

Procedure	Facility Management - Hurricane Plan			Number: MSO-P-0052	
Unit Issuing: MSO	Approved by: MOSS	Initial Issue Date: 11/14/12	Page: 1 of 8	Revision: 2 Eff Date: 02/15/2020	

SUBJECT FACILITY MANAGEMENT HURRICANE PROCEDURE

PURPOSE

This procedure defines the Facility Managers responsibilities to ensure all facilities, systems, and equipment is properly prepared in the event severe weather threatens the Kennedy Space Center (KSC).

SCOPE AND APPLICABILITY

This procedure applies to all Facility Managers under the Base Operations Support & Services contract (BOSS) and shall be implemented to prepare for tropical storms or hurricanes. Facility Managers are responsible for ensuring the tasks documented in this procedure are performed as required and coordinated with the Facility Manager Coordinator (FMC).

PROCESS

This procedure provides the BOSS Facility Managers direction for protecting personnel, facilities, and assets from the effects of a hurricane/tropical storm. The Facility Manager is responsible for conducting a complete evaluation of the exterior of their facility(s) each April in preparation for the Hurricane season which begins June 1 and continues until through November 30. Any item outside a facility that cannot easily be picked up and removed shall be tied down per [KSC-PLN-1904](#). All work identified during the inspection shall be completed in a timely manner to ensure the facility is poised to withstand a possible storm event.

1. HURRICANE PREPARATIONS

- 1.1. Facility Managers (FM) serve as the focal point in their assigned facilities for all hurricane preparation and restoration matters and shall communicate as required with the Facility Manager Department Action Coordinator (DAC). The DAC shall communicate with the Division Hurricane Coordinator (DHC) per [EMP-P-0001](#), Tropical Storm And Hurricane Preparation And Ride-Out, and [EMP-P-0003](#), Damage, Assessment and Recovery
- 1.2. The DHC shall ensure that the DAC attends Hurricane Coordinator Training as requested by the Kennedy Space Center (KSC) Emergency Operations Center (EOC).

- 1.3. Facility Managers are responsible for developing a customized Hurricane Checklist for their individual facility(s) based on the unique features of the structure(s). It is the Facility Managers responsibility to ensure all doors are secured prior to leaving the Center when a HURCON II is declared.
- 1.4. Hurricane preparations shall be in accordance with [EMP-P-0001](#) and [FAM-I-0005](#).
- 1.5. If special preparedness measures are necessary, submit the requirement(s) and the justification to Facilities Services so work can be coordinated in advance. All special requirements shall be annotated on the checklists to ensure the work is completed by the appropriate shop during the proper HURCON Stage.
- 1.6. For emergency generator requirements to ride through the hurricane event, advise personnel to submit form PPS-P-2130 prior to June 1st.

2. HURCON IV (50-KNOT/58 MPH WINDS WITHIN 72 HOURS)

Commence hurricane preparations when HURCON IV is declared. Upon declaration of HURCON IV, implement specific checklists and preparation activities.

- 2.1. Gather any necessary supplies from Logistics to secure the contents of the building.
- 2.2. DAC shall discuss with all FMs the KSC "Return To Work" access protocol and KSC Hotline phone #s 861-7900 (Local) or 1-866-572-4877 (NASA Toll Free)
- 2.3. Designate Damage Assessment and Recovery Team (DART) members to be recalled for recovery.
- 2.4. Brief DART Members on return to work.
- 2.5. Ensure recovery forces have emergency supplies such as flashlights, critical tools and equipment to perform preparatory and recovery tasking.
- 2.6. Check with the individual(s) who are responsible for Spill Prevention Control and Countermeasures (SPCC) within your area of responsibility and ensure all preparations have been completed and the site(s) is secured.
- 2.7. Notify Construction Managers and contractors in or around your facility when a storm is threatening the area and ensure they take the necessary steps to secure their equipment and materials or remove them to a safe location.
- 2.8. Notify the occupants of your facility(s) in advance of an approaching storm and remind them to secure items stored outdoors; check to see if they have the

proper materials and supplies for securing machinery, hardware, and office equipment.

- 2.9. As a storm forms, begin preparations prior to HURCON IV being declared by contacting the Duty Office for removal of wood and other items that could become projectiles during a storm.
- 2.10. Notify the FMC upon the completion of all tasks identified for HURCON IV activities per the Checklists. The FMC shall compile the information provided by the FM and notify the DHC. The DHC shall notify the Payload Services Emergency Preparedness Coordinator (PEPC) when all facilities are 100% complete for HURCON IV activities.

3. HURCON III (50-KNOT/58 MPH WINDS WITHIN 48 HOURS)

HURCON III is the phase when most preparation activities shall be completed and evacuation of non-essential personnel may be directed. KSC shall initiate hurricane securing (i.e., safeguarding) of facilities, property, and equipment when HURCON III is announced.

- 3.1. When HURCON III is declared remind the occupants that Government/Company vehicles not in use shall be parked in a secure location with the parking brake on, keys in the ignition, and the gas tank full per [KDP-KSC-P-3006](#) and [EMP-P-0001](#).
- 3.2. Check dumpsters located near your facility(s) to ensure they are secure with the lids closed to prevent rainwater intrusion.
- 3.3. Prior to leaving the Center, Check and verify operating status of required generators, air compressors, fuel tanks, etc. Coordinate with Facilities, Systems, and Equipment & Utilities (FSEU) Branches as necessary.
- 3.4. Notify the FMC upon the completion of all tasks identified for HURCON III activities per the Checklists. The FMC shall compile the information provided by the FM and notify the DHC. The DHC shall notify the Payload Services Emergency Preparedness Coordinator (PEPC) when all facilities are 100% complete for HURCON III activities.
- 3.5. If required by Heating, Ventilation, and Air Conditioning (HVAC), under FAM-I-0001, Hurricane Operations for KSC HVAC Plants, notify building occupants of status of cooling systems at Utility Annex and IACP going into HURCON II securing. Advise Payload customers of shutdown activities to determine how this will affect current payload posture.

4. HURCON II (50-KNOT/58 MPH WINDS WITHIN 24 HOURS)

HURCON II is the phase when all securing actions shall be completed or terminated. The remainder of KSC and contractor personnel shall be released effective at HURCON II when directed by the CD through the NASA Emergency Management Officer (NEMO).

- 4.1. Ensure all HURCON IV/III actions are complete
- 4.2. Verify facility personnel are securing all IT equipment (PC and associated hardware) and wrapping in plastic bag prior to exiting KSC as directed in the next step.
- 4.3. Personnel not required for execution of hurricane preparations and/or Ride-Out Team shall be released from duty when directed by the ISC General Manager.
- 4.4. Notify the FMC upon the completion of all tasks identified for HURCON II activities per the Checklists. The FMC shall compile the information provided by the FM and notify the DHC. The DHC shall notify the Payload Services Emergency Preparedness Coordinator (PEPC) when all facilities are 100% complete for HURCON II activities.

5. HURCON I (50-KNOT/58 MPH WINDS WITHIN 12 HOURS)

HURCON I is the phase when KSC shall remain secured and the Ride out Team (ROT) shall be sheltered or evacuated.

- 5.1. ROT personnel shall be directed to shelter prior to the arrival of 50 knot/58 MPH winds.
- 5.2. All other personnel unless requested to remain to complete HURCON II activities by the Management Action Team and DHC should be evacuated at this point per EMP-P-001
- 5.3. All ROT members will abide by their respective Hurricane Preparedness procedures.

6. POST HURRICANE OPERATIONS – RETURN TO NORMAL OPERATIONS

6.1. After the storm passes the notification to report to work will be broadcast over the local media stations. Depending upon the post-storm conditions, the broadcast will direct:

- The Ride-Out/DART members reporting instructions (emergency work crews)
- Report to work at a certain hour (general populace)
- Not report to work until further notice (general populace)

6.1.1. All employees to check the emergency information hotline phone #s 861-7900 (Local) or 1-866-572-4877) (NASA Toll Free) or KSC Emergency Management webpage (<https://kscsos.com>).

6.1.2. Unless supporting DART operations, normal employees will not return to work until the Center Director declares “All Clear” per EMP-P-0001 and KDP-KSC-P-3006.

6.1.3. If we encounter a severe storm and communications are totally destroyed to the point broadcasts can’t be made over local media, DART Team members only should report to their workstation to augment the Ride-Out Team when roadways are safe. The general populace should stay at home until either contacted by phone, or receive notification over the local media stations.

6.1.4. If the Center was evacuated under Category 2 or higher storm, listen to radio and television announcements or call the Hurricane Center for status. Reentry may require the issuance of County Road Block Passes.

6.2. DART and DAT member activities

6.2.1. Damage Assessment and Recovery Team (DART) and Damage Assessment Team (DAT) activities are covered under EMP-P-003, Damage Assessment and Recovery and KDP-KSC-P-3007, Damage Assessment and Recovery.

6.2.2. All DART team members will attend a NASA safety briefing prior to entering any area other than the safety briefing site.

6.2.3. If you are assigned to a DART team, you will be tasked with an area to inspect and develop a damage assessment list as a member of the team. It is anticipated that your assignment would be those facilities and/or areas you are normally responsible for but you may not be. Limit your activities to those tasks and/or areas assigned. Do not enter an area declared unsafe or those that you suspect are unsafe without prior approval from Safety.

6.2.4. If supporting the Damage Assessment Team, all damage shall be reported to the Damage Assessment Team Leader and DHC utilizing either Form FAM-F-0001A, Hurricane Damage form or form FAM-F-0001B Hurricane Damage Assessment Worksheet. The Damage Assessment Team Leader will forward all reports to the BOSS Management Action Team (MAT) and Response/recovery Team Coordinator (RTC).

- 6.2.5. Facility Managers in Payload Processing Facilities shall establish communications with the PEPC and work as the interface with the DHC and provide required support.
- 6.2.6. If a facility is found to be uninhabitable, it may be necessary to find temporary housing elsewhere on center for those assigned to that facility. To accomplish this task, coordination with the Space Utilization Group and NASA SI shall be required.
- 6.2.7. When appropriate, have equipment that was installed prior to the storm event removed, i.e. generators, shutters, etc.
- 6.2.8. Report all status for reopening facilities to the DAC.

RECORDS

The following records are retained by the organizations listed below:

Record	Responsible Organization
FAM-F-0001A, Hurricane Damage Documentation Form	Hurricane Response team
FAM-F-0001B, Hurricane Damage Assessment Form	Hurricane Response team
Facility Manager Hurricane Checklists	Facility Managers department

AFFECTED DIVISIONS/OFFICES

Engineering Services
FSEU and OM&E

ROLES AND RESPONSIBILITIES

Facility Manager Coordinator

- Report to the DHC when work is complete at each HURCON stage.
- Coordinate information between the DHC and the PEPC as required.
- Provide the DHC copies of the Facility Manager Hurricane Checklists prior to the start of each Hurricane Season.

Facility Managers

- Comply with the requirements directed by this and governing procedures.
- Update checklists as necessary.

- Report completion of each HURCON stage on the appropriate checklists.

Mission Support

- Issue work orders to support pre-storm activities utilizing the appropriate charge numbers.

REFERENCE DOCUMENTS

The following documents are referenced in this procedure:

Document Number	Title
EMP-P-0001	Tropical Storm And Hurricane Preparation And Ride-Out
EMP-P-0003	Damage Assessment and Recovery
FAM-F-0001A	Hurricane Damage form
FAM-F-0001B	Hurricane Damage Assessment form
KDP-KSC-P-3006	Tropical Storm and Hurricane Preparation and Recovery
KDP-KSC-P-3007	Damage Assessment and Recovery
KSC-PLN-1904	Trailer/Equipment Tie Down Plan for KSC

ACRONYMS

BOSS	Base Operations Support & Services contract
DART	Damage Assessment and Recovery Team
DAC	Department Action Coordinator
DAT	Damage Assessment Team
FM	Facility Manager
FMC	Facility Manager Coordinator
FSEU	Facilities, Systems, Equipment & Utilities
HURCON	Hurricane Condition
KSC	Kennedy Space Center
MAT	BOSS Management Assessment Team
MSO	Mission Support Office
PEPC	Payload Services Emergency Preparedness Coordinator
RTC	Response/recovery Team Coordinator
SPCC	Spill Prevention Control and Countermeasures

DEFINITIONS

None

REVISION RECORD

The following revisions have been applied to this document:

Revision Number	Change Description	Date
0	Initial Release	11/14/12
1	Updated to BOSS contract	06/11/19
2	Updated document for 2020	02/15/2020

DOCUMENT APPROVALS

3/5/2020

X Barbara White

Barbara I White
MOSS Department Manager
Signed by: cards

2/13/2020

X Michael J. Sweeney

Michael J. Sweeney
Manager, Spaceport Integration Center
Signed by: 1c0b27d8-b812-4628-9804-42f1ada5f372