

Air Traffic Control Operational Readiness

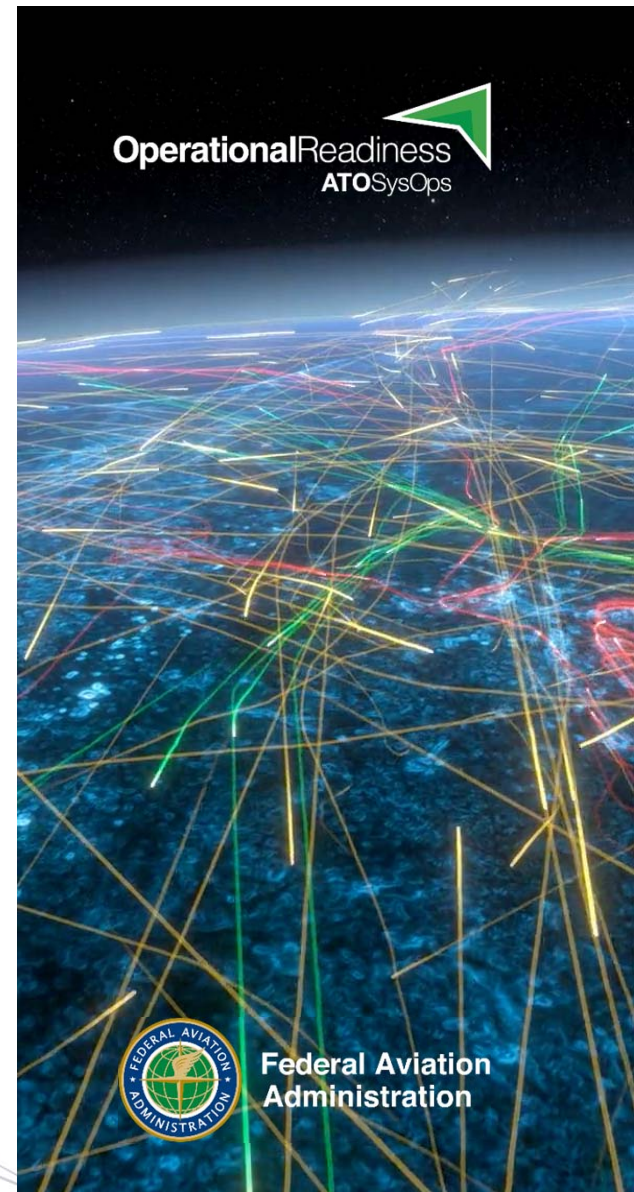
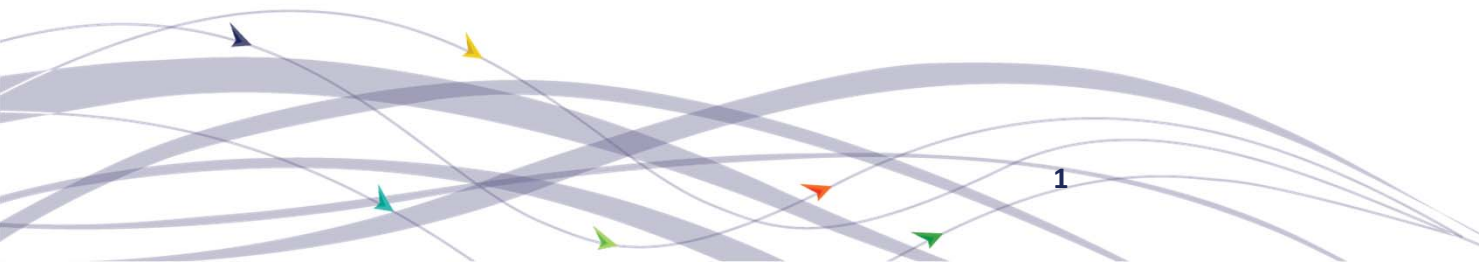
Contingency Planning and Exercises

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Aviation Safety Campaign - Miami

11-12 July 2019



Who We Are



Operational Readiness Directorate

Part of the Federal Aviation
Administration (FAA) Air Traffic
Organization (ATO)

- Responsible and accountable for lifecycle approach to continuous improvement of service continuity in the FAA ATO



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What We Do

- ▶ Prepare ATO facilities and services for Continuity of Operations
 - Specifically, air traffic control facilities and services

579 Facility Contingency Plans



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What We Do



- ▶ Prepare ATO facilities and services for Continuity of Operations

ATC Zero

“facility is unable to safely provide air traffic services”



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Why It Is Important

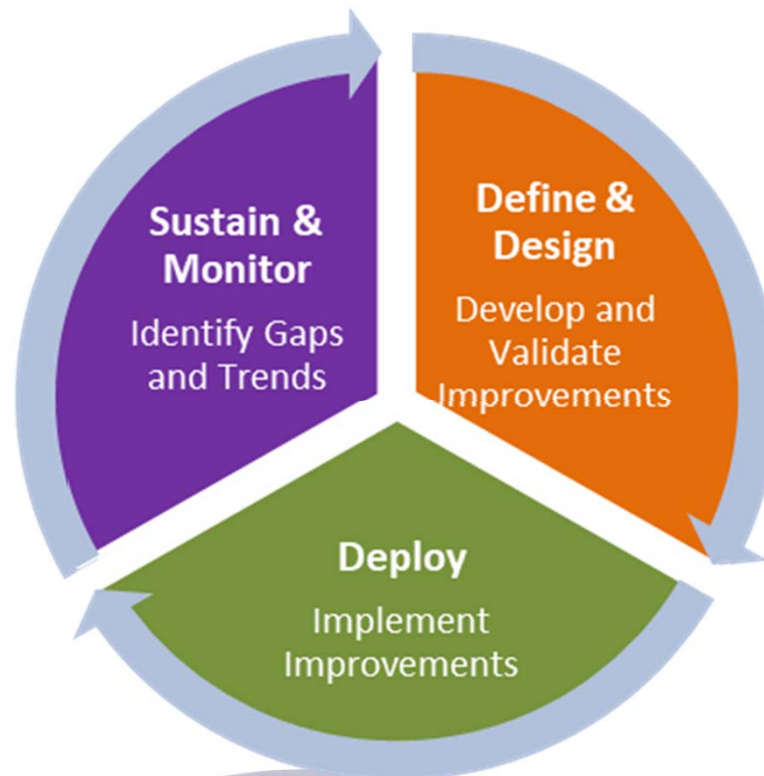
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ATOSysOps



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How We Do It

Lifecycle Approach



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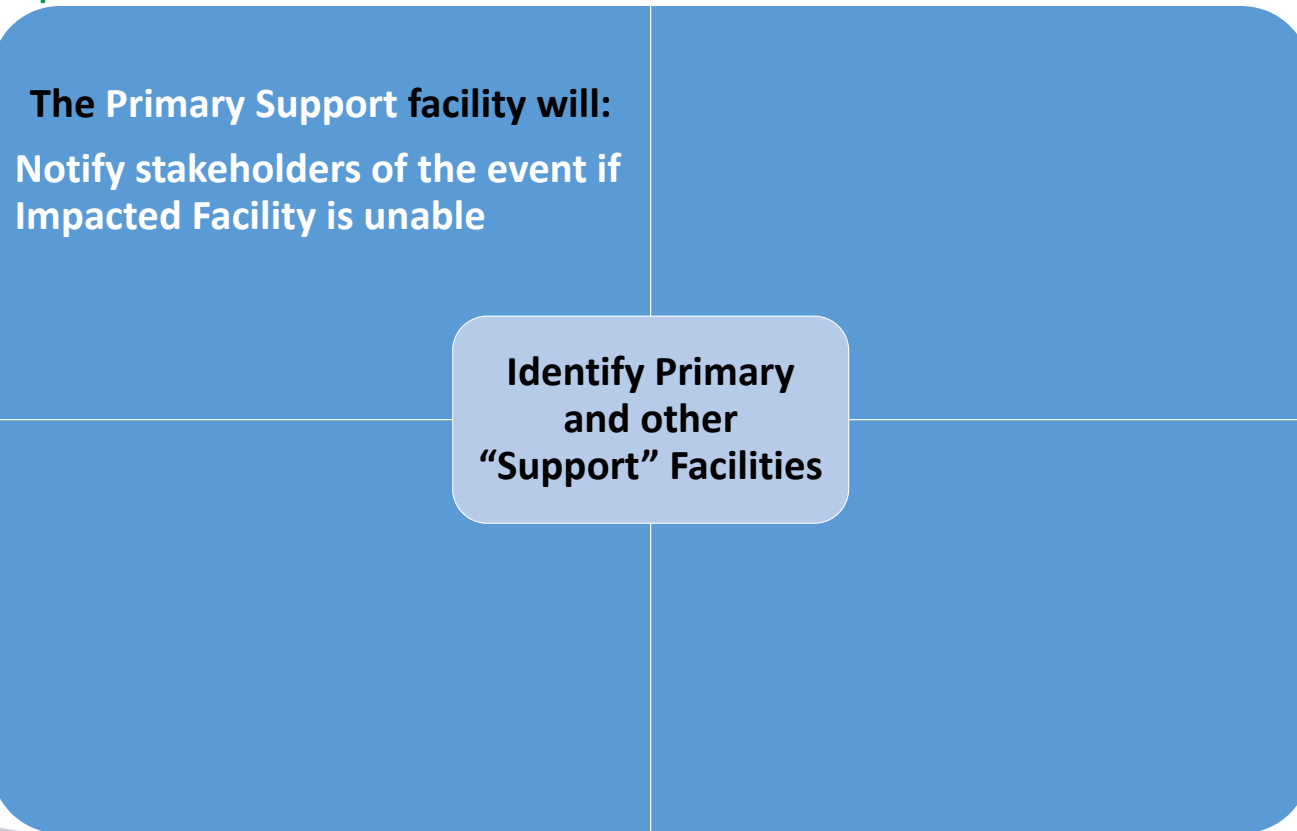
◀ Viable and Capable

Identify Primary
and other
“Support” Facilities



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◀ Viable and Capable



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The Primary Support facility will:
Notify stakeholders of the event if
Impacted Facility is unable
Investigate non-responsive facility

**Identify Primary
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“Support” Facilities**



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◀ Viable and Capable

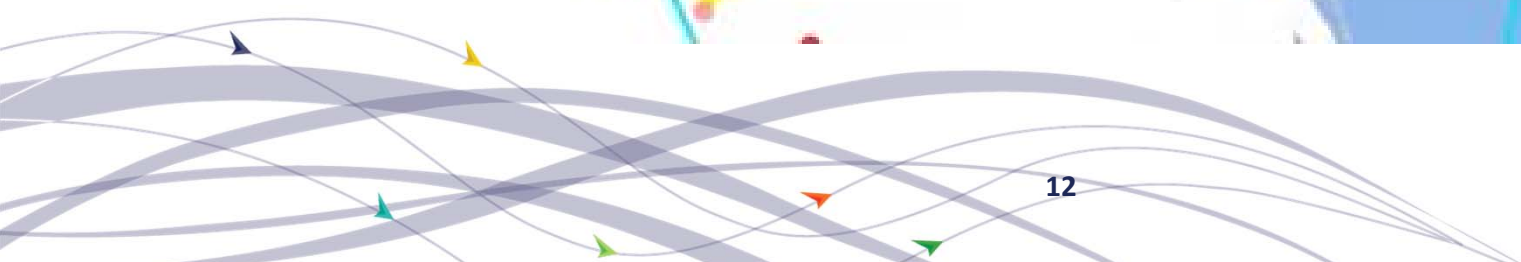
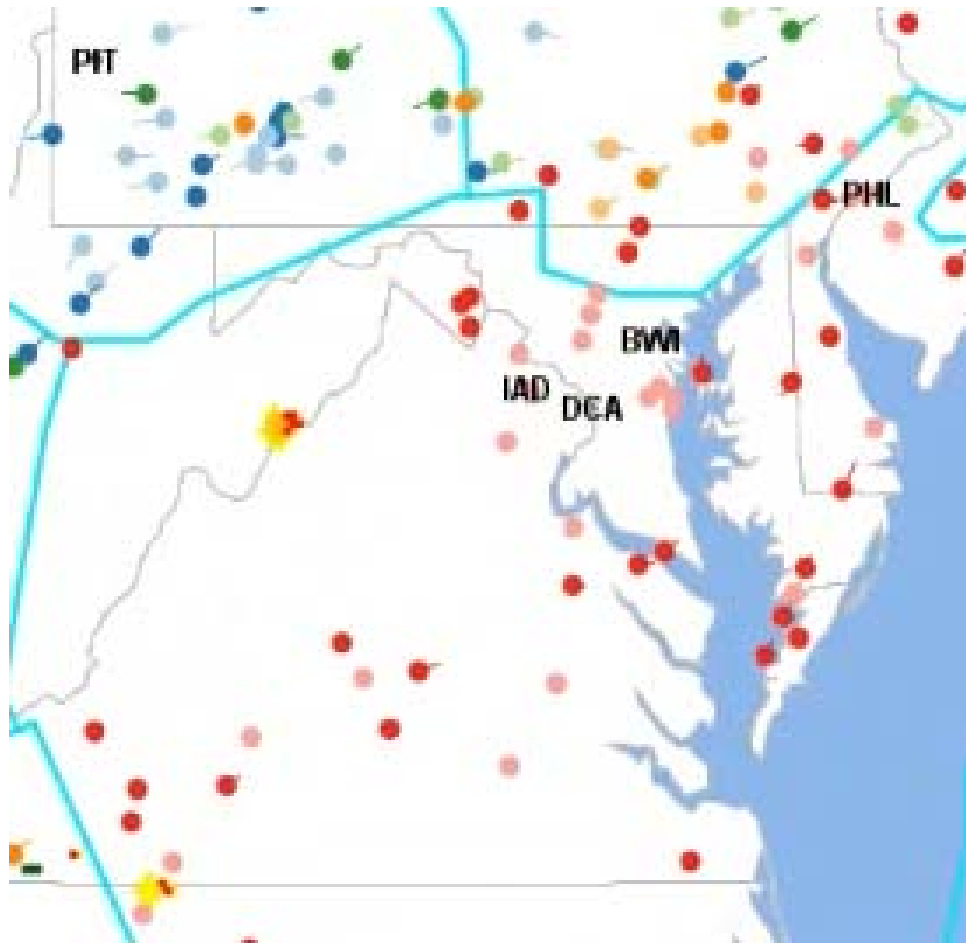
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Support Facilities will, depending on local agreements:
Stabilize impacted airspace

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Support Facilities will,
depending on local agreements:
Stabilize impacted airspace

Take control of impacted airspace

**Identify Primary
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“Support” Facilities**



▶ Viable and Capable

- Identify Primary and other “Support” Facilities

Non-Air Traffic Control organizations may also provide “Support”

e.g., Temporary Tower location by agreement with Airport Authority



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◀ Viable and Capable

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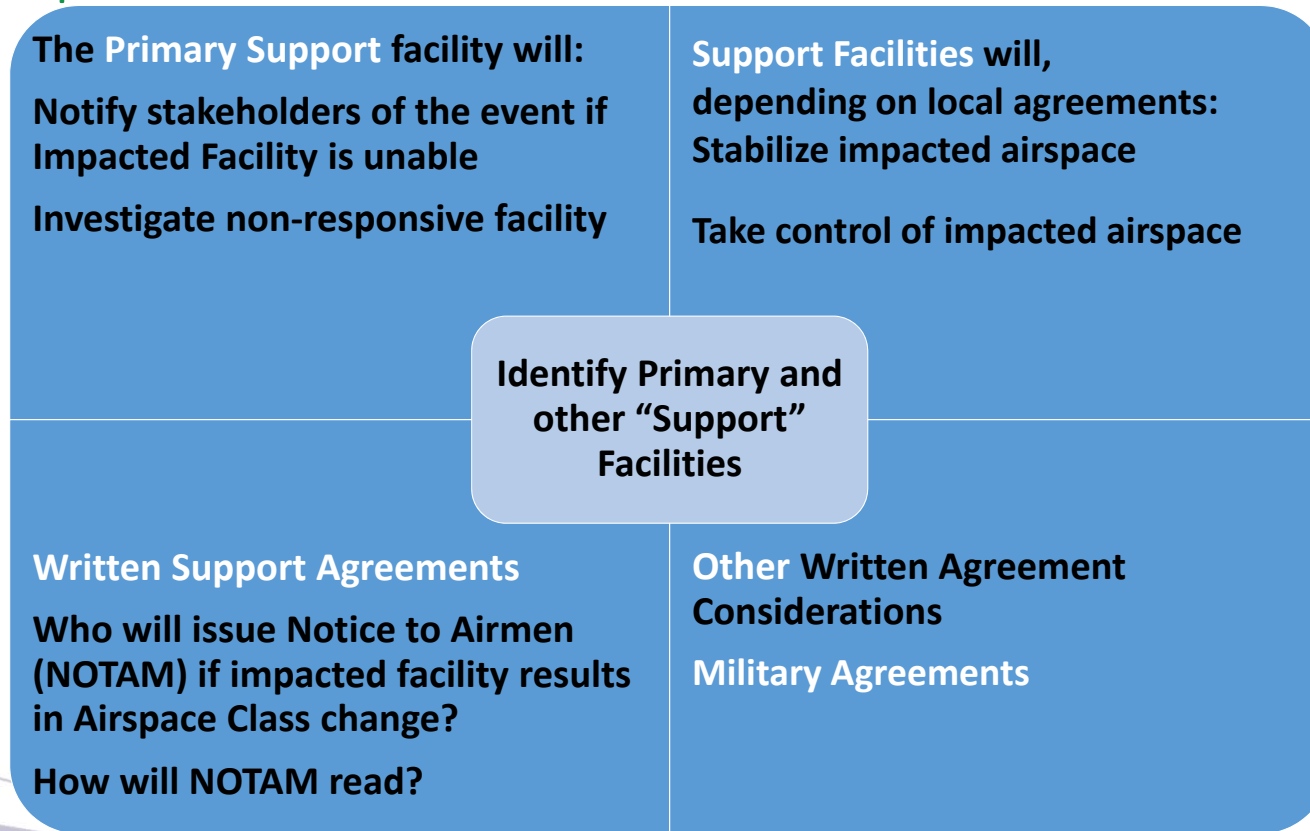
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Identify Primary and
other “Support”
Facilities

Written Support Agreements
Who will issue Notice to Airmen
(NOTAM) if impacted facility results
in Airspace Class change?
How will NOTAM read?

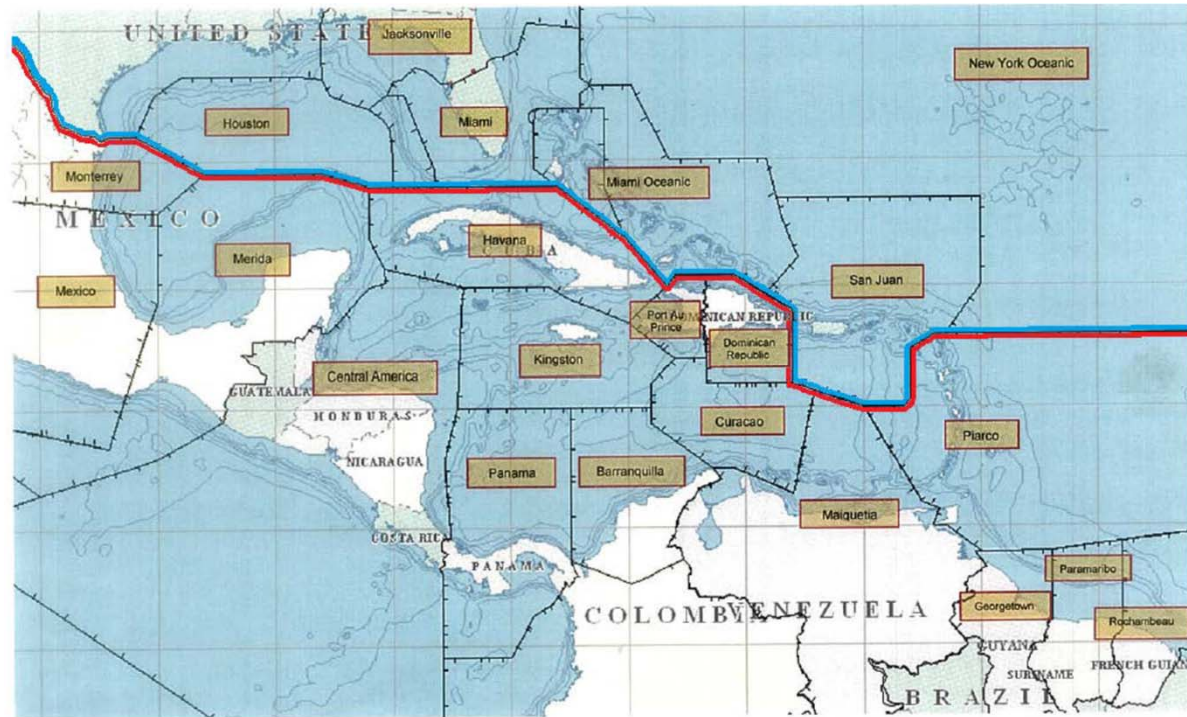


◀ Viable and Capable



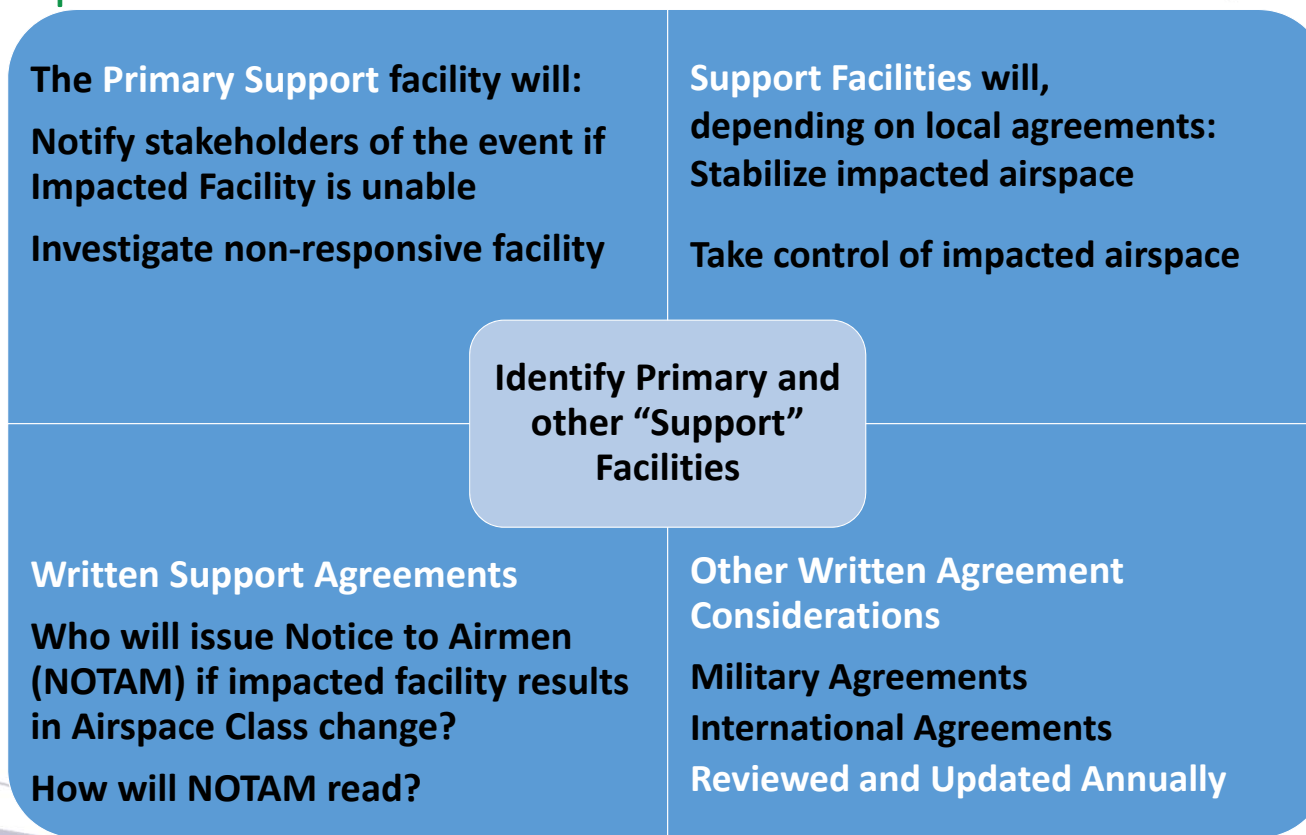
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Written Support Agreements
International Agreements



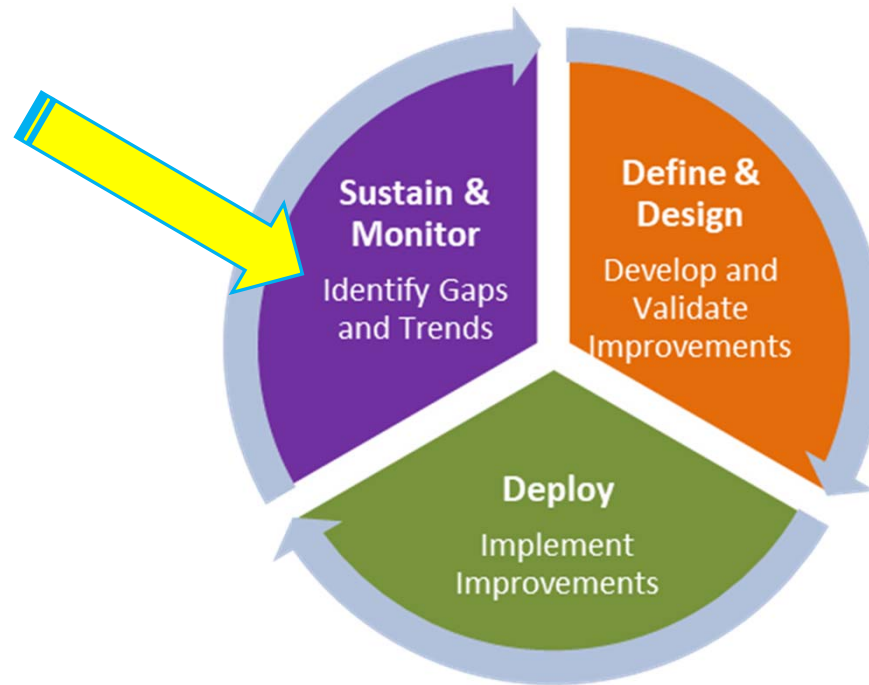
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◀ Viable and Capable



◀ Viable and Capable

Operational Contingency Plan Rebuilds



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▶ Viable and Capable

Operational Contingency Plan Rebuilds



- Verify viable technological & procedural approaches
- Facilitate training and meaningful exercises by promoting full team engagement



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▶ Viable and Capable

Operational Contingency Plan Rebuilds



**Define &
Design**
Develop and
Validate
Improvements

- Facilitate plan rebuilds that cover most common ATC Zero events (most last less than 8 hours)

◀ Viable and Capable



◀ Exercises and Lessons Learned

EXERCISE PLANS
ANNUALLY ...

“...with as much **detail** and **realism** as possible **without impact** to the National Airspace System”



EXERCISE PLANS
ANNUALLY ...

“...with as much detail and realism as possible without impact to the National Airspace System.”

&

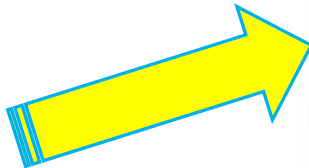
“...they must include the support network facilities.”



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Exercises and Lessons Learned

Conduct training on contingency procedures to include relevant information seen during an exercise or event.



Exercises and Lessons Learned

ACTUAL EVENT



ACTUAL LESSONS LEARNED

**Official Event / Lessons Learned Report
ABC (TRACON) ATC ZERO OCL Declaration
Declared FEB 30 2019 15:02 UTC [Event ID: 19767]**



Facilities Providing Support During This Event:
DCC (ATCSCC)
WXY1 (ATCT)
ZZZ (ARTCC)



Lessons Learned ABC (TRACON):

Problem: Fire alarm was not pulled

- Personnel in the facility did not hear the evacuation pages
- In follow up discussion, it was determined that **controllers were not sure if they should pull alarm and if alarms would activate the sprinklers and ruin equipment**



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Lessons Learned ABC (TRACON):

Solution:

- Training needed
- Fire alarms are not connected to sprinklers
- Include in Contingency Plan to "pull or activate alarm"



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Lessons Learned ABC (TRACON):

Problem: Headsets, contingency plans, directions, and checklist were not readily available. As a result:

- Extra communication needed to set up positions in each tower
- **Controllers were not certain how to get to towers (on airport property)**



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Lessons Learned ABC (TRACON):

Solution: Develop Go Bags (Roller Suit Cases): One for ZZZ, One for WXY1 TWR, One for WXY2 TWR



- At least 4 headsets and 2 handsets
- Phone list
- Position logs (Dash 10)
- **Directions to all facilities**
- Updated copies of OCP, checklists, and quick reference guides
- Additional items to add at time of relocation



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Lessons Learned ABC (TRACON):

Problem: ZZZ could not communicate with ABC once they were located in towers



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Lessons Learned ABC (TRACON):

Solution:

- Add speed dial codes to call each tower and contingency position
- Create an IA directory for all positions
- Secure funding to relocate and add jacks as necessary for each contingency position in the towers



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