

NETWARCOM

NAVAL NETWORK WARFARE COMMAND

PR 11 Integrated Priority List and the Requirements Process

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Requirements Analysis and Assessment
Naval Network Warfare Command

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Agenda

- **Overview of Naval Network Warfare Command**
- **PR 11 IPL Goals and Objectives**
- **Priorities By FORCEnet Pillars**
 - Communications and Networks (C/N)
 - Command and Control Systems (C2)
 - Information Operations (IO)
 - Intelligence, Surveillance, and Reconnaissance (ISR)
- **Questions?**

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NETWARCOM's Role

- Navy's Type Commander
 - **Man, Train, and Equip for**
 - **Cyber**
 - **Networks**
 - **C4**
 - **Information Operations**
 - **Space**
 - **and soon – Navy Intelligence**

- Operational Commander
 - **Operate, Maintain, and Defend Networks**
 - **Conduct Info Ops**
 - **Conduct Space Operations**
 - **Functional Component Commander to USSTRATCOM for Space, Info Ops & NetOps**
 - JTF-GNO/JFCC-NW/JFCC Space
- FFC N6
- 13,407 Personnel Worldwide
- 35 Commands/Detachments Worldwide

Lead Network Warfare & FORCEnet Enterprise

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NETWARCOM Priority Alignment



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Did You Know

We are only seven years old and we originated from many different Echelons

We Are Responsible for:

- Cyber
- Networks
- Communications
- Space
- Fleet C4I & Mod
- COMSEC
- Circuit Management
- Spectrum Management
- IO & SIGINT
- Intel



INFORMATION IS THE AMMO

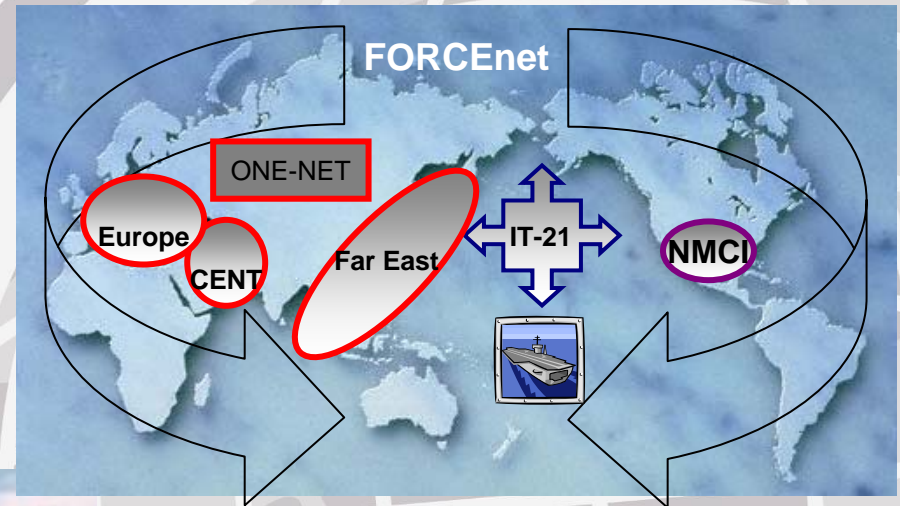
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Information Superiority *for the warfighter*

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"WE ARE YOUR NETWORK"

- NETWARCOM Supports:
 - **NMCI, ONE-NET and IT-21 Networks**
 - 827K Users
 - 375K Seats
 - More than 15K Blackberry devices
 - Transport of more than 125M emails each month



*We operate our
networks all over the
world*

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Information Superiority for the warfighter

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But It's More Than Business IT

Some Inconvenient Truths

- *Information Beats Kinetics in the 21st Century*
- *Our Systems, Purchased for Business and Admin, Have Evolved Into C2 Systems*
- *We Can't Function Today Without the Internet*
 - *Plus Our Millennials Expect It...*
- *Many Put Convenience Over Security*

NETWARCOM's Job is to Influence, Operate, Attack, Defend and Exploit in this Battlespace



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The Question to Ask

Is our C4I structure **secure**,
reliable and **capable**
enough to depend on in the
next conflict?

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Does This Concern You??

USS Nimitz Buzzed By Russian Bomber



A U.S. military official says that one Russian Tupolev 95 buzzed the Nimitz twice, at an altitude of about 2,000 feet, while another bomber circled about 50 nautical miles out.

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How About This??

London Times through familiarity with a Pentagon Report concludes that military hackers in China have formulated a plan to prepare a new cyber-attack designed to put U.S. carriers out of operation



Networks Are A Weapon System

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How Vulnerable Are We?

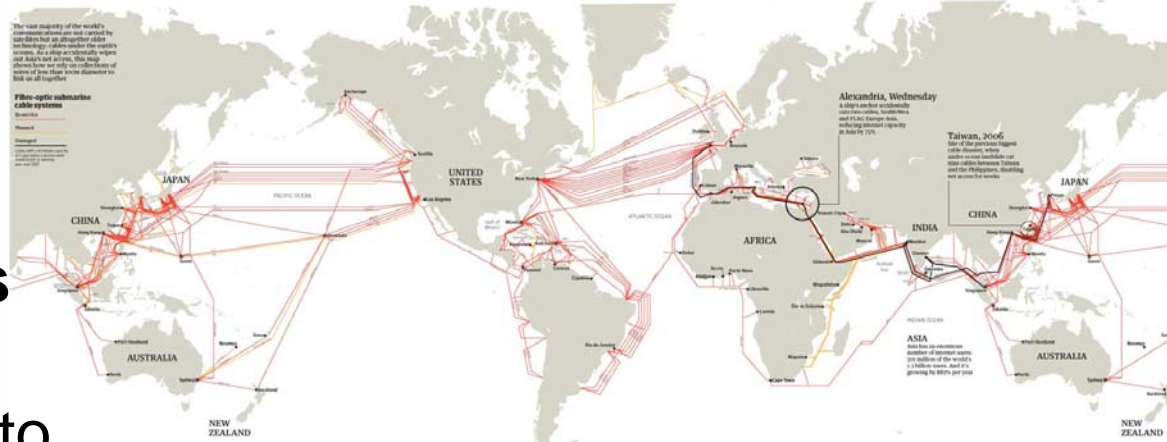
BBC NEWS

New cable cut compounds net woes

The first cut caused widespread disruption to net services

A submarine cable in the Middle East has been snapped, adding to global net problems caused by breaks in two lines under the Mediterranean on Wednesday.

The internet's undersea world



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Our Product Line

Assured Information That Leads to Decision Superiority

Through the management of IT and C4
in order to respond to Joint, COCOM, and Navy
requirements
afloat, ashore, under the sea, and airborne.

**We are not like Mutual of Omaha,
although the cyber world is a Wild Kingdom**

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Our Challenge ...



Maintaining freedom of action in info-space in the 21st century is as important to U.S. interests as freedom of the seas has been since the 19th century and access to air and space since the 20th century.

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The Global Battlespace has Changed

To Win We Must

- *Own C2 ...*
- *Own Space ...*
- *Own the Cyber Domain ...*

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The Growth of the Challenge

*We operate over
700 networks and more than
7,700 applications.*

*The average afloat network age is
6.7 years.*

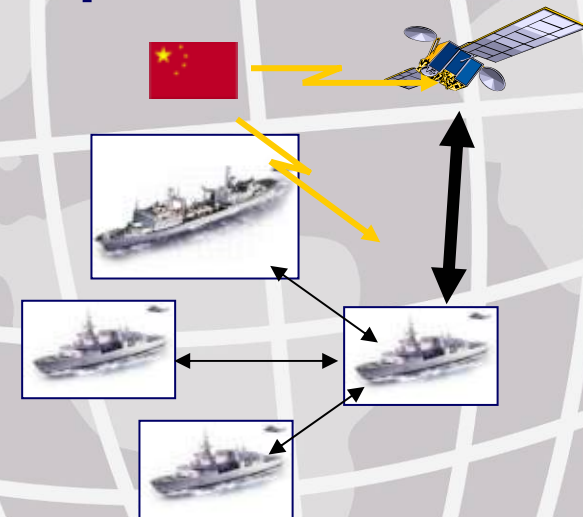
*We still have **874** different radio variants...
with over **30,000** pieces of communications
equipment.*

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Warfighting Principles in the Global Info-space

- Warfighting capability of the Global Maritime Partnership requires secure C2—we can't win the kinetic fight if we lose the network fight
- Maritime Domain Awareness demands protected networks

Our adversaries maintain the ability to disrupt our networks or modify our information at a time and place of their choosing



Can we fight without the network—Can we fight without the information?

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Our Global Presence



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Integrated Priority Goals

- Championed Fleet C4ISR Needs – from User Needs Tracking System and User Needs Statements**
- Provided Program Sponsors (N2, N6, and N8) Fleet's most critical issues for PR 11**
- Provided a short list of concerns for POM 10 reclama deliberations**
- Included issues from NNWC claimancy, from FORCEnet as Operational Agent, and from evolving the Naval Network Enterprise**

Does not include issues with strong Congressional, OSD and SECNAV Champions

IPL Objectives

- **Assure continued operations and readiness in Communications and Networks, C2, ISR and IO**
- **Address warfighting gaps and seam issues with other Enterprises in support of IAMD, ASUW, ASW and Strike (including CNA) identified in UNTS**
- **Harden and Secure the Networks through enhanced defense, governance and training, as well as materiel upgrades**

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Functional Priorities

☐ Communications and Networks

1. Sustain Afloat networks while awaiting CANES
2. Fund cryptographic modernization
3. VTC enhancements afloat and ashore including SCI afloat
4. Enhance shore infrastructure connectivity
5. Fully fund Naval Maritime Terminal to replace aging WSC-6
6. Restore HYDRA funding
7. Voice over IP enhancements
8. Mitigate operational impact of legacy reductions

☐ Command and Control

1. ADSI
2. TBMCS
3. JICO Support System
4. Imagery over Link 16

☐ Information Operations

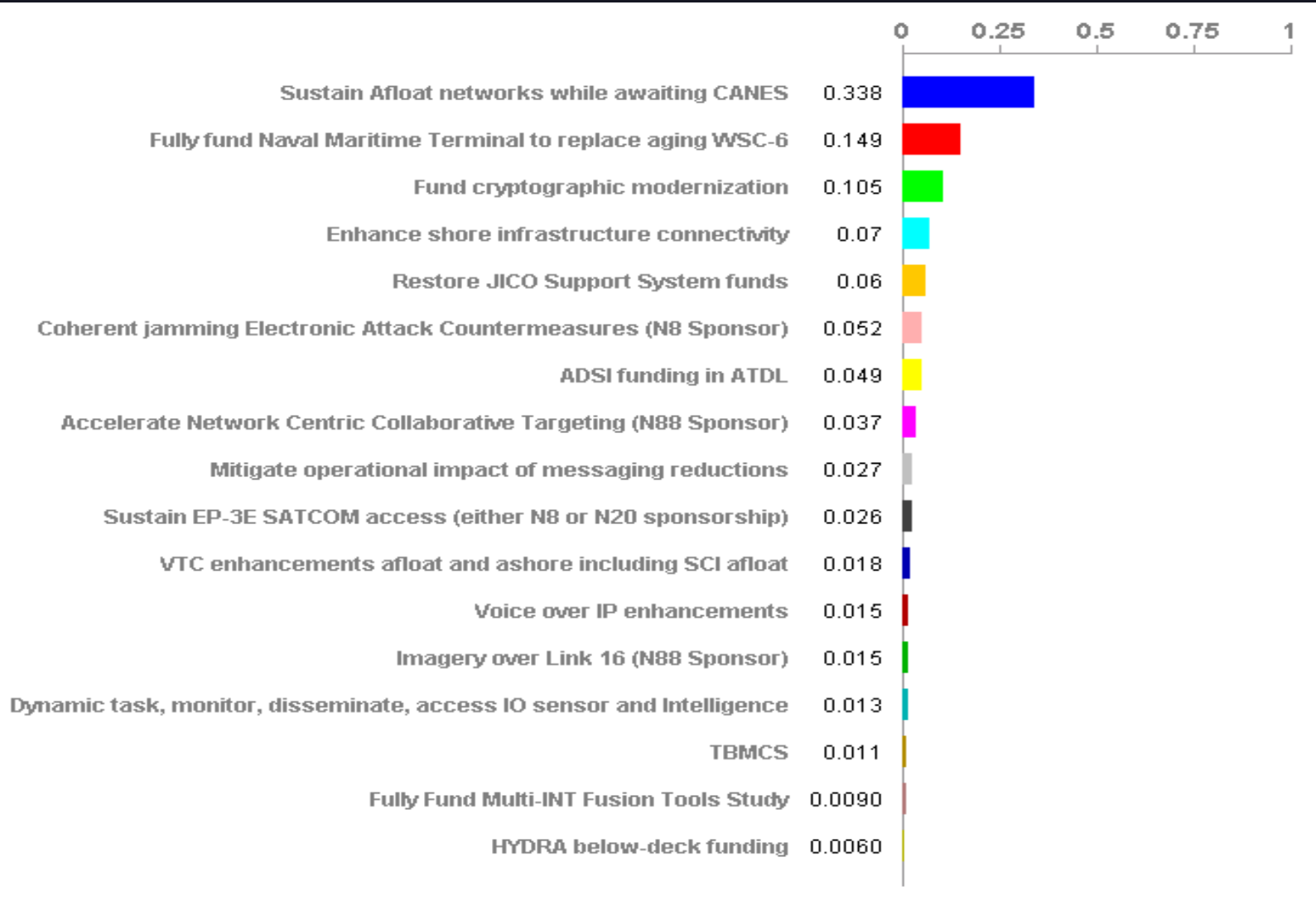
1. Coherent jamming Electronic Attack Countermeasures
2. Dynamic task, monitor, disseminate, access IO sensor and Intelligence
3. Sustain EP-3E SATCOM access

☐ Intelligence, Surveillance and Reconnaissance

1. Accelerate Network Centric Collaborative Targeting
2. Multi-INT Fusion Tools in support of MDA, to include Homeland Defense
3. Fund Navy Gale Lite

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IPL Decision Lens Scoring



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Integrated NNWC Priorities

1. Sustain Afloat networks while awaiting CANES
2. Fully fund Naval Maritime Terminal to replace aging WSC-6
3. Fund cryptographic modernization
4. Enhance shore infrastructure connectivity
5. Restore JICO Support System funds
6. Coherent jamming Electronic Attack Countermeasures (N8 Sponsor)
7. ADSI funding in ATDL
8. Accelerate Network Centric Collaborative Targeting (N88 Sponsor)
9. Mitigate operational impact of legacy reductions
10. Sustain EP-3E SATCOM access
11. VTC enhancements afloat and ashore including SCI afloat
12. Voice over IP enhancements
13. Imagery over Link 16 (N88 Sponsor)
14. Dynamic task, monitor, disseminate, access IO sensor and Intelligence
15. TBMCS
16. Fully Fund Multi-INT Fusion Tools
17. HYDRA below-deck funding

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Summary: Missions Like These

NNWC is your TYCOM and your Partner for:

Information Warfare
Information Operations
Influence Planning
ELINT & COMINT
Cryptology
Computer Network Ops
Linguist and Cultural
FORCEnet
Information Assurance

Space Planning
SSES Manning
MOC/MHQ
Cryptologic Installs
Electronic Warfare
NMCI
ONE-Net
IT-21
SATCOM

EP-3E Ops
Sub Ops
SPECWAR Ops
OPSEC/COMSEC
I&W
Messaging
C4 Installs
Spectrum Mgt
Connectivity

... and, YES ... we do BLACKBERRYs too

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- Backup



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NNWC Integrated Capabilities List

- **To determine Capability Needs**

- JCIDS products (Net-Centric Operations CBA, MAGTF C2 ICD, NCES CDD etc..)
- Analysis for NNFE initiatives (NGEN, CANES, MHQ w/MOC, Tactical Switching, CBSP, Navy Tactical Networks, etc..)
- FORCEnet OV&SV architectures
- UJTLs / NMETLs
- Joint Integrating and Functional Concepts (JICs and JOCs)
- FORCEnet Functional Concept and Annex
- CONOPS

- **To conduct Gap Analysis**

- OPNAV N6 / N8 POM studies
- CNA studies
- Universal Needs Statements from Fleet / IPL
- PEO C4I Masters Plan
- JCIDS documents

30 Studies with over 800 Findings

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IPL to ICL Mapping

IPL – Solutions to Gaps

ICL – capability Gaps

Communications and Networks

- Sustain Afloat networks while awaiting CANES

Networks not assessed

- Fund cryptographic modernization

NCO IA ■ High Impact Top Priority

- Fully fund Naval Maritime Terminal to replace aging WSC-6

- Enhance shore infrastructure connectivity

- VTC enhancements afloat and ashore including SCI afloat

NCO IT ■ High Impact Top Priority

- Voice over IP enhancements

- Restore HYDRA funding

- Mitigate operational impact of legacy reductions

Networks not assessed

Command and Control

- ADSI
- Imagery over Link 16
- TBMCS
- JICO Support System

C2- ■ High Impact Top Priority

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IPL to ICL Mapping

IPL – Solutions to Gaps

ICL – capability Gaps

Information Operations

- Coherent jamming Electronic Attack Countermeasures
- Dynamic task, monitor, disseminate, access IO sensor and Intelligence
- EW data base support and CONOPS development
- Sustain EP-3E SATCOM access

IO not assessed

Intelligence, Surveillance and Reconnaissance

- Accelerate Network Centric Collaborative Targeting

- Multi-INT Fusion Tools in support of MDA, to include Homeland Defense
- Fusion Tools to support MDA (Gale Lite)

BA - Collection  High Impact Top Priority

BA – Process/Analyze
BA – Exploit/Produce0

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 Med Impact Mid Priority