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Dear Mr. Turrell:

I realize that you are tied up with work and we have not had a chance to connect on the phone. I thought it might help if I send you some information for consideration. After you have had a chance to review this it would be helpful to discuss all of this in detail.

My partner, Tom Degremont has put together an analysis of hull form, stability and performance. One of the studies is the comparison of displacement to length ratio and sail area to displacement ratios for yachts of similar size. We usually undertake this process for each design to help determine the initial hull lines. The 80 foot LOD schooner project is currently defined based on discussions with you regarding a light displacement yacht, general layout and level of interior which all impacts weight. What we do not have a handle on is your desired fuel range which can impact the overall hull displacement. The conclusion of this study is the determination of Half Load displacement which we need to develop the initial hull lines. I realize that our starting displacement is higher than your initial concept. This is one of the reasons why we wanted to have a conference call last week and I believe it would be best to discuss on the phone at your convenience.

To expedite this, we developed a moderate displacement hull form that meets your initial length and beam but is heavier than your target displacement.

#### Interior Layouts

I have developed 4 interiors (though there are derivatives of each that can be explored) which show possible layouts.

#### **Layout A**

This layout incorporates an *owner forward* cabin with berth facing aft, a dining and settee area port to starboard of the lifting keel and galley port side aft. One *guest cabin* is forward starboard side and the second one starboard side aft. The crew are located aft in this arrangement with access from the *pilot house*. Note I am indicating that there are two berths (port and starboard) of the tender storage with a connecting walkway at the forward end of the tender and just aft of the engine room. We could put a water tight door on centerline and then use the port crew cabin as a work area with possible access to the engine room or this could just be storage with deck access.

## Layout B

This layout is like Layout A but incorporates a forward *crew cabin* and *head*. Note that the crew cabin is the minimum size but does not have locker space. To accommodate the forward crew cabin, space has been taken out of the *owner's cabin*. I have also shown a possible additional crew cabin on the starboard side aft which would be accessed from the pilothouse. Alternatively, this could be storage accessed from deck.

## Layout F

This layout has a larger crew cabin forward with locker space and a designated shower. This allows a possible walk-through for crew into the owner's cabin and aft for passage making. The *owner's cabin* is located aft with the berth facing forward set to port with a settee or desk area to starboard. Dining and settee areas are like Layout A and B but the galley is located on the starboard side outboard of the main companion way with one guest cabin aft (starboard side) and a second guest cabin on the port side. This arrangement may require a deck coach roof to accommodate adequate head room and the pilot house may need to be a narrower deck structure.

## Layout G

This layout has the same forward owner and crew accommodation as Layout F. However, the galley is located on the port side outboard of the lift keel which allows for a guest cabin on the starboard side outboard of the companion way.

General comments:

- The hull lines currently accommodate 700 to 750 gallons of fuel in two main tanks under the salon and dining table. I am confident that we can accommodate 300 to 400 gallons of water as well without placing tanks in settee seats at this point. However, if there is a desire for more fuel and water, we will need to re-evaluate all up displacement and the hull lines.
- I am not presenting one specific layout at this stage since I have not had adequate input from you. Therefore, these arrangements represent possible configurations.
- At this stage, I am not sending an updated deck plan since we have focused on the interior. The current deck plan is defined by my initial pilot house footprint and cockpit which is similar in theme to your drawing.
- The deck may or may not need a full-length coach roof. This can be addressed when we get to the deck plan.
- All arrangements have a "day head" access close to the companionway.
- The dining area size may be on the large size and we might be able to re-proportion space.
- The lift keel position is preliminary and therefore the layout may need to be shifted once weights and balance has been advanced.
- Watertight doors and bulkheads is a topic that I would like to discuss with you. There are various ways to approach this short of full watertight compartment that meets a damaged stability flotation calculation. At present, I have indicated that we would incorporate a collision bulkhead and some water-tight doors through the accommodation. These doors are very heavy and do impact layout options but there are ways to incorporate subdivision. The tender bay and the engine room can be designed to accommodate subdivision which will help with this process aft.

Please feel free to give me a call when you have a moment.

All the best,

Sam Howell