

**OLD POINT COMFORT MARINA
SEVERE WEATHER PREPAREDNESS PLAN
March 2010**

PURPOSE. To establish a marina severe weather preparedness plan that will minimize damages to the slip holder's vessels resulting from high winds and water. This plan outlines steps to be taken to respond to severe weather storms.

DISCUSSION. In the event of a severe storm, normal operations are disrupted and specific actions may be required to minimize property and personal damage. This plan requires planning, logistics and operational actions to prepare for and counteract the effects of high winds and water.

SCOPE. This plan furnishes information and a checklist of items to be completed to secure the marina against the effects of a severe storm and to safeguard its personnel and property.

ACTION. All personnel assigned to this plan shall ensure compliance with this plan. Each person assigned to implementing this plan shall be familiar with its contents.

NOTE. All material outlined in this plan will be utilized in conjunction with materials outlined in the Commonwealth of Virginia's "Handbook for Marina Owners and Operators for Hurricane and Severe Weather Preparedness" (Prepared by Dept of Emergency Services.), Fort Monroe Adverse Weather and Hurricane Emergency Procedures, and the International Marina Institute Hurricane Management Series.

CONCEPT OF OPERATIONS. Severe weather can come in the form of lightning, hail storms, ice storms, tornadoes, or hurricanes. Concepts discussed herein apply to ideal storm conditions.

HURRICANE RESPONSE TEAM LEADERSHIP: Installation Commander, Installation Operations Center, D,MWR, Marina Manager; Marina Operations Manager; Marina Office Manager; Ship's Store Manager; Dock hands; Restaurant manager.

Delegation of Authority: Marina manager or his/her designated representative has the authority based upon Fort Monroe's Empowerment Agreement to make logical and rational "on the spot" decisions regarding protection of OPCM property and personnel. Slip holders and staff members **must** comply with OPCM Manager directive. Failure to do so may result in disciplinary action for employees and/or eviction of slip holders.

Hurricane Response Team: Includes all Marina employees. Unless instructed otherwise, marina employees will answer to appropriate supervisor during hurricane response.

HURRICANE PREPAREDNESS:

The hurricane season extends from 1 Jun thru 30 November. During this season, Old Point Comfort Marina will maintain one of four readiness phases.

Phase 4: The lowest level of preparation will be set automatically from 1 June thru 30 November. Higher readiness phases will be set upon approach of a storm.

Hurricane preparedness phases have been developed to ensure an orderly transition of the marina from a storm watch to its arrival.

Any tropical disturbances along the Atlantic Coast can be considered a threat to the Chesapeake Bay region and the Commonwealth of Virginia. The conventional path for these storms is northerly; however, these paths are not always the pattern. Unexpected cold fronts can stall the forward movement of a storm and allow it to strengthen over warm waters. Also, storms which make landfall on the Gulf Coast can come across the Appalachians and cause severe flooding and wind damage in Virginia. The passage of a hurricane could strongly affect an area in excess of one hundred miles. Winds build rapidly, up to speeds approaching 150 mph. It can be anticipated that commercial power will be interrupted for an extended period. General confusion in the community can be expected during pre and post hurricane efforts. The various drawbridges in the area will probably be disabled in the down position, severely hindering marine traffic. Tunnels could be closed and roadways flooded, hindering vehicle traffic.

Evacuation orders will be issued by local authorities in time to ensure that evacuation can be completed prior to the arrival of sustained gale-force (39mph/34 knot) winds.

The passing of the "eye" of the storm in our area is to be experienced with a great deal of caution. The direct passing of the "eye" presents a brief lull. Following this period of little wind, there will be a sudden blast of high velocity winds from the opposite direction. During the period of the "eye" passing, no one should venture outside or attempt to do anything in the exposed areas of the marina. Updates of the storm's position can be obtained from you local radio, TV stations, and the marine weather service broadcasts.

An approaching storm with winds below hurricane strength may still pose a threat to the marina. It may continue to build in strength before coming ashore as a hurricane, or it may come ashore at storm strength and still be strong enough to cause considerable wind, rain, and flood damage. In these situations, the storm will be treated as a severe weather front and action appropriate to that weather system will apply.

Slip holders at the marina are encouraged to develop hurricane plans consistent with the provisions of this plan. OPCM has **Hurricane**

Worksheets for Boat Owner's prepared by Boat U.S. in the Marina office.

HURRICANE CATEGORIES

The National Weather Service (NWS) categorizes tropical storms and hurricanes into five categories. The lesser beginning with the lower numbers, and as the numbers get higher, the more severe the storm.

HURRICANE PHASES FOR OLD POINT COMFORT MARINA

There are four hurricane phases which will be set for OPCM. The speed of advance of a hurricane dictates the hurricane phase to be set. The following advance notice is considered adequate for the marina to accomplish the required readiness actions under most circumstances. These phases are as follows:

PHASE FOUR: A seasonal hurricane phase is automatically set by the National Weather Service on 1 June of each year and extends to 30 November. Generalized actions include: Review and revision of plans, lists, and inventories; generation of customer awareness and conduct employee training; and continuation of normal operations. A storm could pose threat to the coast. Evaluate and monitor weather and hurricane awareness on a continual basis.

PHASE THREE: When a hurricane is approaching, Phase 3 indicates that sustained gale-force (39 mph) or greater winds are expected within 72-48 hours. Actions: begin implementation of Storm/hurricane preparation. (Hurricane Watch @ 36 hours).

PHASE TWO: When a hurricane is approaching, Phase 2 indicates that sustained gale-force (39 mph) or greater winds are expected within 48-24 hours. Actions: secure marina and boats; determine marina closing and employee evacuation schedule; establish limited entry. *Slip holders that plan to evacuate must do so no later than Phase 2.*

PHASE ONE: When a hurricane is approaching, phase 1 indicates state of **maximum preparedness**, and is set when winds of sustained gale-force (39 mph) or greater are expected within 24-12 hours. A *high probability of strike exists*. Anyone planning to evacuate *should* have. Marina will be locked down. No entry/exit. (Hurricane Warning issued @ 12 hours).

Progression from phase four directly to phase one can happen very rapidly and is quite possible because of the erratic behavior of hurricanes and the difficulty of accurately predicting the paths of hurricanes.

COMMUNICATIONS. A communications center will be established to notify all marina employees and slip holders of the hurricane warning, serve as a message center and update marina slip holders with periodic status reports.

The center will be established as soon as Phase Three is set. During the hurricane approach and following the storm, the message center will take calls from slip holders concerning the warning status action plan and situation updates.

The marina telephones will be reserved for hurricane operations, work crews, weather reports, security, service calls and emergency use.

The communications center will function up to two days following the storm as required.

The communications center will operate from 72 hours before the storm's ETA until 24 hours after the storm passes to alert slip holders and relay information concerning the progress and phases at the marina. Slip holders will be notified of daily schedule and actual operating hours.

COMPARISON OF HURRICANE CONDITIONS

| | | | |
|---|----------------|-------------------|--------------------------|
| | DES | Maritime | Military |
| June 1 - November 30 | FIVE | WHISKEY | FOUR |
| Hurricane force winds predicted within 120-72 hrs | FOUR | | |
| Hurricane force winds predicted within 72-48 hrs | THREE | | |
| Hurricane force winds predicted within 48 hrs | TWO | X-RAY | THREE |
| Hurricane force winds predicted within 36 hrs | | YANKEE | |
| Hurricane force winds predicted within 24 hrs | | ZULU | TWO |
| 24 hours prior to hurricane force wind arrival until 72 hours after storm's passage | ONE | | |
| Hurricane force winds predicted within 12 hours | | | ONE |
| Post hurricane condition | Return to FIVE | Return to WHISKEY | Return to CONDITION FOUR |

In addition to the above, there are conditions which are applicable for the civilian community which will normally be broadcast over the local radio and TV stations as follows:

HURRICANE SEASON - Automatically set on June 1.

HURRICANE WATCH - Hurricane force winds expected within 36 hours.

HURRICANE WARNING - Hurricane force winds expected within 12 hours

RESPONSIBILITIES PRIOR TO THE HURRICANE SEASON

Prior to the hurricane season, the following administrative functions will be carried out:

Marina Manager:

- o Review, reassess, and revise severe weather emergency procedures as necessary.
- o Post Hurricane Response Checklist and Emergency Listing, and distribute copies of Severe Weather Emergency Procedures to all concerned with carrying out the plan.
- o Review marina slip lease agreement to ensure clarity of renter liability for property damage and personal injury.
- o Review Virginia Emergency Management Severe Weather Procedures reference evacuation routes, drawbridge policy, bridge/tunnel opening closing policy, storm surge, wind damage potential, and flood plains.
- o Review and update detailed schematic of OPCM showing utility shutoff points, potential hazard areas, emergency equipment, supplies, communications equipment, first aid supplies, and escape routes.
- o Update list of evacuation routes, emergency shelters, hurricane holes, and emergency phone numbers.
- o Identify items for evacuation in each section of OPCM (i.e. files)
- o Remind slip holders of responsibilities during hurricane season (send out annual information letter prior hurricane season - June 1)
- o Hold Hurricane Preparedness Training for staff
- o Emphasize cross-training
- o Verify with Chief, FMD that OPCM is adequately insured with liability, storm damage, and business interruption insurances.
- o Review listings for repair and salvage companies. Pre-qualify companies with proof of insurance.

- o Know the limits of OPCM design: storm surge, wind speed, and boat loading
- o Monitor weather forecasts

Marina Operations Manager:

- o Conduct pre-hurricane inspection of marina and boats to determine hurricane readiness.
- o Assist Marina Manager with Severe weather checklist and employee training
- o Perform repair and/or maintenance to all emergency equipment, marina vehicles, and boats (or contract).
- o Inventory marina hand-held radios and weather alert radios
- o Ensure that the following are stocked and ready for issue:

Flashlights and batteries
 Emergency high-intensity lights
 Battery operated AM/FM radio with weather frequency
 Nylon line sized to tie down large items
 Foul weather gear (rain-suits, frostbite/weatherproof gloves, rain boots)
 Emergency water containers (5 gallon)
 Automatically deployed life harness with tether rings
 Reflective vests/phosphorus night-sticks/whistles
 VHF hand held radios
 Gas operated emergency generator
 Large flow capacity sump pump
 Mooring lines - pre cut and placed at pier heads
 Emergency utility shut off
 Emergency medical kit
 Full Gasoline containers

OFFICE MANAGER:

- o Ensure slip renter information is current: this will include name, address, and phone number of **designated caretaker** in the event they are out of town during hurricane season
- o Update employee emergency contact list
- o Post and maintain phone number list to include: Virginia Emergency Management Agency, pre-qualified repair and salvage companies, fire dept/Military Police/rescue service/Installation Environmental personnel
- o Post list of evacuation routes, emergency shelters, emergency phone numbers, and hurricane holes
- o Make list and mark items for quick identification at evacuation. Records to remove: slip holder files; cash register records;

petty cash box; inventory records, Marina Manager's files;
computer software with backed up files

MARINA STAFF:

Under direction of Marina Operations Manager:

- o Review updated OPCM Severe Weather Preparedness Plan
- o Inspect building to detect, repair, or secure potential sources of danger such as:
 - Structural weaknesses resulting from worn or weather beaten supports, wooden light poles, and similar objects
 - Clogged or inoperable gutters and drain pipes
 - Remove any litter and/or debris
 - Inspect, service, and repair as necessary all docks, piers, pilings, and cleats.
 - Inspect all storage sheds and out buildings, freezers and portable buildings for tie down
 - Inspect and have serviced as necessary all fire fighting equipment
 - Inspect and service as necessary all fuel supply and dispensing equipment. Check cut off valves for fuel and water lines
 - Inspect all emergency lighting systems and ensure they are operational
 - Check emergency equipment and supplies and reorder to fill requirements, especially extra mooring lines, lumber for fender boards, chafing gear, screw anchors, flashlights, batteries, portable generators, electric and manual bilge pumps and hull patching or repair supplies.

ALL MARINA STAFF (family/home prep):

Prior to hurricane season, take the following actions:

- ❖ Each employee should have a *written* plan prepared for his/her personal preparation and evacuation in order to effectively reduce his/her required leave time. This will also ensure that other crew members can have adequate leave time. This plan should be discussed with your family so that they will be prepared and know what is expected of them. When preparing your plan, you should consider the following:
- ❖ Prepare you home and yard early in Phase Three to allow for an organized early evacuation. Your efforts should be to reduce wind and flood damage by boarding windows, raising furniture, covering books and appliances, etc.
- ❖ Decide where to go. This will depend on the track and severity of the storm. Local emergency shelters may not be as comfortable as a stay with out of town relatives, but will allow you to return more quickly.

- ❖ If your family decides to go to different locations during the evacuation, decide on destination alternates and communication options to reduce anxiety over the well-being of family members. Calling a designated out of state relative is one option to re-establish contact.
- ❖ How will you evacuate? Plan your route and departure time to avoid low areas which may be flooded due to torrential rains and high tides. Consult the evacuation maps for your area. Scout your route ahead of time for local hazards and alternatives. Plan to leave early.
- ❖ Decide what to take. Important documents should be designated in advance for removal. Small valuables, heirlooms, photos, etc. can be boxed for evacuation.
- ❖ Build a hurricane inventory to include:

- Ice chest for ice and perishable food
- Potable water (plan 1 qt per person, per day)
- Food (perishable, canned, snack)
- Can opener and utensils
- Flash lights and batteries
- Battery operated AM/FM radio with weather frequency
- Extra clothing
- Rain gear and boots
- Toilet and first aid kit
- Required medicine supplies
- Bedding
- Cash, check book and credit cards

Note: Alcoholic beverages, pets and firearms are not permitted in emergency shelters.

- ❖ Be prepared to evacuate early and leave as soon as possible after evacuation has been called for. You may want to send your family ahead if other responsibilities may delay your own evacuation until Phase One.
- ❖ Returning after an evacuation may be a time of despair or rejoicing. Concentrate on the positive aspects of your survival and meet the challenge with optimism and safety consciousness. The threat of storm related injuries is not over. Several deaths in the Charleston area after Hurricane Hugo resulted from post-storm injuries from chain saws, falling trees, candle fires or electrocution. The threats of spoiled food, bad water, poor sanitation, and poisonous snakes should also be considered.
- ❖ Because of the uncertainty of how long crew members will be required to be on duty, at first notice of a storm there will be a staggered relief shifts to allow each person time to go home and prepare their homes and families. This will be done

well in advance of the anticipated storm (as much as 2-3 days in advance).

- ❖ In order to return to preparations as soon as possible, leave time will be scheduled with team leaders going first. Because the fatigue factor during and after the storm can be expected to be high, staffing prior to the storm's arrival should be kept at a minimum.

SLIP HOLDERS:

- o Update personal Severe Weather Readiness Checklist
- o Review boat liability insurance policy. Be aware of special conditions and exclusions. The boat owner is liable for damages caused by his/her boat
- o Ensure all of your information on file at OPCM is CURRENT (telephone numbers, address, proof of insurance)
- o Provide marina with name, phone number and address of qualified and accessible alternate captain of vessel in case you are out of town during hurricane season
- o Ensure your vessel can get underway under it's own power within 48 hours if necessary
- o Keep an adequate inventory of storm gear aboard and maintain dock lines of proper size and condition
- o Know evacuation routes if you are taking your vessel out of the marina. Know conflicts: bridges, boat ramps, storm surge limits, etc

DURING ALL STORM PHASES:

1. Slip holders and staff members **must** comply with OPCM Manager directives. Failure to do so may result in disciplinary action of employees and/or eviction of slip holders.
2. Evacuation directives will be determined by the Installation Operations Center (IOC) and/or Post Commander.
3. Provide listing of emergency shelters/numbers/locations for evacuees. **Located at enclosures**
4. Continuously monitor weather conditions. Post information in public access area of marina.
7. Contact Transients. Monitor whereabouts of same. Transients must vacate boats and leave the marina if warranted by severe weather. Evacuation directive will come from IOC and/or Post Commander.

RESPONSIBILITIES DURING ACTUAL STORM PHASES

Discussion.

Numerous tasks and precautions must take place in preparation for the hurricane or severe weather. The extent of the tasks and the number of personnel available will determine the amount of time required for the marina to complete the preparation. However, **72 hours is the minimal** time allowable in most instances for implementation.

- o Manager will remain on site during the emergency condition period.
- o Additional staff will be scheduled as required.
- o A minimum of two personnel on/around docks during storm.
- o Marina staff will work in conjunction with DPW as per HQ directives (as necessary).

PHASE THREE (Alert)

72-48 HOURS PRIOR TO HURRICANE'S ETA: (Earlier if a weekend is involved).

All vessel removal operations are to be well underway and completed during this 48 hour period. Commence plans for securing remaining vessels.

- o Notify all personnel that the facility is on a hurricane alert. All personnel will commence preparations for putting the Severe Weather Preparedness Plan in action.
- o Contact all slip holders that need to: clear objects that may become airborne from their deck; need to remove bimini tops, canopies, plastic side panels, or dinghies; need to double line their vessels or replace frayed lines, secure sail covers, antennas, fenders, dock boxes, stairs and the like. *Keep a written record of these phone calls.*
- o The communications center will be manned and will be notified on the hurricane alert.
- o At 72 hours prior to ETA, put mobile or waterborne operations personnel on standby and start securing operations. Initiate plans to evacuate personnel and equipment in the flood prone (low-land) locations.

- o Begin facility protection preparations by policing all yard, marina and dock areas to stow away or secure loose equipment and items. Store this equipment in covered or sheltered areas.
- o Secure all flammable, explosive or other hazardous materials such as compressed gas cylinders, in a safe, protected, secure area.
- o Dinghies will be removed and secured in designated safe areas.
- o *All private vessel owners choosing to remove their vessels from the Old Point Comfort Marina must do so at this time. **List of Chesapeake Bay Hurricane Holes is located at enclosure.***
- o OPCM boats will be located inside Bldg 207 for emergency purposes. MWR vessels will not be operated during storm phases or at any time MWR employee's safety would be compromised.
- o As the departing vessels are fueling, facility vessels and vehicles will also be topped off, as necessary, in preparation for securing all fueling operations and equipment. (Loss of electrical power during a hurricane may disrupt fuel supplies after the storm.)
- o Remove all extraneous gear from piers.
- o Check and secure any loose siding or roofing on inside "rack" storage buildings. Remove boats if facility is in a lowland area and is in danger of flooding.
- o If other companies or concerns have supplies or equipment in facility, request that they have their items removed.
- o Consider removing any equipment and supplies you may have at other locations.
- o Take down large signs, antennas or other removable items subject to wind damage.
- o Commence facility protection precautions. Storm shutters or other protective equipment and windows will be taped with masking tape to reduce the possibility of flying glass.
- o Secure important paperwork in a safe, protected area.
- o Process and mail all paperwork that can be completed immediately. Set all new paperwork aside to be completed after the hurricane or storm.
- o Remove expensive equipment or products to inland warehouses for storage. If this is not possible due to a lack of transportation, equipment, or limited time, stack expensive equipment or inventories in protected areas. Cover them with

tarps to protect them from water damage, should the roof leak or the windows get blown out.

- o Reduce inventories as much as possible and delay ordering materials, stocks or supplies until after the storm. If materials or inventories are en-route, try to divert them to a temporary warehouse or area not subject to the storm.
- o Access to piers must be maintained during PHASES 4 thru PHASE 2 of storm conditions.
- o Store picnic tables inside Bldg 207.
- o Fuel tank levels will be dipped, and verified by computer.
- o Monitor storm's progress and plot its advance. Maintain Storm Notice Postings at OPCM office.
- o Keep log of all slip holders that have evacuated/or plan on evacuating marina.

PHASE TWO (Watch)

48-24 HOURS PRIOR TO ETA. Commence and/or complete the following actions.

- o Notify all personnel that facility is on hurricane watch.
- o Continue to monitor storm's progress.
- o Complete securing operations in lowland locations. All dock structures, field buildings and offices will be secured.
- o Ensure marina is secured from non-essential traffic
- o In areas subject to flooding, move vehicles and/or equipment to the highest point available. If outside storage is necessary, do not park under trees, towers, signs, or power lines.
- o All employee personal belongings will be removed from evacuated locations.
- o All electrical power supplies to areas that may be flooded will be secured by turning off the power at the main breaker switch.
- o All natural gas will be turned off at the main valve if the marina is vacated.
- o All fuel supply tanks and lines will be secured at the shore side installation. Shut off power to gas/diesel tanks.
- o All electric motors, pumps and like equipment at or below ground level will be disconnected and protected or placed in a safe location.

- o If fresh water is supplied from municipal or other water lines, turn off the supply at the meter.
- o Secure all equipment such as forklifts, trucks, travel lifts, mobile cranes, and work boats in protected areas, shops or warehouses, as they may not be needed during the storm. Vehicles are to be parked with the emergency brake on.
- o Complete securing all facility "shop" operations. Their equipment and operations are not needed and their interior, protective space will be utilized for storage of other facility equipment. Tape windows, secure and lock doors.
- o For facilities planned to be manned during the hurricane, check that all emergency supplies are readily available such as first aid kits, fire protection equipment, sufficient stores of provisions, including bottled fresh water, fuel for emergency generators, battery powered lighting, flashlights or lanterns, battery powered radios, VHF units and the like.
- o Keep petty cash and IMPACT Cards on hand (to use for operating expenses).
- o Meet with staff to assess preparation progress

SPECIFIC DOCK INSTRUCTIONS

- o The main floating anchor pilings will be marked with fluorescent measurements of tidal surge.
- o **A predetermined point of rise will dictate evacuation on a voluntary basis.**
- o A final mark will require mandatory and **immediate** evacuation of non essential personnel from Old Point Comfort Marina piers. Electric power and water will be shut off and all boats checked for occupancy. At this time, ***gates will be locked and all persons will be denied access to piers.*** Military Police support will be enlisted for personnel failing to comply.
- o The IOC and/or Installation Commander have authority to order evacuation of vessels/docks during severe weather conditions.
- o Piers will be checked hourly for changing conditions and vessel security ("no lone concept"). No lone means that no marina personnel will inspect docks and vessels at any time without a partner present (buddy system).
- o Emergency lines will be secured to pier head gates in sizes and quantities appropriate for pier size and saturation.
- o Fuel dock main and auxiliary shutoffs operate and will be placed in appropriate positions as dictated by conditions (staff).

- o Docks **must** be cleared of extraneous materials - loose gear, plants, and decorations.
- o Maintenance area/wet slip will be used by MWR personnel and vessels only. Private vessels must be removed from maintenance area/wet slip.
- o Transient vessels will be kept in unoccupied slips only. They may not tie off on end of docks.
- o Notification to appropriate manager will be made when evacuation is complete and the location secured.

PHASE ONE (Warning)
24-0 HOURS PRIOR TO ETA

- o In these hours prior to the projected arrival of the hurricane, the "Hurricane Warning" advisory will have been issued and it is highly likely that the hurricane will make landfall or pass near the marina facility. The following activities will be in progress or nearing completion:
- o Notify all personnel that the facility is on hurricane warning.
- o Continue to monitor storm's progress.
- o With all vessel protection and securing operations completed, make a final check of double mooring lines, tied off with sufficient slack and fender boards and/or other protective equipment in place.
- o Secure as necessary, any remaining operational facility buildings.
- o Employees who are not manning facilities during the storm will be released no later than **twelve** hours prior to the storm. Instructions for reporting back to work after the storm will be given at that time.
- o Whether manning or evacuating the facility, insure that all perimeter access points in the form of fences, gates and building doors are locked and secured.
- o All facility preparations will be completed twelve hours prior to the hurricane's arrival. Depending on the track of the storm, the extent of preparation based on information received may or may not be adequate. **All precautions taken as a result of the hurricane warning should be based on the belief that the storm will hit the facility directly and with its full force.** If the full precautionary measures have not been taken, there is probably little that can be done at this point to improve preparation. This is especially true if authorities issue an evacuation notice to the facility location or area. ***In that***

case, evacuate the area and hope that the measures taken will suffice. The protection of human life is more important than property loss or damage.

- o Secure all points of access to prevent looting after storm

The following suggestions are issued in the interest of personal safety:

- o When the Fort Monroe IOC/Installation Commander advises evacuation--do so!
 - o Stay in a protected and safe place inland if possible.
 - o For facilities remaining manned, extreme caution will be exercised in all outdoor activities. In the event of injury, outside medical aid will probably not be immediately available.
 - o Life jackets will be worn by anyone required to perform any activities on or near the docks or piers during severe storm phases.
 - o No vehicles or equipment will be operated during the storm unless **absolutely** necessary.
 - o Stay tuned to news and weather broadcasts concerning the hurricane's movement so you will know when the danger has passed. Hurricanes can take between 6 and 8 hours to pass through an area.
 - o Do not assume that the calm or the "eye" of the hurricane means the storm has passed. If the "eye" passes over you, there is still the other side of the hurricane to contend with. Remember, when the "eye" passes over you, the wind will be in the opposite direction when it starts back up on the back side.
- **No one will attempt to move or re-secure a loose vessel or equipment during the storm period.**
 - **No one will be allowed on the docks during the storm period.**
 - **No one will operate MWR vessels during storm period.**
 - **Under NO circumstances will slip holders ride out storm on vessel**
 - **OPCM will basically be in lock down mode**

MARINA EVACUATION (IF NECESSARY)

- o Lock up
- o Cut off electricity, gas, fuel, and double check to ensure all utilities are off
- o Remove all important documents from marina
- o Leave with adequate time to attend to your own family
- o Monitor storm conditions

AFTER THE STORM

The following should be considered when returning to the area:

- o Extensive damage may have been caused by the hurricane. While checking the condition of the marina facility is of a main concern, there may be limitation to access to the facility or at the facility itself. Flooded roads, downed power lines, washed out beach or river areas are a few of the problems. An inspection of the facility will be made as soon as practicable to determine conditions, damages and security of premises.
- o Be alert to flash flooding that may occur due to heavy rains up stream of flooded canal areas even after the storm has ended. Also, be alert for tornadoes which are frequently associated with hurricanes or occur after the hurricane has passed. In crossing water, do not try to cross a pool of water unless you are certain that the water will not be above your knees (or above the middle of your car's wheels) all the way across.
- o Post storm security should be addressed as soon as you return to the marina to protect against vandalism.

Personnel returning to the facility and beginning the preliminary damage assessment are to be aware of the following:

- o Be aware of snakes when going into grassy areas or other locations. Personnel should wear boots and be cautioned to look where they place their feet and hands.
- o Be aware of possible downed electrical wires which should be considered **HOT** and avoided until the power company or facility electrical maintenance personnel service the wires.
- o Check natural gas installations for leaking gas by smell only, not with matches or candles (for facilities with natural gas).
 - o Check facility fueling docks and tanks for leaking gasoline or diesel fuel where applicable. (This may require filing a report with Directorate of Public Works.)
- o Electrical equipment of the facility that has been submerged in water is not to be started until it has been checked and repaired as necessary.
- o Broken sewer or water mains are to be reported immediately to either the utility company responsible for repair or to the marina facility maintenance personnel if owned and maintained by the facility.

- o Building, shop and dock electric wiring is to be checked completely prior to turning on the main power switch.
- o Wet electrical appliances, such as computers, copiers, calculators, typewriters, etc. will be inspected, and repaired or replaced as necessary prior to operation.
- o Plan to return to the marina once emergency services give clearance and your family is taken care of. Telephone communications may not be possible at this time, so listen to the public radio broadcast for information, emergency services clearance, etc. on returning to the area.

As soon as the facility has been deemed safe for complete inspection, and where damage has occurred, a complete survey of the facilities, inventories, equipment and stocks will be made and documented with photographs or video where possible. Any losses or damages should be reported immediately to the insurance agent of the marina.

A written assessment of damages will be prepared as soon as possible. Estimated damages to docks and piers and other harbor facilities, cranes, mast hoist, boat sheds, toilets, showers, lockers, marina office, fuel dock and office, electric transformers, electric service, and telephones are to be included in the assessment.

Return and account for any emergency equipment issued.

After making damage assessments, plan repairs and implement a repair program as soon as possible.

While it is understandable that immediate repairs may need to be undertaken, all actions taken during the course of repairs prior to any insurance adjustment will be properly documented and filed. In the case of facility property damages, appraisers assigned by the insurance company will be involved in assisting with the claims. Insurance companies usually establish storm claims offices to handle the numerous claims after a hurricane strikes. In catastrophic situations, extra personnel are called in to handle the volume of claims.

If there has been any theft or vandalism loss or damage to the facility, other than storm related, a report will be made to local police or other law enforcement authorities so that appropriate actions can be taken. The incident report number and, if possible, a copy of the incident report, is to be obtained from the police to substantiate any insurance claim or tax property loss reporting.

It is obvious that vessel owners, captains, caretakers and others with vessel interests will inquire as to the status of their vessels. These inquiries should be fielded as best as possible, especially if there is no damage to their property. Notification of any vessel damage should be made as soon as possible. **Consider dedicating a phone line with a pre-recorded message to cut down on answering these calls.** While it is understandable that vessel owners may want to

return to marinas or yard facilities as soon as possible, they will be advised as to the situation at the facility and as to the availability of berthing facilities for their vessel as soon as practical. If damages preclude the facility from providing a berthing space for the vessels, the owners will be so notified and advised as to when the facility may be available to provide a berth.

If the facility is relatively undamaged, then efforts will be made to become operational and provide facility services to those who are not so fortunate.

Controlled access and/or security at the facility may be required in any instance. Facility personnel will be put in charge of such security with consideration given to the handling of:

- Slip holders and non-slip holders in the case of marinas or other facilities.
- Yacht club members.
- Radio, television and press representatives.

SLIP HOLDERS

PHASE FOUR

AUTOMATICALLY SET JUNE 1 THROUGH NOVEMBER 30

- o Know your evacuation route and shelter plan.
- o Ensure that your emergency gear is serviceable and ready for use.

PHASE THREE

72-48 HOURS PRIOR TO HURRICANE'S ETA

- o Secure your boat in accordance with your pre-approved plan. This will include:
- o Securing or changing dock lines. Allow as much line as possible for storm and tide surge.
- o Attach chafing gear such as reinforced radiator hose where lines will rub.
- o Disconnect electric, water, and other connections from dock.
- o If possible, un-step the mast and secure on land
- o Remove all articles on deck including bimini tops, plastic side enclosures, sails, and dinghies.
- o Secure all hatches and doors, tape windows from the inside
- o Check battery for charge and insure that bilge pumps are working properly

- o Shut off fuel lines at tank, and close thru hull fittings
- o Remove all electronics and valuables to prevent destruction or theft
- o Rig spring lines
- o Top off fuel tanks
- o Ensure fuel filters are clean
- o Insert fenders to protect your vessel from rubbing against docks, pilings, or other boats

PHASE TWO

48-24 HOURS PRIOR TO ETA

- o All personnel evacuate the area.
Do not stay on vessel or attempt to move it during this time

AFTER HURRICANE

- o Do not return to dock until storm has cleared permission has been provided by Installation Commander
- o Contact insurance company
- o Make report of all damages to vessel (if necessary). Photograph Damages
- o Salvage vessel if necessary
- o Make repairs to vessel as necessary

**HURRICANE
AND
SEVERE WEATHER PREPAREDNESS PLAN
FOR
OLD POINT COMFORT MARINA**

DATE: _____

This plan will be revised by marina management to keep current with advances in available technology and marina development.

Revised this date: _____

Revised this date: _____

Revised this date: _____

Revised this date: _____

Revised this date: _____

The plan should be reviewed and rehearsed prior to each hurricane season. Employees should have a complete understanding of the marina's policies and plans for a severe storm situation.

Reviewed/Rehearsed by _____ Date _____

Reviewed/Rehearsed by _____ Date _____

Reviewed/Rehearsed by _____ Date _____

Reviewed/Rehearsed by _____ Date _____

Reviewed/Rehearsed by _____ Date _____

MARINA SLIP HOLDERS SEVERE WEATHER INFORMATION

GENERAL INFORMATION FOR MARINA SLIP HOLDERS

Securing a boat against something is extraordinary as a hurricane requires more than just ordinary effort. There is not much time, maybe 24 hours or less, so you cannot wait until a *WARNING* has been posted to decide whether to move you boat, buy extra lines and contemplate what should or should not be stripped off the deck. The time to formulate a plan of action is *NOW*.

In a hurricane, boats are especially vulnerable. They are lifted above the dock by high water, flooded by rain, and thrust and tugged against their mooring lines and pilings by the wind. After the storm they are prime targets for looters.

Storage in the Water

Any boat in the water should be secured in a snug harbor. Storm surge - high water - is a major consideration. It is the deadly storm surge, not the wind or waves that is responsible for wrecking most boats and causing nine out of ten hurricane related deaths. Storm surges of 10 feet or more are common in a hurricane, so a sea wall or sand spit that normally protects a harbor may not offer protection in a hurricane.

Crowded, rock strewn harbors are picturesque, but this may not be the best place to keep your boat in a hurricane. If a harbor is crowded, the chances of other boats breaking loose and banging into your boat are that much greater. You should also know the type of bottom in your harbor. If you plan to anchor, check your charts to see what you will be setting you anchor in. The best anchoring is usually in sand, followed by clay, hard mud, shells, broken shells and soft mud. Water can also be blown out of a harbor, leaving boats stranded briefly.

At a Dock

Most boats weather hurricanes at their docks, but this is not necessarily the best place for a boat in a hurricane. Boats that were bobbing gently next to a dock before a storm sometimes wind up on top of, underneath, or sunk next to that dock. Sailboat masts can become hopelessly tangled when berths are close together. Securing to a floating dock may be an added hazard should the dock break loose.

If you decide to leave you boat at the dock, **a second set of dock-lines (nylon) are required that are a size larger than those you normally use.** Chafe protectors must be on all lines at the chocks and any other potential chafe points.

At a Mooring, at Anchor, or Both

Mooring or anchoring, especially in a harbor that is not too crowded, is a good bet for many boats. A boat at a mooring can swing to face the wind, which reduces wind-age. A boat that is anchored or moored in the open will not bank into a dock unless the anchor or mooring drags.

The chances of the boat dragging can be reduced considerably by using a permanent mooring - a mushroom anchor and chain - with two storm anchors (the mooring should be inspected annually). Using the anchors with the mooring increases it's holding power and decreases the room a boat will need to swing. A third storm anchor can be used instead of the mooring. If there will be ample room for the boat to swing, anchors used in tandem give you the advantage of 100% of the holding power of each anchor. You should use an anchor that is suited to the bottom (mud, sand, etc.) where you will be anchoring. Use anchor weights that are well above the ones you normally use.

In either case, **it is important to have plenty of scope - at least 10:1 - and a lot of heavy, oversized chain.** A chain/nylon ration of 50/50 is the optimum. A riding weight, or sentinel, placed at the chain/nylon juncture, will lower the angle of pull on the anchor and reduce jerking and strain on the boat. To absorb shock, an all-chain mooring must have a snubber - usually nylon line - that is about 10% of the mooring's length.

Chafe gear is essential on any lines, but it is especially critical on mooring lines. More than any area on the boat, the bow is loaded with sharp angles, stanchions, pulpits, etc., that will chafe through a line that is not well protected. A barnacle-free bottom will also help, should the boat ride over its mooring.

HURRICANE HOLES

By using a combination of anchors and lines to trees ashore, you may find a hurricane hole further upriver offering ideal protection for your boat. To be ideal, a hurricane hole should be deep and narrow, with a profusion of young, sturdy trees along high, sheltering banks. This ideal spot should be far inland to provide shelter from high coastal winds and storm surges, but not too far to be difficult to reach in a relatively short time. The location should preferably not require transit of any draw bridges.

You may have to settle for a hurricane hole that is less than ideal, but this should not prevent you from looking. Here are a few things to consider:

First and foremost there are NO ABSOLUTELY SAFE hurricane holes.

a. A hurricane hole that takes an hour to reach under normal conditions may take two or more when wind and seas are building.

b. Bridges may not open as frequently as normal or they may be locked down to evacuate highway traffic. ***The Monitor Merrimac, the***

Hampton Roads Bridge Tunnel, the James River Bridge, and the Coleman Bridge will close to traffic when winds exceed 45+ MPH winds, or if storm surge, rain bands, or if severe weather conditions exist at that particular facility. The Chesapeake Bay Bridge tunnel is not an evacuation route.

c. Other boats may have chosen the same spot.

Storage Ashore

Storage ashore is an option for smaller boats, especially trailer able boats. Larger boats that have low freeboard, such as high-performance powerboats, may be safer ashore. Engines and upholstery on these boats are frequently damaged because their low freeboard is easily overcome by waves, spray and rain. I/O units and outboard motors are especially vulnerable to damage from docks and drifting boats. **See drawing that illustrates how to secure a small vessel on a trailer.**

Storage ashore for larger boats is a good idea if there is time to haul and cradle it and if it will be sheltered from rising water, falling trees and flying debris. A boat on shore, however, creates more wind-age than a boat in the water especially deep-keel sailboats. Therefore, any cradle used in this case should be substantial and not just jack-stand.

HURRICANE/SEVERE WEATHER INFORMATION
EMERGENCY LISTING

OLD POINT COMFORT MARINA

OWNER/OPERATOR: UNITED STATES DEPARTMENT OF THE ARMY

MARINA STORM EMERGENCY PLAN DIRECTORS/CO-ORDINATORS:

GARRISON COMMANDER: 788-3241

INSTALLATION OPERATIONS CENTER: 788-6305

IOC HOTLINE: 788-6318

STAFF DUTY OFFICER (AFTER HOURS): 277-8287

D, MWR: MR PAUL HEILMAN 788-3737

MWR OPERATIONAL STAFF DIRECTOR (DURING EMERGENCIES): MR DON VANPATTEN

OLD POINT COMFORT MARINA EMERGENCY COMMUNICATIONS CENTER: 788-4308

WEATHER INFORMATION: VHF CHANNEL 1
TELEVISION:
24 HOUR WEATHER CHANNEL
WTKR-TV CHANNEL 3
WAVY-TV CHANNEL 10
WVEC-TV CHANNEL 13
RADIO:
WNVZ-FM 104.5
WWDE -FM 101.3
WPTE-FM 94.9
WCMS-AM 100.5
WFOG-FM 92.9
WNIS-AM 790
WTJZ-AM 1270
WTAR-AM 850

NEAREST COAST GUARD UNIT: 484-8192 OR 484-8193 (EMERGENCY NUMBER)

US COAST GUARD SEARCH & RESCUE LOCAL COMMAND CENTER: 483-8567

AMERICAN RED CROSS: 838-7320 OR 1-866-438-4636

DISASTER SERVICES: 446-7762

VIRGINIA EMERGENCY MANAGEMENT: 866-782-3470

FIRE/MEDICAL SERVICE/MILITARY POLICE: CALL 911 USING BASE TELEPHONE

HOSPITALS:

VA MEDICAL CENTER: 722-9961

SENTARA HAMPTON GENERAL: 727-7000

RIVERSIDE: 594-2000
FORT EUSTIS: 314-7500
NAVAL MEDICAL CENTER PORTSMOUTH: 953-5000

EVACUATION ROUTES: SEE ENCLOSURE

PUBLIC SHELTERS: SEE ENCLOSURE

PET SHELTERS ARE LISTED IN FORT MONROE SEVERE WEATHER PLAN

CHESAPEAKE BAY HURRICANE HOLES (places to dock your vessel if you evacuate your slip at OPCM during severe weather)

FORT MONROE TENANT SHELTER LOCATED AT FORT LEE: 1-866-507-7464

USE COMMON SENSE! YOUR LIFE IS MORE IMPORTANT THAN YOUR PROPERTY