



**U.S. DEPARTMENT OF TRANSPORTATION**  
**FEDERAL AVIATION ADMINISTRATION**  
Air Traffic Organization Policy

**ORDER**  
**JO 6000.50E**

**Effective Date:**

**Implementation Date:**

**SUBJ:** National Airspace System (NAS) Project Implementation Risk Planning

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**1. Purpose of This Order.** This order defines requirements for the development of Generic Site Implementation Plans (GSIPs) and Project Risk Plans (PRP) utilized to document, manage and mitigate risks to the NAS during project implementation. These requirements apply to any change or improvement to a NAS facility, supporting facility or infrastructure that has a definite beginning, end and limited duration, regardless of funding source or who is doing the work. Requirements and activities covered by Maintenance handbooks do not apply. The provisions of this order are a necessary component of Strategic Operational Risk Management requirements for projects. Operations Personnel will then use the PRP to augment Tactical Operational Risk Management as defined in the current revision of order 6000.15.

**2. Audience.** This order applies to all FAA employees and contractors who are involved with a NAS project.

**3. Where Can I Find This Order?** You can find this order on the My FAA Employee Website, select "tools & resources" and then select "orders and notices".

**4. What This Order Cancels.** Order 6000.50D.

**5. Effective Date.** This order is effective XX/XX/XXXX. FAA personnel must complete implementation by XX/XX/XXXX.

**6. Explanation of Changes.** This order implements the following changes:

- a.** PRPs replace project plans and the Integrated Risk Management Checklists (IRMC).
- b.** Safety Risk Management (SRM) policy now references the Safety Management System (SMS) Manual.
- c.** Overall Operational Risk Management (ORM) policy now resides in Order 6000.15.
- d.** Clarified the requirements for GSIPs and added a GSIP template in the appendices.
- e.** Added a PRP template in the appendices.
- f.** GSIP and PRP examples will be hosted on the National Airspace System (NAS) Project Implementation Risk Management website: <http://technet.faa.gov/6000.50>

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**Distribution:**

**Initiated By:**

**7. Generic Site Implementation Plan (GSIP) Requirements.** The Program Office is responsible for the completion of a GSIP for each program activity they sponsor. A GSIP describes the steps necessary to implement a project in the National Airspace System (NAS), regardless of where you implement the project or by whom. The GSIP is the basis for the development of location specific design and risk plans that you must develop for each project. SRM assessments are required for all GSIPs and the results documented in a Safety Risk Management Document (SRMD). Refer to the ATO Safety Management System (SMS) Manual for all SRM requirements. The program office must complete the GSIP prior to the first project (key site) and provide it to the implementing organization. Appendix A has an example GSIP template. At a minimum, every GSIP must include the following:

- a. A thorough description of the scope of the project.
- b. A clear identification of all common activities, risks and mitigations.
- c. A clear identification of all items requiring local adaptation due to unique site requirements or configurations.
- d. A clear identification of Environmental and Occupational Safety and Health (EOSH) considerations for each activity.
- e. Any mitigations and assumptions regarding local facility operations (equipment availability, personnel availability, tasks required by local Technical Operations personnel, outages, etc.).
- f. An SRM section that identifies all hazards, mitigations, and residual risks identified during the acquisition process as documented in the System Safety Assessment Report (SSAR) or SRMD as applicable.

**8. Project Risk Plan Requirements.** A Project Risk Plan (PRP) is a living document that promotes coordination and communication thus reducing the risks to the NAS associated with project implementation. A PRP is required for all projects regardless of funding source or project implementer. This section establishes a process to assist project implementers to identify, analyze, communicate and manage risks throughout the lifecycle of a project. Appendix B has an example PRP. Previously completed PRPs will be accessible here <Insert Link>.

Identifying potential risks to the NAS and developing and managing mitigations begins during the planning phase of a project and continues until the project is completed. ORM must be coordinated prior to a site survey when survey activities will create operational risks. Capture this information in the PRP.

a. Risk Plan Process – An analysis to identify, communicate and manage potential risks to the NAS throughout the duration of the project. Document this in the PRP. The process will consist of:

(1) Planning – Analysis of information gathered from project documentation, SMEs, project stakeholders, etc. to generate a preliminary list of activities that may have the potential to negatively affect the NAS.

- (2) Identify risks - Identification of risks associated with the activities.
- (3) Plan risk response – Evaluation to develop mitigation measures.
- (4) Develop PRP – Documentation of project details, activities, risks and mitigations.
- (5) Finalize and Approve – Routed for review and signatures prior to execution.
- (6) Monitor and control – Verification that you implement mitigations and manage new risks throughout the project.

**b.** Project Risk Plan - At a minimum every PRP should have the following elements, except where noted:

(1) Title/Project Data – Elements listed should include the following where applicable:

- (a) Project Title
- (b) Ident
- (c) Location
- (d) JCN
- (e) FAC Code
- (f) Cost Center Code
- (g) Project Implementer
- (h) Project Implementer Organization
- (i) GSIP Title – a copy or link should be attached to the PRP

(2) Schedule – Provide a schedule of activities associated with this project.

(3) Scope – An executive summary of the overall project describing all the work required to execute the project.

(4) Activities List – A detailed description of the project steps and tasks.

(5) PRP Monitor and Control Review Schedule – Document how often the project team will meet in order to review, discuss and update the PRP.

(6) Project Team Members or Stakeholders – A list incorporating all parties who are actively participating or have an interest in the operation of the systems or services that could have potential impacted during the execution of the project. For a list of potential stakeholders, see

## Appendix C.

(7) Risk Mitigation - The documentation of risks and associated mitigations. The size and complexity will vary with each project. The following tools are flexible and scalable depending on the size of the project and may be expanded or condensed as needed.

(a) Issue Register – An optional table useful on large or complex projects to collect and document concerns that require further analysis to determine if a NAS risk exists. You then transfer credible risks to the Risk Register. An issue is a specific problem that could disrupt a project or place its success in doubt. Examples of items that could be included in the Issues Register:

- 1 Flight Procedures
- 2 Security requirements
- 3 Airspace Case studies (7460-1)
- 4 Age of equipment
- 5 Local Events
- 6 Known existing maintenance issues (stuck valves, damaged equipment, etc.)
- 7 Impact to existing systems on power panels
- 8 Maintenance moratoriums
- 9 Adjacent facility outages
- 10 Current system deficiencies
- 11 Underground Utilities

(b) Risk Register - The risk register is a table that records credible NAS risks including those identified in the program GSIP, lessons learned from previous projects, etc. The register clearly states risks and leads to proper mitigation/handling of risks. A risk register should include the following:

- 1 Activity or description of each risk
- 2 Operational consequences and affected NAS services and systems
- 3 Outages required
- 4 Individual or group responsible for mitigation actions
- 5 Mitigation or reference to mitigation register

(c) Mitigation Register - A table of actions that will reduce each risk to an acceptable level. This section of the PRP is flexible to accommodate actions that could range from a simple task to a complex plan.

(8) During the scope definition phase of the project, you should discuss and agree upon PRP routing review and approval signatures. Reviewers can include any potential stakeholder as required.

(9) PRP Signature– The PRP, when approved, ensures that identified activities take place with proper consideration of factors that may negatively impact the NAS. It serves to document results of various coordination activities leading to the execution of a project. Management representatives from the project implementer, Technical Operations District and Air Traffic organizations must sign the PRP prior to commencement of construction, installation or alteration of a NAS facility. At this point, the execution of this plan and any additional risks would be processed utilizing Operational Risk Management principles as defined in the current revision of 6000.15.

(10) PRP Monitor and Control – Verification that you implement mitigations and manage new risks throughout the project.

Vaughn A. Turner  
Vice President, Technical Operations Services



## APPENDIX A. GSIP TEMPLATE

Federal Aviation Administration



Generic Site Implementation Plan (GSIP)

# PROGRAM NAME

Version x.x

Date

**GSIP Change Page**

<b>Action/ Change made to the GSIP</b>	<b>Date of change</b>	<b>Version Number</b>



**Signature Page**

Title: XXX Program

Initiated by:\_\_\_\_\_Date:\_\_\_\_\_

Name: (The Program Office (P.O.) or sponsoring organization, which initiated the document.)

Org/Code:

Phone Number:

Approved by:\_\_\_\_\_Date:\_\_\_\_\_

Name: (The P.O.'s Program Manager)

Org/Code:

Phone Number:

Reviewed by:\_\_\_\_\_Date:\_\_\_\_\_

Name: (The AJW-29 Reviewer. The POC working with the document initiator.)

Org/Code:

Phone Number:

Approved by:\_\_\_\_\_Date:\_\_\_\_\_

Name: (The AJW-13 Reviewer)

Org/Code:

Phone Number:

**SECTION 1: SCOPE/BACKGROUND**

[This Section provides a general description of the program and should identify the activities required to plan and implement the project or system. Information such as number of sites, means of implementation, schedule milestones, etc. should be included in this section.]

**SECTION 2: System Description (if applicable)****2.1 Functional Description**

[In this section, describe the functions the system provides.]

**2.2 Physical Description**

[In this section, describe the components of the system.]

**SECTION 3: ROLES AND RESPONSIBILITIES**

[In this section, list the organizations that must be coordinated with in order to implement the project and provide the roles and responsibilities for each organization as they relate to the project.]

**3.1 Program Office****3.2 Service Center****3.3 Project Implementer****3.4 Technical Operations Districts****3.5 Air Traffic****SECTION 4: LOGISTICS SUPPORT**

[In this section, identify the items that the program office will provide for the project.]

**SECTION 5: OPERATIONS SUPPORT/LIFECYCLE SUSTAINMENT**

[In this section, identify the organization(s) that will be responsible for continued life cycles sustainment.]

**SECTION 6: DESIGN REQUIREMENTS**

[In this section, provide information such as siting criteria, space, electrical, bonding, and grounding requirements, etc. not covered in other Orders or Directives that the project implementer should address the design phase.]

**6.1 Local Site Adaptation**

[In this section, the program office should provide information to support the project implementer with real estate requirements, obstruction and flight procedure considerations, etc. as they plan to implement the project locally.]

## 6.2 Environmental and Occupational Safety & Health (EOSH)

[In this section, the program office should provide information to support the project implementer with EOSH considerations as they plan to implement the project locally. Items such as electrical and fire life safety, labeling and material handling should be addressed in this section, unless covered by other Orders or Directives.]

## SECTION 7: SAFETY MANAGEMENT SYSTEM (SMS) REQUIREMENTS

[In this section, provide the outcome of the safety risk management assessment that the acquisition office completed during the acquisition phase.]

## SECTION 8: IMPLEMENTATION REQUIREMENTS

[In this section, list the high-level standards and requirements (e.g. space requirements, system requirements, etc.) associated with the project.] The GSIP is not intended to address all aspects of project implementation for all possible scenarios. Project planning, engineering, surveys, environmental considerations, site preparation, coordination, notifications (NOTAMs), flight check activities, etc. are developed and addressed on a local per site basis.

## SECTION 9: RISK MANAGEMENT

[In this section, provide a clear identification of all common activities, risks and mitigations that you will use in a Project Risk Plan. Also, include any risk mitigations and assumptions regarding local facility operations (equipment availability, personnel availability, tasks required by local Technical Operations personnel, etc.).

## SECTION 10: APPENDICES

APPENDIX A.POINTS OF CONTACTS

APPENDIX B.LIST OF REFERENCES

APPENDIX C.LIST OF ACRONYMS

APPENDIX D.STANDARD SYSTEM CONFIGURATIONS

APPENDIX E. Safety Risk Management Documentation



## APPENDIX B. PRP TEMPLATE AND EXAMPLE

### PRP TEMPLATE

**<Title>**

## Project Risk Plan

<Version 1.0, XX-XX-XXXX>

### DOCUMENT ACCEPTANCE and RELEASE NOTICE

The signatures on this Project Risk Plan ensure identified activities take place with proper consideration of factors that may negatively impact the NAS. It serves to document results of various coordination activities leading to the execution of a project.

Initiated By: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_  
(Project Implementer) (First Last, Title)

Approved By: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_  
(Front Line Manager) (First Last, Title)

Identification	
Project Description	<Description>
JCN (s)	<Job Control Number>
CIP	<CIP Number>
Service Area	<Service Area>
Tech Ops District Office	<District Office>
Location	<Job Location>
Cost Center Code	<CCD Number>
LOC ID and Facility Type	<LOC, FACID>
Project Implementer	<Name>
Project Baseline Date	<Date>
GSIP Title	<The title of the GSIP provided by the Program Office if applicable>

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Brief Description of Title

## 1 Purpose

A Project Risk Plan (PRP) is a living document that is intended to promote coordination and communication thus reducing the risks to the NAS associated with project implementation. The PRP should be monitored throughout the project life cycle and can evolve depending on the project phase.

This document will achieve the following:

- Formally identify, analyze, and mitigate risks during the project implementation.
- How often the PRP will be reviewed and who will be involved.
- A complete Risk Register containing all risks identified for the project and their risk mitigation strategies.

## 2 Project Schedule

Project Task	Start Date	Completion Date
<Task or Milestone>	<Date>	<Date>
<Task or Milestone>	<Date>	<Date>
<Task or Milestone>	<Date>	<Date>
<Task or Milestone>	<Date>	<Date>
<Task or Milestone>	<Date>	<Date>
<Task or Milestone>	<Date>	<Date>



[illegible]

Brief Description of Title

## 4 Monitor and Review

Frequency of Project Risk Plan Review
<Provide a schedule for the review of the PRP>
<Short duration projects may only require a minimal number of reviews>
<Larger duration projects may require more formal monthly or weekly reviews>
<Site Survey>
<10% Design Review>
<90% Design Review>
<Preconstruction>
<Scope Change>
<Weekly Progress Meetings>

Brief Description of Title

## 5 Project Team Members

	Name	Title	Email	Organization	Role <sup>1</sup>	Phone
1	<Name>	<Title>	<email>	<Organization>	<Initiator>	<XXX-XXX-XXXX>
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
16						
17						

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<sup>1</sup> Identify PRP role as initiator, approver, and reviewer.

Brief Description of Title

## 6 Issues Register

Issue No.	Issues Description <sup>1</sup>	Assigned to	Date	Priority, Actions, & Progress Notes <sup>2</sup>	Date Resolved
1	<An issue that requires investigation>	<Name>	<Date>	<ul style="list-style-type: none"> <li>&lt;In this section, record information accumulated while discussing issues. There may be multiple entries. Examples are below&gt;</li> </ul>	<XX-XX-XXXX> <Remains on register for future reference>
2	<An issue that requires investigation>	<Name>	<Date>	<ul style="list-style-type: none"> <li>&lt;Accumulated information&gt;</li> <li>&lt;Accumulated information&gt;</li> <li>&lt;Determined to be a risk&gt;</li> </ul>	<Remove issue from this register and transfer it to the risk register>
3	<An issue that requires investigation>	<Name>	<Date>	<Investigation determined no risk>	<XX-XX-XXXX> <Remains on register for future reference>
4	<An issue that requires investigation>	<Name>	<Date>	<Determined to be a risk>	<Remove issue from this register and transfer it to the risk register>
5					
6					
7					
8					

<sup>1</sup> Identify anything that might have a negative effect.

<sup>2</sup> Enter information /status updates for each review cycle.

Brief Description of Title

## 7 Risk Register

Activity ID	Activity or Description of Risk	Identification of Consequences and the NAS System Impacted <sup>1</sup>	Outage	Date of Review	Individual Responsible for Mitigation Action(s)	Mitigation Action Timeline	MSOW <sup>2</sup> Register ID #
<b>&lt;100 – Activity Description&gt;</b>							
<1>	<Risk Description>	<Consequence & System>	<No>			<Design>	<10>
<b>&lt;110 – Activity Description&gt;</b>							
<1>	<Risk Description>	<Consequence & System>	<No>			<Design>	<10>
<2>	<Risk Description>	< Consequence & System >	<No>			<Construction>	<20>
<3>	<Risk Description>	< Consequence & System >	<Yes>			<Checkout>	<20>
<4>	<Risk Description>	< Consequence & System >	<Yes>			<Design>	<30>
<b>&lt;120 – Activity Description&gt;</b>							
<1>	<Risk Description>	< Consequence & System >	<No>			<Construction>	<30>
<b>&lt;130 – Activity Description&gt;</b>							
<1>	<Risk Description>	< Consequence & System >	<No>			<Construction>	<30>
<2>	<Risk Description>	< Consequence & System >	<No>			<Checkout>	<40>
<b>&lt;140 - Activity Description&gt;</b>							
<1>	<Risk Description>	< Consequence & System >	<Yes>			<Construction>	<30>
<2>	<Risk Description>	< Consequence & System >	<Yes>			<Checkout>	<40>

<sup>1</sup> This can be useful in identifying appropriate mitigation actions.

<sup>2</sup> Mitigation Scope of Work – Specify the reference number for the MSOW Register.

Brief Description of Title

## 8 Mitigation Scope of Work Register (MSOW)

MSOW ID #	Mitigation Scope of Work
<10>	<ul style="list-style-type: none"><li>• &lt;Mitigation work description&gt;</li><li>• &lt;Mitigation work description&gt;</li><li>• &lt;Mitigation work description&gt;</li></ul>
<20>	<Mitigation work description>
<30>	<ul style="list-style-type: none"><li>• &lt;Mitigation work description&gt;</li><li>• &lt;Mitigation work description&gt;</li></ul>
<40>	<Mitigation work description>

## PRP EXAMPLE

# ATCT Roof Replacement and HVAC Project

## Project Risk Plan

Version 1.1, 2-5-2018

**DOCUMENT ACCEPTANCE and RELEASE NOTICE**

The signatures on this Project Risk Plan ensure identified activities take place with proper consideration of factors that may negatively impact the NAS. It serves to document results of various coordination activities leading to the execution of a project.

Initiated By: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_  
(Project Implementer) (First Last, Title)

Approved By: \_\_\_\_\_ DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_  
(Front Line Manager) (First Last, Title)

Identification	
Project Description	Replace the ATCT roof and the HVAC units in the base building
JCN (s)	
CIP	XYZ.01-00
Service Area	Western Service Area
Tech Ops District Office	XYZ Group
Location	XYZ, Oregon
Cost Center Code	XYZ12
LOC ID and Facility Type	XYZ TOWB
Project Implementer	FAA Employee, Project Engineer - AJW-2W123
Project Baseline Date	02/04/16
GSIP Title	



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## 1 Purpose

A Project Risk Plan (PRP) is a living document that promotes coordination and communication thus reducing the risks to the NAS associated with project implementation. You must monitor the PRP throughout the project life cycle and can evolve depending on the project phase.

This document will achieve the following:

- Formally identify, analyze, and mitigate risks during the project implementation.
- How often you review the PRP and who will be involved.
- A complete Risk Register containing all risks identified for the project and their risk mitigation strategies.

## 2 Project Schedule

Project Task	Start Date	Completion Date
Site Survey	11/23/15	12/28/15
Engineering	02/02/16	06/03/16
Construction	06/12/17	09/08/17
Work Completion date	09/15/17	04/13/18

### 3 Project Scope

General Project Description	
<p>This project replaces packaged outdoor HVAC units on the cab and base building at the air traffic control tower in XYZ, OR. Work includes but is not limited to: Removal of five (5) HVAC units, associated ductwork, electrical power circuits, and controls; installation of five (5) fully redundant HVAC, associated ductwork, electrical power circuits, and new controls.</p> <p>This project also replaces the existing built-up roofing system from the cab, base building and EG roof. Work includes, but is not limited to: Removal of the existing built up roofing system, insulation, walking pads, and metal flashing down to the existing metal deck and parapet wall substructure; installation of a new fully adhered PVC roofing system, new metal flashing, and walking pads.</p>	
Activity Number	Activity Description
100	Site mobilization
110	Crane set up
120	Set up temporary cooling
130	Demolish exterior duct work and condensing units
140	Demolish existing roof
150	Set new condensing units
160	Provide new HVAC controls
170	Provide new exterior ductwork
180	Provide new electrical power distribution
190	Bond condensers, ductwork, and structures to the earth electrode system
200	Perform HVAC operation tests, balancing, and adjustments
210	Complete performance tests
220	Install new roof
230	Demobilize

## 4 Monitor and Review

Frequency of Project Risk Plan Review
Site Survey
10% Design Review
90% Design Review
Each design scope change
Preconstruction meeting
Each weekly construction progress review meeting
Required equipment outage
Construction contract modification

## 5 Project Team Members

	Name	Title	Email	Organization	Role <sup>1</sup>	Phone
1	FAA Employee	AT Manager	faa.employee@faa.gov	XYZ ATCS	Approver	123-456-7890
2	FAA Employee	District Manager	faa.employee@faa.gov	AJW-XYZ	Reviewer	123-456-7890
3	FAA Employee	SSC Manager	faa.employee@faa.gov	WWR16-XYZ	Reviewer	123-456-7890
4	FAA Employee	TOM	faa.employee@faa.gov	WWR1-XYZ	Approver	123-456-7890
5	FAA Employee	SECM	faa.employee@faa.gov	AJW-XYZ	Reviewer	123-456-7890
6	FAA Employee	Project Engineer	faa.employee@faa.gov	AJW-XYZ	Initiator	123-456-7890
7	FAA Employee	Safety Engineer	faa.employee@faa.gov	AJW-XYZ	Reviewer	123-456-7890
8	FAA Employee	Terminal Manager	faa.employee@faa.gov	AJW-XYZ	Reviewer	123-456-7890
9	FAA Employee	SSC Coordinator	faa.employee@faa.gov	WWR16-XYZ	Reviewer	123-456-7890
10	FAA Employee	POCC	faa.employee@faa.gov	AJW-XYZ	Reviewer	123-456-7890
11	FAA Employee	Resident Engineer	faa.employee@faa.gov	AJW-XYZ	Reviewer	123-456-7890
12						
13						
16						
17						

<sup>1</sup> Identify PRP role as initiator, approver, and reviewer.

## 6 Issues Register

Issue No.	Issues Description <sup>1</sup>	Assigned to	Date	Priority Actions & Progress Notes <sup>2</sup>	Date Resolved
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
13					

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<sup>1</sup> Identify anything that might have a negative effect.

<sup>2</sup> Enter information /status updates for each review cycle.

## 7 Risk Register

Index ID	Activity or Description of Risk	Identification of Consequences and the NAS System Impacted 1	Outage	Date of Review	Individual responsible for mitigation action(s)	Mitigation Action Timeline	MSOW <sup>2</sup> Register ID #
<b>100 - Site mobilization</b>							
.1	Working on ladders greater than 6'	Safety risk for individuals performing the work	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	10
<b>110 - Crane set up</b>							
.1	Using a crane	Fiscal and equipment damage from improper use of the crane	Yes	02/16/16	FAA Employee, AJW-XYZ	During Construction	11
<b>120 - Set up temporary cooling</b>							
.1	Removal of HVAC equipment	Loss of NAS equipment service because of over temperature	Yes	02/16/16	FAA Employee, AJW-XYZ	During Construction	12
<b>130 - Demolish exterior duct work and condensing units</b>							
.1	Removal of HVAC equipment	Loss of NAS equipment service because of over temperature	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	12
.2	Construction activities with noise greater than 65 dB such as sawing, drilling, etc.	Disruption to air traffic control	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	13
<b>140 - Demolish existing roof</b>							
.1	Working on ladders greater than 6'	Safety risk for individuals performing the work	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	10
.2	Reroof Activities	Water infiltration	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	14

<sup>1</sup> This can be useful in identifying appropriate mitigation actions.

<sup>2</sup> Mitigation Scope of Work – Specify the reference number for the MSOW Register.

Activity ID	Activity or Description of Risk	Identification of Consequences and the NAS System Impacted <sup>1</sup>	Outage	Date of Review	Individual responsible for mitigation action(s)	Mitigation action timeline	MSOW <sup>2</sup> Register ID #
<b>150 - Set new condensing units</b>							
.1	Construction activities with noise greater than 65 dB such as sawing, drilling, etc.	Disruption to air traffic control	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	15
<b>160 - Provide new HVAC controls</b>							
.1	Working on ladders greater than 6'	Safety risk for individuals performing the work	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	10
.2	Removal of HVAC or electrical	Loss of fire protection system	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	16
<b>170 - Provide new exterior ductwork</b>							
.1	Construction activities with noise greater than 65 dB such as sawing, drilling, etc.	Disruption to air traffic control	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	15
<b>180 - Provide new electrical power distribution</b>							
.1	Unsafe contact with electrical circuits Lockout/tagout	Injury from electric shock or arc flash	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	17
.2	Replacing panel breakers	Loss of NAS equipment service due to power outage	No	02/16/16	FAA Employee, SSC Coordinator	During Construction	18
.6	Humidifiers H-11A & H-11B will be de-energized	Increase static electricity in the VSR equipment room	Yes	02/16/16	FAA Employee, SSC Coordinator	During Construction	18.1
.7	Panel C-E will be de-energized	Loss of TMU Monitors in the control room floor	Yes	02/16/16	FAA Employee, SSC Coordinator	During Construction	18.1
.8	Fire alarm shut down	Loose zone #2 photoelectric smoke detectors	Yes	02/16/16	FAA Employee, SSC Coordinator	During Construction	18.2

<sup>1</sup> This can be useful in identifying appropriate mitigation actions.

<sup>2</sup> Mitigation Scope of Work – Specify the reference number for the MSOW Register.



Activity ID	Activity or Description of Risk	Identification of Consequences and the NAS System Impacted <sup>1</sup>	Outage	Date of Review	Individual Responsible for Mitigation Action(s)	Mitigation Action Timeline	MSOW <sup>2</sup> R register ID #
.9	Elevator will be taken out of service	"A" position consoles can't be taken down to 1st floor for repair	Yes	02/16/16	FAA Employee, SSC Coordinator	During Construction	18.3
.10	IDS will be de-energized	Equipment taken out of service	Yes	02/16/16	FAA Employee, SSC Coordinator	During Construction	18.1
.11	Panel EA will be shut down	Loss of TMU printers in the control room floor	Yes	02/16/16	FAA Employee, SSC Coordinator	During Construction	18.1
<b>190 - Bond condensers, ductwork, and structures to the earth electrode system</b>							
.1	Working on ladders greater than 6'	Safety risk for individuals performing the work	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	10
<b>200 - Perform HVAC operation tests, balancing, and adjustments</b>							
.1	Working on ladders greater than 6'	Safety risk for individuals performing the work	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	10
.2	Remove HVAC or electrical appurtenance that disrupts FCP	Partial or full loss of the fire protection system	No	02/16/16	FAA Employee, SSC Coordinator	During Construction	16
<b>210 - Complete performance tests</b>							
.1	Working on ladders greater than 6'	Safety risk for individuals performing the work	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	10
<b>220 - Install new roof</b>							
.1	Reroofing activities	Water infiltration during construction	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	14
.2	Painting, curing, or sealing activities	Reduced indoor air quality	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	19
<b>230 - Demobilize</b>							
.1	Working on ladders greater than 6'	Safety risk for individuals performing the work	No	02/16/16	FAA Employee, AJW-XYZ	During Construction	20

<sup>1</sup> This can be useful in identifying appropriate mitigation actions.

<sup>2</sup> Mitigation Scope of Work – Specify the reference number for the MSOW Register.

## 8 Mitigation Scope of Work Register (MSOW)

MSOW ID #	Mitigation Scope of Work
10	<ul style="list-style-type: none"> <li>• Insure the safety plan is strictly followed</li> <li>• Use proper fall protection apparatus</li> </ul>
11	<ul style="list-style-type: none"> <li>• Follow activity hazard analysis</li> <li>• Comply with facility procedures</li> <li>• Only have licensed personnel operate the crane</li> </ul>
12	Require the Contractor to provide temporary air conditioning.
13	Schedule this work for nonpeak hours
14	<ul style="list-style-type: none"> <li>• Only as much roofing will be removed as can be replaced by the end of the work day</li> <li>• No opening in the roof cover shall be attempted in threatening weather</li> <li>• Any opening made shall be resealed prior to suspension of work the same day</li> <li>• Contractor shall provide weather protection as required</li> </ul>
15	Schedule this work in non-peak hours
16	<ul style="list-style-type: none"> <li>• Notify fire department of outages</li> <li>• Be aware of smoke detector locations and other fire protection elements</li> </ul>
17	<ul style="list-style-type: none"> <li>• Follow LO/TO procedures and use proper PPE</li> <li>• All penetrations of electrical and electronic equipment will be performed with the equipment de-energized</li> </ul>

MSOW ID #	Work Description
18	<ul style="list-style-type: none"><li>Require the Contractor to perform critical electrical work during a scheduled outage</li></ul>
18.1	<ul style="list-style-type: none"><li>Schedule outage with MOCC</li></ul>
18.2	<ul style="list-style-type: none"><li>Provide a 120 VAC circuit from critical power panel</li></ul>
18.3	<ul style="list-style-type: none"><li>Two extra A position consoles will be moved to the second floor and placed in reserve</li></ul>
19	<ul style="list-style-type: none"><li>Reduce outdoor air intake</li><li>Use zero VOC adhesives</li><li>Install power generator on ground instead of roof</li><li>Set space to negative air pressure</li></ul>



**APPENDIX C. POTENTIAL PRP STAKEHOLDERS**

## Air Traffic

- Manager
- NATCA Rep
- Air Traffic POC (Other)

## Technical Operations District

- Technical Operations Manager
- SSC Manager
- SSC Coordinator
- PASS Representative
- ATSS POC

## Engineering Services

- Group Managers
- ES Center Manager
- Project Engineer
- Resident Engineer
- Design Engineer
- EOSH Engineer
- Project Integrators
- Installation Crew Lead

## Acquisitions

- Contracting Officer
- CO Supervisor
- Contractor Project Manager
- Contractor

## Technical Services

- TSOG
- SECM
- OESG
- NAS Plans Program Coordinator (NPPM)

## PRG

- PIM
- PIM Analyst
- NAS Planning Specialist
- NPI Supervisor
- Requirements Specialist

## FAA Security

## Flight Standards

## Flight Procedures

## FAA Airports Division

## Airport Authority

- Airport Manager
- Airport POC
- Airlines
- Operators