

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.

<u>CAPACITY</u>	<u>LIMITATIONS APPLYING (IF ANY)</u>
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!!!!**

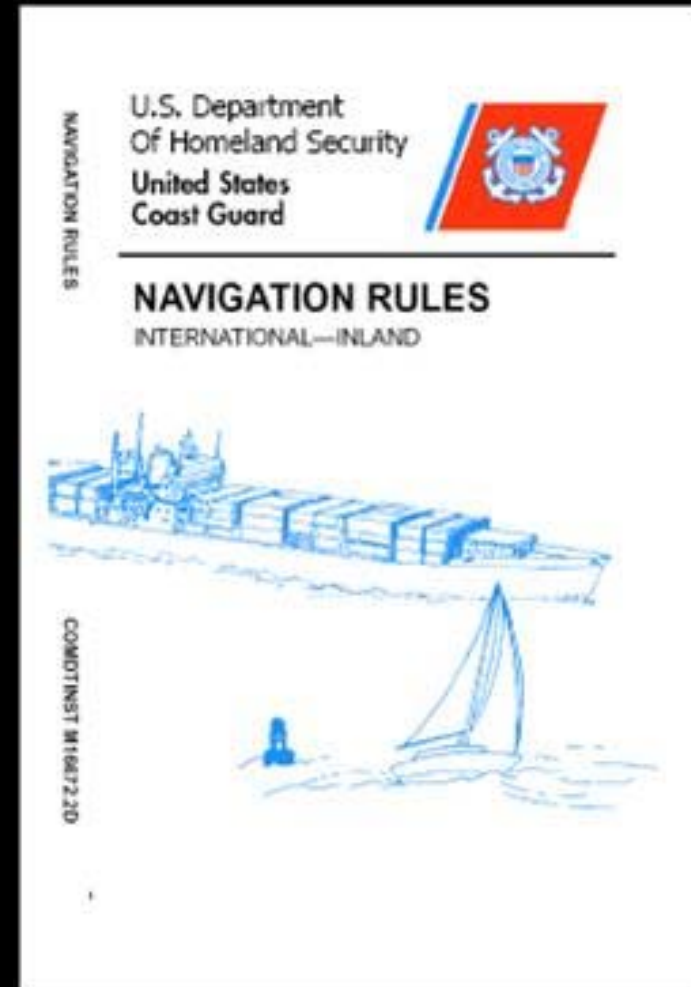


U.S.C.G. 'Rules of the Road'

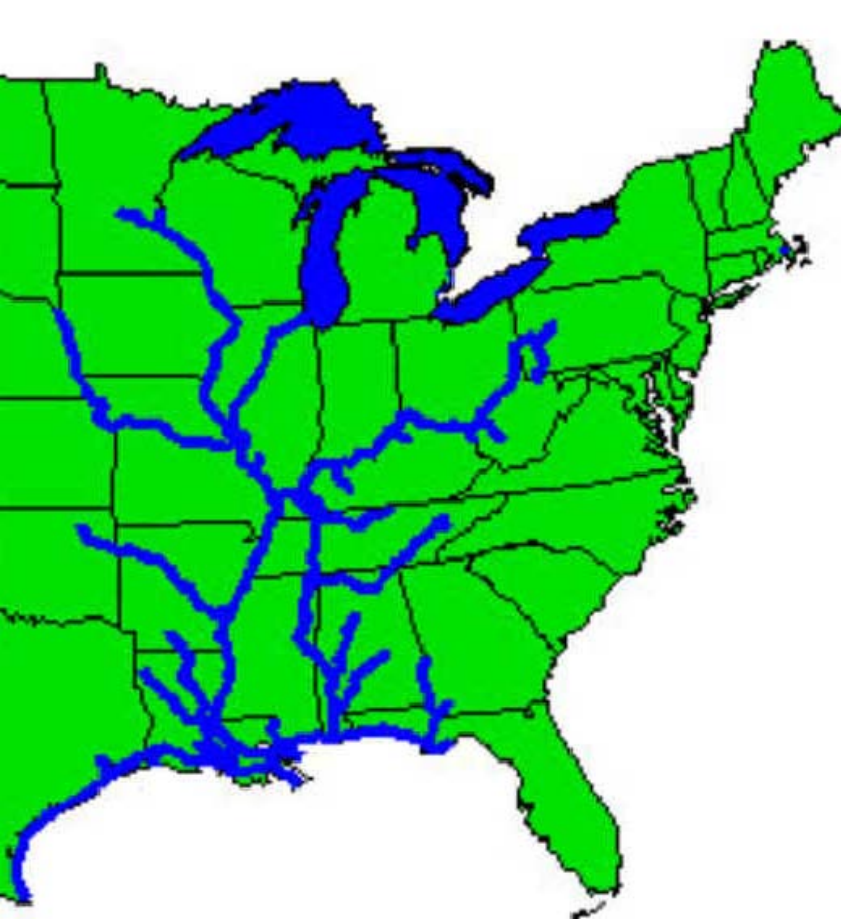
Nothing shall exonerate any vessel **from the consequences of any neglect to comply** with these rules

Ignorance is NOT Bliss!

Inland & International – Inland applies to most SAS mapping!



Navigable Waters...



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

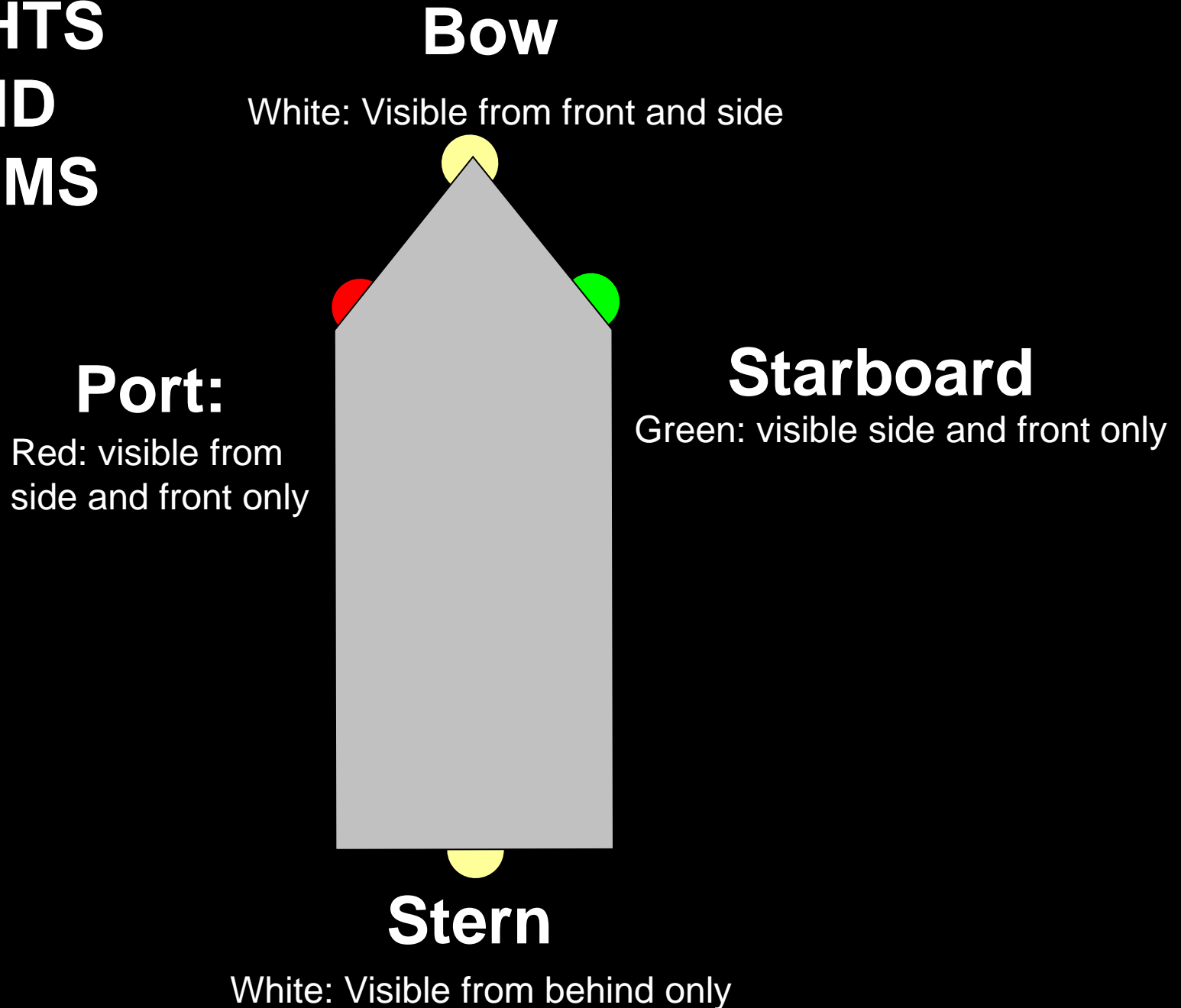


www.usace.gov



www.usace.gov

LIGHTS AND TERMS



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!



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!!!!



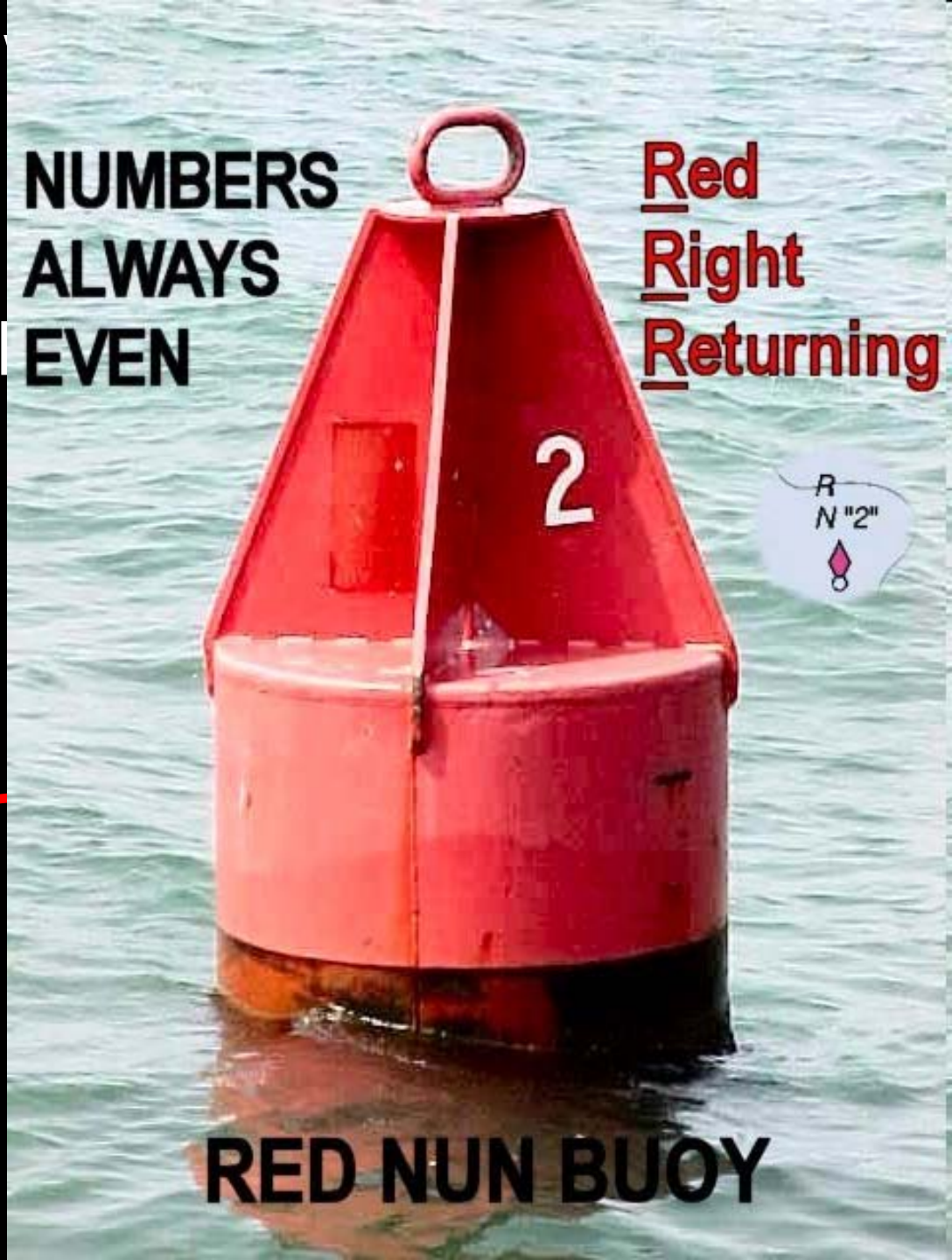
Rule 9: Narrow Channels

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

**NUMBERS
ALWAYS
EVEN**

**Red
Right
Returning**

**RED RIGHT
RETURNING!!!!**



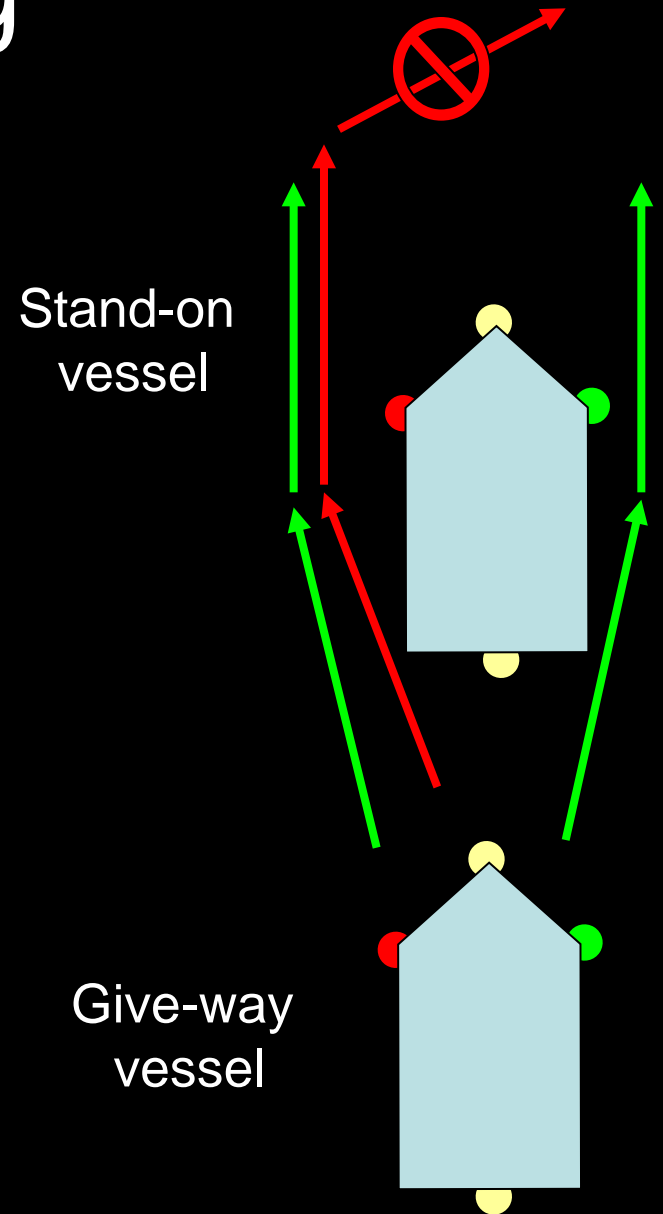
RED NUN BUOY

Rule 9: Narrow Channels

Stay out of the way!!!

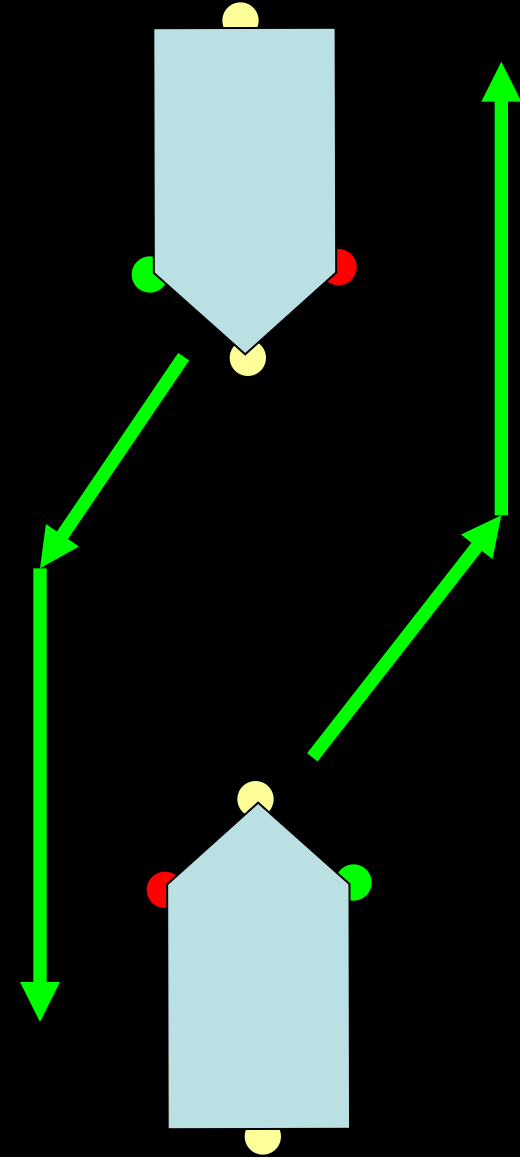


Rule 13: Overtaking

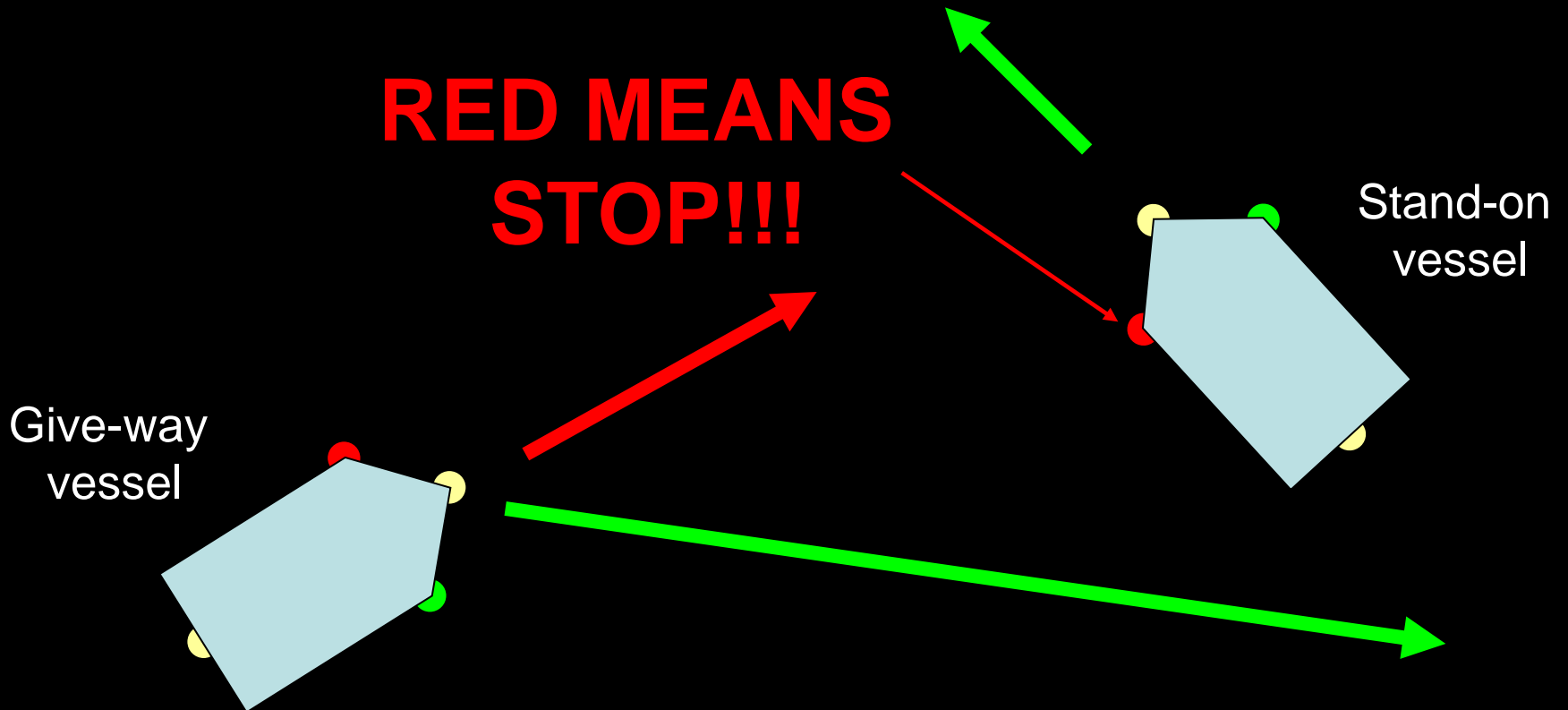


Rule 14: Head-On Situation

When approaching head-on,
alter course to pass port to
port.



Rule 15: Crossing Situation



“RAM’s”

Restricted in ability to maneuver

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

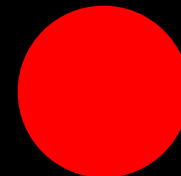
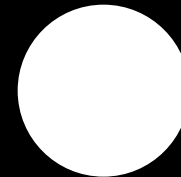
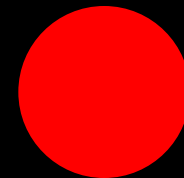


“RAM’s”

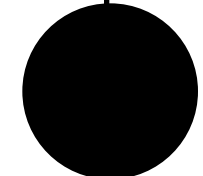
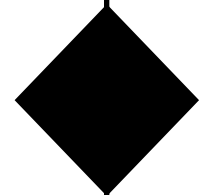
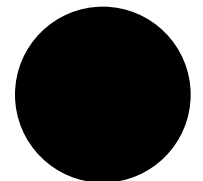
Restricted in ability to maneuver

NEED: Lights and Dayshapes!

Lights



Day shape



Buoys

Port Side Lateral System

As seen entering from seaward
(Green Light Only
Odd Numbered Aids)

Starboard Lateral System

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

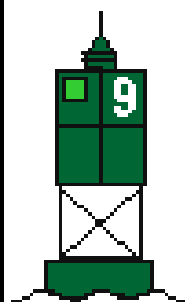


Green Light

Chart Symbol



Fl G 6s

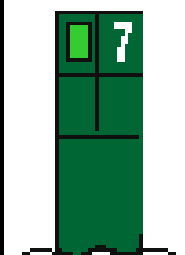


Green Lighted Buoy

Chart Symbol



G "9"
Fl G 4s



Can

Chart Symbol



G
C "7"

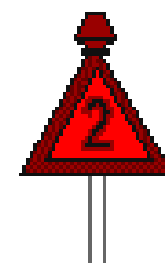


Daymark

Chart Symbol



G
"1"

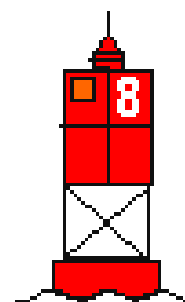


Red Light

Chart Symbol



Fl R 6s

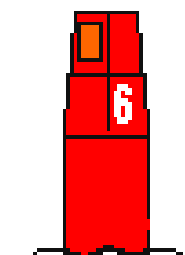


Red Lighted Buoy

Chart Symbol



R "8"
Fl R 4s



Nun

Chart Symbol



R
N "6"



Daymark

Chart Symbol



R
"2"

"Red, Right, Returning"

DISTRESS SIGNALS



RED STAR
SHELLS



FOG HORN
CONTINUOUS
SOUNDING



FLAMES ON
A VESSEL



GUN
FIRED AT
INTERVALS OF
1 MIN.

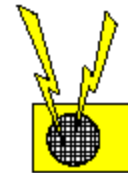


ORANGE
BACKGROUND
BLACK BALL
AND SQUARE



SOS

SOS



"MAYDAY"
BY RADIO



PARACHUTE
RED FLARE



DYE
MARKER
(ANY COLOR)



CODE FLAGS
NOVEMBER
CHARLIE



SQUARE FLAG
AND BALL



WAVE
ARMS



RADIO-
TELEGRAPH
ALARM



RADIO-
TELEPHONE
ALARM



POSITION
INDICATING
RADIO
BEACON



SMOKE

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!!!

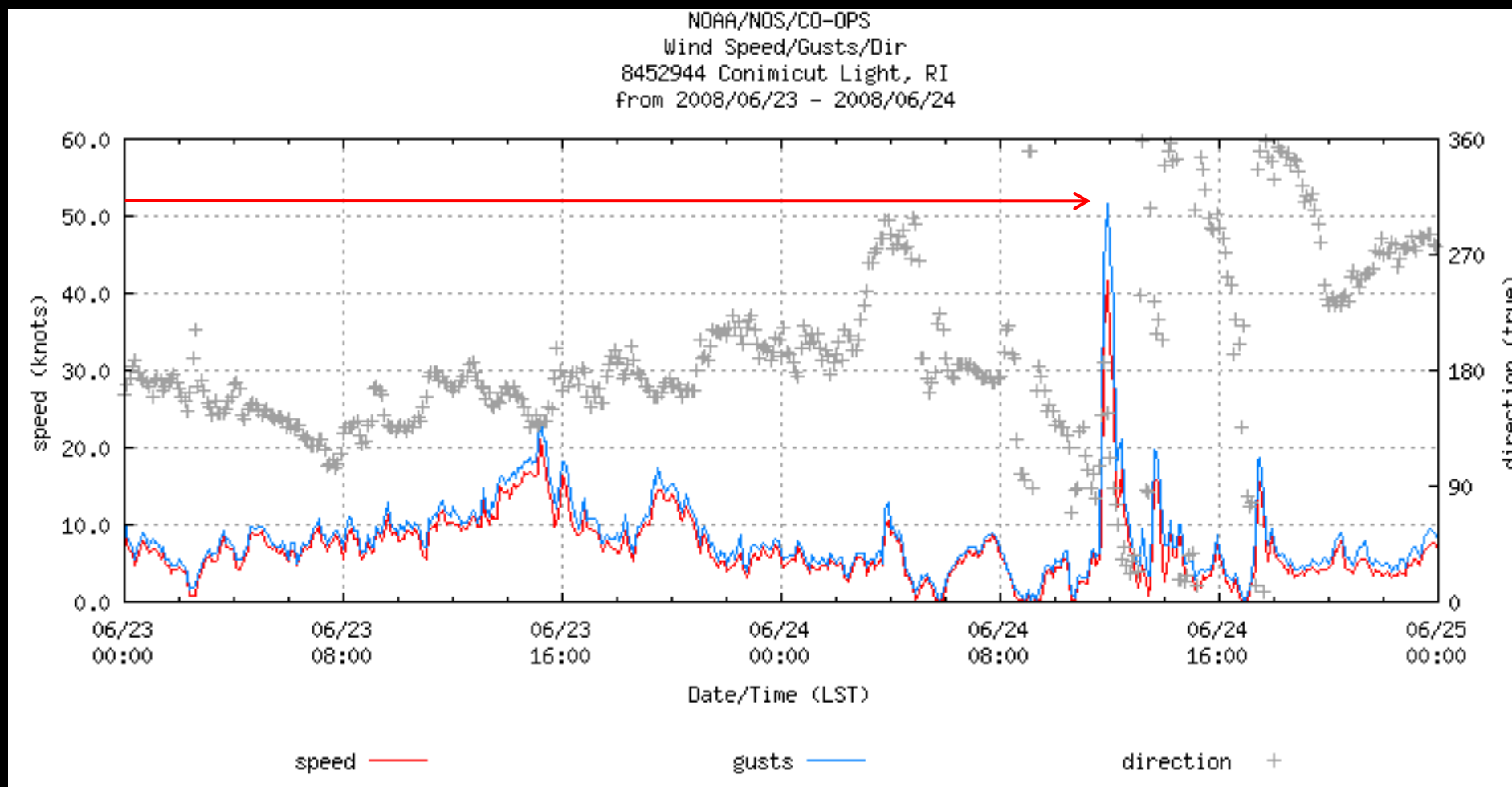




Lightening Rod



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



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!



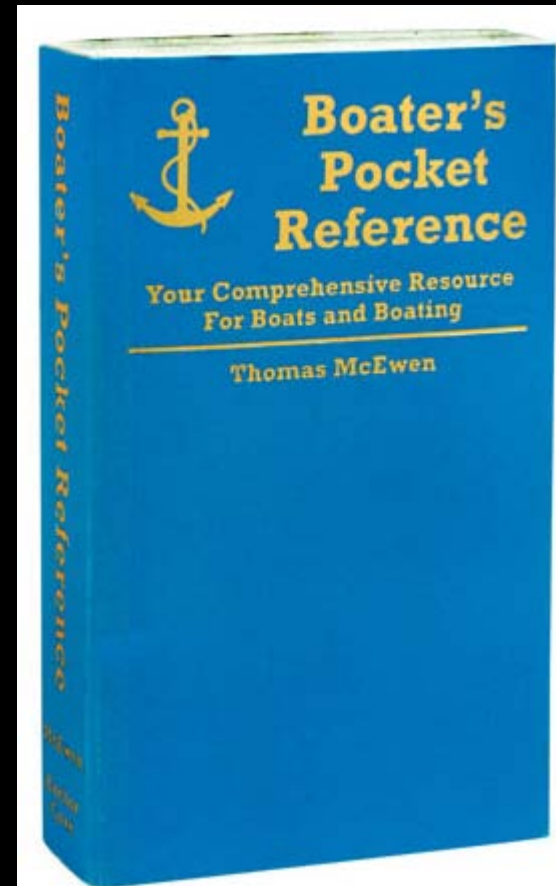
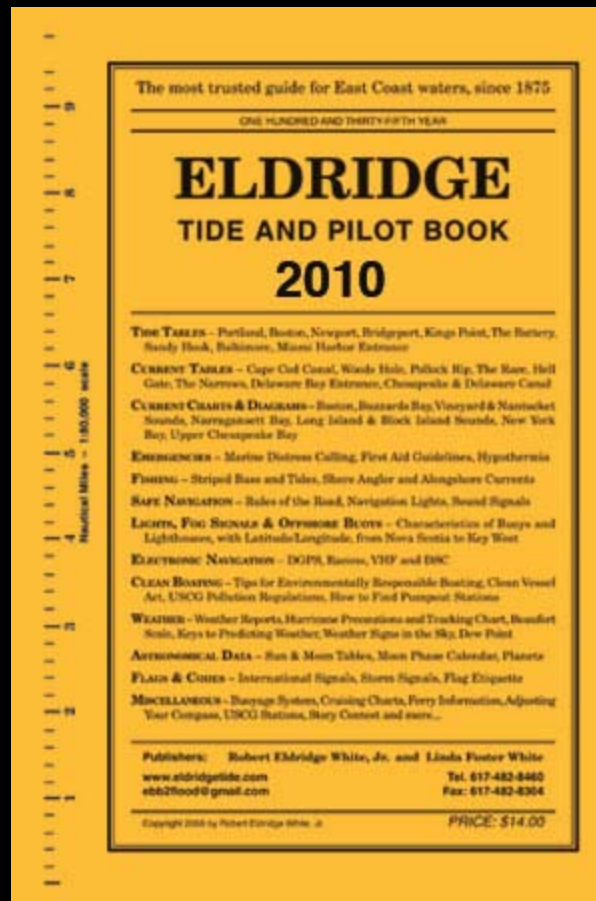
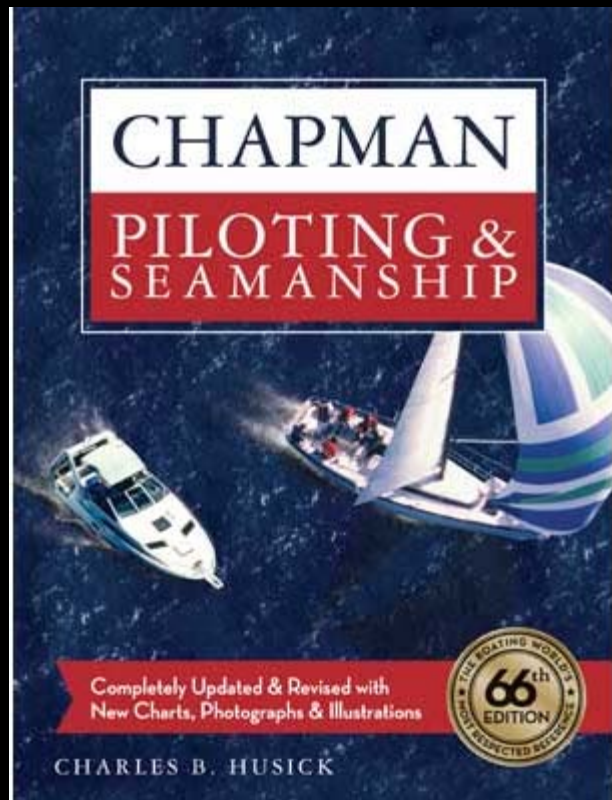
'OAKLEY'S RULES'

- 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



QUESTIONS?

- For more information:
 - <http://www.navcen.uscg.gov>
 - <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>

Bryan_Oakley@hotmail.com

Boakley@my.uri.edu

Boakley@bryant.edu