

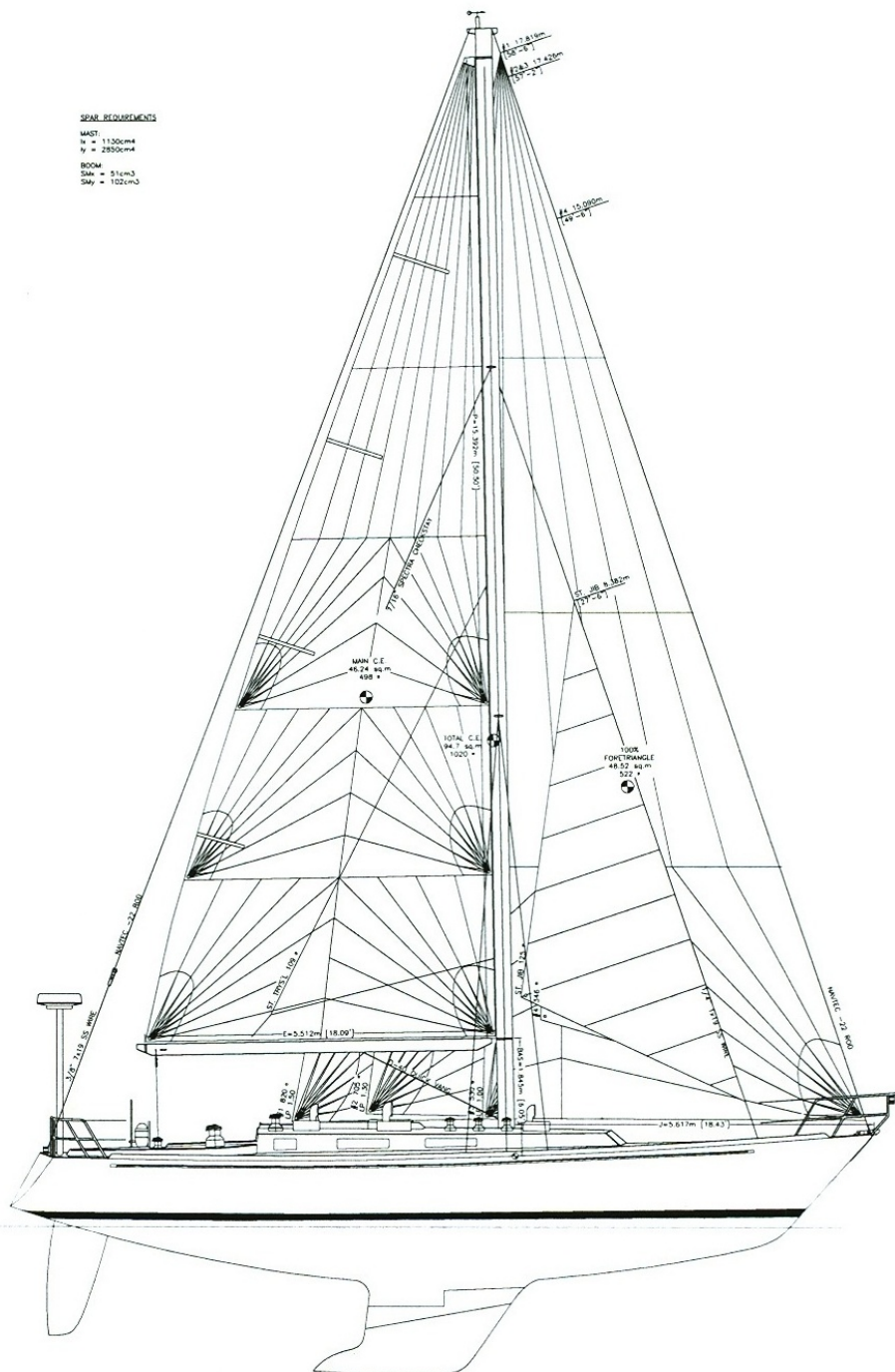
STANDARD OPERATING PROCEDURES (SOP)
AND
REGULATIONS MANUAL



FOR
LARGE SAIL TRAINING CRAFT
AT
THE UNITED STATES NAVAL ACADEMY

WAST:
 $I_x = 1130 \text{ cm}^4$
 $I_y = 2850 \text{ cm}^4$

BOOM:
 $S_{Mx} = 51 \text{ cm}^3$
 $S_{My} = 102 \text{ cm}^3$



DNASINST 3120.1G
September 15, 2012

DNASINST 3120.1G

From: Director, Naval Academy Sailing

Subj: PROMULGATION OF STANDARD OPERATING PROCEDURES (SOP) AND
REGULATIONS MANUAL FOR U.S. NAVAL ACADEMY SAIL TRAINING CRAFT

Ref: (a) USNAINST 3120.2, Use of Naval Academy Sail Training Vessels
(b) USNAINST 5450.3, Naval Academy Organization Manual
(c) U.S. Navy Regulations
(d) PRODEVINST 3140.1, Hurricane Sortie and Mooring Procedures for Hazardous or
Destructive Weather
(e) COMDTINST M16672.2D, Navigation Rules, International - Inland (72 COLREGS)
(f) International Yacht Racing Rules
(g) PMS MRC Deck
(h) Boat Information Book for U.S. Naval Academy Navy 44 Sail Training Craft
(i) COMDTMIDNINST 5400.6L, Midshipman Regulations Manual
(j) DIVPRODEVINST 3530.2 Sail Training Craft (STC) Navigation Standards
(k) OPVAVINST 3500.39c, Operational Risk Management

Encl: (1) DNAS Standard Operating Procedures (SOP) and Regulations Manual for Large Sail Training
Craft

1. Purpose. To promulgate the Standard Operating Procedures and Regulations Manual to be used both
ashore and while aboard large Sail Training Craft (STC).

2. Cancellation. DNASINST 3120.1F.

3. Background. The Naval Academy conducts sail training aboard a variety of STC. This manual
augments guidance contained in reference (a) and guides the professional sail training of midshipmen.

4. Action. All sailing program personnel - to include volunteers and recreational users of STC - shall
strictly adhere and be held accountable to this instruction. This instruction is not all-inclusive and not a
replacement for sound judgment. In all instances, those in positions of authority are responsible and
accountable for compliance with this directive, and shall diligently enforce good order and discipline as it
pertains to sound seamanship, navigation and conduct. Any person who finds that he or she cannot fulfill
the letter and spirit of this instruction shall immediately notify the Director, Naval Academy Sailing.

5. Feedback/Changes. Omissions or recommendations for changing any part of this document shall
submit the feedback form at Appendix (F) directly to the Vanderstar Chair. Feedback forms should
include specific changes and the rationale for making them.

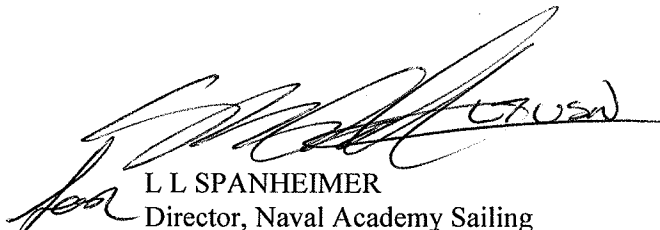

L L SPANHEIMER
Director, Naval Academy Sailing
BY-DIRECTION

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CHAPTER 1

100. OBJECTIVES

The objectives of the sail training program at the Naval Academy are to:

a. Provide safe platforms and procedures for the professional leadership and seamanship training of midshipmen afloat

b. Train midshipmen in the following areas:

- (1) Leadership and teamwork
- (2) Watchstanding
- (3) Small boat handling
- (4) Knowledge of and appreciation for the forces of wind and sea
- (5) Relative motion
- (6) Marlinspike seamanship
- (7) Meteorology and oceanography
- (8) Forehandedness and vigilance
- (9) Shipboard organization
- (10) Preventative and corrective maintenance systems
- (11) Navigation (open ocean and coastal piloting)
- (12) Damage control

c. Provide an instrument with which to promote the public image of the Naval Academy and the Navy and to assist in recruiting qualified applicants for enrollment at the Naval Academy.

d. Provide proficiency and recreational sailing on a not-to-interfere basis with scheduled professional training in accordance with reference (a).

CHAPTER 2

200. UNDERWAY ORGANIZATION

201. COMMAND AUTHORITY

The Director, Naval Academy Sailing (DNAS) is the command authority for the operation of STC assigned to the Naval Academy. This authority is assigned in references (a) and (b). All persons embarked in Naval Academy STC are subject to this authority for purposes of training effectiveness and for good order and discipline.

202. OFFICER IN TACTICAL COMMAND (OTC)

During formally designated local training exercises and during summer training periods, DNAS may assign one or more Offshore Sail Training Squadron (OSTS) STC to the supervision of an OTC. This will normally be the senior qualified Unrestricted Line (URL) Officer embarked and will be so designated in an Operation Order (OPORDER). In cases where the senior URL officer is not, in the judgment of DNAS, the most experienced offshore sailor in the group, DNAS may designate an officer or civilian, other than the senior URL officer, as OTC. The OTC's responsibilities include coordination of training evolutions, embarkation and debarkation of personnel, administration of program policy, communications and reports and other functions necessary for the safe and effective completion of training objectives. OTC's shall promulgate written supplements to DNAS OPORDERS. All OTC supplements will be submitted to DNAS for approval and signature.

NOTE: The OTC position is not filled in the Varsity Offshore Sailing Team (VOST) organization. Within VOST the Senior Coach in the Squadron shall fill duties normally assigned to the OTC.

203. SKIPPER/COACH

a. Only one individual on board can have ultimate command responsibility. For OSTs this individual is the Skipper. For VOST this individual may be the Coach or a designated safety observer. For both OSTs and VOST this individual may be a Midshipman Skipper when a Coach or designated safety observer is not on board. **Skippers and Coaches shall notify all crewmembers that they have assumed this responsibility before the STC gets underway.** As stated in section 211.1, the name of the Skipper/Coach and assigned crew will be entered in the Offshore Yacht Log prior to getting underway.

b. The provisions of reference (c) concerning the overall responsibilities of a Commanding Officer apply to the Skipper, except that a Skipper of a STC has no inherent authority under the Uniform Code of Military Justice. The unique training environment at the Naval Academy requires that command authority be exercised with discretion and in a manner which encourages the development of command and leadership expertise in midshipmen. All persons embarking in Naval Academy STC shall understand this unique relationship.

c. A local training plan, racing roster or OPORDER signed by DNAS shall designate the Skipper/Coach.

203.1 ASSIGNMENT

- a. A fully qualified Skipper/Coach shall be onboard anytime that a VOST STC is in a competitive practice or event.
- b. A “D” qualified Midshipman may serve as a Skipper in the local OPAREA, as approved by DNAS.
- c. A fully qualified Skipper/Coach shall be onboard anytime that a STC is sailing outside the local OPAREA.
- d. A fully qualified Skipper/Coach shall be onboard anytime that a STC is sailing overnight.

203.2 COMMAND ROLE

The designated senior individual who is responsible for STC safety must exercise this command prerogative when required to avoid danger (e.g., collision, grounding, personnel safety, etc.). However, this does not require the senior individual routinely to exercise his command authority. On the contrary, this policy and the core of the program itself requires restraint, patience, coaching and the creation of an atmosphere in which the Skipper has full authority over the boat and crew, as long as he is exercising the requisite judgment, leadership and seamanship to address the situation satisfactorily.

Command is a full-time responsibility. The Skipper/Coach is responsible for the safety of the STC and well-being of the crew always, on watch or off watch.

203.3 THE COACH’S ROLE WHEN RACING (VOST)

Except for those situations where the boat or crew will be endangered, the Coach affords midshipmen the latitude to make decisions. USNA policy encourages coaching advice and discussion of race plans, tactics and strategy; however, Midshipmen Skippers may reject such advice even if, in the eyes of the coach, it will cost the boat places in a race. This restraint does not relieve the coach that is assigned as Officer-in-Charge of his ultimate responsibility for the safety of the crew and the STC. In these instances, Midshipmen Skippers shall comply immediately with the Coach’s orders, regardless of the impact on racing.

203.4 RESPONSIBILITY ASHORE

The Skipper’s/Coach’s responsibilities do not end while ashore, particularly when visiting ports away from the Naval Academy. The Skipper/Coach shall ensure that midshipmen uphold the highest standards of personal demeanor, grooming and STC smartness while inport. In this regard, Skippers/Coaches shall be responsible directly to DNAS.

204. EXECUTIVE OFFICER (XO)

The XO/ Assistant Coach is subordinate to the Skipper/Coach. In most evolutions he will be paired with the watch team opposite that of the Skipper/Coach, in order to bring to that section additional offshore sailing experience. While on watch, he shall perform those duties and responsibilities prescribed for the Skipper.

205. TRAINING

The Naval Academy sailing program has a unique training mission in support of the primary mission of the Academy. The program gives midshipmen the most realistic leadership and command opportunities possible; however, all midshipmen are in training and therefore subject to the authority and discipline of their mentors. Within safe limits, Skippers/Coaches shall give midshipmen maximum opportunity to exercise and develop their leadership, command and judgment skills.

206. POLICY

a. In all sailing evolutions, Skippers/Coaches shall afford the watch captain (OSTS) or Midshipman Skipper (VOST) the opportunity to direct the movements and manage the operation of his vessel, to the degree the midshipman is able to do so.

b. The Skipper/Coach shall intervene whenever and however necessary to prevent a midshipman from "getting in over his head." The Midshipman Skipper (VOST) shall defer immediately to the orders of the Coach in all matters relating to the safety of the STC.

207. PROCEDURES

207.1 ORDERS AND DETAIL ASSIGNMENTS

In Naval Academy sailing programs, the Naval Academy will provide all personnel performing Skipper/XO or coaching functions outside the local OPAREA with official orders (cost or no-cost depending on the voyage or function).

207.2 TRAINING AWARENESS AND COMPLIANCE

The Directors, Varsity Offshore Sailing Team and Offshore Sail Training Squadron, and other staff personnel as the Director may assign, shall ensure that these procedures are fully briefed, discussed and understood by all personnel who participate in the sailing program.

208. NAVIGATIONAL RESPONSIBILITY

The safe and proper navigation of STC is, at all times, the responsibility of the assigned Skipper/Coach. The Skipper shall delegate navigation authority to the embarked midshipmen whenever possible in order to enhance their training. However, ultimate responsibility will reside permanently with the Skipper.

208.1 COMMAND RELATIONSHIPS

The following operational relationships are established to ensure the timely and accurate handling of navigation information:

a. DNAS will publish an Operations Order (OPORDER), which will contain guidance concerning STC movements outside the local OPAREA. The Skipper shall ensure that the crew is thoroughly familiar with the guidance contained therein.

b. The Officer in Tactical Command (OTC) if assigned, shall publish an OTC Supplement to the OPORDER, outlining any additional requirements. Any deviations from the

established program policies must be approved through the Program Director and DNAS in advance. The OTC will serve as liaison between the Naval Academy and the STCs in his squadron and, in consultation with DNAS staff, will make the key operational-level decisions while underway. **The OTC shall avoid, insofar as possible, intruding in the day-to-day decision making process of individual STCs.**

c. The Skipper/Coach is responsible directly to DNAS for compliance with directives contained in the applicable OPORDER and will serve as Safety Officer during underway watchstanding.

d. The XO is responsible directly to the Skipper for compliance with all applicable directives and together with the Skipper will fulfill the role of Safety Officer during underway watchstanding.

e. Navigation Plotter shall be a distinct station in the watch rotation. The Watch Captain may assign the Navigation Plotter for the duration of a watch or may rotate the position among watch team members (not to include the Watch Captain). The Skipper/Coach must ensure that the crew understands the rotation policy prior to getting underway.

208.2 OPERATING AREAS

a. LOCAL OPERATING AREA. See Chapter 3 for the definition of the LOCAL OPERATING AREA and requirements within that area.

b. OPERATIONS OUTSIDE LOCAL OPERATING AREA. Operations which take STCs beyond the local OPAREA shall be directed by OPORDER.

208.3 REQUIRED CHARTS, PUBLICATIONS AND EQUIPMENT

Each STC shall, at a minimum, carry the following items: (See Section 303 for exceptions to this rule in the local OPAREA.)

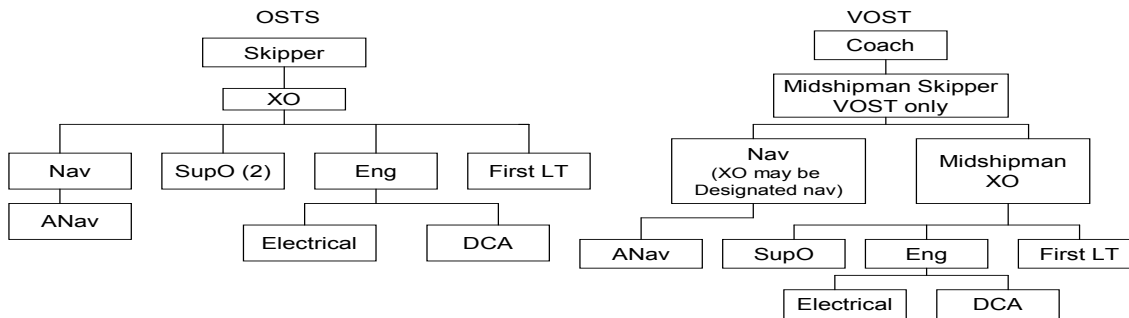
- a. Applicable charts (per list in OPORDER)
- b. Applicable volumes of Eldridge's Nautical Almanac, and Fleet Guides if applicable
- c. Nautical Almanac and H.O. 229, VOST only if applicable
- d. COLREGS
- e. Navigation Kit
- f. Applicable technical manual binder(s), BIB, SOP, and logbook

208.4 NAVIGATION GUIDELINES

The proper interval for fixing the position of a STC varies depending on its speed of advance and proximity to navigational hazards. STC navigation shall adhere to the guidelines outlined in Ref (j).

209. ORGANIZATION AND RESPONSIBILITIES

The diagram below depicts the administrative organization for STC. All hands shall be thoroughly familiar with the responsibilities of their primary billet, watch station and collateral duties.



209.1 MIDSHIPMAN SKIPPER (VOST ONLY)

The Midshipman Skipper reports to and is responsible to the Coach for the safety, readiness and state of crew training. He also acts as Training Officer. The Midshipman Skipper shall:

- a. Conduct, and cause others to conduct, safe evolutions, training and passages.
- b. Improve safety through training and crew drills in casualty response.
- c. Keep apprised at all times of the navigation picture.
- d. Understand the responsibilities of and supervise each crew member in performing his primary billet.
- e. Supervise all man aloft evolutions.
- f. Prior to each departure report readiness to get underway to the Coach, noting any deficiencies/discrepancies.
- g. Prepare evaluations of all underclass crew members and deliver to the Coach prior to cruise completion.
- h. Approve the underway menu/ meal plan.
- i. Remain cognizant of the status of all maintenance.
- j. As **Training Officer**, develop and implement a regular schedule of training for both in-port and underway periods.

209.2 EXECUTIVE OFFICER (XO)

The XO is the Executive Department Head. He reports to and is responsible to the Skipper for the execution of the daily routine, the boat's general readiness and the maintenance of satisfactory living conditions aboard the STC. He also acts as the Senior Watch Officer and may be assigned as the Navigator (NAV). The XO shall:

- a. Report to the Skipper.
- b. Execute the daily routine.
- c. Supervise the crew's efforts to ready the boat for sea, including accomplishment of check lists. The XO shall make a personal report to the Skipper that "the boat is ready to get underway," noting any deficiencies.
- d. Maintain satisfactory boat cleanliness and stowage.
- e. Ensure crew members attend practice sails or special events on time, prepared and properly equipped.
- f. Ensure each crew member begins overnight or offshore voyages with a complete seabag.
- g. Ensure that berthing and head areas are clean.
- h. Conduct daily Messing and Berthing Inspections.
- i. Regulate liberty during cruise block, ensuring the crew is informed of liberty restrictions, muster and duty requirements.
- j. As **Senior Watch Officer**, shall:
 - (1) Report to the Skipper.
 - (2) Maintain the Watch, Quarter and Station Bill as required by reference (b).

209.3 NAVIGATOR

The Navigator reports to and is responsible to the Skipper for proper preparation of charts, and shall ensure that the prepared charts are presented to the Skipper for his review prior to getting underway. The Navigator has responsibility for safe navigation of the sail training craft and shall be appointed in writing by the Skipper. The Navigator shall:

- a. Report to the Skipper.
- b. Ensure that all required charts, navigation instruments and references are prepared following Chapter 9, section 901, and aboard prior to getting underway.
- c. Create a Navigation Plan prior to getting underway and measure progress underway with respect to that plan.

- d. Ensure that the watch teams maintain an accurate plot of the boat's position by all available means (visual, celestial and electronic).
- e. Train and supervise watch team navigation plotters in the principles and practice of visual and electronic navigation.
- f. Train the ANAV as a navigator.
- g. Stay aware of current and forecast weather conditions.

209.4 ASSISTANT NAVIGATOR

The Assistant Navigator (ANAV) reports to and is responsible to the Navigator for navigation readiness and accomplishing the navigation routine. The ANAV shall:

- a. Ensure the boat's navigation charts, publications and plotting aids are complete prior to each underway, and report this to the NAV before departure.
- b. Prepare charts for use at the direction of the NAV.
- c. Maintain all navigation equipment in good order.
- d. Monitor a weather broadcast daily.
- e. Ensure each crew member is trained on the proper operation of the GPS, chart plotter, radar, weather fax, AIS, VHF and HF radios and navigation lighting systems. The ANAV shall ensure by individual walk-through that each crew member can properly operate these key navigation systems.

209.5 ENGINEER

The Engineer reports to and is responsible to the XO for the safe operation and maintenance of the boat's auxiliary propulsion machinery and other mechanical equipment. He also functions as the boat's Fuel, Oil and Water King. The Engineer shall:

- a. Understand the operation and maintenance of the auxiliary engine, steering gear and associated equipment.
- b. Train each crew member on engine procedures, including pre-start checks, starting procedures, operating parameters and indications, operating limits and shutdown. The Engineer shall ensure by individual walk-through that each crew member can perform the pre-start check, engine start up and engine shutdown.
- c. Monitor engine operation, fluid levels and fuel consumption on a daily basis.
- d. Advise the Skipper of the material readiness of the boat. The Engineer shall make recommendations to the Skipper for prompt correction of deficiencies and report deficiencies beyond crew capability to correct by submitting a discrepancy chit to the Cutter Shed.
- e. As **Fuel, Oil and Water King** shall:

(1) Coordinate receipt of fuel.

(2) Fill and properly treat all water tanks prior to each underway.

(3) Ensure a sufficient quantity of fuel, lube oil and engine coolant is on board for the underway period.

f. Be personally responsible for accomplishing all engineering and steering Preventative Maintenance Systems (PMS).

209.6 SUPPLY OFFICER

The Supply Officer reports to and is responsible to the XO for procurement, receipt, storage, issue and accounting of all stores and equipment. He shall also act as the boat's Mess caterer. The Supply Officer shall:

a. Ensure all berthing mattresses and lee cloths are clean and serviceable prior to each departure for overnight sailing.

b. Establish the boat's stowage plan.

c. Supervise the inventory, usage and replenishment of galley gear kit, cleaning gear, first aid kit, pyrotechnics, and all publications on board.

d. Develop an underway menu/ meal plan for approval by the XO.

e. Supervise storage of major food on-loads, paying close attention to secure storage, safety and food freshness.

f. Keep the refrigerator clean and stowed for easy access.

g. Control and restock the snack bin.

h. Control and issue food for meal preparation.

i. Maintain a running inventory of food and drink by storage location.

j. Train each crew member in the proper operation of the DC refrigerator system, the galley range and oven and the propane fuel system. The Supply Officer shall ensure by individual walk-through that each crew member can light and secure the range and oven, and operate the refrigerator.

k. Monitor propane consumption.

209.7 FIRST LIEUTENANT

The First Lieutenant reports to and is responsible to the XO for equipment related to deck seamanship. He shall also function as the boat's Bosun. The First Lieutenant shall:

- a. Maintain satisfactory preservation and cleanliness of the boat's exterior.
- b. Maintain mooring lines, anchors, winches and related equipment.
- c. Train crew in appropriate deck seamanship topics to include:
 - (1) Knots & hitches: bowline, square, sheetbend, clove hitch, figure 8, slippery reef knot
 - (2) Use of winches
 - (3) Proper cleating, coiling and faking of line
 - (4) Preparations for sailing and securing from sailing
- d. Be personally responsible for accomplishing all deck PMS.
- e. As **Bosun**, shall:
 - (1) Keep sails and rigging in good repair.
 - (2) Keep sails as dry as possible and, if stowed wet, ensure they are rinsed and aired out at the earliest opportunity.
 - (3) Inspect and inventory the contents of the Sail Repair Kit.
 - (4) Be personally responsible for accomplishing all sail, standing rigging and running rigging PMS.

209.8 ELECTRICAL ASSISTANT (EA)

The EA reports to and is responsible to the Engineer for the proper operation and maintenance of electrical systems. The EA shall:

- a. Monitor the condition of all battery banks and make recommendations to the Engineer for charging.
- b. Inventory electrical repair equipment.
- c. Ensure sufficient distilled water is on board to replenish battery water levels for boats not equipped with gel-cell or AGM batteries.
- d. Ensure each crew member is trained to connect and disconnect shore power, and operate the ship's AC and DC electrical distribution systems.
- e. Troubleshoot electrical casualties, especially those relating to the charging system. Train the crew in electrical troubleshooting.
- f. Be personally responsible for accomplishing all electrical PMS.

209.9 DAMAGE CONTROL ASSISTANT (DCA)

The Damage Control Assistant reports to and is responsible to the Engineer for all damage control and safety related equipment. The DCA shall:

- a. Inspect and inventory damage control equipment prior to each offshore passage, including pyrotechnics, fire extinguishers, first aid kit, damage control kit and spare CO2 cartridges and bobbins for the inflatable life vests.
- b. Inspect all safety harnesses and inflatable life vests prior to each offshore passage.
- c. Train crew members in the proper assembly, wear and use of the inflatable life vest and safety harness. Ensure by individual walk-through that each crew member knows how to assemble, adjust, and wear the harness and inflate the life vest, and how to replace the CO2 cartridges and bobbins.
- d. Train crew members in the proper use of the head, in the proper position of Y-valves and in the disassembly and reassembly of the head. Ensure by individual walk-through that each crew member knows how to position the Y-valves for the head.
- e. Prepare response plans and train the crew to respond to underway casualties.
- f. Be personally responsible for accomplishing all safety and hull and plumbing PMS.

210. UNDERWAY WATCHES

- a. **WATCH TEAM ORGANIZATION.** A typical OSTS underway watch team has five members: the Skipper or XO, and four Crewmen. Under the direction of the Watch Captain, midshipman watchstanders will be rotated through all watch stations periodically (about hourly) during the watch. A typical watch organization follows:



- b. **WATCH RELIEF.** Watch relief is a formal process where responsibility is turned over. Prior to relieving the watch the oncoming watchstander shall:

- (1) Obtain sufficient rest. **Sleeping on watch is forbidden.**
- (2) Eat sufficient food and drink sufficient liquid.

(3) Dress correctly. Take all clothing needed for watch when reporting on deck. Stow excess clothing in an accessible place before taking the watch to avoid disturbing off-watch personnel to look for more clothing. Foul weather gear should be ready in the wet locker. Wear inflatable tech vests at all times and safety harnesses:

- (a) from sunset to sunrise
- (b) during periods of heavy weather
- (c) during periods of restricted visibility
- (d) at any other times when directed by the Skipper or XO

(4) Review the navigation plot with emphasis on current position, expected navigation aids and hazards and desired course.

(5) Read and initial the Night Orders.

(6) (At night) Adjust eyes to darkness.

(7) Determine the following, once topside:

- (a) Relative position and movement of other STCs sailing in company
- (b) Point of sail and sail combination in use
- (c) Halyards in use
- (d) Environmental/ weather conditions
- (e) Location of all crew members and their station assignments
- (f) Identity and location of all visible and expected nav aids/ hazards

(8) Obtain a face-to-face verbal turnover of information pertinent to the watch station being relieved. Formally relieve the watch by stating "I relieve you" and receiving the acknowledgment "I stand relieved." The Watch Captain relieves last.

210.1 WATCH CAPTAIN

OSTS Skippers shall appoint midshipman watch captains in writing. The Watch Captain is the key supervisory position in the conduct of the watch. He has overall responsibility for the safe operation of the STC, the efficient performance of the watch and the progress of the daily routine. The Watch Captain reports to the Skipper, or XO if XO is on deck. The Watch Captain (if Skipper, VOST only) reports to the Coach. He shall:

- a. Operate the boat in a safe manner.
- b. Remain attentive to external conditions at all times; anticipate and respond to changes early:

- (1) Weather: winds and seas
- (2) Other vessels nearby
- (3) Navigation hazards nearby
- c. Train the watch team.
- d. Take appropriate immediate action in response to casualties.
- e. Ensure the boat remains secured for sea, clean and properly stowed.
- f. Each watch visually inspect standing and running rigging and all spaces for abnormalities.
- g. Rotate the watch at an appropriate interval (about hourly; more frequently in cold or heavy weather).
- h. Ensure all watchstanders carry out the responsibilities of their stations.
- i. Supervise the watch team navigator.
- j. Implement the Low Visibility Bill when required.
- k. Enforce the use of safety harnesses and tech vests.
- l. Ensure timely completion of meal preparation (or post-meal cleanup).
- m. Make required reports to the Skipper or Coach.

210.2 HELMSMAN

The Helmsman reports to the Watch Captain. He shall:

- a. Maintain a good lookout.
- b. Maintain the ordered course within 5 degrees east or west. Inform the Watch Captain and the watch team navigator if unable to maintain the ordered course.
- c. Monitor sail trim at all times.
- d. Monitor conditions on deck. Be accountable for watch team safety at all times, especially during evolutions.
- e. Maintain a listening watch on the VHF radiotelephone using the remote speaker. Alert the watch team navigator if the boat is hailed, if the OTC is transmitting or if a distress call is heard.
- f. Issue the proper verbal commands for all maneuvering and seamanship evolutions.
- g. Respond (verbally or with hand signals) to acknowledge reports from the lookout.

210.3 LOOKOUT

The Lookout reports to the Watch Captain. He shall:

- a. Maintain a proper lookout in accordance with the Rules of the Road. The lookout shall station himself as far forward in the boat as weather permits.
- b. Report all contacts to the Helmsman. The following should be included in the report:
 - (1) Type of contact (merchant, sailboat, etc)
 - (2) Bearing (relative)
 - (3) Range (estimate in yards)
 - (4) Target Angle (in degrees relative)
 - (5) Bearing Drift (left, right, CBDR)

Report the above items as soon as the information is apparent, then update the report periodically as additional information is gained.

210.4 NAVIGATION PLOTTER

The Navigation Plotter serves as the watch team navigator and reports to the Watch Captain. He shall:

- a. Fix the position of the STC in accordance with the fix interval established by the Skipper. See section 208.4 for fix interval guidelines. Report all fixes to the Watch Captain.
- b. Maintain the navigation plot adhering to the six rules of DR. DR two fix intervals ahead from every fix to ensure the boat is not standing into danger.
- c. Make course-to-steer recommendations to the Helmsman.
- d. Monitor HF/VHF radios and advise the Watch Captain of pertinent radio traffic.
- e. Maintain a radar watch (if warranted)
- f. Maintain an AIS watch for contacts
- g. Maintain the Offshore Yacht Log.
- h. Assist in meal preparation/cleanup on a not-to-interfere basis.

211. LOG, STANDING ORDERS AND NIGHT ORDERS

211.1 OFFSHORE YACHT LOG - MINIMUM REQUIRED ENTRIES

The Offshore Yacht Log is used to record all relevant data whenever a STC is underway. Sample log entries will be found in the front of each STC's logbook and should be used as a guide to properly maintain the log. Entries, made in black ink, should include:

a. LOCAL OPERATIONS. (The offshore yacht log is only required to be used in the Local Operations Area when so directed by the applicable program director)

- (1) Name of Skipper/Coach(es) and/or XO
- (2) List **ALL** personnel embarked
- (3) Time underway
- (4) Training conducted
- (5) Time moored
- (6) Any embarked guests

b. EXTENDED OPERATIONS

- (1) Name of Skipper and XO
- (2) List **ALL** personnel embarked
- (3) Time underway
- (4) Training conducted
- (5) Hourly navigation, weather, sail combination, engine operation and bilge/reefer/battery information

c. IN PORT, AWAY FROM USNA

Weather, engine operation/status and bilge/ reefer/ battery information every four hours

d. SPECIAL CIRCUMSTANCES

- (1) Significant events, including casualties
- (2) All emergency drills
- (3) Events/races entered and results
- (4) Mayday and Pan Pan calls received on VHF radio

211.2 STANDING ORDERS

Each OSTS Skipper shall complete a set of Standing Orders prior to departure from the local OPAREA. The OSTS Skipper shall submit the Standing Orders to the OTC for review.

The OSTS program encourages midshipmen to assist the Skipper in drafting the Standing Orders. Each member of the crew shall read and initial the Standing Orders. Appendix A contains sample Standing Orders which may be adopted in whole or modified as desired.

211.3 NIGHT ORDERS

Each OSTS Skipper shall draft Night Orders whenever a STC will be underway at night. The Night Orders shall include specific safety, navigational and operational guidance that applies during the night. Appendix B contains a sample Night Order form.

212. BILGE LEVELS

The Navigation Plotter shall check bilge levels on the hour while underway (but not to interfere with navigation duties and responsibilities). On each occasion, the Navigation Plotter shall manually pump the bilges dry and record the number of pump strokes in the Offshore Yacht Log

NOTE

ALL CREW MEMBERS MUST ADHERE TO INTERNATIONAL, NAVY AND LOCAL POLLUTION CONTROL REGULATIONS. DO NOT PUMP BILGES OVERBOARD IF THEY CONTAIN ANY OILY WASTE. YOU CAN DETECT OILY WASTE BY A COLORFUL SHEEN ON THE WATER'S SURFACE.

213. ELECTRICAL POWER

Since vital electrical loads aboard STCs draw their power from storage batteries, maintain the batteries at the proper charge level of 12.3V DC or higher. The crew shall operate the engine-driven alternators at regular intervals.

214. SQUADRON INTEGRITY

While transiting between ports, vessels shall maintain squadron integrity, which means they shall transit in company. The OTC Supplement shall define the proper interval between STCs and any additional communications requirements. If the OTC diverts a STC to a non-scheduled port for repairs, the OTC shall notify DNAS as soon as possible. In making the decision to divert, give preference to using ports with military installation support. This is not meant to preclude the use of civilian facilities in an emergency. Unless there are unusual circumstances, the OTC shall send a second or "buddy boat" to accompany when detaching a STC that is no longer voyage capable.

215. ORDERS REQUIRED FOR EMBARKATION

Orders must cover all personnel embarking in STC to ensure that both they and the government are protected. Civilian volunteers must have executed a Volunteer Service Agreement (form DD 2793), available from the Program Director. USNA will issue official travel orders for summer cruises as required. USNA will pay per diem as appropriate and in accordance with Naval Academy regulations and policy.

216. EMBARKATION OF NON-OFFICIAL PERSONNEL

Reference (a) specifies procedures for embarking occasional guests aboard a STC. Away from USNA, the Skipper may embark guests for short day cruises with the concurrence of the OTC. Embarking guests at night requires specific advance approval of DNAS. Each guest must sign a Marine Event Liability Waiver in advance of getting underway. Appendix E contains a copy of this form.

217. SANTEE BASIN OPERATING PROCEDURES

This section governs the procedures to be followed by Cutter Shed personnel conducting boat movements in the local OPAREA. These movements apply only to sail craft under engine power. Movement of a STC under sail must follow other procedures outlined in this instruction.

217.1 NAVY 44'S AND CLASS "A" BOATS

At least one of the Cutter Shed personnel assigned to move NAVY-44 and Class "A" STCs must be qualified as a boat coxswain. For training evolutions, a coxswain U/I must have a qualified coxswain on board. When moving a STC from one location to another, whether transferring a boat from one slip to another within the confines of Santee Basin or moving a boat to SCRF, the person driving the craft must be qualified. Prior to moving a STC, the crew shall accomplish the following:

- a. Conduct Engine Start Checklist.
- b. Ensure enough life jackets are available for each person on board.
- c. Obtain permission from Santee Basin Control (Ch 82A).

Each boat will have as a minimum crew one qualified coxswain and one line handler. Each person must be at least a Second Class swimmer. Boat movements will be conducted during daylight hours only unless otherwise directed by the Cutter Shed Department Head. Once underway, the boat coxswain will adhere to all regulations applicable to a sailing vessel under auxiliary power as outlined in COLREGS.

217.2 TOWING

If Cutter Shed personnel must tow a NAVY-44 or Class "A" boat, follow the guidelines below:

a. Use a Rigid Hull Inflatable Boat (RHIB) to tow a STC because of the RHIB's maneuverability, power and soft rubber bladders. During a "dead stick" move of a STC, make up a RHIB bow and stern to the port or starboard quarter to provide the necessary thrust and control.

b. Use qualified boat coxswains as RHIB operators.

c. One line handler will remain aboard the STC at all times to assist with steering or to handle lines.

d. A responsible Petty Officer will be on board either the RHIB or STC to act as a Safety Observer.

217.3 HURRICANE SORTIES

In the event of a hurricane sortie, participating personnel shall follow all requirements discussed in this section as well as those guidelines promulgated in reference (d). Additionally, prior to getting underway, each boat will have on board:

- a. Navigational charts with appropriate information about the assigned hurricane anchorages.
- b. Additional personnel as required to safely moor to designated mooring buoys.
- c. A copy of Reference (d).

CHAPTER 3

300. EXCEPTIONS AND MODIFICATIONS TO SOP REQUIREMENTS

All STC are subject to the Standard Operating Procedures. When operating in the local area or when racing, as defined below, certain modifications apply. The following define the requirements and list the exceptions for such operations.

301. LOCAL OPERATING AREA

The LOCAL OPERATING AREA is defined as the area bounded by:

- a. Severn River, seaward of Route 50 bridge;
- b. Annapolis inner harbor eastward of Annapolis harbor Green Can 1SC;
- c. Chesapeake Bay south of the Chesapeake Bay Bridge;
- d. North of a line connecting Thomas Point Light and Bloody Point Bar Light.
- e. Program directors may authorize training outside the local area on a case-by-case basis.

302. RACING DEFINITIONS

- a. ROUND-THE-BUOY RACES include day races run outside of CBYRA Region 3 on short courses using drop marks or permanent buoys.
- b. POINT-TO-POINT DAY RACES include medium-distance races on pre-determined courses that do not include night sailing.
- c. DISTANCE RACES include all races which include night sailing.

303. REQUIREMENTS FOR LOCAL OPS

a. NAVIGATION

(1) The Skipper/Coach must ensure that appropriate charts and publications are on board and available prior to getting underway. This shall include the following:

- (a) Charts 12270 and 12283.
- (b) Appropriate Tide and Current Tables or Eldridge's Almanac
- (c) Chart 1
- (d) First Aid Kit and manual
- (e) COLREGS

(2) A navigation plot or DR is not required to be maintained while in the local OPAREA, but is highly encouraged both for vessel safety and crew training.

(3) Chart preparation shall conspicuously highlight danger soundings and danger bearings. These markings shall be briefed and understood, by all assigned crew members prior to getting underway.

(4) Prior to getting underway for training in the local OPAREA, the Skipper/Coach shall ensure that:

(a) The VHF weather broadcast has been received.

(b) **A navigation brief will be held**, highlighting expected conditions on the water. At a minimum this brief will include pointing out the area of expected operations on a chart and the information listed in paragraph 303.b (1) (a) or 303.b(2), as appropriate.

(5) The Skipper/Coach shall bear the ultimate responsibility for the safe navigation of the vessel. They must be fully aware of all hazards within the boundaries of the local OPAREA and avoid them.

b. ADDITIONAL REQUIREMENTS

(1) For all RACES:

(a) The Skipper shall hold a crew meeting before the first race of the day to discuss the plan of the day, as well as any logistical, tactical or strategic considerations, including, but not limited to, a weather synopsis.

(b) The Skipper shall hold a crew meeting after the final race of the day in which the day's racing is de-briefed, plans are made for any repairs necessary and any other schedule considerations are discussed.

(c) Logbook entries to include:

1) Title of event

2) Finish position/ fleet size

3) Boat performance in wind and wave conditions, sail combinations, weight placement, etc.

(2) For OSTs, VOST practices, BST and Recreational Sailing; the Skipper/Coach shall ensure that a brief is conducted which includes:

(a) Wind and weather conditions (both current and forecast)

(b) Anticipated training evolutions

(c) Safety considerations

(3) The following Check Lists (found in section 900) are required to be used during local OPS:

- (a) 902. Underway Topsides Check List
- (b) 903. Underway Below Deck and Engine Start Check List
- (c) 907. Santee Basin Securing Check List
- (d) 908. Safety Equipment Check List

304. EXCEPTIONS TO THE SOP WHEN RACING

a. VOST Skippers may adjust their STC's standard daily routine. To accommodate the particular race requirements, the Skipper may, with approval of the onboard Coach, organize the watch rotation and assign tasks as appropriate.

b. All crew members shall contribute to the position of lookout. The bow man should be positioned at the bow pulpit during the start sequence and remain there until on the final approach to the starting line and clear of other traffic.

c. During round-the-buoy racing, if conditions warrant, the Coach may authorize "not" rigging the preventer; however, this is a decision that should not be taken lightly, and should not be considered automatic by the Skipper. For distance races, preventers shall be rigged when on a broad reach or running.

d. Section 405 does not apply when starting a race if the race committee has designated a VHF channel for use in recalling the fleet. Immediately following the start, skippers shall ensure that their radios are reset in accordance with section 405. They should include applicable racing channel(s) in their scan pattern.

e. Section 400.c(6) is modified to allow hiking against the lower lifeline.

f. Section 804.3 is modified only when actually racing, from 15 minutes prior to the preparatory signal for the boat's class until the boat finishes or withdraws from the race, to allow the following:

- (1) optional use of the safety harness
- (2) repair/check only the item/items of concern rather than inspection of the entire rig when going aloft.
- (3) Manning may be reduced to the minimum necessary to safely hoist/lower the man aloft.

CHAPTER 4

400. SAFETY

Safety is at all times a matter of utmost importance and requires the full attention of all hands. The overriding factor when considering a specific course of action shall be whether the contemplated action will unduly hazard the vessel or anyone aboard. This chapter promulgates basic safety precautions and procedures as a minimum standard; Skippers/Coaches are encouraged to add to this list as necessary.

a. INDIVIDUAL GEAR.

(1) SAFETY HARNESES AND PERSONAL INFLATABLE FLOTATION DEVICES. All crew shall wear tech vests at all times. Safety harnesses shall be clipped onto padeyes or jack lines when topside between sunset and sunrise, during periods of restricted visibility and during rough weather or as prescribed by the Skipper. Personnel shall don appropriate personal safety equipment below before relieving the watch.

(2) WHISTLE. Attach a suitable whistle at the helm station to be used as a ship's "General Alarm."

(3) FOOTGEAR. All personnel shall wear non-skid deck shoes topside. See section 602 for additional guidance.

(4) JEWELRY. Do not wear jewelry aboard any STC.

b. STANDARD PROCEDURES. All procedures shall strictly conform to instructions contained in this Standard Operating Procedures (SOP) and reference (h), the Boat Information Book (BIB). All personnel embarked must become thoroughly familiar with the SOP and BIB. During training, there will be no emergency drills except those initiated by the Skipper. Record completion of all emergency drills in the Offshore Yacht Log.

(1) ABANDON SHIP DRILLS. Abandon ship and emergency life raft station drills will be carried out regularly to ensure that all personnel are familiar with correct procedures. Each crew shall conduct abandon ship drills prior to departing the local OPAREA. (See Abandon Ship Bill, Section 806.)

(2) MAN OVERBOARD DRILLS. Periodic man overboard drills will be conducted, including drills during hours of darkness. VOST crews shall conduct at least one man overboard drill each month during regular practice periods.

(3) SAFETY BRIEFS. Safety briefs should be a routine precursor to all evolutions to insure that all hands are familiar with equipment and aware of potential hazards and all pertinent safety precautions. The Naval Safety Center's Operational Risk Management Methodology, Ref (h), is a systematic process for assessing and controlling the risks associated with any task or mission and shall be a part of all safety briefs.

c. EMERGENCY EQUIPMENT. Before proceeding to sea, all members of the crew shall be thoroughly familiar with the location and operation of all emergency and survival equipment on board.

(1) SKIPPER INSPECTION. Prior to beginning an offshore passage, the Skipper/Coach will personally inspect all such equipment prior to getting underway for an offshore or coastal passage and will, in addition, conduct an inspection of the following equipment after it has been issued to individuals:

- (a) Safety harnesses
- (b) Tech vests
- (c) Personal strobe lights

(2) EPIRB. The Emergency Position Indicating Radio Beacon (EPIRB) will be tested by the Vanderstar Chair once a month or as recommended by the manufacturer. However, crews should still inspect their EPIRB in accordance with the manufacturer's recommendations prior to heading offshore.

(3) SPOTLIGHTS. One high intensity 12V or handheld spotlight will be stowed in the cockpit during hours of darkness.

(4) CREW RECOVERY EQUIPMENT. A horseshoe buoy with attached Man Overboard Pole and drogue, whistle and light will be mounted at all times while underway. A life jacket will be kept in the cockpit adjacent to the helmsman. A Lifesling with a strobe light will be mounted on the stern pulpit and a 50 foot heaving line will be attached in the cockpit within reach of the Helmsman.

(5) SAFETY LINES. A safety line (jack line) will be rigged from the cockpit to the bow on the main deck, (port and starboard), as a means of securing safety harnesses.

(6) LIFE LINES. No one shall lean, sit, stand, climb on, or clip safety harnesses on the lifelines.

d. EQUIPMENT MAINTENANCE.

(1) No maintenance will be performed on any electrical or electronic equipment without the express permission of the Skipper or Coach.

(2) No maintenance will be performed in the engine compartment while the engine is operating unless authorized by the Skipper/Coach.

e. SUPERVISION. The Skipper/Coach or XO must personally supervise the following evolutions: Crew Aloft (Section 804), Fueling and Freshwater Filling, Towing and whenever a swimmer is working over the side.

401. USE OF PREVENTERS

The possibility of serious personal injury or damage to a STC due to an accidental jibe is very real. All hands must remain aware of this danger. Voyage planning and daily sailing procedures must reflect specific consideration of the threat of an accidental jibe. Common sense and good seamanship should always prevail. While individual conditions of weather, sea state, crew experience and training cannot be generalized and it is recognized that individual Skippers and Coaches must make decisions based on actual conditions, the following policy shall be followed:

a. Preventers shall be rigged and used whenever a STC is running with the wind at or abaft 120 degrees apparent (regardless of wind speed).

b. Crews shall be trained in the danger zones and safe zones of their respective STCs.

c. The Helmsman should announce, "Prepare to jibe...bearing away...jibing " in a loud voice to inform the crew of maneuvers.

402. SAFETY EQUIPMENT OUTFITTING AND INSPECTIONS

All boats should be fully equipped with appropriate safety equipment. A standard stowage plan shall be posted and outfitting check should be conducted prior to departure from USNA. Skippers and Coaches shall ensure that their STC is in compliance with Chapter 9 (908), US Coast Guard requirements and the International Sailing Federation (ISAF) Offshore Special Regulations (OSR). STC racing or operating in the local OPAREA shall comply with OSR Category 4 in local waters or as specified in the Notice of Race. STC transiting or racing in the ocean shall conform to OSR Category 1, unless otherwise specified in the Notice of Race or OPORDER.

403. SWIMMING

a. RESCUE SWIMMING. Anytime a swimmer is put into the water for rescue and assistance purposes he will wear a PFD and be tethered to the boat with a safety line.

b. RECREATIONAL SWIMMING

(1) No one shall swim from a STC while underway making way.

(2) No one shall swim from a STC in the local OPAREA due to the high traffic density and poor water quality.

(3) When outside the local OPAREA, and with the OTC's permission, Skippers may permit swimming during daylight hours. The Skipper shall ensure that the engine start battery switch (Perko) is in the "off" position prior to swimmers entering the water. Swim call, when authorized, requires extra vigilance and necessitates a designated spotter! **THOSE IN THE WATER SHALL USE THE "BUDDY SYSTEM."**

404. EMERGENCY/"MAYDAY" PROCEDURES

A plaque will be displayed at the navigation station with emergency communications procedures and a sample "Mayday" message customized for the craft. An example is shown below. All hands will be familiar with the use of radios and the proper procedures for transmitting an emergency message.

If your STC is equipped with Digital Select Calling (DSC), follow the boat specific procedure to transmit a DSC distress call on the dedicated DSC channel 70. If the GPS is required to be energized to transmit your position, ensure the GPS breaker and electronics unit are turned on.

SAMPLE "MAYDAY" VOICE MESSAGE

Speak **SLOWLY - CLEARLY - CALMLY**

1. Make sure your radio is on.
2. Select Channel 16 (VHF) or 2182 kHz (SSB). If unable to make contact on 2182 kHz, try alternate high frequency (HF) SSB emergency channels 4125, 6215, 8291, 12290 or 16420 kHz.
3. Press microphone button and say:

"MAYDAY - MAYDAY - MAYDAY."

4. Say: "**THIS IS** _____, _____, _____, _____."
 boat name boat name boat name your call numbers
5. Say: "**MAYDAY:** _____"
 your boat name
6. TELL WHERE YOU ARE (What navigational aids or landmarks are near?).
7. STATE THE NATURE OF YOUR DISTRESS.
8. GIVE NUMBER OF CREW ABOARD AND CONDITIONS OF ANY INJURED.
9. ESTIMATE PRESENT SEAWORTHINESS OF YOUR BOAT.
10. BRIEFLY DESCRIBE YOUR BOAT:

____ FEET LONG; ____ FOOT DRAFT; SLOOP RIG;
 ____ HULL (COLOR); ____ TRIM(COLOR); ONE MAST;
AUXILIARY POWER; ____ HORSEPOWER;
 CONSTRUCTION (FIBERGLASS OR ALUMINUM)

11. END MESSAGE BY SAYING: "**THIS IS _____ . OVER,**"
12. RELEASE MICROPHONE BUTTON AND LISTEN: SOMEONE SHOULD ANSWER. **IF THEY DO NOT, REPEAT CALL, BEGINNING AT ITEM 3.** IF THERE IS STILL NO ANSWER, SWITCH TO ANOTHER CHANNEL AND BEGIN AGAIN.

405. VHF RADIO WATCH

VHF channel 16 shall be continually monitored by STCs while underway. Channel 13 (and Channel 9, in Coast Guard District I) shall be monitored at all times in restricted coastal waters or in areas where commercial traffic may be expected. Use the VHF "SCAN" function when monitoring more than one channel. Scan VHF channel 82a in the local OPAREA or the designated squadron communication channel while underway.

406. RADAR WATCH

A radar watch shall be maintained during reduced visibility and at other times as good seamanship dictates. A maneuvering board solution is always appropriate when working collision avoidance problems.

407. AIS WATCH

An Automatic Identification System (AIS) watch shall be maintained to identify potential collision risks with commercial traffic, and pleasure craft that are equipped with AIS. Recommended interval is every 15 minutes or more frequently as good seamanship dictates.

408. SHORE POWER

Connecting and disconnecting shore power is a potentially hazardous evolution. The procedures in Chapter 9 (Section 903) shall be used to ensure that the connection is safely completed.

409. LPG STOVE

Though very safe when properly used, the operation of galley stoves aboard STCs requires strict adherence to established procedures. Each STC shall post the light-off procedure in a conspicuous location near the stove. The procedure may be found in the Boat Information Book or technical manuals. **When lighting the stove, the bilge exhaust fan shall be operated to ensure that there is no gas in the bilges. When securing the stove, ensure that all gas is burned out of the lines by first closing the valve at the gas bottle, then turning off burners at stove after flame is extinguished.**

410. FUELING

The following procedures should be followed while filling diesel fuel in the STC to ensure safe operations and avoid overfilling. Before starting, determine an estimate of how much fuel (in gallons) is needed so that fuel pump gauge can be monitored in addition to the steps listed below:

1. Turn engine off, bilge blower on.
2. Sound the tank and record the volume with the Tank Tender.
3. Carefully remove deck fuel cap (amidships on port side) have dual concurrence that it is the proper fill, place oil zorb around deck fill, have paper towels ready for spillage.
4. Remove the tank dipstick from the top of the fuel tank below deck, place oil zorb around opening.
5. Position one person at the deck fill with the fuel nozzle, one at the tank tender and one at the dipstick hole on the tank with a flashlight.
6. Begin **fueling slowly** when all are in position, the person at the tank below will monitor the level in the tank and call the stop.
7. **Do not overfill**, leave at least 1 inch below the tank top.
8. When finished return the fuel nozzle to the attendant in the up position.
9. Secure the dipstick back into the tank with a wrench, being careful not to cross-thread or over-tighten.
10. Record the fuel capacity with the Tank Tender.

11. Check condition of o-ring in deck fill cap, secure cap hand tighten with the deck key.
12. Turn off bilge blower 2 minutes after completion of fueling.

411. SPINNAKER/HALYARD FLYING

Spinnaker and Halyard flying are not permitted for safety reasons.

412. SHIP'S BILLS

Ship's Bills are provided in Chapter 8 of this SOP. These Bills are designed to enhance safety and increase standardization throughout the program.

CHAPTER 5

500. POLICY REGARDING INCIDENTS WHILE UNDERWAY

501. PURPOSE

This chapter sets forth policy regarding safe sailing and collision avoidance. Procedures to be followed in the event a STC is involved in collision, grounding or otherwise causes damage to civilian or military property are clearly defined.

502. RULES AND REGULATIONS

References (c), (e) and for those boats involved in a racing program (f), provide detailed guidance, regulations and procedures for collision avoidance at sea and all three are entirely consistent in the concept of collision avoidance and safety of life at sea. All personnel sailing in STCs must be thoroughly versed in these references and competent enough at sea to apply the principles of collision avoidance.

503. POLICY

While the focus of this policy is on collisions between STC and civilian boats, it applies equally to all Naval Academy sailboats in all facets of the sailing program.

a. The prudent mariner knows the situation, knows the capabilities and limitations of his craft and crew and always leaves an escape route.

b. It is recognized that in the course of midshipman sail training, incidents may nevertheless occur. Differentiation is drawn between relatively minor incidents (incidents causing negligible personal or property damage) and more serious incidents (involving personal injury or significant property damage to Navy or civilian craft).

504. PROCEDURES

Training, planning, common sense and good seamanship are the keys to incident avoidance. Nonetheless, if a mishap occurs, prompt notification, accurate reporting and candor in post mishap analysis will ensure that the U.S. Government is protected from undue claims and that the training program will benefit from lessons learned. The Skipper/Coach must file an "Incident Report Form" (see Appendix F) with the Program Director, for review by the Vanderstar Chair and DNAS for all incidents, including grounding, collision, allision, injury, material damage, fire and major maintenance.

a. MINOR INCIDENT REPORTING. "Touching bottom" (soft grounding in which the boat's forward progress is not stopped) shall be reported immediately upon reaching port to the pertinent program Director (OSTS/VOST) so that an underwater hull survey may be scheduled. Program Directors will review the circumstances surrounding the incident and, in coordination with the Vanderstar Chair, shall develop lessons learned to prevent similar instances from reoccurring.

b. ADMIRALTY INCIDENT REPORTING

(1) In contrast to minor incidents, all admiralty incidents will be reported immediately to DNAS via the appropriate program Director. An admiralty incident is any in which two vessels underway strike each other; or in which a vessel strikes a pier, bridge, buoy or other object or causes wake damage; or in which personnel injury or death occurs. When a STC's forward progress is stopped due to contact with the bottom, this is considered an Admiralty incident for purposes of this discussion. Failure to report serious groundings and mishaps may result in substantial public embarrassment to the Naval Academy and to the government, with possible detrimental impact on the Navy's sail training program.

(2) Information required for a complete investigation of the incident must be gathered. The Skipper should close out the Offshore Yacht Log. The Log and navigation chart(s) should be collected and retained for safekeeping. These are legal documents and must be safeguarded. Photographs or video should be taken if camera equipment is available. **The Skipper should direct all crew members with specific knowledge of the incident to draft statements and should draft his or her own as well.** All of these records and reports should be turned over to the pertinent Program Director for Vanderstar and DNAS review at the earliest opportunity.

ADMIRALTY INCIDENT CHECKLIST

Complete the following checklist immediately in all cases of collision, wake damage or injury in which a STC is involved.

<u>ACTION</u>	<u>COG</u>	<u>COMPLETE</u>
Perform first aid, damage control, request/render assistance as required.	Skipper	_____
Upon knowledge of an incident, report by fastest, most efficient means (phone, VHF, HF) to:	Skipper	
a. OTC		_____
b. OSTs/ VOST Program Director/Navy Sailing Duty Officer		_____
Gather information for expected investigation.	Skipper	_____

Report immediately, even if information is incomplete or sketchy. Follow-up reports will be sent from the scene if requested by DNAS or higher authority.

If racing, and the STC can continue to race, complete initial reporting as soon as possible. Prepare for the protest hearing. Attend the protest hearing as directed by DNAS.

If not racing, communicate to the second party that the Navy is a self-insurer and has formal procedures, like any commercial insurance company, for paying damage claims. Tell the other party that they should expect to hear from the Navy within a few days. Do not accept blame or responsibility for the incident.

CHAPTER 6**600. SMARTNESS****601. STANDARDS**

The sail training program at the Naval Academy has very high visibility with the potential for strong positive or negative reaction. Naval Academy STC's represent a significant taxpayer investment and are routinely under scrutiny, both in port and underway. The visual image projected is a powerful influence on the impression created by the training craft and their respective crew. Accordingly, Skippers and Coaches must ensure that the appearance and daily routine of their vessel and assigned crew are maintained at the highest possible military standard. Smart entries of both vessel and crew into port will be the standard, with immediate rectification of outstanding cosmetic deficiencies which could not be corrected at sea accomplished upon arrival.

602. UNIFORMS

The sailing uniform, as approved by the Superintendent, is listed below and may be modified only by DNAS. All personnel sailing aboard Naval Academy vessels are responsible for adhering to these regulations. All uniforms will be clean and in good repair. Midshipmen are reminded to comply with the spirit of these rules to represent the sailing program and the Naval Academy in the best light.

UNIFORM POLICY				
EVENT	OSTS	VOST	IC	BST
LOCAL OPS	BLUE RIM/ KHAKI or BLUE POLO/ KHAKI <u>OR</u> <u>WHITE</u> <u>POLO/KHAKI</u> <u>(INSTRUCTORS)</u>	BLUE RIM/ KHAKI or BLUE POLO/ KHAKI	REG PE GEAR OR ISSUED SAIL GEAR	REG PE GEAR (PLEBE) OR WHITE POLO/ BLUE SHORTS (INSTRUCTORS)
ENTERING/ LEAVING LIBERTY PORT	BLUE POLO/ KHAKI	BLUE POLO/ KHAKI		
ROUND-THE- BUOY RACING		BLUE POLO/ KHAKI		
DISTANCE CRUISE/ RACE	BLUE RIM/ KHAKI	BLUE RIM/ KHAKI		
COLD WEATHER	NAVY SWEATSHIRT BLUE JACKET/ PULLOVER FOUL WEAX GEAR	NAVY FLEECE PULLOVER FOUL WEAX GEAR		

UNIFORM POLICY				
IC TRAVEL			BLUE POLO/ KHAKI	
EVENTS ASHORE	MILITARY UNIFORM OF THE DAY OR BLUE POLO/ APPROPRIATE LONG TROUSERS OR SHORTS	MILITARY UNIFORM OF THE DAY OR BLUE POLO/ APPROPRIATE LONG TROUSERS OR SHORTS	MILITARY UNIFORM OF THE DAY OR BLUE POLO/ APPROPRIATE LONG TROUSERS OR SHORTS	

NOTES:

a. The working uniform is the prescribed shirt and long khaki trousers with cotton web belt or NASS logo belt. Shirt tails will be tucked into the trousers. Khaki shorts may be substituted for trousers. Shorts shall be identical in color to working khaki trousers, Bermuda length and fitted with belt loops. Cargo trousers/shorts are not acceptable.

b. The Naval Academy Sailing polo (with "N" logo) or embroidered crest or other "boat shirts" may be worn, when specifically approved by the appropriate Program Director.

c. A navy blue or white Navy-related ball cap may be worn. When appropriate, the Skipper/Coach may authorize watch caps or other cold weather head gear.

d. Closed toe shoes or boots with non-slip, non-marking rubber shoes will be worn at all times while on deck. Shoes will be brown leather or primarily white. Running shoes, windsurfing or diving "booties," or Teva-type sandals are not acceptable.

e. Low-cut white or khaki socks may be worn based on personal preference. Grey rag wool or synthetic socks are authorized for cold weather.

f. For safety and uniformity, foul weather gear issued by the Program Directors will be worn by offshore sailors.

g. For events ashore, Skippers/Coaches shall wear one of the following, as dictated by the type and formality of the event:

(1) Navy blue polo (burgee polo preferred) over long white or khaki trousers or skirt; or

(2) Light blue or white dress shirt, four-in-hand necktie or bow tie, navy blue blazer and long trousers or skirt.

603. PERSONAL APPEARANCE

STC are military vessels and the military members of their crews are expected to maintain proper military grooming standards at all times.

604. MAINTENANCE OF STC APPEARANCE

Prior to arrival in port, all gear shall be stored in a seaman-like manner, sails furled securely and stowed properly and lines coiled and hung as appropriate. Immediately upon arrival, topsides and decks will be given a fresh water wash down. The vessel's interior will be maintained in an orderly fashion (ready to receive visitors) at all times while in port.

605. COLORS

When STC are berthed at the Naval Academy, morning and evening colors are not required to be observed. During port visits away from the USNA complex, morning and evening colors shall be observed, with proper military decorum, as an example to the sailing community.

NOTE

**THE BURGEE OR PERSONAL FLAG WILL NOT BE
DISPLAYED FROM THE SPREADER.**

606. SALUTES

As vessels in naval service, STC should NEVER initiate a flag salute with another vessel. Salutes to naval vessels are to be made by manning the rail.

607. DRESSING SHIP

STC should Full Dress Ship on national holidays, the Navy Birthday and on special occasions while in port between 0800 and sunset. A STC should NOT get underway while "dressed" unless in a parade. The line of flags should be EQUALLY spaced and should be continuous from the waterline forward, to the stem, to the mast truck, down to the transom, thence to the waterline aft.

607.1 ORDER OF FLAGS

In accordance with yachting tradition, the following sequence of signal flags for dressing ship will be used on Naval Academy vessels. Note that this is different from that used aboard Navy ships, as the small boat "flag bag" does not include number flags. From forward to aft:

AB2, UJ1, KE3, GH6, IV5, FL4, DM7, PO third substitute, RN first substitute,
STO, CX9, WQ8, ZY second substitute.

608. YACHT ETIQUETTE

Skippers should ensure that midshipmen are taught proper yacht etiquette and courtesy. It is in the interest of the sail training program that courtesy flags are displayed properly, other vessels are boarded properly, rafts are crossed properly and launches are called and boarded properly. Chapman's Piloting is a good source of information.

CHAPTER 7

700. ALCOHOL AND TOBACCO POLICY

In amplification of reference (i) this policy statement provides guidance regarding the use of alcoholic beverages and tobacco by personnel associated with the Naval Academy's sailing program.

701. ALCOHOL

a. Alcoholic beverages will not be consumed by anyone, in any manner, while on board a STC. Alcoholic beverages are not permitted on the piers or quay walls or in the parking lot at Santee Basin.

b. Alcoholic beverages will not be consumed by any person who has not reached the legal drinking age at any function or activity of the Naval Academy's sailing programs.

c. Alcoholic beverages may be consumed by those of legal drinking age at officially sanctioned events sponsored by the NASS Social Committee or specifically sanctioned by Commodore, NASS (when not in conflict with Midshipman Regulations, NAAA policy, or team policy).

d. Fourth-Class midshipmen may not consume alcohol, regardless of their age.

e. Midshipmen in a duty status shall not consume alcohol at any sailing function.

f. Alcoholic beverages **MAY NOT** be stored or transported on board STC without the express written consent of DNAS.

i. No one may consume alcohol within eight hours of the planned underway time.

702. TOBACCO

It is the policy of the Navy, the Naval Academy, the Naval Academy Athletic Association and Naval Academy Sailing Squadron that tobacco products, including smokeless tobacco have no place at USNA. Tobacco products shall not be used on board STC.

703. CONSEQUENCES

Failure to abide by any aspect of this policy shall result in administrative and/or disciplinary action.

CHAPTER 8

800. SHIP'S BILLS

Ship's bills are documents that establish organization for various evolutions and may be modified by an STC Skipper where appropriate. Bill maintenance is assigned by billet and can be found in the RESPONSIBILITY section. Any modification requires Skipper approval.

801. GENERAL VISITING BILL

801.1 PURPOSE

To specify procedures for the control of visitors in STC, in order to ensure physical security of the boats, the safety of the guests and reasonable privacy for the crew.

801.2 RESPONSIBILITY

The Supply Officer is responsible for the maintenance of this Bill. The XO is responsible to the Skipper for the overall arrangements for receiving visitors and for directing implementation of the procedures in this Bill.

801.3 PROCEDURES

a. Within a squadron, the OTC shall determine which STC(s) will serve as host for "Visit Ship." He will then determine the visitation hours and the number of crew required on board to receive visitors. The Supply Officer of the assigned craft will ensure that a presentable sign is posted on the pier or other suitable location, if required, designating visiting hours.

b. The XO shall:

(1) Ensure the STC is presented in the most shipshape, hospitable and favorable light;

(2) Ensure that duty personnel are trained to discuss highlights of the Naval Academy in general and the sail training program in specific; the current training cruise; and the mission of Navy Sailing, with emphasis on the professional development of midshipmen morally, mentally and physically.

(3) Ensure duty personnel are stationed topside to welcome visitors.

(4) Ensure that the crew is properly attired in the STC Uniform of the Day.

(5) Ensure all pilferable items are stowed.

c. The In-port Duty Officer shall:

(1) Serve as a professional, polished and engaging host for visitors.

(2) Invite all visitors to sign the Offshore Yacht Log.

(3) Provide visitors with an information bulletin and other PAO guidance as available.

Note: OTCs will carry a supply of PAO materials, which are available on an as-required basis.

d. All hands shall remember that STC are U.S. government vessels, purchased and maintained by tax dollars. "Straggler" visitors should not be turned away, even if they arrive during non-visiting hours, provided:

(1) The visit occurs at a reasonable hour of the day/night commensurate with the privacy of the crew.

(2) The visit does not interfere with shipboard routine.

802. INPORT SECURITY BILL

802.1 PURPOSE

To provide for the security of STC and their equipment while Inport. Security relates to protection from theft or vandalism; protection from inadvertent damage (fire, flooding, etc); and protection of equipment (misuse or improper operation).

802.2 RESPONSIBILITY

The Executive Officer (XO) is responsible for the maintenance of this Bill. It must be emphasized that proper security is an all hands responsibility.

802.3 SECURING PROCEDURES

Prior to disembarking a STC, the Santee Basin Securing Check List (Section 907) will be completed. Personnel assignments are outlined below.

a. THE NAVIGATOR. The Navigator shall:

(1) Inform the Skipper of the weather forecast with specific emphasis on predicted changes, the approach of heavy weather, tide and current conditions.

(2) Account for and securely stow, all portable navigation and electronic equipment.

(3) Properly secure unnecessary electronic equipment.

b. THE ENGINEER. The Engineer shall:

(1) Ensure all non-essential DC breakers are secured.

(2) Ensure all AC breakers are secured, with the following exceptions (with approval of the Skipper/Coach):

(a) Battery charger

(b) Any other AC loads as approved by the skipper

(3) Ensure the engine and house battery Perko switches are in the "OFF" position.

(4) Ensure shore power cable/fittings are protected from the weather and from potential chafing.

c. THE SUPPLY OFFICER. The Supply Officer shall:

(1) Remove all food items that might spoil.

(2) Open refrigerator covers (if reefer not in use).

d. THE FIRST LIEUTENANT. The First Lieutenant shall:

(1) Ensure all cockpit lockers are properly stowed and closed.

(2) Ensure mooring lines are doubled and additional storm lines are rigged in the event of heavy weather or if outboard in a nest/raft.

(3) Ensure fenders are properly positioned so that they are not adversely affected by changing tides and wind.

(4) Ensure proper chafing gear is used with mooring lines.

(5) Ensure overhead hatches and companionways are closed and locked.

(6) Ensure the mainsail is flaked neatly and the sail cover is in place.

(7) Ensure wheel and binnacle covers are in place.

(8) Ensure dorades are open to provide proper ventilation below decks.

e. THE XO. The XO shall ensure all spaces are clean, that equipment is stowed properly and that all items on the securing check-off list are completed.

f. THE SKIPPER. The Skipper shall ensure that responsible duty personnel (if at a military installation) or yard personnel (if at a civilian facility) are informed of the following:

(1) Naval Academy duty phone numbers and contact personnel as appropriate.

(2) Other instructions as may be necessary.

802.4 PROCEDURES WHILE VESSEL IS MANNED

The following procedures shall be followed when a STC is manned in port or at anchor.

a. MIDSHIPMAN DUTY SECTION. The Duty Section shall consist of a minimum of two midshipmen per squadron, when rafted or anchored in close proximity. The in port watch shall be set by the squadron Senior Watch Officer, at the direction of the OTC. STCs berthed at

docks with uncontrolled public access or which experience an extremely large tidal range must be monitored closely. The Duty Section shall:

(1) Monitor the condition of mooring lines and anchor rode, adjusting them as necessary.

(2) Be constantly alert for oil spills or bilge/sewage pumping and take appropriate actions to avoid violation of Navy, Federal, International or local environmental protection regulations.

(3) Check the condition of the shore power cables and connections.

(4) Monitor refrigeration units and charge as required.

(5) Monitor and log the condition of the bilges once every four hours.

(6) Refer to the General Visiting Bill when visitors wish to come aboard.

(7) Conduct morning and evening colors (when in port away from USNA).

(8) Be familiar with the requirements for logging specific occurrences in the Offshore Yacht Log (section 211.1).

(9) Monitor the weather through local VHF or even commercial broadcasts. Notify the Skipper if conditions materially worsen.

(10) Close all boat hatches and dorades in the event of inclement weather.

(11) If anchored or on a mooring:

(a) Monitor the condition of batteries and start engine to recharge if voltage drops below 12.3V DC.

(b) Ensure the anchor light is energized between sunset and sunrise.

(c) Take a fix once an hour to ensure the STC has not dragged anchor; decrease or shorten fix interval as appropriate in heavy weather.

803. MAN OVERBOARD BILL

803.1 PURPOSE

To provide policy for the assignment of personnel, list individual duties and responsibilities and discuss proper procedures for recovering a man overboard.

803.2 POLICY

a. Crews sailing Naval Academy STCs shall employ the **NAVY QUICK STOP** man overboard recovery technique in the recovery of any man overboard. The Quick Stop maneuver minimizes the distance traveled away from the lost crew member and requires prompt maneuvering, sail handling, and recovery under sail and/or power. Class A STC may use the

FIGURE 8 or Reach to Reach man overboard recovery technique if approved by the Program Director.

b. The unique set of procedures and emergency responses required in a MOB scenario shall not be initiated at random by the crew except in an actual MOB situation. For example, if an object (not a person) should fall overboard, the watch shall not call out "MAN OVERBOARD" to expedite the recovery. The Skipper will approve any recovery maneuver proposed by the on-deck watch. The Skipper may call away a MOB drill at any time, being careful to identify the drill by saying "This is a drill, MOB port/starboard side," without notifying the midshipman crew. The purpose of this policy is to prevent compounding a training evolution into an accident.

803.3 TRAINING

Each individual on board will be instructed in the following:

- a. Actions to prevent falling overboard.
- b. Actions to be taken in the event that he falls overboard.
- c. Actions to be followed in the event that someone else falls overboard.

Training should be conducted prior to getting underway, as well as periodically while underway. Drills shall be conducted to ensure the successful execution of this bill.

803.4 RESPONSIBILITY

All crew members are responsible for the contents of this bill. The Skipper is responsible for ensuring compliance.

803.5 EXECUTION OF MAN OVERBOARD RECOVERY PROCEDURES

- a. PREPARATION. At the beginning of each watch:

(1) The Watch Captain shall check all man overboard gear to ensure its readiness for immediate deployment.

(2) Each crew member shall check all his personal safety equipment including harness/PFD, strobe, whistle and foul weather gear. All gear shall be readily accessible throughout the watch (crew should not have to leave their watch posts to don appropriate safety gear).

(3) The Watch Captain will brief the watch section on the particular details of the man overboard recovery procedures that will be used, considering the existing combination of wind, seas and sails at the beginning of each watch.

(4) A Personal Flotation Device (PFD) and a 50 foot heaving line shall be stored within easy reach of the helmsman.

(5) Safety harnesses and a PFD may be worn at any time; however, they will be worn and clipped into padeyes or the jack line when topside at night, during heavy weather, restricted visibility and any other time that the Skipper may direct.

b. IMMEDIATE ACTION

(1) The person first sighting the person overboard should shout "MAN OVERBOARD, STARBOARD (PORT) SIDE!" and point with his arm at the victim. That person shall continue pointing at the victim until properly relieved (if he is the helmsman he should be relieved immediately) or until the victim is on deck.

NOTE

EXPERIENCE HAS SHOWN THAT THE PERSON POINTING TO THE VICTIM SHOULD BE FORWARD IN THE COCKPIT, IN FULL VIEW OF THE HELMSMAN.

(2) The helmsman should immediately begin to heave to, then reach for the pre-staged PFD and throw it to the MOB in the water. Do not delay heaving to in order to throw the PFD. He should call out, "Heaving to." **DO NOT RELEASE THE JIB SHEET.** If under spinnaker:

- a) Ease the guy/spinnaker pole to the headstay and cleat.
- b) Stand by to ease sheet during the douse.
- c) Douse spinnaker, bring boat through head to wind, proceed as follows.

(3) Deploy the horseshoe buoy with the strobe light and pole, the Lifesling or the inflatable MOM unit if supplied on board.

(4) Call "**ALL HANDS ON DECK.**" The crew shall wear shoes. They shall also don safety harnesses if required. The senior person on deck should direct those coming topside to appropriate jobs. **An experienced helmsman should take the helm.**

(5) The Navigation Plotter shall enable the Man Overboard function on the GPS to provide a reference point, and plot the position on the paper chart.

(6) Utilize VHF radio to notify other vessels in the squadron or in the vicinity.

NOTE

WHILE HOVE TO, THIS IS THE TIME TO REGAIN COMPOSURE, ALLOW THE OFF-WATCH TO GET ON DECK, MAKE FURTHER ASSIGNMENTS –SUCH AS MAINSHEET TRIMMER, GENOA HALYARD, FOREDECK AND ANY OTHER ORGANIZATION NECESSARY TO EFFECT RECOVERY.

(7) Secure any lines over the side and start the engine, and remain idling in neutral.

(8) The Helmsman should bear off onto a broad reach. Order foredeck crew to douse the headsail.

(9) Jibe onto opposite tack.

(10) Harden up slowly, placing the MOB just off the leeward bow. Time the boat's turn toward the MOB such that when steady on course the apparent wind is 45-60 degrees off the bow (a close reach.) Adjust mainsail trim to control boat speed during the approach. Effect recovery over the leeward rail.

(11) If the initial Quick Stop maneuver is unsuccessful, release the man overboard rig (pole and horseshoe buoy).

(12) Call for help. Inform other boats in company of the situation by transmitting a PAN-PAN or MAYDAY call. Receive acknowledgment.

c. SUPPLEMENTAL ACTION

(1) When positioning the boat near a victim for a quick and safe recovery, consider the following:

(a) Turning radius.

(b) Optimum angle (45-60 degrees) to wind and seas for controlling speed and holding position near the victim.

(c) Maintenance of sufficient distance from the victim to prevent injury from pitching motion and the propeller.

(2) Ensure that the victim will not become separated from the boat. Secure the victim to the boat using a line or halyard. A swimmer may be necessary if the victim is unconscious. If a swimmer is used, he or she must wear a PFD and remain tethered to the STC with a heaving line at all times.

(3) Hoist the victim aboard the boat as quickly and safely as possible. The optimum method will vary. Some recommended methods are:

(a) Use of the Lifesling rigged to the spinnaker halyard. The main or jib halyard may also be used.

(b) Pulling the victim directly out of the water using two or more crewmen.

(c) Hauling the victim aboard by attaching a halyard to his safety harness.

(d) Use a "poor man's ladder" (run a bight of line to a winch, dangle the bight over the side. MOB uses bight as a footrest while bitter end is winched in, straightening the bight and hoisting the MOB to the deck edge.)

(e) The "GALERIDER" may be used to recover an injured or weak victim.

(4) Once the victim is aboard, his or her physical condition should be carefully evaluated and proper first aid applied as required. Look for and treat symptoms of shock and hypothermia. Continue to monitor the victim.

(5) Recover and stow all man overboard gear for future use.

(6) Notify vessels in company and others cognizant of the situation that a recovery has been made and call for medical advice if needed.

803.6 MAN OVERBOARD RECOVERY (VICTIM PROCEDURES)

Immediate Action

a. Do not panic. Remember, when in the water the horizon is very close. The boat may seem to sail out of sight before turning around.

b. Swim to the PFD thrown from the boat and put it on or hold on to it. Conserve energy, especially if the water is cold. Assume the heat retention position. **DO NOT SWIM AFTER THE BOAT.**

c. If you can see the man overboard rig has been deployed, try to swim to it slowly. If its drogue is deployed, this should be possible without undue loss of energy.

d. Don't shout, as this will be a useless expense of energy.

e. Employ your survival equipment. Conserve energy and make yourself noticeable. Foul weather gear hoods are typically a bright color, and will be easier to see if you can put it on. It will also conserve body heat.

(1) In daylight, ensure your brightest clothing is above water.

(2) Get your whistle ready for use.

(3) At night or in low visibility, perform the above and deploy your personal strobe light so it can be seen.

(4) Splash the water around you. White water is more easily sighted from the boat than a passive or waving victim. This is especially effective at night when a searchlight is pointed near you.

f. When help arrives place the bight in the retrieval line around your chest and under your arms. If the Lifesling begins to drag you through the water, IMMEDIATELY turn around in the sling so that your back is toward the boat. The wash/wake from being dragged can drown a victim. Await further instructions from the boat.

g. Do not remove clothing or foul weather gear unless they are pulling you underwater. They provide vital insulation and buoyancy. Boots or shoes may be removed if necessary to swim.

h. Heat and energy conservation is extremely important. Most MOB deaths occur from drowning after a victim loses consciousness from heat loss and can no longer keep his or her face clear of the water.

803.7 BACKGROUND INFORMATION FOR MAN OVERBOARD RECOVERIES

A man overboard situation is probably the most dangerous condition to which a crew member can be subjected. Even the strongest of swimmers can be injured while falling overboard, lose strength and consciousness from hypothermia before being recovered or become injured or immobilized by marine life or another boat. Because a man overboard is so vulnerable, every effort must be made to recover him as soon as possible regardless of how unfavorable the wind/sea conditions might seem.

Prevention is the best solution to man overboard problems. In the event that a person does become separated from the boat, every effort must be made to return and **get him back aboard in the absolute minimum amount of time.**

The most important preventive measure is to always wear a safety harness and be attached securely to the boat. Many victims have been lost during short periods of time when they were not clipped in; such as moving in or out of the cockpit or entering or leaving the companionway. Clip and unclip from below-decks. Per section 400.a (1), harnesses must be used at night, during reduced visibility, during rough weather or any time that seems prudent. Experience gained while working in a harness makes it easier to get around.

The Quick Stop method is used to minimize the distance the boat travels away from the victim. It reduces both the time needed to recover the victim and the chance of losing sight of the victim in adverse conditions. If a conventional stopping method can be completed in one minute, a boat averaging five knots would travel over 150 yards from the victim to the turn point. Under the same conditions a boat can be "quick stopped" within heaving line distance of the victim.

Although the Quick Stop method is simple to perform, it should be practiced with various sail combinations to familiarize the crew with the procedure and with the responses of the boat. Some Class A STC will need to perform the Figure 8 or Reach to Reach recovery instead of the Quick Stop.

The immediate actions should be performed as quickly as possible. An alert helmsman can throw a PFD very close to a victim in half the time it would take to deploy most man overboard rigs. This will provide an immediate source of buoyancy for the victim so that he or she can conserve energy. Deployment of the man overboard rig provides a much more visible target to steer towards rather than only a person in the water. The man overboard rig should be deployed immediately after the PFD is thrown. The crewman pointing has an important job, in that pointing allows staying on target even if momentarily distracted or if his vision is obscured by heavy seas. Pointing should be done with an arm extended because the eye tends to follow wave action and can be led off target easily.

Because of the short distances traveled when using the Quick Stop method, navigation is not as critical as it might be during other types of recoveries, in which it is easier to lose sight of the victim. However, in the event that the victim is lost from sight, precise navigation will be required to search for the victim. Therefore, the GPS MOB function should be enabled.

The next part of the recovery technique is stopping alongside the victim to get him or her back aboard. The mainsail can often be backed (using manpower on the boom or a foreguy attached to the end of the boom if shorthanded) to stop the boat and hold position near the victim. In certain wind and sea conditions it may be possible to hold position to windward of the victim with the wind abeam providing a lee and minimizing pitching. This will make it easier to get a heaving line to the victim and may create a "lee" of smooth seas. However, another consideration is that an approach to windward of the victim may cause the boat to be blown down onto the victim; in this event, the final decision on recovery side is a judgment call that rests with the Skipper/Coach.

In ocean conditions it can be difficult to hold a boat stationary for any length of time. It is extremely important that the victim be secured to the boat as soon as possible. The time spent in a second approach to an unconscious victim could mean the difference between life and death.

In high sea conditions, it may be better to keep the boat several yards from a victim to prevent injury from contact with the boat and/or the propeller. In this case, a swimmer with a PFD and a safety line should go into the water to secure the victim until he or she can be brought aboard with minimum time spent alongside.

In summary, the best way to handle a man overboard is to prevent it from happening. If it does happen, the following key points should be remembered:

- a. Minimize the distance traveled away from the victim.
- b. Maneuver with sails to place the boat in a recovery position in the shortest amount of time. Only use the engine as a last resort.
- c. Attach the victim to the boat so that he cannot be separated before the recovery is complete.
- d. Practice and plan ahead.

804. CREW WORKING ALOFT BILL

804.1 PURPOSE

To establish procedures to be followed when crew or maintenance personnel go aloft. **TIME SPENT ALOFT SHALL BE KEPT TO A MINIMUM, ESPECIALLY WHILE AT SEA, TO REDUCE THE RISK OF INJURY.**

804.2 RESPONSIBILITY

The Skipper is responsible for ensuring compliance with this Bill with their midshipmen crew. Maintenance personnel shall check in with either DNAS, the Vanderstar Chair or the Cutter Shed Maintenance Officer before going aloft in Santee Basin, and shall comply with the following procedures:

804.3 PROCEDURES

- a. All personnel who go aloft will be instructed in the applicable safety precautions.

b. No one shall go aloft without first obtaining permission from the Skipper, who will:

- (1) Develop a plan for all work to be performed while aloft;
- (2) Ensure personnel going aloft use either the boatswain's chair or a climbing harness.
- (3) Ensure that the boatswain's chair/ climbing harness is properly secured (bight of spinnaker halyard looped through "D" rings and secured with a bowline, snap shackle then made fast as well).
- (4) Ensure that a second halyard is secured to the person's safety harness.
- (5) Ensure that four (4) crew are available to assist on deck; one will tend the safety halyard on a winch, the second will tail the primary halyard on a winch, a third will pull on the halyard in rhythm with the man going aloft who will actively climb to expedite going aloft . if additional crew are available, they can assist with bumping the halyard up. The fourth crew person will be a safety observer only. He shall have no other assignment. The tailers should tend their halyards from a sitting or kneeling position to prevent tripping or falling during the evolution. All other personnel should remain clear of the area immediately surrounding the mast.

NOTE

THE CREW MEMBER GOING ALOFT SHOULD ASSIST BY ACTIVELY CLIMBING HIMSELF UPWARDS. THIS WILL EASE THE BURDEN ON THE LINE HANDLERS.

(6) Ensure that all tools and equipment needed are secured properly to the boatswain's chair by line. A spare messenger may be rigged to facilitate sending tools and equipment aloft.

(7) The man aloft should use a safety line to secure himself to the mast in sloppy weather. The safety harness tether is ideally suited for this purpose. A carabiner attached to another halyard led to the base of the mast and made fast will also keep the man aloft close to the rig. Additionally, it may be prudent to wear a type I or III PFD to avoid injury. At sea, in rough weather it may be prudent to have an additional line attached to the person to reduce the tendency to swing as the boat moves. This line should be hand tended

c. Once the person working aloft is in position, both halyards should be secured and all personnel should stand well clear, but ready to assist. At least one person shall remain on deck.

d. To lower the person, care should be exercised to lower smoothly on both primary and safety halyards, while keeping at least two wraps on each winch. While lowering, pass line from hand to hand. Do not allow line to slide through fingers.

805. GENERAL EMERGENCY BILL

805.1 PURPOSE

To develop procedures to control and minimize the effects of a major emergency.

805.2 RESPONSIBILITY

The Skipper is responsible for ensuring compliance with this Bill.

805.3 GENERAL

The following general emergency situations should be planned for and discussed amongst the crew:

a. FIRE. Nearly all material aboard STC is flammable with the resultant risk that even the smallest fire could spread rapidly to endanger the entire boat and personnel embarked. Combustion by-products of fiberglass, foam cushions, and other flammable materials are highly toxic! Securing the source of a fire may be the best way to control it. Turn off the battery switch, propane or fuel lines, depending on the type of fire. Evacuation of all personnel is essential in the event of an out of control fire.

b. FLOODING. STC are unlikely to remain afloat or awash under flooding conditions caused by catastrophic hull rupture from grounding or collision. Catastrophic flooding from a knockdown would probably be survivable assuming that equipment is properly secured. In all but those cases where structural integrity failure results in the vessel breaking up, measures can be taken to permit partial dewatering. Each crew member must be familiar with the location of all through-hull fittings, installed manual and electric bilge pumps, and alternative methods of dewatering and patching. The use of buckets for dewatering and the use of sails, bunk cushions or blankets as patches are only some of the possible solutions.

c. DISMASTING. Fracture and/or failure of the mast is a serious casualty. The most probable causes include the failure of standing rigging, overpowering under sail, collision, and knockdowns. Great urgency is required to prevent follow-on hull damage when a fractured spar remains at least partially connected to the hull. If the spar cannot be recovered without risk of rupturing the hull it must be cut away in such a manner that it is completely clear. All hands must be familiar with the use of all the contents of the Damage Control Kit.

805.4 EMERGENCIES UNDERWAY

The Skipper shall:

- a. Assume duties as on-scene leader, and shall direct necessary response action.
- b. Keep the OTC informed of all actions taken and provide a damage assessment.
- c. Evacuate personnel from the scene as necessary.

805.5 EMERGENCIES IN PORT

The Duty Officer shall:

- a. Assume responsibility for the coordination of response actions.
- b. Notify adjacent units, and Port Captain, USCG of the nature of the emergency and the type of assistance required.

- c. Evacuate all personnel from the scene as necessary.
- d. Take all steps necessary to ensure that the emergency does not spread to nearby vessels.
- e. Contact DNAS and/or other authorities (as provided in the OORDER) at the Naval Academy.

806. ABANDON SHIP BILL

806.1 PURPOSE

To establish procedures for safe and orderly abandonment of STC.

806.2 RESPONSIBILITY

The Skipper is responsible for training and exercising all hands in the execution of the Abandon Ship Bill.

806.3 PROCEDURE

Abandoning ship is a measure of last resort necessary only in extreme cases. In cases where the vessel may be kept afloat the crew should stay aboard, as chances for survival and rescue in the open ocean are greatly enhanced by remaining with the vessel. The following procedures will be followed:

a. **SITUATION ASSESSMENT.** The Skipper will weigh all factors including weather, vessel condition, proximity to land, likelihood of rescue and crew condition in developing an abandon ship plan.

b. **ABANDON SHIP PREPARATION.** When the word "Prepare to Abandon Ship" is passed,

(1) All hands don Type 1 PFD's and adequate clothing to minimize the danger of exposure or hypothermia.

(2) All hands proceed to their stations as assigned in the Watch, Quarter, and Station Bill. This Bill shall be posted conspicuously in the main cabin.

c. **ABANDON SHIP EXECUTION.** When directed by the Skipper to "Abandon Ship":

(1) Each crew person should execute his or her responsibilities listed on the Watch, Quarter, and Station Bill.

(2) If a crew person is incapacitated, a shipmate should assume that person's responsibility in addition to his own.

(3) The life raft lanyard shall be made fast to the leeward side of the STC before the raft is deployed. The raft shall only be deployed upon the order of the Skipper.

(4) The crew should enter the raft expediently by stepping into the raft. If crew persons must enter the water to get to the raft, they should be attached to a line made fast to the raft.

(5) EPIRB, flares, navigation equipment, survival equipment, extra water and food, clothing, and the ship's log should be loaded into the raft as time and conditions permit.

d. GRAB BAG CONTENTS. In order to expedite loading of extra equipment into the raft, it is recommended that a "grab bag" containing emergency abandon ship supplies be stowed close to the main hatch. The following items are recommended for inclusion in the grab bag:

- (1) EPIRB
- (2) Handheld VHF radio in a waterproof bag
- (3) First aid kit
- (4) one rust-proof drinking cup
- (5) Light sticks
- (6) one daylight signaling mirror and one signal whistle
- (7) pyrotechnics kit
- (8) food rations

NOTES:

*** "MAYDAY" CALLS SHOULD INCLUDE POSITION, NUMBER OF CREW AND NUMBER OF LIFE RAFTS. CALLS SHOULD BE CONTINUED UNTIL "ABANDON SHIP" IS ORDERED. (SEE SECTION 404)**

*** ONCE LAUNCHED, THE RAFT SHOULD BE TENDED CONSTANTLY UNTIL BOARDED. THE RAFT SHOULD BE EQUIPPED WITH A SHARP KNIFE WRAPPED IN A WATERPROOF BAG AND SECURED TO THE RAFT TO CUT THE TETHER WHEN ALL CREW ARE ABOARD AND/OR BOAT SINKS.**

*** THE SKIPPER IS RESPONSIBLE FOR THE FINAL HEAD COUNT BEFORE CUTTING THE RAFT LOOSE.**

*** ONCE ACTIVATED, LEAVE THE EPIRB "ON". IT WILL CONTINUE TO TRANSMIT FOR UP TO 48 HOURS AND AN UNINTERRUPTED SIGNAL WILL FACILITATE QUICKER RESCUE. THE EPIRB SHOULD BE SECURED TETHERED OUTSIDE THE RAFT.**

807. RESCUE AND ASSISTANCE BILL

807.1 PURPOSE

To provide guidelines should a STC find itself in a position to effect a rescue or render assistance at sea.

807.2 RESPONSIBILITY

The First Lieutenant is responsible to the Skipper/Coach for the execution of this Bill.

807.3 POLICY

Direct assistance requiring physical contact with a privately owned or operated craft will only be made if lives are in danger. In all other cases, STCs should stand by to assist while making every effort to contact appropriate government agencies or commercial towing or salvage companies. Examples are the Annapolis Harbor Master, the Maryland Department of Natural Resources Police, the Coast Guard and commercial firms recommended by those government agencies. It is important to note that tradition and law of the sea requires us to assist any mariner in distress. Nothing in this policy prohibits a STC from assisting when life is endangered or other assistance is not available to save property. However, in most cases adequate rescue and assistance is rendered by standing by and maintaining a communications link with the proper authorities.

807.4 PROCEDURE

- a. SKIPPER. The Skipper shall supervise all rescue and assistance evolutions.
- b. NAVIGATOR. The Navigator shall ensure that all details of the rescue and assistance evolutions are properly logged in the Offshore Yacht Log.
- c. COMMUNICATIONS
 - (1) Establish communications with the distressed vessel via Channel 16 (VHF) or any means feasible. Ascertain the nature of the emergency (personnel injury, fire, flooding, etc.).
 - (2) Unless there is an immediate danger to personnel, assistance shall be limited to utilizing the STC's communications systems to summon vessels that are properly equipped to effect a rescue (Coast Guard, Maritime Police, etc.).
 - (3) If communication with other government or commercial rescue units can not be effected, determine if the use of your vessel's EPIRB is necessary.
- e. EXECUTION GUIDELINES. Specific instructions cannot be written to cover all possible rescue and assistance contingencies; however, after the above steps are performed, the guidelines below may apply:
 - (1) If towing a disabled vessel is necessary for safety:
 - (a) Ensure towing bridle is properly rigged.

(b) Ensure your own vessel's screw is not fouled.

(2) If involved in a search for man overboard:

(a) Establish communications with vessel in charge of search.

(b) Ascertain appropriate search pattern/plan for your vessel.

(c) Don't give up the search too quickly.

(3) For recovery of personnel from sinking yachts:

sinking

(a) Beware of the danger from the masts and spars of sinking vessel (a sailboat will right itself as it sinks).

(b) Position your vessel to windward of the disabled vessel.

(c) Have all persons don life jackets

(4) For fire on another vessel at sea:

(a) Approach the vessel from windward.

(b) Concentrate on saving lives rather than saving the vessel.

(c) Beware of fuel tank explosions - ascertain immediately the nature and quantity of fuel on board.

(5) If a medical emergency exists:

(a) Be prepared to place personnel best qualified in first aid on board vessel concerned.

(b) Stand by until professional medical assistance arrives.

f. A vessel in distress within a reasonable distance of your own position necessarily takes priority over all sail training/ racing evolutions. "Reasonable distance" is based on the Skipper/Coach's judgment.

808. LOW VISIBILITY BILL

808.1 PURPOSE

The purpose of this bill is to establish procedures for proceeding safely in fog or reduced visibility.

808.2 RESPONSIBILITY

The Watch Captain is responsible to the Skipper/Coach for the execution of this Bill.

808.3 ACTION

When the Low Visibility detail is ordered, the following actions will take place:

- a. Have topside personnel don tech vests and safety harnesses.
- b. Post a lookout in the bow pulpit.
- c. Post the radar surface watch. (See section 406.)
- d. Commence sounding fog signals in accordance with reference (e).
- e. Reduce speed commensurate with the prevailing conditions and reference (e) requirement to maintain "safe speed."
- f. Energize running lights.
- c. Consider making the following Sécurité transmission on VHF CH 13 or 16:

**"SECURITÉ, SECURITÉ, THIS IS SAILING VESSEL _____ AT POSITION
LAT ____, LONG ____ (OR 2 MILES EAST OF CAPE MAY BREAKWATER,
WHICH EVER IS THE MOST CONCISE MEANS OF UNAMBIGUOUSLY
LOCATING POSITION) PROCEEDING ON A HEADING OF _____ AT A
SPEED OF _____. ALL VESSELS IN THE VICINITY PLEASE IDENTIFY
THEMSELVES."**

- h. When communications are established with other vessels, determine their location, course, speed and whether they hold your vessel on radar.
- i. Place an experienced helmsman on the wheel.

CHAPTER 9**900. CHECK LISTS**

The following check lists are designed to standardize procedures within the sail training program. Each check list provides an easy to use, ready-reference that will help to ensure evolutions are completed in a seamanlike, professional and safe manner. These check lists include:

- a. 901. NAVY SAILING CHART PREPARATION LIST
- b. 902. UNDERWAY TOPSIDES CHECK LIST
- c. 903. UNDERWAY BELOW DECK AND ENGINE START CHECK LIST
- d. 904. ANCHORING CHECK LIST
- e. 905. WEIGHING ANCHOR CHECK LIST
- f. 906. ENTERING PORT CHECK LIST
- g. 907. SANTEE BASIN SECURING CHECK LIST
- h. 908. SAFETY EQUIPMENT CHECK LIST
- i. 909. HEAVY WEATHER CHECK LIST

901. NAVY SAILING CHART PREPARATION CHECKLIST

Revised June 2012

_____ Ensure the chart is the latest edition and reference Notice to Mariners (NTM) and Local Notice to Mariners (LNTM) for corrections at

http://msi.nga.mil/NGAPortal/MSI.portal?_nfpb=true&_pageLabel+msi_portal_page_61

_____ Do not write on or mark over written information on the chart (light characteristics, notes, etc) while prepping each chart. If circling an aid to navigation with pen, leave a space in the circle (or triangle) for text. Do not use red ink on the chart, it will not show up under red light at night.

_____ Plot all waypoints in pencil on each chart using the waypoint list provided by the Operations Officer. Waypoints shall be a 1/8" solid round dot (no crosshairs), labeled WP1, WP2, etc. to coincide with waypoint list.

_____ Outline all shoal water (18 foot contour) on the chart with a blue Sharpie Permanent Marker, Ultra Fine Point. Outline all shallow areas (less than 18 feet) within the deeper water. Outline all fish traps and fish haven areas less than 18 feet. Outline security areas (such as Cove Point LNG terminal).

_____ Make corrections on the chart using the NTM and LNTM. Make ALL corrections to aids to navigation, and other corrections (shoal water, new obstructions, moved buoys, new fish trap areas, etc.) that occur in water 18 feet or deeper. Use Chart No. 1 as a reference to put new information on the chart, and the chart correction template to draw symbols.

_____ Create a correction tree with three columns on the middle left margin of the chart. The first column will be the NTM or LNTM number (designated by the week/year it was made, ie. 42/11 is week 42 of 2011). The second column is the date the correction was made by the chart preparer (1JUN12) and the third column is for the initials of the chart preparer (RM). If there are no corrections to be made, enter "00" in the NTM, the date and your initials as an indicator that the NTM was consulted. Use one line for each correction. Temporary corrections shall be made in black pencil, permanent corrections in black ink.

<i>NTM</i>	<i>Date</i>	<i>Initials</i>	<i>NTM</i>	<i>Date</i>	<i>Initials</i>
42/11	1Jun12	RM	00	1Jun12	RM
13/12	1Jun12	RM			

_____ Highlight the chart sounding datum in yellow fluorescent highlighter.

_____ Highlight the Geodetic Datum in orange highlighter. Note if not in WGS-84, and adjust Navnet GPS on boat as needed.

_____ Highlight the magnetic ring of all compass roses on the chart in yellow highlighter. Leave unmarked if true only (offshore charts).

_____ Identify all unlit buoys in water 18' or deeper by a 5/8" circle using a template; outline in black pen, and color with a green highlighter.

_____ For all bridges on track, highlight bridge controlling height, crossing point and center span location in yellow highlighter.

_____ Identify Radar navigation aids (nav aids with a RACON and prominent points of land) by a 5/8" triangle using a template; outline in black pen, and color with a blue highlighter. Radar nav aids will have a two or three figure identifier, with "R" as the first letter for Radar. RACON buoys will be labeled by their buoy number. Land or land based objects will use one or two letters following "R", i.e. "R P" for a pier or "R TP" for Turkey Point.

_____ Identify visual navigation aids (lit and unlit buoys can be used in addition to land based visual aids such as lights on fixed structures, tanks, spires, and prominent points of land) by a 5/8" circle using a template; outline in black pen, and color with a yellow highlighter. Visual aids used for shooting a line of position (LOP) will have an identifier starting with "V" as the first letter. Buoys will be labeled by "V" and their buoy number, i.e. V 87 for buoy 87 on the Chesapeake Bay. Land based aids will use one or two letters following "V" i.e. V CD for Chapel Dome. Ensure visual aids on overlapping charts have the same identifier for recording in the bearing log. Choose nav aids that can be used in daylight and/or night, and that you can triangulate for a fix.

_____ Fold and label the chart. Fold the chart in fourths – top to bottom, then left to right, with the back side out. Label in legible 1" block letters on the bottom right hand corner of the folded chart – the chart number and name. Immediately above the label, write the number of the connecting chart (from the chart list provided by the relevant sailing program Operations Officer); immediately below the label, write the chart number of the following chart. The numbers of the previous and following charts should be 1/3" letter. For example:

Chart: 13224

Chart: 13223 NARRAGANSET BAY INCLUDING NEWPORT HARBOR

Chart: 13218

_____ Create the track specified by the Skipper with a pencil, and once it's approved mark it with a black Sharpie, Ultra Fine Point. Each straight-line segment of the track will be labeled with the magnetic course (TRxxxM) and Speed of Advance in knots (SOA x.x). This marking will be placed along each segment at least once.

_____ Each Skipper is responsible for the final approval of their boat's charts. After review and making any necessary corrections, the Skipper will sign "Block # __, (year) __ Approved by: _____" in the bottom left margin of the chart.

902. UNDERWAY TOPSIDES CHECK LIST

Deck equipment:

- _____ Walk around boat, check trim at waterline for listing or low in the water and check hull integrity.
- _____ Stow hatchboard below in wet locker chocks or designated stowage area.
- _____ Loosen inner forestay, disconnect and lead back through fairlead on mast, and secure to ring on deck aft of mast. Take out slack with block and tackle, ensure halyards aren't trapped.
- _____ Move halyards to bail at base of mast. Leave halyard closest to dock rigged to assist getting on the boat while docked. Ensure halyards are not trapped or crossed aloft. Lock halyard tails in self-tailor and coil on winches. Check for chafe on halyards and fittings.
- _____ Roll mainsail cover and stow below in aft hanging locker.
- _____ Ensure preventers are rigged and run back to cabin-top winches, tails stowed in sheet bags.
- _____ Rig reefing lines, ensure they are free to run, with mast jammers open and tails run through blocks at the base of the mast.
- _____ Ensure boom vang lines are equalized, and uncled, lines free to run.
- _____ Attach main halyard to head of sail, stabilize boom by tightening mainsheet.
- _____ Rig jib sheets for designated headsail, tie together forward of hatch guards on foredeck.
- _____ Equalize port and stbd lengths of mainsheet, ensure traveler is cled, lines free to run.
- _____ Stow instrument covers inside navigation table.
- _____ Stow binnacle cover in starboard cockpit seat locker.
- _____ Install VHF radio remote mic in cockpit.
- _____ Ensure 8 sail ties are on board.
- _____ Set hydraulic backstay to minimum 500 PSI or as conditions warrant.
- _____ Liferaft – check that locker latch is secure
Offshore - check that line from liferaft is tied to boat prior to underway
NOTE: liferaft cover is not attached to boat once latch is opened.
- _____ Place ensign on staff in stern holder, tie to lifeline.
- _____ Check that heaving line is tied to aft pulpit, ready to deploy.
- _____ Check MOB pole, horseshoe life ring and strobe are free to deploy and tethered together, but NOT tied to the boat. Check operation of strobe (turn right side up).

- _____ Check Lifesling is tied to the boat. Check operation of strobe. Refake line if needed.
- _____ Position winch handles: two double handled in port and stbd bags in cockpit, two single handles in holders port and stbd under traveler, and one single handle in fwd dorade at base of mast.
- _____ Check lifeline attachment points, and ensure all shackle pins and ring dings on blocks are secure. Ensure all winches and blocks turn freely.
- _____ Ensure cotter pins are properly inserted in forestay, backstay and shrouds, and taped.

De-energize Shore Power (AC) prior to starting engine:

- _____ Verify AC has been secured below deck
- _____ Unplug shore power cable at dock/pier FIRST
- _____ Unplug shore power cable in cockpit, secure cover for receptacle
- _____ Coil and stow cable on shore for local ops/on board for extended ops

Engine start:

- _____ Verify engine checks are complete, double check that engine seawater through hull is OPEN. Obtain permission from Skipper to start engine.
- _____ Verify engine start and engine blower breakers are ON, on circuit panel in nav station.
- _____ Disengage engine transmission by pulling silver knob out, engine will only start if transmission is disengaged.
- _____ Move throttle forward to approximately 10 o'clock position.
- _____ Hold key to "START" position until engine starts, then release so it returns to "ON" position.
NOTE: alarm buzzer will sound and alarm lamps will light, indicating alarms are normal.
WARNING - SHOULD ENGINE FAIL TO START WITHIN 15 SECONDS, DISCONTINUE ALL STARTING ATTEMPTS AND REPORT THE CONDITION TO THE SKIPPER/COACH.
- _____ Check for overboard discharge, ensure it continues for 1-2 minutes.
- _____ Check oil pressure is normal (8-78 PSI), shut down if not in normal range.
- _____ Check RPMs (600-800) with engine transmission disengaged, with throttle in neutral position, then advance throttle from neutral to forward to 1200 RPMs to warm engine.
- _____ Check water temperature and place throttle in neutral, shut down if not in normal range (160-190 F).
NOTE: It may take up to 10 minutes for engine to heat up to normal range.

- _____ Record engine hours, oil pressure and water temperature in engine log.
- _____ If dock/mooring lines are doubled, single up all lines and secure them.
- _____ Check for lines in the water at transom and starboard and port amidships
- _____ While tied to the dock, optest transmission by engaging the engine transmission (push silver knob in) then advance throttle in forward, back to neutral, then reverse. Return to neutral.
- _____ Loosen wheel dampener. Turn rudder full port and full starboard, check freedom of operation. Return rudder amidships.
- _____ Report completion of Underway Topsides Check list to Skipper.

903. UNDERWAY BELOW DECK AND ENGINE CHECK LIST

De-energize Shore Power (AC) in the following order :

- _____ AC Main Panel in Nav Station: Turn OFF AC Mains, AC Outlets, and Battery Charger.
- _____ AC breaker aft of engine box: Turn to OFF position.
- _____ Report to topside that AC is secure.

Energize DC power:

- _____ Energize House and Engine battery Perko selector switches.
- _____ Check and record battery banks using the DC meter voltage system at the DC distribution panel.
- _____ Energize breakers on 12V DC panel switchboard, and check operation:
 - Ignition Engine (leave on at all times while underway for emergency starts)
 - Engine Blower
 - Bilge Blower
 - VHF Radio
 - SSB Radio (ensure antenna selector switch set to SSB)
 - Navnet VX2
 - Instruments
 - AIS (NA 31 only)
 - Navigation Lights (when applicable)
 - Cabin Lights (when applicable)
 - Other breakers as needed

Plumbing:

- _____ Check tank levels (water, fuel, waste). Fill or empty as needed.
- _____ Open all through-hull seacocks, (head intake, galley intake, head discharge, galley sink discharge, bilge pump discharge, cockpit drain discharge).
- _____ Ensure head discharge Y-valve under head sink set to "Holding Tank" for local operations.
- _____ Check bilge sump for oil or diesel, use oilzorb to remove.
- _____ Check operation of both manual bilge pumps, and the electric bilge pump.
NOTE: Do NOT discharge oily bilge water into Santee Basin or Annapolis Harbor.

Navigation:

- _____ Check that the following equipment is in the Navigation station:
Chart 12270 and 12283 for local ops

Hand bearing compass

Nav kit

Log book

Engine log

Boat Information Book (BIB)

Standard Operating Procedures (SOP)

Boat specific equipment operator manuals (COTS) for mechanical and electronics

_____ Secure all loose items below deck

Engine checks:

_____ Close companionway hatch, and remove engine cover, front and back.

_____ Check that engine seawater strainer is clear of debris, clear if needed.

_____ Open engine seawater intake seacock.

_____ Inspect engine bilge for fluids, report to Skipper if oil, coolant or seawater found.

_____ Inspect engine for damaged parts and loose bolts, write maintenance chits and inform Skipper.

_____ Check Racor fuel filter for dirt or water. Correct as needed.

_____ Check lube oil level. Check twice if low reading, wait 1 minute before withdrawing dipstick to check second time.

_____ Check transmission oil level. NOTE: Do not overtighten plastic cap.

_____ Check coolant level (only when engine is cool) at coolant tank on engine, not recovery tank.

_____ Check alternator belt tension, deflection 3/8-1/2". Look for evidence of rubber dust, an indicator that belt is loose. Correct as needed.

_____ Check that alternator house batter breaker in forward starboard corner of bilge grid is reset.

_____ Check that spare fluids are onboard (engine oil, transmission oil, coolant, small container of diesel for refilling Racor after draining)

_____ Record information in Engine Log, complete when engine is energized. Check that batteries are charging when engine is running.

_____ Report completion of Below Deck and Engine Check List to Skipper.

904. ANCHORING CHECK LIST

- _____ Review proposed anchoring plan including drop bearings, danger bearings, and bottom type. Discuss required scope and anchor(s) to be employed. Whenever possible, use the anchor stored in the port line locker. In heavier weather or for extended time periods, use the anchor stored forward.
 - _____ Weather permitting, fake out anticipated scope of anchor rode on the foredeck. Attach bitter end of rode to mast with a bowline.
 - _____ Carefully lower anchor over the bow (under the pulpit) to the water's edge, taking care not to scrape the anchor on the deck or hull in the process. Anchor is now "ready for letting go".
 - _____ When at the desired anchorage position and all way has come off the vessel, order the foredeck crew to "let go the anchor." Foredeck crew will veer rode/chain slowly and in a controlled manner until the anchor hits bottom. Helmsman will back down; developing slight stern way and rode will be veered to the desired scope and snubbed on the bow cleat. Helmsman will cease backing and allow residual stern way to set the anchor.
 - _____ Check anchor adequately set and holding by backing down (at least 1500 engine RPM) to check for dragging. Observe landmarks ashore, preferable a range of two landmarks, to ensure no sternway and that anchor is holding.
- NOTE: SCOPE OF 5:1 IS THE ACCEPTED NORM FOR ANCHORING IN GOOD WEATHER. IF HEAVY WEATHER IS EXPECTED, SCOPE SHOULD BE INCREASED TO 7:1 (OR GREATER) AND ADDITIONAL ANCHORS MAY ALSO BE SET.**
- _____ Take a round of bearings to determine the final anchorage position.
 - _____ Ensure the swing circle will not foul adjacent boats at anchor and remains clear of any shoal water.
 - _____ Rig chafing gear.
 - _____ Take fixes every hour on the hour. (Fix interval may be modified at OTC discretion).
 - _____ Energize anchor light between sunset and sunrise. Be prepared to sound fog signals if visibility requires.
 - _____ Hang anchor ball during daylight.

905. WEIGHING ANCHOR CHECK LIST

_____ Complete engine checks and start engine in accordance with check lists.

NOTE: DEPARTURE FROM ANCHORAGE MAY BE MADE UNDER EITHER SAIL OR POWER. MOTORING IS THE NORM; PROCEDURAL DIFFERENCES FOR “SAILING OFF THE ANCHOR” WILL BE HIGHLIGHTED BELOW.

_____ Heave in on anchor rode until anchor is at “short stay” (tending straight up and down).

NOTE: IN HEAVY WINDS, IT MAY BE NECESSARY TO ENGAGE THE TRANSMISSION AND MOTOR SLOWLY FORWARD IN ORDER TO REDUCE THE STRAIN ON THE ANCHOR RODE BEFORE HEAVING AROUND. IF UNDER SAIL, THE SAME END MAY BE ACHIEVED BY EXECUTING A SERIES OF SHORT TACKS, HAULING IN THE SLACK IN THE RODE EACH TIME THE BOAT ROUNDS UP THROUGH THE EYE OF THE WIND. CARE MUST BE TAKEN TO QUICKLY SNUB THE RODE BEFORE FILLING ON THE OPPOSITE TACK OR ANY GAINS MADE IN THIS MANNER WILL QUICKLY BE LOST.

_____ If the anchor does not break free of the bottom, snub the anchor rode on a bow cleat and proceed with throttle forward at slow RPM (up to 1000 RPM) to break the anchor free. After the anchor breaks free, return throttle to neutral position.

NOTE: IF THE ANCHOR IS “FOULED” THE CAUSE MUST BE CORRECTED

_____ Continue to heave anchor manually. When in sight, report anchor is clear (not tangled in debris or underwater cables, etc) to helmsman.

_____ Clean anchor, rode and chain of all bottom residue using a bucket and scrub brush as it comes aboard.

NOTE: IN CALM CONDITIONS, ANCHOR MAY BE HOISTED UNTIL IT LIES JUST AT THE WATER’S EDGE AND THEN DRAGGED THROUGH THE WATER FOR CLEANING. WHILE EFFECTIVE, THIS METHOD REQUIRES EXTRA CARE TO ENSURE THE ANCHOR DOES NOT CONTACT THE HULL.

_____ Secure the anchor/rode in the port line locker in the chocks at the bottom of the locker.

_____ Scrub foredeck with bucket and brush to remove any residual mud and debris.

906. ENTERING PORT CHECK LIST

_____ Position Y-Valve (MSD diverter) to holding tank while greater than 25 miles offshore, consider using macerator to empty holding tank if full and no pump-out facilities are available in port.

_____ Conduct navigation brief.

_____ Complete radio check with harbor master or shore side point of contact. Provide ETA and request mooring or docking instructions.

_____ Complete engine checklist if approaching port under sail, start engine in accordance with check list.

NOTE: DOUSE HEADSAIL, BAG AND STOW BELOW DECKS. FLAKE MAINSAIL OVER BOOM AND SECURE WITH SAIL TIES BUT LEAVE HALYARD MADE FAST TO HEAD SO THAT MAIN IS READY TO HOIST IN THE EVENT OF AN ENGINE MALFUNCTION.

_____ Rig mooring lines/bring boat hook on deck and assign line handling positions.

_____ Conduct transmission forward and reverse check.

_____ Deploy fenders over the side.

_____ Secure boat using Securing check list after docking/mooring.

907. SECURING CHECK LIST

Docking:

- _____ Prior to mooring, check holding tank level. Evaluate pumping out before mooring/docking.
- _____ Run spring lines through closed chocks midships aft to primary winches first to control movement of boat in slip while docking. Once positioned, secure spring lines to primary winches by tying onto standing part of the line with two half hitches secure (do not secure line in self-tailor, it will damage the winch). Secure bow lines on bow cleats (do not cross bow lines). Cross stern lines, run through closed chocks and tie to cleats.
- _____ Ensure bow of boat is at yellow marks on finger piers in Santee Basin.

Secure the engine, with permission of Skipper:

- _____ Push black button on engine control panel in the cockpit. Once alarms sound and engine stops, turn key to "OFF" position. The emergency stop (pull lever) is next to the engine control panel and should only be used in emergencies.

NOTE: If the engine has been run at high speed prior to mooring, reduce to idle until temperature is 180F or lower before securing engine.

NOTE: Leave engine blower on for 15 minutes after securing engine, to remove residual heat from engine compartment and prevent accidental discharge of engine box fire extinguisher.

De-energize DC systems:

- _____ Remove VHF remote mike from cockpit and stow in Nav Station
- _____ Power off all electronics, then position all energized DC breakers in OFF
- NOTE: IF KEEPING A DC LOAD ON:**
 - HOUSE BATTERY selector switch remains ON.
 - Breaker(s) for desired load(s) remain ON.
- _____ Secure house and engine start battery selector (Perko) switches on the side of the nav seat.

Energize AC systems:

- _____ Run shore power AC power cord under lifelines, along deck, around port primary winch and plug into boat first, then into power at dock.
- _____ Energize the AC main circuit breaker and battery charger and check for an increased charge in both battery banks. If shore power is inoperable, see BIB chapter 1, section 1-7.3.5 AC PANEL and SHORE POWER.

Deck Securing:

- _____ Attach main halyard to end of boom. Ensure boom is parallel to cabin truck and vang is eased. Pull traveler all the way over to the side of the boat away from the finger pier. Secure.
- _____ Coil reefing lines, loop coil over reefing horns at goose neck .

- _____ Secure halyards forward. Take tension on the spinnaker halyard closest to the dock to assist getting on and off the boat. Attach the inner forestay to its fitting on the foredeck.
- _____ Put mainsail cover on, mast end first then aft end, secure snaps and webbing underneath.
- _____ Coil all lines neatly and hang from stowage rack in the port cockpit seat locker.
- _____ Stow winch handles and snatch blocks in the hernia box in the starboard cockpit locker.
- _____ Furl ensign and secure in aft end of boom.
- _____ Hand tighten wheel dampener. (Do not over torque).
- _____ Loosen backstay to 500 or minimum PSI to keep some pressure on backstay.
- _____ Ensure instrument covers and binnacle cover are in place, ensure radar is level.
- _____ Rinse deck and topsides with fresh water as required.

Below deck securing:

- _____ Close all hatches
- _____ Stow all equipment used while training.
- _____ Verify that bilge pump and cockpit drain seacocks are OPEN
- _____ Verify that engine seawater intake, galley sink drain, head discharge, head intake, and galley sink intake seacocks are all CLOSED.
- _____ Prepare maintenance chits for discrepancies noted underway and report them to Skipper.
- _____ Report completion of Securing Checklist to Skipper.

Upon leaving boat:

- _____ Take all trash ashore and dispose of properly (put new trash bag in bin)
- _____ Turn in repair chits and engine log to Cutter Shed.

NOTE

IF MOORING AWAY FROM SANTEE BASIN, OTHER FACTORS TO CONSIDER INCLUDE:

- POSITION CHAFE GEAR ON MOORING LINES
- PLACING MULTIPLE FENDERS WHERE REQUIRED
- RIGGING STORM LINES IF EXPECTING INCLEMENT WEATHER
- IF MOORED IN A RAFT, STAGGERING BOAT ALIGNMENT TO PREVENT RIGS FROM TOUCHING WHEN ROCKED BY WAKE. RECOMMEND MOORING BOW-TO-STERN ("CHINESE") TO ENSURE RIGS REMAIN WELL CLEAR OF EACH OTHER.

908. SAFETY EQUIPMENT CHECK LIST

The following minimum of safety equipment shall be maintained on board and readily accessible at all times:

- _____ 1 heaving line (50 FT of polypropylene line stowed in throw sock on stern pulpit).
- _____ 1 horseshoe life buoy with attached strobe and man overboard pole (or currently inspected MOM8 unit).
- _____ 1 Lifesling mounted on stern pulpit and tied to boat.
- _____ 1 pair binoculars
- _____ 1 manual and 1 canister air horn
- _____ 1 bell
- _____ 1 EPIRB (stowed on quick-release mount in companionway)
- _____ 2 preventer tails (stowed in port line locker)
- _____ 1 high intensity 12V handheld spotlight and charger
- _____ 2 white flashlights with spare batteries
- _____ 1 emergency tiller
- _____ 2 buckets with lanyards attached
- _____ Four fire extinguishers (2 MINIMUM) verify charge in green range, and shake lightly at beginning of block.
- _____ Fire blanket
- _____ Lifejacket for each person on board
- _____ Inshore first aid kit

OFFSHORE: (Add the following equipment when leaving the local OPAREA)

- _____ Liferaft
- _____ Offshore first aid kit and manual
- _____ Flare kit
- _____ Jacklines and safety tethers
- _____ Handheld GPS and spare batteries
- _____ Radar reflector

- _____ 1 Galerider drogue
- _____ Storm sails
- _____ Engine spare parts and fluids (Oil, coolant and small container of diesel)
- _____ Damage control kit
- _____ Tools

NOTE: VHF COCKPIT MIC SHOULD REMAIN IN THE “ON” POSITION AT ALL TIMES, WITH VOLUME AT A LEVEL SO THAT COMMUNICATIONS CAN BE HEARD.

NOTE: VHF RADIO SHALL NOT BE USED IN INTERCOM MODE AS THIS RENDERS NORMAL VHG RECEPTION INOPERABLE

909. HEAVY WEATHER CHECK LIST

The heavy weather check list should be consulted on receipt of information that heavy weather will be encountered within the next 24 hours, or at the discretion of the Skipper/Coach. Responsibilities are broken down by billet.

A. SKIPPER:

- _____ Adjust the watch bill as needed to maintain requisite expertise on deck.
- _____ Ensure crew is well rested prior to onset of heavy weather.
- _____ Monitor available weather products closely; consult with the OTC/Coach (VOST) to determine best course of action under the given conditions.
- _____ Brief the crew on storm evasion tactics and precautions.
- _____ Ensure crew uses tethers when topside.
- _____ Issue seasickness medication well in advance of the storm.

B. FIRST LIEUTENANT

- _____ Inspect running and standing rigging for chafe or other obvious problems.
- _____ Secure all deck hatches. Inspect hatch dogs for security.
- _____ Remove cockpit drain grates if installed.
- _____ Turn dorade vents aft.
- _____ Set companionway washboards in place, secure with retainer pins and attach lanyard.
- _____ Set up inner forestay and running backstays as needed.
- _____ Ready storm sails. Bend storm trysail to mast track and secure bagged sail on deck. Ensure sheets are attached to both storm sails. Place storm jib where readily available.
- _____ Strike all unused sails and equipment below and secure for sea.
- _____ Check man overboard gear for security and readiness.
- _____ Check life raft(s) for security and readiness
- _____ Inspect anchors to ensure they are firmly seated in their restraining chocks. Ensure other heavy items below deck are secured.
- _____ Break out Galerider and bend on largest anchor rode. Store below decks where readily accessible.

C. ENGINEER:

- _____ Verify battery charge and recharge if required.
- _____ Top off fluid levels in engine if required.
- _____ Pump all bilges. Check all bilge pockets for cleanliness. Remove any debris that might clog bilge pump strainers.
- _____ Verify secure stowage of all spare parts.
- _____ Inspect steering gear for correct cable tension. Remove or secure any loose gear in the vicinity of the steering quadrant.
- _____ Shut all thru-hulls except those actually in use.
- _____ Ensure Damage Control (DC) repair kit is positioned in a secure but accessible location. Ready two buckets for emergency use as bailers.

D. NAVIGATOR:

- _____ Assist the Skipper/Coach in evaluating options, including hazard avoidance, storm evasion and safe haven selection.
- _____ Continuously monitor weather broadcast updates on HF, VHF and weather fax. Note any developing trends and bring them to the attention of the Skipper/Coach.
- _____ Check flashlight batteries/replace as necessary.
- _____ Ensure emergency gear (flares, EPIRB, hand-held VHF and GPS) are stowed in their assigned locations or in the abandon ship bag, ready and available for use. See Section 806.3d for suggested contents.

E. SUPPLY OFFICER:

- _____ Prepare a hot, substantial meal before the onset of the storm.
NOTE: DON FOUL WEATHER TROUSERS WHEN COOKING IN HEAVY WEATHER TO AVOID BURNS.
- _____ Prepare enough individually wrapped sandwiches to last the crew for at least 12 hours.
- _____ Place honey, peanut butter, and other high-energy foods where they are convenient but secure.
- _____ Secure all storage compartments and loose gear. Eliminate any potential missile hazards in the event of a knockdown or pitch-pole.
- _____ Inventory water and food supplies to be taken off if forced to abandon ship. Secure these items in a readily accessible location.
- _____ Secure cabin sole plates with screws.

APPENDIX A: SAMPLE STANDING ORDERS

Date, Month 2012

From: Officer in Charge, NA-XX

To: Crew of NA-XX

Subj: STANDING ORDERS

Ref: (a) DNAS OPORDER

(b) DNASINST 3120.1F (Series) STANDARD OPERATING PROCEDURES (SOP)

(c) COMDTINST M16672.2 NAVIGATION RULES

(d) DIVPRODEVINST 3530.2 SAIL TRAINING CRAFT (STC) NAVIGATION STANDARDS

Encl: (1) Standing Order Number ONE - REQUIRED REPORTS

(2) Standing Order Number TWO - WATCHSTANDING

(3) Standing Order Number THREE - UNDERWAY ROUTINE

1. Purpose.

These Standing Orders are intended to provide crew members with expectations and guidelines while involved in the Offshore Sail Training Squadron (OSTS) or Varsity Offshore (VOST) summer cruise. A thorough understanding of, and faithful adherence to, these orders will help ensure your cruise is a safe, positive experience you will cherish as one of the highlights of your naval career.

2. Goals.

-Safety at sea. The Atlantic can be, in the words of one noted author, "a cruel and often unforgiving mistress." The concern for safety must be foremost in everyone's minds as we put to sea. Never tolerate unsafe procedures and practices. It is the crew's primary duty to perform all tasks safely and to take immediate and decisive corrective action to resolve unsafe conditions should they arise.

- Develop leadership skills in 1/c and 2/c midshipmen Skippers, XOs, watch captains and navigators.

- Introduce 3/c midshipmen to Navy standards in training, watchstanding, maintenance and boat handling, and leadership skills.

- Learn to sail and navigate with confidence.

- Think of NA-XX as your home. We have the finest looking boat on the waterfront and want to keep her that way. As a matter of course, she will remain clean, shipshape and secure for sea-- Bristol fashion in every respect. Those who don't know what that means, soon will!

- Have fun. Sailing is fun. Liberty is fun. This program provides you with plenty of both!

I. M. ASAILOR
LT USN

STANDING ORDER NUMBER ONE

REQUIRED REPORTS

1. I require that the Watch Captain make reports to me under any of the following conditions:
 - a. When the closest point of approach (CPA) of any surface contact will be less than one nautical mile. (Use radar or seaman's eye to make this determination).
 - b. When you are unable to get a fix in piloting waters (<3nm from land) within two established fix intervals.
 - c. If charted depth in the vicinity of a fix varies greater than ten feet from the reading of the fathometer, when in less than 50 feet of water.
 - d. If a casualty occurs onboard or there is a report of a casualty on another STC in company.
 - e. If the true wind backs or veers in excess of 30 degrees or increases in excess of ten knots in one hour
 - f. When a rise or fall in barometric pressure in excess of .04" per hour is observed or .06" in one watch.
 - g. If a marked change in visibility occurs.
 - h. If a fog signal is heard in low visibility.
 - i. When an unusual object or dangerous condition is sighted such as breakers, unlighted or derelict vessels, waterspouts, discolored water or anything else seemingly out of the ordinary.
 - j. When necessary to send someone aloft.
 - k. When NA-XX is contacted by another Skipper for anything other than a routine exchange of information.
 - l. In the event of landfall.
 - m. When entering a region where soundings are less than fifty feet in depth.
 - n. When you cannot make a required report to the OTC for any reason.
 - o. At 5nm from restricted transit rendezvous and/or non-fixed bridges (draw or lift) along track.
 - p. **WHENEVER YOU ARE IN DOUBT.** The mere presence of doubt in your mind is grounds to call me. If a situation looks bad, smells bad or just plain feels bad, it usually is. I am always on duty. **NEVER HESITATE TO CONTACT ME!**

STANDING ORDER NUMBER TWO

WATCHSTANDING

1. **Watch team organization.** An underway watch team typically has 5 members: the Skipper/XO for OSTs or Coach/XO, and four Crewmen, one of whom shall be appointed Watch Captain. Under the direction of the Watch Captain, midshipman watchstanders will be rotated through all watch stations periodically (about hourly) during the watch. A typical watch organization follows:



2. **Watch relief.** Watch relief is a formal process where responsibility is turned over. To relieve the watch on NA-XX, the on-coming watchstander shall:

a. Obtain sufficient rest. The underway watch routine provides eight hours of sleep daily - get it. **Sleeping, pleasure reading, using your personal cell phone or using your iPod (or any personal media device) on watch is forbidden.**

b. Be well fed and hydrated. Try to have a drink and at least SOME food prior to going topside.

c. Dress correctly. Take all clothing you will need when reporting to watch stations. Stow excess clothing in an accessible place before taking the watch. Foul weather gear should be in one of two places at all times: on your person or stored in the wet locker. **SHOES MUST BE WORN AT ALL TIMES WHEN TOPSIDE.** Sandals, open-toed or aqua-sock type shoes have no place in the watchstanding environment. Tech vest (inflatable life jackets) must be worn at ALL times. Safety harnesses must be worn:

(1) from sunset to sunrise

(2) during heavy weather

(3) at all other times when directed by the Skipper/Coach

d. Review the navigation plot prior to assuming the watch, with emphasis on current position, expected navigation aids and dangers and desired course.

e. Read and initial the Night Orders.

f. Ensure eyes are adjusted to darkness (if applicable).

g. Determine the following, once topside:

(1) Course and speed

(2) Point of sail, sail combination in use, what fwd halyard is attached (i.e. #3 hoisted on stb jib halyard)

(3) Relative position and movement of squadron mates, as well as other shipping in the vicinity

(4) Number of persons on deck

(5) Any problems encountered during the watch (equipment failures, abrupt changes in weather, personnel issues etc)

h. Obtain a face-to-face verbal turnover of information pertinent to the watch station being relieved. Formally relieve the watch by stating "I relieve you", and receiving the acknowledgment "I stand relieved."

i. The Watch Captain shall be relieved LAST. Watch relief may occur only if topsides are shipshape-- clean and orderly.

3. **Watch Rotation.** Watch rotation underway will occur in accordance with the following cycle:

4. **Watch station Responsibilities.**

a. Watch Captain. The Watch Captain is the key supervisory position in the watch team. He has overall responsibility for the safe operation of the craft, the efficient performance of the watch and the timely execution of the daily routine. The Watch Captain reports to the SKIPPER/COACH. He shall:

(1) Ensure the STC remains secured for sea, clean and properly stowed.

(2) Conduct a Messing and Berthing Inspection at 1000 daily.

(3) Ensure watch rotations occur at an appropriate interval (hourly; more frequently in cold or heavy weather).

(4) Ensure all watchstanders carry out the responsibilities of their station in accordance with this Standing Order.

(5) Enforce the use of tech vests at all times and safety harnesses between sunset and sunrise and during heavy weather.

(6) Remain attentive to changes in weather. Anticipate and respond to changes early.

(7) Ensure meal preparation (or post-meal cleanup) is completed in a timely fashion. As a general rule at mealtimes, off going section will cook and oncoming section will clean.

(8) Ensure all required reports are made to the OTC in accordance with DNAS OORDER.

(9) Hail all non-fixed bridges on VHF at 3nm to verify bridge configuration and height before transit.

(10) Rendezvous and "transit in company" as squadron prior to entering restricted waters.

(11) Dual concur between watchstanders and/or other STC on all “cross over” and “cross under” hazards to navigation.

(12) Answer and relay for NA-XX during the OTC’s Squadron roll Call, conducted at the top of all odd hours.

(13) Make required reports to the Skipper/Coach.

b. Helmsman. The Helmsman reports to the Watch Captain. He shall:

(1) Maintain a proper lookout.

(2) Maintain the ordered course. Inform the Watch Captain and the navigation plotter if the ordered course cannot be maintained and provide a recommendation for action to be taken.

(3) Continuously monitor sail trim.

(4) Maintain a listening watch on the VHF radiotelephone using the remote speaker. Alert the Watch Captain if NA-XX is hailed, if the OTC is transmitting or if a distress call is heard.

(5) Issue the proper verbal commands for all maneuvering and seamanship evolutions.

c. Lookout. The Lookout reports to the Watch Captain. He shall:

(1) Maintain a proper lookout in accordance with the Rules of the Road.

(2) Report all contacts to the Helmsman in the following format:

- (a) type of contact
- (b) relative bearing
- (c) range
- (d) target angle
- (e) bearing drift

d. Navigation Plotter. The navigation plotter reports to the Watch Captain. He shall:

(1) Fix the position of NA-XX in accordance with Ref (d).

(2) Maintain a proper navigation plot, constantly adhering to the Six Rules of DR.

(3) Make course and speed recommendations to the watch captain.

(4) Monitor the HF/VHF communications suite, AIS, and radar if energized.

(5) Maintain the Offshore Yacht Log and Bearing Book.

(6) Prepare and/or clean up after meals in accordance with the daily routine.

STANDING ORDER NUMBER THREE

UNDERWAY ROUTINE**0600 - 1200 FORENOON WATCH**

0600	Relieve the watch.
0730	Squadron VHF reports
0800	On watch commence field day, deck equipment safety check
1000	Watch Captain's Messing/Berthing Inspection
1130	Prepare Lunch

1200 - 1800 AFTERNOON WATCH

1200	Relieve the watch.
1230	Training Time (all hands)
1430	Boat work (as needed)
1700	Start the engine to charge batteries, start Dinner preps

1800 - 2200 EVENING WATCH

1800	Relieve the watch. Secure the engine.
1830	Squadron VHF reports.

2200 - 0200 MID WATCH

2200	Relieve the watch.
0130	Midrats for oncoming

0200 - 0600 MORNING WATCH

0200	Relieve the watch.
0530	Start Engine to charge batteries. Prepare breakfast

SQUADRON ROLL CALL CONDUCTED AT THE TOP OF ODD HOURS.
OR, SOME OTHER ROUTINE PRESCRIBED BY THE SKIPPER.

APPENDIX B: SAMPLE NIGHT ORDERS
NA-XX NIGHT ORDERS

For the period 1800 _____ 2012 to 0700 _____ 2012:

1. Maintain course and speed to conform to the Navigator's track.
2. Call me if boat speed drops and will remain below _____ knots or you are unable to steer within 45 degrees of track due to the prevailing wind direction.
3. Conduct the following training evolutions or discussions:

 Standing Order Number(s):

 BIB Section(s):

4. Complete the following maintenance:

5. Notify me if/when:

6. Notes:

CALL ME IF IN DOUBT OR DIFFICULTY

PORT SECTION: 1/C _____ 2/C _____ 3/C _____ 3/C _____

STBD SECTION: 1/C _____ 2/C _____ 3/C _____ 3/C _____

APPENDIX C: SAMPLE WATCH, QUARTER AND STATION BILL NA-XX

NAME	BILLET	SECTION	COLLATERAL DUTY	PMS	IN PORT SECURITY	HEAVY WEATHER	SEA & ANCHOR	CLEANING & PRESERVE	FUELING
	SKIPPER/ COACH	PORT				SAFETY OBS	SAFETY OBS		SAFETY OBS
	XO	STBD				SAFETY OBS	LOOKOUT		SAFETY OBS
	MIDN CO/ MIDN WATCH CAPTAIN	PORT	TRNG O MED KIT	3M SUP	IN CHARGE LOC/ PHONE OF SKIPPER/ COACH AND XO	WATCH BILL SEASICK MED CREW REST	HELM	QUARTER BERTH AFT ENGINE AREA	HELM
	MIDN XO/ MIDN WATCH CAPTAIN	STBD	ADMIN O NAV O SWO		SPACES CLEAN, EQP STOWED, CHK LIST EXECUTION	NAV/ WX SUPVR	NAVIGATOR	SHEETS & SHEET LOCKER TRASH CAN COOLER	NAVIGATOR
	ENGINE	PORT	FUEL/ OIL/ & WATER KING	ENGINEER- ING. STEERING	FLUID LEVELS ENGINE BILGE	FUEL LEVEL FLUID LEVELS	FOREDECK LINE HANDLER	CABIN SOLE (SCRUB, RINSE)	IN CHARGE
	ELECTRIC	STBD		ELECTRICAL	AC & DC BREAKERS, SHORE PWR	BATTERY CHARGE	FOREDECK LINE HANDLER	PORT BERTHING	TANK LEVEL MONITOR
	DAMAGE CONTROL			HULL, SAFETY	SEACOCKS HATCHES	SECURE GEAR LEE CLOTHS	MIDSHIPS LINE HANDLER	HEAD AREA	SPILL MONITOR
	1stLT	STBD		STANDING &RUNNING RIGGING, SAIL	IN CHARGE	IN CHARGE	MIDSHIPS LINE HANDLER	TOPSIDE	FUELING CONNEX
	SUPPLY O	PORT	MESS CATERER	GALLEY PLUMBING	FOOD STORES REEFER	MEAL PREPS, SECURE GEAR	AFT LINE HANDLER	GALLEY	CLEAN UP
	ANAV	STBD		ELECTRONI C MISC	WX FORECAST TIDE/CURR NAV DESK	FIX & DR WX FORECST EMERG GEAR	AFT LINE HANDLER	STBD BERTHING	CLEAN UP

APPENDIX D: SAMPLE GENERAL EMERGENCY BILL NA-XX

NAME	BILLET	SECTION	GENERAL EMERGENCY	ABANDON SHIP	MAN OVERBOARD				
	SKIPPER/ COACH		IN CHARGE	IN CHARGE	DECK OBS				
	XO		VHF/ HF RADIO	EPIRB VHF/ HF RADIO	LOOKOUT				
	WATCH CAPTAIN	ON WATCH	COCKPIT FIRE EXT ASSIST AT SCENE	LIFE RAFT	IN CHARGE				
	WATCH CAPTAIN	OFF WATCH	COCKPIT SAILS SAIL THE BOAT	MRE WX GEAR	GENOA HALYARD FOREDECK SPVR				
	HELM	ON WATCH	HELM	HELM	HELM				
	HELM	OFF WATCH	COCKPIT BILGE PUMP	FLARES	FOREDECK BOAT HOOK				
	NAVIGATOR	ON WATCH	GALLEY FIRE EXT	NAV GEAR MED KIT	GPS MOB ALERT CABIN NAV/ COMM				
	NAVIGATOR	OFF WATCH	FOREDECK SAILS	ABANDON SHIP BAG	MAIN SHEET				
	LOOKOUT	ON WATCH	LOOK OUT	LIFE RAFT	POINTER				
	LOOKOUT	OFF WATCH	BILGE PUMP/FIRE EXT (AS REQ)	WATER JUG SLEEP BAGS	RESCUE SWIMMER				

APPENDIX E: MARINE EVENT LIABILITY WAIVER**EVENT:** _____**DATE OF EVENT:** _____

In consideration of my participation in recreational sailing and/or racing aboard a Naval Academy marine craft, I, the undersigned, intending to be legally bound hereby waive for myself, parents, guardians, heirs, executors, assigns and administrators any and all rights and claims for damages, demands, and other actions whatsoever, including that which I may have against any of the following entities: the U.S. Naval Academy, Annapolis, Maryland; the Department of the Navy; the Department of Defense; the United States Government; all U.S. Naval Academy military and civilian personnel; the Naval Academy Sailing Foundation; plus, United States Sailing Association, all participating supporters and their entities; all individuals associated with planning or conducting marine events; any medical support personnel provided; and these entities' representatives, successors and assigns, arising out of my participation in this event, including any and all injuries or illnesses suffered by me as a result of my participation in this event or use of any U.S. Naval Academy or government facilities, equipment or sailing vessel in conjunction with my participation. I further verify that I have full knowledge of the risks involved in participation in events of this nature where marine craft are used. By participating in this event, I hereby permit the above mentioned entities to utilize my name, likeness and scores for any purpose whatsoever.

I understand that I am responsible for the cleanliness of any marine craft that I may have been assigned, and for my conduct. I am further aware that no alcoholic beverages of any type are allowed aboard any Navy marine craft, and that any misuse of equipment or its facilities will result in revocation of my privileges to participate in this or any future marine event at the U.S. Naval Academy.

I also understand that it is in my best interest to wear a certified Type III U.S. Coast Guard approved Personal Flotation Device, and that if I cannot swim or I am recreational sailing, wearing a certified Type III U.S. Coast Guard approved Personal Flotation Device (PFD) is required at all times while involved with this event, including pier side.

Additionally, I fully accept financial responsibility for any damages incurred while operating a Naval Academy marine craft due to my negligence or improper action(s).

If under age 18: I, the undersigned parent or lawful guardian of the below named person, do hereby grant my permission and consent for my child to participate in the above described event. I have read and agree to be bound by the terms of the above mentioned provisions. I understand that my child must be at least 8 years of age and must have a certified Type III U.S. Coast Guard approved Personal Flotation Device on the day of the sailing event **which must be worn at all times while involved with this event, including pier side.** Furthermore, I understand that no more than four children will be permitted on a boat at one time unless supervised by members of a Naval Academy sailing team or Robert Crown Center staff.

Name	Signature (or parental signature if under 18)	Date
Emergency Contact Name	Relationship of Emergency Contact	
Emergency Contact Phone		

APPENDIX F: INCIDENT REPORT FORM

Date of incident:

Type of boat(s):

Name/number of boat(s):

Program (BST/OSTS/VOST/JVOST/IC/Intramurals):

From:

To: Director, Naval Academy Sailing

Via: BST/OSTS/VOST/JVOST/IC/Intramurals Program Director

Training Officer

Vanderstar Chair

Deputy Director, Naval Academy Sailing

1. Brief description of incident and designation of apparent cause (Write a short paragraph that summarizes the incident. In the last sentence, clearly define your assessment of the root cause of this incident):

The root cause of the incident was:

MATERIAL _____ **PERSONNEL** _____ **PROCEDURE** _____

2. Initial conditions (Write one or more paragraphs that set the stage for the incident. Include in your description your position, weather, sea state, visibility, number and qualifications/experience of those aboard, state of crew training and rest, and any other abnormal conditions that may have existed aboard that might have been distracters):

3. Detailed description of the incident (Be specific. Explain in detail what happened. Also explain what was known and not known at the time of the incident. Some of this material may have been determined in the post-incident critique):

4. Immediate corrective action taken (Describe what you did immediately following the incident, and in the near term aftermath – i.e., what did you do upon return to port. Also, in retrospect, assess the correctness of your actions.):

5. Lessons learned (Describe what you learned from this incident – viewed from the perspective of what should be shared with others so that they also can learn from this incident.):

6. Recommendations for long-term corrective action (i.e., what needs to be done to minimize the chance of this occurring again? This may include things like revisions to instructions, program revisions or enhancements/improvements required – what could have/should have been done differently that would have prevented this incident?):

7. List enclosures (Attach chartlets, pictures, diagrams, etc that help to explain the incident)

- a.
- b.

APPENDIX G: SOP FEEDBACK FORM

INSTRUCTIONS: This form provides a feedback mechanism for the newly-revised SOP document. In your comments, please be specific and provide the rationale for making the suggested change. Submit any proposed modifications or suggestions using this form to the appropriate program Director for review.

RECOMMENDED CHANGE:

RATIONALE:

APPROVAL:

Director, VOST	_____
Director, OSTs	_____
DDNAS	_____
DNAS	_____
Date:	_____