International Cooperation in Times of Disaster

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Agenda

- Assessing and responding to aviation hazards
- Business continuity in ANSP operations
- Innovation and technology use in times of crises
- Human performance management
- Importance of International Cooperation in disaster response

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FAA Hazardous Situation Risk Mitigation

FAA is responsible for safety oversight of U.S. civil operators, U.S.-registered civil aircraft, and FAA-certificated airmen worldwide

- Terrorism, military conflict, navigation service issues, and other hazards can increase risk to civil aviation in other countries; primary responsibility for addressing risks rests with air navigation service provider (ANSP) for affected airspace
- FAA Crisis Response Working Group (CRWG) uses engagement, information sharing, and flight advisories/prohibitions to address risk concerns
- Prohibitions may impact operators' ability to respond to or assist with humanitarian crises
- Operators may request authorization/exemption for flights in prohibited areas if certain conditions are met

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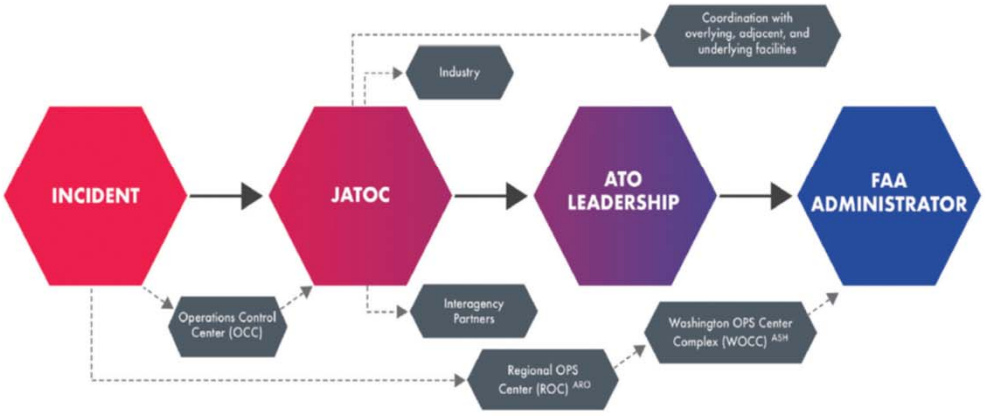
JATOC – Joint Air Traffic Operations Command Center



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Joint Air Traffic Operations Command Crisis Action Team (J-CAT)

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Innovative Techniques for Disaster Response

- Use of mobile / flexible use technology
- UAS for information collection
- Creation of new online tools for information sharing

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Disaster Response Technology

- Suitcase Tower
- Large Mobile Tower

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UAS For Data Collection

- Currently utilized when responding to wildfires and hurricanes
- Used to assess damage in unsafe areas
- Collect data for future research

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Example of New Tools: U.S. Wildfire Dashboard

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Human Factors

- Disasters impact everyone, including responders
- Human factors need to be considered when developing a response strategy

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Issues with Current and Future State Operational Levels

	Normal	Draw Down Posture	Near-Term Ramp Up	Long-Term Ramp Up
Traffic Levels & Complexity	• Normal traffic levels • Normal complexity levels • Normal GA/commercial mix	• Reduced levels • Reduced complexity • Flipped GA/commercial mix	• Ramp up in traffic levels • Relative complexity increase • Increased commercial	• Slow return to increased traffic levels and complexity • Increased commercial
Facility Staffing Levels	• Normal/full op staffing • Normal Team Resource Mgmt (TRM) mix	• Lower op staffing levels required • Large combined sectors • Different TRM mix	• Increase in op staffing levels • Combined sectors • Return to some previous TRM mix	• Full op staffing levels • Return to normal TRM mix
Work Schedules	• Rotating five day schedule • Rotating six day schedule	• Rotating, five in facility and ten out of facility	• Rotating, five in facility and five out of facility	• Rotating five day schedule • Rotating six day schedule
Safety Risk Mgmt	• Known hazards, managed risks • Safety assurance	• Known hazards, managed risks • New hazards, new risks • New mitigations	• Known hazards, managed risks • New hazards, new risks • New mitigations	• Known hazards, managed risks • New hazards, new risks • New mitigations
Controller Performance	• High cognitive engagement • High human performance	• Lower engagement • Different teams • Complacency • Skill automation loss • Slips, lapses • Lifestyle changes	• Increasing cognitive engagement • Skill/learning degradation • Lifestyle changes • Fatigue	• High cognitive engagement • High human performance • New habits • Proficiency/currency drift

HIGH LOW MED HIGH

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Importance of International Cooperation in Disaster Response

- Disasters are inherently international
  - Hurricanes
  - COVID-19
- Information sharing is critical
- Development of standards and sharing of resources

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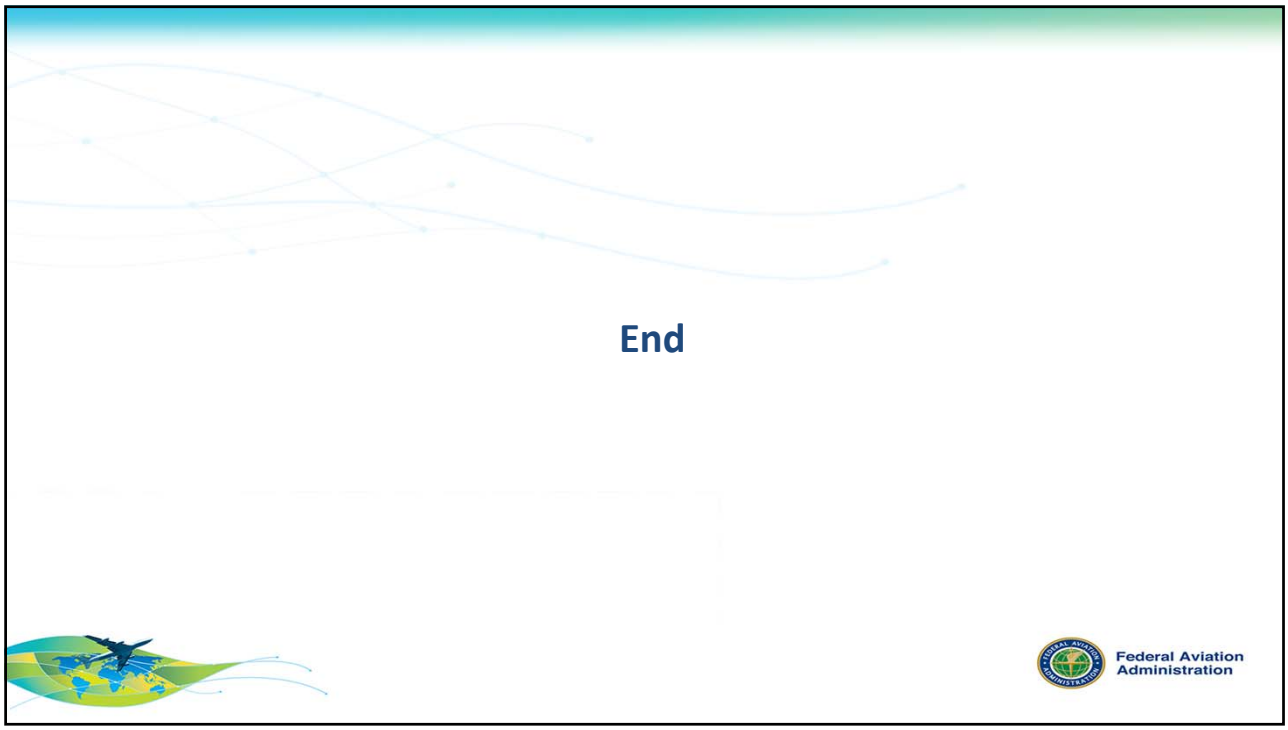

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