Sail Shape and Trim
From the Coach Boat

Mike Ingham
Goal: Speed By Real Time Comparison
Compare:

Trim:
- Leach Profile
- Flow (Leach tales)

Shape:
- Camber
- Draft

Setup:
- Mast bend
- Shroud tension
- Rotation
(Not talking about today)
Problem: Our eye not good at absolutes
Have Computer Tools - But Not Real Time

<table>
<thead>
<tr>
<th>SailType</th>
<th>MAIN</th>
<th>Height</th>
<th>CAMBER</th>
<th>DRAFT</th>
<th>TWIST</th>
<th>ENTRY</th>
<th>EXIT</th>
<th>FORE_CAM</th>
<th>BACK_CAM</th>
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Our Eye is Easily Fooled

• Not at absolutes
• Optical illusion
• Ask how many degrees or
Human Eye Best at Direct Comparison
Human Eye Best at Direct Comparison
Trim First!

• Then setup
Main
Main Leach Tale:

- Flow analog
- "25% stall"

-Cycles ~3 seconds

~10 click ratchet range

From 10% to 90% Stall
Flow Near Main Leach Partially Detached
Leach Profile

Twist transition point
Over-bend Wrinkles
Jib
Jib Leach Tale:
-Flow “digital”
Over Trim Jib = Complete Flow Separation
Spin
Curl:

- Amount
- Height
Use Curl Instead of Tales Because Separation