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### MAN ALOFT

**Man Aloft-** Going aloft in a seaway while sailing, day and night.

Two halyards must be used for training evolutions.

One halyard may be used while racing for quick and immediate remedies

If the boat is heeling excessively, or in a heavy seaway, a downhaul line will be used.

Use caution and common sense as the potential for hazard is extreme. Any nervousness by any significant crewmember will diminish the success of this evolution. If the man aloft exhibits any fear, abort the evolution and make adjustments as to the original need for going aloft.

The bowmen from both watches will conduct the following:

#### **Inspection – Inspect all of the following:**

- Lower Spreader Tips (2) & Clevis Pins (4)
- Fore & Aft Lower Stay Fittings (2 ea)
- Upper Diagonal Stay Turnbuckles & Fitting (2)
- Plastic guards on Running Backstays at the lower spreader (2)
- Spinnaker Trap Preventer
- Steaming/Deck Light fitting/guard
- Forestay fitting (tape) & Topping lift sheave box
- Running Backstay mast fitting (2)
- Upper Spreader Tips (2) & Clevis Pins (4)
- Upper Diagonal Stay Spreader Root Fitting (2)
- Spinnaker Halyard Block & Shackle (2)
- Jib Halyard Sheaves (2)
- Main Halyard Sheave (1)
- VHF Antenna Assembly
- Wind Instrument Fitting
- Tricolor/Anchor Light Fitting
- Windex Fitting and Light Fitting

**Outboard end of spinnaker pole-** A carabineer will be used to attach the Bowman's harness to the foreguy, and a halyard will be used for going to the end of the pole. The Bowman places him/herself forward of the foreguy to prevent pendulum swing toward the mast. If you are bringing a spinnaker tack with you for a peal, then a snap shackle must be used vice a carabineer.

If releasing a spinnaker guy shackle, anticipate some recoil as the load of the spinnaker is released and whiplash from the shackle. Use a fid device for releasing shackles under load. This training is most effective while on a broad reach.

1. Prepare for a spinnaker change
2. Fix "The Blues"

**Spinnaker Clew-** This evolution is to practice attaching the leeward after guy after a spinnaker peel is made. There are two methods for doing this.

1. Attach after guy by pulling down on the sheet. The spinnaker comes "out of trim" for this evolution.
2. Attach after guy by going aloft, and jumping outboard from the properly trimmed clew height. A retrieving line is controlled by deck crew and must be attached to the harness. The spinnaker stays in trim.

**Running a 3<sup>rd</sup> Reef Line-** This procedure has the bowman running a reef line into the mainsail's 3<sup>rd</sup> reef point. Preparation of a continuous line between the second and third reef points allows simple passage of the reef line. A safety line tended by mast crew and a windward spinnaker halyard will be attached to the bowman's harness if perching on the boom is necessary (i.e. boom end over the water vs. deck). A preventer rigged to the boom should be used if the sea conditions cause any hint of backwinding the mainsail.

## **MAN OVERBOARD**

**LOG Man Overboard (MOB) drills** - The practice of these evolutions must be logged as per the requirements for the Newport to Bermuda Race.

### **MOB RECOVERY (SPINNAKER)**

Safety Considerations:

- (1) Ensure lines are aboard prior to engaging the engine.
- (2) Ensure crewmembers remain in safe areas while tacking and gybing.
- (3) When backwinding the mainsail, ensure sufficient people hold the boom to effectively control it. The offshore preventer can be used to backwind the boom very effectively.
- (4) Tether the swimmer to the boat if they enter the water.
- (5) Do not create a bigger emergency by panicking.
- (6) Ensure that all safety gear is pre-inspected and is ready to deploy.

General Situation:

Assume proceeding under main and spinnaker in moderate conditions.

Required Positions:

- (1) Helmsman.
- (2) Pointer.
- (3) Mainsheet.
- (4) Mast.
- (5) Foredeck Crew.
- (6) Spinnaker Guy.
- (7) Spinnaker Sheet. Becomes part of Foredeck Crew.
- (8) Swimmer.
- (9) Navigator.
- (10) Recovery Team. Can be drawn from other positions as available.

Sequence of Events:

- (1) •The person sighting the MOB should call out "Man overboard, starboard (port) side" and points at the victim until relieved. This person becomes the Pointer.
- (2) •Helmsman throws the PFD to the victim and begins to turn the boat through the wind (tack) and call out "Tacking" and "Douse Spinnaker Now!".
- (3) • Spinnaker Guy quickly eases the pole to the head stay, cleats the guy.  
•Spinnaker Sheet goes forward to assist with douse.
- (4) •Helmsman calls out "All hands on deck". Safety harnesses should be worn if conditions warrant. •The senior person on deck directs those coming topside to appropriate jobs. An experienced helmsman takes the helm.
- (5) •Navigator stores the current position in the LORAN set.

- (6) •Foredeck Crew and Mast douse the spinnaker as the Helmsman brings the boat head to wind.
- (7) •Helmsman completes tacking the boat into a hove-to position to slow boat speed and starts the engine, leaving it in neutral. •Swimmer prepares to enter water if needed.
- (8) •Spinnaker Guy and •Foredeck Crew lower the outboard end of the pole to the deck.
- (9) •Helm- Return to the victim as quickly as possible. Foredeck cleanup will still be in progress. •Mainsheet trims in accordance with Helmsman's directions.
- (10) •Helmsman approaches victim with wind 45-60 degrees off the bow.
- (11) •Navigator maintains plot in case first recovery is unsuccessful and boat must return to the victim.
- (12) •Recovery Team prepares to retrieve victim. See Notes.
- (13) •Helmsman positions boat alongside victim and to leeward. Boat should be dead in the water when alongside. Direct the main to be back winded if needed. WHEN BACKWINDING THE MAIN, ENSURE SUFFICIENT PEOPLE ARE USED FOR THE CONDITIONS. The offshore preventer can be used to backwind the boom very effectively. Use the engine if necessary. See notes.
- (14) •Recovery Team establishes contact with victim by throw sock and recovers the victim.
- (15) •Swimmer may have to enter the water if the victim is incapable of assisting rescue efforts.
- (16) •Evaluate the condition of the victim and call for assistance if needed. At the very least, the victim must be treated for shock and observed for symptoms after recovery.

Notes:

- (1) When approaching the victim take into account turning radius, surge, wind and sea angles, and maintenance of sufficient distance from the victim to prevent injury from pitching motion and the propeller.
- (2) Some methods for recovering victim include: using a boarding ladder, pulling the victim from the water with two or more crewmen, haul the victim aboard using the Lifesling and a spinnaker halyard, or attach a spinnaker halyard to the victim's safety harness.
- (3) Use a spinnaker halyard vice a genoa halyard for recovery because the spinnaker halyard block can swivel to provide a better lead.

### **MOB RECOVERY (Headsail Reaching)**

Safety Considerations:

- (1) Ensure lines are aboard prior to engaging the engine.
- (2) Ensure crewmembers remain in safe areas while tacking and gybing.
- (3) When backwinding the mainsail, ensure sufficient people hold the boom to effectively control it. The offshore preventer can be used to backwind the boom very effectively.
- (4) Tether the swimmer to the boat if they enter the water.
- (5) Do not create a bigger emergency by panicking.
- (6) Ensure that all safety gear is pre-inspected and is ready to deploy.

General Situation:

Assume proceeding under main and spinnaker in moderate conditions.

Required Positions:

- (1) Helmsman.
- (2) Pointer.
- (3) Mainsheet.
- (4) Mast.
- (5) Foredeck Crew.
- (6) Headsail Trimmer (2).
- (7) Swimmer.
- (8) Navigator.
- (9) Recovery Team. Can be drawn from other positions as available.

Sequence of Events:

- (1) •The person sighting the MOB should call out "Man overboard, starboard (port) side" and point at the victim until relieved. This person becomes the Pointer.
- (2) •Helmsman throws the PFD to the victim and begins to turn the boat through the wind (tack) and call out "Tacking" and "Heaving To".

- (3) • The headsail trimmer moves to the headsail sheet winch and stands ready to adjust the headsail sheet.  
• A second trimmer gets ready in case the headsail needs trimming on the new tack.
- (4) • Helmsman calls out "All hands on deck". Safety harnesses should be worn if conditions warrant. • The senior person on deck directs those coming topside to appropriate jobs. An experienced helmsman takes the helm.
- (5) • Navigator stores the current position in the LORAN set.
- (6) • Foredeck Crew and Mast prepare to douse the headsail as the Helmsman Points the boat towards the MOB.
- (7) • Helmsman completes tacking the boat into a hove-to position to slow boat speed and starts the engine, leaving it in neutral. • Swimmer prepares to enter water if needed.
- (8) • Foredeck Crew douses the headsail at the direction of the Helmsman, and then prepares to assist on victim recovery.
- (9) • Helm- Return to the victim as quickly as possible. • Foredeck cleanup will still be in progress. Mainsheet trims in accordance with Helmsman's directions.
- (10) • Helmsman approaches victim with wind 45-60 degrees off the bow.
- (11) • Navigator maintains plot in case first recovery is unsuccessful and boat must return to the victim.
- (12) • Recovery Team prepares to retrieve victim. See Notes.
- (13) • Helmsman positions boat alongside victim and to leeward. Boat should be dead in the water when alongside. Direct the main to be back winded if needed. WHEN BACKWINDING THE MAIN, ENSURE SUFFICIENT PEOPLE ARE USED FOR THE CONDITIONS. The offshore preventer can be used to backwind the boom very effectively. Use the engine if necessary. See notes.
- (14) • Recovery Team establishes contact with victim by throw sock and recovers the victim.
- (15) • Swimmer may have to enter the water if the victim is incapable of assisting rescue efforts.
- (16) • Evaluate the condition of the victim and call for assistance if needed. At the very least, the victim must be treated for shock and observed for symptoms after recovery.

#### Notes:

- (1) When approaching the victim take into account turning radius, surge, wind and sea angles, and maintenance of sufficient distance from the victim to prevent injury from pitching motion and the propeller.
- (2) Some methods for recovering victim include: using a boarding ladder, pulling the victim from the water with two or more crewmen, haul the victim aboard using the Lifesling and a spinnaker halyard, or attach a spinnaker halyard to the victim's safety harness.
- (3) Use a spinnaker halyard vice a genoa halyard for recovery because the spinnaker halyard block can swivel to provide a better lead.

### **MOB RECOVERY (Upwind)**

This recovery can become difficult as the victim would be down wind from the vessel. There are a few ways to do this. This evolution should be practiced numerous times to test each method.

1. Light Air- Gybe to approach victim. Do not gybe headsail to have the boat in a hove to position.
2. Moderate Air- Quick tack into hove to position, sail dead down wind to approach the victim with a buttonhook turn under mainsail alone. This maneuver is aggressive and possibly the least desirable.
3. Quick tack into hove to position and drift down on to the victim and douse the headsail to reduce drift speed.
4. Heavy Air- Quick tack into hove to position to stop boat, strike headsail, deploy Lifesling, sail above the victim, gybe and sail slowly around victim and retrieve victim via the Lifesling line as the boat comes into the wind.
5. Quick tack into hove to position to stop boat, strike headsail, deploy Lifesling, sail past victim then gybe and sail slowly toward victim and retrieve victim as the boat comes into the wind.
6. Quick Gybe into hove to position, sail to leeward of victim at first, strike headsail then put the boat into the wind to retrieve victim.

#### Safety Considerations:

- (1) Ensure lines are aboard prior to engaging the engine.
- (2) Ensure crewmembers remain in safe areas while tacking and gybing.
- (3) When backwinding the mainsail, ensure sufficient people hold the boom to effectively control it. The offshore preventer can be used to backwind the boom very effectively.

- (4) Tether the swimmer to the boat if they enter the water.
- (5) Do not create a bigger emergency by panicking.
- (6) Ensure that all safety gear is pre-inspected and is ready to deploy.

General Situation:

Assume proceeding under main and spinnaker in moderate conditions.

Required Positions:

- (1) Helmsman.
- (2) Pointer.
- (3) Mainsheet.
- (4) Mast.
- (5) Foredeck Crew.
- (6) Headsail Trimmer
- (7) Mainsail Trimmer
- (8) Swimmer.
- (9) Navigator.
- (10) Recovery Team. Can be drawn from other positions as available.

Sequence of Events:

- (1) •The person sighting the MOB should call out "Man overboard, starboard (port) side" and point at the victim until relieved. This person becomes the Pointer.
- (2) •Helmsman throws the PFD to the victim and begins to turn the boat through the wind (tack) and call out "Tacking" and "Heaving To".
- (3) • Headsail trimmer does not cast off the sheet to tack the headsail. If a Heavy 1 Genoa is being used, a slight ease on the sheet may prevent a torn sail on the upper spreader.
- (4) •Helmsman calls out "All hands on deck". Safety harnesses should be worn if conditions warrant. •The senior person on deck directs those coming topside to appropriate jobs. An experienced helmsman takes the helm.
- (5) •Navigator stores the current position in the LORAN set.
- (6) •Foredeck Crew and Mast prepare to douse the headsail
- (7) •Helmsman completes tacking the boat into a hove-to position to slow boat speed and starts the engine, leaving it in neutral. •Swimmer prepares to enter water if needed.
- (8) •Return to the victim as quickly as possible. Foredeck cleanup will still be in progress. Mainsheet trims in accordance with Helmsman's directions.
- (9) •Helmsman approaches victim with wind 45-60 degrees off the bow.
- (10) •Navigator maintains plot in case first recovery is unsuccessful and boat must return to the victim.
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Notes:

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- (3) Use a spinnaker halyard vice a genoa halyard for recovery because the spinnaker halyard block can swivel to provide a better lead.

## **EMERGENCY STEERING / HEAVY WEATHER / PREVENTERS / DAMAGE CONTROL**

### **Emergency Steering**

**Catastrophic rudder failure-** Where the emergency tiller is of no use. This exercise should utilize all the various methods to attempt to steer a boat with the rudder secured amidships. The theory of balancing the helm via dragging items to leeward and adjusting sails can be enacted in a variety of ways. This evolution must be logged, as this is a requirement for the Newport to Bermuda Race.

**Steering with a drogue-** Two lines are needed. Attach the longest line to the port or starboard stern quarter of the boat with a bowline, and the other end to the drogue. Tie a rolling hitch, or other knot to the long line that will be about ten feet from the boat. This shorter line should be passed through a snatch block on the opposite quarter and lead to a winch for adjustment. Now you can deploy the drogue. This system can tack the boat also.

**Steering with sails-** "Weather helm", in general, is a direct effect of the size of the leeward bow wave. The more the boat heels over, the larger the leeward bow wave becomes, the more weather helm is felt. Once a balance has been made with leeward drag items, steering can be affected with the sails. Over trimming the headsail, and luffing the mainsail will make the boat come away from the wind. Over trimming the mainsail and easing the headsail should make the boat head into the wind. Balancing the boat by angle of heel will also steer the boat.

The spinnaker pole can be used as a crude rudder. The large cutting board, a floorboard, or any other small panel may be attached to the spinnaker pole. A lashing at the middle of the spinnaker pole, the pole passed beneath the stern pulpit, and tied to the spreader fitting. Another line is tied to the forward end of the spinnaker pole. A crewmember pushed up and down on the pole end, and adjusts the controlling line to where the pole is more settled and a desirable result is made controlling the direction of the boat.

### **Heavy Weather**

Experience is the most effective teacher, but any input (reading, Safety at Sea Seminars, lectures) is a step in the right direction. Preparing and securing the stowage, perpetual house keeping, hourly bilge, deck and rig checks, maintaining communications, maintaining the batteries, monitoring crew condition, seeking advantage on the weather and maneuvering the boat to accept the conditions are all blended into surviving severe conditions. The crew should discuss this topic for at least an hour and set to practice behavior and action that simulates heavy weather if the conditions are not available.

### **Rigging Preventers**

There are two types of preventers on the Navy 44.

1. Block and tackle preventer. Intended for lighter conditions. Can only be set 80 to 100 degrees from the toe rail to the forward mainsheet bale.

2. Heavy (boom end) preventer. Intended for heavy air, but is the most dynamic of preventer systems. This preventer allows for the mainsail to be depowered without adjusting the preventer. In light air in sloppy conditions, this preventer will keep the boom still better than the light preventer. Instructions on rigging the preventer are in the new BIB.

### **Damage Control**

The crew must deploy the collision mat. It is recommended that a speedo be pulled, and place the collision mat over the thru-hull fitting. Discuss using interior fittings to shore up damaged hull and slowing water intrusion due to collision. Every crewmember must touch each thru hull fitting on the boat. On thru hull fittings that are difficult to touch, visual contact must be made.

Completely discuss these areas of damage control:

Collision

Abandoning Ship

Dismasting

Fire Fighting