

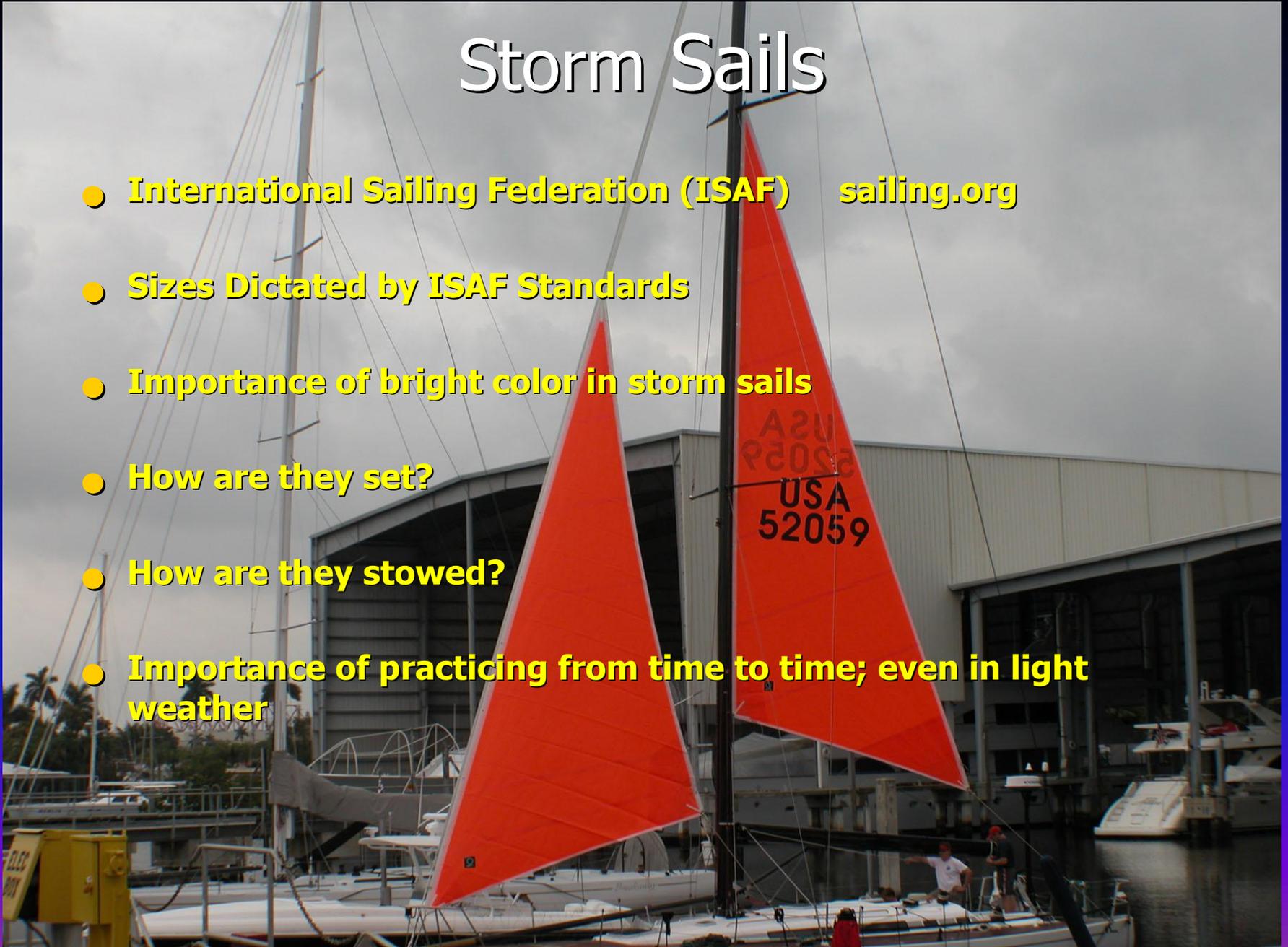


Storm Sails

Safety at Sea Seminar

Storm Sails

- **International Sailing Federation (ISAF) sailing.org**
- **Sizes Dictated by ISAF Standards**
- **Importance of bright color in storm sails**
- **How are they set?**
- **How are they stowed?**
- **Importance of practicing from time to time; even in light weather**



Special Regulations, cont.

- Storm Jib, Cat 0-2
 - Area $< 5\%$ of foretriangle squared
 - Luff $< 65\%$ of foretriangle height
 - Cannot use luff support foil
- Heavy weather jib, 0-4
 - Area $< 13.5\%$ of the height of the foretriangle squared
 - No reef points

Storm Jib

- Tack Pennant & Clew height
- Dangers of heavy water breaking over the bow and carrying away poorly stowed or sails set too low
- Foot length to clear mast
- Danger of heavy metal shackles in storm sails



Storm Jib Tack

- Note Tack Height
- Alternative means of attachment
- Lash around headstay





Special Regulations

- Storm Triesail, Cat 0-2
 - Not greater than 17.5% of luff x foot
 - No headboard
 - No battens
 - Attaches to mast; independent of boom
 - Sail #s
- Reefable Mainsail, Cat 3-4
 - Reduces hoist by 40%

Storm Trysail

- Sail clears stack height of main on slides
- Adjustable to correct sheeting angle
- Note Clew height





Separate Trysail track

- Highly recommended
- Eliminates requirement to remove mainsail
- Trysail can live on deck
- Separate track “mandatory” for in mast and LeisureFurl type sails



NEXUS

NEXUS





DAUMARIS

DAUMARIS





Team Work makes the difference



West Marine

Protect your sails

- Heavy water breaking over the boat can carry away poorly stowed sails
- High clewed sails and pendants at the tack



Nicely stowed Sails



West Marine

Balancing the sail plan

- While sail area is reduced, it must be balanced
- Move CE towards center of vessel
 - Storm staysail
 - Low aspect trysail

Only 200 nm to go



West Marine

Keeping the rig in the boat

- Storm sails may put forces on the rig in different places

Reefed mains may invert mast

Use runners or check stays to maintain column

Pre-bend mast with backstay and babystay

Head of the Trysail should end near a spreader

Look up mast and make sure it is behaving



Sailmaking details

- Have storm sails made from bright orange or red fabric
- Minimize clew hardware to prevent injury
- Trysails should use a separate track on the mast
- Pendants raise CE, but allow better visibility and wave clearance
- Triple stitching
- Flat cut

Practice in light air

- How does the trysail attach to the mast?
Where do the sheets lead? Mark positions
- How does the jib bend on the headstay?
Where does it lead? Mark positions
- What is the best way to secure the boom?
- Set up mast with runners and adjust for pre-bend

Lets Go Sailing in some Breeze

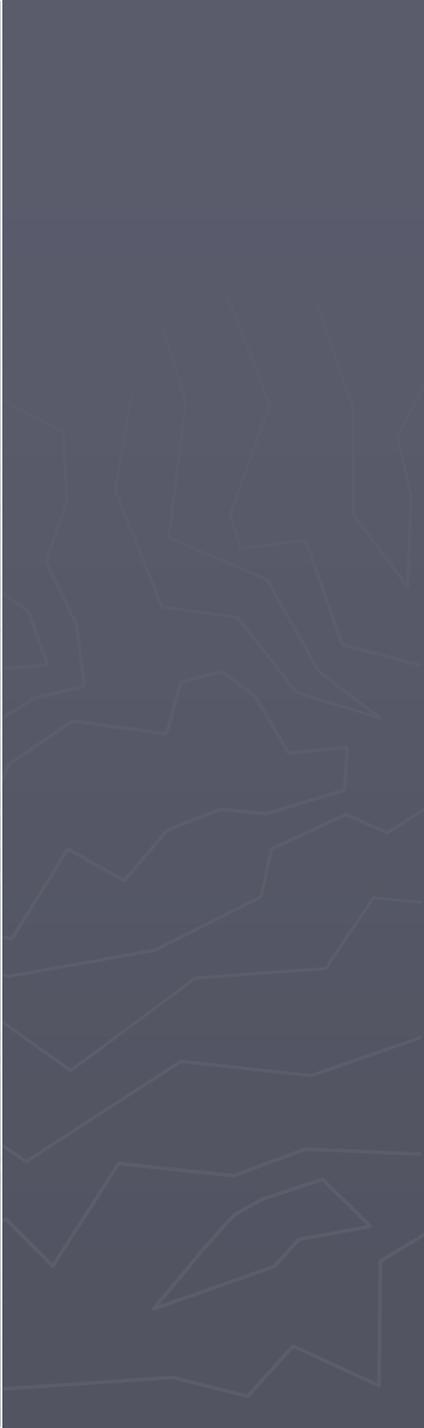


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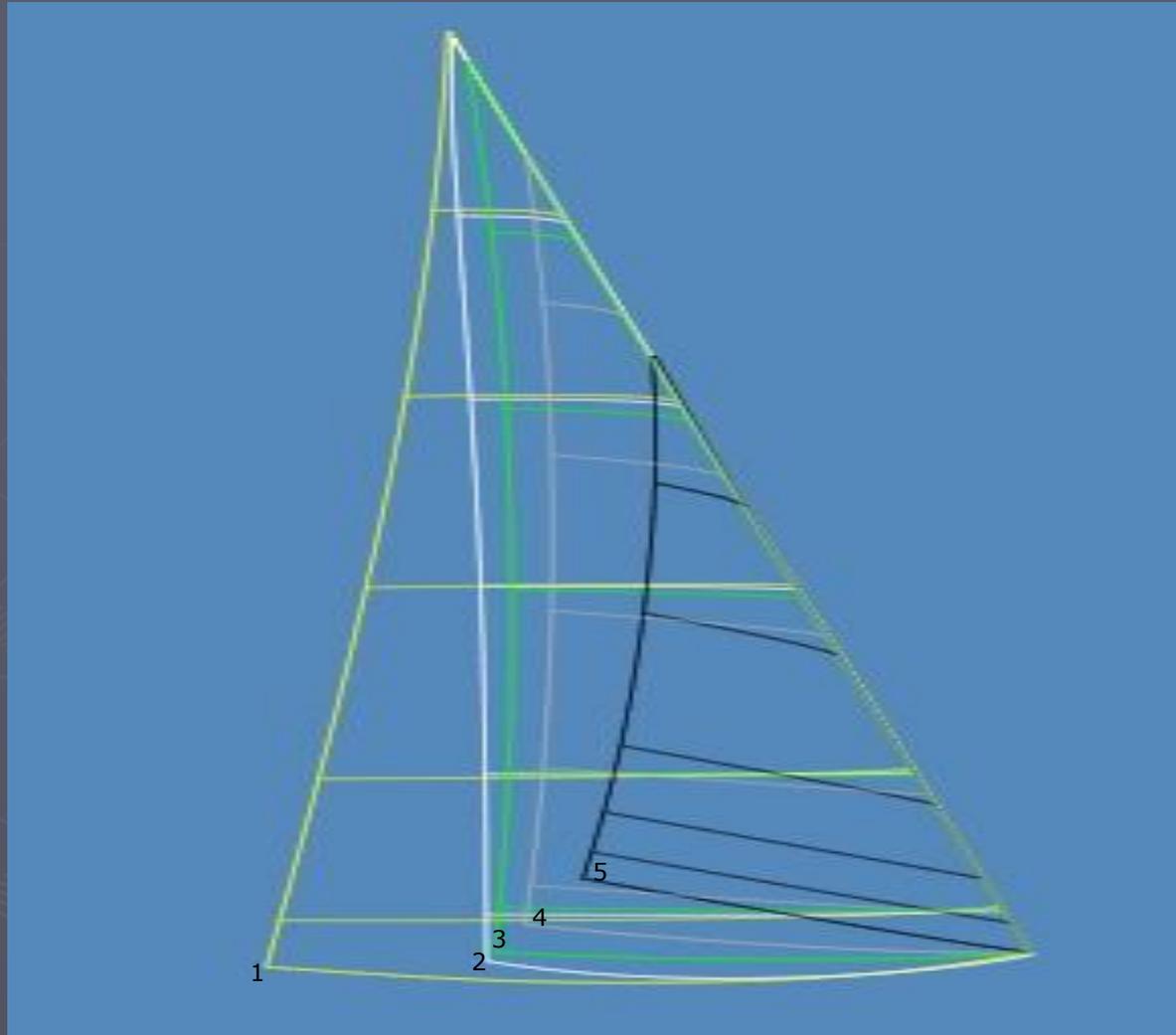




12.19.2006



Headsail Step-down Diagram



Genoa/ jib sizing and crossovers

Overlapper to be considered. Establish wind range for this sail with aerodynamic tools



Code 1 Overlapper
320 sqm



Code 1-2 Non Overlapper
240 sqm



Code 3 Jib
208 sqm



Code 4 jib
170 sqm



Code 5 jib
105 sqm

Reaching Sails

Jibtop; Sizing to be discussed and dependant on the sizing of the biggest genoa



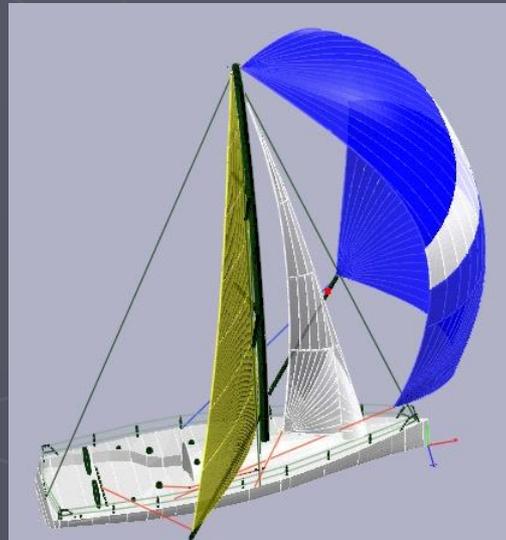
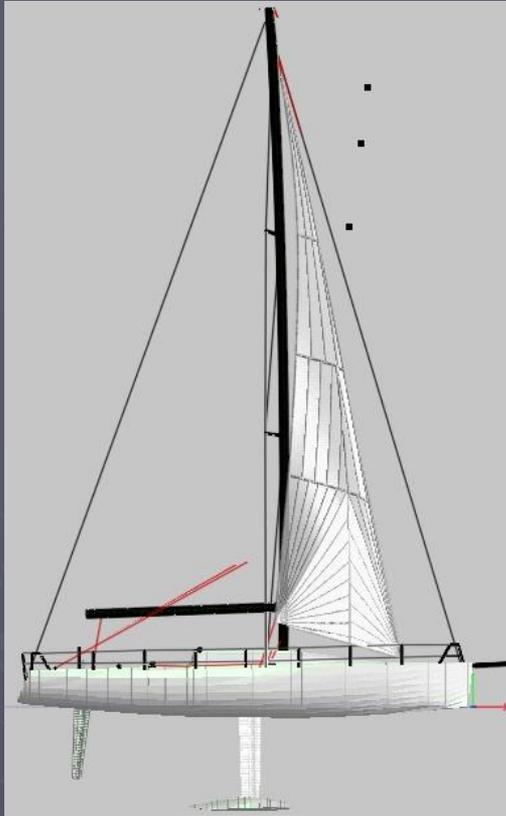
Staysail: Head of sail will need to tie into check stay for Rig support.

Spinnaker Staysail



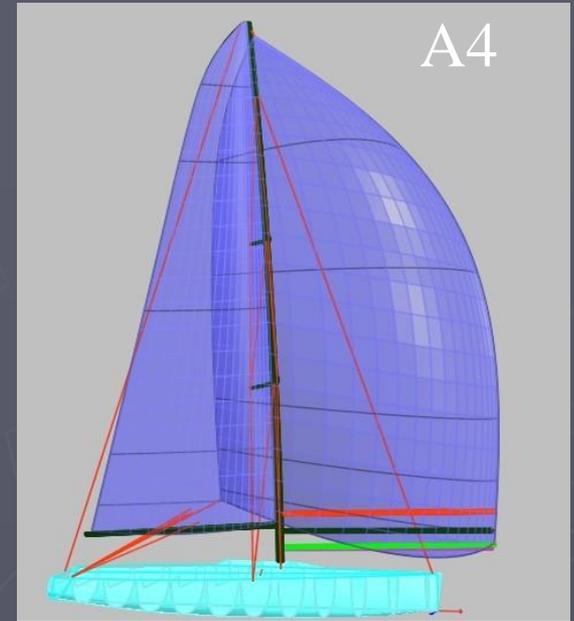
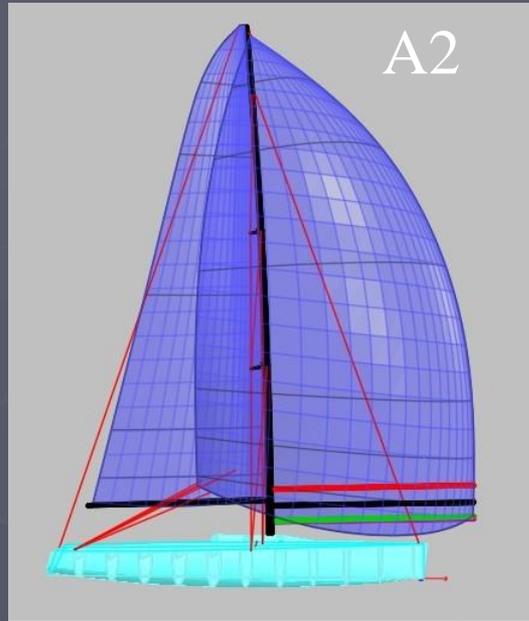
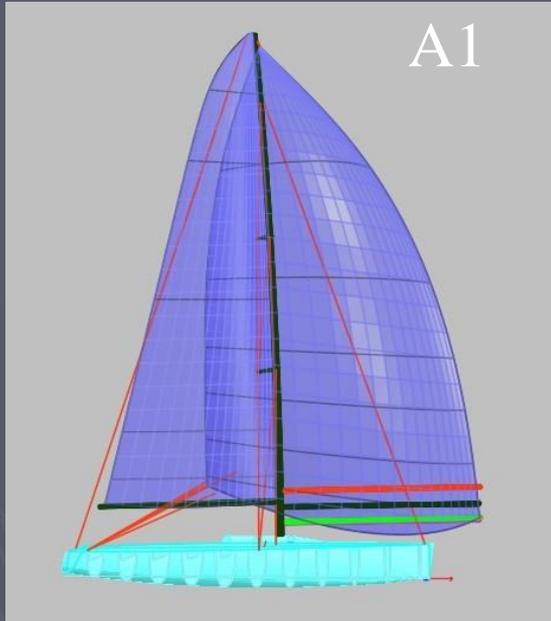
Flown from staysail tack
Position hoisted to genoa
Halyard. Flown under A1 and
A2 gennakers
Area 175 sqm





Spinnaker staysail will fly effectively
Under all downwind configurations

Design progression for TP 52 downwind inventory



All sails designed as they will fly at the correct wind angles

