

The following notes were taken on Friday, 12/7/12 during the teleconferences with Gary Pierce, Zak Kordik, and Richard Ramos

**Teleconference Notes: Gary Pierce**

- Legs aren't keeping up with body in regards to speed, when sliding from one side of the boat to the other
- Lower body keeps sliding out from body
  - Clipping in feet to restraint would be okay. 5-Point harness okay too
- Make it soft? Removable seat is possible
  - Gary would like a cushion integrated into the seat so that there is one less thing to have to worry about
  - Some sort of memory foam would be useful
- No other assistant devices present in boat that would take up space, on either the Sonar or the Freedom style boats
- Balance is a problem, very low core strength
  - His 5-year-old is able to push him over
  - Would like to be strapped in: **THIS IS VERY IMPORTANT**
- Typically transfers to other side of the boat **DURING** the tack
- Sliding bench in place now
  - This causes a lot of problems of slipping around when sitting
    - Needs some sort of seat with rubbery bottom to stop sliding
  - Using arm-power currently, to hold himself in place
- Would like to have the ability to face towards the bow when riding
- Would like to have the ability to lean backwards in seat in order to stay more level when riding
- Gary is 6' 2" tall. Height is a big issue with hitting the boom with his head
- Weighs 205 lbs
- System **NEEDS** to be removable. Has to transfer between several boats in a weekend possibly. Installation is a big issue and **CANNOT** be invasive to the boat
  - The system he has now is removable
  - Can attach to the hand rails possibly
- System needs a locking mechanism to help with holding seat in place (especially when riding on the high-side)
  - Release mechanism would be best placed between the legs or near the side of the seat
    - Between the legs would be best

### **Teleconference Notes: Zak Kordik**

- Assistive device for runner in the boat, not in the area of the jib trimmer, though
- Sails on a Freedom 20 boat, mostly
- No limited arm strength, NOT good core, however
- Wants to lock in place at the sides of the boat. Some sort of pulley system to move to the other side of the boat
- Wants to be able to switch sides after the tack is complete
- Zak is 6' 2" tall
- Weighs 185 lbs
- Would like to be able to face towards the center of the boat while riding
- Butt slips off of the gunnel as well. Needs sticky bottom on his cushion
  - High winds are especially problematic
- Wants a release for a locking mechanism between his legs
  - A lever would be best
- Needs shoulder harness on seats to hold him in place
  - Bucket seats would be best
- People have different needs for cushions
  - Zak has his own personal air cushion
- Same balance problems as Gary
- Has long legs, needs a comfortable leg holder
  - Does not like wraps simply around the legs
  - Velcro straps that attach to the seat would work perhaps
- Seat movement has to be powered by the individual jib trimmer, NOT by an extra crew member
- Height requirements are not a huge deal when near the front, by the bulkhead

The following teleconference notes were taken and give a good idea of the overall scope of the project, as compared to the individual needs of the jib trimmer, as was done with Gary and Zak.

**Teleconference Notes: Richard Ramos**

- Difficulty with adding on to some boats with a captain's chair in place
  - Tight space requirements
  - Captain's chair often occupies some of the available hand-holds
- Approximately 10" or 12" from the front of the chair to the bulkhead
  - Possibly an additional 6" or 8" if the captain's chair was moved back
- Optimally 40 lbs or less for the jib transfer bench
- No Chrome plating on metal parts
  - powder coating works better
- Aluminum is good, fiberglass is better. Perhaps small amounts of stainless steel?
  - Have to be careful of dissimilar metals because of corrosion
- The boat design has changed slightly over the years
  - Hand holds have changed
    - Old style has 2 hand holds, new style has 3 hand holds
      - Have to design to fit into both old and new styles
  - Traveler bar has changed slightly

After the teleconference with Richard, the old design was analyzed more carefully, and it was found that there is a platform on which the captain's chair was mounted that takes up all of the space up to the bulkhead: exactly where the jib transfer bench needs to be placed. This platform, however, does not exist in the boats that will be used by either Gary or Zak, because there is no captain's chair present in those boats. After thinking of several adaptations for our design due to this new information, we came up with the best solution to the problem:

Have a detachable rail system that mounts to the current platform that is being used by Richard's team: the one with the captain's chair. We will then use the current design of Richard's platform, which we will recreate for use in the boats for Gary and Zak. This will allow for the easy attachment to any Sonar and will allow for portable, non-invasive installation. The platform will also act as a stabilizing base for the jib transfer bench and will strengthen the structural rigidity of the overall system.