



The Nautilus Institute
for Security and Sustainable Development
Pegasus Project

Welcome to The Pegasus Project

The Nautilus Institute

*for Security and Sustainable Development
Pegasus Project*

PEGASUS PROJECT

Marine Environmental Education

**The Nautilus Institute, 125 University Avenue
Berkeley, CA 94710 - 1616**

Phone 510-204 - 9296 Fax 510 - 204 - 9298

Pegasus Hotline & Cell Phone underway 510 - 697 - 9296

The Captain for the upcoming sails will have an updated voice-mail message concerning the latest news on weather, sails, times, and any changes. Leave a message and a phone number as to your availability, and the Captain will monitor the messages.

E-Mail: Pegasus@nautilus.org

Web: <http://www.nautilus.org/pegasus>

The Nautilus Institute

*for Security and Sustainable Development
Pegasus Project*

The Pegasus Project

Marine Environment Education

The Pegasus Project is the Nautilus Institute's model program in marine environment education. The Nautilus Institute is a Berkeley-based non-profit research and education organization. The Institute promotes international cooperation for security and ecologically sustainable development, with a focus on Asia-Pacific.

In 1992, the Institute extended its Asia-Pacific focus to the shores of California with a youth-oriented environmental program that is both educational and transformative. To this end, we launched The Pegasus Project, a program in marine environment education. The project utilizes the Institute's vessel, Pegasus, built in 1972 by Baum Shipyard in Kennebunkport, Maine. It is constructed of Philippine mahogany. It is 45 feet long on deck, 51 feet overall. Its ketch rig has four sails. The vessel can accommodate seven overnight. Pegasus has been fitted with extensive safety equipment including a Tinker sailing tender and an eight person Zodiac liferaft.

The Pegasus Project has two complementary objectives:

- 1) To enable teenage public school students from the East Bay and San Francisco to experience firsthand the Bay waters on the Institute's traditional sailing vessel.

The Pegasus Project will help them to tap their own creative potential in ways that inspire the community to strive for environmental sustainability.

In 1995, the Institute identified and established strong partnerships with East Bay school and utility districts. We offer an ongoing program for school-year activity, in addition to a summer outreach program in conjunction with the Shorebird Nature Center in Berkeley.

- 2) To make Pegasus a model "green boat" by a documented upgrade program, with the related goal of developing user friendly, free software for boaters to determine the least-cost, maximum-impact way to improve their vessels' environmental performance. Pegasus was adopted by the California Green Boat Network as its pilot demonstration vessel.

The Pegasus Project is funded from the Institute's contract revenues and private donations. Contributions are tax deductible.

For further information, please contact Dr. Peter Hayes, Coordinator, The Pegasus Project (510) 295-6110.

The Nautilus Institute

for Security and Sustainable Development
Pegasus Project

The mission of the Pegasus Project is

- *to teach the public about marine environments,*
- *to impart a love of the ocean and joy of sailing to Bay Area youth,*
- *to maintain a safe, clean, green, and technically excellent boat that will serve as a role-model,*
- *to provide a team-oriented environment in which participants feel respected, and*
- *to improve the project's effectiveness at every opportunity.*

Pegasus Project Pledge

I promise to:

Commit myself to achieving the mission of the Pegasus Project;

Respect all participants, especially the youth communities served by the Pegasus Project and volunteers. In particular, to affirmatively reject discrimination on the basis of race, age, creed, national origin, gender, gender and sexual orientations, marital status, and physical ability in my interpersonal communication;

Study and observe the Pegasus Operating Procedures and Guidelines along with any supplementary materials, all of which are critical to the safe operation of the Pegasus, and at all times, to follow the direction of the designated Deck Captain;

Make an equal opportunity available for all Pegasus Project volunteers to learn and participate in activities to which I contribute;

Contribute at least as much time to sailing with youth and to developing the Pegasus Project as I spend sailing in training and recreational activities on the Pegasus. Such development could include participation in maintenance activities, or off-boat activities such as curriculum development, fundraising, inventory, special events, outreach, coordination, administration, etc.;

Pay for the cost of volunteer insurance to cover myself in the Pegasus activities [if feasible as determined by Nautilus];

Promote participation in the Pegasus Project by other potential volunteers and potential supporters.

Violations of the Pegasus Pledge are subject to disciplinary action up to and including termination of participation in the Pegasus Project.

Sign below if you understand your obligations under the pledge and promise to adhere to it at all times:

Name

Date

Complaint Procedure and Remedies:

Any Volunteer who feels that another participant in the Pegasus Project is violating the Pegasus Pledge, or who objects to their own behavior being so characterized, may write to the Director of the Nautilus Institute, the operator of the Pegasus Project, who will convene a three-person, non-partisan review committee to consider the complaint. Notwithstanding this procedure, the Deck Captain's command while aboard the vessel is to be observed at all times, without exception. Such a grievance procedure may, at the complainant's request, be implemented confidentially.

The Nautilus Institute

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Pegasus Project

Pegasus Project Volunteer Application

- Directions:**
- Fill out this form.
 - Attach resume
 - Attach a recent photo, if available.

Name: _____ Age: _____ Gender: _____

Profession: _____

Address: _____ City, State, Zip: _____

Home Phone: _____ Office Phone: _____ Fax: _____

Email: _____

Years of sailing experience: _____

Sailing Experience (check all which apply):

- captain
- crew
- navigator
- sailing school certification level: _____
- other: _____

Supervisory Experience (check all which apply):

- adults, explain: _____
- children, ages: _____

Skills (check all which apply):

- carpentry
- painting
- curriculum
- plumbing
- editing
- safety
- email
- varnishing
- fundraising
- writing
- mechanical
- other, explain: _____

Availability (circle all which apply):

- weekdays
- weekends
- evenings
- weekends only
- other, explain _____

Two Professional or Sailing References:

Name: _____ Name: _____

Profession: _____ Profession: _____

Phone: _____ Phone: _____

Relationship: _____ Relationship: _____

Do we have your permission to contact your references? _____

Pegasus Project Crew Qualifications

Welcome to the Pegasus crew qualification process. You can aspire to one of four crew categories as follows:

- * Apprentice: A new member or existing member with some basic sailing skills who desires to qualify as crew.
- * Crew 1: This level covers the basic skills necessary for you to be a helpful, effective crew member. It entitles you to be designated as crew for our scheduled sails with passengers on board. Apprentices are tested by a qualified Captain on their knowledge of nautical terminology, rules of the road, knots, and safety. Skills and knowledge as required by the Crew 1 Qualification Sheet must be demonstrated.
- * Crew 2: Completion of Crew 1 is a prerequisite. Crew 2 candidates must demonstrate practical seamanship skills and boating knowledge.
- * Crew 3: The prerequisite is completion of Crew 1 and 2. Applicants are to demonstrate advanced practical sailing skills and knowledge. Members at this level must demonstrate competency as crew and have the ability to assume Captain's responsibilities in the event the Captain becomes incapacitated.

It is your responsibility to *bring your crew qualification sheet* on sails. In the process of getting items signed off, don't lose it! Keep the original dry and safe. Use a copy on deck and have the Captain sign the original later. When you are working on a qualification, check with one of the Captains to see if they are willing to work with you on it. For difficult skill requirements, some Captains may be willing to work with you on an individual basis in addition to scheduled group sails. Don't be shy; ask!

The policy for getting items signed off is to successfully perform the required function without help. If you have difficulty and need help, that's all right, but you can't be signed off that day. You must successfully perform the task, without help, on another day. Do not expect to complete an entire sheet in one outing. It will take time. There are no time limits on the qualification process. Just keep working at it.

The Pegasus project does not have the capacity to teach sailing to a non-sailor. It is recommended that you take classes at least through the intermediate level. There are many organizations that teach sailing classes. We also highly recommend taking a Safe Boating course given by the United States Power Squadron or United States Coast Guard Auxiliary. These classes are offered to the public at a nominal cost.

Each item on a qualification sheet must be signed by a qualified Captain and submitted to Peter Hayes or his designee at 125 University Avenue, Berkeley, CA. The sheets are kept as part of the Pegasus project records.

CREW 1

Crew Candidate _____

PEGASUS PROJECT

Date Completed _____

Photo Received _____

Application received _____

Verification _____

BASIC SAILING: Prerequisite: Some basic sailing experience...

General Description: Demonstrated ability to crew and help sail a boat, in light to moderate winds and sea conditions, in familiar waters with little supervision. This is a preparatory standard with no sailing or navigation skills required.

A. Getting Ready

Skipper Verification

1. identify the following parts of a sailboat:

- | | | | |
|-----------|------------|--------------|----------|
| hull | mast | mainsail | keel |
| bow | bow pulpit | gooseneck | jib |
| lifelines | stern | stern pulpit | cabin |
| spreaders | shrouds | headstay | backstay |

Skipper _____ **Date** _____

- boom
- deck
- bow sprit

2. Describe the functions of the following items on a sailboat:

- | | | | |
|------------|--------------|---------------|-----------|
| mainsheet | rudder | winches | boomvang |
| halyard(s) | topping lift | jib sheet(s) | telltails |
| fenders | shackle | stays/shrouds | cleats |

Skipper _____ **Date** _____

- outhaul
- fairlead
- spring/breast lines

3. Define the following terms:

- | | | | |
|---------|----------------|------------------------------|----------|
| port | starboard | skipper | helmsman |
| forward | aft | abeam | astern |
| tacking | jibing | windward | leeward |
| heel | points of sail | running and standing rigging | |

Skipper _____ **Date** _____

- crew
- ahead
- beam

4. Identify the following sails and parts of sails:

- | | | | |
|----------|-------|-----------|-------------|
| mainsail | jib | genoa | battens |
| luff | leach | head | tack |
| foot | hanks | bolt rope | mizzen sail |

Skipper _____ **Date** _____

- batten pockets
- clew
- stay sail

List and explain the points of sail

Skipper _____ **Date** _____

B. Safety Equipment and Use

1. List three U.S. Coast Guard Safety equipment requirements:

- a.
- b.
- c.

Skipper _____ **Date** _____

2. Locate fire extinguishers on this boat, and describe how to use, for what class or type of fire.

Skipper _____ **Date** _____

3. Locate remaining safety equipment on this boat, describe when and how to use it.

Skipper _____ **Date** _____

4. Demonstrate at least 3 visual distress signals:
a.
b.
c. Skipper _____ Date _____

5. Select, demonstrate and explain the proper use of a personal floatation device. Skipper _____ Date _____

6. Explain proper clothing for sailing Skipper _____ Date _____

C. Getting Under Way

Skipper Verification

1. Explain proper procedure for this vessel Skipper _____ Date _____

2. Hoist the sails, set appropriate luff tensions and coil and hang halyards and other lines. Skipper _____ Date _____

3. Check halyards, shackles, sheets, tie stopper knots where appropriate. Skipper _____ Date _____

4. Check that all lines on board are ship shape Skipper _____ Date _____

5. Cast off all lines Skipper _____ Date _____

D. Rules of the Road

1. Demonstrate and explain "**right of way**" while under way for following relative situations:
starboard tack -- port tack
downwind vessel -- overtaking vessel -- give-way vessel -- stand-on vessel
vessel under power -- vessel under sail Skipper _____ Date _____

2. Explain "**Danger Zone**" Skipper _____ Date _____

3. Identify location, color and proper use of lights: Skipper _____ Date _____

What lights are used when under sail?
What lights are used when powering?
What lights are used when power sailing?
What lights are used when at anchor?

4 On a chart and on the **water**, point out the location of:
shipping lanes channel markers range markers Skipper _____ Date _____

5. Explain and prepare to give the correct signals for the following situations for US inland waters:
fog meeting overtaking danger Skipper _____ Date _____

E. Tie the Following Knots:

bowline

figure eight

cleat hitch

reef/square knot

clove hitch

round turn and two half hitches

Skipper Verification

Skipper_____ **Date**_____

Skipper_____ **Date**_____

Skipper_____ **Date**_____

Skipper_____ **Date**_____

Skipper_____ **Date**_____

Skipper_____ **Date**_____

**Congratulation for completing Crew Qualification Level
One.**

CREW 2

PEGASUS PROJECT

Crew Candidate _____

Date Completed _____

Verification _____

INTERMEDIATE SAILING: Prerequisite : Successful completion of CREW 1

General Description: Demonstrated ability to crew and sail a boat, in light to moderate winds and sea conditions, in familiar waters without supervision. This is an intermediate standard with some sailing skills required.

A. Boat Handling Under Sail

Skipper Verification

- | | |
|--------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1. Check and adjust topping lift. | Skipper _____ Date _____ |
| 2. Hoist and set mainsail/mizzen, tension luff | Skipper _____ Date _____ |
| 3. Coil and hang halyards. | Skipper _____ Date _____ |
| 4. Unfurl jib, tension jib luff. | Skipper _____ Date _____ |
| 5. Coil and stow furling line. | Skipper _____ Date _____ |
| 6. Use proper wrapping technique on a winch. | Skipper _____ Date _____ |
| 7. Demonstrate proper use of winch handle and storage of winch handle after use. | Skipper _____ Date _____ |
| 8. Sail a compass course specified by skipper. | Skipper _____ Date _____ |
| 9. Sail each of the major points of sail. | Skipper _____ Date _____ |
| 10. Keeping the wind astern, set sails as full as possible. | Skipper _____ Date _____ |
| 11. Explain and demonstrate heading up, bearing away, and methods of luffing. | Skipper _____ Date _____ |
| 12. Perform a tack and instruct the crew to retrim the sails for the new tack. | Skipper _____ Date _____ |
| 13. Explain sailing "by the lee." | Skipper _____ Date _____ |
| 14. Explain and demonstrate Heave-To | Skipper _____ Date _____ |
| 15. Sail a windward/leeward course while performing successful tacks and at least one controlled jibe. | Skipper _____ Date _____ |

16. Explain and use the following terms properly:

"ease sheets" "easing sheets"
"heading up" "sheet in" "sheeting in"
"ready about" "helms-a-lee" "falling off"
"ready to jibe" "jibe-ho"

Skipper_____ **Date**_____

B. Reefing

Skipper_____ **Date**_____

1. Explain to helmsman how to maintain control.
2. Carry out reefing procedure.
3. Explain procedure for shaking out the reef, demonstrate if wind conditions become appropriate.

C. Radio Operation

Skipper_____ **Date**_____

1. Explain channel usage for following situations:

hailing and conversing with the Coast Guard;
hailing and conversing with another boat;
hailing a bridge.

2. Hail and converse with another boat.
3. Explain procedure for conversing with the Coast Guard in an emergency situation.

D. Lowering and Stowing the Sails

Skipper_____ **Date**_____

1. Bring boat near head to wind.
2. Furl jib, stow furling line.
3. Attend to topping lift.
4. Lower and secure mainsail; mizzen sail; secure halyards.

E. Knots and Lines

Skipper_____ **Date**_____

1. Use the following properly in at least two different applications:

bowline figure eight spring line reef knot
sheet bend cleat hitch round turn and two half hitches

F. Rafting

Skipper_____ **Date**_____

1. List the five most important procedures when coming into a raftup.
 - a.
 - b.
 - c.
 - d.
 - e.
2. Assist in raftup situation, with lines or at helm.
3. Explain and demonstrate proper use of spring lines in raftup.

G. Anchoring

Skipper_____ **Date**_____

1. Discuss the steps to proper anchoring under normal conditions.
2. Assist in anchoring, windlass position and helm position.
3. Assist in weighing **anchor**.

H. Docking

Skipper_____ **Date**_____

1. List the steps to proper docking.
2. Place fenders.
3. Assist in docking the boat, with lines or at helm.
4. Secure and flemish dock lines.

**CONGRATULATIONS FOR COMPLETING
CREW QUALIFICATION LEVEL TWO**

CREW 3

PEGASUS PROJECT

Crew Candidate _____

Date Completed _____

Verification _____

ADVANCED SAILING: Prerequisite : Successful completion of CREW 2.

General Description: Demonstrated ability to crew or sail a boat, in moderate to heavy winds and sea conditions, by day, in familiar waters without supervision. This is an advanced crew position, with previous sailing skills required.

A. Boat Handling Under Sail

Skipper Verification

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1. Set and sail a compass course. | Skipper _____ Date _____ |
| 2. Sail a windward/leeward course while performing successful tacks and controlled jibes. | Skipper _____ Date _____ |
| 3. Demonstrate:
a. check topping lift.
b. hoist and set mainsail, tension main luff, coil and hang halyard.
c. unfurl jib, check jib luff, coil and stow furling line.
d. hoist mizzen; tension luff, coil and hang halyard.
e. demonstrate proper wrapping technique on winch.
f. adjust reefing lines and outhauls. | Skipper _____ Date _____ |
| 4. Sail each of the major points of sail in turn. | Skipper _____ Date _____ |
| 5. Sail wing on wing, set sails as full as possible. | Skipper _____ Date _____ |

B. Reefing

- | | |
|--------------------------------------------------|----------------------------------------|
| 1. Demonstrate how to reef underway, unassisted. | Skipper _____ Date _____ |
|--------------------------------------------------|----------------------------------------|

C. Sailing Conditions

- | | |
|-----------------------------------------------------------------------------------------------------|----------------------------------------|
| 1. Read wind direction and estimate strength, look for and identify wind patches . | |
| 2. Establish tide and current from tide book. | |
| 3. Make course recommendation according to tide, current, and wind conditions , explain why. | Skipper _____ Date _____ |

D. Review electrical system

1. A/C system; D/C system; Link 2000 unit

E. Knots

Skipper _____ **Date** _____

1. Tie each of the following knots, using their proper application, in 15 seconds:
bowline ; figure eight; cleat hitch; rolling hitch.
reef/square knot; round turn and two half hitches.

E. Person Overboard

Skipper _____ **Date** _____

Demonstrate ability to maneuver boat back to person in water; stabilize boat for POB recovery; assess the POB's ability to help themselves; or need for external assistance. Demonstrate use of boarding ladder and when you would use it. Assemble and use POB lifting gear and direct crew in use thereof; demonstrate use of lifesling. Demonstrate proficiency with heaving line. Explain, describe and demonstrate the actions, as listed below, to be taken by a helmsman/Captain from the time a person falls overboard, without warning, until the person is safely **recovered**. Explain the two recommended methods for performing this procedure. Speed is a close second to safety, but remember that the first rule of rescue is "**NEVER, EVER ALLOW YOURSELF TO BECOME THE SECOND VICTIM.**"

1. Set lookout, deploy POB pole, life ring, if appropriate.
2. Complete POB maneuver.
3. Approach victim, check headway.
4. Stop the boat at a given mark (i.e., your victim), secure **victim**.
5. Explain two successful methods of bringing victim aboard.
6. Describe how to get an exhausted or unconscious person aboard.

F. Navigation and Chart Reading

Skipper Verification

1. Take a fix, using visual bearings, locate your position on the chart. Determine latitude and longitude of fix from chart **Skipper** _____ **Date** _____
2. Plot given latitudes and longitudes on chart. **Skipper** _____ **Date** _____
3. Plot a course between two points and give true and magnetic compass courses. **Skipper** _____ **Date** _____

CONGRATULATIONS FOR COMPLETING CREW LEVEL THREE QUALIFICATION.

MATE/CAPTAIN QUALIFICATIONS PEGASUS PROJECT

To Qualify as A Mate:

- 1) Basic Cruising¹/Basic Coastal Cruising² certificate, or proof of equivalent sailing experience.
(Approved by Training Captain)
- 2) Resume, photo, and application on file.
- 3) Checked out on all stations.
- 4) Verification (Captain or Mate's signature) of completion of all qualifications for Crew 1, 2, and 3.
- 5) Show proof of crewing all stations (except #1) at least 3 times before being considered for position. Evaluation, during a Program sail with passengers (e.g. Nature Center, Booster, or Volunteer sail), by Training Captain or designee in positions #1 and 2.

Procedure:

- 1) Any crewmember desiring to be a Mate should notify the Training Captain or the Director.
- 2) The Training Captain will ensure that the candidate has completed all of the requirements as a crewmember for consideration as a Mate.
- 3) Judgment by Training Captain with input from Pegasus crew members, that the candidate is suited for Captainship, including but not limited to, understanding of the Pegasus mission and rules, and demonstration of appropriate personality and behavior (respectful, responsible, etc.). The Training Captain or the Program Director may decline to accept, or limit the role of, a candidate. Acceptance or non-acceptance of any candidate is at the sole discretion of The Nautilus Institute, the Pegasus Project Program Director, Training Captain, or Pegasus Project Designated Independent Certified Sailing Instructor.
- 4) The Training Captain will schedule any training that he/she thinks the Mate candidate needs in order to successfully pass the "Mate's Review."
- 5) A "Mate's Review" will be scheduled by the Training Captain and/or the Director with the Pegasus Project Designated Independent Certified Sailing Instructor. One review will be scheduled per candidate.
- 6) An on-the-water boat handling review with the Designated Independent Certified Sailing Instructor ("Mate's Review") will be scheduled to include at least one Mate, one Captain and the Training Captain as crew.
- 7) The candidate will be required to have a satisfactory knowledge and demonstrate to the Instructor any or all of the following:

A. Boat Set up

¹ ASA

² US Sailing

- B. Crew Assignments
- C. Safety Briefing
- D. Departure at helm
- E. Motoring Procedures
- F. Underway procedures at helm
- G. Person overboard recovery
- H. Arrival and Docking Procedure at Helm
- I. One emergency Situation (to be decided by Training Captain and Instructor)
- J. Demonstrated ability to do night and fog bound DR navigation and show appropriate "situational awareness," including defensive sailing skills, rules of the road, and voyage planning.
- K. Boat Systems.

8) After completion of the review, the training Captain and Director will receive input from the Sailing Instructor and the on board Mate, Captain and crew, relative to the candidate's strengths and deficits. At the discretion of the Instructor, any identified deficits may be addressed by additional training. The Training Captain may require the candidate to improve their performance based on the review before recommending them to the Director for approval. After the Director has received input from the Instructor and Training Captain he/she will make the final decision relative to the candidate's status and notify them.

To Qualify as a Captain:

- 1) Be certified as a Mate.
- 2) At least 12 sails in the previous year as a Mate. Six of which must be in the #2 (Helm) position and three in the #1 (Deck Control) position.
- 3) A Bareboat Chartering¹/Bareboat Cruising² certificate or proof of equivalent sailing experience. (Approved by Training Captain)
- 4) Current First Aid and CPR certification.
- 5) Evaluation by Project Sailing Instructor which will include:
 - A) An evaluation in actual sailing conditions, with passengers, with the candidate in the #1 (deck control) position.
 - B) Evaluation of candidate's knowledge of ship board procedures.
- 6) Interview and approval by a board of two current Captains.
- 7) Approval by Training Captain and Program Director.

Procedure:

- 1) Any crewmember desiring to be a Captain should notify the Training Captain or the Director.

³ ASA

³ US Sailing

2) The Training Captain will ensure that the candidate has completed all of the requirements as a Mate for consideration to be a Captain.

3) Candidate will then proceed to #3 above.

All Captains and Mates will be subject to re-testing every two years.

PEGASUS CREW POSITIONS

REFER TO PEGASUS DECK DIAGRAM:

Position 1: "Deck control officer". Traffic watch and overview of operation. Communicate pertinent information to helmsman.

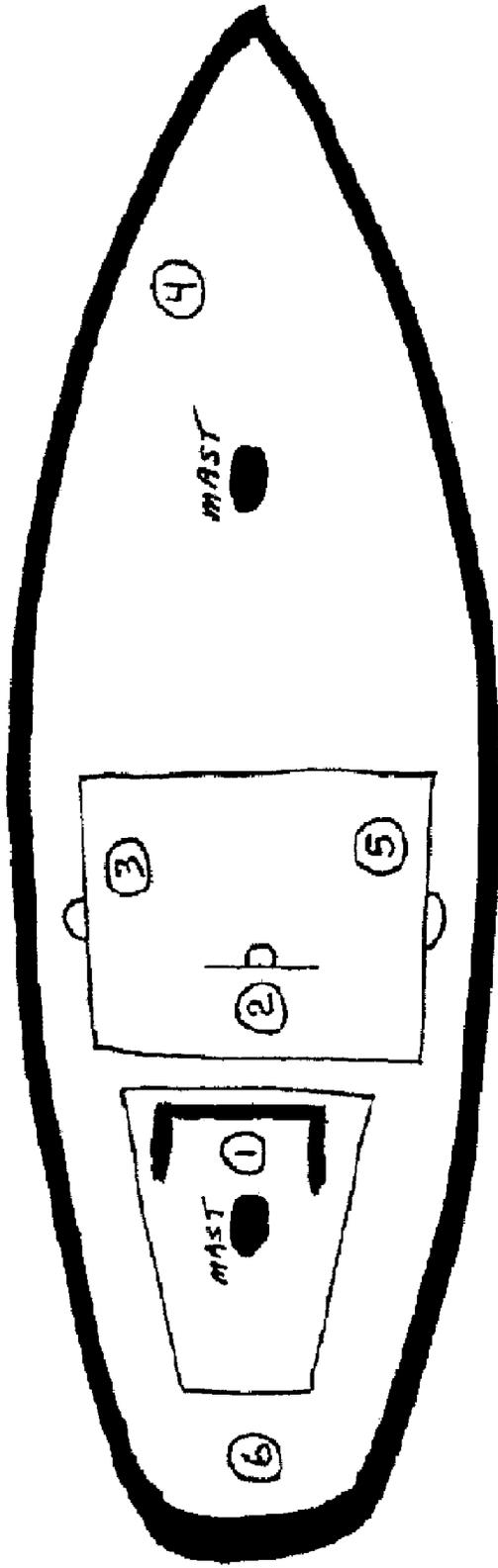
Position 2. Helm: co-ordinate and brief crew on safety; departure and arrival procedures. Direct crew on M.O.B. duties and maneuver boat to pick up M.O.B. Act as helmsperson.

Position 3. Deliver bow line to crew position #4 on fore deck. Deliver stern line to crew position #6 on aft deck. Stow boarding step at head of dock and board boat at gate. Handle port Genoa winch; assist in raising main sail by removing sail ties and handling main sheet. Handle Genoa furling line. Close boarding gate when clear of dock

Position 4: Handle bow line and main halyard. Maintain forward watch. When raising main sail; adjust out haul; reefing lines; luff tension; boomvang; stow halyard.

Position 5: Walking fender and starboard Genoa winch; Mizzen sheet during sail raising and gybe maneuver. Assist with deployment and furling of Genoa by providing slight tension on Genoa sheets. Tend main sail reefing lines.

Position 6: Assist traffic watch and guest control and supervision. Handle port stern line during departure and arrival. Tend mizzen sail ties and mizzen halyard; reefing line; topping lift; outhaul on Mizzen sail.



PEGASUS PREP FOR SAIL

CREW POSITION #1: DECK CAPTAIN

Arrange for crew in advance and make crew assignments.

Inspect overall condition of boat:

Sails; standing rigging; running rigging; hull condition.

Check lights:

Nav Lights

Steaming Light

Spreader Lights

Check Radar

Tension Back Stays

Back up crew position #2 duties.

PEGASUS PREP FOR SAIL

CREW POSITION #2: Helmsperson

CENTER HELM	_____	_____
ENG THRU HULL	_____	_____
ENG OIL	_____	_____
ENG COOLANT	_____	_____
ENG BELTS	_____	_____
FUEL SUPPLY	_____	_____
FUEL VALVES	_____	_____
FUEL FILTER	_____	_____
COCKPIT DRAINS	_____	_____
POTABLE H2O ON	_____	_____
HEAD THRU HULL	_____	_____
LOG SET TO "0"	_____	_____
SNIFFER "GREEN"	_____	_____
BILGE PUMP AUTO	_____	_____
INSTRUMENT BREAKERS ON	_____	_____
STOW INSTRUMENT COVERS	_____	_____
NAV LIGHTS	_____	_____
STEAMING LIGHT	_____	_____
LINK 2000 PANEL	_____	_____
SHORE POWER	_____	_____

PEGASUS PREP FOR SAIL

CREW POSITION #3:PORT WINCH

DISTRIBUTE CREW DUTY CARDS _____

REMOVE SPRING LINE _____

CHECK BLACK WATER LEVEL
EMPTY__ MID__ FULL__

CHECK HIGH WATER
ALARM _____

ORGANIZE LIFE JACKETS _____

ORGANIZE SAFETY HARNESSSES _____

ORGANIZE FOUL WX GEAR _____

PEGASUS PREP FOR SAIL

CREW POSITION #4: FORE DECK

CHECK P.O.B. POLE _____

STOW STARBOARD BOW LINE _____

CHECK VHF AT NAV STATION _____

PORTABLE VHF IN COCKPIT
RIGHT SIDE OF COMPANIONWAY _____

EPIRB STOWED IN MAIN SALON _____

FIRST AID KIT _____

VERY PISTOL _____

LPG:(LIQUID PETROLEUM GAS)
CIRCUIT BREAKER OFF _____

CONTROL PANEL SWITCH OFF _____

BOTH TANKS OFF _____

REMOVE & STOW MAIN SAIL COVER
CHECK WITH HELMSPERSON FIRST: _____

ASSIST WITH:
LIFE JACKETS _____
SAFETY HARNESSSES _____
FOUL WX GEAR _____

PEGASUS PREP FOR SAIL

CREW POSITION #5: Starboard winch:

LIFE RAFT

Check Tinker

COCKPIT LOCKER:

Manual bilge pump
handle

Tinker pump

Fire extinguisher

Flares(orange box)

Life sling

Distribute winch
handles

WALKING FENDER

EMERGENCY TILLER

SECURE PORT HOLES

CHECK FIRE EXTINGUISHERS:

FWD. "V" BERTH

MAIN MAST

MAIN SALON

MAIN LADDER

ENGINE HALON

AFT HEAD

AFT SALON

Assist with mainsail reefing lines when raising and lowering sails.

PEGASUS PREP FOR SAIL

CREW POSITION #6: AFT DECK CONTROL

SECURE STARBOARD STERN LINE _____

SAFETY GEAR:

HEAVING LINE _____

STROBE LIGHTS (2) _____

SNAP SHACKLE PULLEYS(2) _____

CHECK LIFE SLING _____

POB MARKER POLES (2) _____

HORSE SHOE RINGS (2) _____

Whistle attached _____

Sea anchor attached _____

POB HALYARD _____

REMOVE MIZZEN SAIL COVER. _____

CHECK WITH HELMSPERSON FIRST _____

ASSIST WITH LIFE JACKETS;

SAFETY HARNESSSES &

FOUL WX GEAR.

MARINA PROCEDURES

DEPARTING

REFER TO MARINA DIAGRAM:

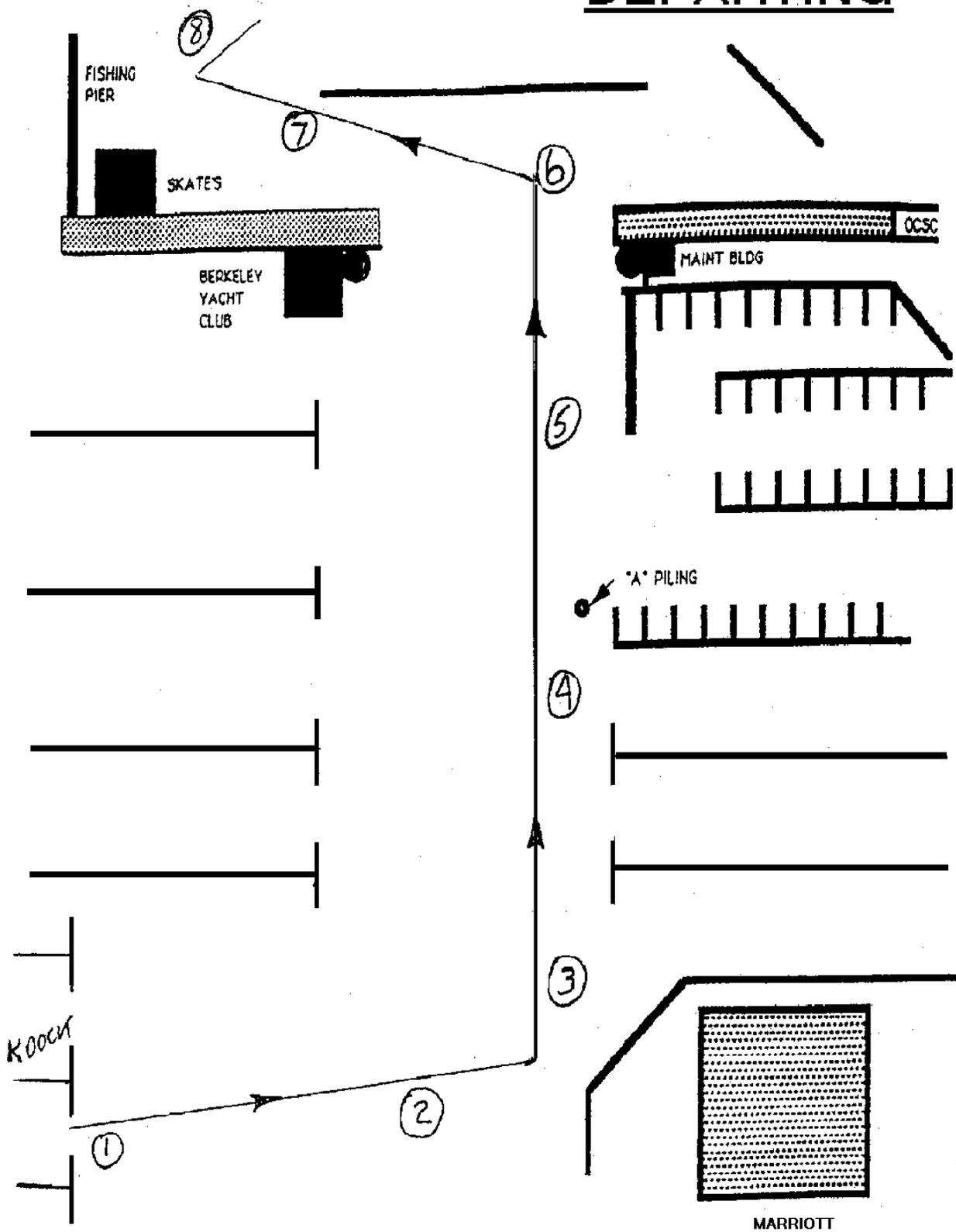
1. DEPARTING SLIP: Crew briefed; guests ready and quiet; check wind conditions and probable effect on boat; center steering; check for other moving traffic in marina.
2. CLEAR OF SLIP: Remove and stow fenders; stow dock lines; secure boarding gate; ready crew for sail deployment.

HEAD TO WIND:

3. Ease mizzen sheet; ease reefing line; raise mizzen sail; adjust out haul; adjust reefing line; adjust topping lift. Adjust mizzen sheet. Stow mizzen halyard.
4. Ease Main sheet; ease reefing lines; adjust boom vang; raise main sail; adjust outhaul; adjust reefing lines; cleat Main halyard; adjust main sheet; stow main halyard.
5. Unfurl Genoa.
6. Bear away and trim sails.
7. Head up and trim for close hauled.
8. Tack away from pier and secure engine.

These procedures are for the prevailing westerly winds at the Berkeley marina. Helm or Captain will modify procedures as necessary.

DEPARTING

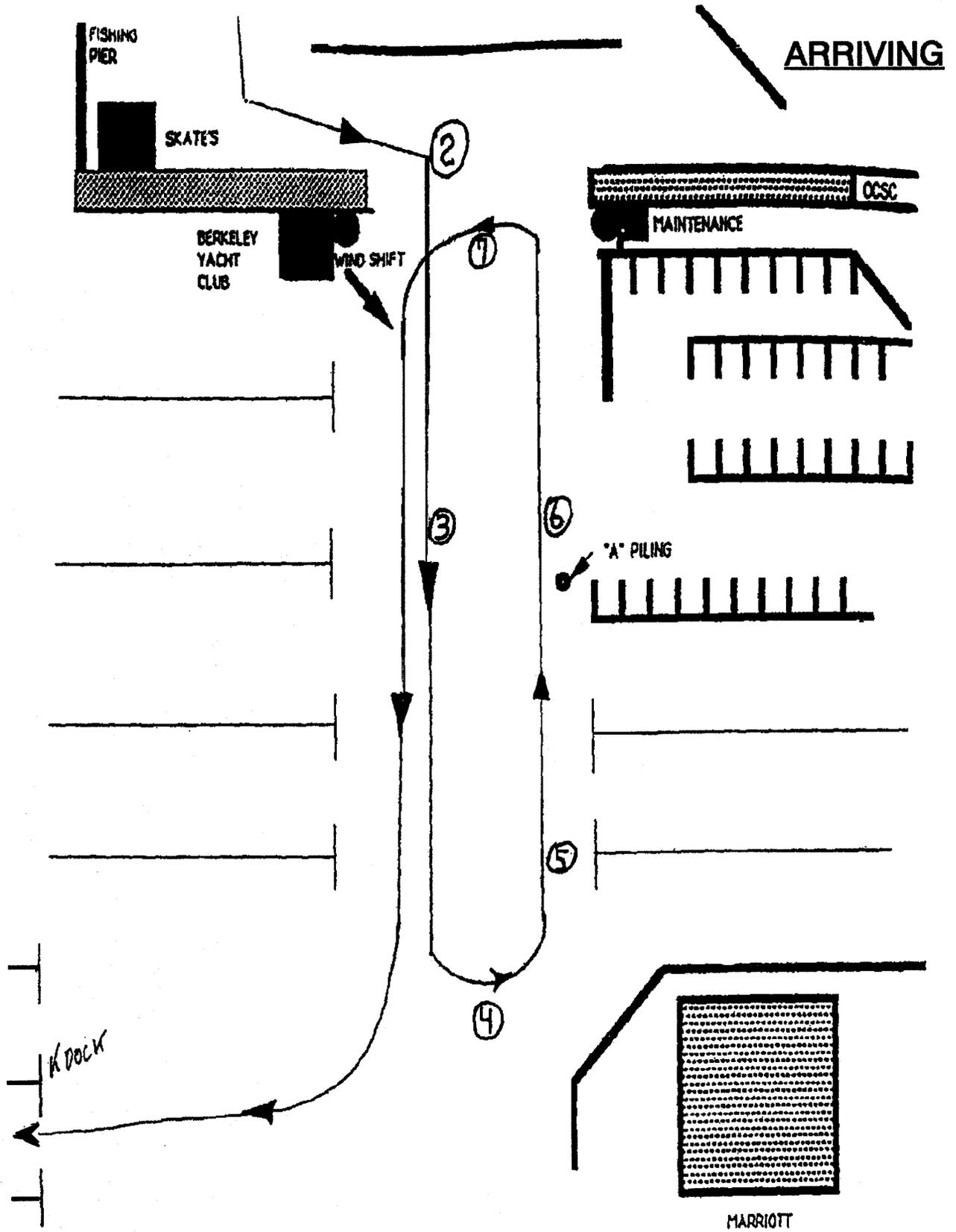


MARINA PROCEDURES ARRIVAL

- 1. Start engine and furl head sail outside marina.**
- 2. Gybe if necessary: use caution for wind shift caused by BYC buildings when wind is strong.**
- 3. Brief crew and distribute sail ties.**
- 4. Head up.**
- 5. Douse Main & Mizzen sails.**
- 6. Fenders over side and ready dock lines.**
- 7. Motor back to slip.**

Dousing sails, placing fenders and other deck activities are easier and safer inside the breakwater when bay is rough.

Have boat fully prepared to dock before entering K dock fairway. Fenders installed and over side; docking lines brought to boarding gate; boarding gate open; crew briefed.



PEGASUS PERSON OVERBOARD (P.O.B.)

REFER TO PEGASUS DECK DIAGRAM:

- Position 1: DECK CONTROL OFFICER: Maintain watch. Spotting and continuous observation of P.O.B. is this crew members only duty. Communicate pertinent information to helmsperson.**
- Position 2. Helmsperson: instruct crew and maneuver boat into recovery position. Maintain course until DECK CONTROL OFFICER has P.O.B. in sight.**
- Position 3. Back up deployment of port P.O.B. pole, strobe, and horseshoe ring. Handle port Genoa sheet. Handle P.O.B. topping lift and P.O.B. boom during recovery. Handle Main sheet if main sail doused. Assist with P.O.B. recovery.**
- Position 4: Use marine V.H.F. to send PAN PAN PAN message. Alert Coast Guard and Berkeley Harbor Master. Prepare P.O.B. recovery system and handle main halyard as necessary if main sail is doused. Tend P.O.B. needs after recovery.**
- Position 5. Handle starboard Genoa winch and mizzen sheet. Back up deployment of starboard P.O.B. pole; strobe and horseshoe ring. Sail ties for main sail if doused for P.O.B. recovery. Assist with P.O.B. recovery.**
- Position 6: Immediately deploy nearest P.O.B. pole, strobe and horseshoe ring. Handle mizzen halyard as necessary. Deploy Life Sling on helmsperson's command.**

PEGASUS HYPOTHERMIA PROCEDURE

Definition: When a body loses more heat than it can produce.

Causes: Inadequate clothing, wet clothing, falling overboard.

The best way to treat hypothermia is by preventing it:

- 1) Crew should anticipate weather conditions outside of the breakwater and dress passengers appropriately.**
- 2) Harnesses and PFD's are to be worn outside of foul weather gear.**
- 3) 30% of heat loss is through a person's head, so wool caps are encouraged.**
- 4) Passengers and crew are encouraged to wear foul weather gear on windy days. Heat loss increases by 15% when clothing is wet.**
- 5) Adequate nutrition and hydration are key to preventing hypothermia.**

Mild Hypothermia:

Symptoms:

- 1) Shivering**
- 2) Skin that is cold to touch**
- 3) Vague, slow, speech**
- 4) Drowsiness**

Treatment:

- 1) Add additional clothing**
- 2) Take below, out of wind**
- 3) Remove any wet clothing and dry off**
- 4) Warm drinks are NOT a substitute for decreasing heat loss**

Severe Hypothermia:

Usually secondary to falling overboard.

Symptoms:

- 1) Uncontrolled shivering
- 2) Lack of shivering!
- 3) Poor judgment
- 4) Staggering, may appear drunk
- 5) Unconsciousness

Treatment:

- 1) Perform man overboard recovery if necessary, being careful to support head and neck if person is unconscious.
- 2) If conscious, take victim below, out of wind
- 3) Remove all wet clothing, if patient is female have female crew member or passenger assist
- 4) Place in sleeping bag on starboard bunk with head covered.
- 5) Call “Pan, Pan, Pan” message for USCG assistance
- 6) If unconscious, place in sleeping bag behind helm.
- 7) CPR, if warranted, by trained crew member.
- 8) Proceed to nearest marina or Coast Guard rendezvous and have ambulance standing by

Remember the goal is to Prevent further heat loss. Trying to rewarm a severely hypothermic patient may cause them to go into “cold shock.”

PEGASUS HIGH BILGE WATER ALARM

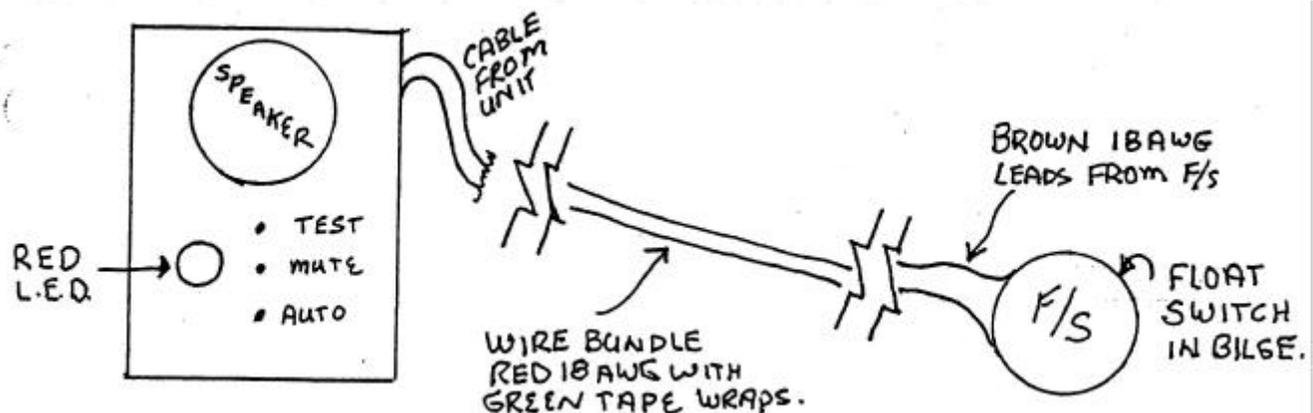
Installed February 29, 1996

LOCATION: Aft salon stairway; starboard wall; adjacent to engine start switch.

This is a self-contained unit powered by two 9.0-volt internal batteries. Batteries should be changed annually.

BATTERY CHANGE PROCEDURE:

1. Remove four small screws from backplate of unit. Do not remove unit from wall. Backplate is accessible from companionway leading to engine compartment.
2. Slide backplate off along alarm cable.
3. Remove and replace batteries.
3. Replace backplate.
- 4.



* F/S mounted on cross beam in bilge aft of transmission under galley floor. To gain access; remove aft salon ladder; remove floor access panel; reach down and forward to actuate F/S. (lift up).

TESTING UNIT:

1. Place switch to TEST position. Alarm will sound.
2. Place switch to AUTO position. Lift float switch; alarm should sound. Place F/S down.
3. Place switch to MUTE. Lift F/S; red L.E.D. light on panel should illuminate- no audio alarm. You may need observer to monitor L.E.D.(Light Emitting Diode).

TAKING ON WATER !!!

Captain will be assisted by crew position #4 & #5.

Captain will start & monitor operation of electric bilge pump.

Crew position # 4 will inspect for leaks forward and work aft.

Crew position #5 will inspect for leaks aft and work forward.

Crew position #2 (HELM) will initiate Pan, Pan, Pan message and maintain communication link with Coast Guard or Vessel Assist.

PROCEDURE:

- 1. Pan, Pan, Pan message.**
- 2. Identify source of leak.**
 - a. Inspect thru hull fittings.**
 - b. Speed transducer**
 - c. Depth transducer**
 - d. Stuffing box (prop shaft exit)**
- 3. Start electric bilge pump & check for operation. Monitor same.**
 - e. Rudder post stuffing box.**
 - f. Engine exhaust (water cooled); engine cooling system**
- 4. If heavy seas;**
 - a. Inspect port holes and dorade vents.**
 - b. Inspect hatches for security.**
- 5. Stem flow of water.**
 - a. Thru hull: close; wooden plug; stuff with rag; etc.**
 - b. Engine exhaust or cooling leak: stop engine & close thru hull.**
- 6. Damaged hull.**
 - a. Stuff hole with pillow; cushion etc. and brace with boat hook, whisker pole, tinker oars etc.**
 - b. Cover hole from outside; sail or bimini cover; screw or nail plywood or hatch cover over hole.**
- 7. Use manual bilge pump and manual sucker pump to remove excess water.**

IF UNABLE TO STEM FLOW OF WATER OR GET TO PORT, INITIATE MAYDAY MESSAGE. IF IN DANGER OF SINKING, RUN SHIP AGROUND TO PREVENT TOTAL LOSS OF SHIP. IN BERKELEY FLATS THE UPPER CABIN TRUNK, MASTS AND BOOMS SHOULD BE ABOVE WATER AFTER KEEL HITS BOTTOM. STAY WITH THE SHIP UNLESS IT IS OBVIOUSLY GOING DOWN; ONLY THEN ABANDON SHIP ON CAPTAINS COMMAND.

PEGASUS FIRE

Fire needs fuel; heat or ignition source; oxygen (air); and the ability to maintain a continuous chemical reaction. Remove fuel, heat, or oxygen and the fire goes out!!

**Prevention: New elect system; sniffer; blower; engine room doors closed before engine start; kept closed while engine running.
Keep cabins, galley and bilge clean.**

**Fire Extinguishers: Properly stowed; checked; and annually serviced.
Two types on Pegasus: Dry chemical (red bottles)
Halon (white bottles)**

**Use the Halon (white) primarily on electrical fires.
Dry chemical (red) on other fires.
Bucket of water on wood, clothing, upholstery etc.**

**Halon has a range of 9 to 15 feet. Sweep the base of flame slowly.
Dry Chem has a range of 5 to 15 feet. Sweep the base of the flame.
Both types only good for 8 - 20 seconds. Must be used effectively right from the start.**

**As soon as fire is detected a Pan Pan Pan message by crew #4; May Day if necessary.
Crew member #5 begin fire extinguish procedure.**

LPG (propane) fire.

- 1. Emergency kill switch left of galley stove off.**
- 2. Knock flame down with extinguisher.**
- 3. Bottle valve off.**
- 4. Stove control switches off if possible**
- 5. Monitor fire area for re-ignition**

Engine fire

- 1. Stop engine: use fuel shut off switch in cockpit. (Helm)**
- 2. Engine blower off (Crew #5)**
- 3. Check engine halon discharge; visually at aft engine room door space at top.**
- 4. Discharge Dry Chem into engine room from Access port behind fwd companion way.**
- 5. Do not open engine room doors for 15 minutes.**
- 6. Monitor area for re-ignition.**