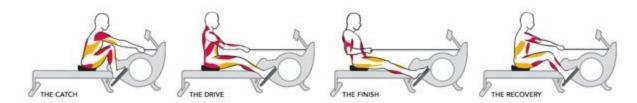
Goals

- Understand and execute the rowing stroke with proper mechanics in order to emphasize efficiency and minimize potential for injury
- Understand proper setup on the C2 including foot placement and damper setting
- Learn drills and cues to practice and teach proper technique
- Establish a baseline split to use for training purposes

Technique/Sequence

- Rowing consists of 2 main phases: the DRIVE and the RECOVERY
- The **Drive** is the work portion of the stroke
- The **Recovery** is the rest portion
- The **Stroke Rate** is how many strokes you take per minute (s/m)
 - 22-26 is good for more endurance or technique focused workouts
 - o 28-32+ is good for sprints
 - On the performance monitor this number is updated every stroke
- The **Split** is how long (in minutes and seconds) it will take you to row 500m
 - o i.e. 2:00 means it will take you 2 minutes to go 500m
 - On the performance monitor this number is updated every stroke



- The Catch
 - Shins vertical
 - Relaxed Grip (Flat wrists)
 - Hands Shoulder height and shoulder width
 - Straight Arms
 - Relaxed shoulders
 - Tight core
 - o Body Angle (1pm) Sitting up tall
 - Neutral Gaze
- The Drive
 - Legs -> Body -> Arms
- The Finish
 - Legs extended
 - Handle drawn to body (below bra strap) and held lightly
 - o Body position 11:00
 - Neck & Shoulders relaxed
 - Head Neutral
 - Elbows drawn past body

- Flat wrists
- The Recovery
 - Arms -> Body -> Legs (Reverse of the Drive)

Rower Setup

- Drag factor between 110-115 (women) 115-120 (men)
- Usually this is a damper setting of around 4.5
- Place feet high/low enough that shins are vertical at the catch avoid over-compressing and under-compressing

Drills

Pick Drill

- WHAT IS IT?? Drill that Isolates the different parts of the recovery and drive sequence and helps you feel how they're supposed to flow together.
- Do about 20 strokes of each section
- https://www.youtube.com/watch?v=gQOC9bbFY6A
- Arms only Points of performance
 - body stable
 - legs extended
 - arms extend fully, then draw back until hands come w/in 1 inch of body
 - return straight back out
- o Arms and Body Points of performance
 - body hinges @ hips only after arms have straightened
 - change directions starting w/ body, then pull w/ arms
- ½ Slide Points of performance
 - arms extended, body @ 1, bend knees just a few inches
 - drive through heels to extend legs, lean body, pull hands back
- Full Slide Points of performance
 - shins vertical @ catch
 - body stable
 - sequence straighten the legs, then lean body from 1 to 11, then pull handle to body w/ arms
 - reverse extend arms, lean body, bend knees
- Blend into a smooth continuous motion :)
- Ratio 1:2 drive:recovery (practice counting out loud to help)

Pause Drill

o Pause @ Finish to work on over-gripping and chicken wings/finish position



 Pause @ arms away (body still back @ 11) to work on proper sequencing of arms/torso movement pattern



- https://www.youtube.com/watch?v=EDmP37nyzj4
- Pause @ arms and body over (legs still straight) to work on not bending the knees too early on recovery



- https://www.youtube.com/watch?v=ZGcPk6aA go
- Legs Only Drill
 - keep body and arms still and just row w/ the legs
 - helps correct shooting the butt and leaning/initiating w/ the shoulders/back.
 - https://www.youtube.com/watch?v=uLcS7qmy2EY#action=share
- Feet Out Rowing
 - place feet on top of the straps and row
 - o focus on keeping constant pressure on the foot board through both toes and heels

Example Workout Using Base Split

- Jane and Joe do a 6K @ 26 spm
- Jane's average split is 2:15 this is now her Base split
- Joe's average split is 1:55 this is now his Base split

Sample WOD Using Base Split:

2 x 10 min pieces, 2 min rest

Each piece consists of

4 min @ 18s/m - Base + 10-15 (Jane: 2:25-2:30, Joe: 2:05-2:10) 3 min @ 22s/m - Base + 5-10 (Jane: 2:20-2:25, Joe: 2:00 - 2:05)

2 min @ 26s/m - Base (Jane: 2:15, Joe: 1:55) 1 min @ 30s/m - Base - 5 (Jane: 2:10, Joe: 1:50)

Resources, References, and Links

- http://www.courtney-mitchell.com/5-common-rowing-errors-seen-in-crossfit/#.Vc-ZaxNViko
- http://www.concept2.com/indoor-rowers/training/technique-videos
- http://www.fitnesscultchronicles.com/blog/2014/8/12/a-rowers-guide-to-conquering-the-erg
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- http://heartwerks.weebly.com/anatomy-of-a-rowing-machine.html
- http://en.wikipedia.org/wiki/Anatomy of a rowing stroke
- http://static1.squarespace.com/static/53cc791ae4b0847eddfba0e2/t/5483c400e4b0195c0da1121b/141 7921536876/Water+Drills.pdf