

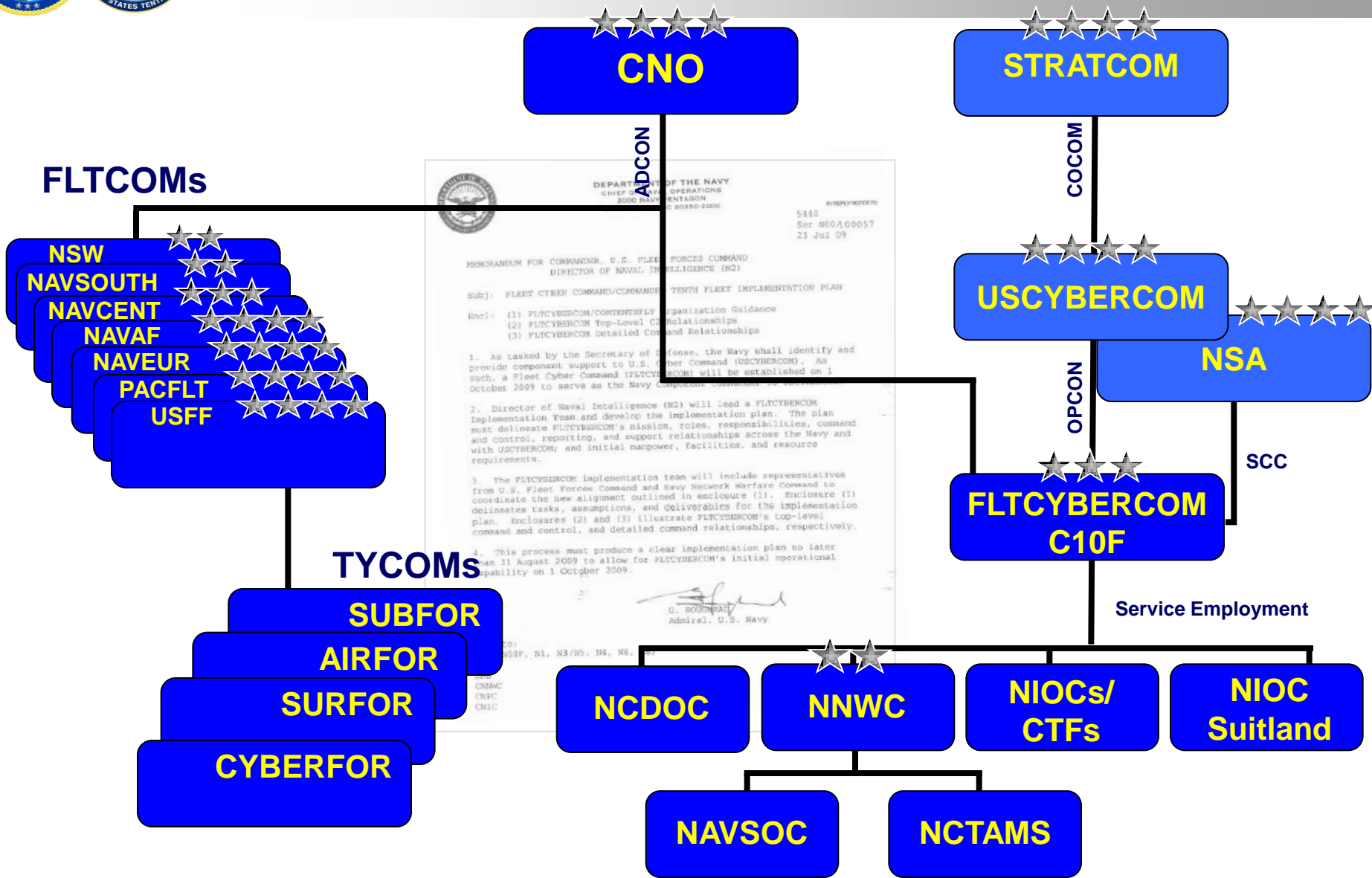


# U.S. FLEET CYBER COMMAND U.S. TENTH FLEET

RDML BILL LEIGHER, USN  
DEPUTY COMMANDER

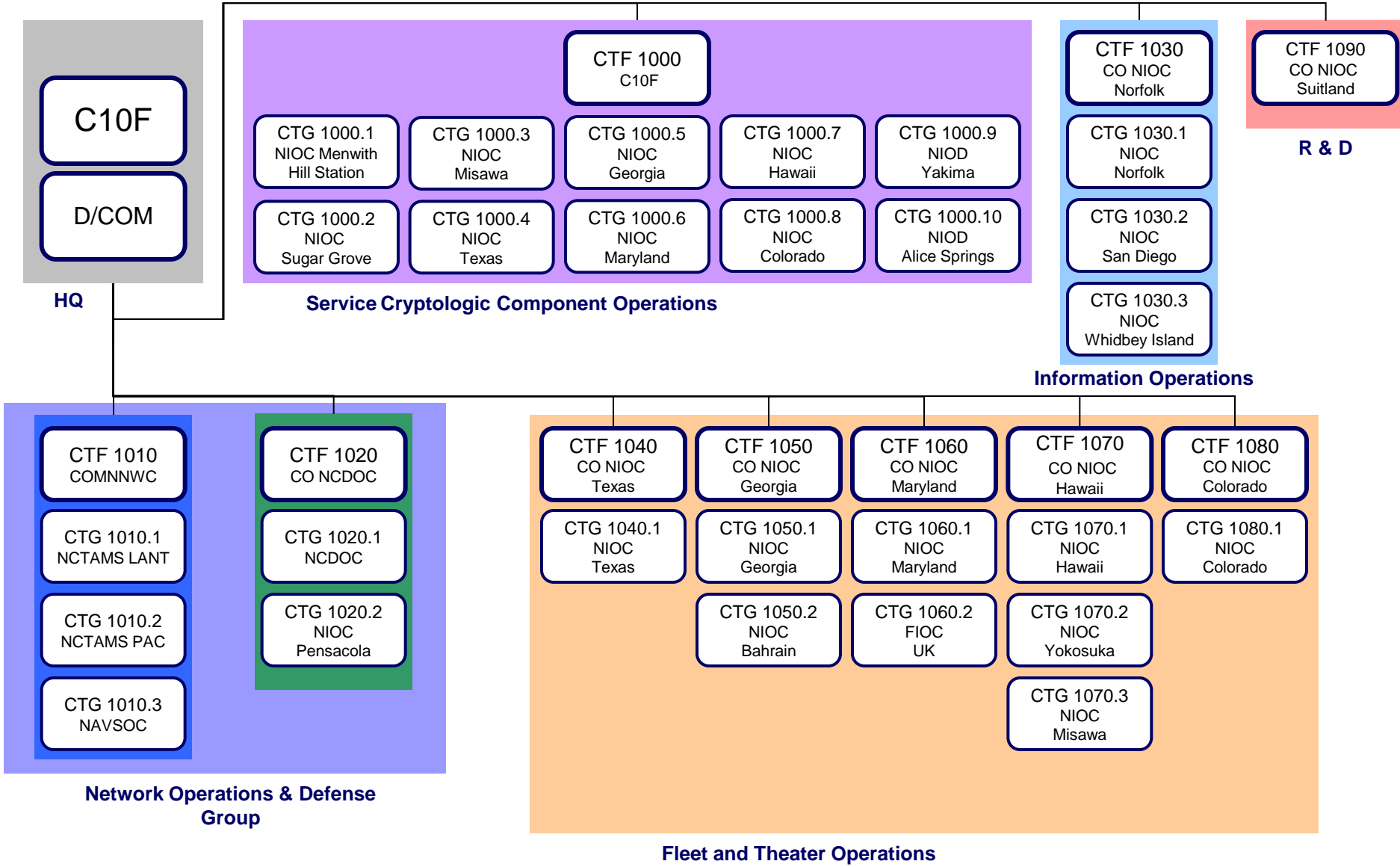


# Detailed C2 Relationships (CNO Memo)





# C10F Standing Task Organization





# Missions and LOOs

## ■ Mission

- Central operational authority for networks, cryptology/SIGINT, IO, cyber, EW and space in support of forces afloat and ashore
- Navy Component Commander to USCYBERCOM
- Service Cryptologic Component Commander

## ■ Lines of Operation

- Assuring Navy's ability to Command and Control its operational forces in any environment
- Achieve and sustain the ability to navigate and maneuver freely in cyberspace and the RF spectrum
- On command, and in coordination with Joint and Navy commanders, conduct operations to achieve effects in and through cyberspace



# Nature of Cyber Warfare

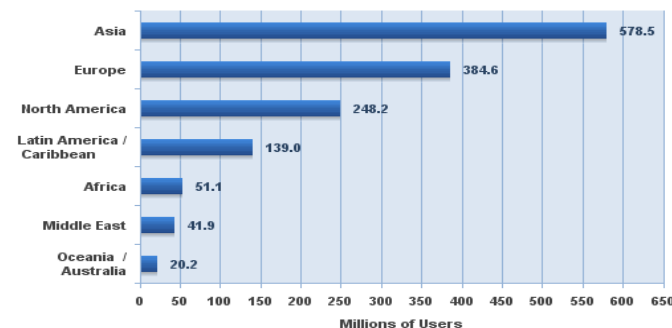
## Cellular Expansion

- We operate, attack and defend on the same platform as the adversaries
  - Threat characterization and attribution are challenging
  - Offense and defense have similar features
- Industry drives cyberspace technology
- Public, high profile adversary successes will breed additional actors
  - Inexpensive, anonymous and effective
- Cyber operations require a force that lives “on-the-network”
  - Global Cyber Common Operational Picture
  - Predictive cyber threat/response capability
  - Integrated NetOps, Attack, Defense, Exploit operations



## Internet Explosion

Internet Users in the World by Geographic Regions

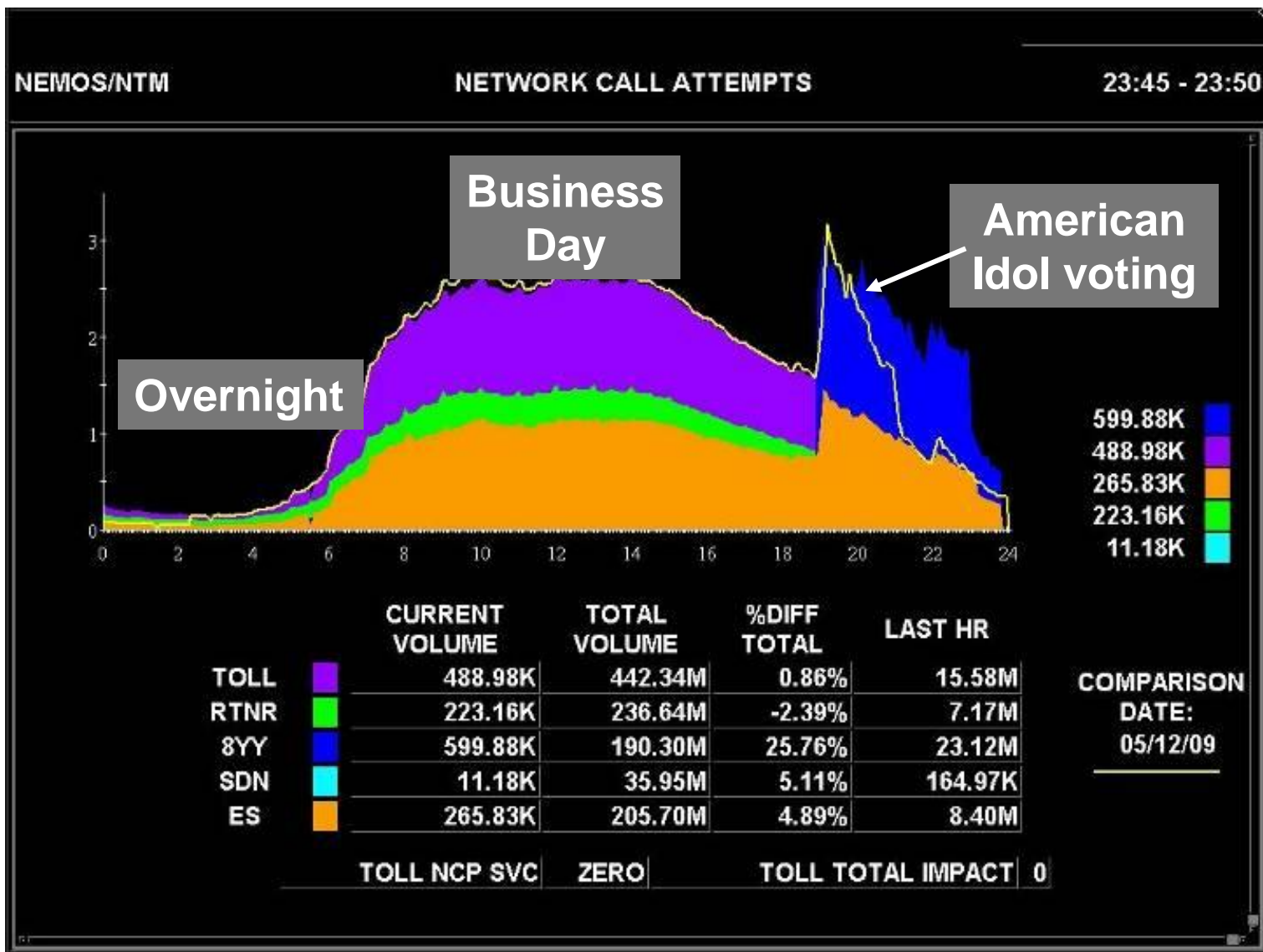


Source: Internet World Stats - [www.internetworldstats.com/stats.htm](http://www.internetworldstats.com/stats.htm)  
Estimated Internet users is 1,463,632,361 for Q2 2008  
Copyright © 2008, Miniwatts Marketing Group

***State, Non-State Actors and Individuals All Operate Within Cyberspace***



# The Importance of "Normal"



\*Source: AT&T GNOC

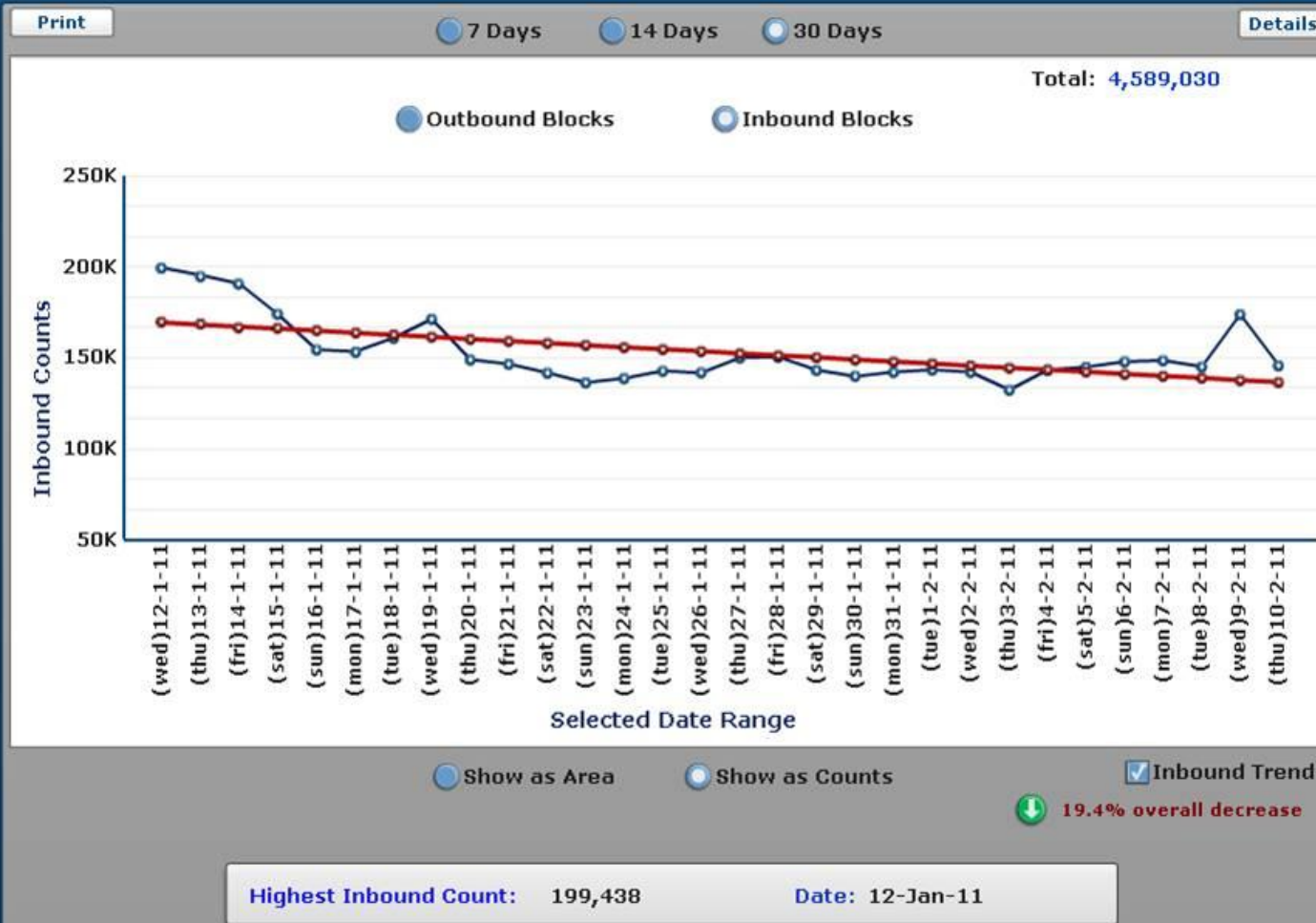




UNCLASSIFIED//FOUO

## Aggregated Strategic Sensor Block Comparison

Outbound vs. Inbound Activity





Home | My Workspace | Open | Send To | Dashboards | **Unclassified** | Help | Preferences | Log Out

UNCLASSIFIED//FOUO

## Top List of Aggregated Strategic Sensor Events

By Selected Event and Date Range

Start Date:  | Number of days in range (180 max):  | End Date:

Top 200 Events:  By Descending Count |  Alphabetical

WORM:

Total Counts |  Inbound/Outbound |  Blocked/Not Blocked

Number of selected dates too high to show individually

Zoom:

### WORM: Conficker Activity Detected

Show Trend

Daily Avg: 36,745.9  
 Total : 3,380,625  
 Date with highest count: 10/16/2010

**Count Breakdowns**

Inbound  
 Outbound  
 Other

Blocked  
 Not Blocked

Filter results by selected sensor

**Concentrations by Sensor (by descending count):**

AOR	Sensor Name	Alarm Count
NORTHCOM	AOR-CNET-GREATLAKES	640786
NORTHCOM	pacswsen01	517613
NORTHCOM	UARNOCSEN01	458125
NORTHCOM	AOR-CNET-PENSACOLA	402024
PACDM	JRNOCSEN01	393652

The list pane is updated.

Local intranet | 100%



# Driving Change In Cyberspace

- **If we don't have assured C2 nothing else matters, but offensive cyber usually seen as the priority**
- **The global domain and C2 relationships**
- **Definition and understanding of the battle space**
- **Implementing Inspections and assessments**
- **Cyber culture and training is not operationally focused**
- **Fragility of the infrastructure**
- **Delivering decision quality information to commanders**

