

**2004 Command & Control Research & Technology Symposium**

**The Power of Information Age Concepts & Technologies**

**Command & Control (C2)  
in the  
Collaborative Information  
Environment (CIE)**

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# Introduction

- **Information Age Concepts & Technologies**
- **Better & More Timely Decisions & Actions**
- **Joint Forces Command Experimentation**
- **CIE Components & Organization**
- **Common Purpose: Collect & Share Data**
- **Collaborative Sharing=Decision Superiority**

# Agenda

- **Collaboration and Experimentation**
- **The Quest for Information**
- **Collaboration Possibilities & Constraints**
- **Testing the Technology & Participants**
- **The Challenges & The Potential**
- **Information Age Leader Competencies**

# **Collaboration & Experimentation**

- **Distributed & Collaborative Environment**
- **Standing Joint Force Headquarters**
- **Cross-Functional Staff Organization**
- **Operations: Information/Knowledge Based**
- **Virtual Information Enterprise Warehouse**
- **Technology & Computer Based Concept**

# The Quest for Information

- **Right Questions for Right Answers**
- **Virtually Any Question Answered**
- **Joint Interagency Coordination Group**
- **Developing the Network Challenges**
- **Centers of Excellence (COE)**
- **Subject Matter Experts (SME)**

# Possibilities & Constraints

- **Infinite Possibilities & Current Constraints**
- **Time Sensitive Information Needs Vary**
- **Incomplete, Inaccurate, Misinterpreted Data**
- **The Role of Uncertainty & Risks**
- **The Proverbial “Paralysis by Analysis”**
- **A Time to Analyze—and to Act**

# Testing the Technology

- **Testing the Array of “Tools”**
- **The Value of Training: Initial & Sustained**
- **Traditional & Cultural Leadership Values**
- **Mechanical vs. Intellectual**
- **Complex vs. Simple**
- **Compartmented vs. Integrated**

# **The Challenges & The Potential**

- **The Human Behavior Domain**
- **User Influence on Technology Tools**
- **Employing & Responding to Technology**
- **Ability to Collect, Manage & Distribute**
- **Communicate, Coordinate, Cooperate**
- **Collaborate, Collaborate, Collaborate**



# **Information Age Leader Competencies**

- **Coping with Cultural & Doctrinal Issues**
- **Establishing Trust & Confidence**
- **Exploiting Speed & Decision Making**
- **Ensuring Sharing & Dissemination**
- **Mastering Information Overload**
- **Partnering with Civilian Authorities**

# Summary & Conclusions

- **Technology Aids Decision Making...But**
- **Unless We're Careful...**
- **The CIE Is a Work in Progress**
- **Prepares Today's Leader for Tomorrow**
- **Helps Achieve Decision Superiority**
- **Speed of Action vs. Speed of Decision**