An aerial photograph of an airport is shown, with a large blue rectangular overlay on the right side. The overlay contains white text for a webinar. The background shows the airport's runways, taxiways, and terminal buildings, with a city and water visible in the distance.

TRB Webinar: Military Resources and Strategies to Improve Civilian Airport Resiliency

Tuesday, October 22, 2024
11:00 AM – 12:30 PM Eastern

Today's Learning Objectives

- **Apply key military resources and strategies to improve the resiliency of civilian airport operations and infrastructure**
- **Integrate military and civilian airport systems to enhance response and recovery capabilities during emergencies**
- **Identify lessons learned and best practices from case studies demonstrating successful collaboration between military and civilian airports**

AICP Credit Information

1.5 American Institute of Certified Planners Certification Maintenance Credits

You must attend the entire webinar

**Log into the American Planning Association
website to claim your credits**

Contact AICP, not TRB, with questions

American Association of Airport Executives (AAAE)

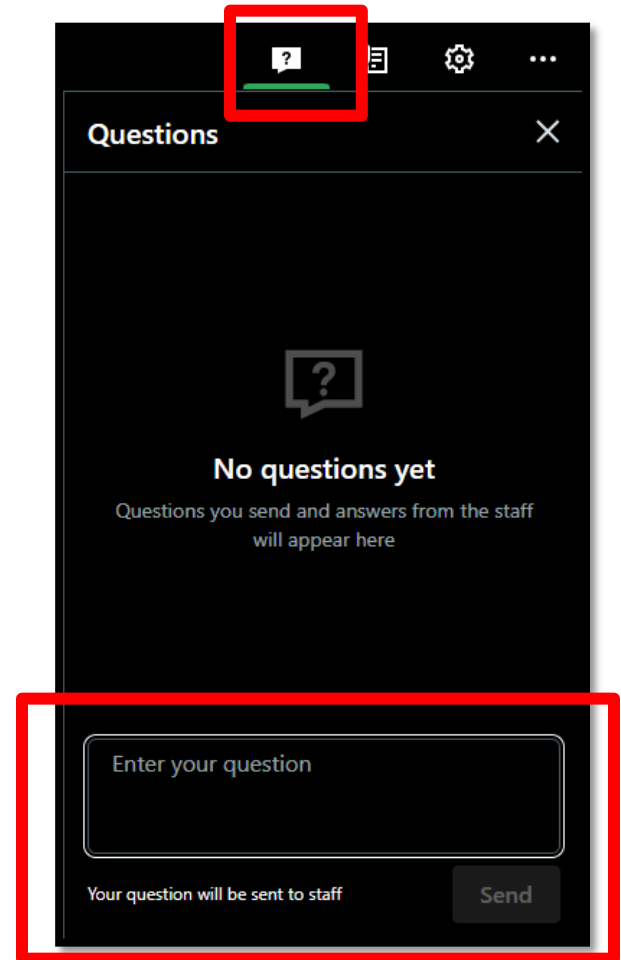
1.0 Continuing Education Units (CEUs) are available to Accredited Airport Executives (A.A.E.)

Report your CEUs:
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Questions and Answers

Please type your questions into
your webinar control panel

We will read your questions out
loud, and answer as many as
time allows



Today's Speakers



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Westover Air Reserve Base

ACRP Synthesis 133

Military Resources and Strategies to Improve Civilian Airport Resiliency

Chelsea Treboniak, Critical Ops

Karen “Jack” Magnus, Westover Air Reserve
Base

Brenda Enos, TRC Companies

Chelsea Treboniak Principal Investigator

- President, Critical Ops
- ACRP and NCHRP
Principal Investigator and
Panel Member
- ACRP Ambassador
(Emeritus)
- West Point Graduate and
United States Army
Veteran



Karen “Jack” Magnus Panelist

- Director, Mission Sustainment & Community Partnerships for the 439th Airlift Wing
- Mission Sustainment Program
- Community Partnership Program
- Previously a Mission Support Group Commander for Westover Air Reserve Base



Brenda Enos

Moderator

- Vice President, Energy Transition Solutions at TRC Companies
- Civil Aviation Professional
- Environmental, Sustainability and Resiliency Expertise
- ACRP Panels
- Airport Council World Environment Steering Group Committee Member



ACRP Synthesis Panel

Harry G. Barrett, Jr. Palm Springs International Airport

Silvana V. Croope, Alabama Transportation Institute

Abe Forney, City of St. Joseph

Rebecca Hupp, Boise Airport

Col. Mark Ruehter, 139th Airlift Wing

Tom Williams, Meridian Regional Airport

Neal Wolf, Environmental Science Associates

Jordan Christensen, ACRP Senior Program Officer

Research Problem

- **Range of disruptive events and shocks (e.g., extreme weather, natural disasters, economic crisis, etc.)**
- **Vulnerability of U.S. Critical Infrastructure**
- **Array of civilian airport approaches and plans and investments in resilience**
- **U.S. military resilience practices**
- **Applicability of co-located military organizational resilience processes and practices to civilian airports**

Research Objectives

Document resiliency practices and processes from the National Guard and other military services that airports can adapt and leverage for their own facilities in partnership with co-located military facilities.

Approach to Addressing the Problem

- **Mixed-method study**
- **Literature Review: 110 Sources**
- **Interviews: 30 (Military Officers → Learning Improvement (LIT) Program Manager)**
- **Case Examples: 4**

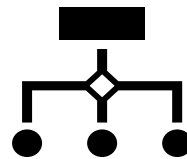


Key Terms: Resources and Strategies

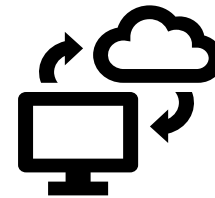
- Resiliency resources are people and stockpiles of supplies, space, and other assets drawn from individuals or organizations for effective functioning.
- Resiliency strategies are plans of action or policy to achieve the overall aim.
- When combined, resources and strategies include people, processes, and technology.



People



Processes



Technology

Prevailing Themes

- Unwavering focus on safety and security
- Safeguard personnel, assets, and critical infrastructure
- Resilience is partnership-driven
- Purpose is the fundamental difference
 - Military: Tasked with deterring war and protecting national security
 - Airports: Pivotal hubs for air travel, accommodating the needs of passengers and cargo

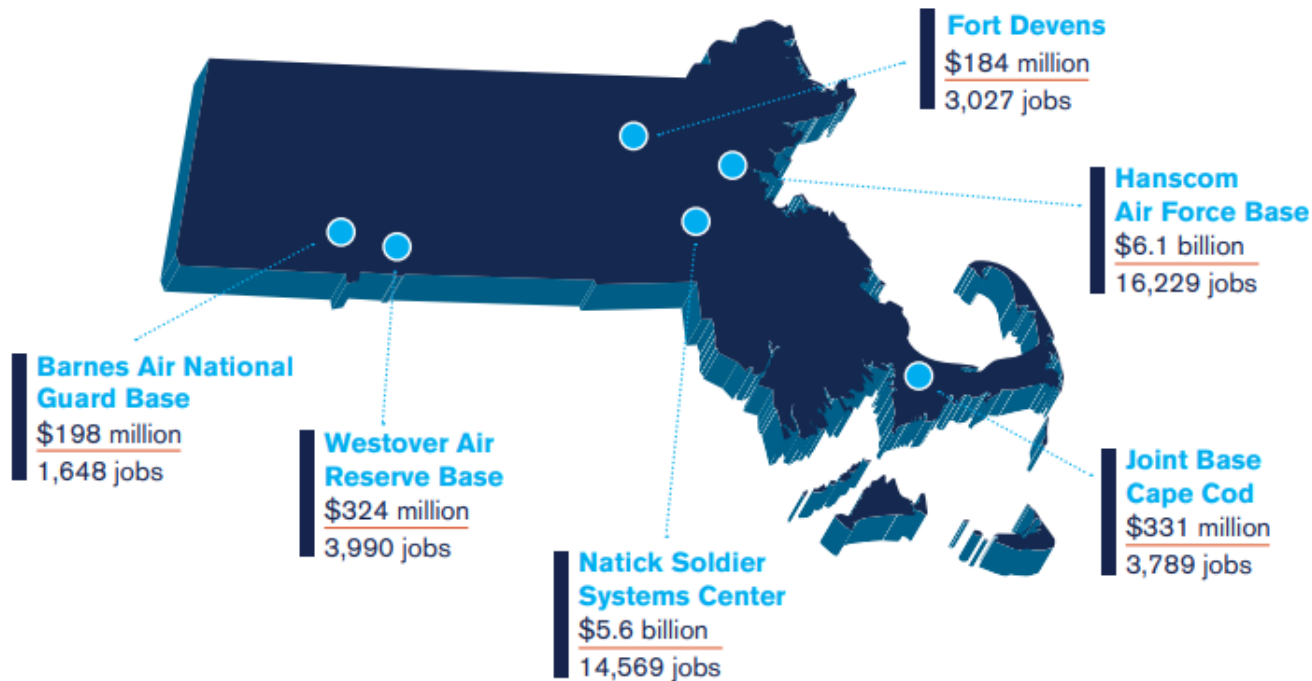
Glue: 14 CFR Part 139
Applicability: Civilian Air Operations
Use Case: Joint-Use Airports
Commonality: Requirements and Community

People, Processes, and Technology

- **People:** Workforce and workforce gaps
- **Processes:** Varying degrees of maturity and consistency
- **Technology:** Immense potential yet underutilized primarily due to technical capabilities of personnel, the immaturity of processes, and diverting attention/focus on priorities

Massachusetts Military Asset and Security Task Force (MASS-TF)

Massachusetts has six military installations that are key contributors to defense innovation and serve as major economic engines for the region.



Air Force Resilience Pillars



Processes

- **Phase 0: Forward-thinking from current state to ideal state – building capacity**
- **Transportation Systems – Inclusive**
- **Risk Management**
- **Assessments and Frameworks – Prioritization**
- **Change Management – Training**
- **Peer Examples and Innovation**

San Antonio Electromagnetic Defense (SA-EMD)



Infrastructure

5th Gen Cell

Policy & EDU

Recovery

SA-EMD

- 700+ Volunteers
- 100+ Organizations
- Quarterly Updates

Gov't, military, industry, research & academia for city / base EMP resilient pilot project

Ensure JBSA will continue ops in post EMP environment

Work Groups

Infrastructure Resilience

5G Cellular

Policy & Education

Recovery Readiness

Deliverables

EMP Hardened & Exercised

FirstNet 5G

Resiliency Guide

EMP Annex

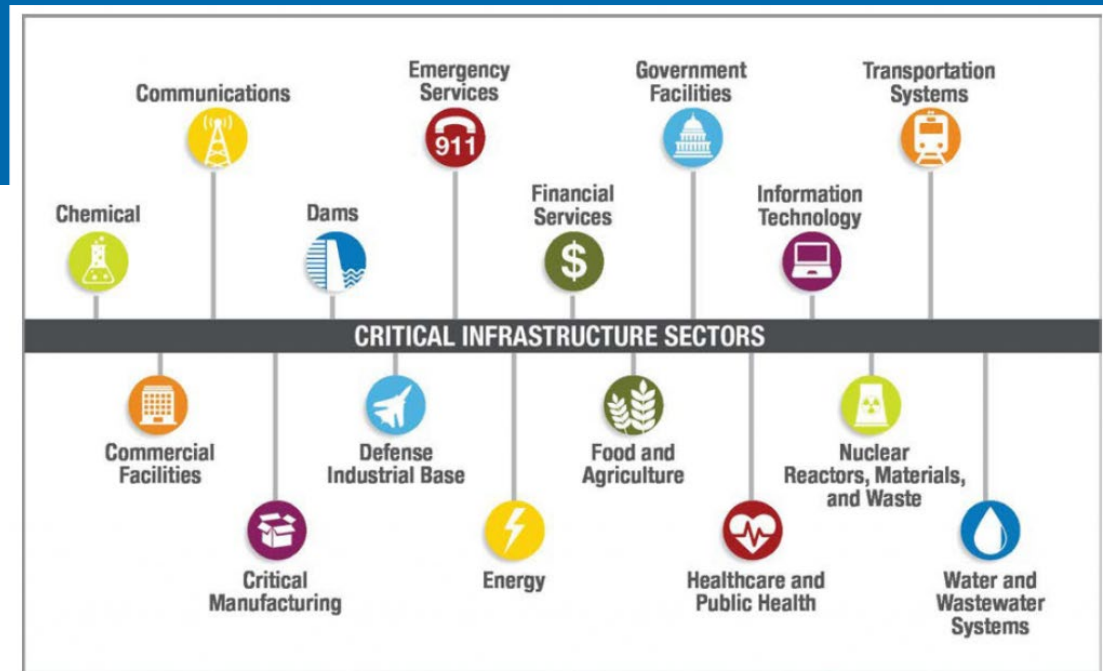
Military Readiness Enabled by Community Resilience

Technology



Considerations

- Dependencies among the 16 critical infrastructure sectors
- On-base and off-base controls (i.e., access controls, entry points, etc.)
- Management, Funding, and Third-Parties
- Metrics, KPIs, and Scorecards




Research Results

- **Theme 1: Definition.** Resiliency can be defined according to publications, organizational purpose, and operations. Purpose generates operations.
- **Theme 2: Compartmentalized Resources.** Operations are achieved through the alignment of people, processes, and technology.
- **Theme 3: Standards.** Resources and strategies are driven by standards, including military specifications (MIL-SPEC), FAA Advisory Circulars (AC), Standard Operating Procedures (SOPs), and regulations. Differentials require negotiations for effective operations, finite funding alignment, and insurance and bonding requirements.

An aerial photograph of an airport is shown, with a large blue rectangular overlay in the upper half. The overlay contains the title 'Theme 1: Definition' and a paragraph of text. The background image shows a runway with a plane, taxiways with green markings, and various airport buildings and parking lots.

Theme 1: Definition

Resiliency can be defined according to publications, organizational purpose, and operations. Purpose generates operations.



Theme 2: Compartmentalized Resources

Operations are achieved through the alignment of
people, processes, and technology.

Theme 3: Standards

Resources and strategies are driven by standards. Differentials require negotiations for effective operations, finite funding alignment, and insurance and bonding requirements.

Case Examples

- **Army Joint-Use Military Airfield: Killeen-Fort Hood Regional Airport and Skylark Field Airport**
- **Army Joint-Use Military Airfield: Camp Guernsey Army Airfield**
- **Air Force Joint-Use Military Airfield: Westover Air Reserve Base/Metro**
- **Joint Base: Joint Base San Antonio (JBSA)**

Airport Practitioners: Action Time!

- **Management practices, funding, and third-party relationships create directives, standards, and agreements. These are crucial for decision-making and information sharing, especially when definitions differ.**
- **Formalized training and adoption of a fitting economic model may align with process enhancement and funding opportunities.**
- **Technology implementation and scalability.**
- **Continue the knowledge exchange in communities, among partners, and with stakeholders to identify co-benefits, landscape changes, and opportunities to reduce system complexity.**

FOR ADDITIONAL INFORMATION



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Other Events for You:

November 20, 2024

**TRB Webinar: Intermodal Passenger Facility Trends in
Technology and User Experience**

November 21, 2024

TRB Webinar: Evolving the Practice of Benefit-Cost Analysis

January 5 – 9, 2025

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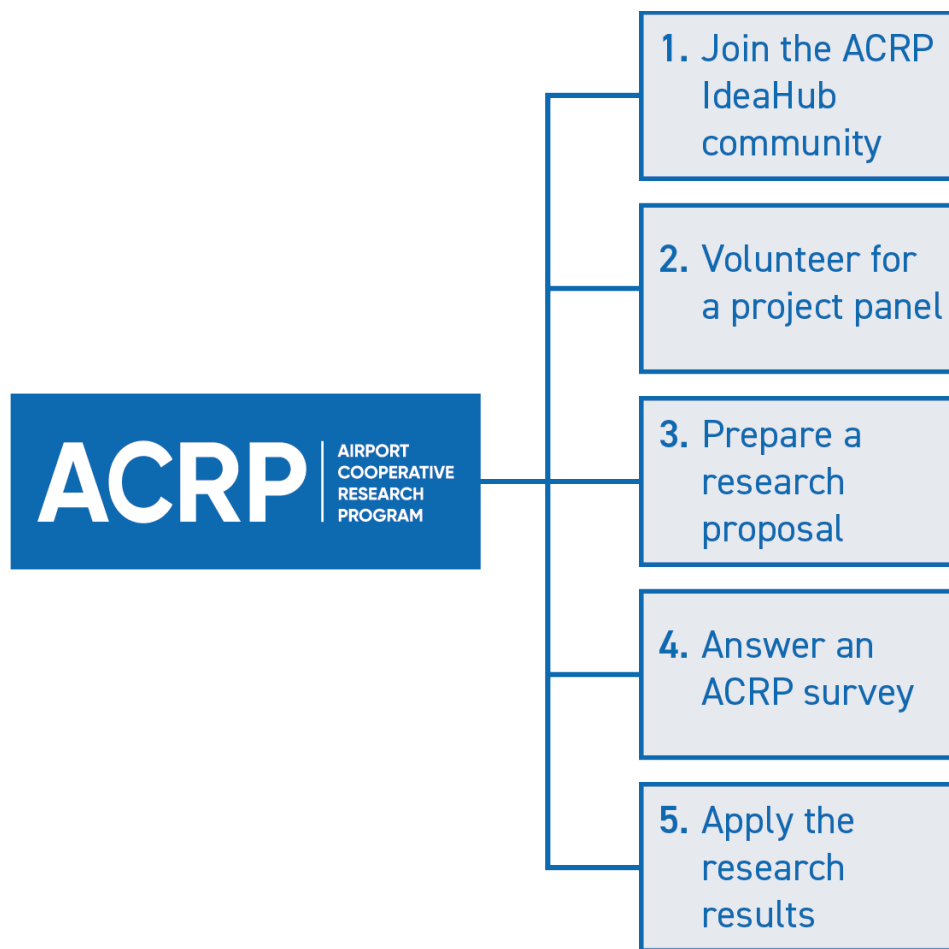
- Networking opportunities
- May provide a path to Standing Technical Committee membership

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