

# Towards A Joint Force Cyberspace Operations Planners Curriculum

“The way to get started is to quit talking and begin doing.” - Walt Disney

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# Conference Questions

- How to help...efficiently enable relevant joint training and joint training capabilities to the joint force?
- What actions and strategies are necessary to better inform our training efforts by Joint Force lessons learned, Concept Development and Solutions Analysis, and validated joint training requirements?

It is first important to be effective, as efficiently as you can.”

ADM McRaven, CDR USSOCOM

# Background

## 2009:

- Initial Cyberspace Planner Concept Paper developed by Joint Forces Staff College (JFSC) for JTF-GNO. Provided as a “thought piece” to inform decision makers as they shape the Cyber Ops career field
- JTF-GNO concurred; added recommendations for Table Top Exercises (TTX), distributed learning and regular outreach for course updates

## 2010:

- JTIG-IO derives need from CCMDs for “Computer Network Operations (CNO) Planner” training
- USJFCOM/USSTRATCOM request JFSC to assist the development effort (USSTRATCOM asked JFSC to focus on “Cyberspace Ops”)
- Demand signal from CCMDs focused on content delivered “on-site”
- JFSC and other Schools adding “cyber” content to their curriculum as well.

# Research Purpose

- Collect requirements and develop options to provide or incorporate training content for cyberspace planning.
- Focus on developing a cadre of planners at CCMDs/JTFs with the knowledge, skills, and abilities to:
  - Conduct joint planning for operations in and through the cyberspace domain, and
  - Integrate cyberspace operations across the physical domains of air, land, maritime, and space.

# Combatant Command Feedback (1 of 2)

Combatant Command-expressed thoughts on prospective cyberspace operations planners:

- An understanding of:
  - Joint Operational Planning Process (JOPP).
  - The various authorities (Title 10, 18, 22, 50, etc.).
  - The role of USSTRATCOM / USCYBERCOM / NSA.
  - How intelligence supports Cyberspace Ops.
  - How to request/integrate “Cyber Forces”.
  - How to integrate the various cyberspace operations capabilities (e.g. Defense, Network Ops, Offense) .
  - Enabling Capabilities/Doctrinal Cyberspace Operations Organizations.
  - *Joint Exercise Life Cycle (JELC)*

# Combatant Command Feedback (2 of 2)

Other Combatant Command-derived suggestions:

- Need a unified and consistent lexicon for cyberspace operations .
- Have (or are provided) some degree of technical expertise
- Optimum solution should take no more than three consecutive weeks.
- Delivered to CCMD is preferred: No specific demand signal for a “new” in-residence *TDY/TAD & return* course.

# Derived Solution

- Near-Term Task: Present tailored/focused training content to Combatant Command (CCMD) staffs for planning and integrating cyberspace operations.
- Method:
  - Incorporating CCMD-expressed training needs, present a hybrid, seminar-style planning course.
  - Delivered on-site at each CCMD location by Joint Network Attack Course (JNAC) instructor group.
- Long Term Focus: Incorporating CCMD and Military Department training needs, develop a baseline of needed training content, and identify options for a in-residence coursework at the Joint Forces Staff College.

# Derived Course Modules

- National/Strategic Overview
- Cyberspace Operations Overview
- Intelligence Support to Cyberspace Operations
- Related Cyberspace Capabilities and Concepts
- Cyberspace Planning Exercises

# Course CONOPS

- Designed for CCMD Cyberspace Planners (J2, J3, J5, J6 etc) as well as DISA Fld Office, TSOC, etc.
- 2 x Instructors; 16-20 students (Facility Dependent)
- 10 Training Days over 2 weeks (M-F)
- Combination of Lecture/Seminar and Practical Exercise
- Modular; Can be rearranged as needed to meet scheduling requirements
- Guest Speakers as available/appropriate
- Clearance Level: Up to TS/SCI (Facility Dependent)
- US Only (right now)

Not designed (right now) to be a “Joint-Certified JNAC-Lite” course

# Sample Week 1

## Day 1

Course Intro  
Fundamentals of  
Cyberspace  
Ops  
Legal  
Considerations  
Cyberspace  
Domain  
(Facilitated  
Discussion)

## Day 2

Intelligence  
Support to  
Cyberspace  
Ops (intro)  
JIPOE  
JIPOE Practical  
Exercise

## Day 4

Joint Operational  
Planning  
Process  
JOPP Practical  
Exercise

## Day 3

Intel Spt to  
Cyberspace  
Ops  
(Disciplines)  
Targeting  
Targeting PE

## Day 5

Related Cyberspace  
Ops Capabilities  
STO  
Red/Blue Teams  
Attack  
Fundamentals

# Sample Week 2

## Day 6

Week 1 Review  
Fundamentals of  
Offensive  
Cyberspace  
Ops (OCO)

OCO Practical  
Exercise

## Day 7

Fundamentals of  
Defensive  
Cyberspace Ops  
(DCO)  
Threat  
Degraded Ops

DCO Practical  
Exercise

## Day 9

Integrating  
Cyberspace  
Operations  
into  
OPLANs/  
CONPLANs

## Day 8

NETOPS  
(DISA NetOps  
100/200/300)

## Day 10

Joint Exercise  
Lifecycle  
AAR/Close out

# Road Ahead

- ☑ USSTRATCOM and USCYBERCOM verify the language to modify the JNAC Contract enables an MTT option.
  - ★ How to implement MTT Option
  - ★ Key Dates:
    - ★ August 2011 – Hiring Begins
    - ★ September 2011 – Course Content Assembly
    - ★ 15 October 2011 – Decision Point for scheduling first course.
- ★ USSTRATCOM CTI continues CCMD outreach to review and adjust planner curriculum matched to requirements.
- ★ Other Outreach Efforts
  - ★ Leverage BCNOPC for MTT Course Content or a second Joint-certified venue
  - ★ Engage War Colleges and other upper-level education venues
  - ★ JFSC conducting long term planning for a resident course

# Outreach CONOPS

Requirements Collection Continues...

“Effective First; Efficiently as Possible”

## Visiting All CCmds during FY 12

- Meet planners and leaders
- Determine how they are trained (school, OJT, etc)
- Assess perceived effectiveness of training
- Roles and tasks in exercise planning/execution
- Collect curriculum change recommendations

## Engage USCYBERCOM Service Components and Academic Institutions:

- AFCYBER/24<sup>th</sup> AF
- ARFORCYBER/2d Army
- NAVCYBER/10<sup>th</sup> FLT
- MARFORCYBER
- Senior Service Colleges/NPS
- US Coast Guard/Other Interagency

Questions?