



FORCE

XXI

US Army's PEO C3S Knowledge Center

Jun 2000

Emerson Keslar

**Program Executive Office
Command, Control and Communications Systems**





PEO C3S Mission Statement

To rapidly develop, field, and support leading edge, survivable, secure and interoperable tactical, theater and strategic command and control and communications systems.



“What We Do - Command and Control”

EAC C2

Maps

Air Defense

Fire Support

Joint COP

Common Tactical Picture (CTP)

Joint Common Database

Map & Overlay

Maneuver

Logistics

Intelligence

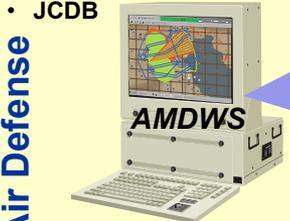
Battle Command



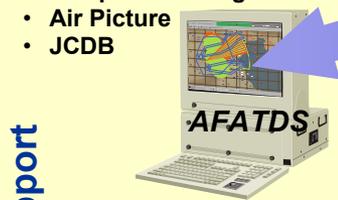
- ATO
- Joint COP
- Air Support Request
- JCDB



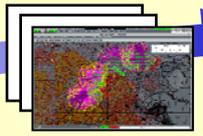
- Local Terrain
- “Go/No-Go” Areas
- JCDB



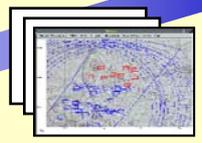
- Sensor Coverage
- Weapon Coverage
- Air Picture
- JCDB



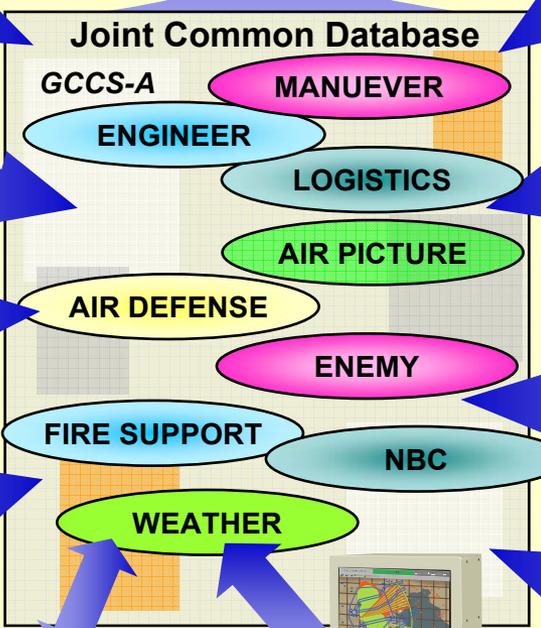
- USAF TBMCS Interface (JWID)
- Fire Unit Locations
- Range Fans
- Target Locations
- Radar/Observer Locations
- JCDB



ADA Overlay

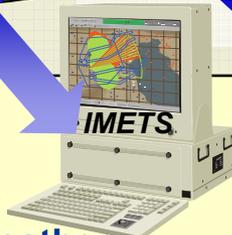


F/S Overlay



- Air Space Management
- Air corridors

Weather



- Weather Effects Matrix
- Battle Scale Forecast Model
- JCDB



- OPLAN/OPORD
- Unit Task Organization
- Reports
- JCDB



Logistic Overlay

- BRIL / CTIL
- Equipment Status Report
- CSSCS Capability Report
- JCDB



Enemy Overlay

- Secondary Imagery
- Intelligence Summary
- Enemy Locations
- Enemy Geometries
- JCDB



Situation Awareness





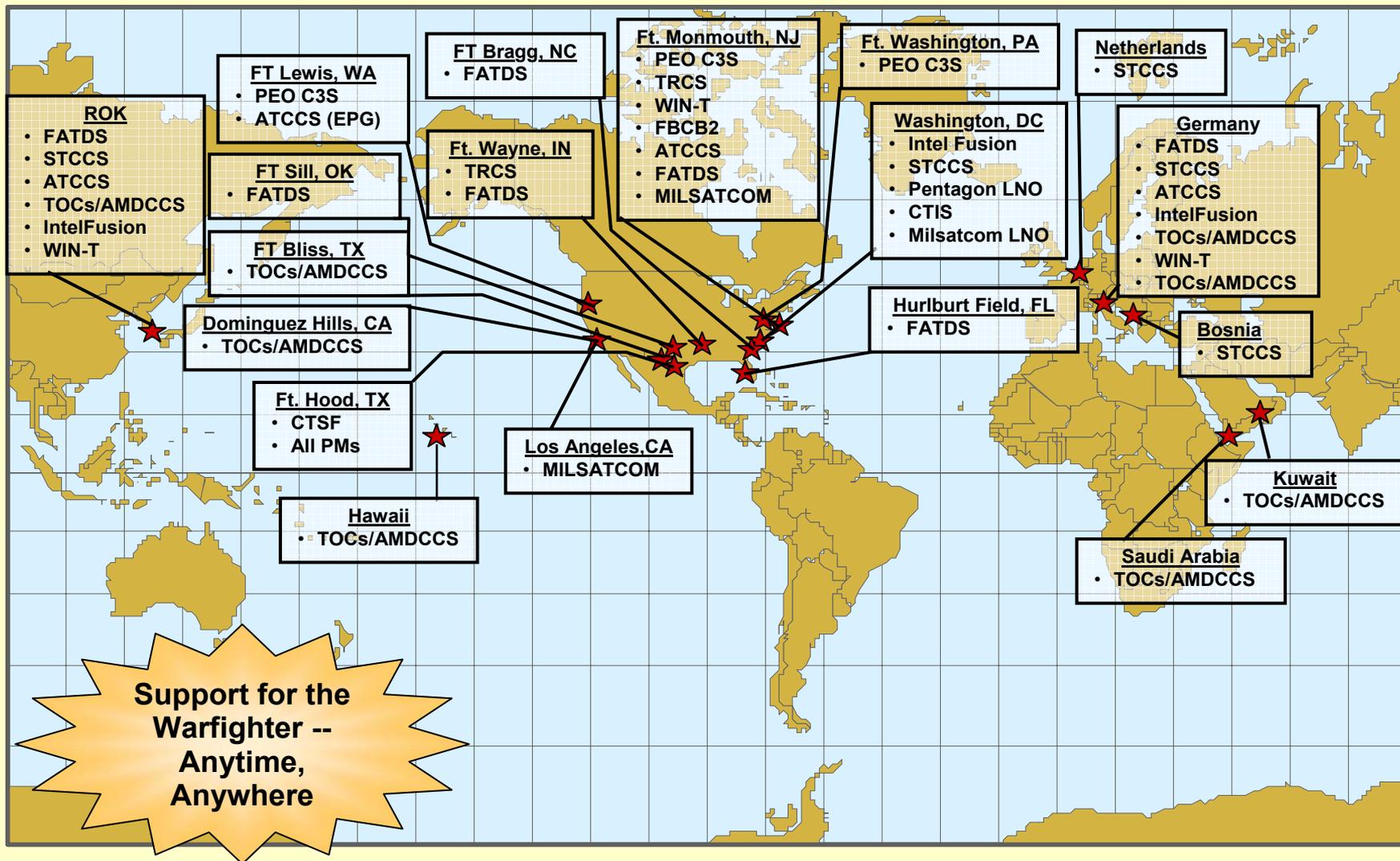
“What We Do - Communications Systems”



**Connecting them all together
in a single cohesive network**



PEO C3S World-Wide Locations





Why The Army Needs Knowledge Management



Yesterday:

- Containment Strategy
- Forward-Based Forces
- Global, Nuclear War Focus
- Monolithic Soviet/WP Threat
- Deter and Defend

1950 -1989 :
10 Major Deployments



Soldiers:
780,000 Active
467,000 ARNG
594,000 USAR



Civilians:
265,000

Today & Tomorrow:

- Engagement
- CONUS & Overseas-Based
- Power Projection
- Regional Conflict Focus
- Major Regional Competitor Only
- Peacetime Engagement
- Preventive Defense

Economic Dangers *Transnational Dangers*



1990 -1999 :
27 Major Deployments

**Decreasing Force,
Increasing Missions**



Soldiers:
480,000 Active
367,000 ARNG
432,000 USAR



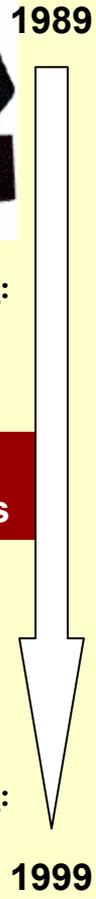
Civilians:
170,000

Need KM To: Get It Right

- Allow the Army's Enterprise Information to be accessed more quickly and easily for less cost

Get Ahead

- Use information technology to leverage Army-wide innovation in services, processes, and knowledge creation



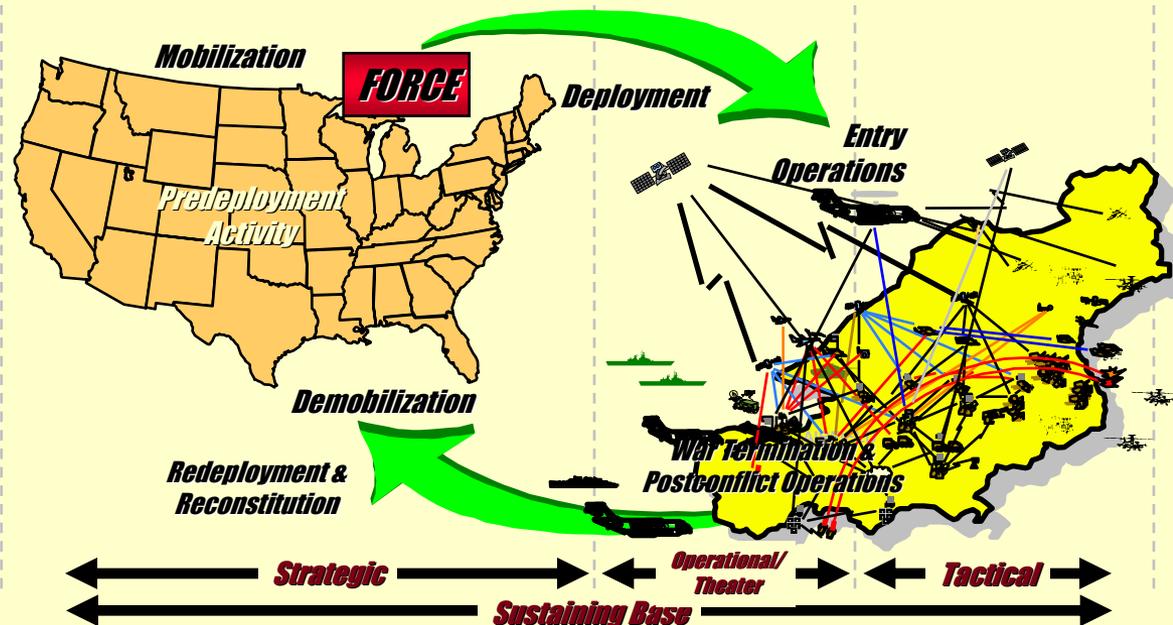


Digitizing The Institutional Army

HYPOTHESIS:

IF the Corps/Div. Rear Boundary is the Sustaining Base (TRADOC 525-5) and we are digitizing the Battlefield

Then.....



- We Must **Digitize** the Institutional Army!
- We Must **Enable** new ways of making technology work for our soldiers and civilians.



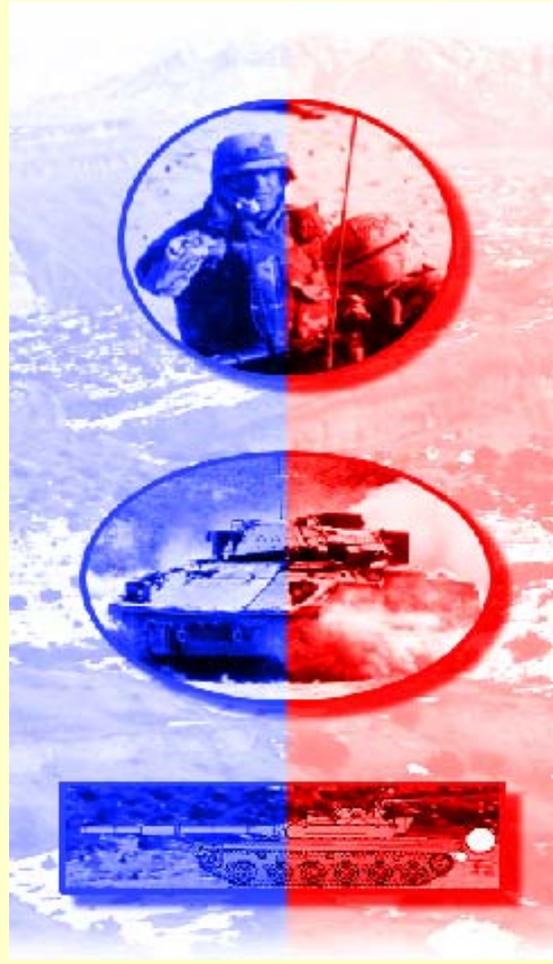
Digitizing the Army: *Information Dominance*

What a Warfighter On the Battlefield Must Know:

Where am I?

Where are my friends?

Where is the enemy?



What a Headquarters Staff Must Know:

What is the requirement?
What is the priority?
What is its status?

Who are the proponents?
Who are the stakeholders?
Who controls the
processes?

What are the laws,
regulations,
and policies?

What are the time and
resource constraints?

On the Battlefield

In the Institutional Army



Army Knowledge Online

Covering The Range Of Knowledge
from Secret to Public Information

• AKO On The SIPRNET

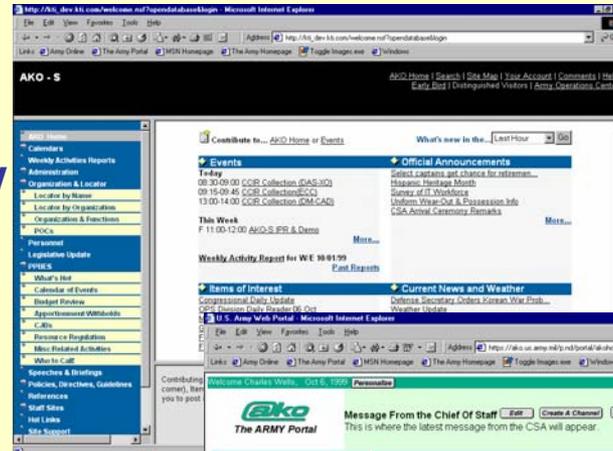
- Highly Restricted Access
- Content is Secret and Below
- In Development for VCSA

• AKO On The NIPRNET

- Restricted Access
- The Army's Private Website
- Content is Sensitive (but Unclassified)
- Portal to other Army Private Sites

• The Army Homepage

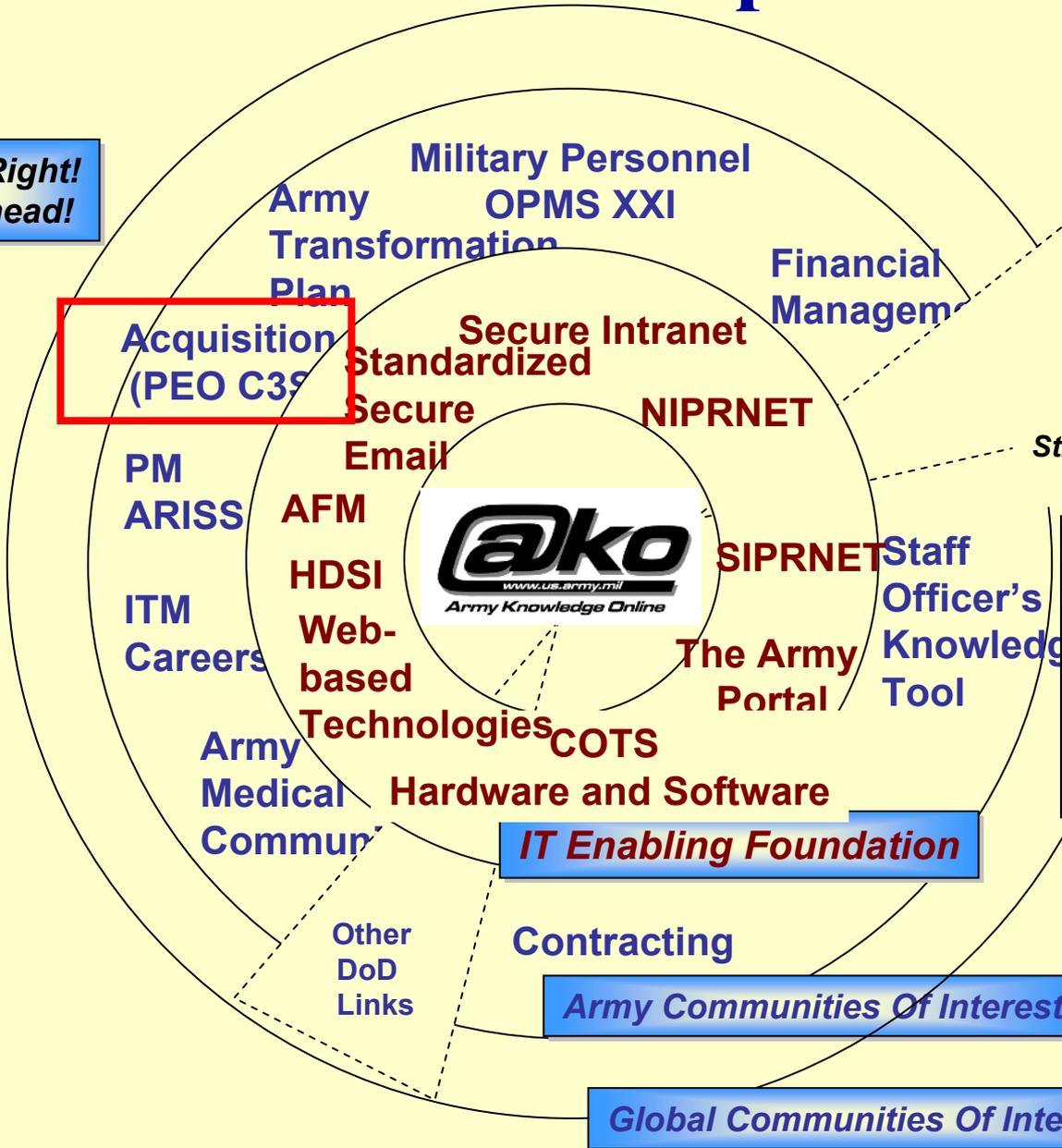
- Unrestricted Access
- The Army's Public Website
- Content updated daily by Army Public Affairs Office





AKO Components

**Get It Right!
Get Ahead!**



Strategic and Advanced Computing Center

- “Trail Boss” for AKO**
- Project management and technical integration
 - Leverage commercial IT initiatives to enhance the Army’s infrastructure
 - Catalyst for AKO

PEO C3S



Army's C3S Knowledge Center

The screenshot shows a web browser window displaying the Army's C3S Knowledge Center. The browser's address bar shows the URL: https://peoc3s.monmouth.army.mil/homepeoc3s.nsf/Home?OpenFrameSet&Frame=Frame2&Src=/_852565d200. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The browser's address bar also shows the address and links. The website's header includes the date Monday, December 6, 1999, and a welcome message for Emerson L. Keslar. The header also features a navigation menu with links for Your Profile, Change Password, Your Feedback, Subject Matter Experts, and HELP (1-877-PEOC3S7). The main content area features a featured picture of SGT Nikole McBride and LTC Peter Janker, with a caption describing their recent ceremony. The main content area also features a section for Messages to the Community, a section for Top Stories, and a section for Project Updates. The left sidebar contains a navigation menu with links for Return to Home Page, PEO C3S Public Page, Search Knowledge Center, Your User Profile, Real-Time Capabilities, Your Team Workspace, and CHANNELS. The taskbar at the bottom shows the Start button, Quick launch icons, and the current time 2:13 PM.

- Brings Geographical Dispersed Offices Together
- Secure
- Front Page Portal
- Integrates Many Sources of Data and Business Processes
- > 6000 Users; 1/2 million monthly hits
- 600+ Databases & Applications
- Utilizes Knowledge Management Principles & Techniques



Institutional Awareness

⇒ Who's On-Line?
(Instant Message/Chat)

⇒ Where is the Meeting?

⇒ Share a White Board or PC to Others On-Line

⇒ Collaborate on a Doc Throughout the World

⇒ What is Happening Real Time in the Community

The screenshot shows a Sametime Connect window on the left with a list of users in the 'PEOC3S Community Notes Users' list. The users listed include:

- Arthur S Santo-Donato/FATDS/...
- Carol Locklin/MILSATCOM/PEO...
- Charles Smith/REO/PEOC3S
- Charles W Howard/ATCCS/PEO...
- Chase E Gregory/ADCCS/PEOC...
- Claude Jones/FIO/PEOC3S
- Colleen M Moore/TRCS/PEOC3S
- CPT John W Brandenburg/TRCS...
- CPT Joseph Dupont/PEOC3S
- Craig R Steele/ATCCS/PEOC3S
- David Brackmann/OPS/PEOC3S
- David Jimenez/MILSATCOM/PE...
- Deborah A Clevenger/PEOC3S
- Deborah R Smith/ATCCS/PEOC...
- Denise C Murphy/TRCS/PEOC3S
- Dr George W Watts/PEOC3S
- Dr. David B Usechak/ATCCS/PH...
- Duane Christensen/FIO/PEOC3S
- Emerson L Keslar/OPS/PEOC3S
- Erskine Kelley/REO/PEOC3S
- Francisco Cubelo/REO/PEOC3S
- George Gary/ATCCS/PEOC3S
- George Velez/ATCCS/PEOC3S
- Irving Zimmerman/ATCCS/PEOC...
- James R Snodgrass/OPS/PEOC...
- Jeffrey L Weiss/FATDS/PEOC3S
- Jeffrey M Forgach/TRCS/PEOC...

The right window shows the 'PEO C3S KNOWLEDGE CENTER MEETINGS & EVENTS' page. It features navigation buttons for 'All by Date', 'All by Action Office', 'Calendar View', 'This Week', 'Next Week', and 'Beyond'. A table displays meeting information for the week of 12/05/99 - 12/11/99:

Title	Action Office
1999 Ft. Monmouth Holiday Ball	Operations Office
JTRS T&E IPT	JTRS
FIO Meeting and Event Schedule	Force Integration Office
GCCS-A Support Joint Battle Center (JBC)	Army Tactical Command & Control Systems (ATCCS)
GCCS-A Support III Corps Road Runner 99 Exercise	Army Tactical Command & Control Systems (ATCCS)

A tooltip for Denise C Murphy/TRCS/PEOC3S indicates she is away or not using the computer now.



Information Exchange

- ⇒ What is the Policy?
- ⇒ Where is a Copy of the Briefing/Agenda?
- ⇒ What is the Requirement?
- ⇒ How Do I Reach My POC?
- ⇒ Where is the Draft Comments to the Document?

PEO C3S KNOWLEDGE CENTER
B R I E F I N G A R C H I V E

By Action Officer By Briefer By Date By Milestone
By Organization By Title Milestones

Previous New Document Expand All Collapse All Search Next

ARCHIVED BRIEFS BY DATE

Date Presented	Title	Briefer(s)	Provided To	View Chart
▼ 12/03/99	Foreign Overview Brief	na	na	144_c3s.ppt
	Standard Overview Brief	na	na	127_c3s.ppt
▼ 11/08/99				

PEO C3S KNOWLEDGE CENTER
D O C U M E N T L I B R A R Y

Sort by Category Sort by Date Sort by Source Sort by Title

The Document Library database contains PEO C3S documents on various subjects (e.g., business issues, logistics, technical issues, administrative issues). All users may contribute documents to the library.

Previous New Document Search Next

DOCUMENTS BY DATE

Date	Title	Category	View File Attachment
12/07/99	FBCB2 TEMP V 7.3.2.2 (Response to)	REO	Tempfbc2.doc
12/06/99	ABCS External Interoperability Chart	Interoperability	ABCS Interop Slide2.ppt
12/06/99	MCS Supportability Strategy (Response to)	REO	SptS MCS 11-99.doc
12/03/99	AMDWS MR Strategy (Response to)	REO	AMDWS 1203.doc
12/02/99	Actions Tracking Database Summary Document	First Digitized Division	FDDAction.xls
12/01/99	Weekly FIO Newsletter 11/26/99	FIO	FIO News (11-26-99).doc
12/01/99	Weekly FIO Newsletter (11-19-99)	FIO	FIO News (11-19).doc
11/30/99	Fort Drum Long Range Planning Calendar (Response to)	REO	LRPC.xls
11/30/99	CAWE Assumption Briefing	CAWE	CAWE.ppt
11/29/99	FBCB2 TEMP V 7.3.2.2 (Response to)	REO	Tempfbc2.doc



Team Tool Box

- ⇒ Who Has the Action Item?
- ⇒ What is the Latest Schedule?
- ⇒ How Can My Team Communicate via the Web?
- ⇒ How Can I conduct a Virtual Meeting?
- ⇒ What is Happening Now in the Community?

The screenshot shows the PEOC 3S Knowledge Center website. The top banner reads "KNOWLEDGE CENTER Your Team's Web Space". Below this, there is a text box stating: "The Knowledge Center Now Has Available a Series of Different Tools and Applications which provide Integrated Product Teams (IPTs) the ability to Operate and Maintain their Own Web Space. To bring these tools and applications to your team simply call the Support Center at 1-877-PEOC3S7 and ask for a demo of the capabilities that are available to your team today."

Below the text box, there are several tool descriptions:

- C3S Team Room** – Allows teams to manage and operate their own team room to include library, calendar and discussion groups. The team project leader controls and manages access to their team room.
- Action Item Tracking System (AITS)** – Allows a team to manage and track open/closed actions by priority, date and person assigned. Currently used by many teams throughout the community.
- ASSIST** – This is an automated source selection tool that allows Source Selections Evaluation Boards (SSEBs) to be conducted in a virtual environment. This allows SSEBs to overcome geographical issues and evaluation rollup boards.
- CDRL Tracking** : contract data req approval process

On the right side, there is a "Teams:" section with a list of links:

- [Aladdin Private Library](#)
- [ASAS WarFighting Channel](#)
- [IT IPT](#)
- [Joint Tactical Radio System \(JTRS\)](#)

The bottom part of the screenshot shows a table titled "PEO C3S KNOWLEDGE CENTER FDD ACTION TRACKING OPEN ACTION ITEMS BY DUE DATE". The table has columns for Due Date, Assigned To, Action #, Priority, and Description.

Due Date	Assigned To	Action #	Priority	Description
05/06/99	FDD - FBCB2	41	Medium	JVMF Messaging
05/13/99	FDD - DMS	44	Medium	DMS Boot-up process
05/13/99	FDD - DMS	45	Medium	DMS Resource Requirements
05/13/99	FDD - DMS	48	Medium	Replication minimization
05/13/99	FDD - DMS	49	Medium	Bandwidth conservation
05/13/99	FDD - Comms-CMP,FDD - DMS	50	Medium	Launching CMP from within DMS
05/13/99	FDD - DMS	51	Medium	DMS security
05/13/99	FDD - Comms-CMP,FDD - DMS	53	Medium	Precedence Levels
05/13/99	FDD - DMS	55	Medium	DMS integration
05/13/99	FDD - Sun Forum	58	Medium	No Audio/Video Support
05/13/99	FDD - Sun Forum	62	Medium	Sun Video Plus Card
05/13/99	FDD - Sun Forum	63	Medium	SunForum incompatibility with ShowMe 2.0.1



Knowledge Management

- ⇒ Who Are the Subject Matter Experts?
- ⇒ What are the Success Stories and Lesson Learned?
- ⇒ What Information Do I need for My Functional Area?
- ⇒ What Knowledge Exists? Where? and How Do I Get Access To It?
- ⇒ How Do I Institutionalize Learning Among Teams/Individuals?

PEO C3S KNOWLEDGE CENTER
PEO C3S COMMUNITY DATABASE

View Profiles by:

Name	Office Symbol	Organization
Subj Matter Expert		
Work Code		

Previous ← New Document Expand All + Collapse All - Search Next →

ALL PROFILES BY EXPERT
Community Database Home

Last Name	First Name	Specific Expertise	Commercial Phone #	E-Mail Address
WILDER	JOHN		732-427-2259	wilder@c3smail.monmouth.army.mil
ISHIMASA	SHARON	Milestone Decision Reviews, Consolidated Acquisition Reporting (CARs), ACATI	732-427-2063	ishimasa@mail1.monmouth.army.mil

Create Success Story/Lesson Learned

Sort by Topic

PEO C3S Knowledge Center
Success Stories/Lessons Learned by Date

This application is intended to allow PEO/PM community members to post and subsequently receive comments and discussion on their success stories and lessons learned on any subject matter.

← Previous Next → + Expand - Collapse 🔍 Search

Date	Story Topic	View File Attachment
04/28/99	Source Selection Evaluation Boards Lesson Learned	ssebill.doc
02/01/99	Rapid Response to Critical Systems Requirements Protest No. 281114: Lessons Learned	lessons_learned.doc
11/05/98	Teleconferencing Saves SOS IPT Time & Money	tele.htm
10/21/98	SMART-T: 1st to Do a Web Based ASARC Process	

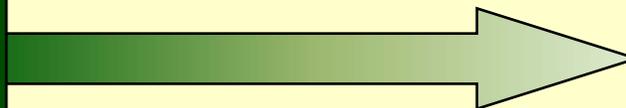
← Previous Next → + Expand - Collapse 🔍 Search



Suite of Applications (Examples)

Subject Matter Experts	Document Library	Reference Info
Community Database	Calendars	Budget
White Boarding	Human Resources Info	What's New
Chat	Policies	Training
Instant Messaging	Ask The Expert	Product Info
Shared Applications	Action Items / Suspense	Milestone / IPR
Virtual Meetings	FAQ	ACQ Req Package
Discussion Groups	Teleconferencing Center	News
Success stories	Road Warrior	Security Alerts
Lesson Learned	POC Directories	Executive Reports
Meeting / Events	Organization Info	Schedules
Briefings Archives	Team Rooms	Purchasing

**Real Time Info and
Collaborative Tools**



**Right Info
Right Time
Right Decision**



PROTECT
OPERATE
SECURE



Eagle Base, Tuzla Bosnia, from the 10th MTN Div G-6 OPS using web based connectivity to research the BDI effort on the PEO Knowledge Center



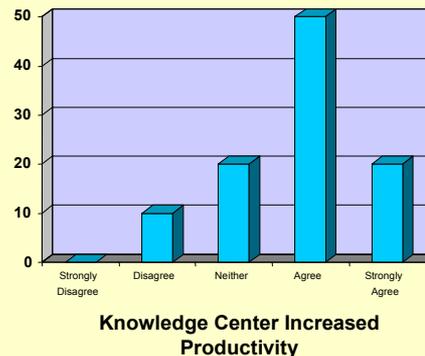
Congressman Franks visits MG Nabors & BG Boutelle At a Demo of Digitization and Knowledge Center Activities



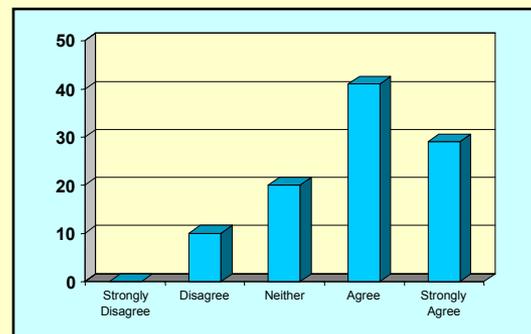
Captain Dupont and Bob Lehnes Provide Digitization Demo to Governor Whitman



Increased Productivity



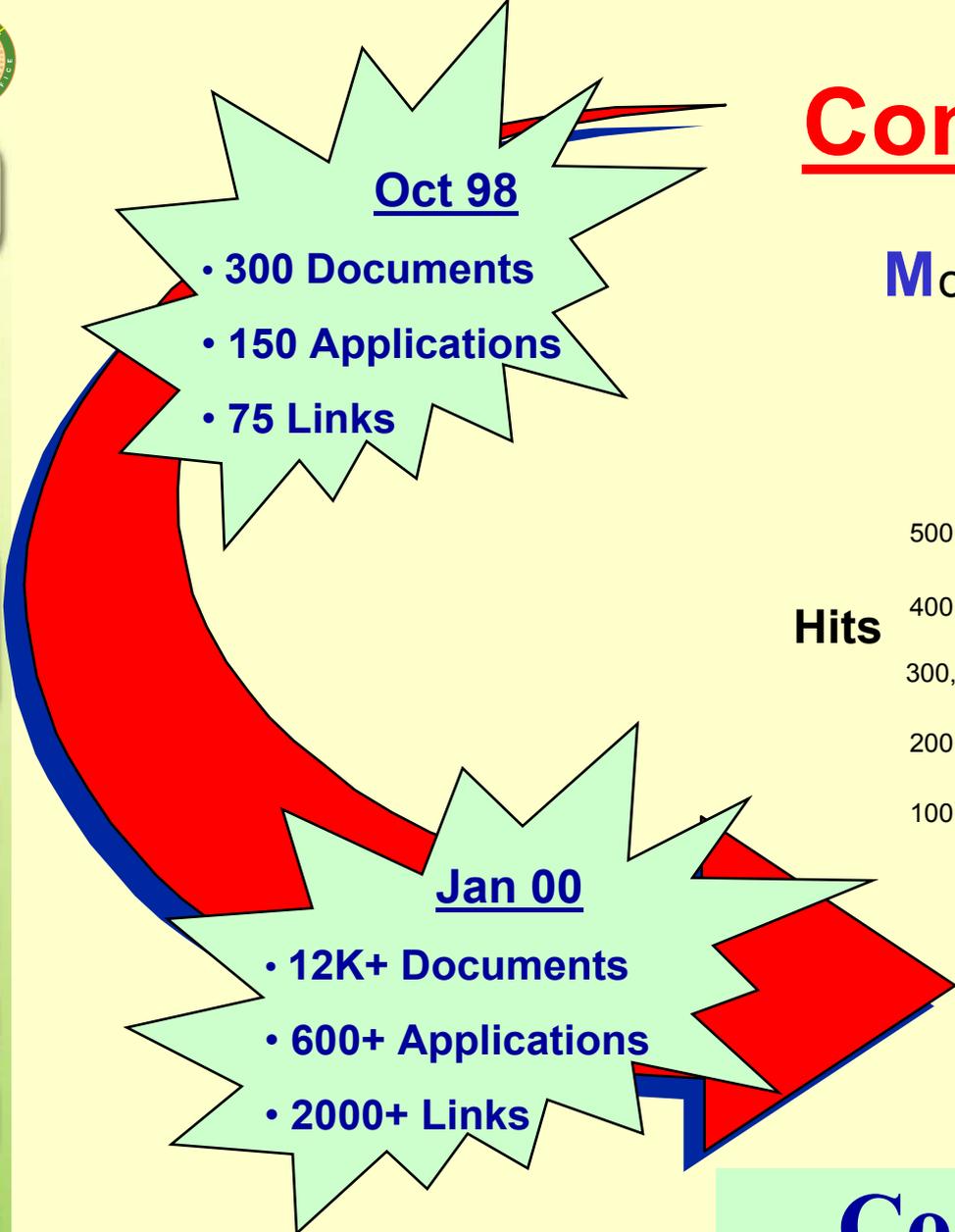
Increased Sense of Community



Increases Sense of Community

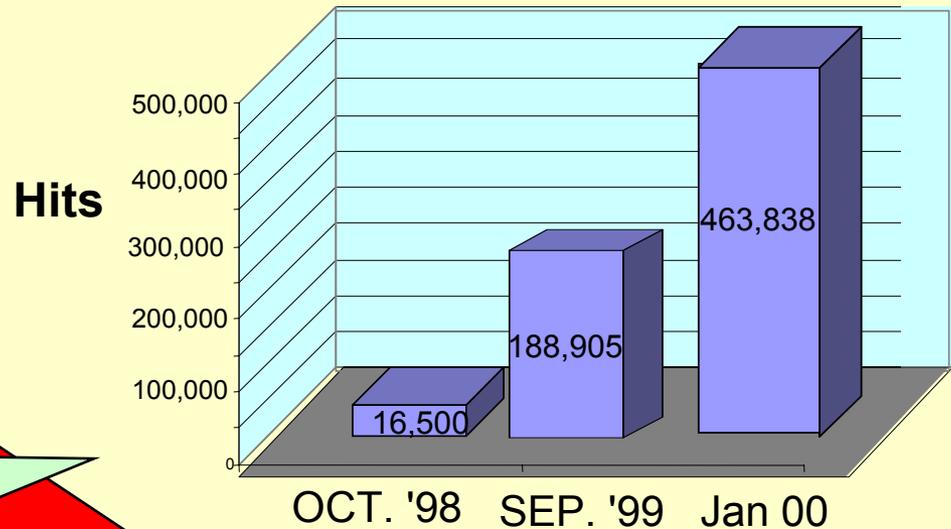
ROI

Investment ~\$ 2.5M Return ~\$ 23.5M (1060%)



Content to Usage

Monthly Usage Has Increased by **15%**
Each Month since October '98



Today > 600K/Month

Community Usage



Our Approach

- **Executive Champion/Buy-In from Key Management**
- **Recognizing Impact It Would Have to the Organization**
- **Proper Project Team's Authority**
- **Changing the Culture & Developing Creative/Innovative Mechanisms to Make that Happen**
- **Emphasis on Knowledge Management and Business Process Re-Engineering and Not Primary on Technology**
- **Wouldn't Happen Overnight**
- **Good Implementation Strategy & Planning Documents**
- **Adequate Resources and Funding**



Model - Knowledge Areas Across Our Key Business Processes

KNOWLEDGE AREAS

Auditing

Acquisition Logistics

Business Cost Estimating and Financial MGMT

Communications-Computer Systems

Contracting

Industrial Contract Property MGMT

MFG, Production and Quality Assurance

Program MGMT

System Planning Research, Development and Engineering

Test and Evaluation

E-Business

“ACQ
Community
to
Industry”

E-Battle

“ACQ
Community
to
War Fighters”

E-System Acquisition

“ACQ
Community
to
Itself”

E-Career

“ACQ
Community
to
Individuals”

Knowledge Management
Across The Community Domain

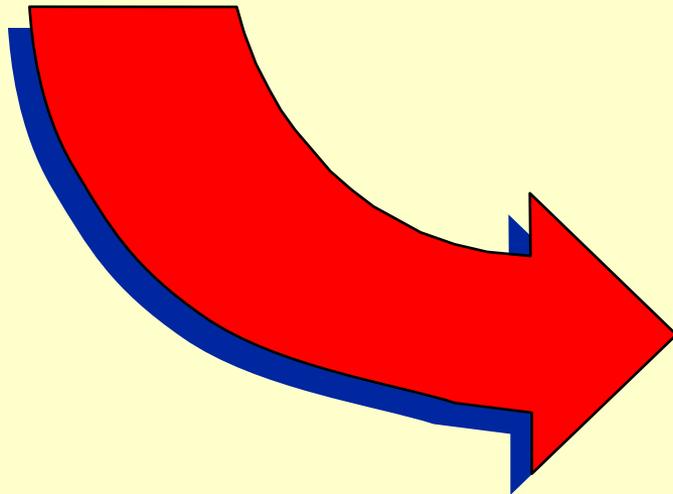


How The Evolution Occurred

Variables

- Technology
- Business Process Re Engineering
- Awareness
- Education
- Support Structure

Static Info Web and Email Culture



**Dynamic / Operational
Web-Based Applications**

Examples Techniques Utilized

- Close Relationship With Battlefield Digitization Teams
- Up Front Community Involvement
- Support Center
- Suite of Training Approaches (I.E. Lunch Box, Road Shows)
- Steering Committees
- Strong Partnership With Industry Vendors
- Promotion / Marketing
- Incentives / Recognition (Individual / Organizational)
- Total Executive Level Commitment and Involvement
- Broadcast / Information Manager
- Redundant Sites
- 24x7 Support and Operations
- High End Security Infrastructure



Lesson Learned

- **Sites Functional Vs Organizationally Driven**
- **Cohesion Necessary Among Army Successful Web Applications**
 - Cross Platform Navigation/Search
 - Common Look and Feel
 - Consolidation of Address Books (Password / ID's)
- **Secure Email Has to Be Integrated Into Web Application**
- **Incentives/Motivation for Culture/Community to Participate in Knowledge Mgmt**
- **The Community has to be the Provider and have Responsibility for the Content**