

## Preparations to Reduce Disaster

Mystic Seaport Museum is located on the southeast coast of Connecticut. On the seventeen acres of land that the public has access to, there are more than fifty buildings containing public exhibits, as well as administrative and curatorial offices and a research library. The majority of this land falls below the high flood level as projected by a mid-1950's Army Corp. of Engineers study. To compound the problem, we have many office and storage spaces at basement levels.

Recovery from any sort of natural or unnatural disaster would be extremely difficult if there is no preparation plan designed to minimize such a threat. Although most plans that I have listened to or read are for preparation for recovery from a disaster.

We are dealing with a plan of prevention to minimize disaster, complemented with a secondary plan of recovery. It may seem quite natural for a conservator to first think of recovery because we are more often than not called upon after the damage has been done.

The foremost natural disaster that threatens us in Mystic is the hurricane. We have been hit with six hurricanes since the 1930's and were most recently put on alert this past August with another threat. In September 1985, hurricane Gloria decided to make a visit even though she was unwelcome. Our preparation plan was pulled from the shelf and put into action. This plan was some eighty odd pages and is reviewed and revised annually.

Fortunately, a sequence of events happened which were in our favor. There was very little rain associated with the storm and it arrived within one hour of dead low tide. The winds had diminished somewhat, but were being recorded at speeds between 80-135 knots (1 knot=1 1/8 m.p.h.).

Hurricane Gloria was the first storm which we had

to activate our preparation plan since hurricane Belle in 1976. There were numerous corrections and modifications that had been made after the work preparing for Belle. At the same time we realized that all of our preparations to minimize damage from such a storm would not protect us from the unforeseeable. So at this time we spoke with Peter Sparks, then at Winterthur, and made arrangements for two graduate school interns to come to Mystic in the summer of '77 and assist in the organizing of a document pertaining to recovery. The interns who performed this enormous task were Heidi Miksch, now at Peeble Island and Marc Williams, now at C.A.L.

Neither the "Hurricane Preparation Bill" nor the "Recovery Manual" is a how to manual. There is not adequate time to study and educate when notice of a hurricane is within 48 hours of arrival, or after a disaster when there are already wet and damaged objects scattered around. At this time you have to act.

The annual spring review and update of the "Hurricane Preparation Bill" includes a check and restocking of long-term supplies, and servicing of auxiliary generators and pumps. Also at this time are verification of arrangements of rental trucks that are needed for evacuation. Review and updating of procedures and changes with staff as to their responsibilities and numerous other details which are pertinent to the success of preventive preparations.

Some would criticize that our plan is too long and it has grown to be cumbersome and difficult to use. I can only say that when you are confronted with a forecast of imminent disaster you will wish there were more answers to a mounting list of questions. Flexibility, initiative, inventiveness, and a positive attitude have come into play and will assist in filling the gaps in the written plan. No plan of prevention or

recovery will answer all the questions or guard against all possible danger and destruction. These preparations can and will minimize the damage and expedite the recovery.

The following attachments include a copy of the table of contents (Appendix I) which will provide an overview of the general information and areas of specific responsibilities which have to be addressed. The next section (Appendix II) is an introduction and description of "conditions" that are set by the Seaport Administration.

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# Appendix I

## HURRICANE STATION BILL

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1986

## Appendix II

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### MYSTIC SEAPORT MUSEUM

#### HURRICANE STATION BILL Revised July 1986

This bill defines the responsibilities, functions, and procedures to be followed by Mystic Seaport staff in the event of a severe cyclonic storm.

This bill will be reviewed annually and revised as required.

#### INTRODUCTION

Hurricanes are severe tropical disturbances which originate over water, gradually intensifying as they move over the ocean in erratic, but sometimes predictable courses. A tropical storm which has wind velocities of over 74 miles per hour is classified as a hurricane. In addition to high winds and torrential rains, these disturbances are accompanied by mountaineous seas, abnormally high tides in coastal areas, and create possible tidal waves along the storm's path.

#### Gale/Storm/Hurricane Conditions

Mystic Seaport Museum's classification of storm or hurricane conditions recognizes U. S. Coast Guard and U. S. Navy Standards with modification appropriate to the Museum's unique circumstances.

#### Condition - Watch

Set by Planetarium when there are persuasive indications a severe storm could threaten the Seaport within 48 hours.

#### Action

Establish watch at Planetarium. Planetarium notifies Director, Deputy Director, switchboard, Department Directors, and other senior personnel (listed on page 3). Department Directors notify departmental personnel.

Planetarium continues to track storm, maintains plot and advisories in Planetarium, Shipyard, Deputy Director's office.

Central Control Station is established in Deputy Director's office (333).

Dockmaster's office warns visiting yachts they will be asked to depart when and if Condition I is set.

#### Condition I

Set by 1., Director, or 2., Deputy Director, or, if need be, 3., other senior staff (as available) approximately 36 hours before effects of storm are predicted to reach Mystic area.

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### Action

Museum remains open to visitors (docks closed).

Central Control Station operates from Deputy Director's office (333).

Departments carry out long lead time preparations.

Dockmaster's office closes docks to entering yachtsmen, requests departure of visiting yachts.

### Condition II

Set by 1., Director, or 2., Deputy Director, or, if need be, 3., other senior staff (as available) when destructive winds and high tides are anticipated within 12-18 hours.

### Action

Museum closed to visitors.

Docks remain closed to visiting yachtsmen.

Departments carry out Hurricane Protection Bills.

Central Control Station moves to Planetarium (333, 234). (See page 4).

### Condition III

Storm is imminent. All preventive measures should have been taken. Security force and other lay staff on a voluntary basis to remain on standby in preselected locations (see Central Control). All others relieved of duties.

#### 1. TORNADO WARNING

In the event of a tornado warning, persons should take shelter in the cellar or lowest floor of a structurally sound building -- preferably, interior hallways, small interior rooms, or under sturdy furniture; stay away from windows. Even though it may be raining hard and blowing outside, windows should be open wide, as the passage of the tornado funnel over a well-insulated, tight house may cause it to explode due to the sudden great decrease in pressure outdoors. If there is time before the storm hits, papers, etc., should be put in drawers and file cabinets.