A Bad Day for ASW – Potable Water Pump Room 3-59-0-E – AC Flats 3-33-01-E

From: Damage Control Training Team (DCTT)

To: Commanding Officer, USCGC HEALY (WAGB-20)

Subj: Drill Date: 12 August 2004

Used This Drill	Prop / Simulation	Simulated Casualty
X	Blue Rag	Flood Water (Potable Water room / Reefer flats)
X	MPCMS Alarm for Flooding in Potable Water Room	MPCMS Alarm
X	MPCMS Alarm for Flooding in AC Flats	MPCMS Alarm from water collecting during roll
X	Blue light on string	Rising falling water

The following safety issues / simulations will **ALWAYS** be in effect onboard *HEALY*:

A. Activation of installed CO_2 Flooding System / AFFF flooding system / Salt water flooding system.

B. Charging of fire hoses in any machinery space.

C. Discharge of portable fire extinguishers without specific direction from a DCTT/ECCTT member.

D. Destructive access or clearance of equipment for simulated DC efforts.

E. Spraying water on any Helo.

DCTT Communications: primary WIFCOM channel 4 secondary Dial phone.

DCTT Mode of training: **Walk through**

Repair locker mode of training: **Walk through**

SAFETY WALK THROUGH: **Completed by ALL DCTT in perspective areas.**
Complete ½ hour prior to drill.
Report to DCC [redacted] when walk through is complete.

Risk assessment

Number_____

Green Amber Red

(b)(6)&(7)(c)

OBJECTIVES THIS DRILL:

2.1 Report the Flooding

2.2 Take Initial Actions

2.5 Assess the Casualty and Identify the Required Equipment

2.7 Set Flooding Boundaries

2.8 Orders and Complete Electrical Isolation

2.10 Repair Ruptured Piping

2.9 Erect Shoring

DCTT Members & Assignments:

Member Name	Assignment	Tasking Sheet
DCC [redacted]	Torch P/W room / initial responder	2.1 , 2.2 , 2.5
EMC	ECC	2.1 , 2.2 , 2.8
EO	OOD / DCA	2.7
DC2 [redacted]	OSL / TL	2.5 , 2.10 , 2.9
MK1 [redacted]	Boundary men	2.7
BMC [redacted]	Locker leader	2.7
HSC	Medical	as per medical drill pack
1ST LT	Flooder / initial responder	2.1, 2.2, 2.5
MK1 [redacted]	Dewatering / shoring team	2.5 , 2.10
ET1 [redacted]	FWD investigators	2.5
EM1	Aft investigators	2.5

SCENERIO:

While engaged in breaking heavy ice in support of AWS 2004, HEALY is experiencing heavy vibration. During one particularly strong oscillation, a pipe ruptures and a valve seal fails at approximately the same time. In the potable water pump room 3-59-0-E (PWR), the weld connecting two sections of the ASW return line from the A/C Flats (6" pipe in port, forward, upper corner) completely fails, resulting in water entering the compartment. In the AC Flats (ACF), the constant vibration coupled with heavy impact results in the valve seal failing at the #2 A/C Chiller pressure regulation station, putting water into the space.

The drill begins with a flooding alarm received in ECC for compartment 3-59-0-E (PWR). The Initial Responder will find the flood level to be approximately 12" of water on deck and a large amount of water pouring from the readily marked ASW return line. Upon reporting to the EOW, the report will be passed to the OOD who will then pipe flooding and set GE.

After the water source is secured the space will be dewatered and a pipe pitch will be installed.

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Ten minutes into the drill, the ship rolls slightly to starboard so as to result in the water spilling failed valve seal in the ACF to collect under the flooding alarm, sounding a second flooding alarm on MPCMS. The EOW should contact the bridge via the 21MC to report the alarm; in turn the investigators should be dispatched to investigate the alarm. Upon finding the damaged valve, the aft investigators should report their findings. Repair locker shall request ECC send TOW to assist investigators.

The drill will end when the P/W room is dewatered the ASW line has a patch on it and the valve on the refer deck has been bypassed.

Training Time Out: A training time out may be called by training team members if a situation arises that requires more time to train than allowed in the timeline. Additionally, training time out may be called if watchstander(s) is performing procedures incorrectly and corrective action and/or on scene training by the training team member will disrupt the timeline. Training time out may be called in the training team loses control of the drill. **Training Time In** shall be given by the training team leader when situation is corrected or proper training has been completed.

Safety time out: Safety is the primary concern when training. A safety time out may be called by any crewmember or training team member if a watchstander places themselves or equipment in an unsafe environment or condition. In a safety time out the drill will be stopped and corrective action will be taken to correct the situation. The **Commanding Officer** has exclusive authority to restart the drill once he is satisfied that the condition to run the drill are safe.

[redacted], DCC XO___ [redacted], CAPT

DCTT Leader Commanding Officer

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STRUCTURAL DAMAGE SCENARIO **12 August 04**

ITT TIME Potable Water Pump Room 3-59-0-E – AC Flats 3-33-01-E

_____ STRUCTURAL DAMAGE: Broken ASW line
DAMAGE HOLE SIZE 6 inch pipe separated
PORT / STBD / CL / DECK / **OVHD** / BLKHD / 1FT/Below Water Line
DISCLOSURE METHOD: Separated pipes attached to installed pipe / pipe mock up
DCTT: DCC

_____TYPE OF REPAIR: **PLUGGING** / SHORING / OTHER
TYPE OF SHORING IF USED: I / H / K / WOOD / STEEL
DISCLOSURE METHOD: pipe mock up
DCTT: DC2 / DCC

_____ UNDERWATER HULL DAMAGE: **N/A**
FLOODED SOLID: _____
DISCLOSURE METHOD: _____
DCTT _____

_____ FLOODING:
COMPT P/W pump room / FLOODING 1 foot
HOLDING / INCREASING AT _____ IN / FT_____ MIN(s)
CLEAN / CONTAMINATED
DISCLOSURE METHOD: Blue light on string / rags
DCTT DCC

_____ FLOODING:
COMPT Reefer deck / FLOODING 6 inches
HOLDING / INCREASING AT _____ IN / FT_____ MIN(s)
CLEAN / CONTAMINATED
DISCLOSURE METHOD: Blue light on string / rags
DCTT 1st.LT

_____FLOODING BOUNDARIES: P/W pump room all boundaries our tanks except the top 2nd deck.

_____FLOODING BOUNDARIES: Reefer deck not required

N/A PROGRESSIVE FLOODING WILL ACURE IF FLB NOT SET IN ___MINS OR
DAMAGE NOT CONTAINED IN ___ MINS. (NOT PLUGGED/PATCHED/ENOUGH
DEWATERING EQIPMENT RIGGING ETC)

_____ ELECTRICAL ISOLATION: **ACTUAL** / SIMULATE
LOCATION OF SOURCE: _____
DISCLOSURE METHOD: _____
DCTT _____

_____ MEANS OF DEWATERING:
SUB PUMP / PORT. EDUCTOR / P-1000 / BUCKET&SWAPS
DECREASING At 3 inches a minute
WILL **/ WILL NOT ENERGIZE PUMP(S)**
DISCLOSURE METHOD: Actual pump will be broken out and lowered into the space.
DCTT DC2, DCC