

Has C2 become an Anachronism on the Net-Centric Battlefield?

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Selected C2 JMT's

- Tactical JCAS C2
- Ops JTF HQ C2
- Strategic Strategic (New Triad) C2
- National National C2

JCAS JMT

Immediate Request Tasks

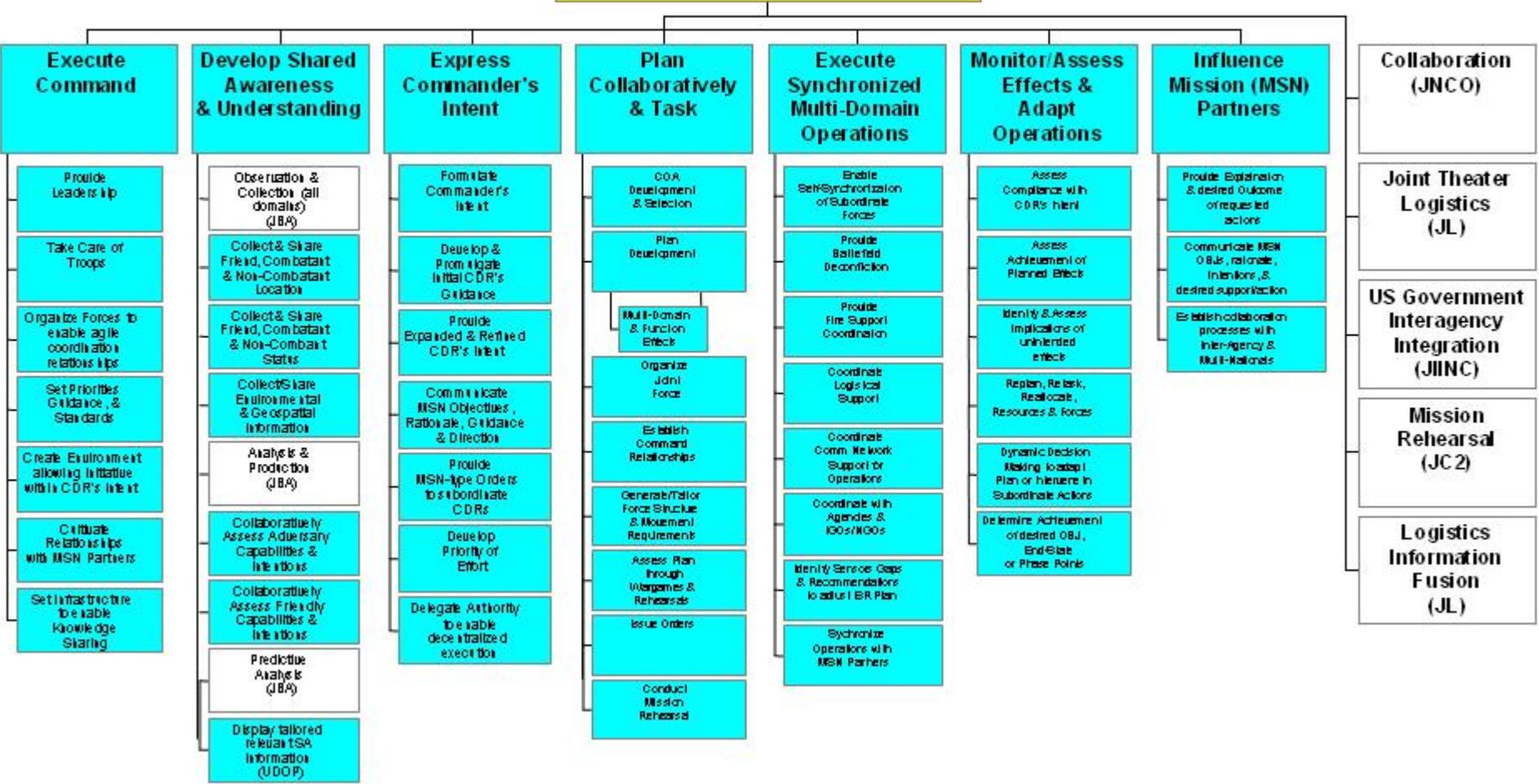
1. Unit detects target (ISR)
2. CDR request CAS
3. Unit notifies TACP
4. TACP passes request to ASOC/DASC
5. Intermediate TACP monitors and coordinates CAS request, if needed
6. ASOC/DASC coordinates w/senior ground HQ which approves request
7. ASOC/DASC calls AOC/TCC to scramble A/C (no on-call A/C) / calls WOC (on-call A/C)
8. AFAOC/TACC calls WOC (No on-call A/C)
9. CRC/DASC sends A/C to contact (CP) point from alert/divert
10. Approaching CP, CRE (AWACS) or DASC tells CAS A/C to contact FAC & pass updates
11. JTAC, FAC(A) or TAC(A) briefs A/C
12. A/C depart IP
13. Joint Terminal Attack Controller controls CAS A/C
14. Bombs on target
15. Assessment (DBA)



Joint Command & Control

OPR & FCB: C2

Joint Command & Control



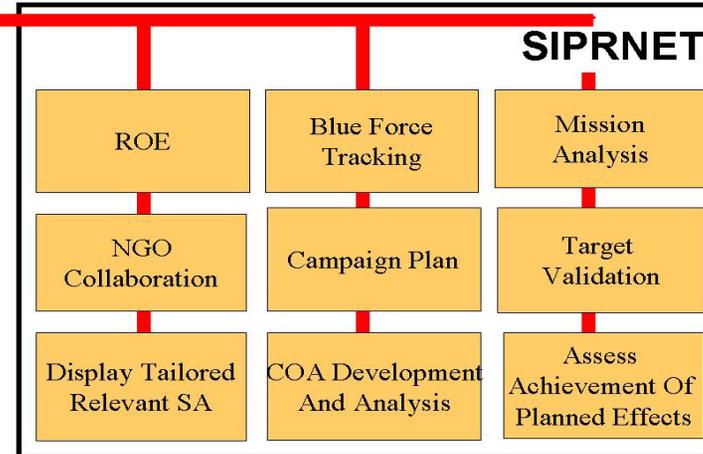
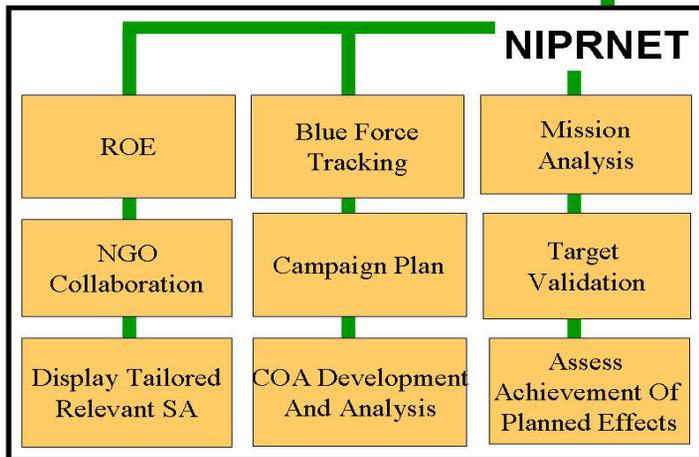
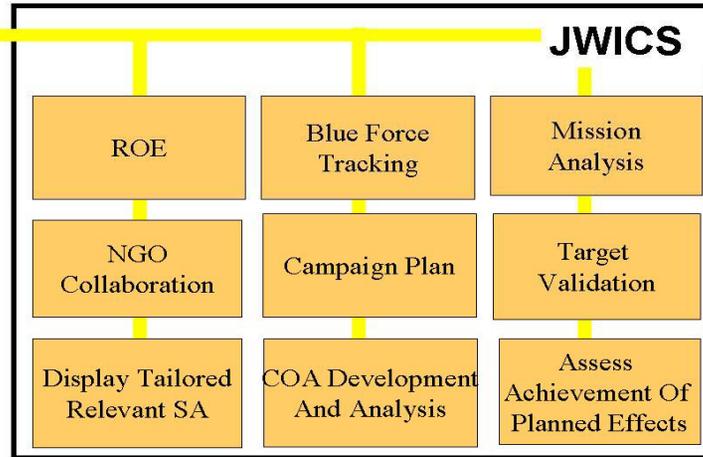
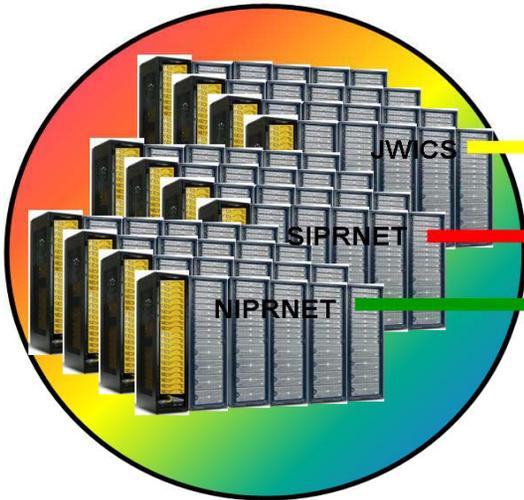
Tier 1 JCA



DRAFT
as of 11-Jan-06

GIG C2 SOA Services

C2 SOA Services



Iraq, Afghanistan & Katrina C2 Lessons In An Enclave World



1. C2 in Iraq moved to the Mil. Intel Enclave

Business Mission Area		Warfighting Mission Area		National Intelligence Mission Area	Allies, Coalitions, Partners	Department of Homeland Defense Mission Area						
Governance		Governance		Governance	Governance	Governance						
Installations & Environment	Logistics	Acquisition	Human Resources Management	Accounting & Finance (incl Strategic Planning)	Battlespace Awareness	Force Application	Protection	Focused Logistics	Battlespace Comms	In work	In work	In work
Enterprise Information Environment Mission Area				National Intelligence Enterprise Information Environment MA	Coalition Information Environment MA	DHS Enterprise Information Environment MA						
Governance				Governance	Governance	Governance						
Communications	Computing Infrastructure	Core Enterprise Services	Information Assurance	In work	In work	In work						

2. C2 in Katrina moved from Civilian to Military Enclave for the infrastructure (Intel was CNN vs. Mil. Intel)

“C2 Is A Migrant Worker” – It Moves To The Enclave Where The Information and Infrastructure Exist to Perform The C2 Function.

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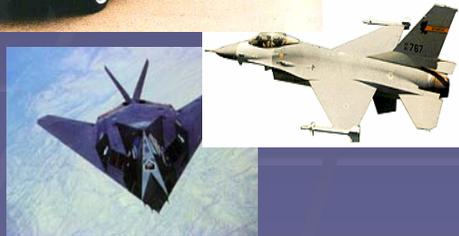
Fixed C2 Centers



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UNCLASSIFIED

Mobile C2 Centers



UNCLASSIFIED

What Must Net-Centric C2 Look Like?

Command and Control

- Net-Centric C2 will still have fixed, mobile and COOP C2 nodes
- COOP will be everywhere all the time (no data loss or facility loss possible)
- C2 will become a networked, distributed, redundant, net-centric capability that relies upon Intelligence and the GIG infrastructure



Fixed C2 Centers



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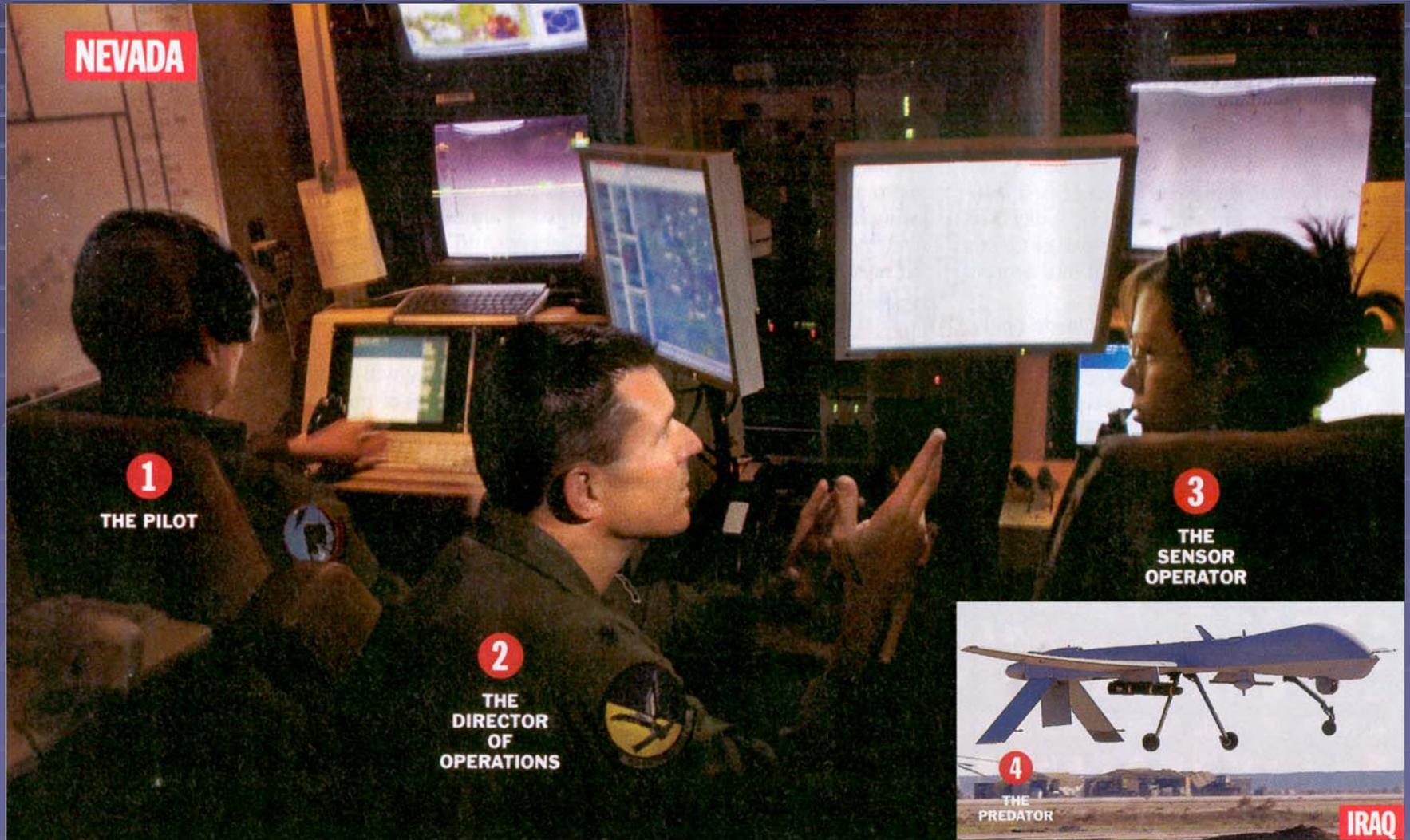
Mobile C2 Centers



C2 COOP? – Everywhere & Anywhere



Net Centric Command and Control Today



Net-Centric Command Center Environment

JTF & Component Commanders

COCOM Distributed Virtual
C2 Capability Supporting
JTF and Component
Commanders



COCOM/NMCS Command Center Complex

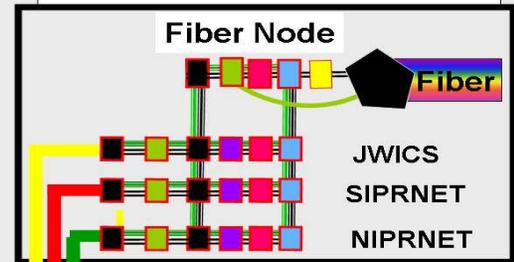


COCOM Operations

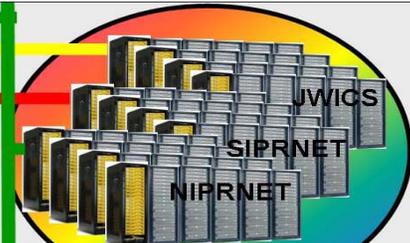


DOTMLPF (FDCE) Sandbox

Standardized GIG Data Node



Redundant Replicated Distributed Data Storage Node



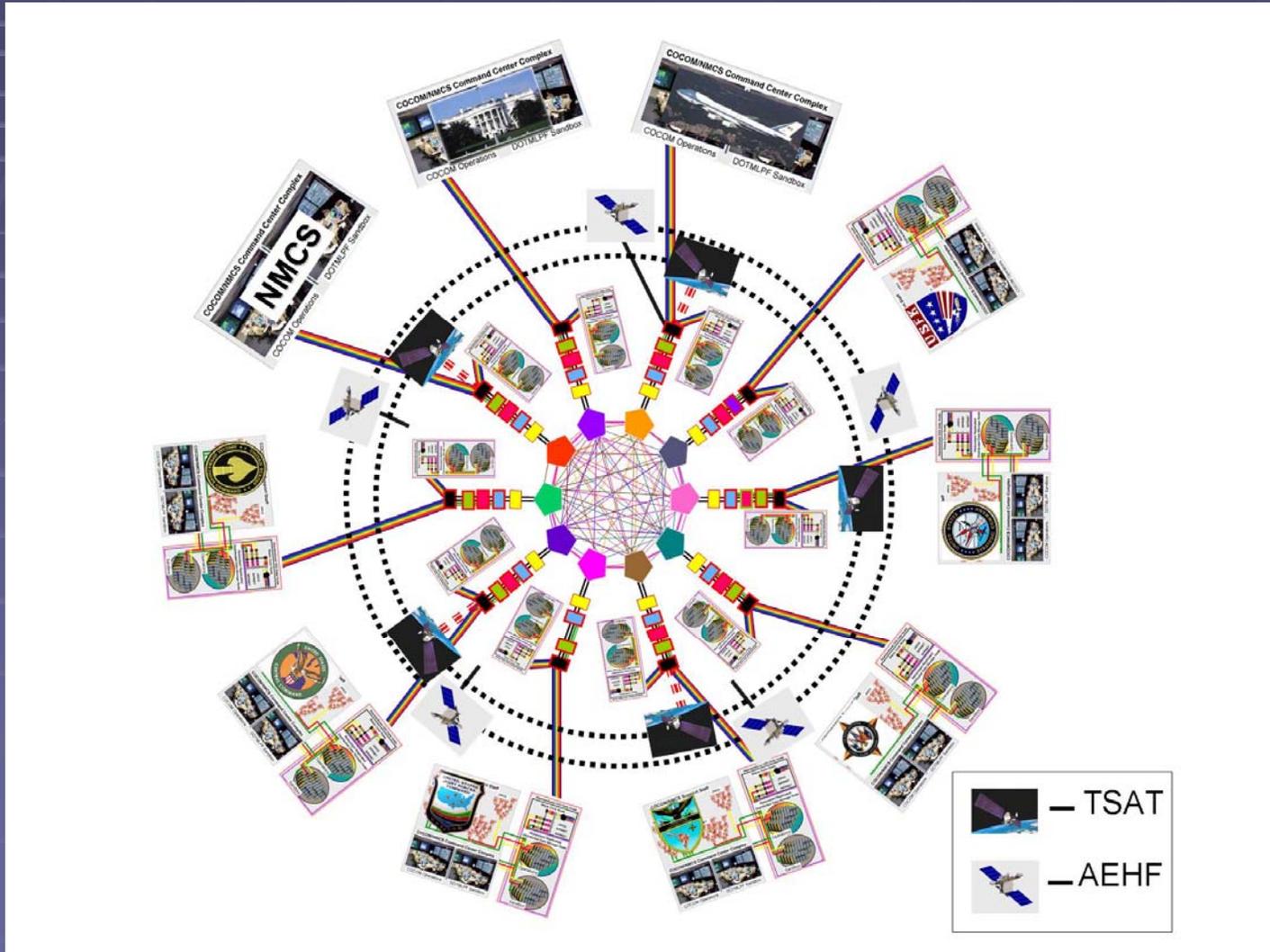
Operations



Sandbox (FDCE)

COCOM and Global C2 Vision (OV-1)

C2 In A Net-Centric GIG Environment



DoD C2 Vision

- **DoD C2 in a distributed net-centric environment must be based upon a flexible, expandable web-based strategy that allows for:**
 - Continuous growth of all DOTMLPF elements
 - Dynamic configuration/reconfiguration to meet evolving “operations today” needs
 - Rapid technology insertion
 - A near term implementation of all C3I elements with supporting communications and networking
 - Integrated enterprise level security, Network Operations (NETOPS) and Crypto
 - MILDEP development of truly unique services/applications to support respective C2 needs