

RAPID RESPONSE JOINT TASK FORCE

REPORT TO FHYC & BSC

JULY 2018

Task Force Sponsored by

Fairfield Harbour Yacht Club & Blackbeard Sailing Club

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BACKGROUND

- On March 22, 2018 at approximately 11:21 the 22' sailboat *Mutiny*, a Pearson Ensign, sank in Upper Broad Creek while practicing for a race that was scheduled to take place later that day. The four-man crew spent approximately 30 minutes in the 51° water before being rescued. They were transported by ambulance to Carolina East Medical Center and treated for hypothermia. All four recovered fully and were released that afternoon.
- Blackbeard Sailing Club and Fairfield Harbour Yacht Club formed a Joint Task Force to capture lessons learned and to look for opportunities to improve our community's response to future events requiring rescue in local waters.

LESSONS LEARNED

- Individuals involved have contributed many lessons learned that have been summarized in four broad categories:
 - Boat and equipment
 - Skippers and Crew
 - The Clubs - FHYC & BSC
 - Water Rescue

LESSONS LEARNED BOATS & EQUIPMENT

- Verify integrity of flotation systems if your boat is so equipped.
- Consider enhancing existing flotation or adding flotation if not present.
- Verify presence, proper operation and accessibility of vessel's safety equipment including VHF radio, ladder, throw cushions, etc. (more complete list ?)

LESSONS LEARNED SKIPPERS AND CREW

- Skippers should know your boat's and crew's capability to sail safely in anticipated weather conditions.
- Skippers should make active, timely decisions on whether to sail and if sailing, when to return to the dock.
- Skippers and crew should wear serviceable PFDs that are designed to keep as much of the body out of the water as possible.
- Skippers and crew should carry appropriate, waterproofed, accessible signal and communication devices tethered to their person.
 - Practice using your cell phone in it's waterproof container.
 - Remove security code for fast access and ensure emergency contacts are on speed dial.
 - Set up a whistle code for each member of the crew to enable communication if they are separated.
 - Keep a list of medications together with your cell phone.

LESSONS LEARNED SKIPPERS AND CREW CONTINUED

- Skippers and crew should stay together and, if possible, stay with the boat.
- Buddy sailing is strongly encouraged; skippers should wait for other boats or safety boats to go out.
- Skippers should prepare a float plan and leave with a responsible individual who will mobilize assistance if overdue

LESSONS LEARNED FHYC AND BSC

- The Clubs should produce a “Safety When Sailing” card with checklists and tips that can be distributed to members and the POA and published in Club and Community newsletters.
- The Clubs should conduct periodic member training in relevant safety practices such as getting someone out of the water.
- The Clubs should ensure that suitable, properly equipped, safety boats are present in adequate numbers for club-sponsored and club-hosted on-the-water events.
- The Clubs should conduct periodic training for safety boat skippers and crew.

LESSONS LEARNED WATER RESCUE

- Skipper and crew of Mutiny has no effective way to request assistance and were fortunate to have been observed by a citizen on shore who called 911. They were also fortunate that the 911 dispatch of the fire departments was overheard by a private contractor who was able to respond, was first on the scent and who pulled two of the crew from the water.
- Communication among responders using UHF radios (911 and the fire services) and responders using VHF radios (Tidewater, mark boats) was difficult and, at times, impossible. 911 may be used to relay communications between responders using UHF and responders using VHF.
- Tri-Community VFD's larger, Bridgeton-based boat (suitable for response in the existing weather conditions) was delayed in finding an open launch ramp.
- No Pan-Pan or Mayday Relay was issued that, conceivably, could have brought other rescue boats to the scene sooner.

CONCLUSIONS

1. At 32 minutes and depending largely on volunteers, it will be difficult to significantly reduce the time between 911 call and four sailors removed from the water. Nevertheless BSC, FHYC, Tri-Community VFD and all other interested parties must do everything in their power keep this time as low as possible.
2. FHYC, BSC, POA, Tri-Community VFD and the residents of Fairfield Harbour can make improvements to their readiness to respond effectively to on-the-water emergencies, primarily in the areas of education and training, communications and coordination among all stakeholders.
3. Skippers and crew bear individual and collective responsibility for proper training and for all necessary safety and communication equipment

CONCLUSIONS CONTINUED

4. Luck – both good and bad – played a huge hole in the *Mutiny* incident. Our goals should include eliminating luck from the equation.
 - It was enormous good luck that a private citizen observed her being swamped and called 911. If that had not happened, the clock may not have started ticking for another 30 or 40 minutes when the Race Committee was due on the course.
 - It was also good luck that another private citizen (tidewater Marine) heard the 911 call and had a boat handy to respond. His boat was first on the scene and pulled the first two sailors from the water.
 - On the other hand, it was bad luck that Tri-Community VFD's larger boat was delayed in finding an accessible launch ramp.

RECOMMENDATIONS

The Joint Task Force is making a number of specific recommendations. These are organized in these categories:

1. Education and Training
2. Communication
3. Facilities
4. Resources

RECOMMENDATIONS CONTINUED EDUCATION AND TRAINING

I. Recommendations for FHYC, BSC and Tri-Community VFD on Education and Training:

- FHYC and BSC should provide comprehensive, periodic training for club members covering
 - The responsibilities of skippers and crew.
 - Rescue procedures.
 - Proper use of emergency communications.
- BSC, FHYC, Tri-Community VFD and POA (in the future) should schedule and conduct periodic training on access to facilities and location of resources.
- BSC, FHYC, Tri-Community VFD should determine if training in rescue procedures can be provided by New Bern Fire-Rescue. If feasible, schedule and conduct training for volunteer water rescuers.

RECOMMENDATIONS CONTINUED COMMUNICATION

2. Recommendations for BSC, FHYC and the POA on Emergency Communications:

- BSC, FHYC and the POA should determine if the POA phone notification system can be leveraged to provide notification to volunteer water rescue staff and implement if feasible.
- Where possible, BSC and FHYC should avoid the use of low-power VHF channels, for example VHF 67, for club-sponsored events.

RECOMMENDATIONS CONTINUED FACILITIES

3. Recommendations to FHYC, BSC, POA and Tri-Community VFD on Facilities:

- BSC and Tri-Community VFD should determine the best way to provide access for first responders to the BSC gate and launch ramp and implement. (keypad, locks, yelp box, etc.)
- POA should ensure a new launch ramp remains a priority for the Fairfield Harbour POA and that, when built, it is accessible to water rescue personnel.

RECOMMENDATIONS CONTINUED RESOURCES

4. Recommendations to FHYC and BSC on Resources:

- BSC, FHYC and Tri-Community VFD should investigate the formation of a volunteer water rescue force and implement if feasible.
- FHYC, BDC, POA should determine if and how other local entities can be engaged to enhance the community's water rescue capability. (Northwest Creek Marina, Security staff, POA, etc.)
- BSC and FHYC should determine what boats are available locally from responder agencies and residents and capabilities of each.
- FHYC and BSC should develop and publish guidelines for the number and type of safety boats required to support club sponsored or hosted events and for the safety and rescue equipment to be carried on them.

APPENDIX I

THE TIMELINE

03/22/2018 (time)	Craven County Sheriff's Department Dispatch Log	Response Time (minutes from 911)
11:21	<ul style="list-style-type: none">911 call received from citizen living on Upper Broad Creek reporting a sinking sailboat near Northwest Creek and Upper Board Creek, two persons in the water and no other boats in the area.	0
11:24	<ul style="list-style-type: none">New Bern Fire-Rescue is responding. (?)	3
11:26	<ul style="list-style-type: none">1st Ambulance en route to address that initiated 911 call.	5
11:31	<ul style="list-style-type: none">Tidewater Marine intercepts 911 dispatch, launches boat and is en route.Tri-Community Volunteer Fire Department (Bridgeton) advises they are responding.	10
11:35	<ul style="list-style-type: none">Coast Guard is advised.	14
11:36	<ul style="list-style-type: none">Tri-Community attempts to launch at Bridgeton Boat Works, finds ramp blocked and heads to Union Point.	15
11:34	<ul style="list-style-type: none">2nd ambulance en route.	
11:42	<ul style="list-style-type: none">1st Ambulance arrives on scene.	21

APPENDIX I

THE TIMELINE CONTINUED

03/22/2018 (time)	Craven County Sheriff's Department Dispatch Log	Response Time (minutes from 911)
11:46	<ul style="list-style-type: none">Tidewater Marine arrives on scene and pulls two men from the water.Tri-Community is en route.Coast Guard launches from Hobucken.3rd ambulance is en route.	25
11:50	<ul style="list-style-type: none">2nd ambulance arrives on scene.	29
?	<ul style="list-style-type: none">New Bern Fire-Rescue arrives on scene and pulls third man from water.	29-32
?	<ul style="list-style-type: none">Race Committee mark boat arrives on scene and pulls fourth man from water.	29-32
11:53	<ul style="list-style-type: none">All four men are reported out of the water and en route to shore.	32
11:57	<ul style="list-style-type: none">3rd ambulance arrives on scene.	36
12:12	<ul style="list-style-type: none">Ambulances depart for hospital.	51
12:28	<ul style="list-style-type: none">Two ambulances arrive at hospital.	67
12:56	<ul style="list-style-type: none">Third ambulance arrives at hospital.	95

APPENDIX 2

COLD WATER & HYPOTHERMIA

Survival Times in Cold Water Without Protective Clothing

Water Temperature Degrees C	Water Temperature Degrees F	Loss of Dexterity with no protective clothing	Exhaustion or Unconsciousness	Expected Time of Survival
0.3	32.5	Under 2 min.	Under 15 min.	Under 15 to 45 min.
0.3 to 4.5	32.5 - 40	Under 3 min.	15 to 30 min.	30 to 90 min.
4.5 to 10	40 - 50	Under 5 min.	30 to 60 min.	1 to 3 hrs.
10 to 15.5	50 - 60	10 to 15 min.	1 to 2 hrs.	1 to 6 hrs.
15.5 to 21	60 - 70	30 to 40 min.	2 to 7 hrs.	2 to 40 hrs.
21 to 26.5	70 - 80	1 to 2 hrs.	2 to 12 hrs.	3 hrs. to indefinite
Over 26.5	Over 80	2 to 12 hrs.	Indefinite	Indefinite

APPENDIX 3

MARINE DISTRESS CALLS

Distress Calls In order of Increasing Urgency		
Securite	<ul style="list-style-type: none">From the French word <i>sécurité</i>, meaning safety.Pronounced "say-cure-ee-tay".	Indicates a message about safety, such as a hazard to navigation or weather information.
Pan-Pan	<ul style="list-style-type: none">From the French word <i>panne</i>, meaning breakdown.Usually pronounced "pahn-pahn".	Indicates an urgent situation of a lower order than a "grave and imminent threat requiring immediate assistance", such as a mechanical breakdown or a medical problem.
Mayday	<ul style="list-style-type: none">From the French phrase <i>venez m'aider</i>, meaning <i>come help me</i>.	Used to signal a life-threatening emergency.

APPENDIX 3 CONTINUED MARINE DISTRESS CALLS

Use of Securite

- When a marine radio transmission begins with "Securite, Securite, Securite", it means that what follows is important safety information. The most common use of this is by coast radio stations before the broadcast of navigational warnings and weather information.
- It is normal practice to broadcast the Securite call itself on a distress and listening frequency such as VHF Channel 16 and then change frequency to a working channel for the body of the messages.
- Although mostly used by coast radio stations, there is nothing to stop individual craft broadcasting their own Securite messages where appropriate, for example, when a vessel is adrift and unable to maneuver near other craft or shipping lanes.

APPENDIX 3 CONTINUED MARINE DISTRESS CALLS

Use of Pan-Pan

- Three repetitions of Pan-Pan is used to signify that there is an urgency on board but that, there is no immediate danger to anyone's life or to the vessel itself. This is distinct from a Mayday call, which means that there is imminent danger to life or to the continued viability of the vessel itself.
- Pan-Pan informs potential rescuers that a safety problem exists whereas Mayday will call upon them to drop all other activities and immediately initiate a rescue attempt.
- The correct usage is "Pan-Pan, Pan-Pan, Pan-Pan", followed by the intended recipient of the message, typically "All Stations, All Stations, All Stations" and the identification of the craft, its position, the nature of the problem and the type of assistance or advice required.

APPENDIX 3 CONTINUED MARINE DISTRESS CALLS

Use of Mayday

- The call is always given three times in a row ("Mayday, Mayday, Mayday") to prevent mistaking it for a similar-sounding phrase under noisy conditions, and to distinguish an actual Mayday from a message about a Mayday.
- Making a false distress call in the United States is a federal crime carrying sanctions of up to six years imprisonment, and a fine of \$250,000.

APPENDIX 3 CONTINUED MARINE DISTRESS CALLS

Mayday Relay

- If a vessel in distress is unable to make a Mayday call, a Mayday Relay call can be made by one vessel on behalf of another vessel which is in distress.
- If a vessel makes a Mayday call that is not acknowledged by the Coastguard after a single repetition and a two-minute wait, then a vessel receiving the Mayday call should attempt to contact the Coastguard on behalf of the Mayday vessel by broadcasting a Mayday Relay.
- A Mayday Relay should use the callsign of the transmitting vessel but give the name and position of the Mayday vessel.

APPENDIX 4

ORGANIZATIONS RESPONDING

Organizations Involved in Rescue

- Craven County Emergency Management
- New Bern Fire-Rescue
- Race Committee
- Tidewater Marine
- Tri-Community VFD Station 13
- United States Coast Guard

APPENDIX 4 CONTINUED ORGANIZATIONS RESPONDING

Craven County Emergency Management

- Operates 911 Call Center
- Communicates with and dispatches fire departments, police, ambulances, etc.

APPENDIX 4 CONTINUED ORGANIZATIONS RESPONDING

New Bern Fire-Rescue

- Manned 24/7 by career fire fighters
- Trained water rescue personnel
- High-quality, trailered rescue boat located in New Bern

APPENDIX 4 CONTINUED ORGANIZATIONS RESPONDING

Race Committee

- Organizes and executes race events
- Includes a signal boat and one or more mark and safety boats, depending on availability
- Not currently trained or equipped for water rescue
- Generally on the race course 30 to 60 minutes before scheduled start of race

APPENDIX 4 CONTINUED ORGANIZATIONS RESPONDING

Tidewater Marine

- Private marine contractor located on the Trent River, involved primarily in boat repair
- Some personnel monitor fire department dispatch radio

APPENDIX 4 CONTINUED ORGANIZATIONS RESPONDING

Tri-Community Volunteer Fire Department

- Three unmanned stations serving our area:
 - Station 13 (main station) at 200 Saints Delight Church Rd. (Bridgeton)
 - Station 13-2 (?) at 651 Truitt Rd. (5 mi northwest of Bridgeton)
 - Station 13-3 at 589 Broad Creek Rd.
 - Fire fighting is main mission; water rescue is secondary mission
- Water Rescue Capabilities:
 - Station 13-1 has one trailered rescue boat
 - Station 13-3 has small trailered boat that is unsuitable for rough water

APPENDIX 4 CONTINUED ORGANIZATIONS RESPONDING

US Coast Guard

- Monitors VHF distress channels 9 & 16 and 911 calls
- Highly trained water rescue personnel
- Equipped with high-quality boats and equipment
- Nearest station is in Hobucken, NC
 - ~30 miles by water from Fairfield Harbour