

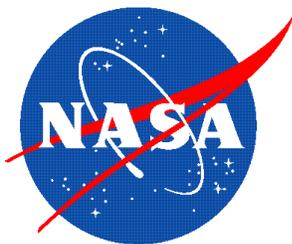
SUBORBITAL AND SPECIAL ORBITAL PROJECTS DIRECTORATE
803/Safety Office

Hurricane / Nor'easter Preparedness Plan

For

Wallops Flight Facility (WFF)

Effective: 12 July 2012



Goddard Space Flight Center
Wallops Flight Facility
Wallops Island, Virginia 23337

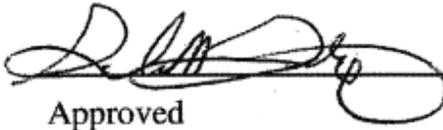
National Aeronautics and
Space Administration

CONCURRENCE AND APPROVAL



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12 July 2012
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12-July-2012
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1.0 INTRODUCTION

This plan establishes the responsibility and procedures to effectively and safely respond to and mitigate the effects of predicted severe wind events such as hurricanes or nor'easters occurring at or near the Wallops Flight Facility (WFF). Comments and questions concerning the contents of this plan should be addressed to the Safety Office, Code 803, Wallops Flight Facility, Wallops Island, Virginia 23337.

This is a controlled plan and will be reviewed annually and revised by page changes when necessary. This plan supercedes all previous versions of the Wallops Flight Facility Hurricane/Nor'easter Preparedness Plan.

1.1 Applicability

This plan applies to Goddard Space Flight Center (GSFC) personnel at WFF, all WFF Partner personnel, all Commercial Operations personnel and all Contract personnel at WFF. Use of WFF personnel in this Plan refers to all entities at WFF unless otherwise noted.

2.0 PURPOSE, SITUATION AND ASSUMPTIONS

2.1 Purpose

This plan provides for an effective and coordinated response in the event of a hurricane or significant nor'easter. The goal for this plan is to protect life, preserve government assets, and to quickly return to the conduct of our missions. This plan addresses the procedures to prepare projects, employees and facilities for storm impacts, for closure of the Island, for recovery projects and support to the local community.

2.2 Situation

WFF is one of many coastal localities in Virginia for which hurricanes and significant nor'easters may present a major hazard. If a hurricane occurs in eastern Virginia, the coastal areas of Accomack County, including the entire WFF, are likely to be severely affected by storm surge and coastal flooding. If a major hurricane passes near Accomack County, the storm surge at Wallops Island could reach almost 20 feet above sea level. The entire Island could experience major damage. All Island personnel will be evacuated if a major hurricane threatens the area. Nor'easters present similar hazards, and this plan will be used as appropriate when a nor'easter threatens WFF. When the term hurricane is used in the remainder of this plan, it is implied that emergency response would be the same for a nor'easter or other severe wind/flood event.

2.3 Assumptions

This plan was developed on the following assumptions:

- WFF will cooperate with local governments in planning and preparing for severe weather to the fullest extent possible.

- WFF will cooperate with and support the Federal Emergency Management Agency (FEMA) and other agencies as available resources permit in post-hurricane recovery activities.
- Accomack County may, as a last resort shelter, request WFF to accept approximately 200 evacuees and provide basic conditioned space and restroom facilities. Accomack County will direct infirmed patients to county hospitals and nursing homes. Accomack County will be responsible for the evacuees and make arrangements for Shelter Managers. The Wallops Security Office (WSO) will arrange entry processes suitable for an emergency situation.
- Hurricane categories depict how intense the hurricane will be according to the Saffir/Simpson Scale. WFF responses will be tailored to match the risks. Planned responses allow for protective actions and evacuations to be completed before the onset of tropical storm force winds. If Wallops is expected to be impacted by a Category 3 or higher hurricane, evacuees will be directed further inland. If a Category 3 or higher hurricane is expected, the Executive Management Team will decide whether to maintain a ride out crew or evacuate all personnel from WFF during the event.

<u>STORM TYPE</u>	<u>WINDS (MPH)</u>	<u>(KT)</u>
Tropical Storm	39 – 73	34-63
Category 1 Hurricane	74 - 95	64-82
Category 2 Hurricane	96 - 110	83-95
Category 3 Hurricane	111 - 130	96-113
Category 4 Hurricane	131 - 155	114-134
Category 5 Hurricane	>155	>135

3.0 CONCEPT OF OPERATIONS

3.1 Management

Emergency Operations will be directed and controlled by the Director of Suborbital and Special Orbital Projects who chairs the Executive Management Team (EMT) from Building F-6. The Emergency Coordinator will support these activities and establish an Emergency Operations Center (EOC) in Room 104 of Building E-107. Emergency operations will be phased, starting with a notification of impending storm conditions and ending with completion of the recovery process.

While close coordination is expected, the Director of Suborbital and Special Orbital Projects or the Emergency Coordinator may unilaterally close the Island and direct evacuation or other protective actions as necessary. The WFF Partners may evacuate earlier at their discretion.

Each WFF Partner, Commercial Operation, and Contractor will direct and control emergency operations within its jurisdiction utilizing procedures they develop based on this Plan. These procedures will be implemented with life safety as a priority and include evacuation and governmental assets protection processes. These procedures will be provided to WFF Emergency Management.

Activities that involve shared resources (such as the WICC contract) will be coordinated by applicable department and agencies to ensure that the highest priorities are satisfied. All requests for WICC support will be made thru the WICC HELP desk (ext. 4357).

Procedures outlined in this plan are a guide to managing preparation, response, and recovery actions for hurricanes and nor'easters. For other extreme weather events (when sustained winds and/or flooding are not expected to exceed hurricane force, but are determined threats), the Executive Management Team (EMT) will meet and determine if actions within this plan should be implemented.

3.2 Sequence of Actions

Effective hurricane/nor'easter preparedness actions are continual. Preparation actions occur during normal operations, initial threat notifications, early coordination efforts to mitigate threats, deployment/demobilization of resources, and recovery operations. These actions will not necessarily occur in sequential order; some may have to be taken concurrently

4.0 ROLES AND RESPONSIBILITIES

Effective hurricane/nor'easter preparedness actions are continual. Preparation actions occur during normal operations, initial threat notifications, early coordination efforts to mitigate threats, deployment/demobilization of resources, and recovery operations. These actions will not necessarily occur in sequential order; some may have to be taken concurrently.

4.1 Non-Emergency/Normal Operations: Roles and Responsibilities

Executive Management Team

- Review plans as requested
- Participate in hurricane response exercises as requested

Emergency Management:

- Develop and maintain a WFF Hurricane/Nor'easter Response Plan. Update it annually prior to hurricane season.
- Maintain HURREVAC program on EOC and EM computers. Update the program as needed and at least annually.
- Assure the viability and accuracy of hurricane response contact lists
- Assure the viability and accuracy of hurricane response resource lists
- Assure the viability and accuracy of Space Act Agreements
- Assign duties and responsibilities for staffing of the EOC
- Assure teams and their duties are available for implementation of emergency preparation, response and recovery operations
- Assure that facilities, equipment and resources are operative and sufficient for conducting emergency operations in the EOC.

- Meet with Accomack County Emergency Management to review past year's events and responses. Review and update as necessary any MOU's needed with the county for effective hurricane response.
- Review and update Emergency Preparedness and Shelter Standard Operating Procedures (SOP) to manage the facility security requirements if the facility becomes a public evacuation site.
- Provide hurricane preparedness materials to the WFF community via newsletters, websites and other media.
- Request that Fire/EMS department perform a pre-hurricane season size-up of WFF for location of possible mitigation actions
- Identify loose items located on WFF property that may become a hazard during high wind or flood events. Contact appropriate department or agency to assure that items are secured.
- Exercise the hurricane/nor'easter response plan at least annually. Develop an After Action Report after each exercise and make changes to the Plan as necessary to assure effective emergency response.
- Maintain a record of NIMS compliancy training of hurricane response personnel.
- Provide training classes to hurricane emergency response personnel as necessary to maintain NIMS compliancy.

WFF Partners, Commercial Operations, and Contractors

- Develop and maintain a department/agency specific Hurricane/Nor'easter Response Plan. Review it annually and update as needed prior to hurricane season.
- Assure the viability and accuracy of hurricane response contact lists, resource lists, and emergency contracts.
- Identify and maintain a list containing current contact information of essential services and facilities which must continue to operate, and may need to be protected during a hurricane.
- If possible, mitigate any actions identified as hazardous during a previous hurricane event or exercise.
- Identify loose items or equipment present within your domain that may become a hazard during high wind or flood events. Take corrective actions to assure that items are secured.
- Participate in hurricane response exercises as requested
- Ensure hurricane related materials are stocked

WFF Weather Office

Develop and maintain procedures for alerting WFF and all WFF off-site project locations under the cognizance of NASA (Bermuda, Coquina, NC, etc.) of potential storm events that may require activation of this Plan.

4.2 Condition V – 120 Hours – Alert: Roles and Responsibilities

Condition V may be established as soon as the WFF Weather Office alerts Emergency Management that tropical storm force winds (> 39 mph) or stronger are possible within 120 hours (5 days) at WFF. The WFF Weather Office will alert Emergency Management if an

approaching storm may possibly impact a WFF off-site project locations under the cognizance of NASA (Bermuda, Coquina, NC, etc.) earlier than WFF. Partners, Commercial Operations and /or Contractors with interests in these off-site projects may have to precede through these Condition levels at a different pace or in conjunction with Condition levels for WFF. Condition levels, while based primarily on storm impact to WFF, may be adjusted to allow for protective action tasks completion during normal working hours.

Emergency Management:

- Notify EMT of impending storm
- Review impending storm timelines and develop an action plan
- Request that Fire/EMS department perform a pre-storm size-up of conditions and facilities possibly needing protective actions
- Evaluate long lead time preparation activities
- Notify all applicable WFF entities that WICC requires a list of emergency protective action projects at least 72 hours in advance of tropical storm force winds
- Coordinate with applicable partners if the approaching storm may possibly impact WFF off-site project locations under the cognizance of NASA (Bermuda, Coquina, NC, etc.)
- Review this plan and any other applicable plans.
- Review and update as necessary any contact lists.
- Review and update as necessary MOU's and any other emergency contracts.
- Notify GSFC – Greenbelt EOC and NASA HQ EOC of possible storm impact.
- Assure that all EOC equipment is functional. Refer to EOC Equipment checklist in WebEOC.
- Survey EOC communications capabilities to include operative satellite phones, GETS cards, SHARES, etc.
- Begin inputting at least daily a situation report into WebEOC.
- *Ongoing throughout storm's progress* - Upon notification from the WFF Weather Office of any significant changes in the storm forecast, all entities having a role in this Plan will be alerted as soon as possible.

Public Affairs Office (PAO)

- Review this plan and any other applicable plans.
- Review and update as necessary any contact lists.
- Review and update as necessary “canned” announcements for WFF personnel and the general public regarding the pending storm – preparedness information, closures, evacuations, sheltering information, etc.
- Alert all WFF personnel of possible storm conditions.
- PAO will coordinate all emergency public information news releases. Partner, Commercial Operations, and Contractor PAOs will coordinate any event specific news releases with WFF PAO prior to dissemination to the media.

WFF Weather Office

- Review this plan and any other applicable plans.
- Alert Emergency Management if the approaching storm may possibly impact WFF off-site project locations under the cognizance of NASA (Bermuda, Coquina, NC, etc.).

- *Ongoing throughout storm's progress* - Alert Emergency Management of any significant storm forecast changes as soon as possible.

All Other WFF Codes, Partners, Commercial Operations, and Contractors

- Review this plan and any other applicable plans.
- Review and update as necessary any contact lists.
- PAO's will coordinate any event specific news releases with WFF PAO prior to dissemination to the media.

4.3 Condition IV – 72 Hours – Begin Preparations: Roles and Responsibilities

WFF will transition into Condition IV preparations when tropical storm force winds (> 39 mph) or stronger are anticipated within 72 hours (3 days) at WFF.

Executive Management Team (EMT)

- Conduct meeting(s) with all applicable WFF entities to consider, at a minimum, the following:
 1. Assurance that all appropriate entities are present
 2. A weather briefing from WFF Weather Office regarding the current storm
 3. Review of potential storm impacts – to include at the minimum, inland rainfall and resultant flooding, high tides and potential coastal flooding, storm surge, wind predictions and impact date and times
 4. A decision, with the weather briefing as the basis, on when and if to start mitigation preparations
 5. Prioritize a list of protective measure projects provided by all affected WFF entities to be completed by WICC
 6. Receive status updates and determine any actions needed for applicable WFF off-site project locations under the cognizance of NASA (Bermuda, Coquina, NC, etc.)
 7. Determination of a 48 Hour – Condition III meeting(s) time and place

Emergency Management:

- Activate EOC with a skeletal crew that will begin monitoring storm system from the EOC
- Schedule for EOC storm ride-out crew, at least 2 shifts deep/position. Ride-out crews may be inappropriate for Category 3 and above storms.
- Determine when ride out crew will be allowed time away from work to prepare their homes and families for storm impacts. Ride-out crews should be allowed to make final preparations at their homes prior to Condition I.
- Notify applicable partners, contractors and commercial operations of EM's need for Damage Assessment Team rosters
- Disseminate EOC staffing schedule to all applicable parties - the schedule will be complete to the end of the ride-out period
- Establish contact and coordinate activities with SCSC EOC operations
- Begin providing a daily situation report to GSFC - Greenbelt EOC and NASA HQ EOC
- Establish contact with Accomack County Emergency Management for at the minimum:

1. Potential storm impact data sharing
 2. Conference call scheduling
 3. Potential activation of MOU for utility personnel sheltering in dorm rooms and equipment sheltering on main base
 4. Local shelter opening times: This information will be shared with the PAO for dissemination to WFF personnel
 5. Potential for last resort sheltering in gymnasium
- If potential for last resort sheltering of county citizens exists, review and coordinate possible action items with Wallops Office of Protective Services

Public Affairs Office (PAO)

- Update all WFF personnel of current storm conditions and possible impacts via intercom, blanket emails, website or other best available means. Include at the minimum the following information:
 1. Access to local (Delmarva) shelter locations and openings information - a listing of local media outlets is in the EOC Resource Annex
 2. General information on emergency preparedness – food supplies, sheltering at home, vulnerability of mobile homes and coastal homes, special needs considerations, pet considerations, preparing your boat, etc.
 3. Information on where to obtain emergency preparedness information – websites, etc.
 4. With assistance from FOMs, prepare and issue information on what they can do to protect their workspace – turning off electronics, protecting electronics with plastic sheeting, removing electronics and paper items off the floor, securing paper objects within plastic, backing up computer files, etc.

WFF Weather Office

- Conduct weather briefing for EMT meeting
- Conduct protective actions as with other partners listed below

All Other WFF Codes, Partners, Commercial Operations, and Contractors

- Continue to submit requests for WICC support of all protective actions thru the WICC HELP desk (x4357) using priority list generated at EMT meeting as a guide
- Conduct planning meetings to reaffirm responsibilities and review specialized requirements Meetings should include at the minimum:
 1. Implementation of hurricane/nor'easter emergency preparations checklist - a hard copy form of this checklist is Appendix A of this Plan
 2. When applicable, a schedule for storm ride out crew, at least 2 shifts deep/position. Ride-out crews may be inappropriate for Category 3 and above storms.
 3. When applicable, determine when ride out crew will be allowed time away from work to prepare their homes and families for storm impacts. Ride-out crews should be allowed to make final preparations at their homes prior to Condition I.
 4. When applicable, determine a Damage Assessment Team roster and report roster to EOC

- Begin regular updates of completed hurricane/nor'easter emergency preparations checklist items into WebEOC. A hard copy form of this checklist is Appendix A of this Plan
- Assure that Facility Operations Managers (FOMs) continue to secure high wind/flooding hazard items and other preparations duties. Contact appropriate department or agency to assure that items are secured

4.4 Condition III – 48 Hours – Active Preparation: Roles and Responsibilities

WFF will transition into Condition III preparations when tropical storm force winds (> 39 mph) are anticipated within 48 hours (2 days) at WFF.

Executive Management Team (EMT)

- Conduct meeting(s) with all applicable WFF entities to discuss, at a minimum, the following:
 1. A weather briefing from WFF Weather Office regarding the current storm
 2. Review of potential storm impact changes from previous day – to include at the minimum, inland rainfall and resultant flooding, high tides and potential coastal flooding, storm surge, wind predictions and impact date and times.
 3. With input from Emergency Management, determine if and when to close WFF, allowing time for employees to evacuate their homes
 4. Review list of protective measure projects provided by all affected WFF entities to be completed by WICC and adjust as necessary
 5. Receive status updates and determine any additional protective actions needed for applicable WFF off-site project locations under the cognizance of NASA (Bermuda, Coquina, NC, etc.)
 6. Determination of a 24 Hour – Condition II meeting(s) time and place

Emergency Management:

- Staff the EOC with a part time crew that will continue to monitor storm system and its impact on the county
- Deploy Fire Department patrols to report areas which need additional preparation
- Utilize HURREVAC, input from the WFF Weather Office, and evacuation announcements from surrounding counties to advise EMT of evacuation needs
- Continue contact and coordination activities with SCSC EOC operations
- Continue providing a daily situation report to GSFC – Greenbelt EOC and NASA HQ EOC
- Continue contact with Accomack County Emergency Management for at the minimum:
 1. Potential storm impact data sharing
 2. Update of utility personnel sheltering in dorm rooms and equipment sheltering on main base needs
 3. Local shelter opening times
 4. Final decision for last resort sheltering in gymnasium options
- Contact Town of Chincoteague EOC for status data sharing
- Determine Damage Assessment Teams and notify team members of schedule

- Discuss with WEMA the possibility of operating the building E-2 cafeteria post-storm for WFF recovery teams, emergency crews and others before WFF is open to all WFF personnel

Public Affairs Office (PAO)

- Continue to update via best available means, all WFF personnel of WFF closures, evacuations, current storm conditions and possible impacts

WFF Weather Office

- Conduct weather briefing for EMT meeting
- Conduct protective actions as with other partners listed below

Code 200 Assistant Director

- If applicable, evaluate actions necessary to activate last resort shelter operations. Determine which shelters to use based on severity of the storm and input from Accomack County EM, and WFF Emergency Management. All final decisions on last resort shelter openings will be from the EMT.

All Other WFF Codes, Partners, Commercial Operators, and Contractors

- Continue to submit requests for WICC support of all protective actions thru the WICC HELP desk (x4357) using priority list generated at EMT meeting as a guide.
- Conduct meetings to reaffirm responsibilities and review specialized requirements.
- Continue progress updates on hurricane/nor'easter emergency preparations checklist into WebEOC. A hard copy form of this checklist is Appendix A of this Plan.

Assure that Facility Operations Managers (FOMs) have secured all high wind/flooding hazard items from around their buildings.

4.5 Condition II – 24 Hour – Active Preparation: Roles and Responsibilities

WFF will transition into Condition II preparations when tropical storm force winds (> 39 mph) are anticipated within 24 hours at WFF.

Executive Management Team (EMT)

- Conduct meeting(s) with all applicable WFF entities to contain, at a minimum, the following:
 1. An updated weather briefing from WFF Weather Office regarding storm status
 2. Review of potential storm impact changes from previous day – to include at the minimum, inland rainfall and resultant flooding, high tides and potential coastal flooding, storm surge, wind predictions and impact date and times
 3. Make final determination of when to close WFF, allowing time for employees to safely evacuate their homes
 4. Review list of protective measure projects provided by all affected WFF entities to be completed by WICC and re-prioritize as necessary
 5. Assure all protective measures and evacuations needed for applicable WFF off-site project locations under the cognizance of NASA (Bermuda, Coquina, NC, etc.) have been completed

6. Determination of a 12 Hour – Condition I meeting(s) time and place

Emergency Management:

- Prepare to fully staff the EOC within 12 hours
- Continue Fire Department patrols to report areas which need additional preparation
- Assure adequate food, water and janitorial supplies for ride-out crew are complete
- Assure scheduling of ride-out staff
- Assure scheduling of Damage Assessment (DA) Teams
- Assure DA Team home contact info is current and reflective of any evacuation moves made
- Continue to utilize HURREVAC, input from the WFF Weather Office, and evacuation announcements from surrounding counties to determine safe evacuation times for WFF personnel
- Continue contact and coordination activities with SCSC EOC operations
- Continue providing at least daily a situation report to GSFC – Greenbelt EOC and NASA HQ EOC

Public Affairs Office (PAO)

- Continue to update all WFF personnel of WFF closures, current storm conditions and possible impacts via best available means

WFF Weather Office

- Conduct weather briefing for EMT meeting
- Conduct protective actions as with other partners listed below

Code 200 Assistant Director

- If applicable and after concurrence from EMT, assure all actions necessary to activate last resort shelter operations are complete.

All Other WFF Codes, Partners, Commercial Operations, and Contractors

- Continue to complete hurricane/nor'easter emergency preparations checklist items. A hard copy form of this checklist is Appendix A of this Plan
- Continue progress updates of hurricane/nor'easter emergency preparations checklist into WebEOC

Assure that ride-out crews from your department/agency have or will have soon completed home and family preparations

4.6 Condition I – 12 Hours – Final Preparations: Roles and Responsibilities

WFF will transition into Condition I preparations when tropical storm force winds (> 39 mph) are anticipated within 12 hours at WFF.

Executive Management Team (EMT)

- Conduct final meeting(s) with all applicable WFF entities to contain, at a minimum, the following:

1. An updated weather briefing from WFF Weather Office regarding storm status
2. Review of potential storm impact changes from previous briefing – to include at the minimum, inland rainfall and resultant flooding, high tides and potential coastal flooding, storm surge, wind predictions and impact date and times.
3. Assure list of WFF protective measure projects are complete
4. Assure all protective measures and evacuations needed for WFF off-site project locations under the cognizance of NASA (Bermuda, Coquina, NC, etc.) are complete
5. Assure EMT home contact info is current and reflective of any evacuation moves made
6. Determination of when/if to cut electrical power to Wallops Island – if possible, at least 2 hours' notice given to Code 700 for communications shut off to Island
7. Determination of a Post Storm meeting time and place

Emergency Management:

- Fully staff the EOC
- Ensure all GSA vehicles are topped off with fuel
- Utilize HURREVAC, input from the WFF Weather Office, and evacuation announcements from surrounding counties to determine absolute evacuation times for WFF personnel
- Assure EOC staff, Fire/EMS, Security and Facilities personnel for Ride-Out conditions through to Recovery is adequate and complete
- Assure adequate food, water and janitorial supplies for EOC ride-out staff
- Assure Ride-out staff has brought enough food to support themselves for 3 – 5 days
- Assure scheduling of Damage Assessment (DA) Teams
- Assure DA Team home contact info is current and reflective of any evacuation moves made
- Continue providing at least daily a situation report to GSFC – Greenbelt EOC and NASA HQ EOC
- Contact Accomack County to confirm or receive final requests for sheltering
- Notify appropriate officials concerning status of any evacuees
- Deploy Fire Department patrols to report and/or assist with any areas which need final preparations

Public Affairs Office (PAO)

- Notify all WFF personnel of WFF absolute closures, anticipated return dates, and how to obtain updated facility information off-site
- Conduct protective actions as with other codes listed below

WFF Weather Office

- Conduct final weather briefing for EMT meeting
- Conduct protective actions as with other partners listed below

Code 200 Assistant Director

- If applicable and after concurrence from EMT, assure reception and care for last resort shelter evacuees.

All Other WFF Codes, Partners, Commercial Operations, and Contractors

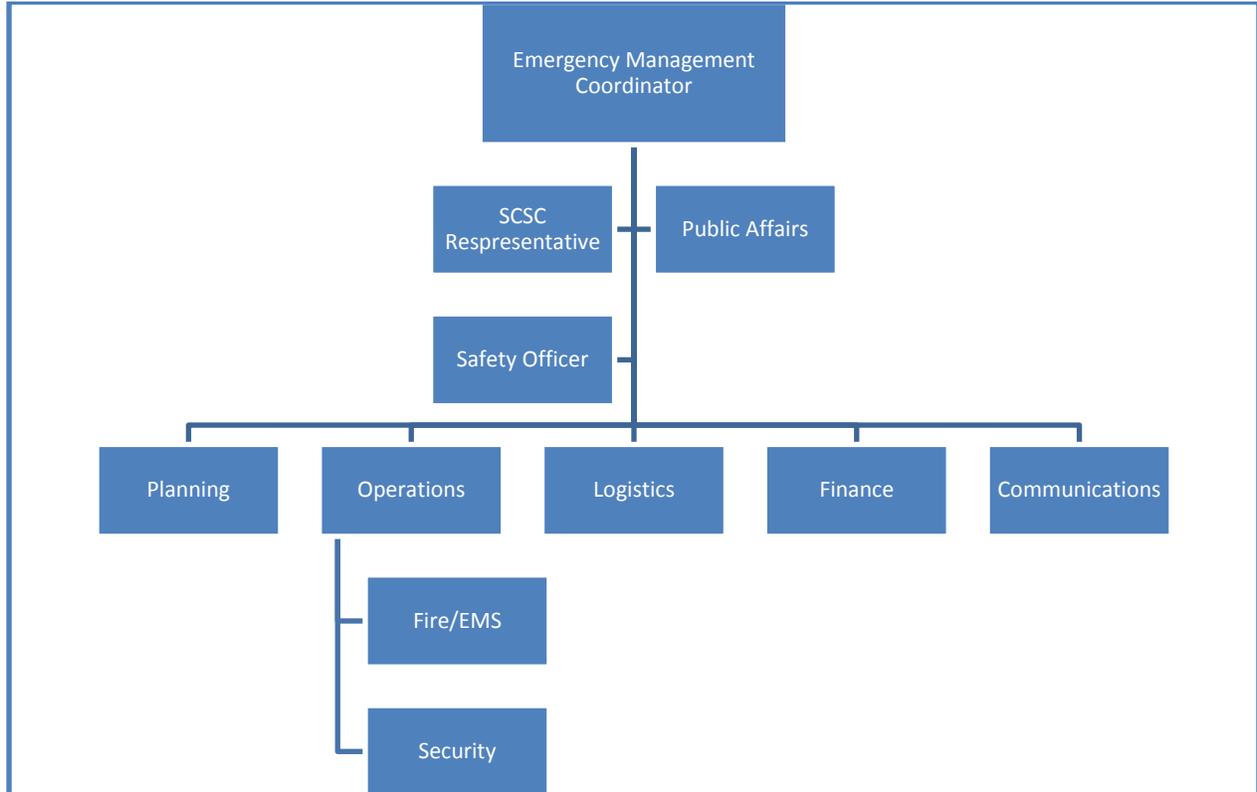
- Complete hurricane/nor'easter emergency preparations checklist items – a hard copy form of this checklist is Appendix A of this Plan
- Complete updates of hurricane/nor'easter emergency preparations checklist into WebEOC – a hard copy form of this checklist is Appendix A of this Plan
- Assure that ride-out crews from your department/agency have completed home and family preparations

4.7 Ride-Out – Onset of Tropical Storm Force Winds: Roles and Responsibilities

All WFF personnel not involved in emergency response should have evacuated WFF before the onset of tropical storm force winds. The EOC will be fully staffed for the duration of the storm. The following is a general job summary for each post. A detailed list of roles and responsibilities follows the EOC Structure diagram.

- The EM Coordinator will be Incident Command and also fulfill some planning section duties.
- The Safety Officer shall advise personnel on safety requirements and precautions.
- The SCSC representative will manage Navy assets and resources.
- Public Affairs will disseminate information to WFF personnel and local media outlets.
- The Planning Section shall develop incident action plans and distribute them as required.
- The Operations Section shall manage security, fire, and emergency medical services operations.
- The Logistics Section shall arrange for medical services, equipment needs, resource requests with GSFC – Greenbelt, food and lodging requirements, etc.
- The Finance Section shall keep track of expenditures by WICC and Codes to support storm protective actions and recovery activities.
- The Communications Section shall assure communication pathways to WFF entities as well as outside agencies such as county and state EOCs.

EOC Command Structure



Emergency Management:

- Continue to monitor storm's progress using WFF Weather Office feeds, NWS - Wakefield and HURREVAC updates.
- Prior to 50 mph sustained winds or flooding, order that Island power be shut off using the procedures outlined in Appendix G
- Implement evacuation of Fire Station 2 before 50 mph sustained winds or before storm surge over wash of roadways
- Continue providing, at least daily, a situation report to GSFC – Greenbelt EOC and NASA HQ EOC
- Continue contact with Accomack and Chincoteague EOCs as needed
- Continue to apprise GSFC WFF Facility Director of WFF status updates
- Begin preparations for damage assessment team deployments
- Maintain action log for briefing of next shift

Communications:

- Assure radio communications between all Ride-out staff is maintained and reliable.
- Assure HF radio communication pathways to Accomack EOC, Chincoteague EOC, VEOC, NASA SHARES, and other necessary contacts
- Maintain action log for briefing of next shift

Operations:

- Monitor wind speeds and advise ride-out personnel at WFF when sustained winds are approaching 50 mph that emergency services will shut down at that time. Use wind measurements from either the Island or Main Base (Weather Office Blue Screen) - whichever measures 50 mph sustained first for suspension of service implementation.
- When sustained winds reach 50 mph, notify all ride-out personnel that emergency services will be suspended.
- When sustained winds fall below 50 mph, notify all ride-out personnel that emergency services are again operative.
- Notify Main Base guards of approach of 50 mph sustained winds and assure closure of gate and evacuation of guards
- Maintain action log for briefing of next shift

Logistics:

- Monitor all camera feeds to observe possible damage to WFF (seawall breach, storm surge flooding, wind damage to buildings, etc.). Arrange for electrical power shut off of the Island.
- Record if possible, by photo, video and/or WebEOC, storm damages to WFF infrastructure
- Maintain action log for briefing of next shift

4.8 Recovery and Damage Assessment: Roles and Responsibilities

WFF will manage a comprehensive and coordinated recovery process that will bring about the prompt and orderly restoration of facilities and services, infrastructure, and mission related activities, while providing for the health, welfare and safety of the population. The recovery analysis process is comprised of the following phases: initial damage assessment, full damage assessment, the formulation of short and long term priorities, and implementation of appropriate restoration strategies. The full damage assessment plan is located in the WFF Emergency Operations Plan (803-PLAN-0003)

Recovery operations may begin as emergency operations continue.

Executive Management Team (EMT)

- Participate, if possible and needed, in a meeting/conference call with EM to discuss at a minimum the following:
 1. Briefing with regards to storm's severity and impacts to surrounding areas
 2. Initial WFF damage assessment report
 3. If applicable, close out of evacuation shelters
 4. Restoration of power to the Island
 5. Safety review and release of Island for re-opening
 6. Additional post-storm actions
- ** For less severe storms, the EMT may elect to suspend this meeting
- After EM briefing of facility conditions, concur with Emergency Management on when to give the "All Clear"
- Prioritize recovery actions
- Determine employee work status (facilities open/closed/partially opened)

Emergency Management:

- If applicable, close out evacuation shelters
- Deploy Initial Damage Assessment team(s) to:
 1. Evaluate condition of Causeway Bridge
 2. Evaluate condition of roadways
 3. Evaluate condition of utilities
 4. Inspect for other hazards such as hazardous material, dead animals, etc.
 5. Make recommendation on opening Island for restoration activities
- An “All Clear” order will be given by the emergency coordinator based on the following conditions:
 1. Confirmation from NWS reports that the storm has passed WFF
 2. The WFF has not experienced sustained winds in excess of 39 mph for more than one hour
 3. An Initial Damage Assessment has been conducted to verify the safety of personnel needing to access both the Island and other facilities. Special consideration has been given to the stability of roads, bridges, safety of electrical power, potable water and wastewater systems. Areas have been checked for the presences of hazardous materials, dead animals, and other issues that could provide serious health concerns. The WSO (Code 240), Safety Office (Code 803), WFF Fire Department, SCSC Public Works and Facility Management Division (Code 228) have determined the areas safe for full damage assessment and restoration activities.
 4. Concurrence has been received from the Code 800 Director, or designee
- If applicable, notify SCSC, ext. 2068 for coordination of activities prior to restoring power on the Island so as to minimize damage to equipment in the Navy facilities.
- After coordination with FMB, notify GSFC – Greenbelt of Damage Assessment results within 24 hours of storm’s end
- After coordination with FMB, submit follow-up written report of repair estimates to GSFC – Greenbelt within 48 hours
- Continue providing, at least daily, a situation report to GSFC - Greenbelt EOC and NASA HQ EOC
- Request assistance, if necessary, from GSFC – Greenbelt EOC and NASA HQ EOC
- Cooperate, as able, with FEMA and other applicable organizations to support airlifts, communications, emergency power, water, and other services as available
- Conduct an after actions meeting with applicable entities within ten working days post storm, to review lessons learned and to determine if adjustments to the plan are needed. .

Wallops Security:

- Keep Island closed and secure until initial Damage Assessment Team recommends opening

Public Affairs Office (PAO)

Notify all WFF personnel of WFF damage conditions, opening times, and/or how to obtain updated facility information off-site

APPENDIX A – HURRICANE PREPAREDNESS ACTIONS CHECKLIST

CONDITION IV -- 72 HOURS TO TROPICAL STORM FORCE WINDS (>39 MPH)

Code 200 and SCSC Public Works/Supply Officer

- Move hazardous waste to Mainland (250)
- Checkout fuel pumps, generators, and vehicles (228/PW)
- Stock emergency supplies, (plywood, anchors, rope etc.) (233/SO)
- Remove equipment and debris adjacent to buildings (all)
- Check all Island floodgates, unlock VSFC floodgate (228)
- Notify Construction Contractors to remove/secure equipment, and inform them of possible WFF closure, etc. (228/PW)
- Fill fuel tanks, also contact NOAA for emergency fuel needs
- Stock janitorial supplies for shelter locations
- Stock janitorial supplies for EOC
- Stock janitorial supplies for Ride-out crew locations

Code 800/500/400 and SCSC Operations

- Notify range users and projects
- Identify storage/parking areas for Island equipment
- Plan hanger space utilization
- Initiate Security Plans for classified materials
- Secure antennas identified at EMT meeting (453)

Wallops Security

- Survey the Main Base and Wallops Island for any loose materials that may be picked up by strong winds or any other potential hazards and report to Shift Supervisor
- Brief all Security personnel of daily updates of Hurricane plans and weather updates

Management Education Center

- Consider and plan for possible re-scheduling of programs occurring during storm period and possibly after storm passes
- Plan for scheduling early departure of guests needing an extended travel timeframe

CONDITION III -- 48 HOURS TO TROPICAL STORM FORCE WINDS (>39 mph)

Code 200 and SCSC Public Works/Supply Officer

- ❑ Station generators at evacuee/critical site D-10 (only if being used as a shelter)
- ❑ Station mobile generators at evacuee/critical site E-2
- ❑ Station mobile generators at evacuee/critical site F-3
- ❑ Station mobile generators at evacuee/critical site F-5
- ❑ Station mobile generators at evacuee/critical site R-20 (only if being used as a shelter)
- ❑ Inspect and test emergency generators at A-1
- ❑ Inspect and test emergency generators at B-129
- ❑ Inspect and test emergency generators at D-50
- ❑ Inspect and test emergency generators at F-16
- ❑ Inspect and test emergency generators at F-166
- ❑ Inspect and test emergency generators at N-127
- ❑ Inspect and test emergency generators at U-25
- ❑ Inspect and test emergency generators at U-55
- ❑ Inspect and test emergency generators at V-16
- ❑ Inspect and test emergency generators at X-15
- ❑ Inspect and test emergency generators at X-75
- ❑ Move heavy equipment off the Island
- ❑ Assist in securing/relocating trailers, antennas, radar units, etc. - ROC will be responsible for securing most ROC assets
- ❑ Inspect all hazardous waste storage sites for cleanup and secure storage (250)
- ❑ Inspect all hazardous material and waste containment areas for possible overspill/overflow during heavy rain periods (250)
- ❑ Inspect all oil water separators for possible overspill/overflow during heavy rain periods (250)
- ❑ Assure Strap Tie-Downs on above ground fuel storage are in place
- ❑ Check operation on all storm water flood gate @ Bld. X-15 (11 gates)
- ❑ Check operation on all storm water flood gate @ Bld. X-75 (3 gates)
- ❑ Check operation on all storm water flood gate @ Bld. Y-15 (2 gates)
- ❑ Check operation on all storm water flood gate @ Bld. Y-30 (4 gates)
- ❑ Check operation on all storm water flood gate @ Bld. Y-40 (5 gates)
- ❑ Check operation on all storm water flood gate @ Bld. Y-60 (4 gates)
- ❑ Check operation on all storm water flood gate @ Bld. Z-40 (3 gates)
- ❑ Check operation on all storm water flood gate @ Bld. Y-25 (2 gates)
- ❑ Check operation on all storm water flood gate @ South By-Pass Rd (2 gates)
- ❑ Check operation on all storm water flood gate @ North By-Pass Rd (1 gate)
- ❑ Check operation of storm pumps at X-55
- ❑ Check operation of storm pumps at Y-46
- ❑ Check operation of portable pumps

- ❑ Remove Boiler Burner/Secure Chiller @ Bld. X-15
- ❑ Remove Boiler Burner/Secure Chiller @ Bld. X-35
- ❑ Remove Boiler Burner/Secure Chiller @ Bld. X-75
- ❑ Remove Boiler Burner/Secure Chiller @ Bld. Y-15
- ❑ Remove Boiler Burner/Secure Chiller @ Bld. Y-55
- ❑ Remove Boiler Burner/Secure Chiller @ Bld. Y-60
- ❑ Remove Boiler Burner/Secure Chiller @ Bld. W-15
- ❑ Remove Boiler Burner/Secure Chiller @ Bld. W-40

Code 800/500/400 and SCSC Operations

- ❑ Terminate project activities and secure equipment (800/SCSC)
- ❑ Initiate removal of equip from Island (840)
- ❑ Move rocket motors to secure facility (840)
- ❑ Notify GSFC - Greenbelt of possible interruption of WOTS support (453)
- ❑ Ensure antennas on Main Base, Mainland and Island are secure (453)
- ❑ Complete aircraft relocation plan (830)
- ❑ Test applicable communication systems in the Control Center
- ❑ Manage hanger space utilization

Wallops Security Office

- ❑ Review Hurricane Response plans for Condition III
- ❑ Have roving patrols report areas that need additional preparation
- ❑ Brief security staff of storm location, storm track, and last weather briefing details

Management Education Center

- ❑ Cancel and/or re-schedule all pending classes
- ❑ Assure safe departure of guests needing extended travel timeframes

CONDITION II -- 24 HOURS TO TROPICAL STORM FORCE WINDS (>39 MPH)

Code 200 and SCSC Public Works/Supply Officer

- ❑ Tighten Security procedures
- ❑ Require two-way communication capability for access to Island
- ❑ Establish controlled access to Island
- ❑ Support elevation, moving and/or securing of equipment, per FOMs' requests
- ❑ Revisit all construction contractors to ensure their construction sites are secure and are aware of final WFF closure time frames. Inspections are to be performed by Code 228 construction inspectors (228/PW)

Code 800/500/400 and SCSC Operations

- ❑ Prepare to Move Fire Station 2 to Main Base
- ❑ Elevate items not removed from Island
- ❑ Elevate all equipment
- ❑ Ensure all flood gates/barricades to doors of applicable buildings have been installed (WICC)
- ❑ Elevate equipment; complete the removal of equipment from Island including passenger vehicles, mobile equipment (WICC)
- ❑ Terminate project activity and secure equipment (800/SCSC)
- ❑ Finish removal of equip from Island; move rocket motors (840)
- ❑ Implement aircraft relocation plan (830)
- ❑ Test applicable communication systems in the Control Center
- ❑ Manage hanger space utilization

FOMS

- ❑ Report status of building preparations to Executive Management Team
- ❑ Elevate items off the floor of facility – especially if located on the Island
OR
- ❑ Move equipment and /or supplies located in the facility to a safer location

Wallops Security

- ❑ Deploy roving patrols to report areas that need additional preparation
- ❑ Brief security staff of storm location, track of storm, and latest weather briefing
- ❑ Review Hurricane Response plans for Condition I
- ❑ When notified by Emergency Coordinator, implement sign-in procedures of all personnel entering the Wallops Island gate
- ❑ Log personnel entering Island gate; limit to essential personnel

CONDITION I -- 12 HOURS TO TROPICAL STORM FORCE WINDS (>39 MPH)

WICC:

- ❑ Ensure that all vehicles and equipment need for emergency activities are topped off with fuel and fully operative
- ❑ Coordinate with NAVY CDO and Code 700 on Plans to cut island power
- ❑ If the decision is made, cut power to Island when evacuation is complete or waves are coming over the seawall. Action to be completed before arrival of tropical storm force winds
- ❑ Evacuate ride-out personnel to safe location

Coast Guard

- ❑ Move equipment to Hanger N-159 per Interagency Agreement between NASA and USCG
- ❑ Report ride-out staffing to the EOC

WEMA

- ❑ Assure preparations are complete for any utility crews sheltering in F-4 dorm rooms per MOU with Accomack County

Wallops Security

- ❑ Restrict access to the Island. When a restriction is in effect, only personnel with two-way communication will be permitted into the closed areas. FM Radios on WFF Net or cellular phones will fulfill the requirement. Use of the buddy system will be required
- ❑ Brief security staff of storm location, track of storm, and latest weather briefing
- ❑ Implement procedures for receiving evacuees
- ❑ Coordinate with Navy Security/Hurricane Command Post to remove all personnel from Wallops Island
- ❑ Secure all security posts on Wallops Island and evacuate all remaining security personnel to Main Base
- ❑ Coordinate with emergency services to have their emergency equipment stored in safe areas for rapid response (N159, D1, Fire Dept., etc.)
- ❑ Deploy roving patrols to report areas which have critical needs
- ❑ Review Hurricane Response plans for Ride-Out and Recovery
- ❑ When notified by Emergency Management, implement sign-in procedures of all personnel entering the Island and Main base gates

APPENDIX B – EXECUTIVE MANAGEMENT TEAM (EMT) MEMBERSHIP

The WFF organization for emergency operations consists of existing government departments and supporting organizations. The EMT, chaired by the Director of Suborbital and Special Orbital Projects, will determine overall preparedness, response and recovery priorities and will have the authority to change or modify these procedures as the situation dictates. The WFF Emergency Coordinator and the WFF Partners (NOAA, Navy, Coast Guard, Orbital, and MARS), with assistance from department heads or their representatives will direct and control emergency operations. Emergency operations will follow a stepped sequence of actions in response to anticipated storm impacts.

The EMT is composed of representatives from the following organizations. Those indicated by an * are required members. Others may or may not be present depending on conditions present during an individual storm event.

NASA

- *Suborbital and Special Orbital Projects Directorate (800)
 - Safety Office (803)
 - Range and Mission Management (840)
- *Management Operations Directorate (200)
 - Facilities Management Branch (228)
- *Security Office (240)
 - FOM Coordinator
 - Logistics Coordinator
- *Mission Services Program Office (453)
 - Applied Engineering and Technology Directorate (500)
 - Public Affairs Office (130)

NOAA

- Station Manager/Representative

US Coast Guard

- Command Office Representative

US Navy – Surface Combat Systems Center

- *Command Office Representative
- Public Works

ROC/SCNS

- Contract Manager

WICC

- Contract Manager

Mid-Atlantic Regional Spaceport (MARS)
Representative

Orbital
Representative

APPENDIX C – BYPASS PHONES

If the SIEMENS system is down, you may be able to access the following extensions or buildings by dialing the 824 number in the right column.

Building No.	Extension	Building Function	Bypass Number
B-129	2009	Fire Station No. 1	824-3018
D-50	1083	Waste Water Treatment Plant	824-3416
E-106	2006	Control Center	824-4136
F-160	2008	Health Unit	824-3400
F-6	2011	800/Director, SPOD	824-3412
F-6	2013	130/Public Affairs	824-3414
N-128	2003	Main Gate (Guard Shack)	824-3244

Note: You cannot dial the 824 number on the Main Base unless the SIEMENS telephone system is down.

Building No.	Extension	Building Function	Bypass Number
U-10		Island Gate	824-0962
V-10	7024	Navy/SCSC Guard (Desk)	824-3123
V-10	7029	Navy/SCSC Guard (Lobby)	824-5985
V-24		Navy/SSDS	824-6397
X-15		Fire Station No. 2	824-0963

APPENDIX D – MOBILE FM RADIO CALL SIGNS

FIRE AND RESCUE

CALL SIGN	TALKGROUP	CONTACT INFORMATION
CAPTAIN 25	FIRE DISPATCH	SHIFT DUTY CAPTAIN - MAINBASE
LIEUTENANT 26	FIRE DISPATCH	SHIFT DUTY LIEUTENANT - ISLAND
DISPATCH	FIRE DISPATCH	B-129
ES-1	FIRE DISPATCH	WALLOPS EMERGENCY COORDINATOR E-106
ES-2	FIRE DISPATCH	WICC DEPUTY PM – ENVIRONMENTAL, HEALTH, AND EMERGENCY SERVICES

SECURITY

CALL SIGN	TALKGROUP	CONTACT INFORMATION
SECURITY-1	SECURITY DISPATCH	WFF SECURITY OFFICER
SECURITY-2	SECURITY DISPATCH	WFF DEPUTY SECURITY OFFICER
SM-1	SECURITY DISPATCH	WICC SECURITY OFFICER
SM-2	SECURITY DISPATCH	WICC DEPUTY SECURITY OFFICER
SM-3	SECURITY	WICC DEPUTY

	DISPATCH	SECURITY OFFICER
DISPATCH	SECURITY DISPATCH OR FIRE DISPATCH	B-129

WICC OPERATIONS

CALL SIGN	TALKGROUP	CONTACT INFORMATION
WICC-1	MAINTENANCE 1	WICC PROGRAM MANAGER
WICC-2	MAINTENANCE 1	WICC DEPUTY PROGRAM MANAGER
WICC-3 or ES-2	MAINTENANCE 1 OR FIRE DISPATCH	WICC DEPUTY PROGRAM MANAGER

APPENDIX E – COMMUNICATIONS RESOURCES

- Normal communications will be through Siemens phones, the land mobile radio system, and local paging systems.
If the Siemens phone system fails, bypass phones may be utilized (see Appendix C).
- The Emergency Coordinator contact info during Condition 1 through to Recovery is:
Office - x1159
Fire Station #1 – x1300
Call Sign EM-1 on the WFF LMR radio system
- Communications with County fire and rescue units will be initiated by way of the Emergency Dispatch consoles in Building B-129.
- The NASA WIDE1 talk group will be utilized for pre-storm planning.
- In the event that the LMR Trunked radio system is damaged as a result of the storm, the backup FS1 and FS2 repeaters will be the main talk channels.
- If the backup FS1 and FS2 repeaters are also damaged, radio users will have to use the TALKAROUND function on the MA/COM radios.
- Loaner MA/COM radios will be provided as required.
- In addition, the Wallops SHARES radio network station is located in N-134. The SHARES network is part of the National Security Emergency Preparedness (NSEP) network, which allows all the national communication systems to share their capabilities in a national emergency. Agencies supporting SHARES are MARS (All branches), Bellcore, CAP, DLA, DMA, DOE, DOI, DOJ, DOMS, EPA, FAA, FBI, FCC, FEMA, FHWA, GSA, HHS, INS, MARAD, NASA, Nat. Guard, NCC, NCS, NTIA, OET, USA, USACE, USCG, USCS, USDA, USN, USTRANSCOM, and VA. NASA uses 14.455 MHz and net control is in CA
- Regional FEMA office in Philadelphia, Pennsylvania (215) 931-5500.
- Accomack Emergency Management Coordinator (757) 710-4000
- Virginia EOC (804) 674-2400

- WFF organizations to be notified are as follows:

ORGANIZATION**PHONE NUMBERS**

U.S. Navy, Surface Combat Systems Center,
Officer-Of-The-Day

(757) 824-2058*
or 2068*
Cell 757-894-0769*

National Oceanic and Atmospheric Administration
Wallops CDA Station, **Shift Supervisor**

(757) 824-7304*
(757) 824-3446

U.S. Coast Guard **Group Duty Officer**
Officer of the Day

(757) 336-2840*
(757) 336-2836*

U.S. Postal Service, Postmaster for GSFC/WFF
Branch Post Office Chincoteague

(757) 824-1243
(757) 336-2934

Mid-Atlantic Regional Spaceport

(757) 824-2335
Or (757) 824-2336

Orbital

(757)-824-6509

*These lines are manned 24 hours per day. By dialing this number, the "Officer-Of-The-Day" will contact all parties from that organization that need to be notified.

NASA INTERNAL NOTIFICATION LIST

<u>Org. Name</u>	<u>EXT.</u>		
130.4/Mr. K. Koehler	7-1579	830/Mr. S. Dover	7-1529
240/Mr. T. Northam	7-1885	840/Mr. J. Pittman	7-1955
Or for the WSO	7-1111	Chief FOM W. Redmond	7-1191
210/Mr. B. Pagliaro	7-1277		
228/Mr. G. Lilly	7-1299		
200/Mrs. C. Massey	7-1959		
231/Mr. K. Webb	7-1144		
453/Mr. S. Currier	7-1646		
500/Mr. F. Nelson	7-2396		
614.6/Mr. W. Petersen	7-1567		
800/Mr. W. Wrobel	7-1201		
800/Mr. C. Purdy	7-2555		
801/Ms. H. Garrison	7-1206		
802/Mr. B. Underwood	7-1479		
803/Mr. G. Liebig	7-1498		
810/Mr. P. Eberspeaker	7-2202		
820/Mr. D. Gregory	7-2367		

APPENDIX F – GENERATOR RUN TIMES

STATIONARY GENERATORS.								
BUILDING SERVED/BUILDING #	KW	MAKE	NASA/NAVY	TYPE OF CONNECTION	ESTIMATED FUEL CONSUMPTION AT 100% LOAD	MODEL #	TANK SIZE	FUEL TYPE
R-30	250	STATELINE	NAVY	AUTOTRANSFER	26.4/HR; 7.5/HR	SJ350	200 GAL	FUEL OIL BELLY TANK
R-1	250	STATELINE	NAVY OUT OF SERVICE	AUTOTRANSFER	N/A	N/A	N/A	N/A
V-18	275	CAT	NAVY	AUTOTRANSFER	19.4 GAL/HR; 10.3 HRS	GENSET 3400	200 GAL	FUEL OIL BELLY TANK
F-16	30	KOHLER	NASA	AUTOTRANSFER	19.5 GALS/HR; 25.6 HRS; 1 DAY	30RZ82	500 GAL	PROPANE
B-129	75	ONAN	NASA	AUTOTRANSFER	53.7 GALS/HR; 9.31 HRS	75 ENAD	500 GAL	PROPANE
A-3	80	ONAN	NASA	AUTOTRANSFER	51.7GALS /HR; 4.8 HRS	80GGHC	250 GAL	PROPANE
F-166 WATER TOWER	20	KOHLER	NASA	AUTOTRANSFER	17.3 GALS/HR; 14.4 HRS	20RZ82	250 GAL	PROPANE
N-127 SECURITY	60	ONAN	NASA	AUTOTRANSFER	41.4GALS /HR; 12 HRS	60ENA	500 GAL	PROPANE
D-8	3.0MW	CAT	NASA	AUTOTRANSFER	209 GALS/HR; 191/HRS; 7.9 DAYS	C175	40,000 GAL	FUEL OIL
D-50A	500	ONAN	NASA	AUTOTRANSFER	37.4 GALS/HR; 26 HRS; 1.1 DAYS	500DFGA	1,000 GAL	FUEL OIL
U-12	750	KATO LIGHT	NASA	AUTOTRANSFER	64.9 GALS/HR; 46.2HRS; 1.9DAYS	D75FRY4	3,000 GAL	FUEL OIL
U-65 COMMUNICATION BLD	225	CAT	NASA	AUTOTRANSFER	17.9GALS HR; 27.9 HRS; 1.1 DAYS	3306 ENGINE SR4B GENERATOR	500 GAL	FUEL OIL
U-25	15	KOLHER	NASA	AUTOTRANSFER	11.3GALS/HR 22 HRS;	15REYG	250 GAL	PROPANE

X-16 FIRE HOUSE	30	KOHLER	NASA	AUTOTRANSFER	2.8 GALS PER HR; 714 HRS; 29 DAYS	30ROZ J81	2,000 GAL	FUEL OIL
X-76	40	KOHLER	NASA	AUTOTRANSFER	3.4 GALS PER HR; 294 HRS; 12.25 DAYS	40ROZ J81	1,000 GAL	FUEL OIL
W-20	15	KOHLER	NASA	AUTOTRANSFER	1.3 GALS PER HR; 769 HRS; 32 DAYS	15ROZ 81	1,000 GAL	FUEL OIL
V-66	80	KOHLER	NASA	AUTOTRANSFER	46 GALS PER HR; 43 HRS; 1.8 DAYS	80RZG	2,000 GAL	PROPANE
GEN SHED DESIGNATED FOR HIF	300	CAT	NASA	POSILOC CONNECTIONS	22.3 GALS PER HR; 21 HRS	3456-XQ300	470 GAL	FUEL OIL

PROPANE; CONVERT CFH TO GAL = CFH
DIVIDED BY 7.4805

APPENDIX G – ISLAND EVACUATION PROCEDURES

Wallops Island may not be closed for all storms. If high winds and flood conditions are likely, power to Wallops Island may have to be shut off for the duration of the storm and the Island will have to be closed.

Preparations for possible power shut down will begin during Condition I and closure notices to all affected entities will be given if possible. Power will be cut without notification in emergency situations.

In preparation for closure, Wallops Island access will be restricted to only employees involved in hurricane preparations. Island access will require two-way communication. FM Radios on WFF Net or cellular phones will fulfill the requirement. The buddy system is in effect. The Guard will be verifying the presence of the communication equipment and maintaining a log of the vehicles and personnel entering the Island.

Once the EOC has determined that power to the Island needs to be shut off (prior to 50 mph sustained winds or Island flooding and allowing time for evacuation), the following procedures will be followed.

- Efforts will be made for any prior notice by contacting the SCSC CDO at extension 2068.
- Security/Fire Department will be dispatched to conduct an on-site patrol of Island and selected essential facilities to ensure that Island facilities are evacuated. They will provide assistance to evacuees as appropriate.
- Facilities Management Branch (Code 228 and WICC) will station two electricians on the Island who have full authority to cut power prior to the immersion of energized high voltage electrical equipment. After the power is cut, these employees will report to the Main Base (D-50) to provide services as needed.
- The Island Fire Station will relocate to the Main Base.
- Closure of the Island - when all personnel have evacuated the Island and power is secured, close the Island gate and relocate all security personnel to the Main Base.

Restoration of power - the EOC will coordinate with the SCSC, Ext. 2068 prior to restoring power so as to minimize damage to equipment in the Navy facilities.

APPENDIX H – EVACUEE SECURITY PLAN

- 1 During the period of a natural disaster such as a hurricane or severe nor'easter, Accomack County may request the use of NASA facilities to protect the lives of the general public. During this period, some modifications to the Center access policy will be required.
- 2 Accomack County will be responsible for the reception and care of evacuees. Accomack County will arrange for shelter managers to operate a shelter at WFF.
- 3 The NASA Emergency Coordinator will notify the WSO of the intent to activate a shelter as early as possible. The Coordinator will notify the WSO when the shelter is activated and ready to receive evacuees.
- 4 Security will implement the following procedures after Accomack County has declared an emergency, provided shelter managers, and has a shelter ready to receive evacuees:
 - a Register all evacuees ensuring that a home address, phone number and emergency contact data are obtained for each individual.
 - b Issue "Emergency Evacuation Badge" for the designated shelter and the cafeteria.
 - c Provide the evacuees with an information sheet concerning the WFF Security/Shelter requirements.
 - d Provide directions to the shelter and shelter parking areas.
 - e Periodically patrol the shelter area to ensure order. Persons creating a problem will be asked to leave.
- 5 If the shelter has not been activated and no call has been received that one is being activated, tell potential evacuees that the Town and County officials have not made arrangements with WFF to open a shelter. Suggest that they try Arcadia High School or listen for official announcements on the radio.
- 6 If the shelter is in the process of being activated, collect the pertinent data and issue the "Emergency Evacuation Badge" but do not allow them on the base until the shelter is ready to receive them.

WFF Security/Shelter Requirements

Remember that these shelters are in government buildings. There are no beds or cots. There is no privacy. A shelter is just that, it offers shelter -- a roof, four walls and a floor.

You will need to be considerate of the other people there.

NO WEAPONS

NO ILLEGAL DRUGS

NO ALCOHOL

NO PETS

NO SMOKING IN THE BUILDING

NO BOATS OR CAMPERS

- Stay in/at the shelter and do not wander around the Main Base

APPENDIX F – ACRONYMS AND ABBREVIATIONS

DETF	Delmarva Emergency Task Force
EAS	Emergency Alert System
ECHO	Emergency Contact for Hazardous Operations – a NASA notification system
EM	Emergency Management
EMT	Executive Management Team
ENS	Emergency Notification System
EOC	Emergency Operations Center
ESARC	Eastern Shore Amateur Radio Club
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
FMB	Facilities Management Branch – Code 228
FOM	Facilities Operation Manager
GETS	Government Emergency Telecommunications Service
GSFC	Goddard Space Flight Center
ICS	Incident Command System
IDA	Initial Damage Assessment
MARS	Mid-Atlantic Regional Spaceport
MEC	Management Education Center
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NASA HQ	NASA Headquarters, Washington DC
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
PDA	Preliminary Damage Assessment
PAO	Public Affairs Office – Code 130
POC	Point of Contact
RACES	Radio Amateur Civil Emergency Services
RMMO	Range Mission Management Office
ROC	Range Operations Contract
SCNS	Space Communications Network Services
SCSC	Surface Combat Systems Center, US Navy
SHARES	SHARED RESources
SOP	Standard Operating Procedures
VDEM	Virginia Department of Emergency Management
USCG	United States Coast Guard
VDEM	Virginia Department of Emergency Management
VEOC	Virginia Emergency Operations Center
WEMA	Wallops Exchange and Morale Association
WFF	Wallops Flight Facility

WICC	Wallops Institutional Consolidated Contract
WOTS	Wallops Orbital Tracking System
WSO	Wallops Security Office

CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	June 19, 2001	This version of the plan updates the procedures to comply with current requirements for emergency preparedness planning and reflects personnel and organizational changes.
Annual Review	June 1, 2002	Updates phone numbers and reflects impact of the WICC and Partners involment. Adds National Hurricane Center URL for tracking charts and hurricane basics. Eliminates the need for legal size paper.
Annual Review	June 1,2003	Updates phone numbers. Changes the first response period to reflect the 5 day forecast.
Annual Review	May 13, 2004	Update Phone numbers, The Town of Chincoteague has been replaced by Accomack County, Executive Management Team defined in Appendix G
Annual Review	June 1, 2005	Correct minor format errors. Create new cover sheet. Create new plan identification number. Place plan on Center's Configuration Control site in addition to the WFF Code 803 Safety website.
Annual Review	June 12, 2006	Implements incident command as identified in IG report on NASA's Katrina Response.
AnnualReview	June 6, 2007	Paginate the document. Eliminate references to the old radio system. On Page 9, add references to the NASAWIDE1, FS1, FS2 and TALKAROUND radio channels. On page 15, eliminate reference to old radio system

Annual Review	July 10, 2008	Update EOC Manager location to E-107 on Page 27. Update NASA Internal Notification List on Page 29
Annual Review	June 17, 2009	Updated with new cover sheet. Updated Formatting. Minor grammatical corrections.
Annual Review	June 2, 2010	Updated NASA Internal Notification List on Page 30.
Revised	Nov 1, 2010	Updated to incorporate changes discovered during annual hurricane exercise. Changed evacuees from 1,000 to 200; added EMT decision making to close WFF during CAT 3 storm; Establishment of a phased in EOC with approaching storms; Emergency services ceasing when winds exceed 74 MPH; changed criteria for weather office personnel release from duties; changed criteria for weather office notification to emergency coordinator for tropical storms.
Annual Review	July 25, 2011	Added verbage for D-10 as “last resort shelter”, updated mobile generator locations, changed D-8 to D-50 as location of 24 hour coverage on P-19 and contact numbers in appendix C, Changed EOC location from RCC to E-107 room 104, changed command post to EOC on page 27, updated NASA Internal Notification List on Page 30.
Annual Review	July 12, 2012	Updated to incorporate needed changes discovered during Hurricane Irene event, needed changes discussed during 2012 hurricane/nor’easter tabletop exercise, changed wind speed trigger point for Condition levels to be in sync with Fire/EMS/USCG SOP values, changed format to reflect NIMS compliant formatting, added NIMS compliancy and exercise participation to roles and responsibilities.