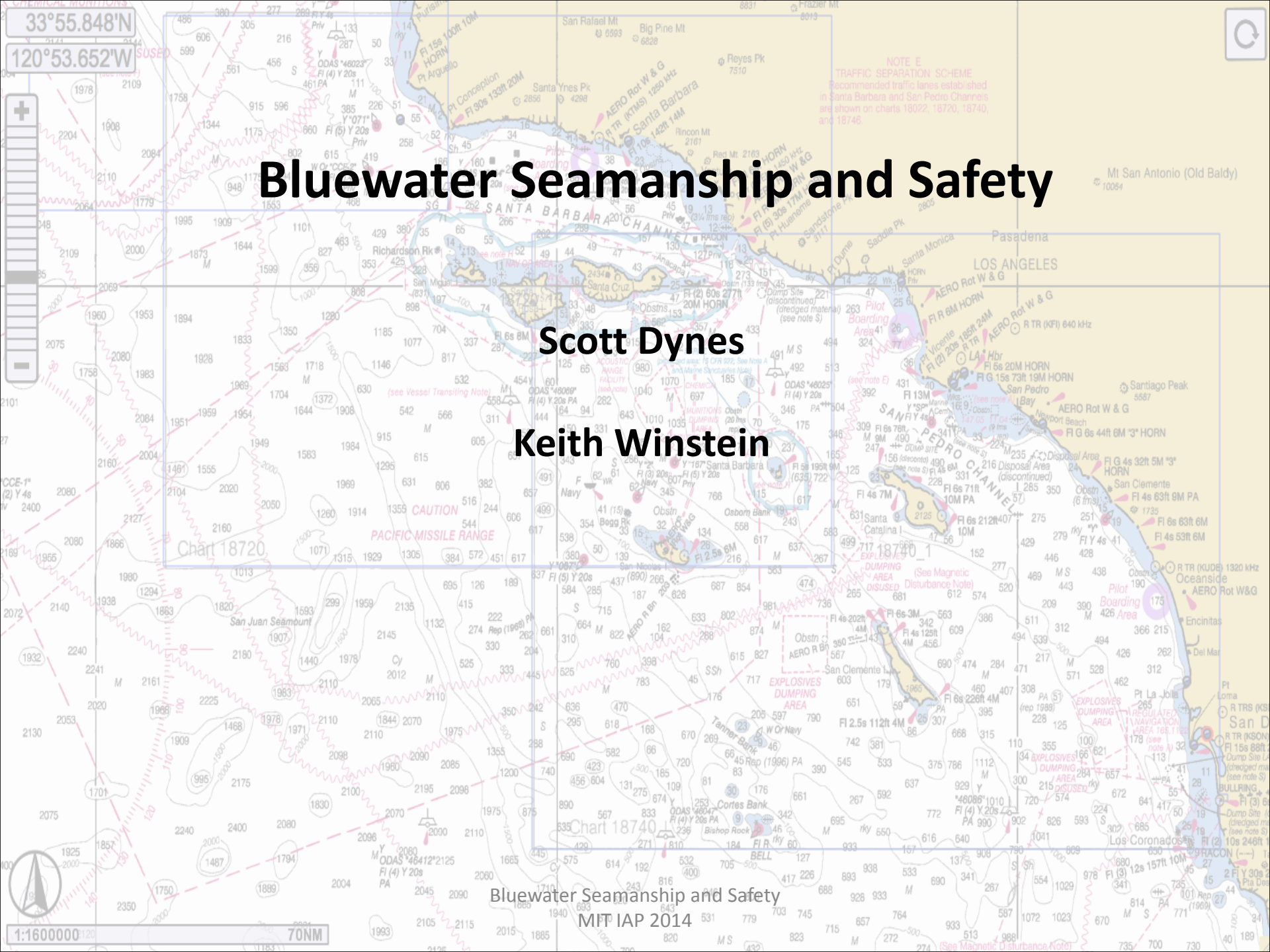
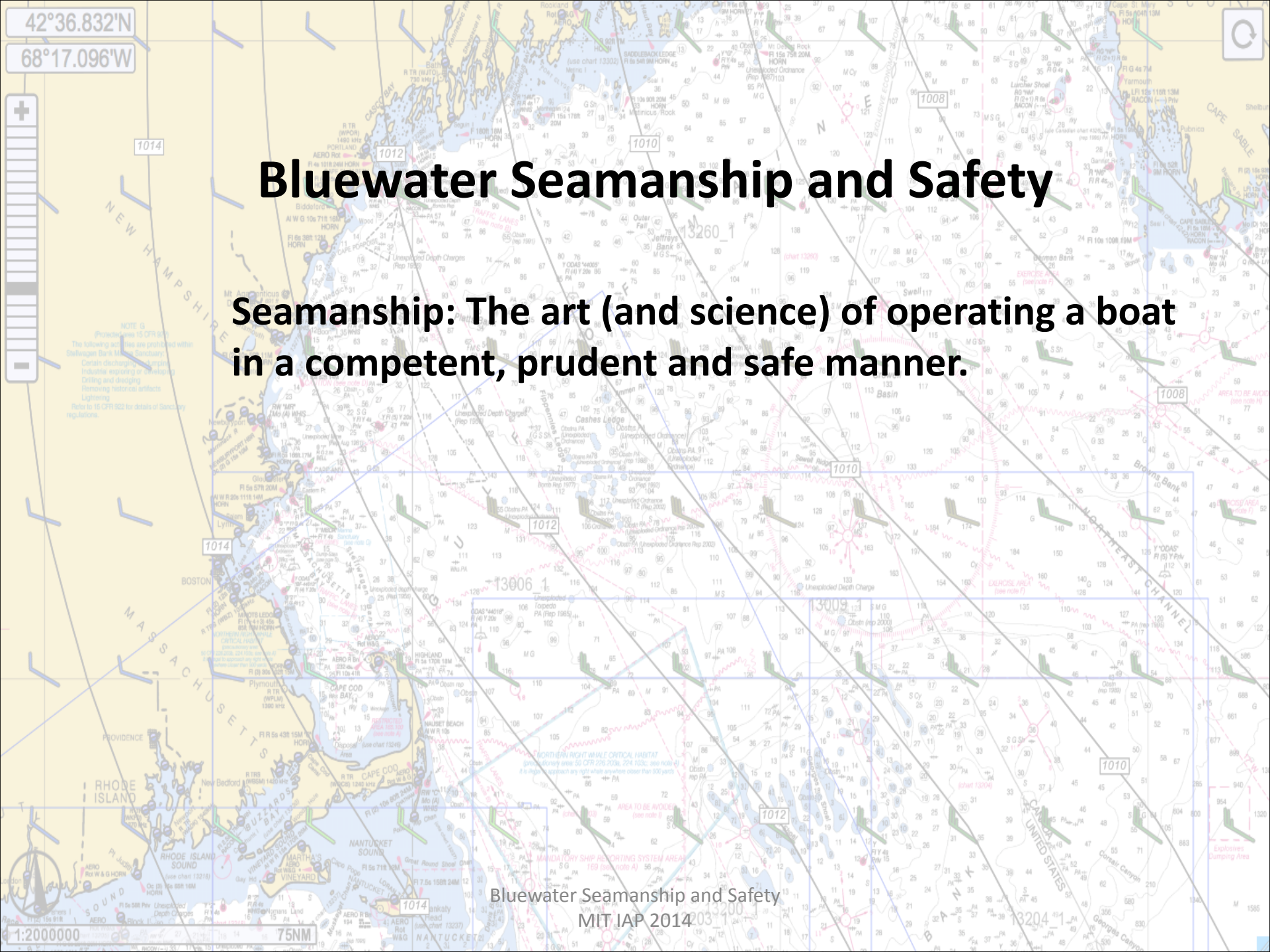


Bluewater Seamanship and Safety

Scott Dynes

Keith Winstein



Bluewater Seamanship and Safety

Seamanship: The art (and science) of operating a boat in a competent, prudent and safe manner.

Bluewater Seamanship and Safety

Seamanship: The art (and science) of operating a boat in a competent, prudent and safe manner.

Themes:

- Risk Management
- Communication
- Preparation/Knowledge
- Situational Awareness
- Personal Responsibility

Bluewater Seamanship and Safety

Seamanship: The art (and science) of operating a boat in a competent, prudent and safe manner.

Evening will be broken into:

- Boat Handling
- Crew and Boat Safety
- Sailing

Practical Boat Handling

- Know your crew
- Communication
- Rules of the road/lights/shapes
- Anticipate contingencies

Practical Boat Handling

Know Your Fellow Crew and Their Capabilities.
Who, by name, can help with

- Crew Overboard
- Reefing
- Docking

Practical Boat Handling

Communication

- Outside the boat:
  - Float plan
  - Early communication with other vessels
- Inside the boat:
  - Clear instructions to crew
  - Prepare crew for actions in advance
  - Complete sentences, calm voice.
- In general,
  - What do I know?
  - Who needs to know?
  - Do they know?

Practical Boat Handling

Situational Awareness

- Where is the boat going?
- Weather/approaching weather
- Tide and current
- Sunset etc.

Practical Boat Handling

- Familiarity with vessel and systems before getting underway
- Do a walkaround
- Minimum equipment list
  - Required equipment
  - Recommended equipment
  - Paperwork
  - Spare parts
  - Medical kit

Practical Boat Handling

- Distress signals
- Lights and sound signals
- Radio
  - Calling procedure
  - Channels
  - Practice – what to say, where to find data
  - Mayday / Pan Pan / Securite

Practical Boat Handling

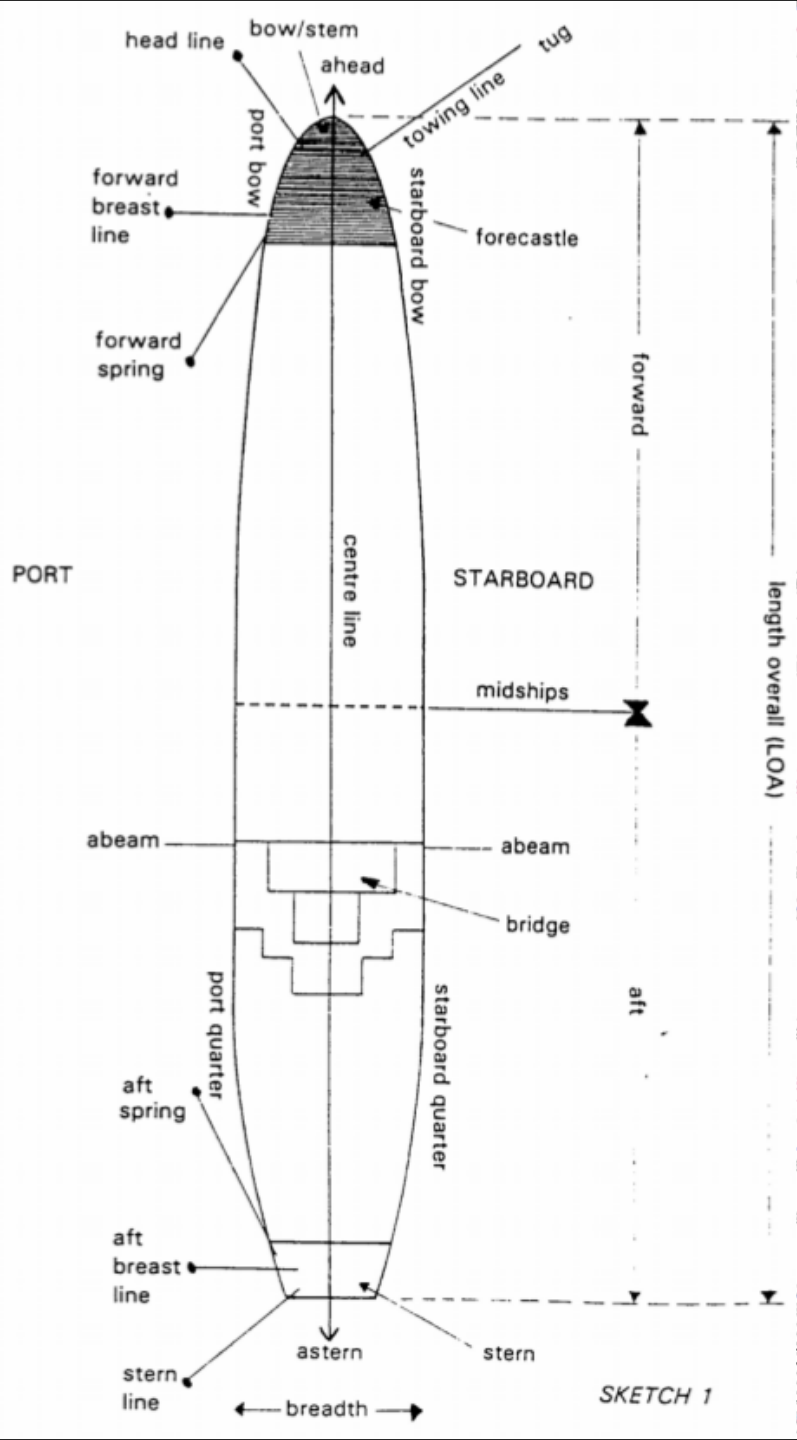
Pan Pan, Mayday, or Securite?

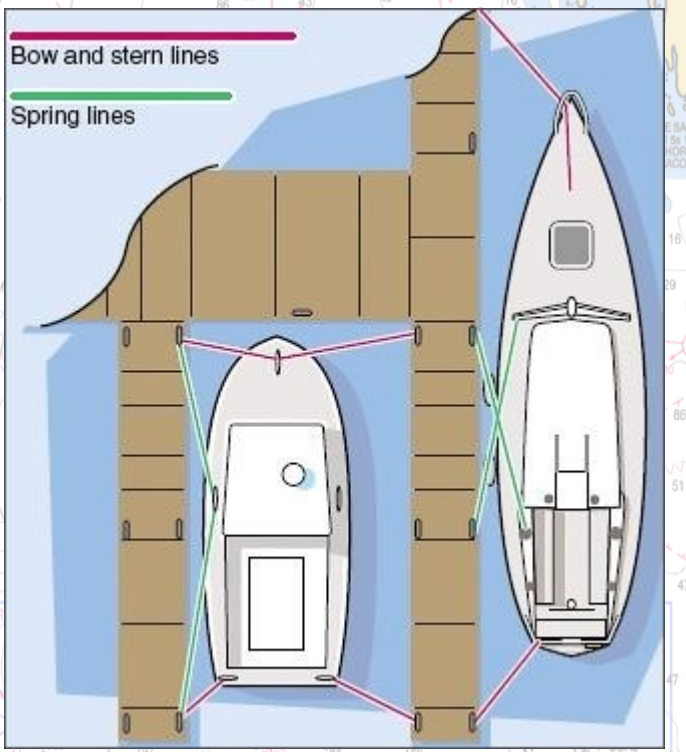
- You see a large floating log in the main ship channel that could be a hazard to small boats.
- You are offshore, and a passenger starts complaining of chest pains.
- In Boston Harbor, a thru-hull fails and the boat starts filling with water, near the capacity of the primary bilge pump.
- On a spinnaker reach, your unsecured whisker pole whips forward and whacks a crewmember in the head, who drops to the deck senseless.

Practical Boat Handling

Standard Procedures

- Docking
- Anchoring
- Running aground
- Fouled propeller
- Broken Steering Gear
- Holed hull
- Failed stay/shroud


head line
bow/stem
ahead
tug
towing line
port bow
starboard bow
forward breast line
forecastle
forward spring
forward
PORT
centre line
STARBOARD
length overall (LOA)
midships
abeam
abeam
bridge
port quarter
starboard quarter
aft
aft spring
aft breast line
astern
stern
stern line
breadth
SKETCH 1


Bow and stern lines
Spring lines

Questions?

Boat and Crew Safety

Personal Responsibility

- Everyone is responsible
- Preparation
- Be honest about your abilities
- If you see something that isn't right…
- Be proactive

Boat and Crew Safety

Planning

- What's the trip and route?
- Crew
- What needs to be onboard
- Weather
- Boat status

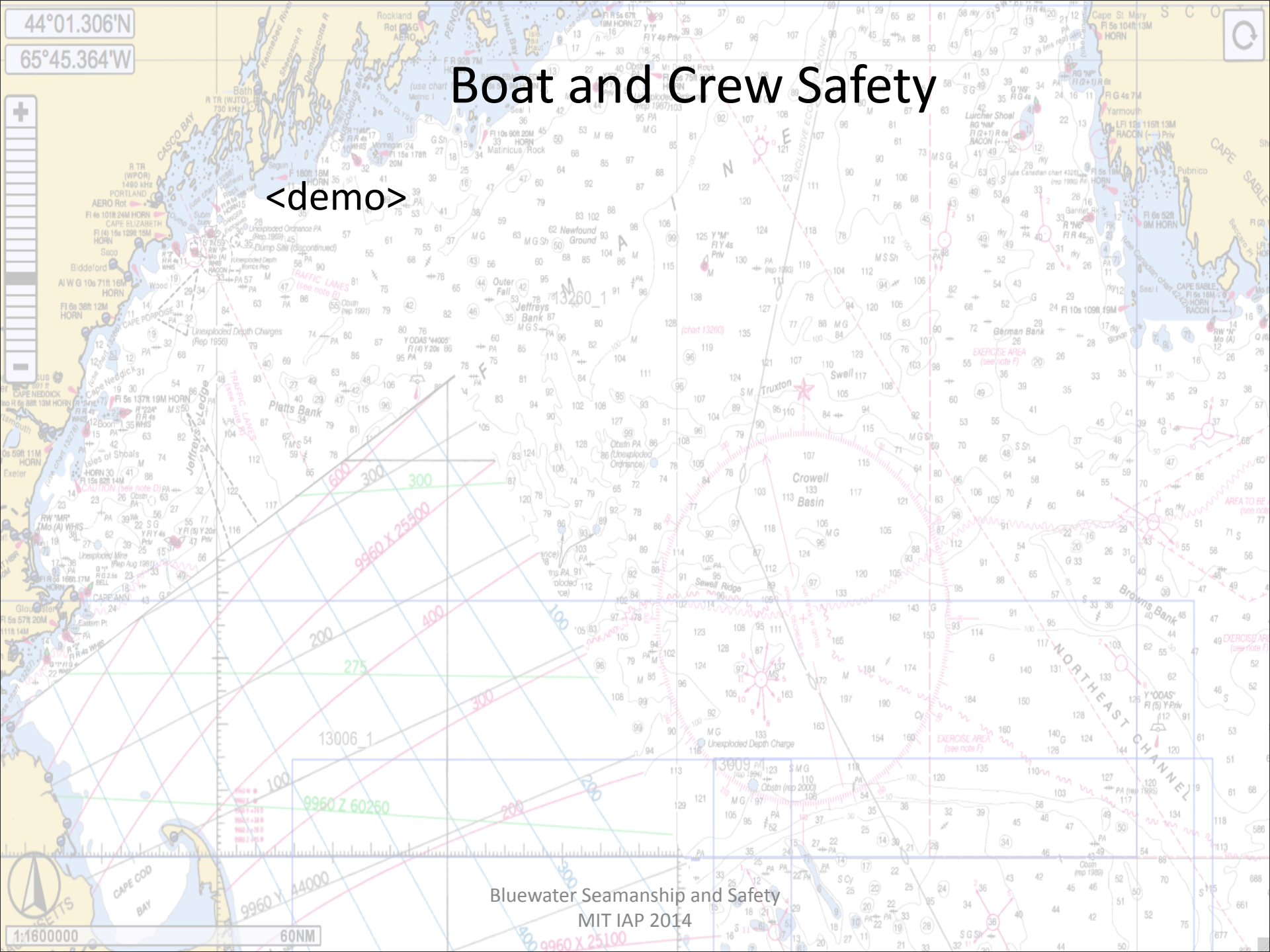
Boat and Crew Safety

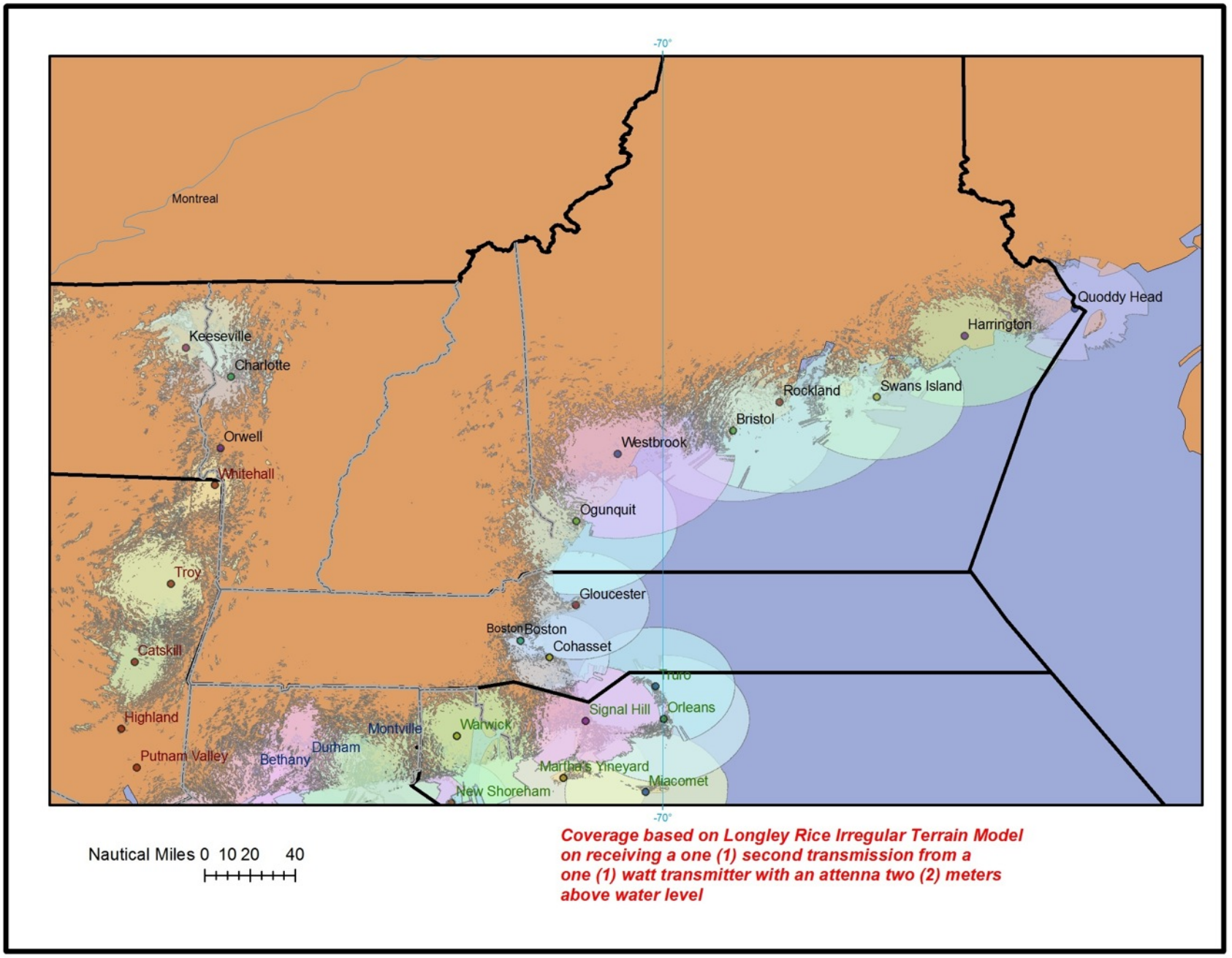
Planning Example: Trip to Woods Hole

- Tides and currents important
- Crew and watch schedules
- Need to bring dinghy
- Weather
- Boat status

Boat and Crew Safety

<demo>




-70°
Montreal
Keeseville
Charlotte
Orwell
Whitehall
Troy
Catskill
Highland
Putnam Valley
Bethany
Durham
Montville
Warwick
New Shoreham
Martha's Vineyard
Miacomet
Signal Hill
Orleans
Truro
Cohasset
Boston
Boston
Gloucester
Ogunquit
Westbrook
Bristol
Rockland
Swans Island
Harrington
Quoddy Head
-70°
Nautical Miles 0 10 20 40
Coverage based on Longley Rice Irregular Terrain Model
on receiving a one (1) second transmission from a
one (1) watt transmitter with an attenna two (2) meters
above water level

Boat and Crew Safety

Watch Schedules

- Four on/four off
- ‘Modified Swedish’
- One-off for single overnight sails
- Rotating watches for odd number of crew

Boat and Crew Safety

Risks to Crew – Staying Healthy

- Sunburn
- Hyper/hypothermia- what to wear
- Shoes/boots
- Food and Water
- Sleep

Boat and Crew Safety

Risks to Crew – Injury

- No running
- Getting Whacked
- Securing the deck and cabin
- Things that make you go ouch (+ gloves)
- Bad decisions

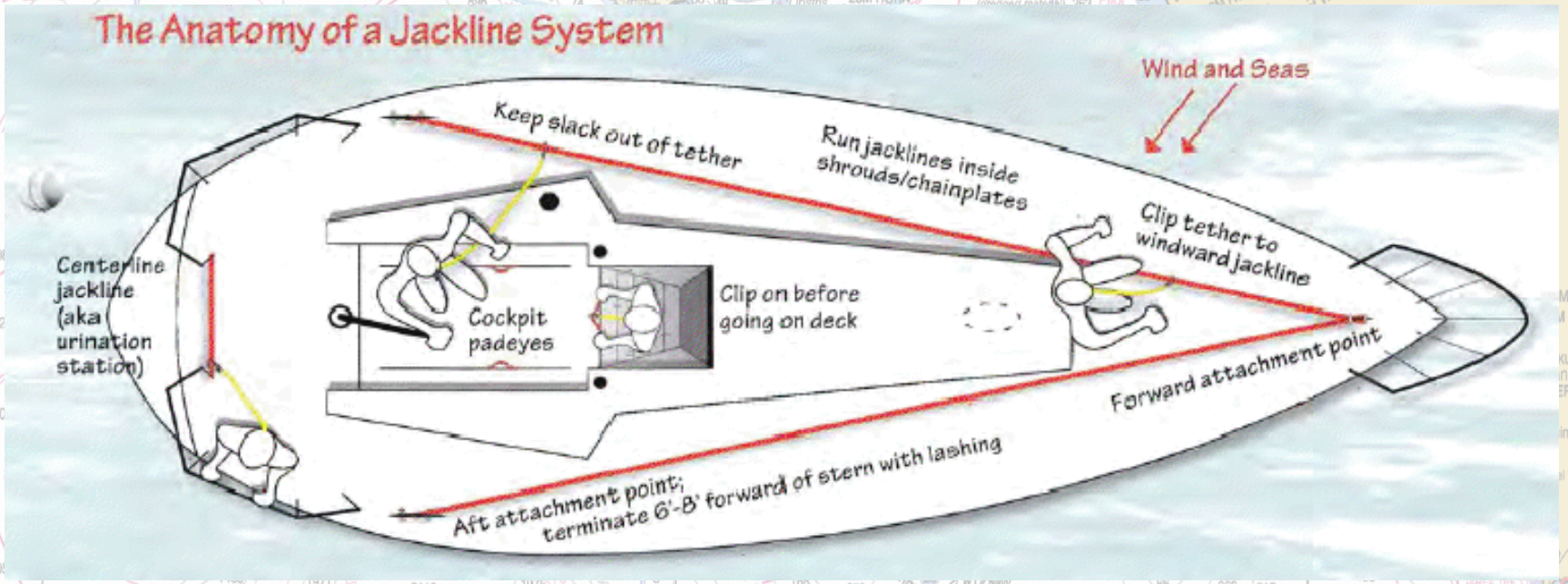
Boat and Crew Safety

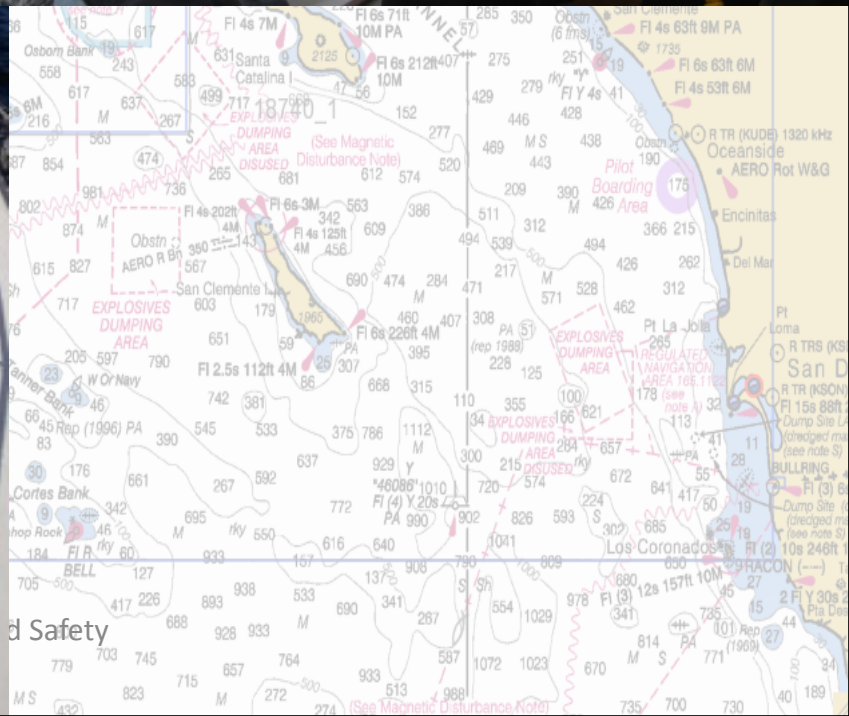
Risks to Crew – Going Overboard

- Harnesses/Tethers/Jacklines
- You are on the boat: COB mindset and actions
- You're in the water; what do you do?
- Spiral search

Boat and Crew Safety

Boat and Crew Safety




18740_1
Santa Catalina I
San Clemente I
Oceanside
Encinitas
Del Mar
Pt La Jolla
Los Coronados
Cortes Bank
Osborn Bank
Tanner Bank
EXPLOSIVES DUMPING AREA
Pilot Boarding Area
BULLRING

d Safety

Boat and Crew Safety

Risks to Crew – Going Overboard

- Harnesses/Tethers/Jacklines
- You are on the boat: COB mindset and actions
- You're in the water; what do you do?
- Spiral search

Crew Overboard Strategy

1. A clear chain of command

2. Mark the spot

3. Most important task: seeing the COB

4. Attaching the COB to the boat

Key tips:

- Furl the jib to control speed/reduce complexity
- No style points for rescue under sail; start the engine
- **Only through periodic drills can you be prepared for the real event**

Boat and Crew Safety

Risks to Crew – Going Overboard

- Harnesses/Tethers/Jacklines
- You are on the boat: COB mindset and actions
- You're in the water; what do you do?
- Spiral search

Boat and Crew Safety

In Extremis

- Sea Tow
- Helicopter Rescue
- Abandoning Ship

Boat and Crew Safety - Stories

I was the skipper.. The boat hit the submerged rocks between the deer island light and deer island under both full sail and motor. I am not sure exactly how fast we were going but it was somewhere between 7-10 knots. Thekeel sheered right off and the boat rolled immediately.

The short story is that I was out with an inexperienced crew and was not attentive enough, lost focus on the big picture, and made some very bad assumptions about the crew's ability and knowledge despite having been out with the crew at the helm 3 times and having given specific instruction about channel markers and about the deer island light in particular. My fault as the skipper entirely. I am thankful that there were no serious injuries.

I am not a very experienced sailor but have been sailing off and on for 25 years. Have sailed 100+ hours in Boston harbor both as a skipper and as a student getting one on one instruction on a CC36. ...

I had been out the previous weekend as skipper with the high winds and perhaps I was lulled in to a false sense of lax security by the mild conditions and the fact that the day was going so well with crew all taking turns at the helm under my supervision. Truly an idyllic day sailing with friends and our children. After being under sail for 3 hours or so we ventured out in to the south channel (when we passed deer island light on the way out I specifically reiterated to crew that it needed to be off our port bow due to under water obstructions between it an deer island and again went over red-right-returning). I put the boat on a heading that would have taken it out the south channel without further tacks and gave the helm to crew (adult) with a visual heading (white gas storage tank on far shore). ***I then went below for the 1st time since we had set sail to use the head and while down there I received a cell phone call that distracted me. I was in the cabin for perhaps 10 mins (during which time I had called up to the helm to ask if we were in the channel to which I received an affirmative reply) and I feel a bump.*** *I jump back to the cockpit and find that we are south of the channel near the area of Rams Head off of Lovell island. I immediately rounded the boat to port and head back in to the channel heading back in and engage the engine.*

... Even though we didn't ground hard it was still a bump and I explained to the crew that we were headed back in as I didn't want to take any chances. ...The boat was now motor sailing towards deer island light and I asked the crew to come to the helm while I went below to check for leaks. I pumped out the toilet,ran the bilge, checked under the floor boards and the engine compartment and didn't see any leaks. The crew had pushed the throttle to its stop and I called up to ask that they throttle back as I couldn't hear anything over the sound of the engine (wanted to see if I could hear any water sloshing about). The next thing I know there is the loudest crash I have ever heard, I am flying through the air full length of the boat and land on my back toward the bow. The scene has gone from everything ship shape to floor boards, cushions, and other debris all floating around the cabin and the within what seemed like seconds there was water up to my waist and the boat was rolling under. I ***pushed my 10 year old daughter up and out of the cabin (she had been wearing her PDF since boarding)*** *where she climbed up on to the rail that was still out of the water, I turned the VHF to 16 and put out a mayday call that I repeated twice and then swam out of the cabin off the boat. The crew were all calm and had climbed part way on to the hull which was the only part of the boat above the waterline at that point. Within what was probably 10-15 minutes the MEP picked us up and did a great job.*

Yes I feel like a complete idiot for letting happen and I know we got very very lucky and I am incredibly thankful for the first responders that did such an excellent job.

Questions?

Practical Sailing

Sailing the boat

- Keeping the boat upright
  - Flattening sails
  - Vang/sheet/traveller
  - Reefing/changing sails
- Accidental Gybing/Preventers
- Polars

Practical Sailing

Accidental Gybing/Preventers

Practical Sailing

Accidental Gybing/Preventers

Practical Sailing

Sailing the boat

- Keeping the boat upright
  - Flattening sails
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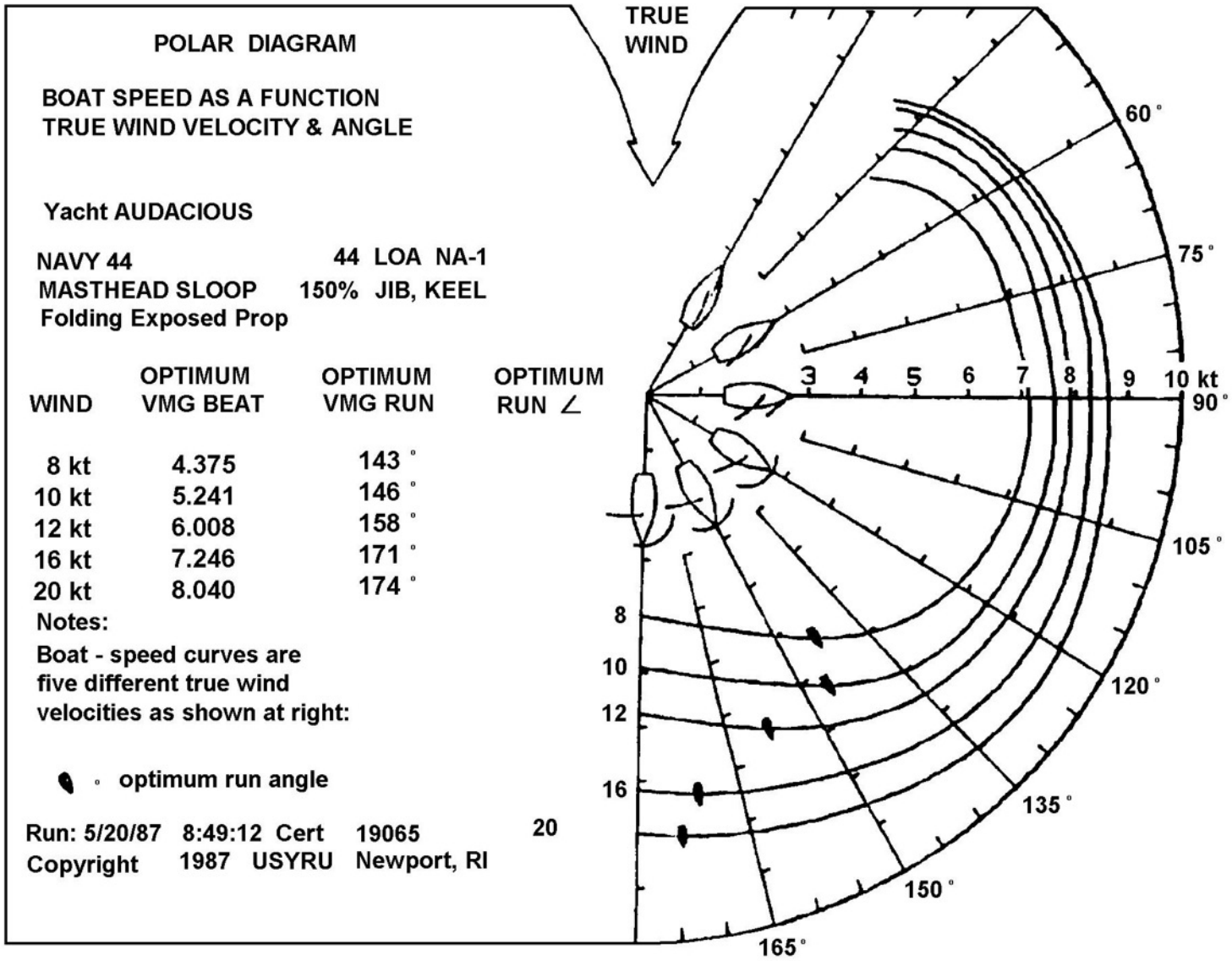
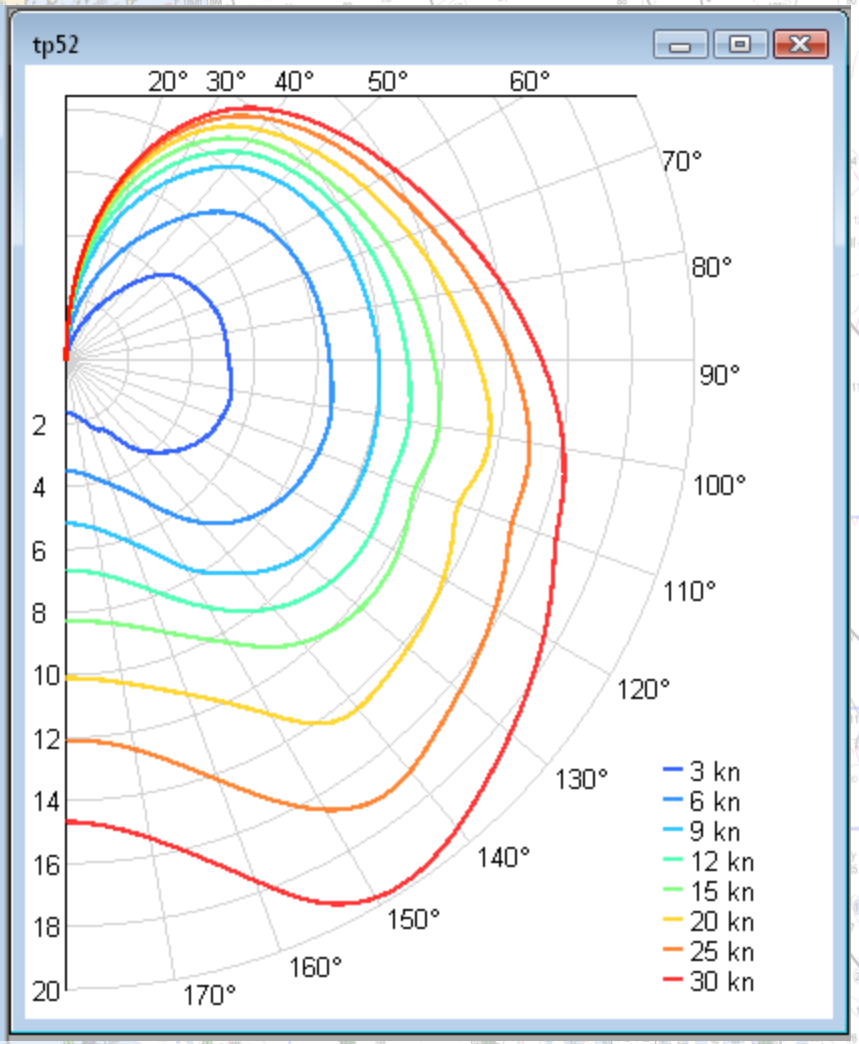
A Polar Example



Another Polar Example



Practical Sailing

Handling Lines

- Knots
  - Fastening to a cleat
  - Bowline
  - Tautline hitch
- Coiling lines
- Heaving a line
- On winches

Practical Sailing

Heavy Weather Sailing

- Reducing Sail - Reef early, go faster. Chicken Jibes.
- Heaving to
- Lying a-hull
- Running off
- Warps, sea anchors

Practical Sailing

Driving the Boat

- Roles – what are you doing?
- Steering a course v. close-hauled
- Sailing a compass course
- Dead Reckoning and updating the position

Practical Sailing

Standing Watch

- Know the situation
- Keep a sharp eye out
- Look at the boat
- Update the log

Questions?