Air Force
Cyber Operations Command
Mission: Warfighting

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5 Jan 2007

This Briefing is:
UNCLASSIFIED
Presentation Overview

- Cyberspace Command Mission Analysis
- Cyberspace Operations
- Global Effects C2
CSAF Intent: Redefine Airpower by extending our global reach and global power into a new domain … of electronics and the electromagnetic spectrum.

Warfighting Mission: Integrate AF’s global kinetic and non-kinetic strike capability … through the full range of military operations … with authority to become COMAFFOR for all USAF cyberspace.

Administrative Mission: Develop an “on ramp” to transition the Mighty Eighth into a MAJCOM Component responsible for … the full spectrum of integrated global effects.
Endstates & Key Tasks

- Present forces to STRATCOM for global operations or ... through COMAFFOR/JFACC for theater operations.
- Provide COCOM with viable military options ... and execution in air, space, and cyberspace.
- Organize your NAF around an AOC, able to operate 24x7x365, interoperable with all other AOCs.
- Advocate your requirements to ACC and Air Staff functional elements to ensure they are given equal weight to other warfighting capabilities.
- Synchronize activities of other organizations ... such as AFCA, AIA, AFC2ISRC, and AFRL.
Missions/Phases

Missions
- Integrate AF’s global kinetic and non-kinetic strike capability
- OT&E to provide full spectrum of integrated global effects

Phases
1. Change culture from cyber as force enabler to warfighting force
2. Organize and present forces for full spectrum, integrated operations—peacetime through combat, global and theater
3. Advocate for Cyber manpower, resources, and a requirement CONOPS to provide Cyber forces and capabilities to COCOMS
4. Transition to the Cyber force provider (MAJCOM)
Prioritized Essential Tasks

- Build CONOPS/CONEMP
- Baseline Global Effects Force – Define Gaps/METLs
- Identify Manpower Requirements
- Identify Resource and Support Requirements
- Develop Cyber COP
- Baseline Capabilities/ Threats (EOB/FOB)
- ID Intelligence Requirements
- Integrate with Theater Commanders and Functional POCs
- Resolve CD & “fratricide” issues (ROE & Authorities)
- Stand up a Cyber PE & advocate in AF Corporate Structure
- Develop initial POM capability (with Air Staff support)
DoD Definition: Cyberspace is a domain characterized by the use of electronics and the electromagnetic spectrum to store, modify, and exchange data via networked systems and associated physical infrastructures.
Exploiting the EMS

DC to Daylight to Gamma Rays and Beyond
The Battle in Cyberspace

Observe

Act

Decide

Orient

Intelligence

Sensor Ops

Conventional Ops

Land/Sea Aerospace Domains

Cyber Domain

Cognitive Domain

Integrated Effects (EMS, EA, Net-A)

GIG Ops

Battlespace Awareness

Influence Ops

Command Control

Offense, Defense, Infrastructure Elements

Integrity - Service - Excellence
"Fly & Fight" in Cyberspace

Cyber Ops

- Operational Freedom of Action
  - Networked Systems Survivability
  - Counter-cyber (Defense) Ops

- Global Effects Integration
  - Surveillance/Reconnaissance
  - Battlespace Awareness
  - Command & Control
  - Combat Systems Effectiveness

- Offensive Cyber Ops
  - IADS, C2, Control Systems
  - Adversary Combat Systems
  - Adversary Information Systems

- Enabling Ops: Intel, GIG Ops, IFO

For USAF, Cyberspace is a *Warfighting* Domain
Global Effects C2 Concept

Global Air Force Capabilities

“Leverage, consolidate and integrate AF-unique cyber capabilities and functions across the spectrum of conflict from peace to crisis to war”
Global Strike: B-2, B-52
Network Operations: AFNOC, I-NOSC, Network Warfare Wing
Surveillance/Reconnaissance: RC-135, U-2, Global Hawk
C2/Battle Management: AWACS, JSTARS, CAOC, ASOG, E-4
Electronic Warfare: EC-130 Compass Call
Intelligence: Distributed Common Ground Station (DCGS)
Effects-based Cyber Enterprise

- Integrity - Service - Excellence

Cyber Effects
- Network Warfare
- Electronic Warfare
- Electronic Attack

Physical Effects
- Electromagnetic Effects
- Network Operations Center
- Tailored Access/Intel
- C2ISRC

Air Operations Centers
- Multi-Domain Surveillance and Reconnaissance
- Command Control
- Intel Operations Support

USAF Air Warfare Center
- Intelligence Centers
- Network Infrastructure Maintenance and Logistics
- Intel Personnel

Programs
- Material
- Doctrine and Training
- Leadership
- Facilities

Supporting Capabilities

Enabling Capabilities

Sustaining Foundation

I n t e g r i t y - S e r v i c e - E x c e l l e n c e
Summary

- AF conducts Cyber Ops to **ENSURE OUR FREEDOM OF ACTION** and **DENY FREEDOM OF ACTION TO OUR ADVERSARIES**

- Air Force views Cyberspace as a warfighting domain on par with the air, space, ground, and maritime domains

- DoD views Cyberspace as much more than the Internet ... a domain characterized by the use of electronics and the electromagnetic spectrum to store, modify, and exchange data via networked systems and associated physical infrastructures

- Sensors, C2 elements, and shooters are networked together via Cyberspace to produce integrated cross-domain effects

- Cyberspace ops require secure, survivable, and resilient networks, infrastructure, and electromagnetic spectrum