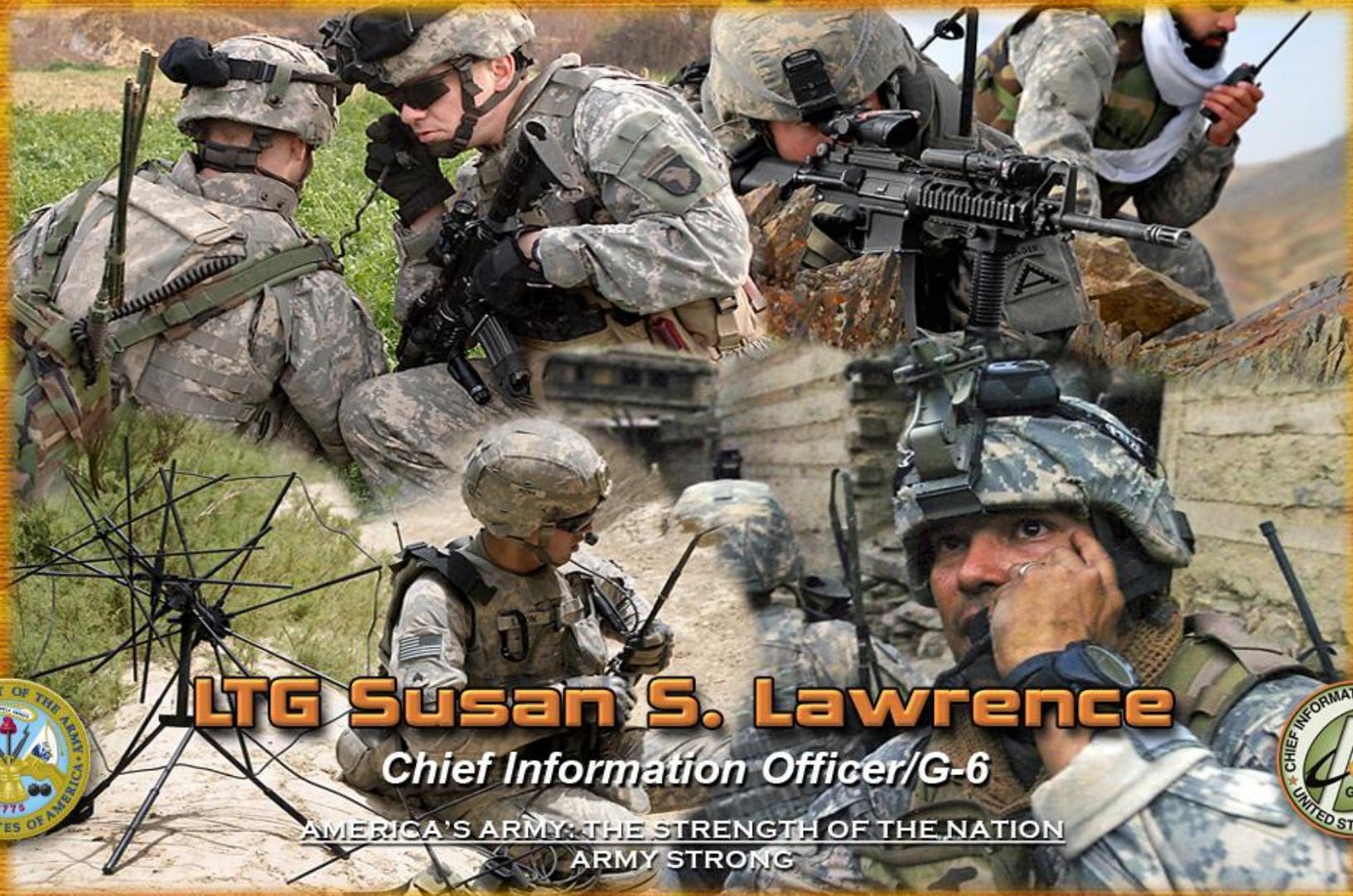


MILCOM 2011

LandWarNet: Powering America's Army



LTG Susan S. Lawrence

Chief Information Officer/G-6

AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG





Overview

- ★ Our World is Changing...
 - So is the Defense Environment...
 - And So Must We
- ★ Powering America's Army Through LandWarNet
- ★ The Network Must Bring to Bear All Functions
- ★ The Need for Change – Addressing the Gap
- ★ The Operational View
- ★ Game Changers
 - Warfighting Effect
 - Common Operating Environment (COE)
 - Network Integration Evaluations (NIEs)
- ★ America's Army – Our Intent
- ★ Our Challenges
- ★ Thank You



Our World is Changing...

Speed, Scale, Flexibility, Replication

Economic Recovery...

GDP Growth

Global Competition

Businesses Networked IT
as Differentiator

Natural Disasters

Safety &
Security

Innovation

New Threats...
Evolving Everyday

Public Sector Spending

Technology & Business
Architecture

Productivity

Emerging
Markets

Social Networking

Broadband

Information Age

Networked Age

Cutting-Edge Technology, in Particular Cyber-Related Resources, will Continue to Become Cheaper and More Widespread, Even to Those with Minimal Financial Means



...So is the Defense Environment

Collaboration is Not Optional

- Joint Operations: Army, Navy, Air Force, Marines
- Coalition Operations: Global War On Terrorism, Peace Keeping Operations, Humanitarian Relief

Enterprise to the Edge... "From the Cloud to the Warfighter"

- Across the Department of Defense
- Operationally Effective and Efficient

Across Boundaries: Ground, Sea, Air, Space, Cyber

- Horizontal and Vertical Integration

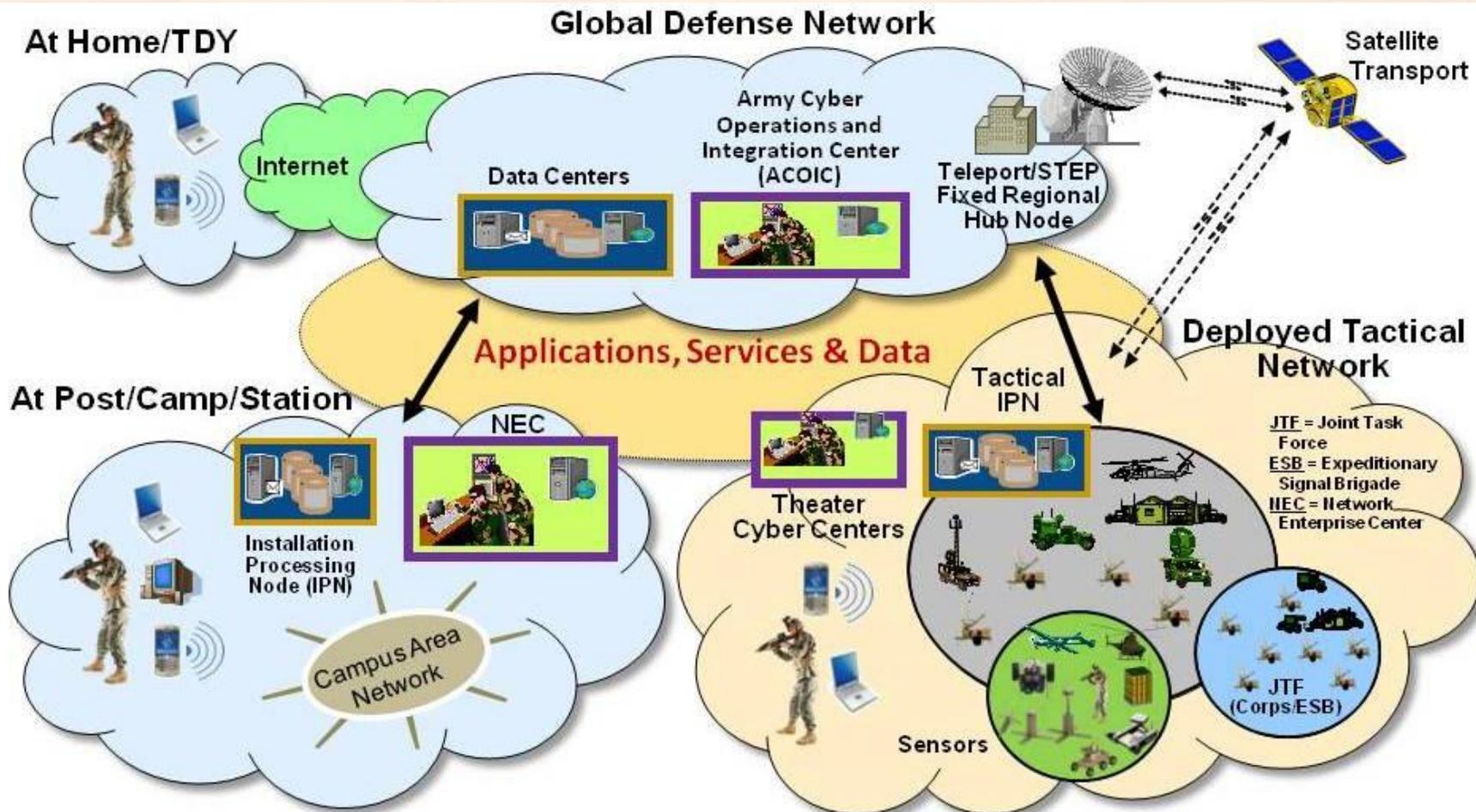
Agility, Flexibility, Resiliency, and Security

- Response Time Will Continue to Shrink
- Have to Hit the Ground Running



LandWarNet

"Powering America's Army"



The Network Must be **Capable, Reliable and Trusted** and to Get There it has to be a **Single, Secure, Standards-Based Environment** that **Ensures Access at the Point of Need** and **Enables Global Collaboration**



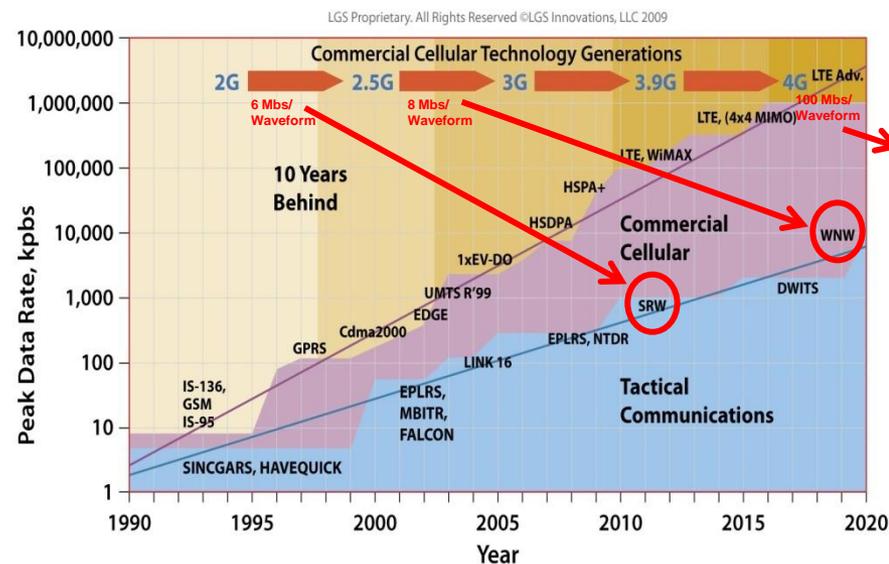
Addressing the Gaps

★ Current State of Army's Network(s): Multiple, Inconsistent, Complex, and Disparate

- Compounded by Fragmented Network Requirements and Funding Approach
- Newly Established Technical Standards, Early in Implementation (COE and EoIP)

★ Commercial Technology is Rapidly Evolving and is Leveraged by our Enemies

- Army Investments Cannot Keep Pace with Industry Growth or Spending
 - Industry to Spend \$3T over Next Decade
 - Army and DoD Budget Expected to Decrease
- Current Acquisition Processes Excessively Long – Stagnating Army's Ability to Modernize
 - Testing & Certification can take 18 Months
 - Poor Track Record for Sustainment & Life-Cycle Management



Unity of Effort ★ Reduce Complexity ★ Establish a Single Network Architecture



The Operational View

Computing Environment

Cloud

Market Place



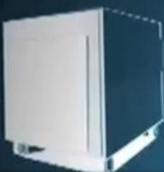
- Services & Applications Built on Standards
- Hosted in a Market Place
- Capability Available to all via the COE

National



- XXX Corps
- XX Div
- X Bde
- II Bn

Scalable



Back End

Network

Communication



SPACE

AERIAL



TERRESTRIAL

Transport

Sensors & Platforms

Connected via the Network, Extending the Network to the Warfighter at the Edge

End Users

Connected via the Network - Vehicle Acts as a Common Access Point for Warfighters

- Co
- ...
- Plt
- Sqd

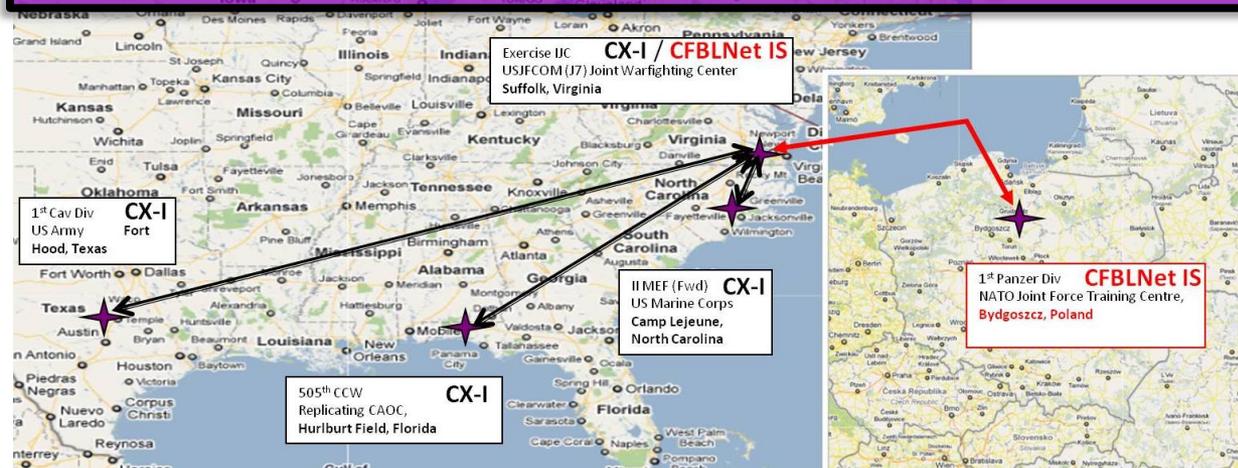


Front End



“The Effect” – Afghanistan Mission Network

Training Real-Time How We Will Fight



“This is the best game changer preparing us for deployment.”

-- MG James L. Huggins, Jr.
Commanding General
82d Airborne Division

- ★ Key Element of AMN Concept – Connected at Home Station
- ★ Leveraged to Enhance and Improve Pre-Deployment Training
- ★ CENTRIXS-ISAF (CX-I)...The US Component of AMN - Over 40 Sites in CONUS

“America’s Army – The Nation’s Force for Decisive Action – Ready Today, Prepared for Tomorrow”



Common Operating Environment...

"The Big Game Changer"



Stringent Technical Standards for both Network Infrastructure and Applications



- ★ Reduces Redundant Fieldings Across Programs (e.g., MTS and FBCB2 Both Fielding GPS Systems When one Suffices)
- ★ Reduces Integration Complexity (e.g., MRAP and Stryker Vehicles – Today each Application has its Own Hardware – Need One Computing Environment For Vehicles that All Applications Can Operate on)
- ★ Aligns PEOs to Provide Products Across Programs (i.e., PEO Soldier Provides Mobile/ Handheld Devices to all PEOs/PMs)

- ★ Directs Integration of Multiple Applications/ Mission Command Systems on Single Hardware Platforms
- ★ Changes the Way we Field Applications (Apps Store, Faster, Cheaper, Pulled – not Pushed)
- ★ Leverages More COTs and Emerging Technologies by Using Control Point Testing vice Complete Systems Test (Key to Network Integration Evaluations)





Network Integration Evaluations (NIEs)



"We must have an affordable modernization strategy that is integrated and synchronized between our Soldier programs, our networks, combat vehicles, tactical wheeled vehicles, aviation, and missile defense capabilities."

Gen. Raymond T. Odierno, Chief of Staff of the Army, Eisenhower Luncheon (Oct 11, 2011)



Network Modernization



A SIPRNet/NIPRNet Access Point (SNAP) terminal is shown in the mountains of White Sands Missile Range. SNAP terminals, fielded by Project Manager Warfighter Information Network-Tactical (PM WIN-T), are designed to provide beyond line-of-sight communications to small units at forward operating bases (FOBs), providing network capability down to the team, platoon and company level.

- ★ Incremental Modernization Through Capability Sets
- ★ Establishing an Integrated Network Capabilities Baseline

- ★ Semi-Annual NIEs Conducted by the Brigade Modernization Command
- ★ Providing Testing & Operational Feedback to Inform Investment Decisions
- ★ Facilitating a New Agile IT Acquisition Process





America's Army – Our Intent

★ Remain the Most Decisive Land Force in the World

- Network Environment is Critical to “Develop a Versatile Mix of Capabilities, Formation, and Equipment for the Future”
- We Must do Better at Leveraging Available Technologies to Give our Soldiers the Advantage...Said Another Way, We Cannot let Technology Disadvantage our Soldiers

★ Sustain the High Quality All-Volunteer Army

- Our Soldiers have Better Technologies in their Daily Personal Lives Than Currently Afforded in the Fight...They Expect More
- We Owe Them the Technical and Operational Advantage

★ Provide Depth and Versatility to the Joint Force

- Building Joint/Coalition in Up Front with Common Operating Environment Architecture and Computing Environments
- Improved Collaboration and the Ability to “Fight Upon Arrival”

★ Ensure Effective Employment of the Force

- We Won't Need as Many Boots on the Ground with the Future Network
- Signal Force Redesign for Full Spectrum Network Support to Company and Below (to include Wide Area Security) Home and Abroad

★ Provide Flexibility for National Security Decision Makers

- Enterprise Services Provide Global Collaboration
- Data Accessible From Anywhere – at the Point of Need



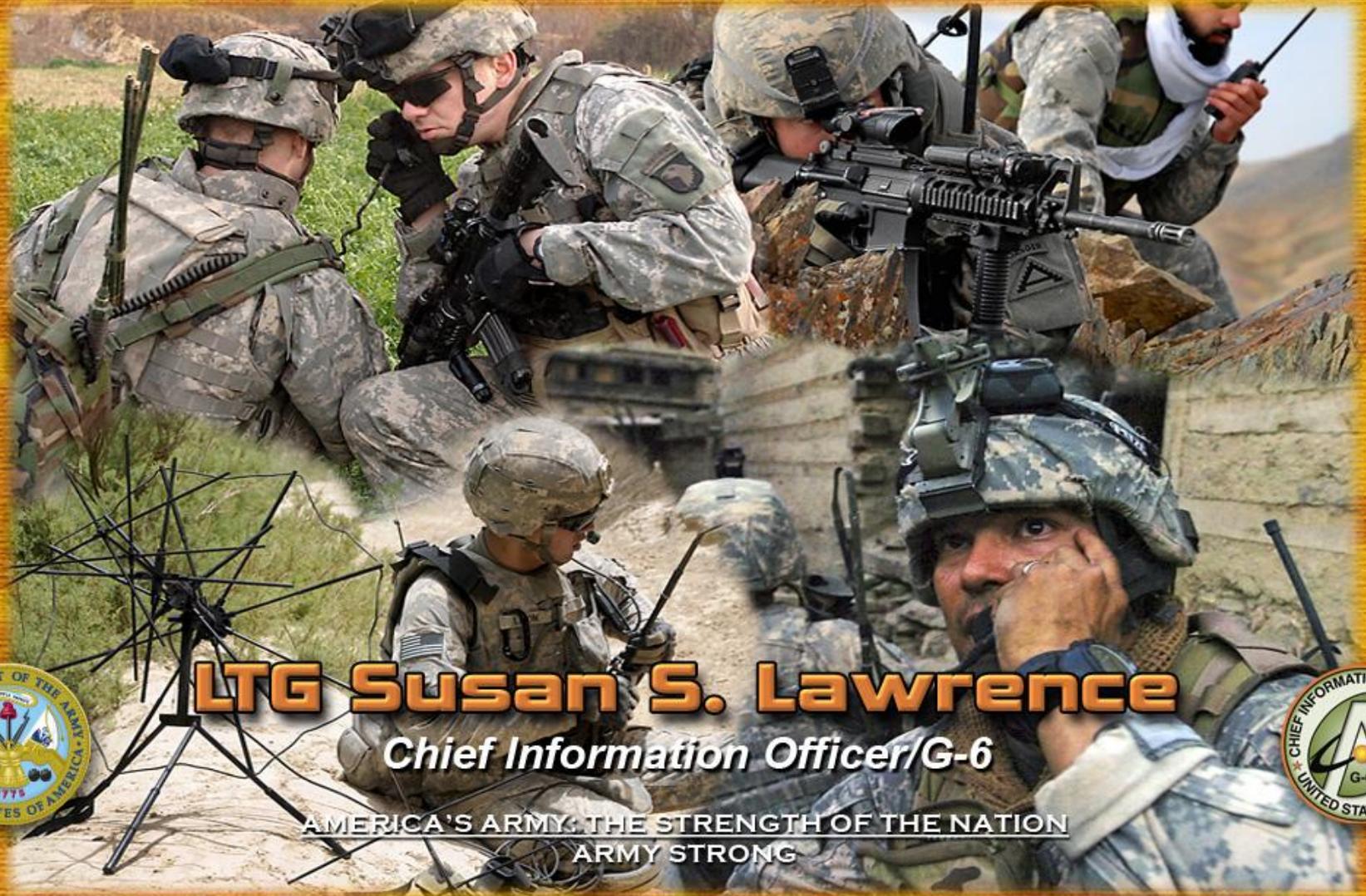


Thank you!

Your Commitment Ensures our
Army Remains the Best Networked
Land Force in the World



QUESTIONS + THOUGHTS



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