### **SMALL BOAT SAFTEY**

Captain Bryan A. Oakley Univ. of Rhode Island Dept. of Geosciences Bryan\_Oakley at hotmail.com

#### The lawful holder of this credential, BRYAN ANDREW OAKLEY

as endorsed below, is entitled under Title 46 (Shipping) U.S. Code to serve in the capacity or capacities specified (Domestic Only), subject to any limitations indicated.

CAPACITY	LIMITATIONS APPLYING (IF ANY)
Master	Of Steam or Motor Vessels Of Not More Than 100 Gross Registered Tons (Domestic Tonnage) Upon Inland Waters.

Ref Num 2654823

Serial Num USA000016284

### About me...

• U.S.C.G Licensed to vessels <100 G. Tons

- ~1200 professional days on the water in the last 15 years on a variety of passenger, fishing and research vessels
- ~175 days conducting geophysical and geotechnical surveys, primarily in shallow water





Hmm... How did I manage to get THIS stuck!!!!

USDA NRC.

1

Sun TRACKER

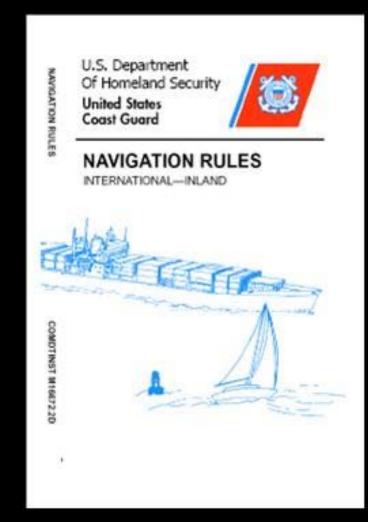
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### U.S.C.G. 'Rules of the Road'

Nothing shall exonerate any vessel *from the consequences* of any *neglect to comply* with these rules

Ignorance is NOT Bliss!

Inland & International – Inland applies to most SAS mapping!



### Navigable Waters...



http://www.mycruiseguys.com/USrivers.htm



### LIGHTS AND TERMS

Bow

White: Visible from front and side

#### Port:

Red: visible from side and front only

#### Starboard

#### Green: visible side and front only



White: Visible from behind only

# Rule 18: Responsibility between vessels

- A power-driven vessel underway shall keep out of the way of:
  - a vessel not under command
  - a vessel restricted in her ability to maneuver
  - a vessel engaged in fishing
  - a sailing vessel.
  - (Basically everyone)



### Some Common Sense Rules

Rule 5: Every vessel shall at all times maintain a proper look-out to avoid the risk of collision.

What this means:

– One set of eyes on the data, one set of eyes on the water!



http://www.guildlandis.com

### Rule 6: Safe Speed

Safe speed depends on (outside of signed harbors/anchorages)

- Visibility
- Traffic Density
- Vessel characteristics
- Weather conditions



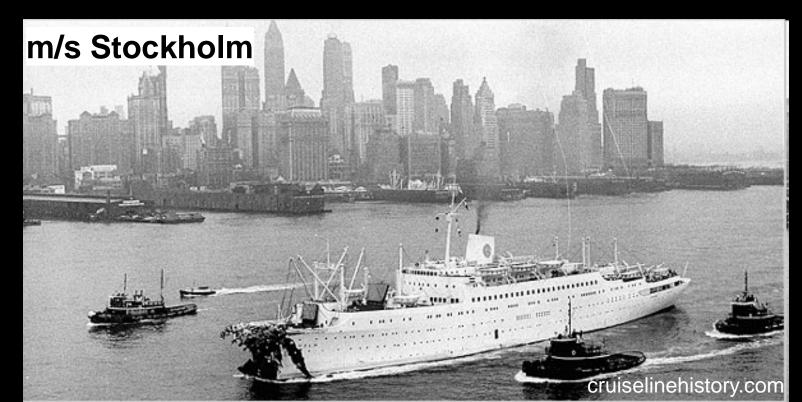
\*\* Remember, you are responsible for your WAKE!!



### Rule 7: Risk of Collision

Use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists.

If there is any doubt the RISK exists!!!!

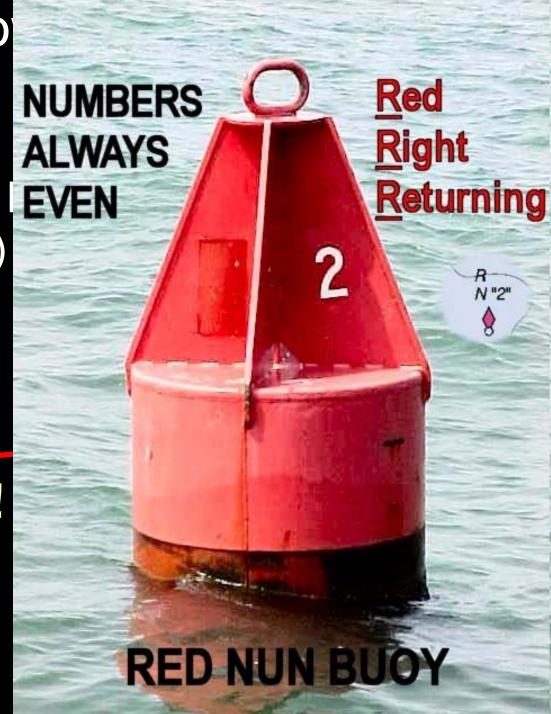


### Rule 9: Narro Channels

In a narrow channel EVEN to starboard (right) of the channel

### RED RIGHT RETURNING!!!!!

bostondavid.info





#### www.greaterbostonphotography.com

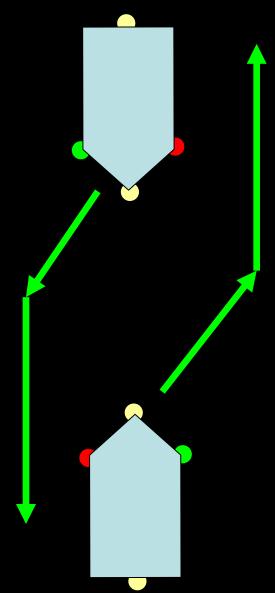
### Rule 13: Overtaking

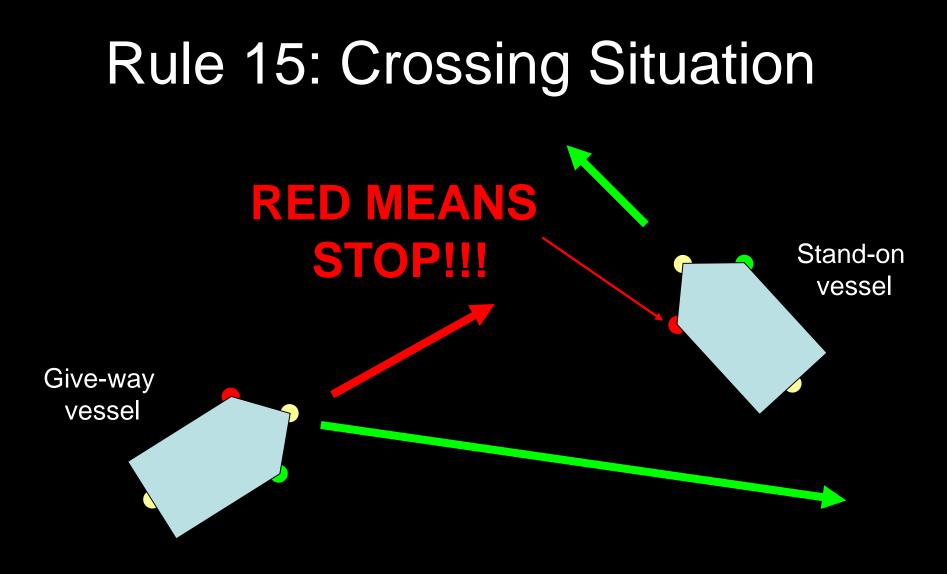
Stand-on vessel

Give-way vessel

### Rule 14: Head-On Situation

When approaching head-on, alter course to pass <u>port to</u> <u>port.</u>





### "RAM's" Restricted in ability to maneuver

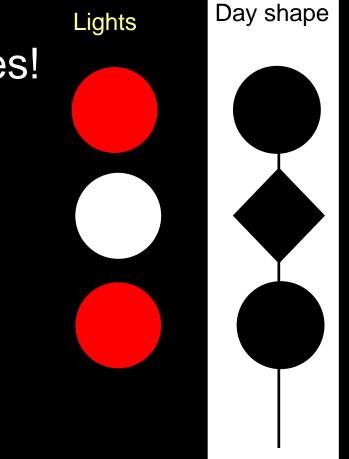
### Includes: Dredging, surveying or underwater operations (Divers)



### "RAM's" Restricted in ability to maneuver

### NEED: Lights and Dayshapes!

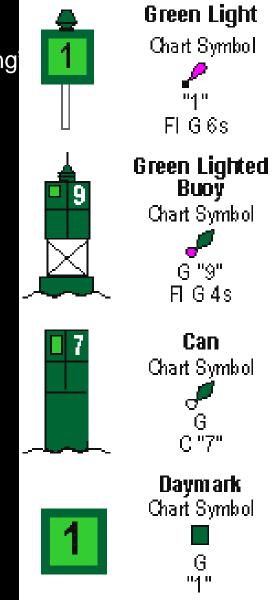




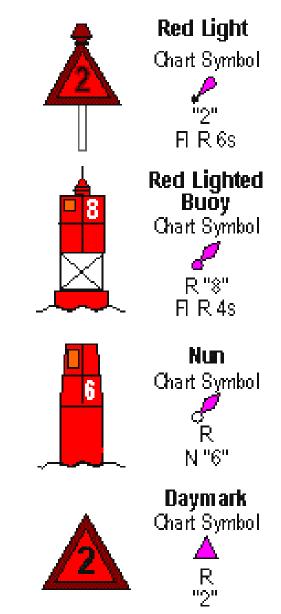
# Buoys

Port Side Lateral System As seen entering from seaward (Green Light Only Odd Numbered Aids)

"Red, Right, Returning



Starboard Lateral System As seen entering from seaward (Red Light Only Even Numbered Aids)

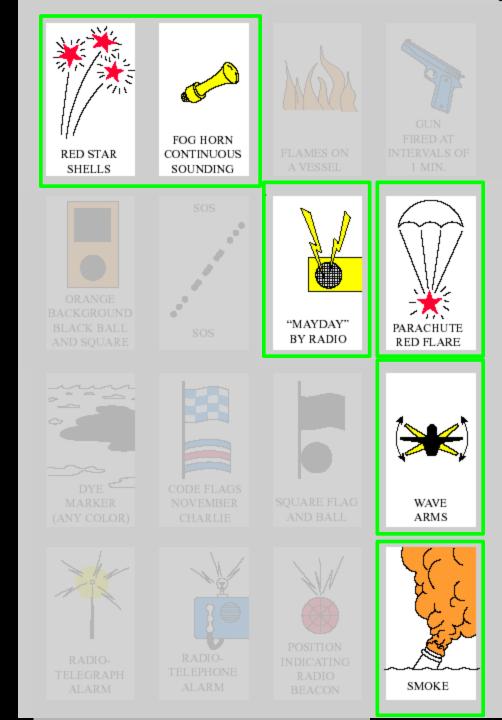


boatingbasicsonline.com

### DISTRESS SIGNALS



#### www.magic99.ca



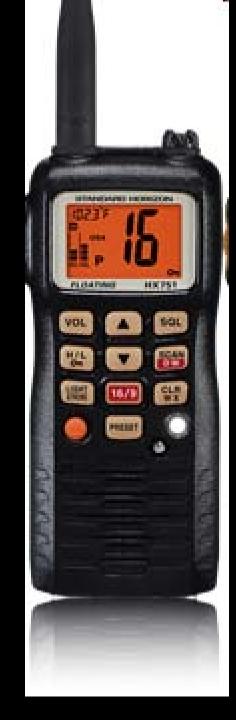
### **VHF RADIOS**

• But, I have a cell phone...



### VHF RADIOS

- Waterproof Handheld VHF
  - \* One waterproof hand held minimum: fixed mounts get MUCH better transmission



### VHF RADIO ETIQUETTE

- VHF IS not a cell phone, calls aren't private, and channel is tied up if you are talking
- Typically Call should be something like this
  - " r/v Doerner, r/v Doerner, this is the r/v Gilbert on channel 16"
  - "*r/v Gilbert* this is the *r/v Doerner* back, switch and answer channel (71, 72 etc)
  - "Roger r/v Doerner, channel 71"

### **WEATHER:**

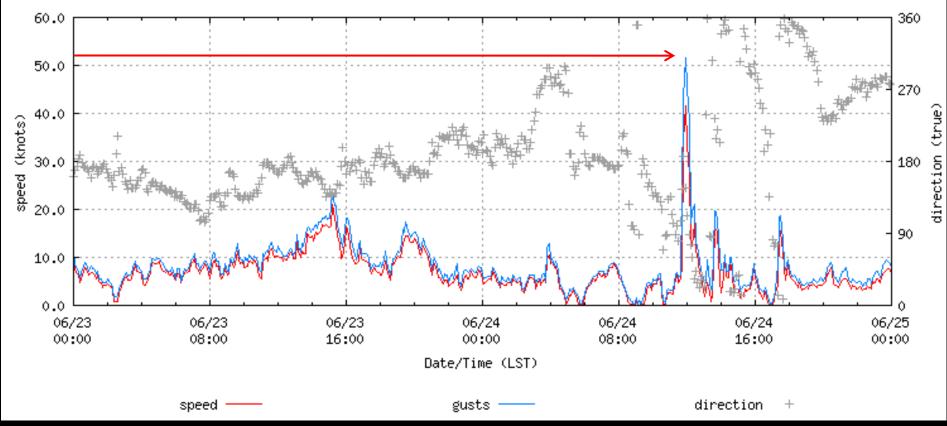
#### Know your limits and your vessels limit!!!





# Fortunately, most days when the weather is bad, the data is bad; However

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8452944 Conimicut Light, RI from 2008/06/23 - 2008/06/24



# **COLD WATER**

U.S.C.G. Considers cold water < 60° F (16° C)

In 50-60° water, Exhaustion/Unconscious in 1-2hr

Examples: Ocean City, MD (Nov –June 15) Cape Hatteras, NC (Nov-May 1) Newport, RI (Oct – 15 June)

#### COLD WATER SURVIVAL GEAR

"Immersion Suits"

- Good for deck work; double survival time.

"Gumby" Suits

-Full neoprene survival suits, Only for emergencies, not for working!

#### PFD's

- Not optional in cold water conditions!



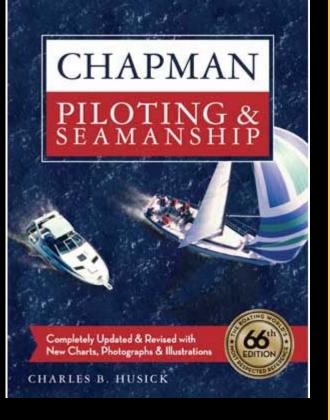
### 'OAKLEY'S RULES'

- When dealing with most 'weekend warriors' throw the rules out ON THEIR END
- Do your best to stick to the rules, however deviate when necessary to avoid collision
- EXPECT THE UNEXPECTED!!!!!
- IF IT CAN GO WRONG, IT WILL GO WRONG, at some point. BE PREPARED!

### "New Boater Training"

- Some states require new boater training
- Typically an office course, not field tests
- In coastal states, this is easy to find
- In New England:
  - -www.boatwise.com
  - Sea School
  - Confident Captain
  - Etc. etc. etc.

### Literature



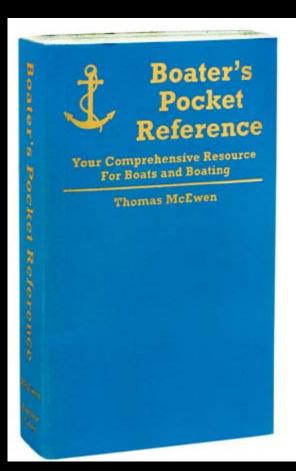
ELDRI		
2010		
Time TAKERS - Partland, Boston, Newport, Bri Bandy Hock, Bablinson, Mason Harbor East	dgeport, Kings Point, The Bars	
CERRENT TAILER - Cape Col Canal, Winds Gate, The Narrows, Delaware Box Entrance	Hole, Polick Rip, The Race, I	
CURRENT CRARTS & DIAGRAMS - Boston, Bos Sounds, Norregeneett Bay, Long Island & Bay, Upper Chesapeake Bay	pards Bay, Veryard & Namu	
Emmandem - Marine Distress Colling, Fir-	of Ald Guidelines, Hypotherm	
FIGURE - Striped Base and Tides, Shore Aug	for and Alongshore Currents	
SAFE NAMEATION - Rules of the Road, Navig	ation Lights, Bound Signals	
Liciens, For Sicious & Orrisona Boom Lighthouses, with Latitude Lengitude, from	- Characteristics of Borys a Nova Scotia to Key West	
Electronic Numberson - DOPS, Resson, V.	HP and DBC	
CLEAN BOARDIG - Tips for Environmentally B Act, USCG Pullution Regulations, How to F	Inspecialitie Boating, Clean Ver and Pumpeut Stations	
WEATHER - Wonther Reports, Harrisone Present Scale, Keys to Predicting Wonther, Weather 20	ions and Tracking Chart, Boost igns in the Sky, Dev Paint	
Astronomical Data - Sun & Moon Tables,	Mass Phase Calendar, Planet	
FLADS & CODES - International Signals, Sto	en Signals, Plag Etigaette	
MINCELLOWEDEN - Buoyage System, Oraning Cl. Your Company, USCI Stations, Blory Contest	harts, Perry Information, Adjust and mere	
Publishers: Robert Eldridge White, J	w. and Linda Foster White	
www.eldridgetide.com ebb2flood@gmail.com	Tel. 617-482-846 Fax: 617-482-830	
Excerning 2006 by Partnet Excerning Rithing at	PRICE: \$14.0	

The most trusted guide for East Coast waters, since 1875

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# **QUESTIONS?**

#### • For more information:

- <u>http://www.navcen.uscg.gov</u>
- http://www.uscgboating.org
- http://boatsafe.com/flash/reviewrules.html
- http://www.noaa.gov/charts.html
- http://www.navrules.com/about.html

http://www.uscg.mil/nmc/training/rules.pdf

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