



**Program Executive Office
Command, Control, Communications,
Computers and Intelligence (PEO C4I)**

Deployable Joint Command & Control (DJC2) Overview

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Statement A: Approved for public release, distribution is unlimited (11 SEPTEMBER 2012)

***Information Dominance
Anytime, Anywhere...***





DJC2 BLUF

- Joint ACAT I delivered ***on time, within budget, meeting all KPPs***
- Through its spirals and technology insertion/refresh, **system has become:**
 - ***Less expensive***
 - ***Smaller in footprint, lighter in lift***
 - ***More capable***
- All configurations have ***3-year Authority to Operate (ATO)***
- C2 architecture “***born joint,***” able to be scaled/repackaged for ship, vehicle
- DJC2 ***heavily used by COCOMs, Components*** in real-world JTFs
 - *Japan, Haiti, Myanmar, New Orleans ...*
 - *Support manning: Joint Communications Support Element (JCSE)*
- ***Services leveraging*** DJC2 for Service C2 to reduce risk, costs



Japan



Haiti



Haiti



Thailand



Germany



Morocco



DJC2 Program of Record (POR)

Enabling JTF Ops for HA/DR, Drug Interdiction, Homeland Security Defense, and Overseas Contingency Ops



DJC2 Mission

Field an integrated C2 HQ system to enable a commander to set up a self-contained, self-powered, network-enabled JTF HQ anywhere in the world within 6 - 24 hours of arrival

- 5 networks, 130 clients
- Secure Wireless Networking with extension of services
- IP Convergence Suite (EoIP)
- C-JWICS / DODIIS
- GCCS-J
- Robust 8 Mb comms (GBS, TACSAT)
- Defense Connect Online (DCO) / VTC / Collaboration Tools
- Onsite support manning
- 24/7 Help Desk, Support Portal, training, tech manuals, spares



Design is fully self-supporting, with its own power, environmental control, and SATCOM — augmented with autonomous rapid response and en route capabilities

RAPID RESPONSE KIT (RRK)

2 / 15 operators (reachback)
Carry-on/Checked baggage





DJC2 Evolution

MORE capability in SMALLER footprint for LESS COST

SPIRAL 1.0



SPIRAL 1.3

More capability ...

Sheltered HMMWVs removed, components containerized, capabilities added, subsystems repackaged for greater capability, flexibility, scalability

124/244

Core Expansion

20/60

Core

20

Early Entry (EE)

10

**Early Entry (EE)-Lite
EE-Lite Plus**

<15

**Rapid Response
Kit (RRK)**

<4

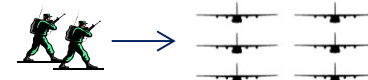
**Commander's
Kit**

Users

NOTE: Each expansion kit adds 60 seats to Core

Smaller footprint ...

Lift, weight, cube significantly reduced



Lift: 2-persons to 6 C-130s

SPIRAL 1.0

\$12M Core

\$\$\$\$\$\$
\$\$\$\$\$\$

Less cost ...

\$7.4M Core

\$\$\$\$
\$\$\$\$

SPIRAL 1.0



Lift: 13 C-130s



Servers: 36



Servers: 8



DJC2 Scalability

DJC2 = Fully Scalable Joint C2

- = No. of networks
- = No. of clients included
- = Communications
- = Infrastructure
- ❖ = No. of support positions

Users

124/244

<4

Commander's Kit



- 2 Networks/Rchbk
 - BGAN
- Wt : 90 lb**
Cubic ft: 3.59

<15

Rapid Response Kit (RRK)



- 2 Networks/Rchbk
 - Client x 5
 - CCT-120
 - VoIP/VoSIP
 - Voice (analog)
 - VTC
- Wt: 465.40 lb**
Cubic ft: 32.47

10

Early Entry (EE)-Lite,* EE-Lite Plus**



- *2 Networks/Rchbk
 - **2 Networks/Local
 - Client x 15
 - CCT-120
 - VoIP/VoSIP
 - Voice (analog)
 - VTC
 - Shelter/HVAC
 - Power gen & distro
 - Tables/Chairs
- *Wt: 7652.40**
***Cubic ft: 926.75**
- **Wt: 9764.40**
****Cubic ft: 1014.14**

20

Early Entry (EE)



- 3 Networks/Local
 - Client x 40
 - AN/USC-60A & -68
 - GBS
 - AN/PRC-117F
 - Iridium
 - VoIP/VoSIP
 - Voice (analog)
 - DRSN
 - VTC
 - FAX
 - Shelter/HVAC
 - Power gen & distro
 - Tables/Chairs
- ❖ +8 Support Positions
- Wt: 44891.0 lb**
Cubic ft: 6288.23

20/60

Core



- 5 Networks/Local
 - Clients x 130
 - AN/USC-60A & -68
 - GBS
 - AN/PRC-117F
 - Iridium
 - VoIP/VoSIP
 - Voice (analog)
 - DRSN
 - VTC
 - FAX
 - Shelter/HVAC
 - Power gen & distro
 - Tables/Chairs
- ❖ +8 Support Positions
- Wt: 78797 lb**
Cubic ft: 11798.26

Core Expansion



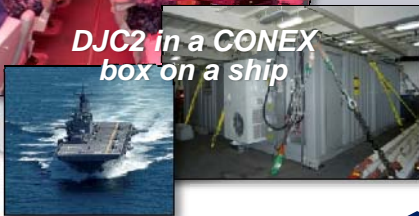
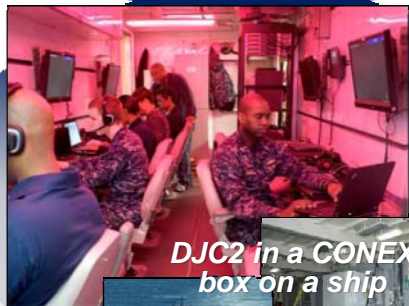
NOTE: Each expansion kit adds 60 seats to Core

- 5 Networks/Local
 - Clients x 250+
 - AN/USC-60A & -68
 - GBS
 - AN/PRC-117F
 - Iridium
 - VoIP/VoSIP
 - Voice (analog)
 - DRSN
 - VTC
 - FAX
 - Shelter/HVAC
 - Power gen & distro
 - Tables/Chairs
- ❖ +8 Support Positions
- Wt: Variable**
Cubic ft: Variable



DJC2 Flexibility

DJC2 = Fully Flexible Joint C2



... and so is this





DJC2 in Real-World Ops

OPERATION TOMODACHI: *Yokota AFB, Japan (2011)*



Mission:

Deployed by PACOM (supported by JCSE) to provide C2 capabilities in support of operation providing HA/DR support in austere environment where normal infrastructure had been damaged/destroyed by tidal wave



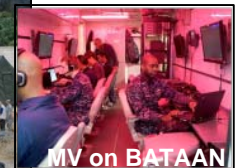
CJTF HAITI: *Port-au-Prince, Haiti (2010)*



Mission:

Served as command post for CJTF Haiti, providing services to 300 staff, including SIPR/ NIPR/ NGO/ GBS/ JWICS/ VTC/ VOSIP/ VOIP/ PSTN/ DSN

DJC2 Maritime Variant (MV) supported C2F on BATAAN



JTF CARING RESPONSE: *Myanmar (2008)*



Mission:

Provided U.S.-only Command Center for potential real-world operations during CG-08 exercise
Enabled "instant" JTF HQ when Cyclone Nargis hit Myanmar, and then supported move of JTF to Utapao with no gap in C2 for JFC



By using EE/Core and RRRK, JFC was able to transition JTF HQ from tents to building 200 miles away without losing C2/comms

JTF KATRINA : *New Orleans (2005)*



Mission:

Supported Joint Force Maritime Component Commander (JFMCC) at JRB NAS New Orleans
Only Ashore C2 component





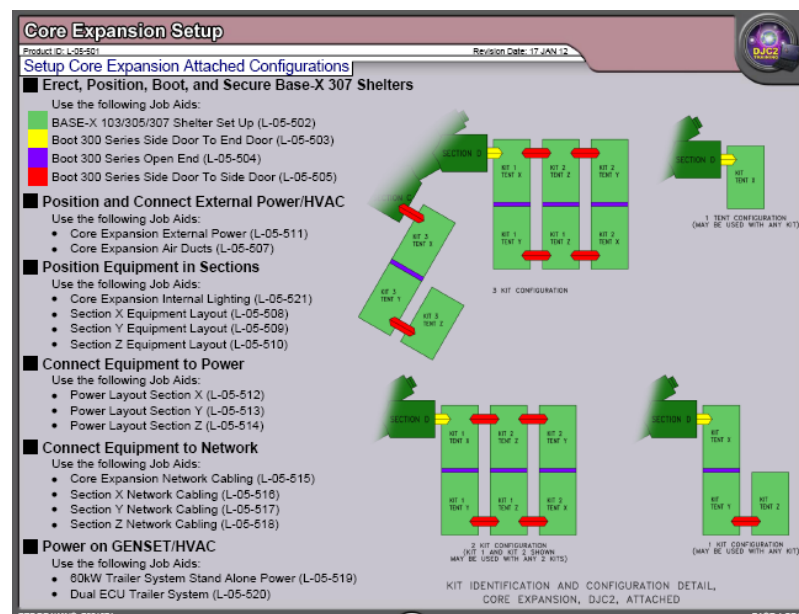
DJC2 Support: Robust, Mature



DJC2 Support includes:

- **On-Site Maintainers (Tier 1):** (Contractors)
 - Co-located at each GCC; deployable with the system
 - Skill sets tailored to enhance GCC manning
 - Funded by DJC2 program across FYDP
- **Reachback Support (Tier 2):** DJC2 Operations Support Center (DOSC) at www.djc2.org/support & support.djc2.mil
 - Toll free help desk: 1-888-294-2635
 - 24/7 when supporting deployed systems
- **Subject Matter Experts (Tier 3):** Design Agent (DA) and In-Service Engineering Agent (ISEA) expertise
 - Proactive Tech Refresh and Tech Insertion program for obsolescence mitigation and functionality enhancements
 - Maintains the system security, hardware, and software configuration baselines for fielded systems
 - Fly-away teams can support exercises or troubleshooting
- **SharePoint Support Portal**
 - Tactical website
 - Access to Support information: Drawings, IETMs, training information, MSDS, Software Patches, Inventory, etc.
 - Resides on NGO, NIPRNet, and SIPRNet
- **Training**
 - Web-based training for self-paced learning
 - Mobile Training Team teaches at other locations
- **Job Aids:** More than 100 detailed, ready-reference guides
- **Technical Manuals:** Interactive Electronic Tech Manuals (IETMs) available on Support Portal and DVD
- **Pack-Up Kit:** Initial spares, consumables, and test equipment provided with each system for on-the-go A₀
- **Spares:** Stocked at PBL-J facility at SPAWAR's St. Juliens Creek

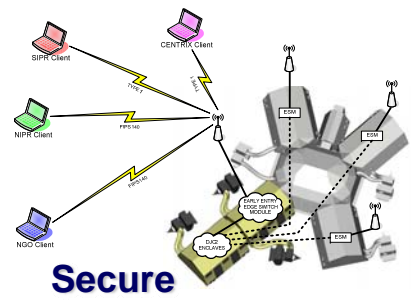
Three-tiered support structure provides training, 24/7 Help Desk, 24/7 online tactical support portal, IETMs, job aids, web-based lessons, spares ...



Sample DJC2 Job Aid



DJC2 Staying Viable Through Technology Insertion / Refresh



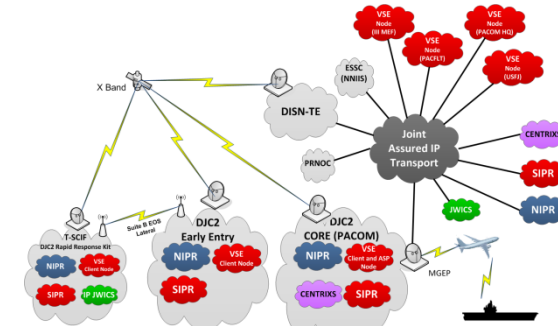
Secure Wireless Networking Modularity Redesign
(FY2012)



Comms Enhancements
(Ka Band/X Band, UHF, HF, GBS, TACSAT)
(FY2012)



Next Generation Rapid Response Kit
(FY2013)

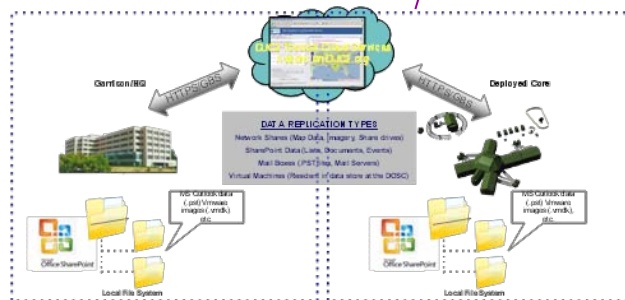


Virtual Secure Enclave, Mobile GIG Entry Point
(FY2013-14)

DJC2 working closely with Joint Warfighters to identify / provide technologies they need ...



Spiral 1.3
(Upgrades to Networks, Storage Array & Servers, Video Distribution, GCCS-J, and Software)
(FY2011-2012)



Software Enhancements
(Portal, GeoCAS, Replication Services)
(FY2011-2012)



Core Expansion Kits
(Available FY2012)

- TI/TR Overview**
- IT systems upgraded every 18 - 24 months
 - Laptops, servers, etc.
 - Funded to enhance systems by inserting high priority, mature new technologies
 - Selected from Warfighter inputs, industry best practices
 - Fielded in cycles



DJC2 Core Expansion Kits

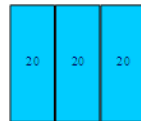
Available FY12



Objective:

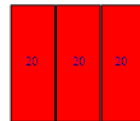
Provide a kit-type solution to expand DJC2 Core from 60 to 240 users

Kit 1 – 60 users



- 1 – 60Kw Generator
- 2 – Dual 8 Ton ECUs

Kit 2 – 60 users



- 1 – 60Kw Generator
- 2 – Dual 8 Ton ECUs

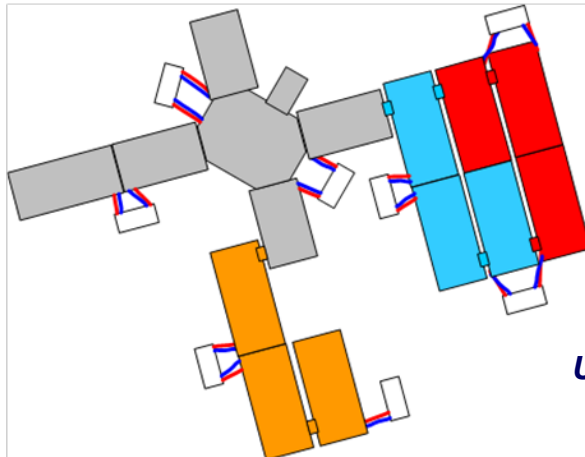
Kit 3 – 60 users



- 1 – 60Kw Generator
- 2 – Dual 8 Ton ECUs

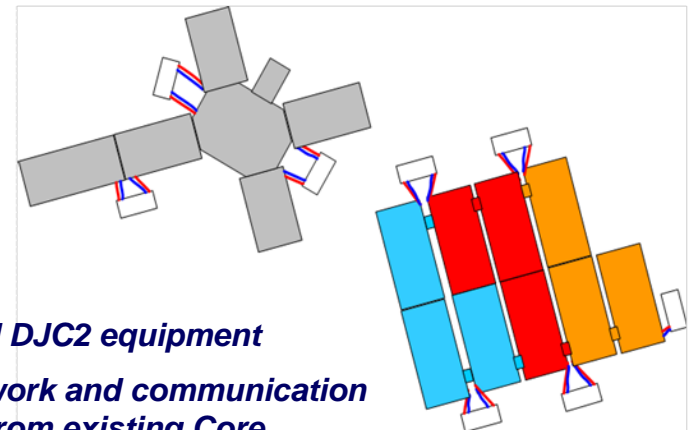
Full Expansion Notional Layout

- CORE
- Kit 1
- Kit 2
- Kit 3



Full Expansion Notional Layout In Stand Alone Configuration

- CORE
- Kit 1
- Kit 2
- Kit 3



Use standard DJC2 equipment

Draw network and communication services from existing Core

Managed/Maintained at NSWC PCD



DJC2 Leveraged for Service C2

FUNDED

Navy

NAVCENT Continuity of Operations (COOP) Capability

DJC2 in ISU containers

Naval Expeditionary Combat Command (NECC) Expeditionary C2 Capability

24 x DJC2 Rapid Response Kits, plus future procurements

Naval Mine and Anti-Submarine Warfare Command (NMAWC)

2 x DJC2's Rapid Response Kits

USMC

MARCORSYSCOM Combat Operations Center (COC) v1

3 x expanded / tailored DJC2 Cores (180 seats each) for I, II, & III MEFs' COCs

MARCENT Deployable C2

1 x DJC2 expanded Core

11th, 13th, 15th, 26th Marine Expeditionary Units (MEUs)

DJC2 Rapid Response Kits



AWAITING FUNDING

USMC

Leverage DJC2 RRR for Expeditionary C2 Suite (ECCS)

POTENTIAL

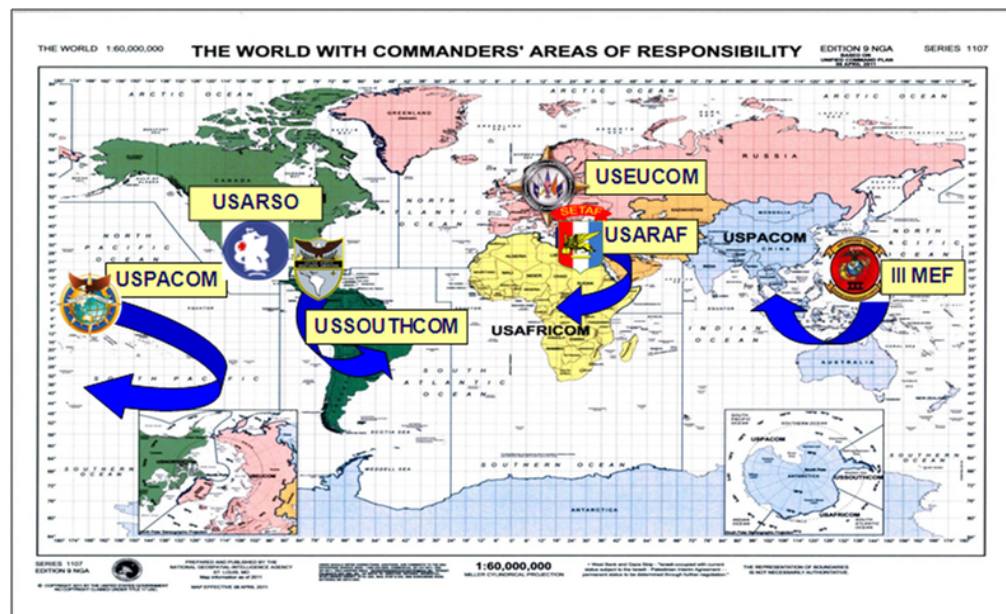
USNORTHCOM C2 Assets to DJC2 POR
POM Initiative in process

Other Service Warfighters leveraging DJC2 and its R&D to get proven capability without duplicating development costs



Summary

- DJC2 gets **more capable, smaller and lighter**, and **less expensive** as program progresses
- Its **highly modular and scalable** capabilities are being **heavily used by its COCOM customers**, and **leveraged by the Services** for Service C2 needs
- **New technologies** are being assessed, demonstrated, and integrated to keep it viable





We get it.

We also integrate it, install it and support it. For today and tomorrow.