Safety on Board

or... *Don't Panic!*

CAPTAIN GEORGIA HILTON

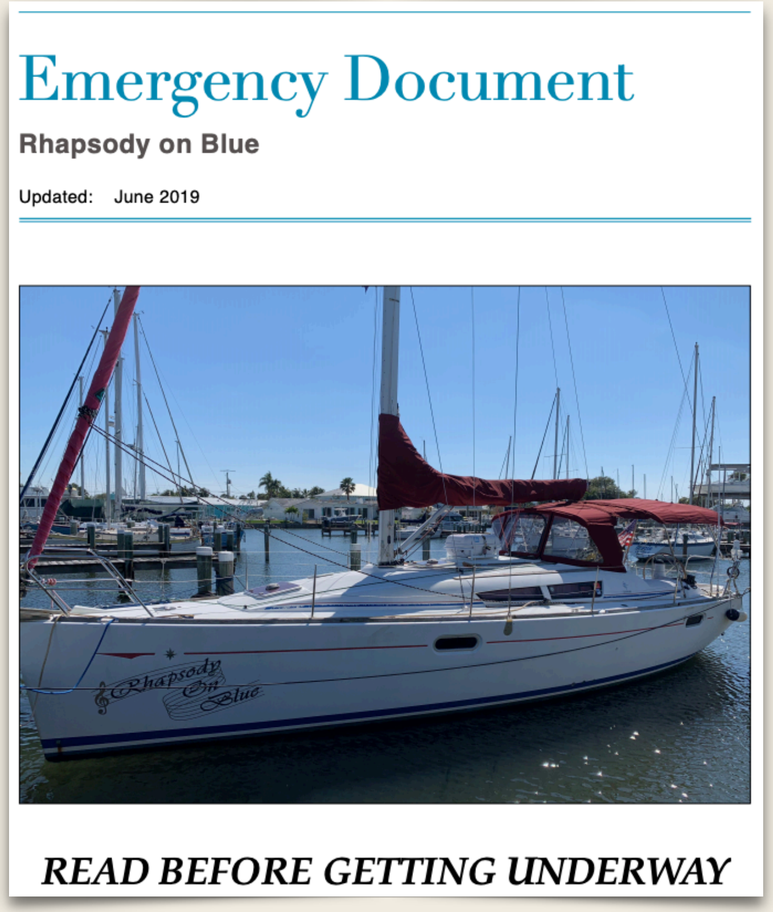
Why safety?

...in 2019 the USCG counted 4,168 accidents involving over 600 deaths, 2500 injuries and over $55 Million in property damage.

Boating is dangerous, Things can go wrong.
so... we need to *Be Prepared*.
to do this we utilize Risk Management and Risk Mitigation...

Our discussion today

- Risk Mitigation and Risk Management
- Principle areas of potential emergencies
- Swiss Cheese model for accident avoidance
- What can we utilize from big ship safety SOLAS
- Take Big Boat safety to the small boat
- GMDSS overview
- Safety planning and training on your boat
- Creating a safety plan for your boat and crew



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Basic Boating Safety

Risk Mitigation

We all accept some level of risk

We need to REDUCE that level of RISK as much as possible.

Risk Mitigation is the effort of Risk Management to reduce the chance of any given risk and the damage that might occur if that actual Risk occurs.

Risk Management

Risk management is the identification, evaluation, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability or impact of unfortunate events.

It basically means we look at each Risk, the probability of it happening, and the cost/effort associated with reducing the damage occurring if a given situation happens.

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Basic Boating Safety

Areas of Potential Risk on Board

Fire
Flooding
MOB
Injury to crew and guests
Damage / Equipment failure

Basic Boating Safety

Areas of Potential Risk

Fire

Fires are among the more dangerous, yet preventable, accidents that can occur onboard a boat.

Common location that Fires might start

Engine Room / Compartment
Galley
Stores
Laundry
Batteries / Electrical

Basic Boating Safety

Areas of Potential Risk

Flooding

Sinking sucks.

Common location of Flooding

Through Hulls / Seacocks
Stuffing Box / Shaft Seal
Damage from running aground
Hatches
Collisions / Allisions

Basic Boating Safety

Areas of Potential Risk

Man over board

1/2 of recreational boating accidents happen in Calm Waters!
All are unexpected.

Common causes of an MOB Situation.

Rough Weather
Trip / Falls
Focus
Sharp Turns (Powerboats)
Crew / Passenger caught off guard by movement of Boat
Getting on / off boat
Capsizing

Basic Boating Safety

Areas of Potential Risk

Injury

Injury to Crews or Guests

Common causes of an injury on board.

Alcohol is the leading contributing factor of accidents on board
Lack of Proper Safety gear
Focus
Running Aground
Crew / Passenger caught off guard by movement of Boat
Falls / Tripping
Line Handling

Basic Boating Safety

Areas of Potential Risk

Health

Crew/Guest sickness

Seasickness
Contaminated Food or Water
Existing / Underlying Conditions
Stings / Bites

Basic Boating Safety

Areas of Potential Risk

Damage

Stuff Happens...

Common causes of Damage to your Boat

Lack of Maintenance
Rough Weather / Storms
Docking / Anchoring
Wear and Tear
Faulty or incorrect Navigation
Faulty Electrical Systems
Bad Fuel / Overheating
Rig improperly tuned
Running aground
Collision / Allision

Basic Boating Safety

Areas of Potential Risk

Equipment Failure
Nothing lasts forever...

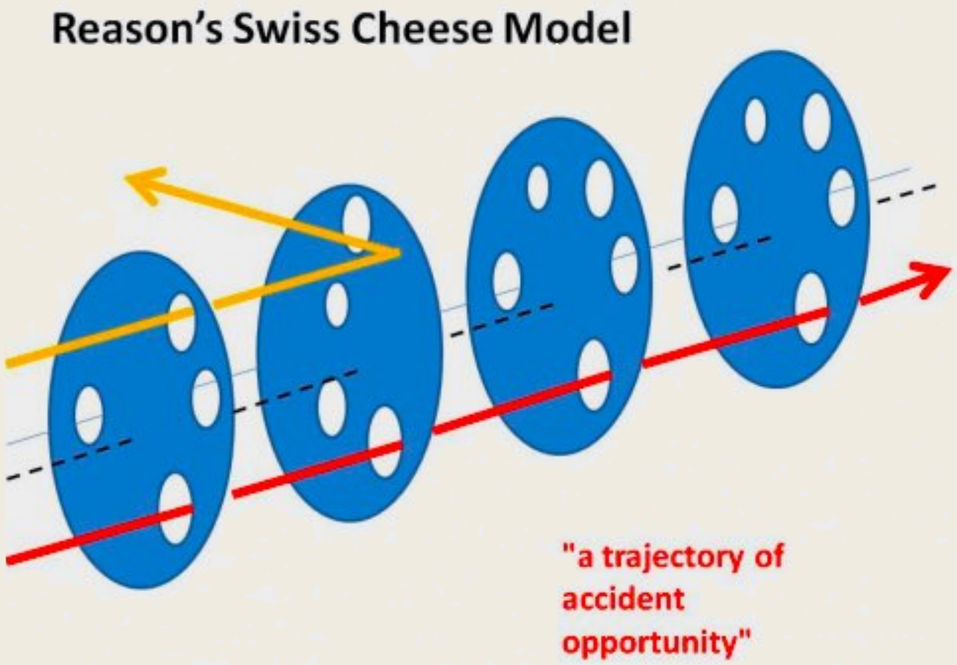
Common causes of Equipment Failure

Lack of Maintenance
Rough Weather / Storms
Docking / Anchoring
Wear and Tear / Old Equipment
Improper Equipment
Engine / Drive Train Failure
Rig improperly tuned
Collision / Allision

Basic Boating Safety

Risk Mitigation on “Big Boats”

James Reason’s “Swiss Cheese” model of accident Causation



Each barrier to an accident represents a defense against failure.

If all barriers are breeched the accident happens.

An example:
Barrier 1: Training
Barrier 2: Implementation
Barrier 3: Operation
Barrier 4: Safety Systems

If a flaw in each Barrier is breeched the accident can happen.

Basic Boating Safety

Risk Mitigation on “Big Boats”

Emergencies tend to get messy so DON’T PANIC

Most emergencies tend to be multi level and can easily get worse by mistake.

Training and planning is critical

Plan for emergencies and train to execute emergency response

You do what you practice.

You’re sailing on a nice day, you and the mate are on deck, with a couple steaks cooking in the galley by your cook, perfect day.

You’re guest on board is standing up on the bow taking a selfie...
A power boat blows past, the wake hits your boat.
and...
He slips and goes over the side. **MOB emergency**
You swing into action, you mate drop sails...
You swing the boat around in a perfect Williamson Turn... except the main wasn’t all the way down
and the mate is now unconscious on deck from being hit in the head by the boom as the boat heels abruptly. **MEDICAL emergency**
And, by the way, the cook, who didn’t know you were turning spills grease onto the propane stove, the fire flare up lighting the port hole curtain on fire. **FIRE emergency**
And no one was paying attention to the original problem, the MOB victim, now drifting away...

IF you had trained with the crew. you would have yelled MAN OVERBOARD, The cook would have immediately turned off the stove, grabbed the med kit, jumped on deck, throwing a life ring and maintaining eye contact with the MOB. The mate would have dropped the sails and signaled to you ready to turn and you would have announced commands prior to maneuvering. You would have made that perfect turn, the mate would be ready with recovery gear and the cook would be tacking the victim and ready to assist the mate with recovery while you navigated the boat, had situational awareness, signaled a MAYDAY if required and focused on recovery.

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Basic Boating Safety

Risk Mitigation on "Big Boats"

How do the big boats/ships mitigate risk and what can we learn from them?

SOLAS

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Basic Boating Safety

Risk Mitigation on "Big Boats"

SOLAS

Safety Of Life At Sea

The International Convention for the Safety of Life at Sea

SOLAS is an international maritime treaty which sets minimum safety standards in the construction, equipment and operation of merchant ships.

A large part of SOLAS is managed and enforced in the USA by the USCG

Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS

A focus on some SOLAS aspects that pertain to small boats

Fire Protection, Detection, and Extinction
Life-Saving Appliances and Arrangements
Radio Communications
Safety of Navigation
International Safety Management Code - ISM
Safety Management System - SMS
Training and Drills

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Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS - FIRE PROTECTION

Focuses on Engine Room, Galley, Flammable Stores, Laundry Spaces

Probability of Ignition
Fire Growth Potential
Smoke Generation and Potential Toxicity

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Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS - FIRE PROTECTION

Suppression of Fire
Control of Smoke spread
Containment of Fire

Notification to Crew and Passengers
Fire Fighting
Means of Escape

Instructions
on board drills
maintenance of Fire and Safety Equipment

Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS - FIRE PROTECTION

Approved Fire Fighting Equipment

https://cgmix.uscg.mil/Equipment/EquipmentSearch.aspx

Fire Detection Equipment
Backfire Flame Arresters
Fire Dampers
Fixed Fire Systems
Automated Ventilation Shutdowns
Fire Extinguishers
Fire Blankets
Fixed Fire Suppression Systems

Basic Boating Safety

Risk Mitigation on your boat

SOLAS - FIRE PROTECTION

Fire Detection, Suppression, Fire Fighting on your boat

Smoke Detectors, Carbon Monoxide Detectors
Fixed Suppression System in Engine Space
Fire Blanket in Galley
Limiting Fire Spread
Fire Extinguisher Type, Quantity, and Placement
Training and Drills

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Basic Boating Safety

Risk Mitigation on your boat

SOLAS - FIRE PROTECTION

Fire Detection, Suppression, Fire Fighting on your boat

Install smoke and Carbon Monoxide detectors in key locations
Create a Fire Emergency Plan and PRACTICE it with guests and crew
Inspect Electrical Systems quarterly
Don’t Overload Power Outlets
Select, Install and Maintain proper Fire Extinguishers
Inspect cooling and exhaust systems monthly
Do not leave portable heaters or open flames unattended on your boat

Basic Boating Safety

Risk Mitigation on your boat

SOLAS - FIRE PROTECTION

Fire Detection, Suppression, Fire Fighting on your boat

CLASS A - wood / paper
CLASS B - flammable liquid or gas
CLASS C - electrical fire
CLASS D - metal fire (titanium, magnesium, sodium, etc)
CLASS K - cooking fires (Oils, fats)

Basic Boating Safety

Risk Mitigation on your boat

SOLAS - FIRE PROTECTION

Fire Detection, Suppression, Fire Fighting on your boat

ABC POWDER fire extinguisher - Class A,B,C (leaves residue requiring cleanup)
CO2 fire extinguisher - Class B fires (no residue)
WET CHEMICAL fire extinguisher - Class K (cools and smothers)

USCG approved: less than 26 ft One UL 5-B Extinguisher - capable of putting out 5 square feet of Class B (liquid) fires. 2.5 to 5 lbs Dry Chem (Powder) ABC extinguisher

USCG approved: 26 to 40 ft Two UL 5-b or One UL 20-B extinguisher 20-B is a 10 lbs Dry Chem ABC extinguisher

USCG approved: 40 to 65 ft Three UL 5-b or One UL 20-B extinguisher + One UL 5-B 20-B is a 10 lbs Dry Chem ABC extinguisher

Basic Boating Safety

Risk Mitigation on your boat

Real World - FIRE PROTECTION

Fire Detection, Suppression, Fire Fighting on your boat

Rhapsody On Blue - 39 foot Sailboat

FOUR	5 lbs ABC Amerex or Ansul Dry Chem ABC extinguishers
ONE	Fire blanket
TWO	Smoke detectors
TWO	CO2 detectors

And don't forget about the Marina you are staying in.
Review the Firefighting and Alarm systems they may have.

Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS - LIFE SAVING

Approved Life Saving Equipment

https://www.dco.uscg.mil/CG-ENG-4/PFD/
https://www.dco.uscg.mil/CG-ENG-4/SurvivalEquipment/
https://www.dco.uscg.mil/CG-ENG-4/VDS/
https://www.dco.uscg.mil/CG-ENG-4/Thermal/
https://www.dco.uscg.mil/CG-ENG-4/Ladders/

Personal Floatation Devices (PFD)
Throwable Devices
Life Raft and Associated Gear
Visual Distress Signals (VDS)
Exposure Suits
Climbing Ladders

Basic Boating Safety

Risk Mitigation on your boat

SOLAS - LIFE SAVING

https://uscgboating.org/images/howtochoosetherightlifejacket_brochure.pdf

Personal Floatation Devices (PFD)

Type I PFD - Offshore (designed for rough weather, where rescue may take some time, turn an unconscious victim face up)
Type II PFD - Near Shore (calm waters, quick rescue)
Type III - Floatation Aids (non inflatable or inflatable vests)
Type IV - Throwable Devices (cushions, Horseshoe or Life rings)
Type V - Special Use (developed for special use, kayaking, wake boarding, wind surfing)

Type I PFD for each person on board - required for commercial vessels
Type II PFD for each person on board - required for recreational vessels
Type IV All boats 16' or over are required to at least ONE throwable device

Basic Boating Safety

Risk Mitigation on your boat

Real World - LIFE SAVING

Rhapsody On Blue carries

4 TYPE I PFDs
6 TYPE II PFDs
2 TYPE III Inflatable vests
1 TYPE III High end Inflatable vest (with waterproof PLB and Emergency Light attached)
2 TYPE IV Throwable devices

Jacklines on port and starboard
Everyone is clipped in offshore

Basic Boating Safety

Risk Mitigation on your boat

SOLAS - LIFE SAVING

Life Boat and Associated Gear for a smaller boat

Inflatable Liferaft
Size and Type is determined by Capacity and Rescue Time

Capacity - between 4 and 25 persons
Rescue Time - Less than 24 hours or Greater than 24 hours (also SOLAS requirements for offshore)

Your Dingy - as a last resort

Basic Boating Safety

Risk Mitigation on your boat

Real World - LIFE SAVING

Life Boat and Associated Gear for a smaller boat

Inflatable Liferaft
Size and Type is determined by Capacity and Rescue Time

Capacity - between 4 and 25 persons
Rescue Time - Less than 24 hours or Greater than 24 hours (also SOLAS requirements for offshore)

Your Dingy - as a last resort

Rhapsody On Blue carries
One 8 Person SOLAS approved Life Raft - stowed aft in compartment on transom
One 4 to 6 Person Life Raft - on deck with hydrostatic release
One Inflatable 4 person RIB w/motor (our Dingy) - stowed not inflated

Basic Boating Safety

Risk Mitigation on your boat

Medical Equipment

First Aid Kits / Oxygen / AED / Support documentation / Emergency Medical Support

First Aid Kit (basic first aid)
EMT kit (First Aid, CPR mask, Minor wounds, topicals, bandages/dressings, splints, irrigation kit, medical instruments, infection control, burn kits, etc
AED
Oxygen Bottle and mask, regulator
Support Documentation (How to manuals and documents)
Emergency Medical support contact information for your area of cruising (phone numbers for emergency response)

Recommended courses

Red Cross First Aid & CPR
Wilderness First Aid
USCG Basic First Aid
USCG Medical Care Provider

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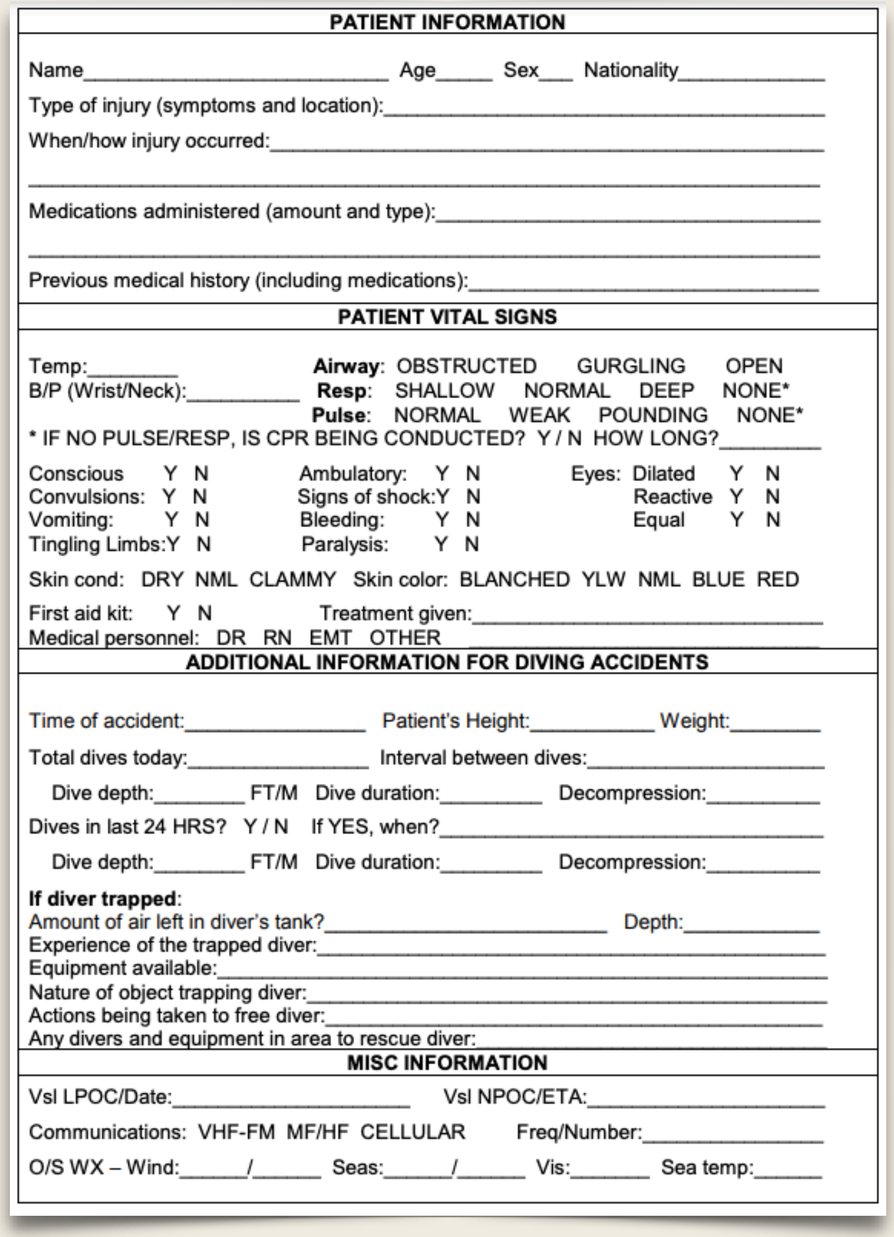
Basic Boating Safety

Risk Mitigation on your boat

Medical Support

PATIENT INFORMATION SHEET

IF it's NOT written down, IT DID NOT HAPPEN.



PATIENT INFORMATION

Name_____ Age____ Sex___ Nationality_____

Type of injury (symptoms and location):_____

When/how injury occurred:_____

_____

Medications administered (amount and type):_____

_____

Previous medical history (including medications):_____

PATIENT VITAL SIGNS

Temp:_____ **Airway**: OBSTRUCTED GURGLING OPEN

B/P (Wrist/Neck):_____ **Resp**: SHALLOW NORMAL DEEP NONE*

Pulse: NORMAL WEAK POUNDING NONE*

* IF NO PULSE/RESP, IS CPR BEING CONDUCTED? Y / N HOW LONG?_____

Conscious Y N Ambulatory: Y N Eyes: Dilated Y N

Convulsions: Y N Signs of shock:Y N Reactive Y N

Vomiting: Y N Bleeding: Y N Equal Y N

Tingling Limbs:Y N Paralysis: Y N

Skin cond: DRY NML CLAMMY Skin color: BLANCHED YLW NML BLUE RED

First aid kit: Y N Treatment given:_____

Medical personnel: DR RN EMT OTHER

ADDITIONAL INFORMATION FOR DIVING ACCIDENTS

Time of accident:_____ Patient's Height:_____ Weight:_____

Total dives today:_____ Interval between dives:_____

Dive depth:_____ FT/M Dive duration:_____ Decompression:_____

Dives in last 24 HRS? Y / N If YES, when?_____

Dive depth:_____ FT/M Dive duration:_____ Decompression:_____

If diver trapped:

Amount of air left in diver's tank?_____ Depth:_____

Experience of the trapped diver:_____

Equipment available:_____

Nature of object trapping diver:_____

Actions being taken to free diver:_____

Any divers and equipment in area to rescue diver:_____

MISC INFORMATION

Vsl LPOC/Date:_____ Vsl NPOC/ETA:_____

Communications: VHF-FM MF/HF CELLULAR Freq/Number:_____

O/S WX – Wind:_____/_____ Seas:_____/_____ Vis:_____ Sea temp:_____

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Basic Boating Safety

Risk Mitigation on your boat

Medical Support

Support Numbers

https://www.gwdocs.com/specialties/emergency-medicine/maritime/
https://www.whoi.edu/marine/PDF/08.4%20Medical%20Evacuations.pdf

GW Maritime Medical Access 202-715-4219
GW Maritime Medical Access 202-741-2936
Divers Alert Network 919-684-9111
Atlantic USCG SAR 757-398-6700
RCC Norfolk 757-398-6231
RCC Miami 305-415-6800
National Poison Control 800-222-1222
Medical Global Rescue 617-459-4200

Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS - Signals

Visual Distress Signals (VDS)

https://www.dco.uscg.mil/CG-ENG-4/VDS/

Red Hand Flares - 500 candle power
Signal Pistol for Red Parachute Flares
Hand Held Red Parachute Flare
Red Aerial Pyrotechnic Flare
SOLAS approved 15,000 candle power Hand Held Red Distress Flare
SOLAS approved 30,000 Candle power Red Parachute Flare

Floating Orange smoke signal
50 Second Orange smoke signal
15 Minute floating Orange distress signal
SOLAS approved 3 minute Orange smoke distress signal
SOLAS approved 15 minute Orange smoke distress signal

Orange Flag distress signal
Electric S-O-S distress light

Basic Boating Safety

Risk Mitigation on your boat

Real World - Signals

Visual Distress Signals (VDS)
USCG recommendations for Recreational boats

Boats under 16 ft
only required when operating sunset to sunrise

Boats 16 ft or over
1 Orange distress flag or 1 electric distress light
OR
3 handheld or Floating Orange smoke & 1 electric distress light
OR
3 combination Red Flares and hand held, meteor, or parachute flare

Rhapsody On Blue carries
6 Hand held Flares
1 Pistol system with 4 Red Parachute Flares and 4 Meteor Flares

Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS - RADIO COMMUNICATIONS

Approved Radio Equipment

https://www.law.cornell.edu/cfr/text/47/80.905

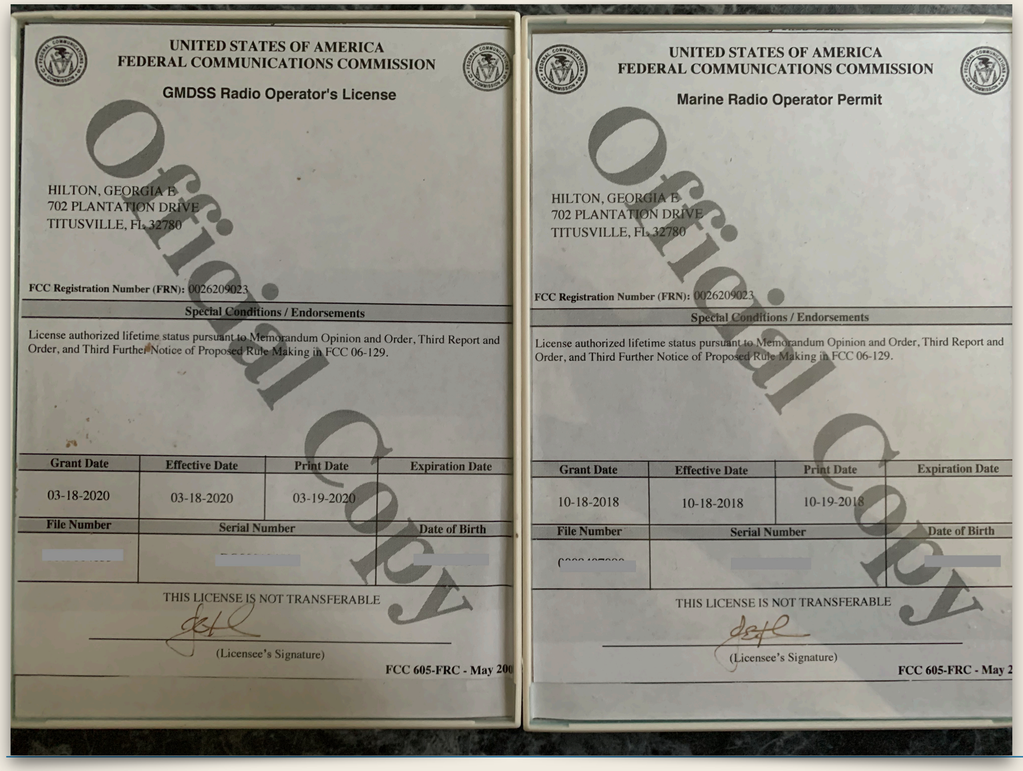
Each vessel must be equipped with a VHF-DSC radiotelephone capable of transmitting and receiving necessary to **communicate** with a public coast station or **U.S. Coast Guard** station serving the area in which the vessel is operating.

Basic Boating Safety

Risk Mitigation on your boat

SOLAS - RADIO COMMUNICATIONS

Make sure you get your FCC Ship's Radio License
and Your FCC Marine Radio operator license



UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

GMDSS Radio Operator's License

HILTON, GEORGIA B
702 PLANTATION DRIVE
TITUSVILLE, FL 32780

FCC Registration Number (FRN): 0026209023

Special Conditions / Endorsements

License authorized lifetime status pursuant to Memorandum Opinion and Order, Third Report and Order, and Third Further Notice of Proposed Rule Making in FCC 06-129.

Grant Date	Effective Date	Print Date	Expiration Date
03-18-2020	03-18-2020	03-19-2020	

File Number	Serial Number	Date of Birth

THIS LICENSE IS NOT TRANSFERABLE

(Licensee's Signature)

FCC 605-FRC - May 200

Official Copy

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

Marine Radio Operator Permit

HILTON, GEORGIA B
702 PLANTATION DRIVE
TITUSVILLE, FL 32780

FCC Registration Number (FRN): 0026209023

Special Conditions / Endorsements

License authorized lifetime status pursuant to Memorandum Opinion and Order, Third Report and Order, and Third Further Notice of Proposed Rule Making in FCC 06-129.

Grant Date	Effective Date	Print Date	Expiration Date
10-18-2018	10-18-2018	10-19-2018	

File Number	Serial Number	Date of Birth

THIS LICENSE IS NOT TRANSFERABLE

(Licensee's Signature)

FCC 605-FRC - May 2

Official Copy

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Call Sign	WDJ3849		Radio Service	SA - Ship Recreational or Voluntarily Equipped	
Status	Active		Auth Type	Regular	
Dates					
Grant	02/08/2017		Expiration	02/08/2027	
Effective	08/02/2018		Cancellation		
Licensee Information					
FRN	0026209023		Type	Individual	
Licensee Name					
hilton, georgia 702 PLANTATION DR TITUSVILLE, FL 32780 ATTN georgia hilton					
Ship Data					
License Type	Regular		Ships in Fleet		
Official Ship #	FL2419RG		General Class	Pleasure	
Ship Name	Rhapsody on Blue		Specific Class	Sloop	
Gross Tonnage			Working Series		
Length			MMSI	367771980	
Selective Call Digital		Selective Call INMARSAT		Accounting Authority Code	
Does ship make international voyages?				Yes	
Does ship communicate with foreign coast stations?				Yes	
Ship Radiotelegraph Station Requirements					
Required by Title III, Part II of the Communications Act?				No	
Required by Title III, Part II of the Communications Act or Safety Convention?				No	
Required by Title III, Part III of the Communications Act?				No	
Required by Great Lakes Radio Agreement?				No	
Required by the Vessel Bridge-to-Bridge Radiotelephone Act?				No	
Search and Rescue Information					
Radio Information					
EPIRB Identification Code	2DCC816A20FFBFF		Radio Installation(s) for Ship and Survival Craft	VHF, MF, HF, DSC, 406 MHZ EPIRB	
Vessel Information					
Maximum number of persons on vessel	8	Number of Rafts	2	Number of Lifeboats	0

Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS - RADIO COMMUNICATIONS

GMDSS

Global Maritime Distress and Safety System

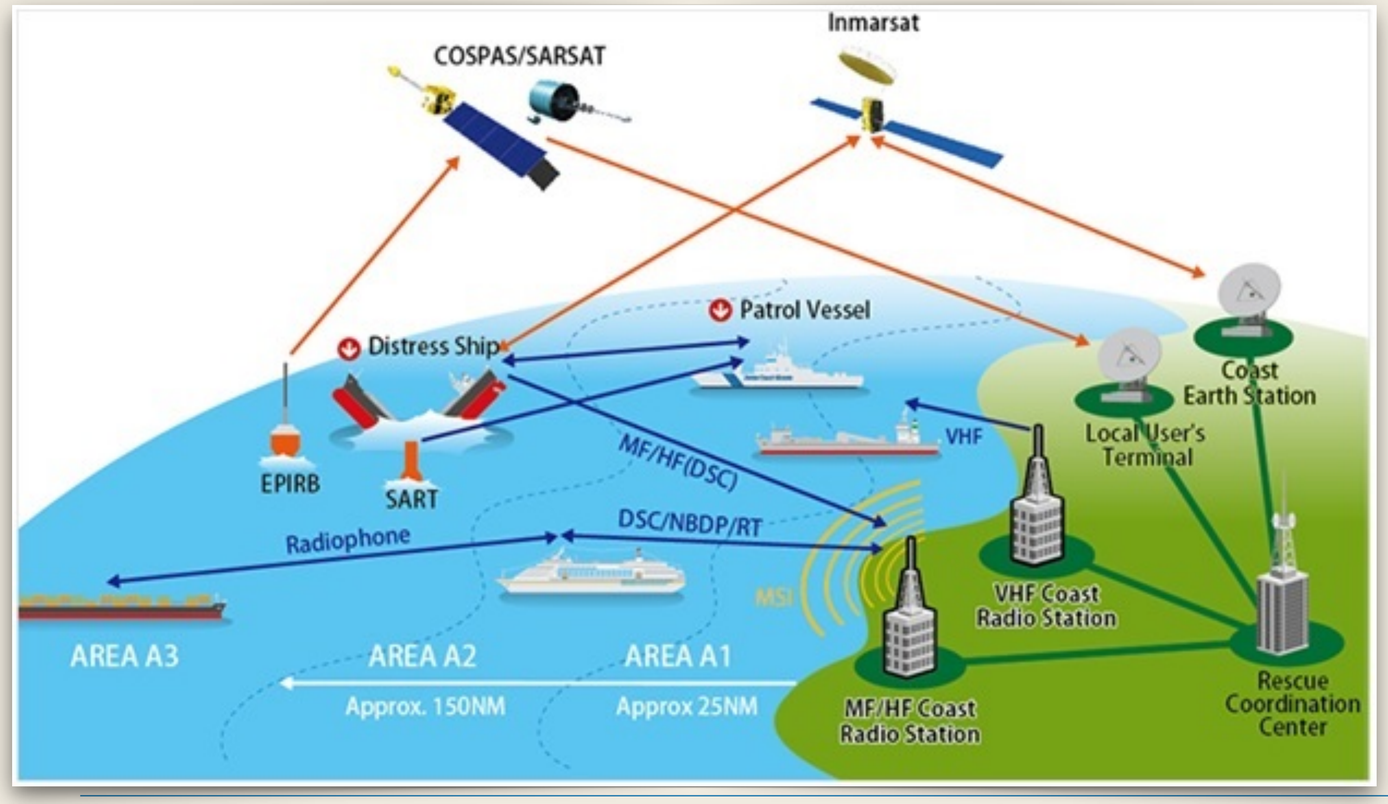
The Global Maritime Distress and Safety System is an internationally agreed-upon set of safety procedures, types of equipment, and communication protocols used to increase safety and make it easier to rescue distressed ships, boats and aircraft.

Area 1 - VHF coverage (30 Mhz to 300 Mhz)
Area 2 - excludes Area 1 and has MF coverage (300 Khz to 3 Mhz)
Area 3 - excludes Area 1 and 2 and has INMARSAT coverage (satellite Communications)
Area 4 - excludes Area 1, 2, and 3 - mostly the Arctic and Antarctic

Basic Boating Safety

Risk Mitigation on your boat

SOLAS - GMDSS



If you declare an emergency on your small boat

- Call a Mayday on VHF
- Call a Mayday on MF/HF
- Fire off your EPIRB

The EPIRB signal is picked up via COSPAS / SARSAT satellite systems and relayed to a Coast station. Data from your registration is added to the Mayday and the Coast Station alerts any near by GMDSS shipping and the USCG.

If the radio signal (VHF, MF, HF) is heard by a GMDSS equipped ship it relays the information directly to the Coast station or relays to another ship close enough relay to a Coast station. It also either responds to you directly or during the relay another GMDSS ship may hear the relay and respond directly to your location.

SAR authorities mange and coordinate the GMDSS calls and response to you.

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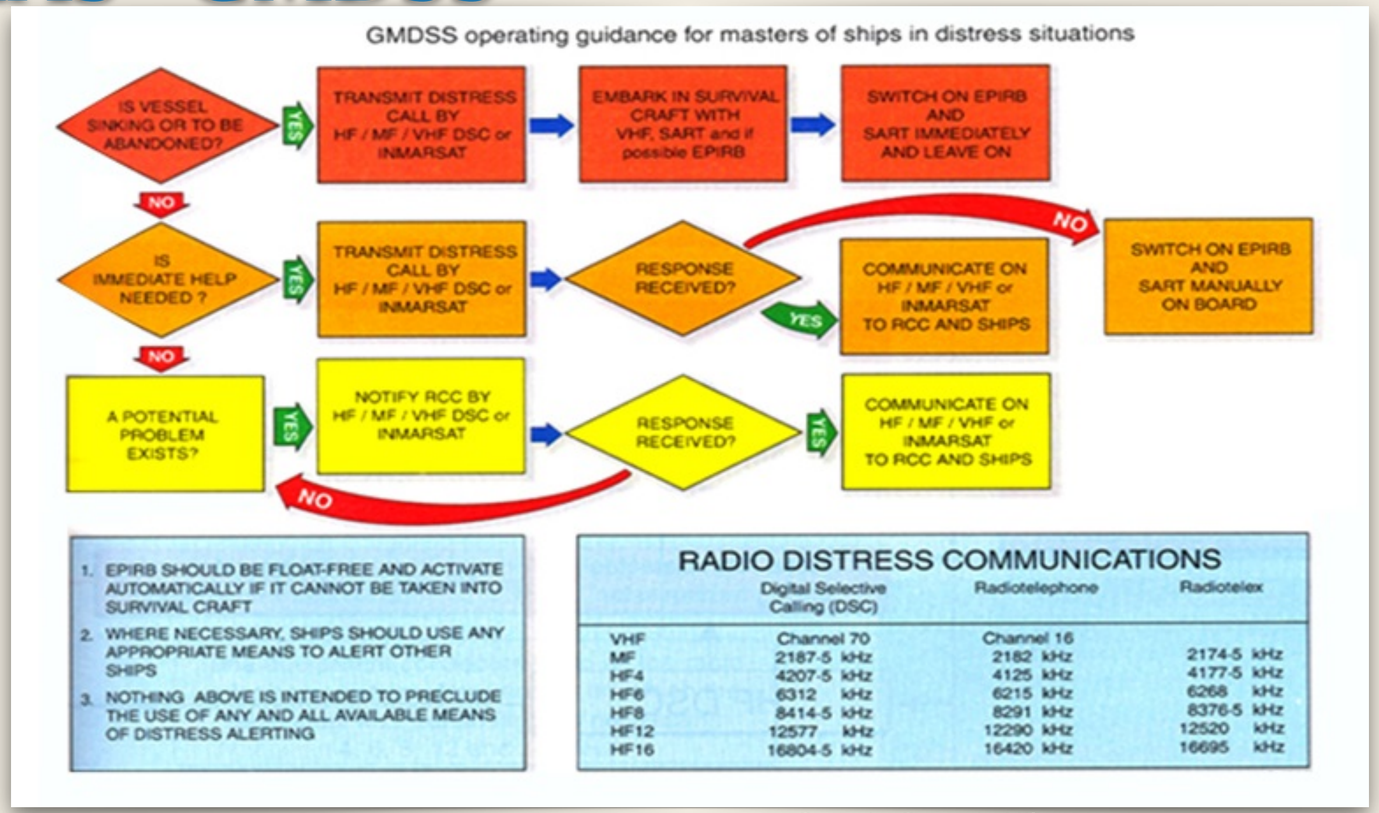
Basic Boating Safety

Risk Mitigation on your boat

SOLAS - GMDSS

Interacting with GMDSS on a small boat

VHF Radio Ch 16 DSC 70
Emergency VHF/GMDSS Survival Radio
MF Radio
HF Radio
406 Mhz EPIRB
(Emergency Position Indicating Radio Beacon)
GPIRB
(Global Position Indicating Rescue Beacon)
SART
(Search and Rescue Transponder)



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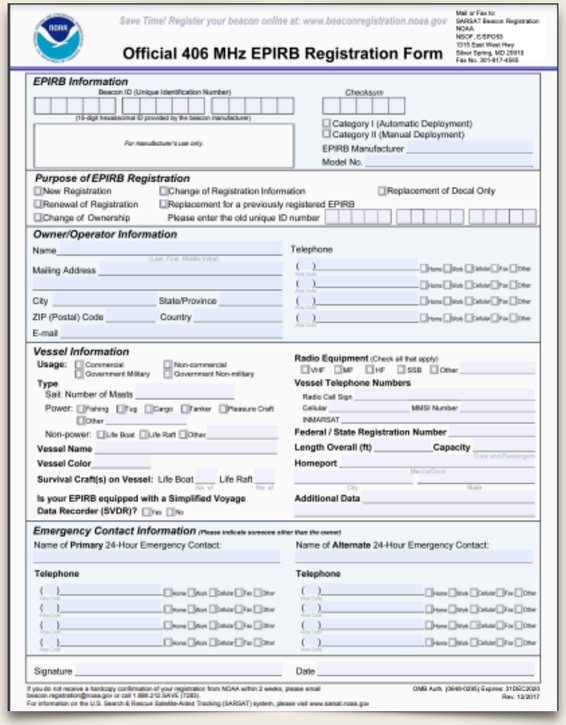
Basic Boating Safety

Risk Mitigation on your boat

Real World Assistance Access

Interacting with GMDSS on a small boat
VHF Radio Ch 16 DSC 70
Emergency VHF/GMDSS Survival Radio
MF Radio
HF Radio
EPIRB / GPIRB - Make sure you register it! https://beaconregistration.noaa.gov/RGDB/forms
SART



Save Time! Register your beacon online at: www.beaconregistration.noaa.gov

Mail or Fax to:
SARSAT Beacon Registration
NOAA
NSOF, E/SP/S3
1315 East West Hwy
Silver Spring, MD 20910
Fax No. 301-817-4566

Official 406 MHz EPIRB Registration Form

EPIRB Information
Beacon ID (Unique Identification Number) — Checksum
(15-digit hexadecimal ID provided by the beacon manufacturer)
For manufacturer's use only
☐ Category I (Automatic Deployment)
☐ Category II (Manual Deployment)
EPIRB Manufacturer
Model No.

Purpose of EPIRB Registration
☐ New Registration ☐ Change of Registration Information ☐ Replacement of Decal Only
☐ Renewal of Registration ☐ Replacement for a previously registered EPIRB
☐ Change of Ownership Please enter the old unique ID number

Owner/Operator Information
Name (Last, First, Middle Initial)
Mailing Address
City State/Province
ZIP (Postal) Code Country
E-mail
Telephone

Vessel Information
Usage: ☐ Commercial ☐ Non-commercial ☐ Government Military ☐ Government Non-military
Type
Sail: Number of Masts
Power: ☐ Fishing ☐ Tug ☐ Cargo ☐ Tanker ☐ Pleasure Craft ☐ Other
Non-power: ☐ Life Boat ☐ Life Raft ☐ Other
Vessel Name
Vessel Color
Survival Craft(s) on Vessel: Life Boat (No. of) Life Raft (No. of)
Is your EPIRB equipped with a Simplified Voyage Data Recorder (SVDR)? ☐ Yes ☐ No
Radio Equipment (Check all that apply): ☐ VHF ☐ MF ☐ HF ☐ SSB ☐ Other
Vessel Telephone Numbers
Radio Call Sign
Cellular MMSI Number
INMARSAT
Federal / State Registration Number
Length Overall (ft) Capacity (Crew and Passengers)
Homeport (Marina/Dock, City, State)
Additional Data

Emergency Contact Information (Please indicate someone other than the owner)
Name of **Primary** 24-Hour Emergency Contact:
Name of **Alternate** 24-Hour Emergency Contact:
Telephone
Telephone

Signature
Date

If you do not receive a hardcopy confirmation of your registration from NOAA within 2 weeks, please email beacon.registration@noaa.gov or call 1.888.212.SAVE (7283).
For information on the U.S. Search & Rescue Satellite-Aided Tracking (SARSAT) system, please visit www.sarsat.noaa.gov

OMB Auth. (0648-0295) | Expires: 31DEC2020
Rev. 12/2017

Rhapsody On Blue carries
2 VHF radios, one with DSC calling
2 VHF emergency handheld radios with GPS and DSC calling
1 GPIRB (EPIRB with GPS registered with NOAA)
1 PLB (Personal locator Beacon registered with NOAA)

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Basic Boating Safety

Risk Mitigation on “Big Boats”

SOLAS - SAFETY OF NAVIGATION

SOLAS part V is a must read for watch keepers on ANY sized boat.
Officially applies to large ships but...

Charts and Chart updates (Electronic and Paper)
ECDIS (Electronic Chart Display and Information System) (MFDs / Chartplotters /
Computer based Navigation
Radio Communications
Bridge Watch Keeping
Ships Logs
SAR (Search and Rescue)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/343175/solas_v_on_safety_of_navigation.pdf

Captain Georgia Hilton

Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY OF NAVIGATION

Situational Awareness!

Keep a sharp lookout at all times
Keep your charts and electronic charts up to date
Maintain a navigational log book
Maintain a general ships log book
Maintain up to date knowledge of weather
Be aware of tides and currents
Understand and utilize COLREGS
Plot you position regularly

What does regularly actually mean?

off shore you can plot over long periods of time
Near coastal plot your position based on time to nearest danger
Coming into port large ships plot their position every 60 seconds

Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY OF NAVIGATION

Situational Awareness!

Electronic Navigation
RADAR is the best Electronic system you have for navigation
... if you know how to use it.
ARPA or MARPA
(Automatic RADAR plotting Aid, Mini Automatic RADAR plotting Aid)
Sea Stabilized, North up or Heads up.

Collision Avoidance
Plotting your position
Weather Data
Guard Zones

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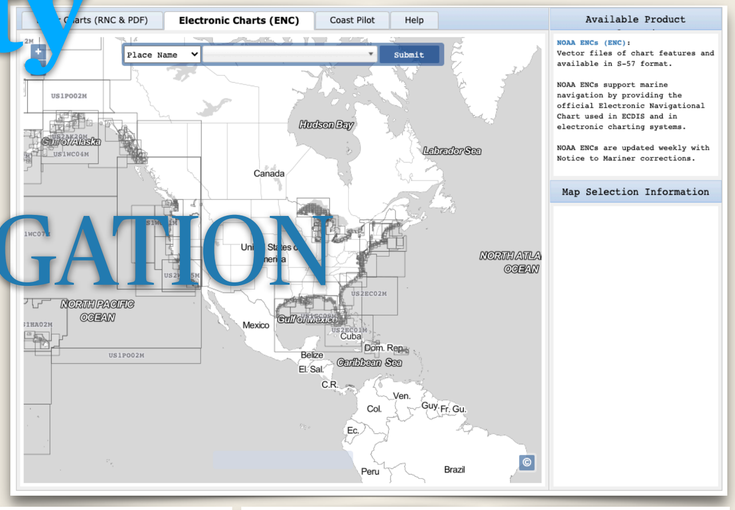
Basic Boating Safety

Risk Mitigation on your boat



Real world - SAFETY OF NAVIGATION

Situational Awareness!

Recommended Navigational Assistance Documentation

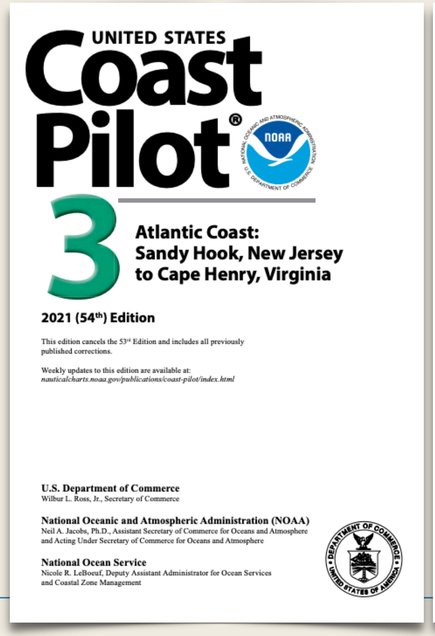
Up to date Tide Tables & Current Tables
Coast Pilot
Light List
Paper Charts (NOAA download)

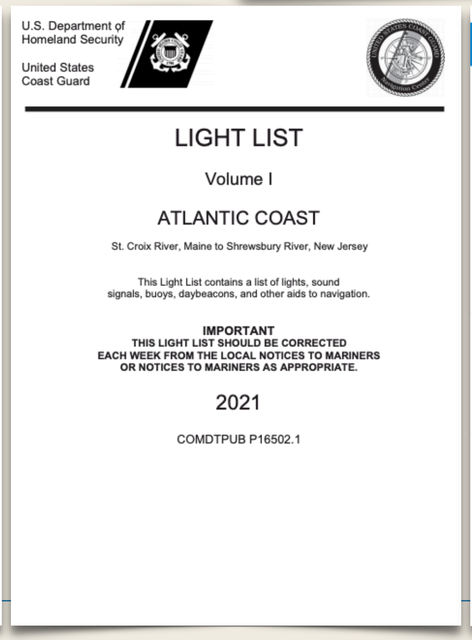
https://www.nauticalcharts.noaa.gov/

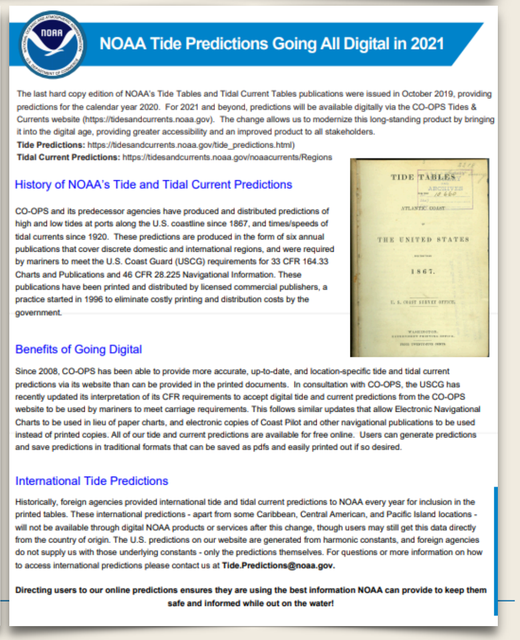
https://nauticalcharts.noaa.gov/publications/coast-pilot/index.html

https://tidesandcurrents.noaa.gov/tide_predictions.html

https://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml


UNITED STATES
Coast Pilot®
3
Atlantic Coast:
Sandy Hook, New Jersey
to Cape Henry, Virginia
2021 (54th) Edition
This edition cancels the 53rd Edition and includes all previously published corrections.
Weekly updates to this edition are available at:
nauticalcharts.noaa.gov/publications/coast-pilot/index.html
U.S. Department of Commerce
Wilbur L. Ross, Jr., Secretary of Commerce
National Oceanic and Atmospheric Administration (NOAA)
Neil A. Jacobs, Ph.D., Assistant Secretary of Commerce for Oceans and Atmosphere and Acting Under Secretary of Commerce for Oceans and Atmosphere
National Ocean Service
Nicole R. LeBoeuf, Deputy Assistant Administrator for Ocean Services and Coastal Zone Management


U.S. Department of Homeland Security
United States Coast Guard
LIGHT LIST
Volume I
ATLANTIC COAST
St. Croix River, Maine to Shrewsbury River, New Jersey
This Light List contains a list of lights, sound signals, buoys, daybeacons, and other aids to navigation.
IMPORTANT
THIS LIGHT LIST SHOULD BE CORRECTED EACH WEEK FROM THE LOCAL NOTICES TO MARINERS OR NOTICES TO MARINERS AS APPROPRIATE.
2021
COMDTPUB P16502.1


NOAA Tide Predictions Going All Digital in 2021
The last hard copy edition of NOAA's Tide Tables and Tidal Current Tables publications were issued in October 2019, providing predictions for the calendar year 2020. For 2021 and beyond, predictions will be available digitally via the CO-OPS Tides & Currents website (https://tidesandcurrents.noaa.gov). The change allows us to modernize this long-standing product by bringing it into the digital age, providing greater accessibility and an improved product to all stakeholders.
Tide Predictions: https://tidesandcurrents.noaa.gov/tide_predictions.html)
Tidal Current Predictions: https://tidesandcurrents.noaa.gov/noaacurrents/Regions
History of NOAA's Tide and Tidal Current Predictions
CO-OPS and its predecessor agencies have produced and distributed predictions of high and low tides at ports along the U.S. coastline since 1867, and times/speeds of tidal currents since 1920. These predictions are produced in the form of six annual publications that cover discrete domestic and international regions, and were required by mariners to meet the U.S. Coast Guard (USCG) requirements for 33 CFR 164.33 Charts and Publications and 46 CFR 28.225 Navigational Information. These publications have been printed and distributed by licensed commercial publishers, a practice started in 1996 to eliminate costly printing and distribution costs by the government.
Benefits of Going Digital
Since 2008, CO-OPS has been able to provide more accurate, up-to-date, and location-specific tide and tidal current predictions via its website than can be provided in the printed documents. In consultation with CO-OPS, the USCG has recently updated its interpretation of its CFR requirements to accept digital tide and current predictions from the CO-OPS website to be used by mariners to meet carriage requirements. This follows similar updates that allow Electronic Navigational Charts to be used in lieu of paper charts, and electronic copies of Coast Pilot and other navigational publications to be used instead of printed copies. All of our tide and current predictions are available for free online. Users can generate predictions and save predictions in traditional formats that can be saved as pdfs and easily printed out if so desired.
International Tide Predictions
Historically, foreign agencies provided international tide and tidal current predictions to NOAA every year for inclusion in the printed tables. These international predictions - apart from some Caribbean, Central American, and Pacific Island locations - will not be available through digital NOAA products or services after this change, though users may still get this data directly from the country of origin. The U.S. predictions on our website are generated from harmonic constants, and foreign agencies do not supply us with those underlying constants - only the predictions themselves. For questions or more information on how to access international predictions please contact us at Tide.Predictions@noaa.gov.
Directing users to our online predictions ensures they are using the best information NOAA can provide to keep them safe and informed while out on the water!

Captain Georgia Hilton

Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

Properly Equipped Boat / Tools and repair parts
Fire detection / Fire fighting equipment
MOB safety Gear / PFDs / Throwable devices
Harnesses / Jacklines / Attachment Points
EPIRB / GPIRB / PLB /
Life raft
Communications Equipment
Safe Navigation with redundancy and proper operations

Training and Drills with crew and guests

Pre Departure Safety Chat

DON'T PANIC document for your boat

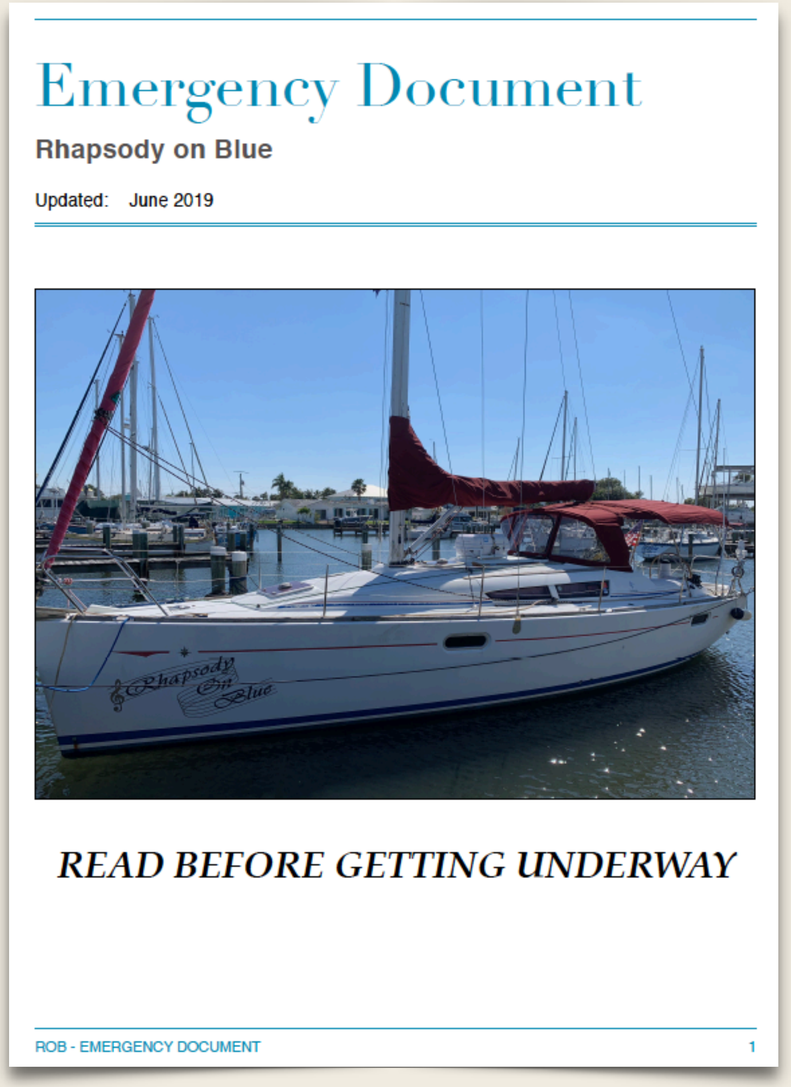
Captain Georgia Hilton

Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat



Captain Georgia Hilton

Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON’T PANIC document for your boat

OVERVIEW

Captain Georgia Hilton

DON’T PANIC

Ok, the proverbial shit has hit the fan. ***First… Don't Panic***. This document provides you with everything you need to find MEDICAL, FIRE, SINKING, MOB or other emergency materials on board the *Rhapsody on Blue*.

Rhapsody’s Basic Cabin Layout

There are 6 BASIC areas of Emergency Gear in this document.

- SOMEONE IS HURT - MEDICAL EMERGENCY
- THINGS ARE ON FIRE… LITERALLY. - FIRE EMERGENCY
- THE BOAT IS SINKING - BUOYANCY EMERGENCY
- THE REST OF THE BAD STUFF - GENERAL EMERGENCY
- UNEXPECTED SWIM BREAKS - MOB EMERGENCY

I’ve broken this down so you can use this guide quickly and efficiently if you are now in charge or simply assisting. First, we are assuming you are a guest or a regular crew member of Rhapsody and you are reading this prior to getting underway.

Good news, Rhapsody is pretty well kitted out for emergencies, as I am a bit of a safety fanatic. There are Fire extinguishers and gear to fight fires on board. There is a couple first aid kits, and a good EMT quality medical kit. There’s a well stocked tool kit, and spares kit. There’s gear and parts to patch holes and there’s gear to recover a man overboard as well.

While you read the rest of the document, walk around and find all the great safety stuff mounted in plain sight or hidden away in storage so, when the shit does hit the fan, you’ll have a good idea of where to find things and what to do.

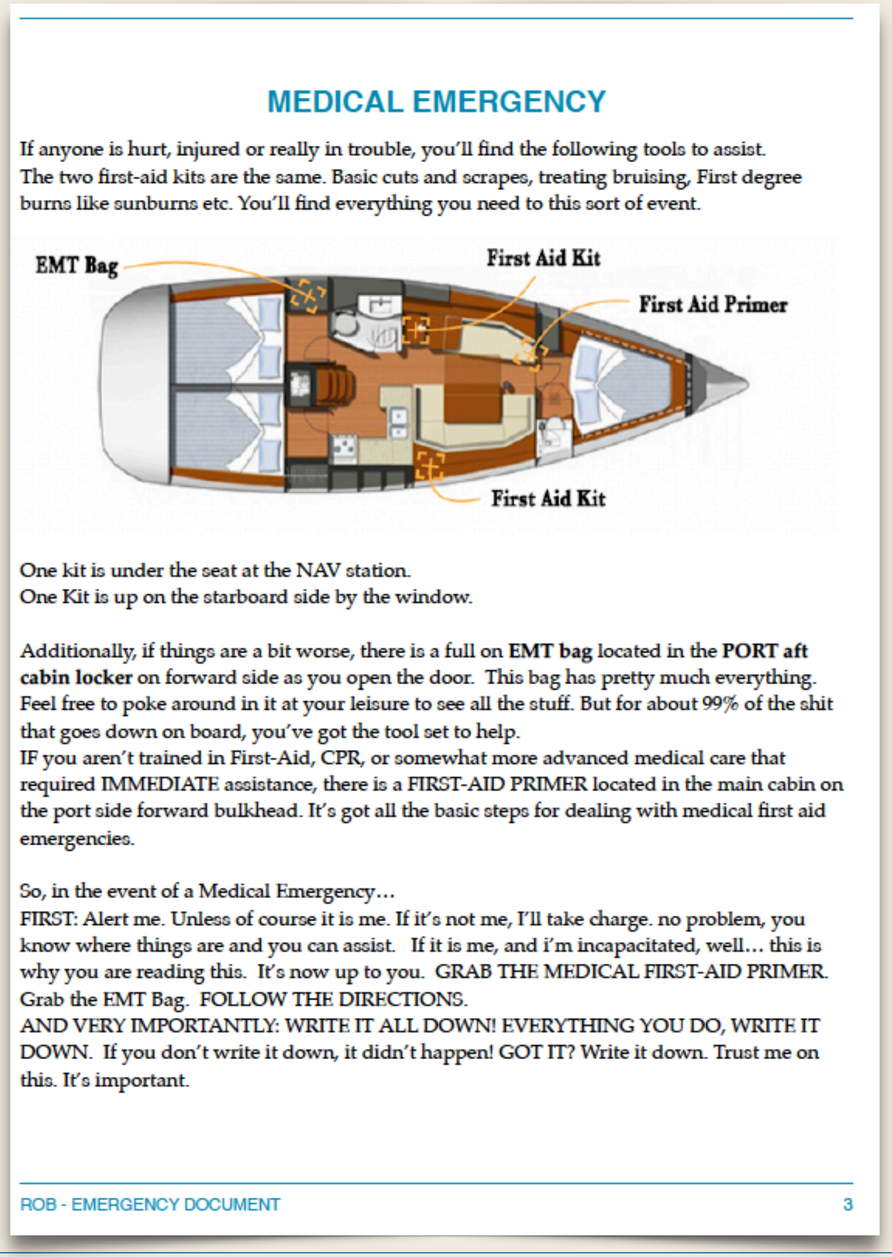
Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Medical



MEDICAL EMERGENCY

If anyone is hurt, injured or really in trouble, you'll find the following tools to assist.
The two first-aid kits are the same. Basic cuts and scrapes, treating bruising, First degree burns like sunburns etc. You'll find everything you need to this sort of event.

One kit is under the seat at the NAV station.
One Kit is up on the starboard side by the window.

Additionally, if things are a bit worse, there is a full on **EMT bag** located in the **PORT aft cabin locker** on forward side as you open the door. This bag has pretty much everything. Feel free to poke around in it at your leisure to see all the stuff. But for about 99% of the shit that goes down on board, you've got the tool set to help.
IF you aren't trained in First-Aid, CPR, or somewhat more advanced medical care that required IMMEDIATE assistance, there is a FIRST-AID PRIMER located in the main cabin on the port side forward bulkhead. It's got all the basic steps for dealing with medical first aid emergencies.

So, in the event of a Medical Emergency…
FIRST: Alert me. Unless of course it is me. If it's not me, I'll take charge. no problem, you know where things are and you can assist. If it is me, and i'm incapacitated, well… this is why you are reading this. It's now up to you. GRAB THE MEDICAL FIRST-AID PRIMER. Grab the EMT Bag. FOLLOW THE DIRECTIONS.
AND VERY IMPORTANTLY: WRITE IT ALL DOWN! EVERYTHING YOU DO, WRITE IT DOWN. If you don't write it down, it didn't happen! GOT IT? Write it down. Trust me on this. It's important.

Captain Georgia Hilton

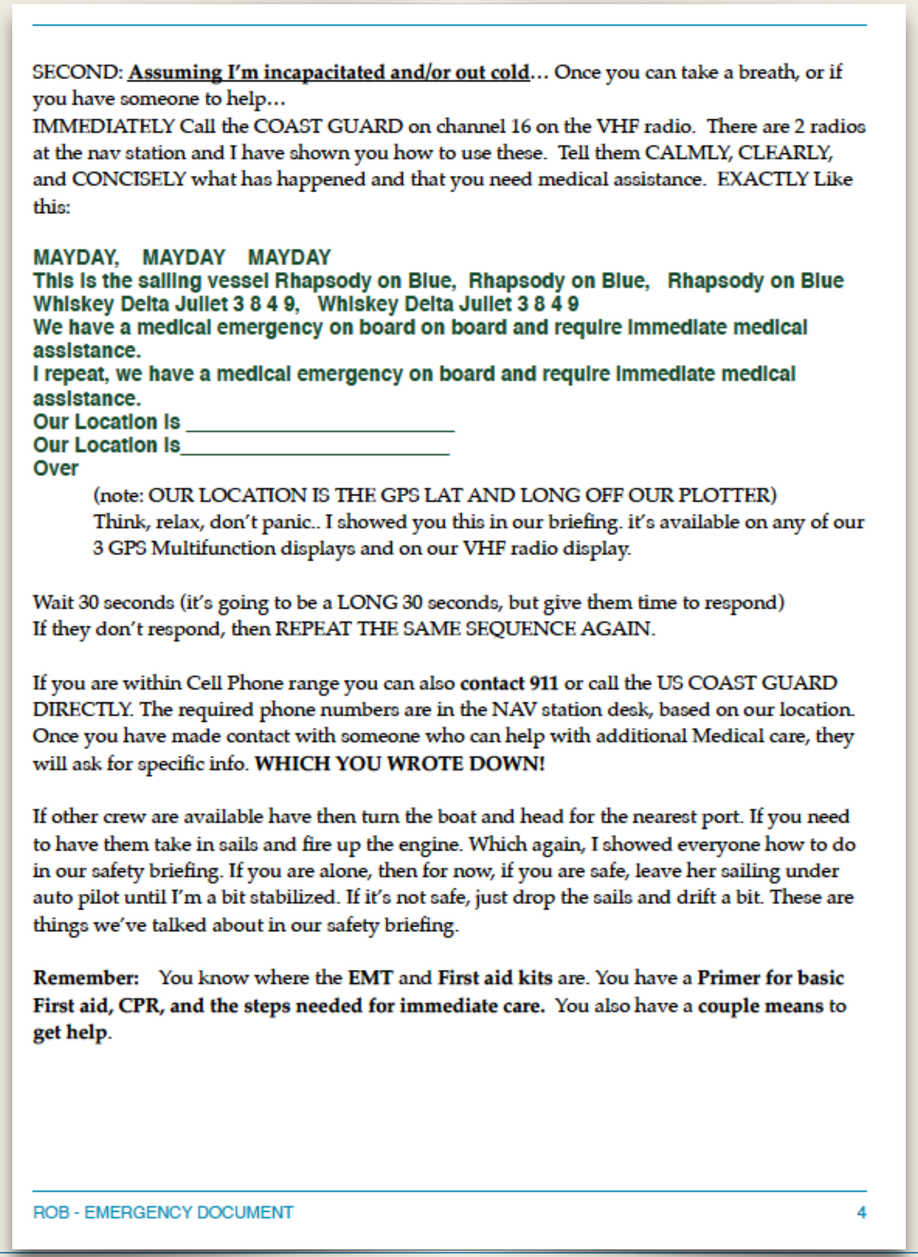
Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Medical and Medical Mayday



SECOND: **Assuming I'm incapacitated and/or out cold**… Once you can take a breath, or if you have someone to help…
IMMEDIATELY Call the COAST GUARD on channel 16 on the VHF radio. There are 2 radios at the nav station and I have shown you how to use these. Tell them CALMLY, CLEARLY, and CONCISELY what has happened and that you need medical assistance. EXACTLY Like this:

MAYDAY, MAYDAY MAYDAY
This is the sailing vessel Rhapsody on Blue, Rhapsody on Blue, Rhapsody on Blue
Whiskey Delta Juliet 3 8 4 9, Whiskey Delta Juliet 3 8 4 9
We have a medical emergency on board on board and require immediate medical assistance.
I repeat, we have a medical emergency on board and require immediate medical assistance.
Our Location is _____
Our Location is_____
Over

(note: OUR LOCATION IS THE GPS LAT AND LONG OFF OUR PLOTTER)
Think, relax, don't panic.. I showed you this in our briefing. it's available on any of our 3 GPS Multifunction displays and on our VHF radio display.

Wait 30 seconds (it's going to be a LONG 30 seconds, but give them time to respond)
If they don't respond, then REPEAT THE SAME SEQUENCE AGAIN.

If you are within Cell Phone range you can also **contact 911** or call the US COAST GUARD DIRECTLY. The required phone numbers are in the NAV station desk, based on our location. Once you have made contact with someone who can help with additional Medical care, they will ask for specific info. **WHICH YOU WROTE DOWN!**

If other crew are available have then turn the boat and head for the nearest port. If you need to have them take in sails and fire up the engine. Which again, I showed everyone how to do in our safety briefing. If you are alone, then for now, if you are safe, leave her sailing under auto pilot until I'm a bit stabilized. If it's not safe, just drop the sails and drift a bit. These are things we've talked about in our safety briefing.

Remember: You know where the **EMT** and **First aid kits** are. You have a **Primer for basic First aid, CPR, and the steps needed for immediate care.** You also have a **couple means** to **get help**.

ROB - EMERGENCY DOCUMENT 4

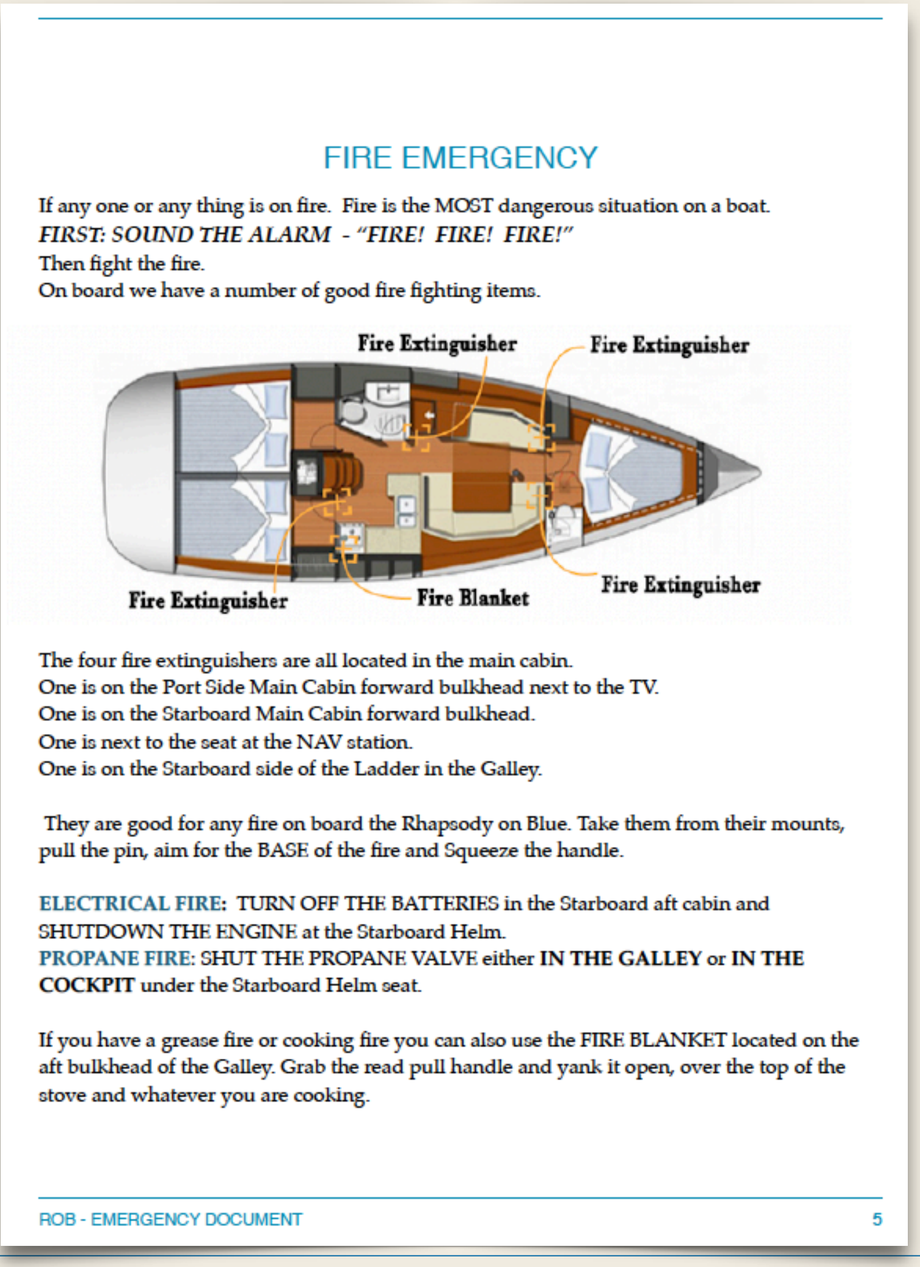
Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

General Fire
Electrical Fire
Propane Fire



FIRE EMERGENCY

If any one or any thing is on fire. Fire is the MOST dangerous situation on a boat.
FIRST: SOUND THE ALARM - "FIRE! FIRE! FIRE!"
Then fight the fire.
On board we have a number of good fire fighting items.

The four fire extinguishers are all located in the main cabin.
One is on the Port Side Main Cabin forward bulkhead next to the TV.
One is on the Starboard Main Cabin forward bulkhead.
One is next to the seat at the NAV station.
One is on the Starboard side of the Ladder in the Galley.

They are good for any fire on board the Rhapsody on Blue. Take them from their mounts, pull the pin, aim for the BASE of the fire and Squeeze the handle.

ELECTRICAL FIRE: TURN OFF THE BATTERIES in the Starboard aft cabin and SHUTDOWN THE ENGINE at the Starboard Helm.
PROPANE FIRE: SHUT THE PROPANE VALVE either **IN THE GALLEY** or **IN THE COCKPIT** under the Starboard Helm seat.

If you have a grease fire or cooking fire you can also use the FIRE BLANKET located on the aft bulkhead of the Galley. Grab the read pull handle and yank it open, over the top of the stove and whatever you are cooking.

ROB - EMERGENCY DOCUMENT 5

Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

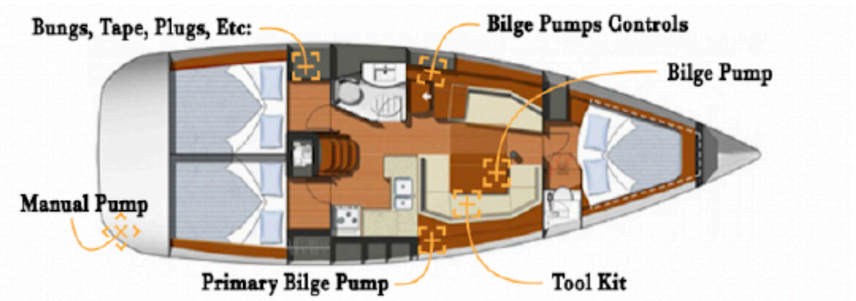
Taking on Water
Bilge Pump Operations

Captain Georgia Hilton

We also have buckets stowed under the Port Cockpit seat with lines attached to grab sea water and dump it onto a fire if required. (DO NOT DO THIS WHILE THE BOAT MOVING… we do not need an MOB situation in the middle of a fire)
Also remember, in port, you can also send someone for a hose and CALL 911 !

BUOYANCY EMERGENCY

Damn it, we're sinking, or at least taking on water… Remember… ***Don't Panic.***
Yes, a boat is supposed to be in the water… The water is not supposed to be in the boat.
But, we have equipment and abilities to stop the water from coming into the boat and remove the water already there.



More than likely we will not sink…So let's focus on not sinking.

REMOVING THE OFFENDING WATER

There are 4 different pumps on board Rhapsody on Blue we can use to remove any water that has found its way in.

One, The primary bilge pump. This is a high volume diaphragm pump located just above the water line on the starboard side of the boat behind the settee just forward of the Galley. The control for this pump is at the Navigation station and labeled Bilge Pump. It can operate on automatic or manual or be turned off. I normally leave it set for automatic operation. In an emergency you can just leave it running in the ON position.

Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Taking on Water
Using the Bilge pumps
Plugging a Leak

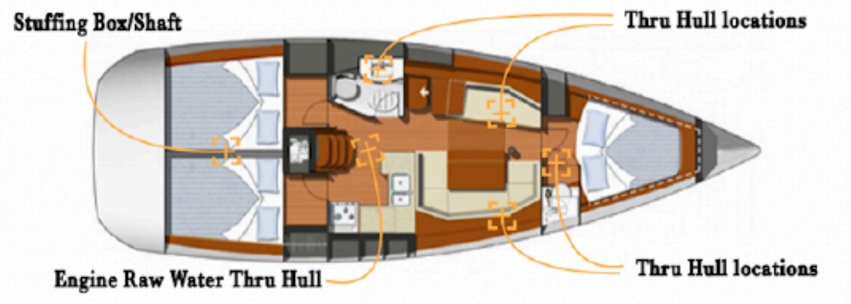
Captain Georgia Hilton

Two, There is a secondary bilge pump located in the bilge itself and operates the same way as the Primary. Its controls are at the navigation station as well, on a standalone switch to the right of the main panel.
Three, There is a seriously good manual bilge pump located in the cockpit at the aft end of the Port side seat. Pull the grey handle and start pumping. Easy peasy.

Four. If need be you can turn the engine into a bilge pump as well. Open the floor panel at the base of the ladder. You will see a single Thru hull with a valve. WITH THE ENGINE OFF. Close the valve (RED HANDLE). Then unscrew the retaining ring on the hose leading from the valve. Remove that hose from the valve and stick in where the water is. Keep the valve closed and Start the engine… This is the raw water intake for the engine and it will suck up any water pretty quickly. Just do NOT leave the engine running if there is no water to suck. Otherwise your day will suck as you have now damaged the engine on top of everything else.

PLUGGING THE LEAK

In order to plug the leak, we need to find it. More than likely, we have a problem with a thru hull blowing out. So let's start there. These are the locations of places water might try to enter.



Additionally, you can check the bolts on the Keel and check the Thru hull/Stuffing Box for the Shaft. If it's none of these, check around the engine and look at the rudder post. The rudder post is located aft. You can access it via an access panel in the Starboard aft cabin, way in the stern of the cabin…Remove that and you can see the rudder post. To check the Keel bolts, simply remove the main cabin table, lift the flooring and you can see all the bolts.

Basic Boating Safety

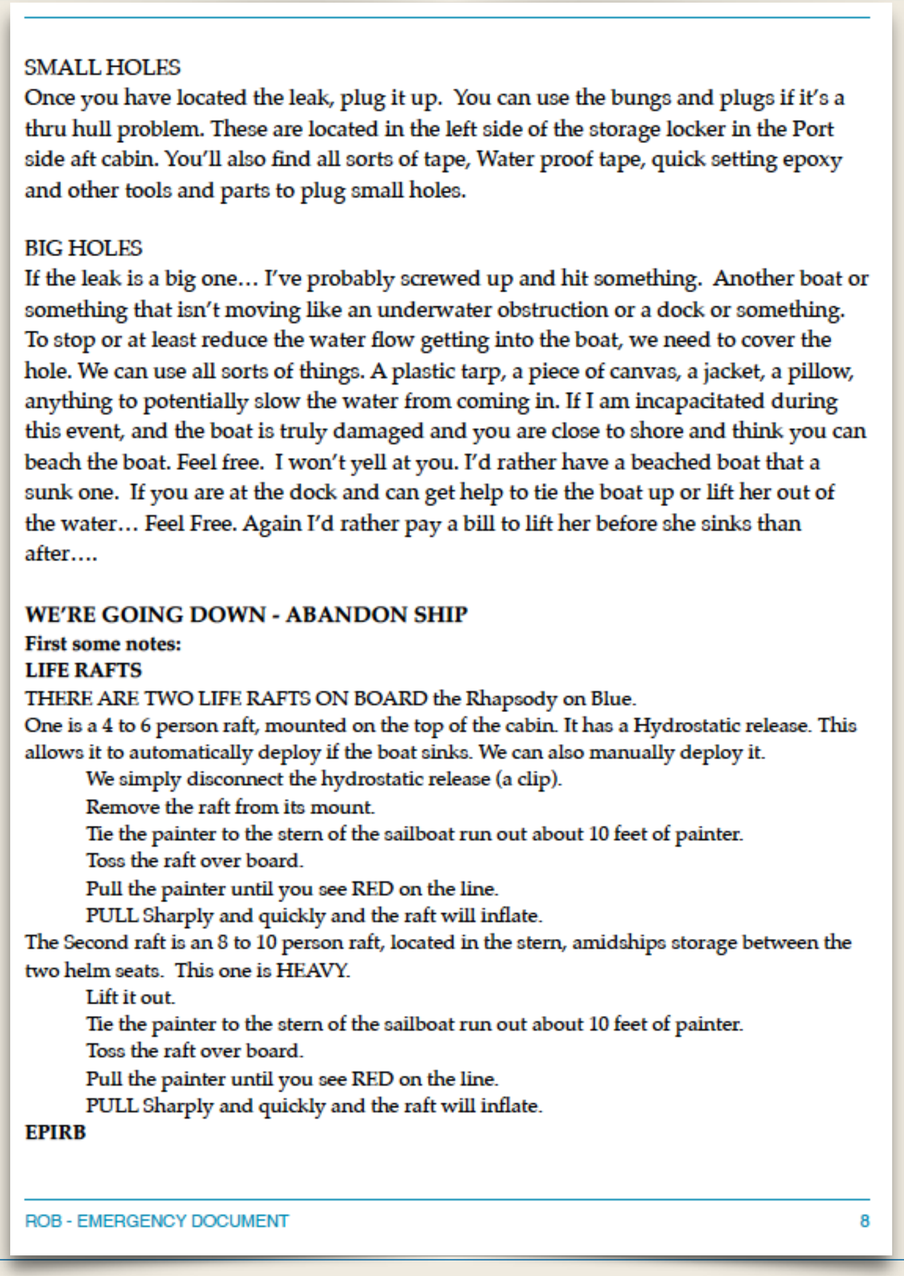
Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Taking on Water
plugging holes
preparing to Abandoning Ship

Captain Georgia Hilton



SMALL HOLES

Once you have located the leak, plug it up. You can use the bungs and plugs if it's a thru hull problem. These are located in the left side of the storage locker in the Port side aft cabin. You'll also find all sorts of tape, Water proof tape, quick setting epoxy and other tools and parts to plug small holes.

BIG HOLES

If the leak is a big one… I've probably screwed up and hit something. Another boat or something that isn't moving like an underwater obstruction or a dock or something. To stop or at least reduce the water flow getting into the boat, we need to cover the hole. We can use all sorts of things. A plastic tarp, a piece of canvas, a jacket, a pillow, anything to potentially slow the water from coming in. If I am incapacitated during this event, and the boat is truly damaged and you are close to shore and think you can beach the boat. Feel free. I won't yell at you. I'd rather have a beached boat that a sunk one. If you are at the dock and can get help to tie the boat up or lift her out of the water… Feel Free. Again I'd rather pay a bill to lift her before she sinks than after….

WE'RE GOING DOWN - ABANDON SHIP

First some notes:

LIFE RAFTS

THERE ARE TWO LIFE RAFTS ON BOARD the Rhapsody on Blue.

One is a 4 to 6 person raft, mounted on the top of the cabin. It has a Hydrostatic release. This allows it to automatically deploy if the boat sinks. We can also manually deploy it.

- We simply disconnect the hydrostatic release (a clip).
- Remove the raft from its mount.
- Tie the painter to the stern of the sailboat run out about 10 feet of painter.
- Toss the raft over board.
- Pull the painter until you see RED on the line.
- PULL Sharply and quickly and the raft will inflate.

The Second raft is an 8 to 10 person raft, located in the stern, amidships storage between the two helm seats. This one is HEAVY.

- Lift it out.
- Tie the painter to the stern of the sailboat run out about 10 feet of painter.
- Toss the raft over board.
- Pull the painter until you see RED on the line.
- PULL Sharply and quickly and the raft will inflate.

EPIRB

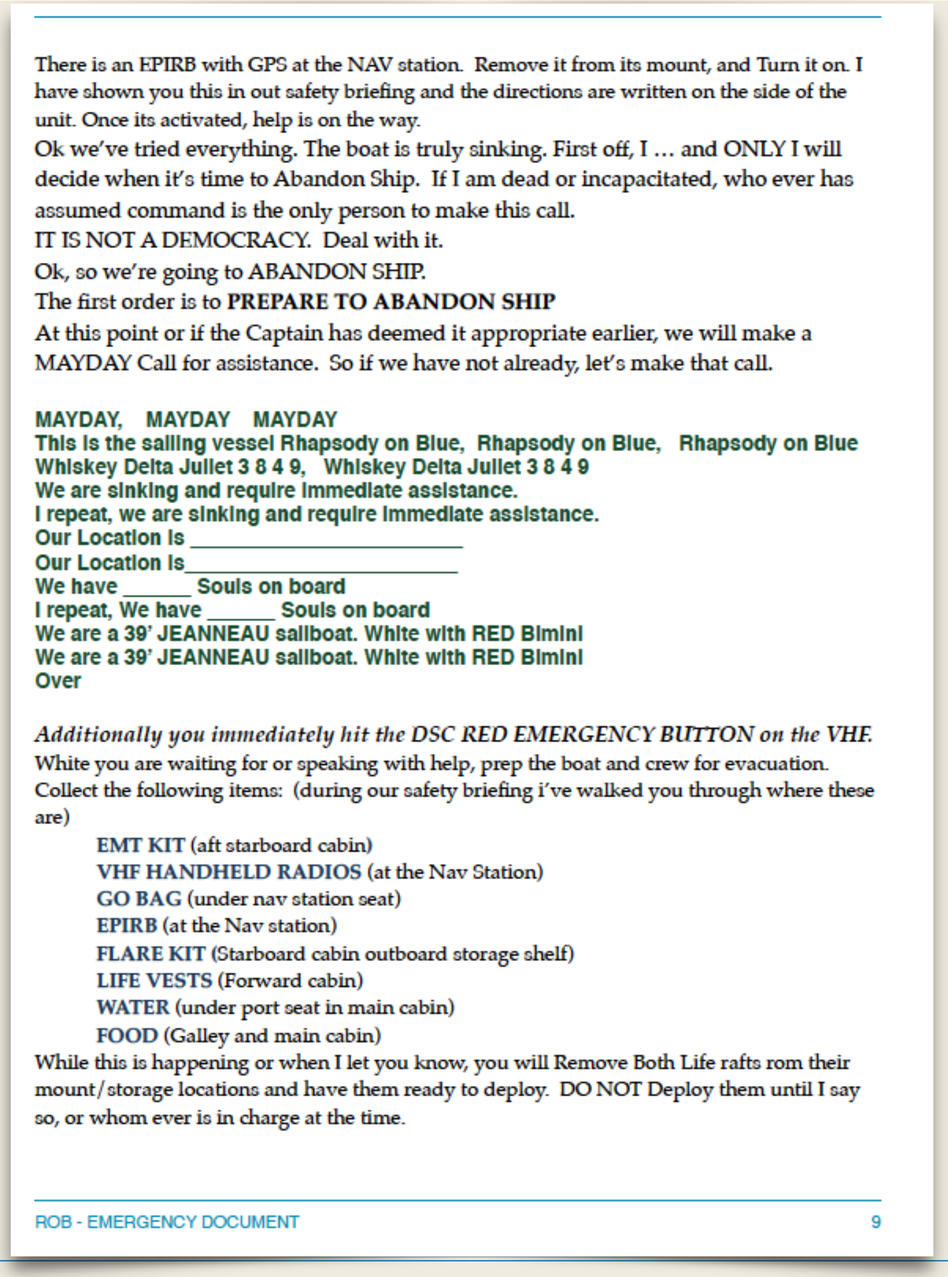
Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Sinking
General Mayday
Preparing to Abandon Ship



There is an EPIRB with GPS at the NAV station. Remove it from its mount, and Turn it on. I have shown you this in out safety briefing and the directions are written on the side of the unit. Once its activated, help is on the way.
Ok we've tried everything. The boat is truly sinking. First off, I … and ONLY I will decide when it's time to Abandon Ship. If I am dead or incapacitated, who ever has assumed command is the only person to make this call.
IT IS NOT A DEMOCRACY. Deal with it.
Ok, so we're going to ABANDON SHIP.
The first order is to **PREPARE TO ABANDON SHIP**
At this point or if the Captain has deemed it appropriate earlier, we will make a MAYDAY Call for assistance. So if we have not already, let's make that call.

MAYDAY, MAYDAY MAYDAY
This is the sailing vessel Rhapsody on Blue, Rhapsody on Blue, Rhapsody on Blue
Whiskey Delta Juliet 3 8 4 9, Whiskey Delta Juliet 3 8 4 9
We are sinking and require immediate assistance.
I repeat, we are sinking and require immediate assistance.
Our Location is _____
Our Location is_____
We have _____ Souls on board
I repeat, We have _____ Souls on board
We are a 39' JEANNEAU sailboat. White with RED Bimini
We are a 39' JEANNEAU sailboat. White with RED Bimini
Over

Additionally you immediately hit the DSC RED EMERGENCY BUTTON on the VHF.
White you are waiting for or speaking with help, prep the boat and crew for evacuation. Collect the following items: (during our safety briefing i've walked you through where these are)

- **EMT KIT** (aft starboard cabin)
- **VHF HANDHELD RADIOS** (at the Nav Station)
- **GO BAG** (under nav station seat)
- **EPIRB** (at the Nav station)
- **FLARE KIT** (Starboard cabin outboard storage shelf)
- **LIFE VESTS** (Forward cabin)
- **WATER** (under port seat in main cabin)
- **FOOD** (Galley and main cabin)

While this is happening or when I let you know, you will Remove Both Life rafts rom their mount/storage locations and have them ready to deploy. DO NOT Deploy them until I say so, or whom ever is in charge at the time.

ROB - EMERGENCY DOCUMENT 9

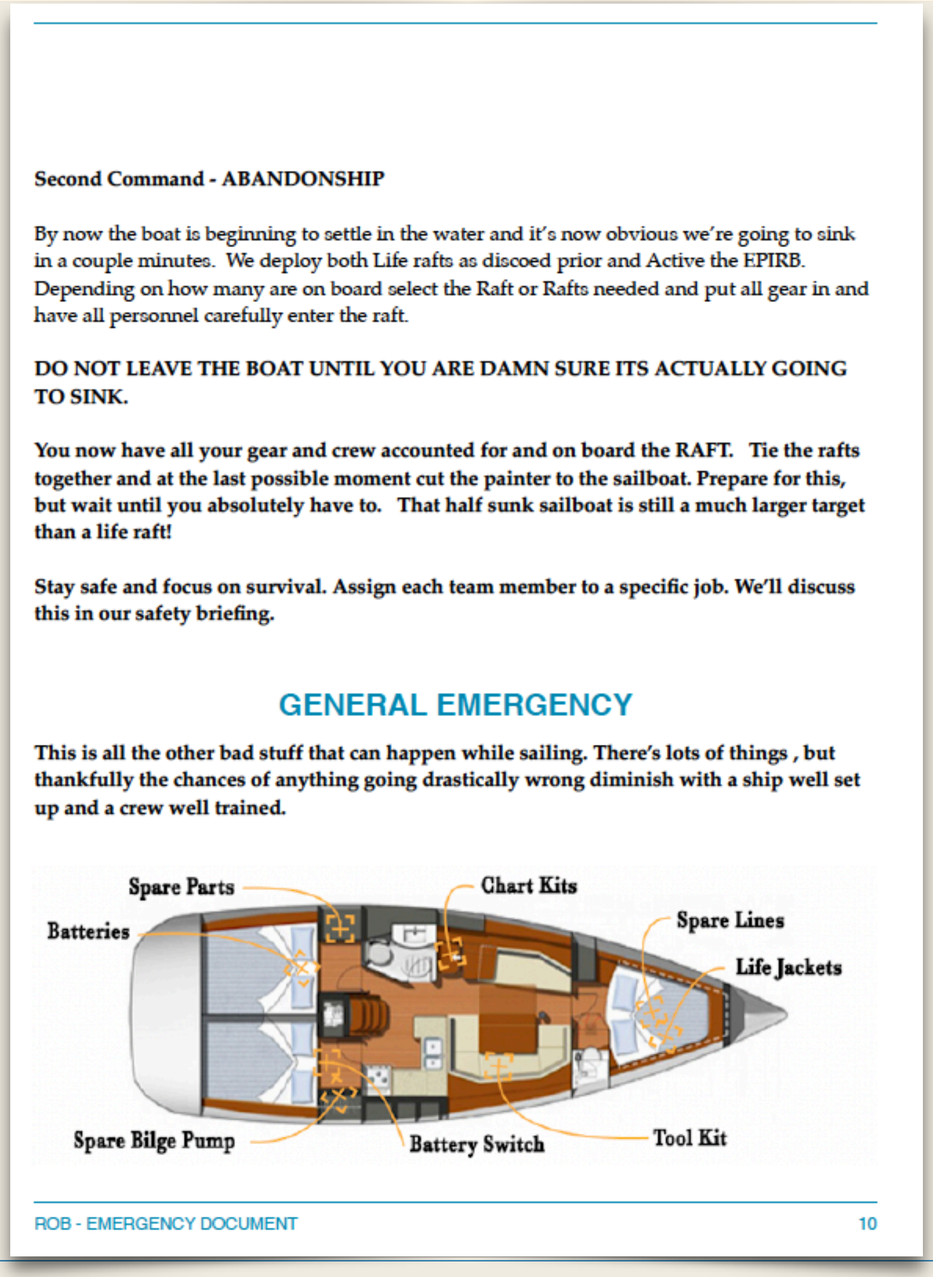
Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Abandon Ship
General Emergency



Second Command - ABANDONSHIP

By now the boat is beginning to settle in the water and it's now obvious we're going to sink in a couple minutes. We deploy both Life rafts as discoed prior and Active the EPIRB. Depending on how many are on board select the Raft or Rafts needed and put all gear in and have all personnel carefully enter the raft.

DO NOT LEAVE THE BOAT UNTIL YOU ARE DAMN SURE ITS ACTUALLY GOING TO SINK.

You now have all your gear and crew accounted for and on board the RAFT. Tie the rafts together and at the last possible moment cut the painter to the sailboat. Prepare for this, but wait until you absolutely have to. That half sunk sailboat is still a much larger target than a life raft!

Stay safe and focus on survival. Assign each team member to a specific job. We'll discuss this in our safety briefing.

GENERAL EMERGENCY

This is all the other bad stuff that can happen while sailing. There's lots of things , but thankfully the chances of anything going drastically wrong diminish with a ship well set up and a crew well trained.

Captain Georgia Hilton

Basic Boating Safety

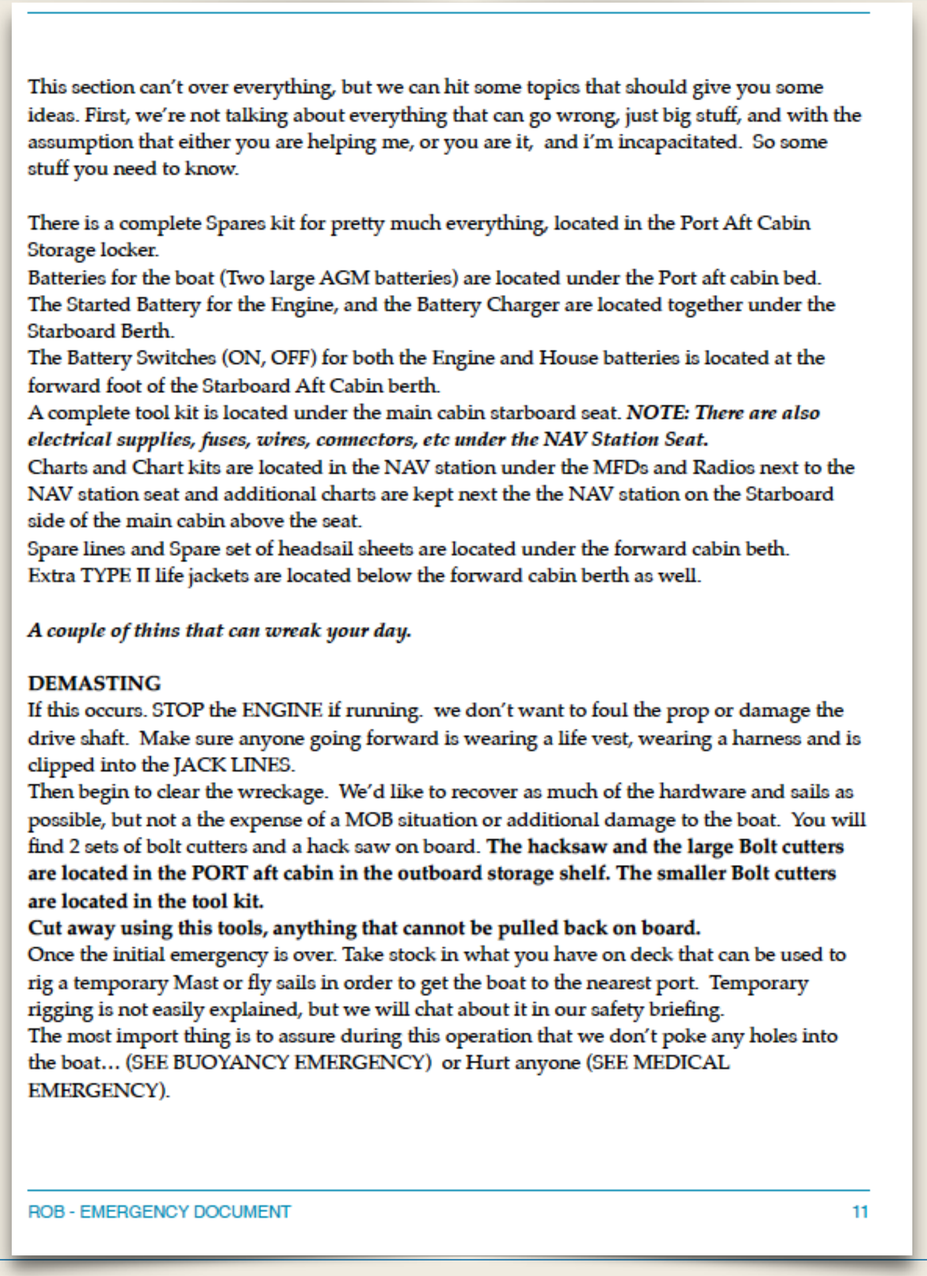
Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

General Repairs
Dismasting

Captain Georgia Hilton



This section can't over everything, but we can hit some topics that should give you some ideas. First, we're not talking about everything that can go wrong, just big stuff, and with the assumption that either you are helping me, or you are it, and i'm incapacitated. So some stuff you need to know.

There is a complete Spares kit for pretty much everything, located in the Port Aft Cabin Storage locker.
Batteries for the boat (Two large AGM batteries) are located under the Port aft cabin bed.
The Started Battery for the Engine, and the Battery Charger are located together under the Starboard Berth.
The Battery Switches (ON, OFF) for both the Engine and House batteries is located at the forward foot of the Starboard Aft Cabin berth.
A complete tool kit is located under the main cabin starboard seat. ***NOTE: There are also electrical supplies, fuses, wires, connectors, etc under the NAV Station Seat.***
Charts and Chart kits are located in the NAV station under the MFDs and Radios next to the NAV station seat and additional charts are kept next the the NAV station on the Starboard side of the main cabin above the seat.
Spare lines and Spare set of headsail sheets are located under the forward cabin beth.
Extra TYPE II life jackets are located below the forward cabin berth as well.

A couple of thins that can wreak your day.

DEMASTING
If this occurs. STOP the ENGINE if running. we don't want to foul the prop or damage the drive shaft. Make sure anyone going forward is wearing a life vest, wearing a harness and is clipped into the JACK LINES.
Then begin to clear the wreckage. We'd like to recover as much of the hardware and sails as possible, but not a the expense of a MOB situation or additional damage to the boat. You will find 2 sets of bolt cutters and a hack saw on board. **The hacksaw and the large Bolt cutters are located in the PORT aft cabin in the outboard storage shelf. The smaller Bolt cutters are located in the tool kit.**
Cut away using this tools, anything that cannot be pulled back on board.
Once the initial emergency is over. Take stock in what you have on deck that can be used to rig a temporary Mast or fly sails in order to get the boat to the nearest port. Temporary rigging is not easily explained, but we will chat about it in our safety briefing.
The most import thing is to assure during this operation that we don't poke any holes into the boat… (SEE BUOYANCY EMERGENCY) or Hurt anyone (SEE MEDICAL EMERGENCY).

Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Engine Trouble

ENGINE TROUBLE

If the Engine dies… It's probably one of a couple things.

- You are out of diesel fuel. …Tough.. Because unless this is a delivery, I don't carry extra fuel.
- It's overheating. Hopefully you noticed this long before it died. You'll smell it, you'll feel it and the over heat idiot light and alarm will sound. If you are in a safe place, anchor and sort it out. If you are not and need to motor drop it back to minimum RPMs to maintain steerage way and find a place to tie up or anchor to sort out the problem. If you are at sea, at least you can shut it down and work the problem since you have some sea room. If it's overheating either the heat exchanger is clogged up (something you can't fix easily unless you are a mechanic) or the raw water is not getting to the engine to cool it. THIS, you can probably fix. The first thing is to make sure the RAW water thru hull is open. lift the floor at the base of the ladder and check to make sure the thru hull is open. The RED handled valve is in the UP (Vertical) position. If so then you'll need to check the impeller. Luckily we have spare impellers on board and everything you need to swap one out. Here's how:
- Raw Water Impeller replacement. Shut down the engine, close the raw water thru hull valve, and open the front of the RAW water pump. I've shown you where it is in our safety briefing. (it's on the front of the engine, behind the ladder, on the right bottom. Round thingy. you can see that the raw water hose leads right to it. Open it. First is it all there? Yes? good. it's probably ok. open the raw water valve and see if you have water flow to the pump. Water coming out? Good. If not you have a blockage in the hose of the thru hull. Back to the Impeller. if you need to swap it out, you'll need our trusty impeller puller tool (Located in the starboard parts locker) or just use some pliers to pull it out. BUT!!!! WAIT! Before pulling it, look at the direction of the blades… and look at the impeller setup. Take a photo… You'll need to make sure the new one looks the same when you are done. So, pull toe old one. Grab one of the spares. in the spare there is an impeller and a gasket. You'll also need to gasket sealer. You'll find that in the spares locker as well. Pull the old impeller. Clear the old gasket, clean up the inside. Drop the New Impeller back in, use some of that gasket sealer (lightly) around the edge and put the gasket back up. Close up the pump (those screws you took off). Open the raw water valve and make sure you don't have any leaks. Fire the engine back up and give it a few to get to temp. If it looks good head out. If it starts to overhead, take it gently and you may have to run it a while, give it a break, and then run it again to get home. Careful to not actually overheat it. Remember, we are a sailboat… use the sails if possible and save the engine for docking.

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Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Bilge Pump repairs
Propane issues
Running Light bulb replacement

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PRIMARY BILGE PUMP won't PUMP

This is a bit of a head ache, but not the end of the world. You can take this pup apart, clean it and have it back to running in under 20 minutes.

This is a photo of the pump. It's located on the starboard side of the main cabin, behind the seat, right next to the galley. It's held on by 4 Philips head screws. And, of course, the power cable (which is long enough to lift it out without disconnecting) and the two hose clamps. Remove the 4 screws, Remove the hose clamps, pull the hoses out, and move the pump down onto the seat. Now you can start to clean it and get it operating again. Simply unscrew the two flathead screws on the red flange cover. Remove the flange cover and lift the pump top off. This give you access to the diaphragm and the to rubber valves. Now just clean them up. (they come out and only go back one way). Wipe them down , remove any debris and put it back together. Remount it and you should be all set. There is a spare PUMP located in the Port aft cabin under the storage cabinet if you need a new one.

PROPANE

This one is easy. There are two tanks, both filled, at least when we left, under the Port side Helm set in the cockpit. Open that up and you'll see the two tanks. One is connected to the primary Propane valve and hose. The gauge should have some pressure in it. If not, first make sure the valve is turned all the way on. If it is, and there is still no pressure, you'll need to swap the tanks. If there is pressure. make sure the valve is open, make sure the secondary electric safety cutoff switch in ON. That's the propane switch in the galley at the forward port side corner of the galley.

If you need to swap the tanks. Turn off the galley cutoff switch. OFF. Go topside and close the Propane valve. CLOSED. Then unscrew the tank lead and screw in the other tank. Once the new tank is secured, open the valve, and check for pressure. If there is, then go to the galley and turn on the switch in the galley. ON. You now have Propane for the stove again.

STERN RUNNING LIGHT

Yes, the forward ruling lights are LED and simply don't NOT work. But the stern light is still a bulb and may need replacing. Whenever you turn on the nav/running lights always visually check that everything is on before sunset. If the stern light is not lit, it's one of two

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Risk Mitigation on your boat

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Man Over board

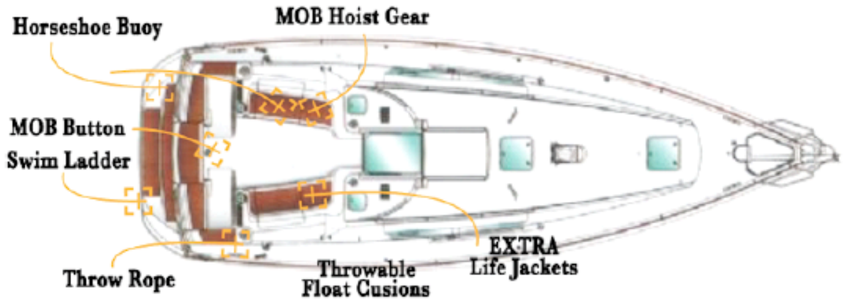
Captain Georgia Hilton

things. Either it's come loose in its mount or its just burnt out. Both are easily fixable. Open the cover of the light (two very small screws) and reset the bulb if it's out of the socket. If the bulb is burnt out, you'll find replacement bulbs in the NAV Station Seat. Open and look inside for a box of fuses and bulbs… A spare is there. swap out the bulb, test and close the cover… Of course you might want to make sure the Running Lights ON/OFF switch is in the ON position before assuming its burnt out.

MOB (MAN OVERBOARD) EMERGENCY

Ok, first off, stay on the damn boat. Unless we're anchored and swimming.
If you are on deck or in the cockpit and its night: Wear a life vest, harness and tether in.
If you are on deck in the cockpit and its rough weather: Wear a life vest, harness and tether in.
If you are on deck in the cockpit and its daytime: Wear a life vest, harness and tether in.
If you are on deck or in the cockpit and its really nice weather and you are alone: Wear a life vest, harness and tether in.
Do you start to see a pattern here?
Ok, when you are on my boat, and we are offshore, we wear lifejackets with built in harnesses or life jackets and harnesses and tether in. IF its a super nice day and we are safe… I might… might resend that order for a bit…. but you're still going to have the gear at the ready.
If you go forward, you tether into the JACK LINES that run fore and aft on both sides of the boat.
Finally I wear, and prefer you wear as well, a personal locator beacon, whistle, and light attached to your life vest.

If you do go over the side. We will have chatted about what to do and how to do it but here's the basics… if its me who went over.



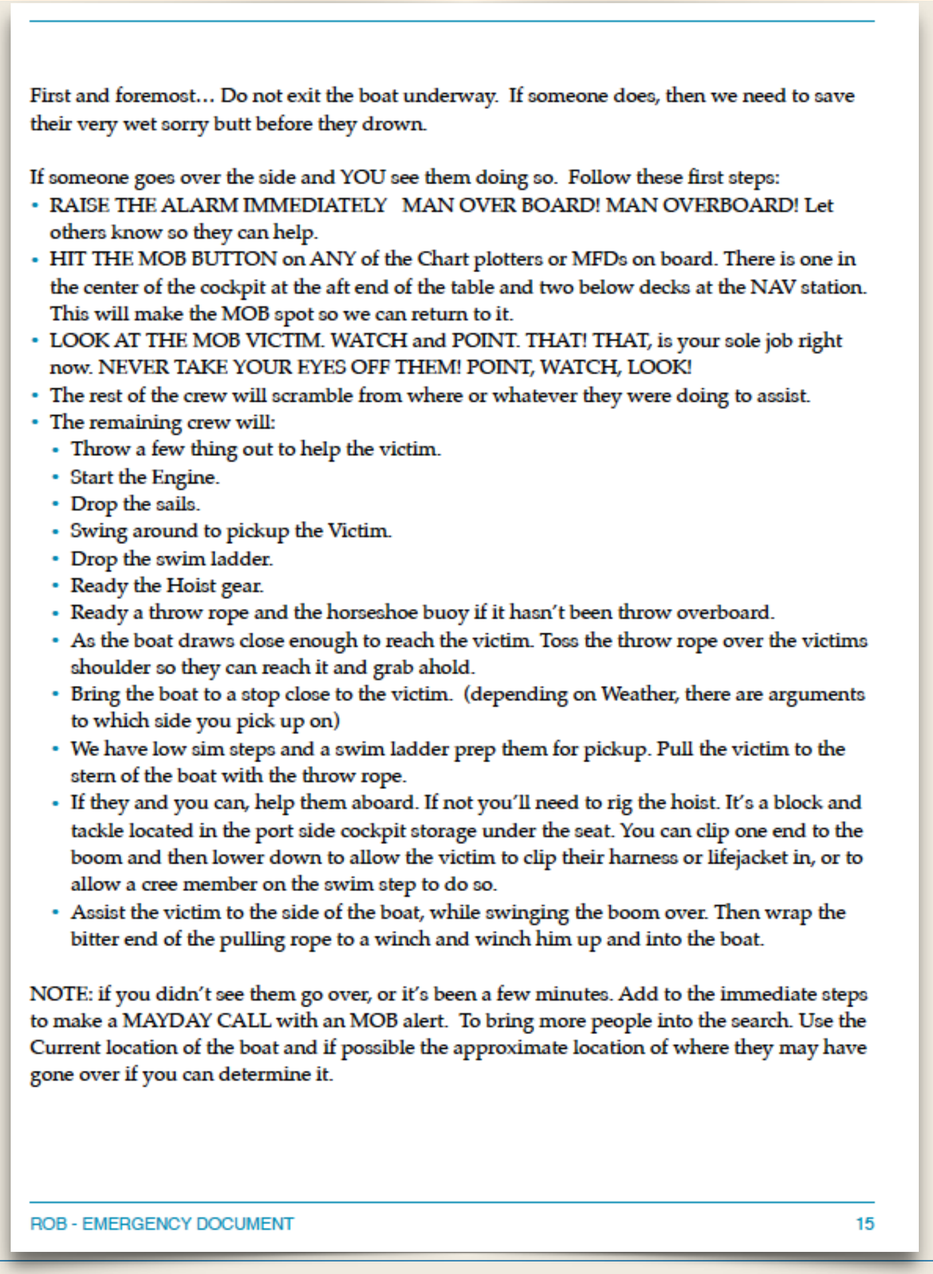
Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

Man Over Board



First and foremost… Do not exit the boat underway. If someone does, then we need to save their very wet sorry butt before they drown.

If someone goes over the side and YOU see them doing so. Follow these first steps:

- RAISE THE ALARM IMMEDIATELY MAN OVER BOARD! MAN OVERBOARD! Let others know so they can help.
- HIT THE MOB BUTTON on ANY of the Chart plotters or MFDs on board. There is one in the center of the cockpit at the aft end of the table and two below decks at the NAV station. This will make the MOB spot so we can return to it.
- LOOK AT THE MOB VICTIM. WATCH and POINT. THAT! THAT, is your sole job right now. NEVER TAKE YOUR EYES OFF THEM! POINT, WATCH, LOOK!
- The rest of the crew will scramble from where or whatever they were doing to assist.
- The remaining crew will:
  - Throw a few thing out to help the victim.
  - Start the Engine.
  - Drop the sails.
  - Swing around to pickup the Victim.
  - Drop the swim ladder.
  - Ready the Hoist gear.
  - Ready a throw rope and the horseshoe buoy if it hasn't been throw overboard.
  - As the boat draws close enough to reach the victim. Toss the throw rope over the victims shoulder so they can reach it and grab ahold.
  - Bring the boat to a stop close to the victim. (depending on Weather, there are arguments to which side you pick up on)
  - We have low sim steps and a swim ladder prep them for pickup. Pull the victim to the stern of the boat with the throw rope.
  - If they and you can, help them aboard. If not you'll need to rig the hoist. It's a block and tackle located in the port side cockpit storage under the seat. You can clip one end to the boom and then lower down to allow the victim to clip their harness or lifejacket in, or to allow a cree member on the swim step to do so.
  - Assist the victim to the side of the boat, while swinging the boom over. Then wrap the bitter end of the pulling rope to a winch and winch him up and into the boat.

NOTE: if you didn't see them go over, or it's been a few minutes. Add to the immediate steps to make a MAYDAY CALL with an MOB alert. To bring more people into the search. Use the Current location of the boat and if possible the approximate location of where they may have gone over if you can determine it.

ROB - EMERGENCY DOCUMENT 15

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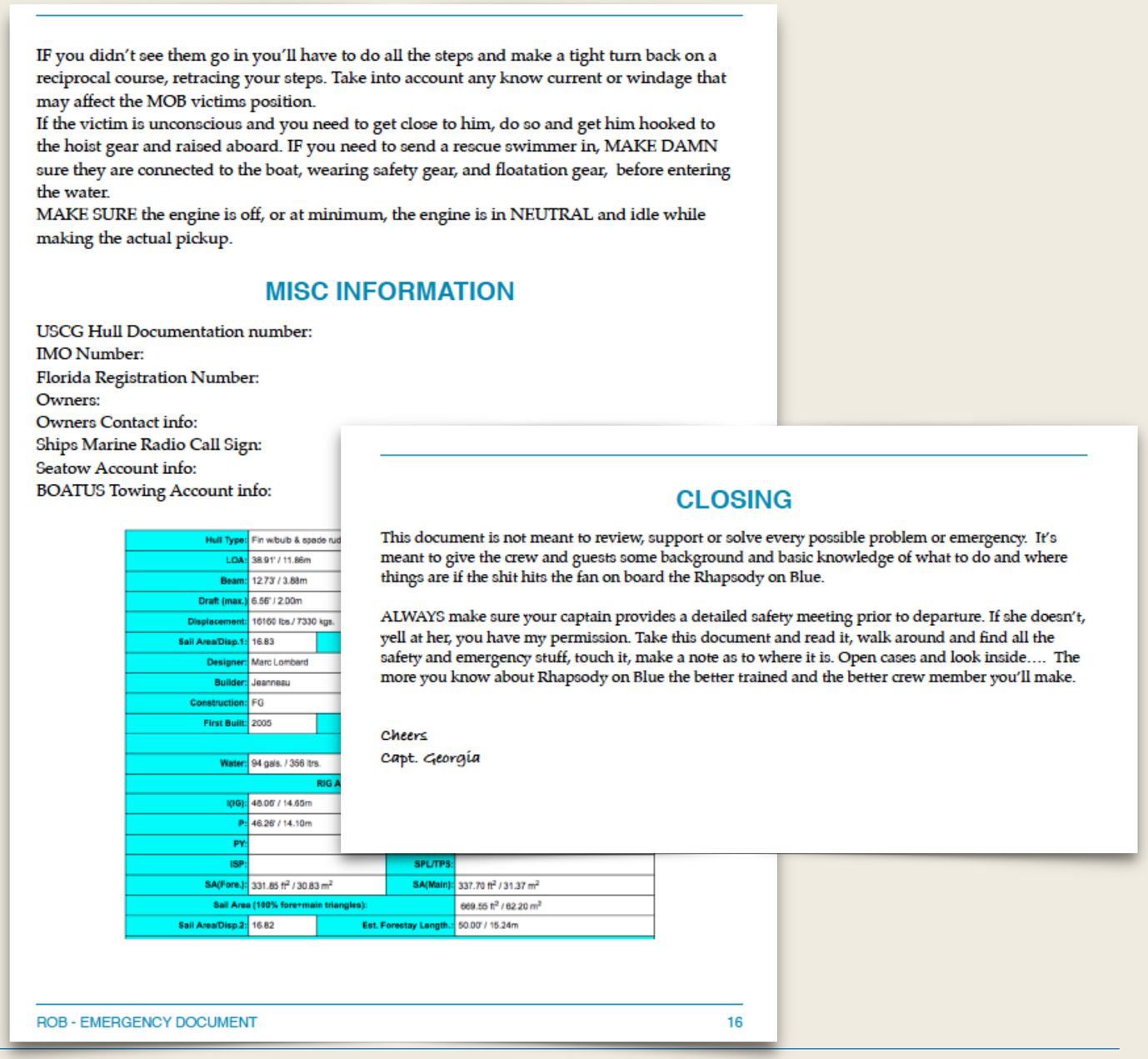
Basic Boating Safety

Risk Mitigation on your boat

Real world - SAFETY

DON'T PANIC document for your boat

General Boat information
Closing



IF you didn't see them go in you'll have to do all the steps and make a tight turn back on a reciprocal course, retracing your steps. Take into account any know current or windage that may affect the MOB victims position.
If the victim is unconscious and you need to get close to him, do so and get him hooked to the hoist gear and raised aboard. IF you need to send a rescue swimmer in, MAKE DAMN sure they are connected to the boat, wearing safety gear, and floatation gear, before entering the water.
MAKE SURE the engine is off, or at minimum, the engine is in NEUTRAL and idle while making the actual pickup.

MISC INFORMATION

USCG Hull Documentation number:
IMO Number:
Florida Registration Number:
Owners:
Owners Contact info:
Ships Marine Radio Call Sign:
Seatow Account info:
BOATUS Towing Account info:

Hull Type:	Fin w/bulb & spade rud		
LOA:	38.91' / 11.86m		
Beam:	12.73' / 3.88m		
Draft (max.):	6.56' / 2.00m		
Displacement:	16160 lbs / 7330 kgs.		
Sail Area/Disp.1:	16.83		
Designer:	Marc Lombard		
Builder:	Jeanneau		
Construction:	FG		
First Built:	2005		
Water:	94 gals. / 356 ltrs.		
	RIG A		
I(G):	48.06' / 14.65m		
P:	46.26' / 14.10m		
PY:			
ISP:		SPL/TPS:	
SA(Fore.):	331.85 ft² / 30.83 m²	SA(Main):	337.70 ft² / 31.37 m²
Sail Area (100% fore+main triangles):			669.55 ft² / 62.20 m²
Sail Area/Disp.2:	16.82	Est. Forestay Length.:	50.00' / 15.24m

CLOSING

This document is not meant to review, support or solve every possible problem or emergency. It's meant to give the crew and guests some background and basic knowledge of what to do and where things are if the shit hits the fan on board the Rhapsody on Blue.

ALWAYS make sure your captain provides a detailed safety meeting prior to departure. If she doesn't, yell at her, you have my permission. Take this document and read it, walk around and find all the safety and emergency stuff, touch it, make a note as to where it is. Open cases and look inside…. The more you know about Rhapsody on Blue the better trained and the better crew member you'll make.

Cheers
Capt. Georgia

ROB - EMERGENCY DOCUMENT 16

Captain Georgia Hilton

Basic Boating Safety

We did a quick look at SOLAS and big boat safety
Risk management / Risk mitigation
SOLAS and how it equates to small boats
Swiss Cheese Model of accident prevention
GMDSS and how it affects you
Areas of concern on your boat
Fire / MOB / Sinking / Medical / Equipment
Support and gear
Training and Planning for emergencies
Creating a DON'T PANIC doc for your boat

you'll find a lot of this information at
https://captaingeorgia.com/handy-documents

Q & A

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