Core Competency

seamanship

the at-sea-answer

to risk management

Ralph Naranjo
Vanderstar Chair
U.S.N.A.

- Boat handling skills
- Navigation
- Decision making
- Oceanographic awareness
- Technical knowledge
- Fitness and agility

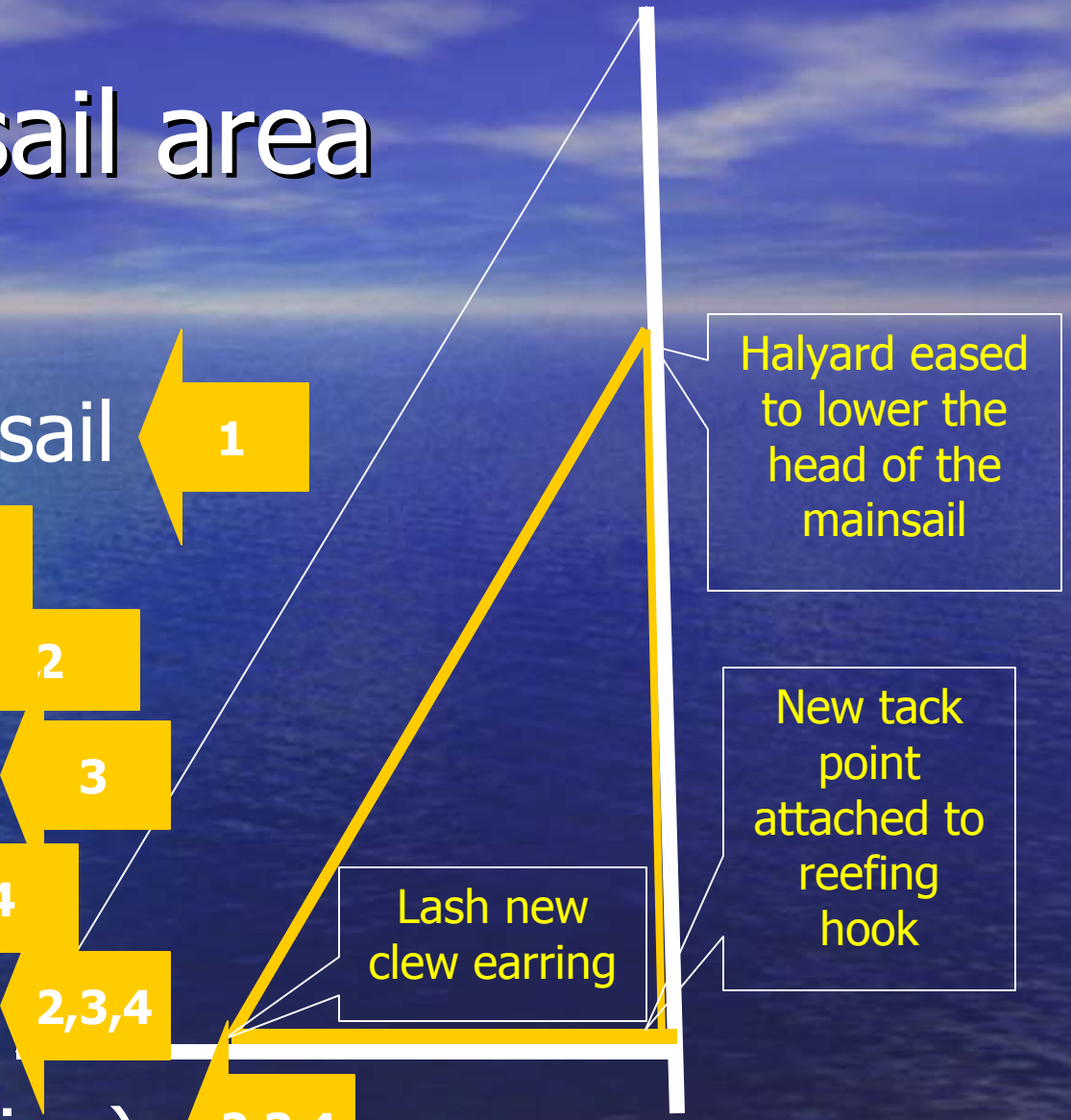
Merging the skills

Reefing skills

- De-power mainsail
- Ease vang
- Ease halyard
- Set new tack
- Haul in clew
- Tie reef points
- Lash clew (earring)
- Trim

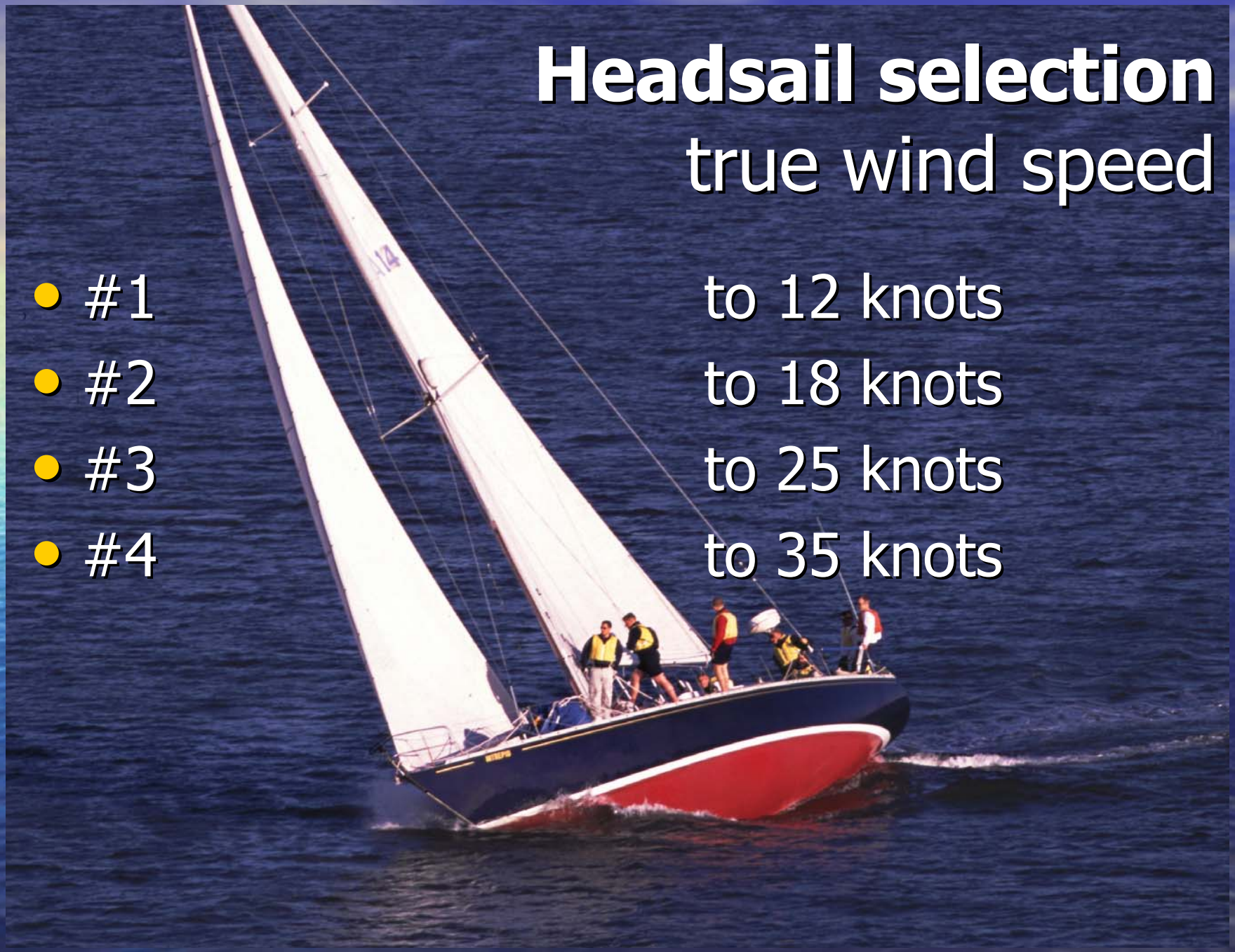
Reducing sail area

- De-power mainsail 1
- Ease vang 1
- Ease halyard 2
- Set new tack 3
- Haul in clew 4
- Tie reef points 2,3,4
- Lash clew (earring) 2,3,4
- Trim 1



Headsail selection
true wind speed

- #1 to 12 knots
- #2 to 18 knots
- #3 to 25 knots
- #4 to 35 knots



When to set storm sails

THE 35 KNOT RULE OF THUMB

- DETERIORATING WEATHER
- NIGHT
- CREW CONDITION
- SAVE THE MAIN

Stay ahead of sea state demands

Deciding how hard to drive the boat

- Crew skill and size
- Vessel condition
- Sea state
- Mission

Navigation

- Don’t let the process overshadow the product!
- Second guess the plot
- Process sight, sound, smell
- Kinesthetic awareness
- Over ripe fruit and DR
- A navigator’s “threat-con level”

New landfalls déjà vu

- Reference Sailing Directions
- Large scale charts
- Reeds
- Track gazing

Validate your plot

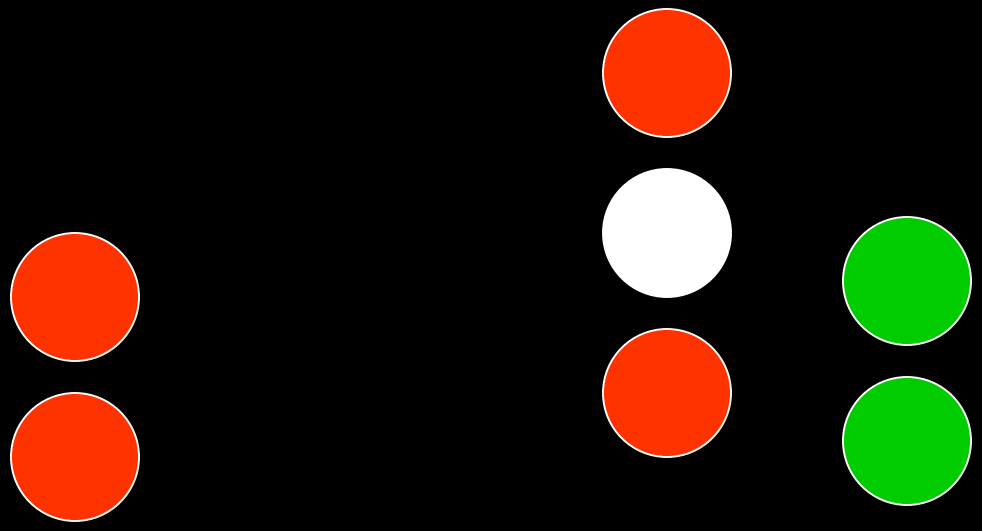
- The 7x50 instrument vs. tool rule
- Magnetic compass trend
- Average boat speed
- Soundings trend and fathometer reading
- Radar ranges
- GPS/LORAN Fix

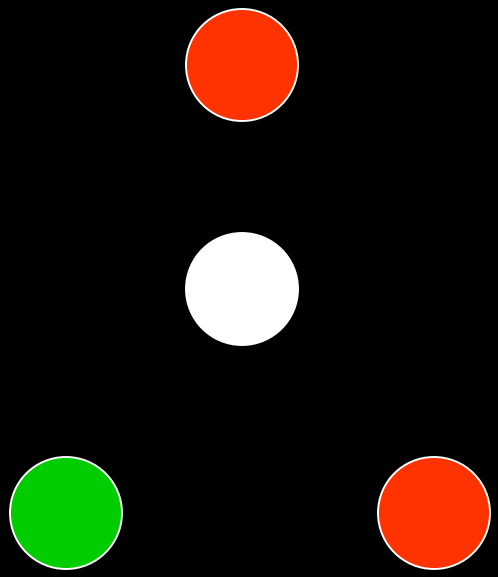
Integrating the inputs

- Screen wisdom (SOG and COG)
- Handy handhelds (GPS and VHF)
- Cel-nav and calm clear conditions
- Advancing a sun LOP

Well tested wisdom

- When in doubt approach a bold headland
- Keep track of the current's set & drift
- Navigate inside or outside of a channel
- Think 3D
- Visibility
- Lights





INLAND RULE 24

The unintentional jibe

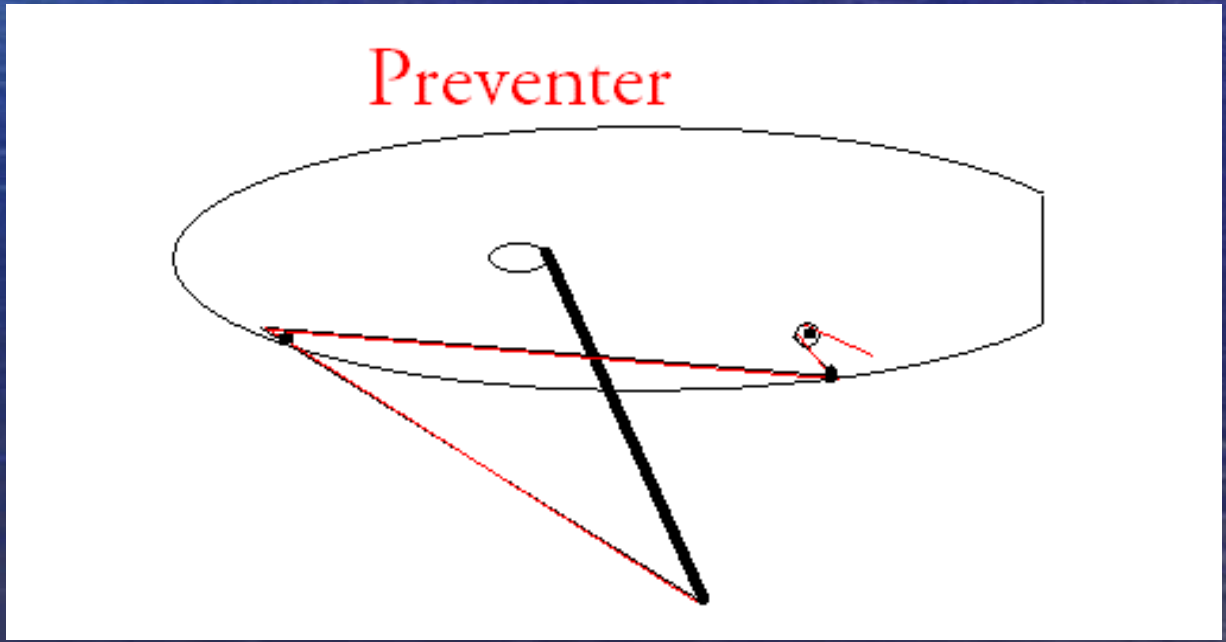
- MIDN Alan Minister 1990
- A history of head injuries
- Mainsheet tackle and vang
- Building awareness

Jibe avoidance

- Skilled helmsperson
- Attentive OIC/AOIC, Safety Officer
- Glance at the Windex
- Preventer tackle properly set

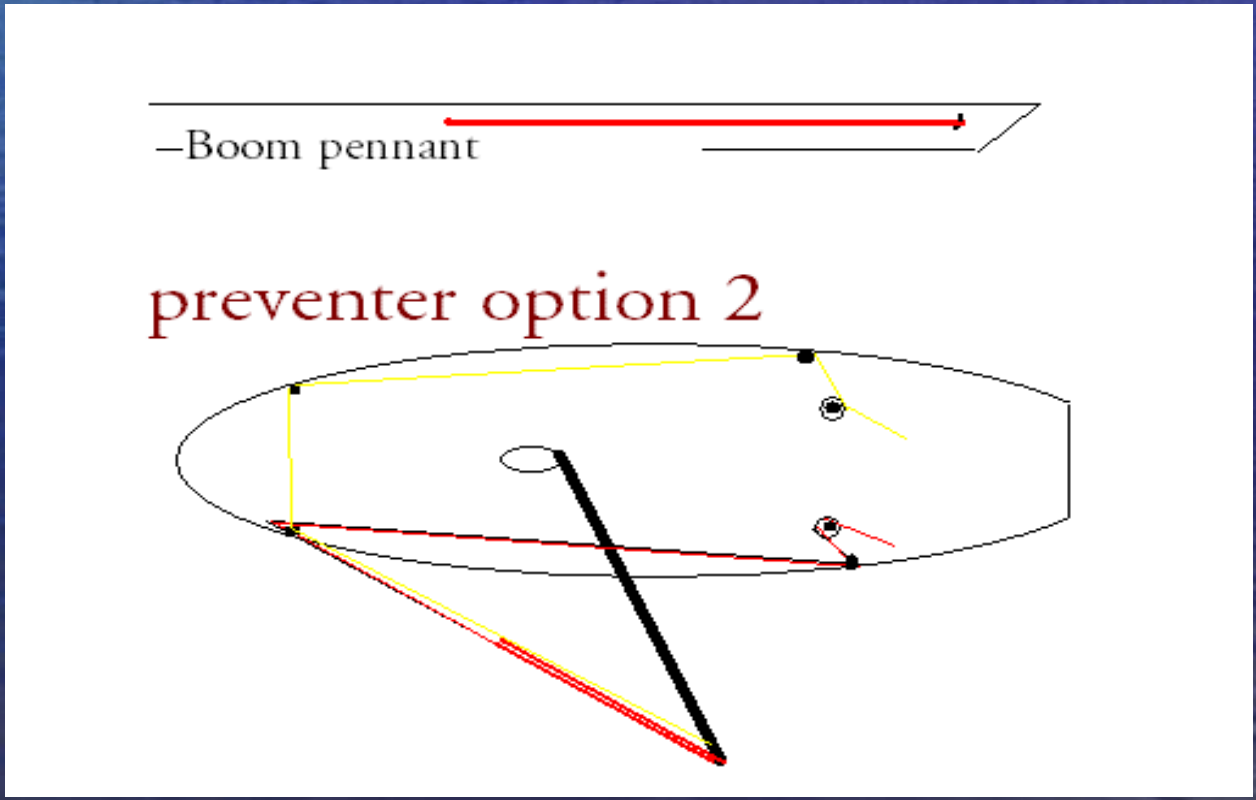
End boom preventer

- must handle full mainsheet load
- Eased from a winch



Shortage of leeward winch

- Rig additional snatch blocks to windward



Bay vs. oceanic conditions

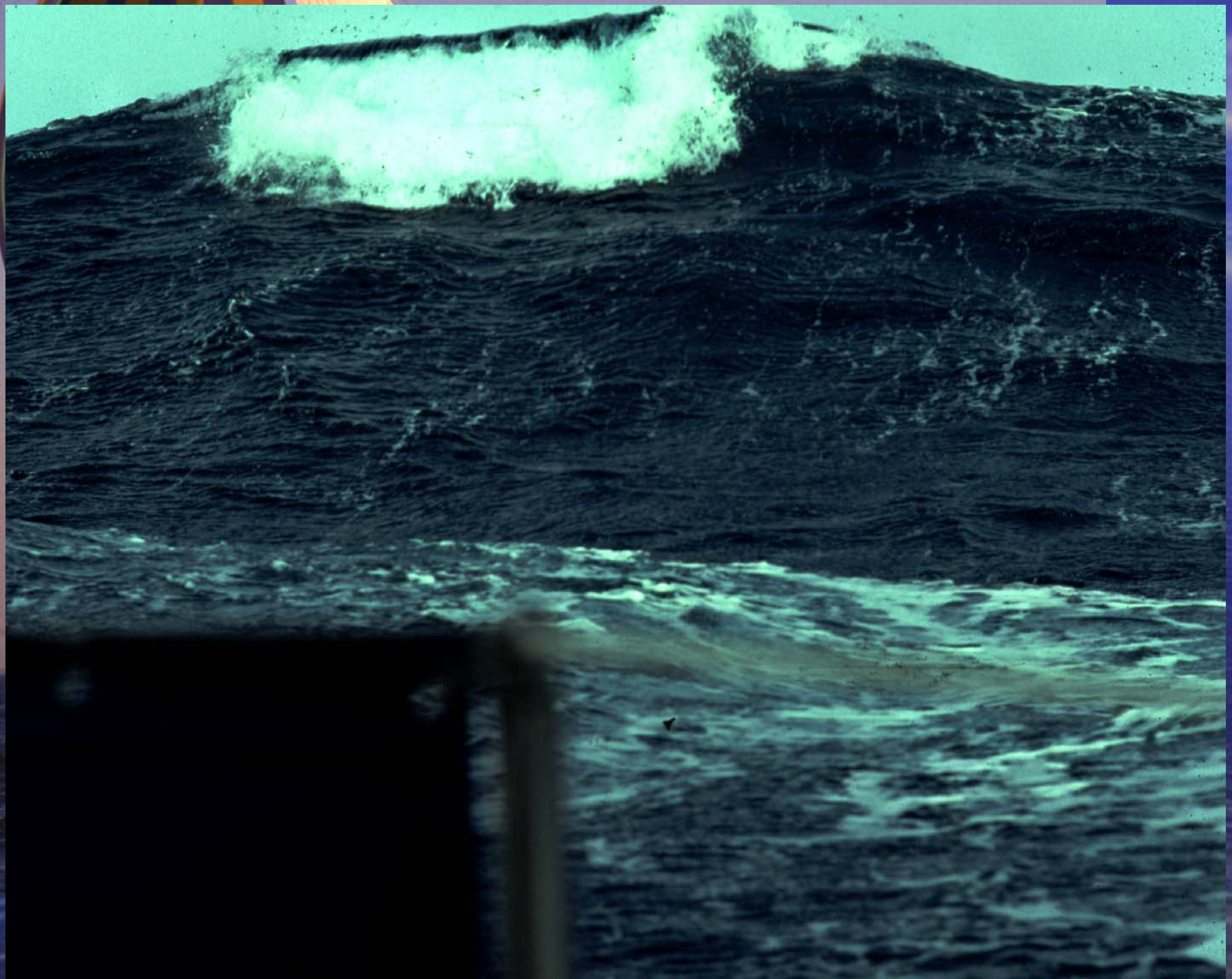
- Swells and waves effect directional stability
- Loss of landmarks
- Unfamiliar with compass steering
- The relative nature of darkness

Crew dynamics

- Implications of changing weather patterns
- Coping with seasickness
- Fighting fatigue
- Crew skill range

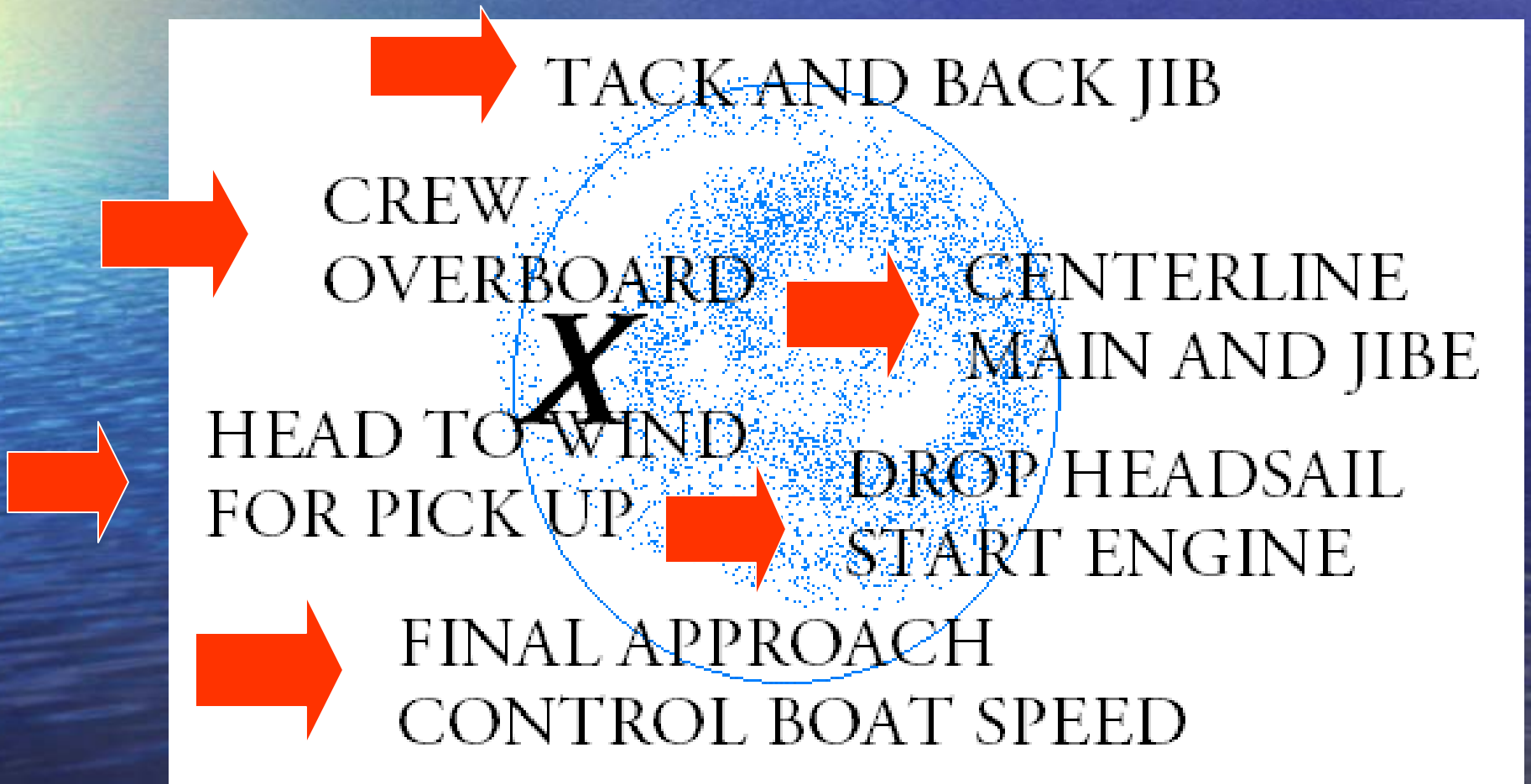
Collision avoidance

- Watch turnover vulnerability
- Learn the lights
- The art of avoidance
- Helm - bow watch – navigation
- Watch captain
- OIC/ AOIC
- Keeping track of the fleet



ON-THE-WIND

- EXECUTE QUICK-STOP



Off the wind

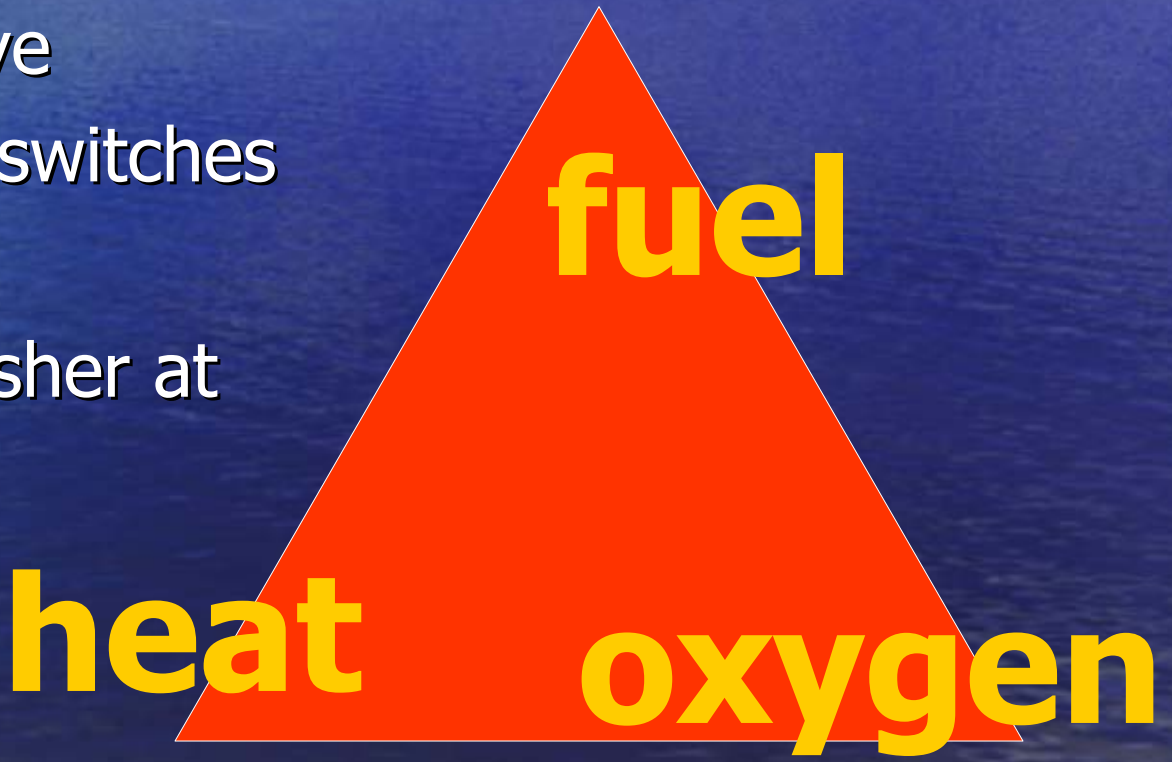
- Turn into the wind
- Cope with spinnaker, lines preventer etc.
- Start engine

Throw floatation – deploy pole, strobe and horseshoe

Check your safety gear!

Fire

- Stop engine/heave to
- Shut off fuel valve
- Turn off battery switches
- Close hatches
- Aim fire extinguisher at base of flames



Flooding

- Heave to
- Locate leak
- Stop water flow
- Execute damage control
- Communicate condition

know the location of all thru-hulls

Grounding

- Check vessel for leaks
- Check crew condition
- Tidal phase – bottom configuration
- Threat evaluation and communication

- Establish “which way off”
- Trim sails to heel vessel
- Start motor (lines, thrust,RPM)

Hard aground!!!

- Anchor set to best path of egress
- Second anchor set to windward
- Surf conditions and risk factor
- USCG, Harbor Master, Commercial tow
- Recreational boater

Communications options

- Don’t discount VHF
- SSB propagation vs. time of day
- Review Reeds (Wx and distress)
- Tuning the SSB antenna
- EPIRB and emergencies

Abandon ship

- Mayday
- PFD's
- Raft, EPIRB, grab bag, flares, water
- D.C. efforts and preparation to abandon
- Very last resort

step up into the liferaft

Lending assistance

- Confirming the needs of another vessel
- Evaluate your ability to assist
- Make clear your intentions
- Wait for confirmation
- Instruct both crews

Responding to a distress call

- Alert USCG (USNA)
- Determine risk
- Proceed to vessel and plan response
- Communicate with all involved
- Seek confirmation

Set priorities

- Identify hazard
- Amend rescue plan
- Save crew (multiple rescue)
- Assist vessel
- Take in tow

Beware of the unexpected

- Irrational behavior of victims
- Irresponsive crew
- Dangerous constraints
- Secondary effects

Must consider

- Imminent threat to your own crew
- Danger to the crew requesting help
- Are better options available?

seamanship =
safety at sea