

# Rare Event Gaming

*Connecting the Dots...*



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**9 February 2010**

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# DHS Center of Innovation US Air Force Academy

**Industry**

*Bridging the Innovation Gap*

**Federal  
Government**



# DHS Center of Innovation US Air Force Academy

A large suspension bridge with two tall metal towers and a long deck spans a deep, rocky canyon. The bridge is filled with people walking across it. In the background, there are rolling mountains under a clear blue sky. The bridge's structure is made of white metal lattice, and the deck is supported by thick cables. The canyon walls are reddish-brown and rugged.

**Fulfilling:**

**Title III, Section 313**

DHS Technology Clearinghouse  
for the Federal Government

# CoI Innovation Approach



The Web 2.0/3.0 cadet generation researching and field testing game-changing technologies for War Fighters/First Responders

# Focus of Effort: Edge Operators



- Mission Fabric Network
  - Disruptive *Product* Innovation
- Flexible Distributed Control
  - Disruptive *Process* Innovation



# Functions of Flexible Distributed Control

**SYSTEM THAT ENSURES....**

**THE RIGHT INFORMATION**

**GETS TO THE RIGHT PEOPLE**

**AT THE RIGHT TIME**



# Summer 2009 JCS Exercise: Predicting Future Rare Events



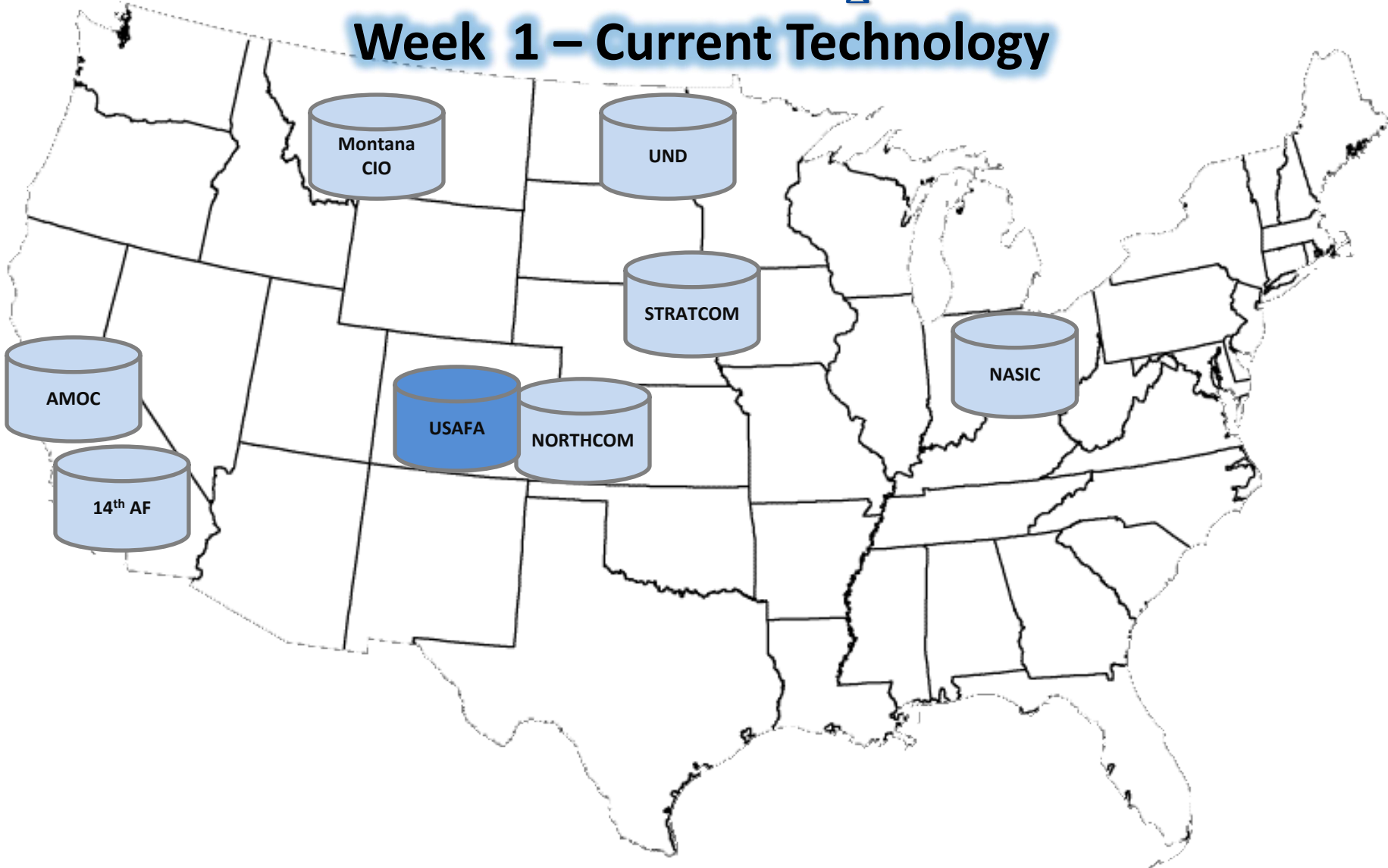
Distributed Collaboration



# FY09 USAFA

## Mission Fabric Experiment

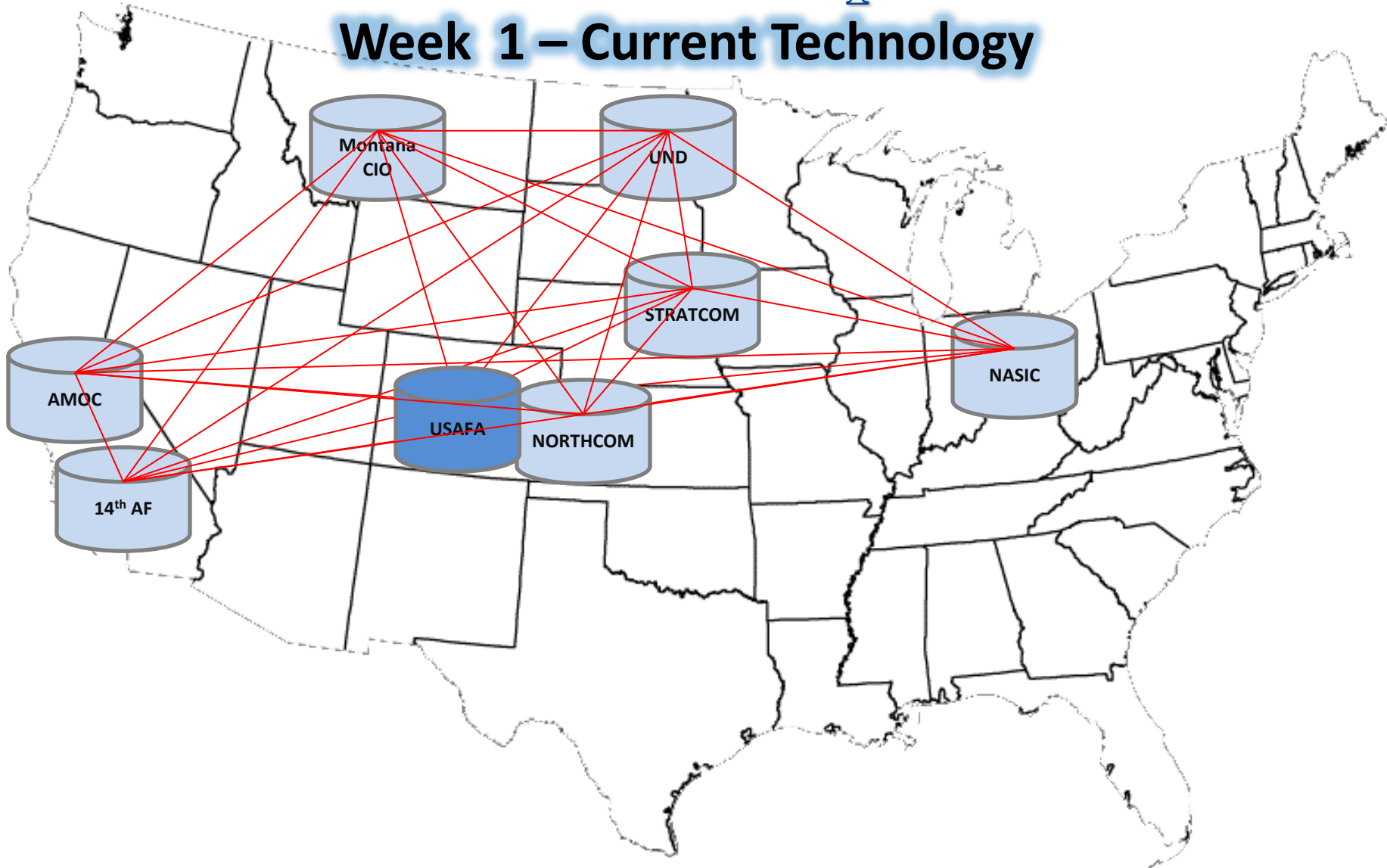
### Week 1 – Current Technology



# FY09 USAFA

## Mission Fabric Experiment

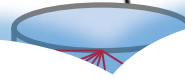
### Week 1 – Current Technology



# FY09 USAFA

## Mission Fabric Experiment

### Week 2 – Prototype Technology



USAFA

STRATCOM

UND

Cross Agency  
Collaboration

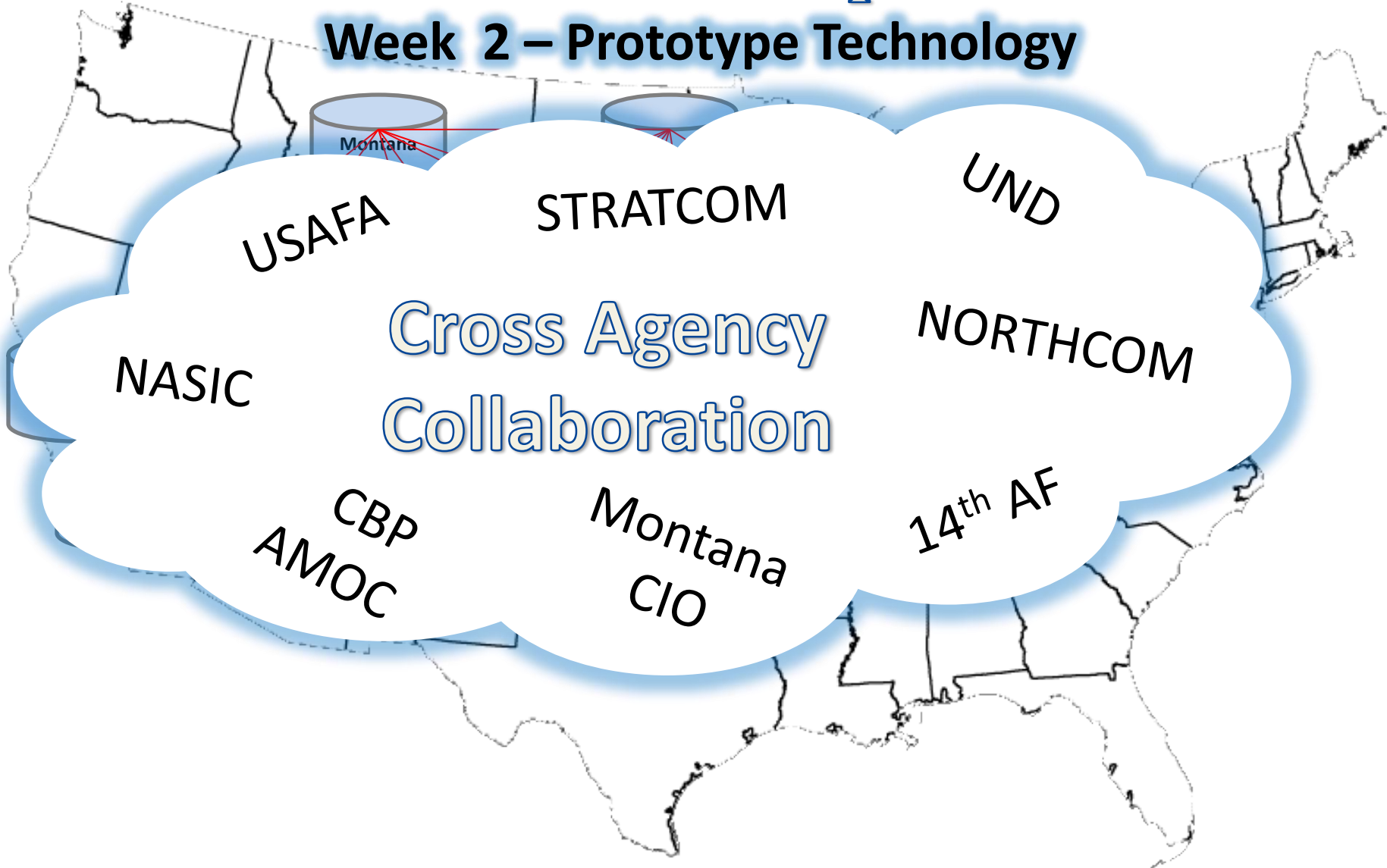
NORTHCOM

NASIC

CBP  
AMOC

Montana  
CIO

14<sup>th</sup> AF



# What Did We Learn?

**Final Report  
On The  
US Air Force Academy Mission Fabric  
Collaboration Experiment**

Conducted under the auspices of the  
Strategic Multi-layer Assessment (SMA) program

September 2009

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Abstract

The USAFA Mission Fabric experiment was conducted over two 1-week segments (13-17 July and 20-24 July 2009) during which different sets of collaboration tools were available to the participants as they attempted to anticipate a rare event based on information injected over the duration of the experiment. This report presents findings from the experiment.

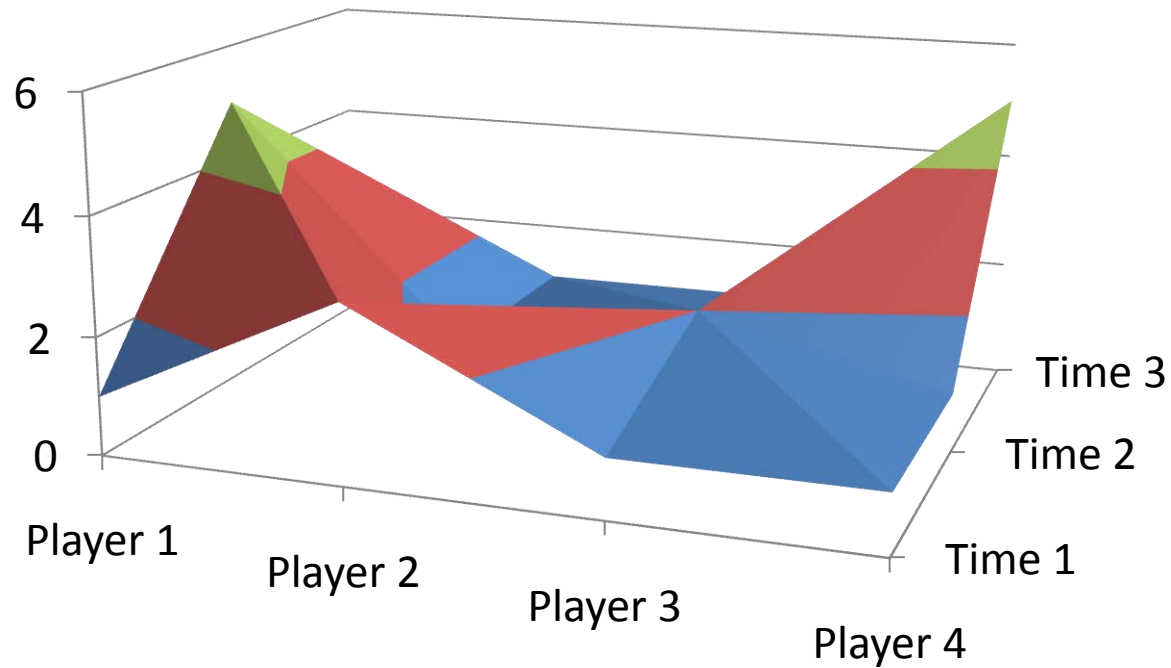


# The Tool Alone Is Not The Answer

“In short, by themselves, the tools alone cannot make people more effective and satisfied; the highest levels of performance and satisfaction arise when appropriate tools are matched with effective processes for employing those tools.” – USAFA Mission Fabric Experiment Final Report Sept 2009



# Process



“Peaks” of leadership spike and dissipate over time

# The “Yo” Incident



A close-up photograph of a human eye with light green irises. The eye is looking slightly to the right. The skin around the eye is a warm, light brown color. The text "Visual Trust" is overlaid in a large, bold, black serif font across the center of the eye.

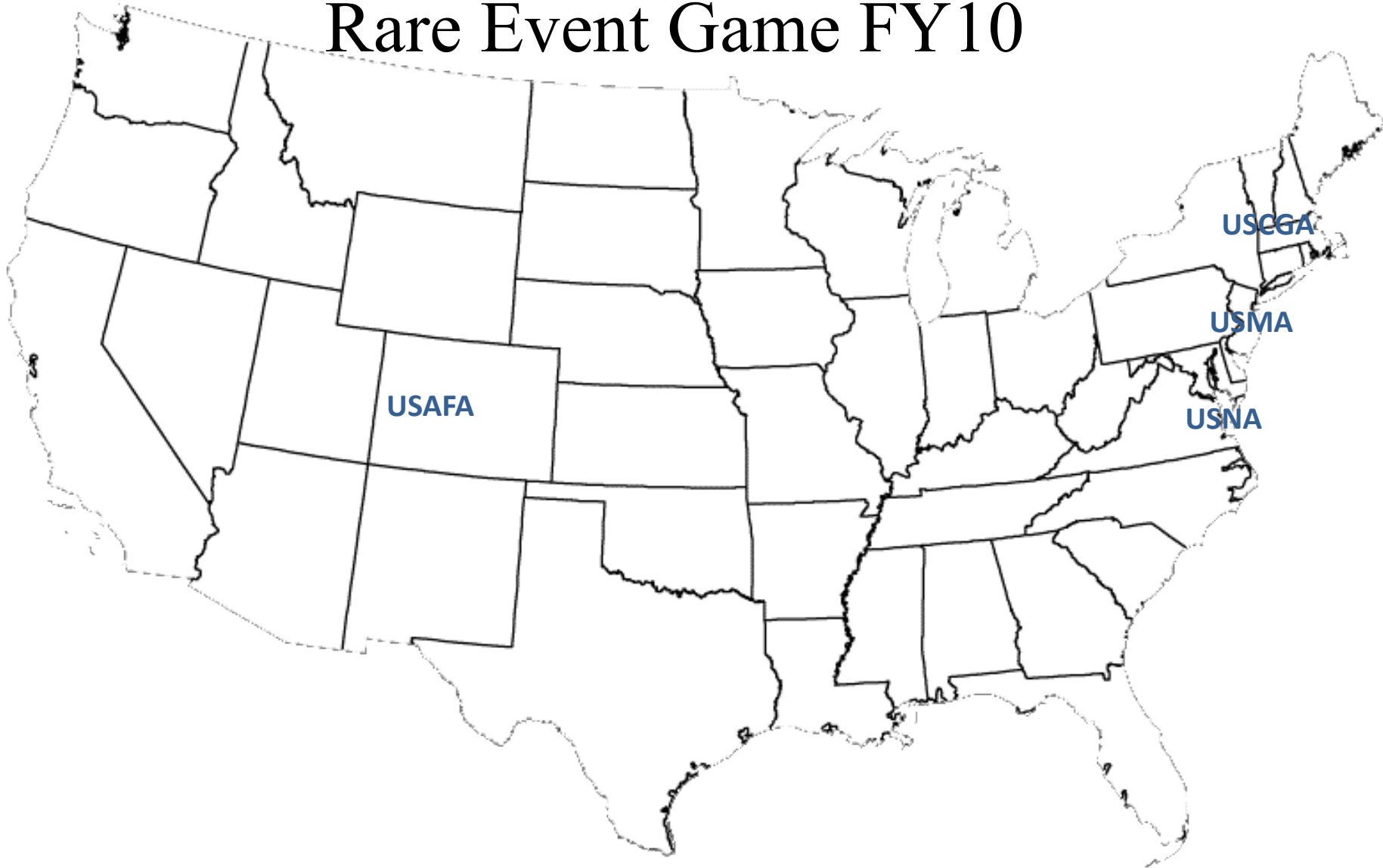
# Visual Trust



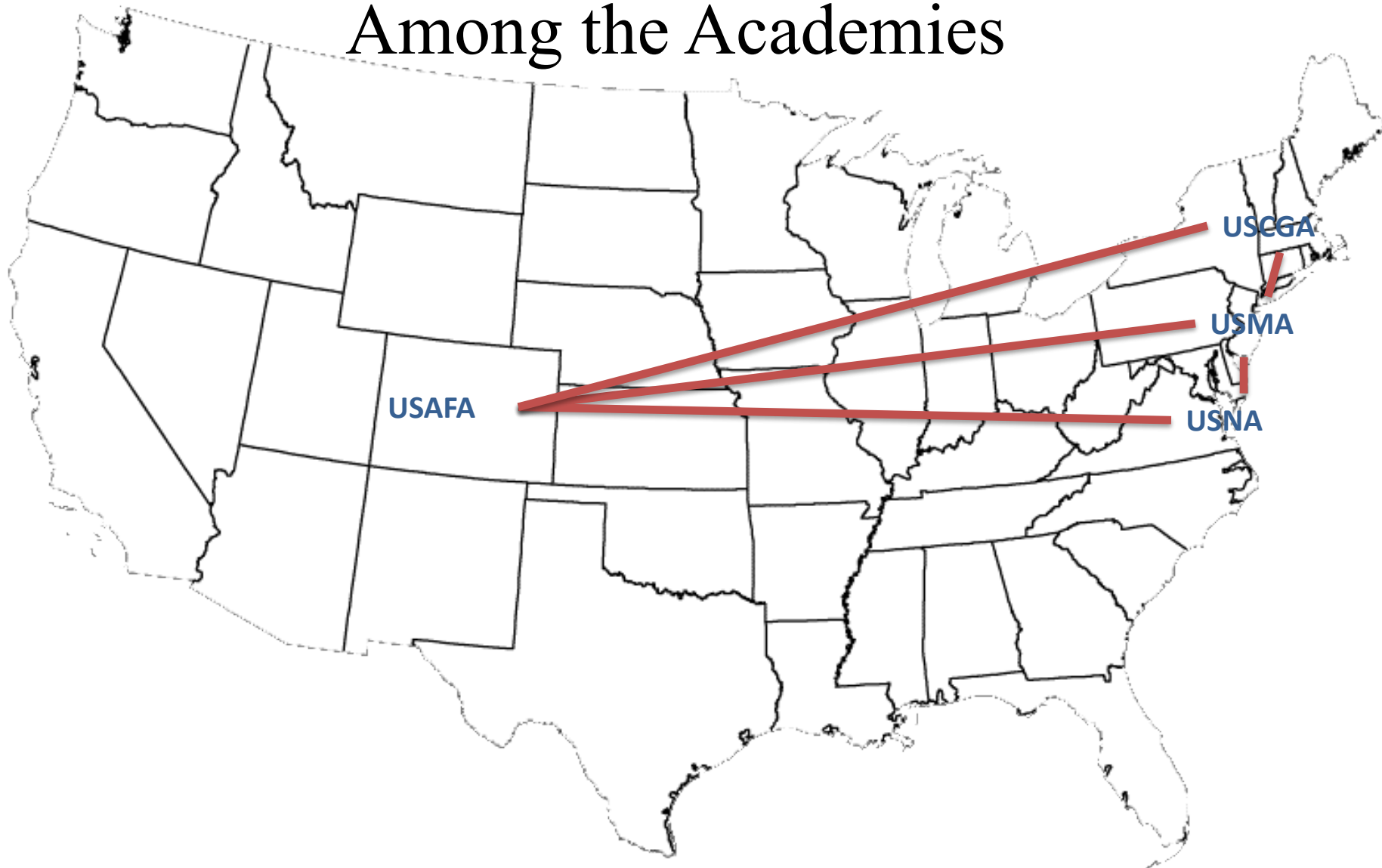
# Where To Go From Here?



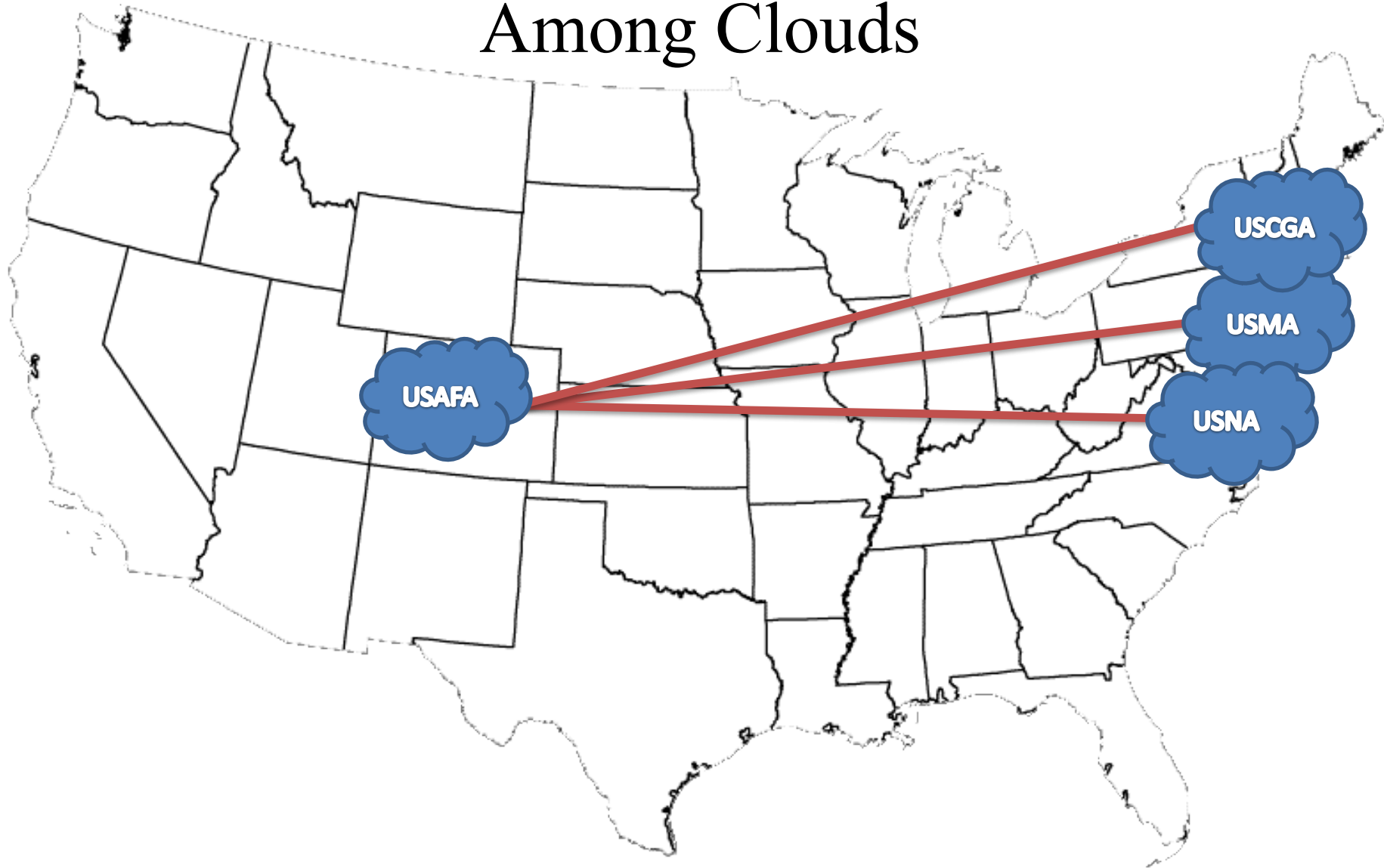
# USAFA Mission Fabric Rare Event Game FY10



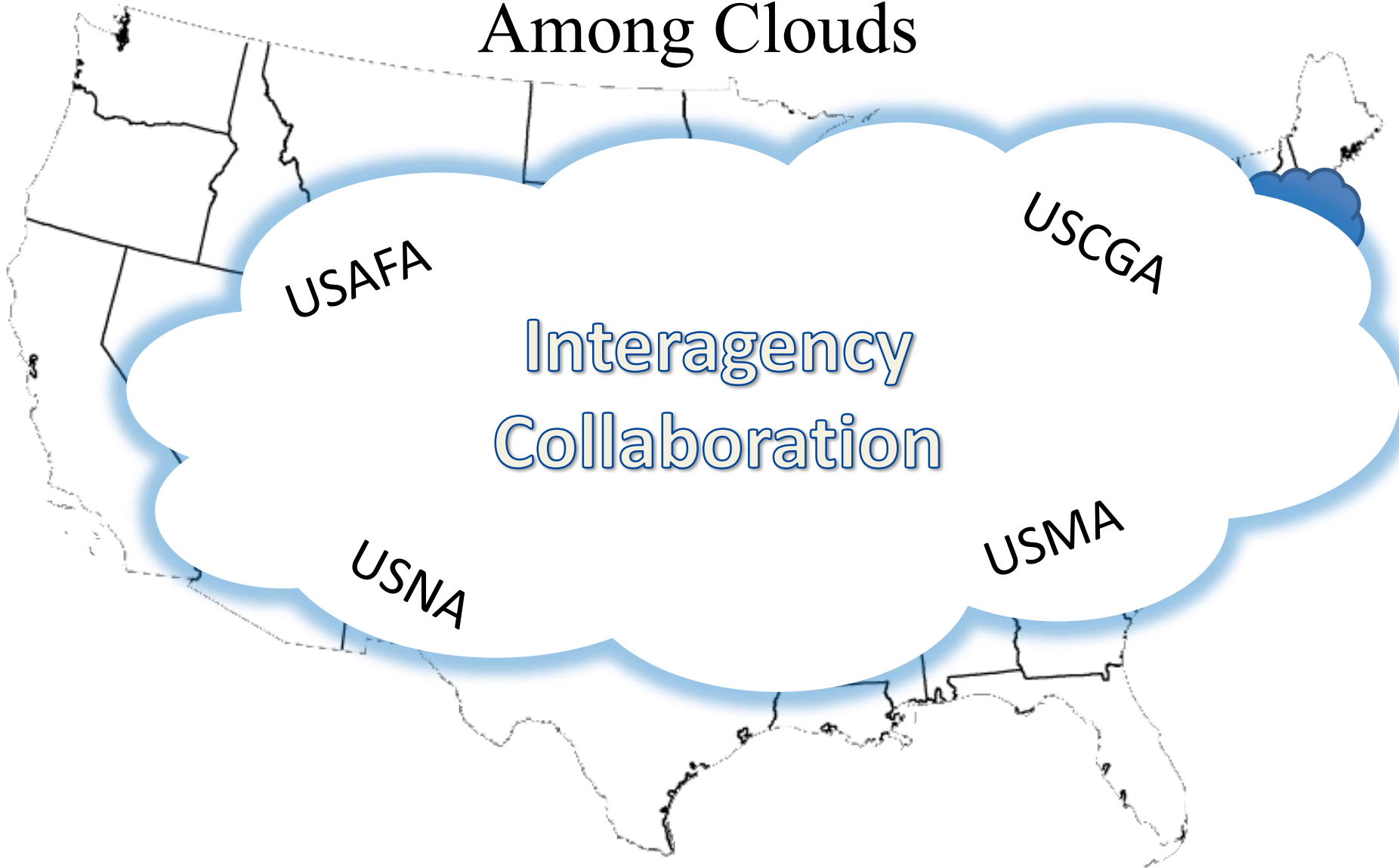
# Field Testing Intelligent Network Among the Academies



# Field Testing Interoperability Among Clouds



# Field Testing Interoperability Among Clouds



USAFA

USCGA

Interagency  
Collaboration

USNA

USMA

# Questions?



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