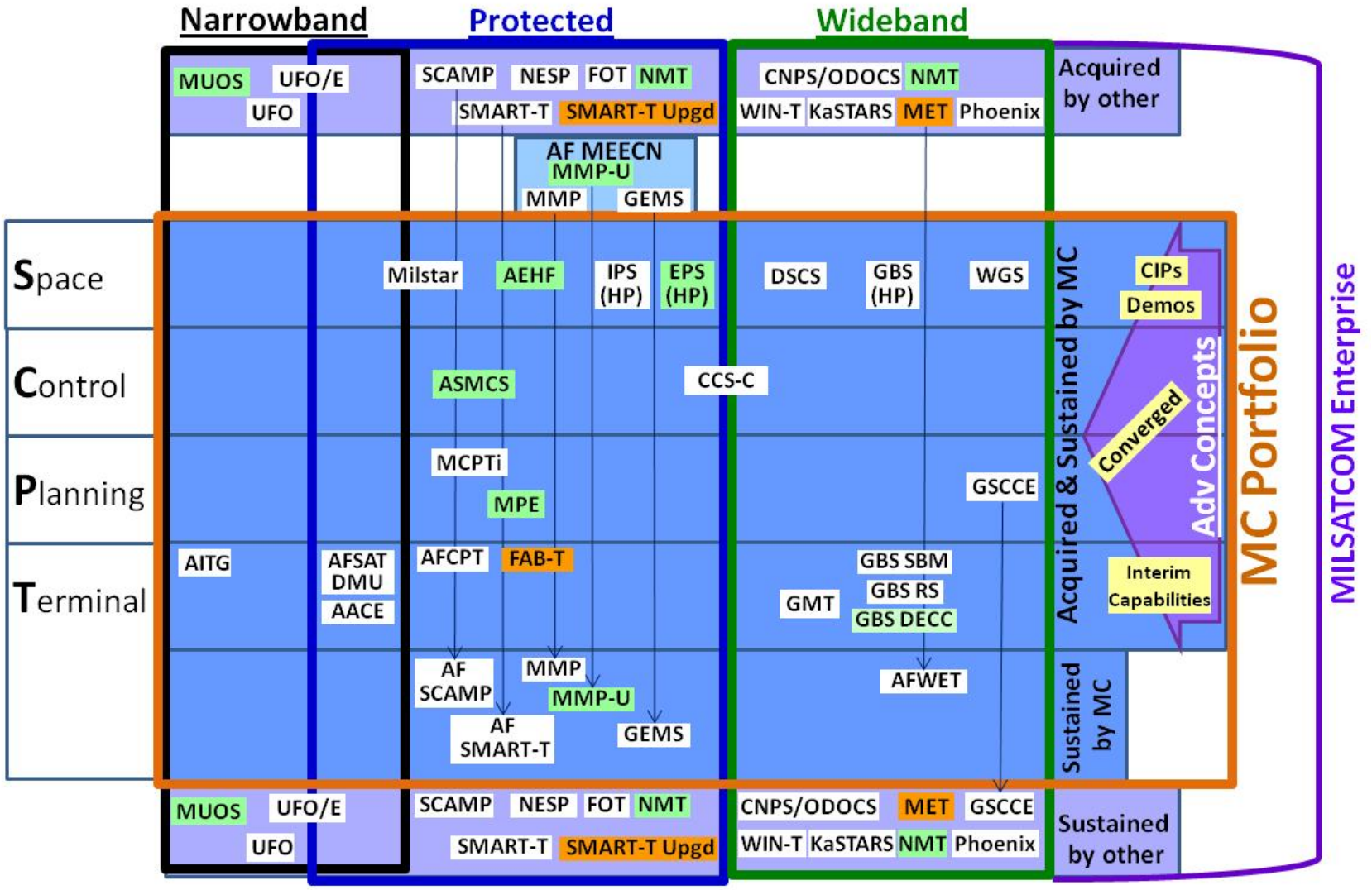
Mission:
Plan for, acquire and sustain space-enabled, global communications capabilities to support National Objectives.

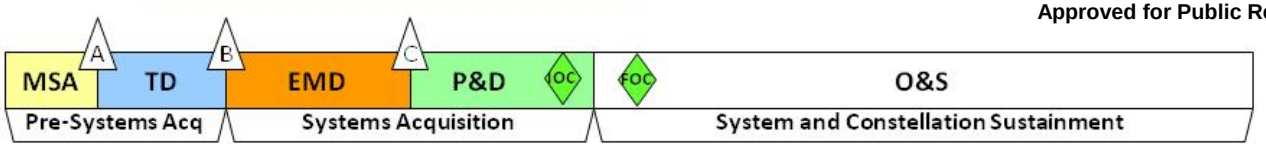
David Madden, SES



Providing Critical Communications Capability for National / Joint Force Operations

MILSATCOM Enterprise



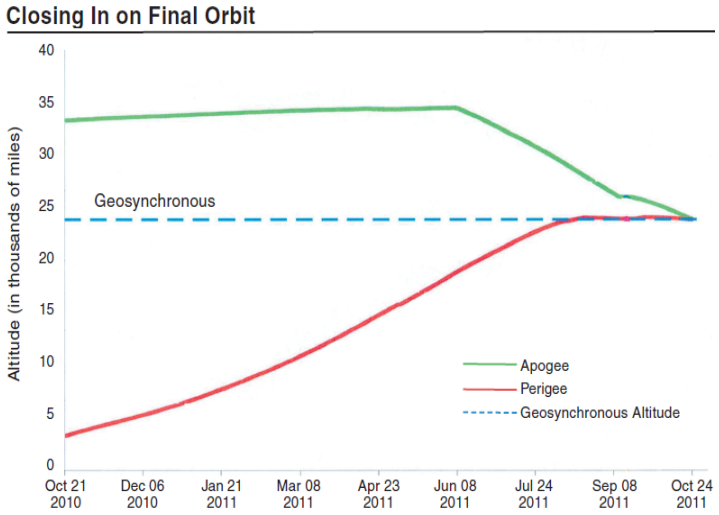


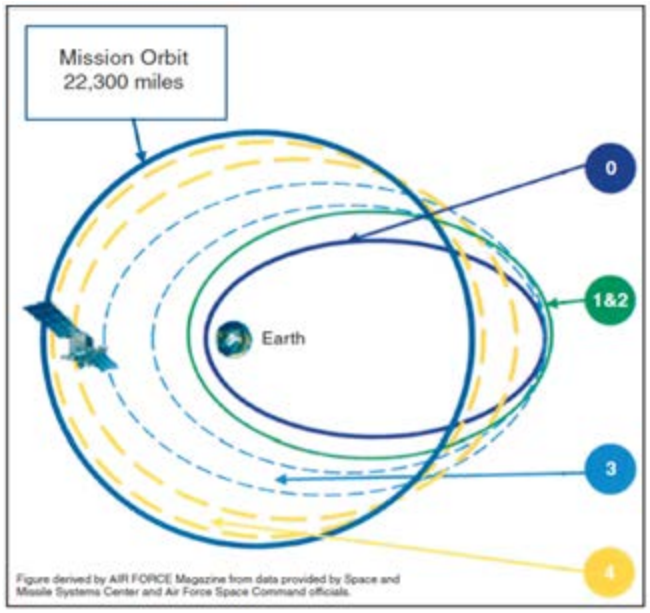
AEHF-1 Recovery

- **Picture-Perfect Launch on 14 Aug 10 → SMC/LR, 45SW and United Launch Alliance**
- **15 Aug 10 – Liquid Apogee Engine (LAE) Burn Aborted After ~9 Seconds**
- **17 Aug 10 – LAE Test Burn Aborted After ~2 Seconds**
- **Conclusion: Anomaly With Propulsion Subsystem**

Phases of the AEHF's Recovery

Phase	Operation	Perigee	Apogee	Completed
0	Space injection	140 mi	31,000 mi	Aug. 14, 2010
1 & 2	REA burns	3,000 mi	31,000 mi	Sept. 22, 2010
3	HCT burns 1	17,000 mi	32,000 mi	June 2, 2011
4	HCT burns 2	22,300 mi	22,300 mi	Oct. 24, 2011

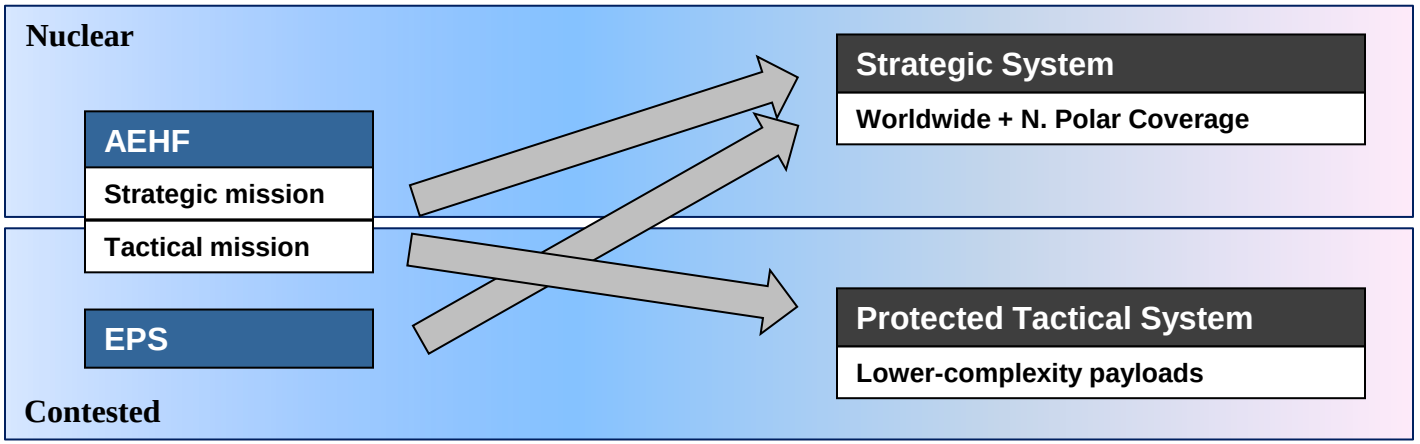




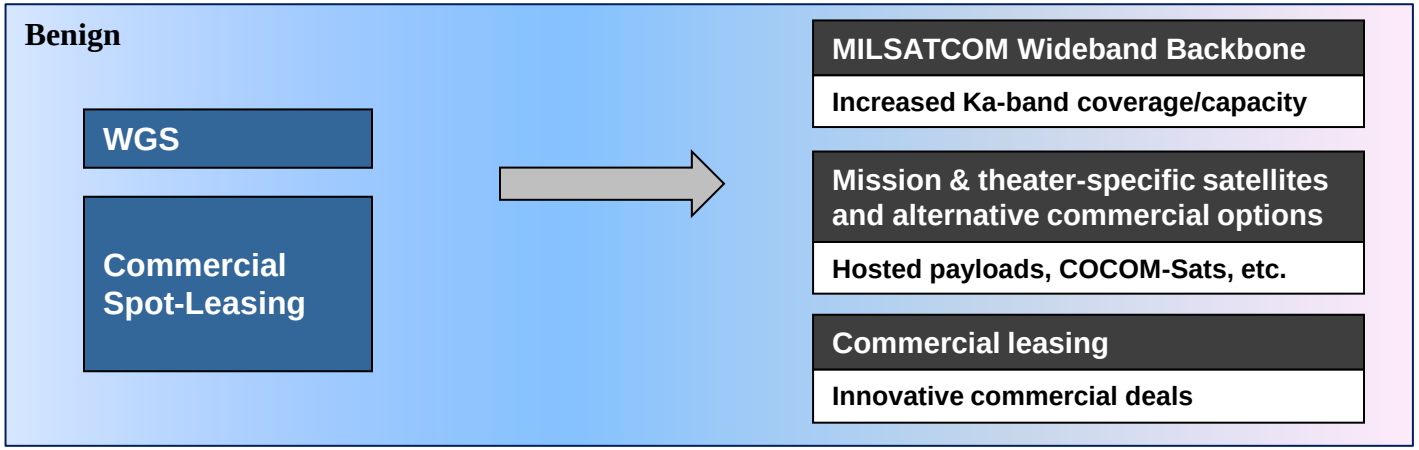
Source: Air Force Magazine, Jan 2012, SMC

Long-Term Disaggregated Architecture

- Split strategic and protected tactical missions



- Diversify wideband options



Transition strategy with near-term investment achieves long-term architecture

Enabling Warfighting Capabilities

- Robust, Connected Command and Control
- Universal Situation Awareness
- Increased Tempo of Operations
- UAV Sensor Collection/Dissemination
- Mobile Communications

SATCOM Remains Essential to the Warfighter