



TOOL LIST

PLANK CONSTRUCTED POND YACHT II

W/ BRUCE RICHTER

***Important* This list is for returning students only. If this is your first time taking this course, please see the tool list marked "POND YACHT I"**

Your *Build Your Own Plank-Constructed Pond Yachts - Week 2* course materials fee will be used to purchase bulk quantities of the following which will be available to each individual class member during the school week:

- Wood needed for the mast and boom stock, a simple deck, the electronics board, deck beams, king plank, rudder, keel fin, and a simple boat stand
- Brass tubing for the rudder
- The fasteners and adhesives consumed during the course.

To complete your boat you will also need to purchase the materials and fittings from the list on pgs 2-4.

Before proceeding to the list, just a quick word about the intention of the Week 2 class, which is to give you the opportunity to devote working time towards your boat with experienced guidance from an instructor. In your first *Building Vintage Pond Yachts* course taught by Bruce Richter or Thom McLaughlin, the group discussed many options in rigging, decking, painting and electronics leading towards finishing your boat. In an effort to keep the Week 2 course focused and productive, sitting in on most discussions will be optional.

The materials and fittings list that follows is limited in choices, but will build an elegant, traditional, and superbly functioning pond boat; one that you will be proud of visually and can enjoy with minimal maintenance for years.

While there is nothing wrong with purchasing all the parts below prior to the class, you may want to only purchase items you personally will use during our course week. Boats will arrive in various states of finish. That is one aspect of the course which you will find rewarding as you can compare solutions and get enhanced visual guidance. The parts to purchase are organized by phases of work (Wk. 2 Phase 1 and Wk. 2 Phase 2) to assist your ordering.

Many of the needed items can be found at the following websites (**For a digital version of this document with clickable links, please email me at richterbruce@gmail.com**):

- Model Yacht Fittings, <http://www.modelyachtfittings.com/>
- Midwest Model Yachting, <http://www.midwestmodelyachting.com/>
- Tower Hobbies, <http://www.towerhobbies.com/> - no longer have the wide range they once had, but still worth checking out.

Most items on the list start with a source abbreviation in bold print, web catalogue reference number, and amount to purchase in bold print and underlined. Prices on items may fluctuate.

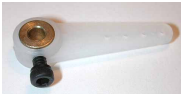
- **MYF** refers to products from Model Yacht Fittings
- **MWY** refers to products from Midwest Model Yachting
- **TH** refers to products from Tower Hobbies

Week 2 Phase I

The following are items needed for the course week if your boat has received little attention since the first course. Some items are available from multiple resources (no endorsements here.) Work done in this phase could include fabricating and installing the keel fin and rudder, fairing the hull and coating it with epoxy, removing the hull from the building board and installing deck beams, building the electronics board, preparing the winch and deck, and laminating the mast and boom stock.



MWMY pt. # 202: Medium Size Bowsie, 10/pack @ \$3.18, **2 packs total needed, total \$6.36**
(the item on the web site is under Rig Hardware > Running Rigging)
http://www.midwestmodelyachting.com/Bowsies--Medium--10pack_p_191.html



TH stock # DUB155: Dubro Long Steering Arm, **1 total needed @ \$1.99**
<https://www.hobbyline.com/htm/dub/dub166.htm>



Dave Brown Fiberglass Pushrod system (order "Complete Pushrod system" **1 set total needed @ \$9.95**)
<http://www.ohio-superstar.com/dave-brown-product-line/fiberglass-pushrod-system>



(If you're coming back for wk.2 class, I will supply these - worth the price of entry right there!)
Sullivan 4-40 Gold-N-Clevis 2/set, **1 set needed @ \$3.09**
<https://sullivanproducts.com/product/s526/>



Sullivan Threaded Studs 4-40, 6/set, **1 set total needed @ \$3.87**
<http://sullivanproducts.com/product/s491/>



TH stock # DUB561: Great Planes Hex Nut 4-40 8/set, 1 set total needed @ \$1.00
<https://www.towerhobbies.com/product/steel-hex-nuts-4-40/DUB561.html>



Du-bro Threaded Stud Driver SKU504, **1 needed @ \$6.05**
<https://www.dubro.com/products/threaded-stud-driver>



TH stock # HRC57215S: Hitec Heavy Duty Switch Harness, **1 needed at \$15.99**
<https://www.towerhobbies.com/product/switch-harness-universal/HRC57215S.html>



TH stock HRC31805S: Hitec HS-805BB Mega Giant Scale Sail Arm Control Servo
1 needed @ \$46.99
<https://www.towerhobbies.com/product/hs-805bb-giant-14-scale-analog-aircraft-servo/HRC31805S.html>



TH stock # HRC33485S: Hitec HS-485HB HD BB Karbonite Gear Servo for rudder,
1 needed @ \$19.99
<https://www.towerhobbies.com/product/hs-485hb-standard-analog-karbonite-gear-aircraft-servo/HRC33485S.html>



While not a must, I'd suggest bringing a Dremel tool to the course. If you don't already have one, there are many models available and most will do the job. (Personally, I find the cordless models super convenient but that's just me.)

If your Dremel does not have a chuck with jaws, be sure you bring collets for the appropriate size drills, especially 1/16" and 5/64" drill bits.

Also see point 6 on the last page regarding Dremel cutting wheels.

Week 2 Phase II

This includes items needed for the course week if you've already completed Week 2 **Phase I**. Work done in this phase could include completing the deck and electronics controls, attaching the deck fittings and bow bumper, final hull fairing and epoxy coating, and building the complete rigging system.



TH Stock # ONXM2212: Onyx NiMH 6.0V 2000mAh AA Flat Receiver Battery w/ Universal Plug, **1 needed @ \$28.99**

<https://www.towerhobbies.com/search?q=ONYX+NiMH+6.0+2000mAh+Flat+&search-button=&lang=default>



TH stock # DYNC2030: Prophet Sport Mini 50W Multichemistry Battery Charger. **Only 1 needed @ \$34.99**

<https://www.towerhobbies.com/product/prophet-sport-mini-50w-multichemistry-charger/DYNC2030.html>

Transmitter Options

Here is a range of suggestions, from budget entry-level to higher-end options. This is one area where a little research might be worthwhile. Make sure the transmitter also comes with a compatible receiver - most are sold as kits.

If you already have an RC boat or airplane: Then you also have a working 2-stick transmitter with at least two channels. Most allow you to program more than one model. So all you'd need is a compatible in-boat receiver.

Good budget option: The Chinese company Flysky is newer on the scene but has been getting very good reviews:

- GoolRC Flysky FS-i6 6CH Radio System w/ transmitter and receiver - **\$47.99**

- <https://www.amazon.com/GoolRC-Flysky-Transmitter-Helicopter-Receiver/dp/B00VE3PZ3Y>

Next level up: Willing to spend a bit more? Spektrum and Graupner are German companies who've been at it for many years and have very good reputations. Also I know Spektrum offers excellent support.

- Spektrum DXe transmitter w/receiver - \$100

- <https://www.spektrumrc.com/Products/Default.aspx?ProdId=SPM1000>

- Graupner mz-10 5-channel transmitter w/GR-12L receiver - \$99

- <https://www.gravesrc.com/grus10011-graupner-mz-10-5-channel-24ghz-hott-transmitter.html>

Next level above that

Futaba is highly reputable and probably has the best-known name in RC radios. Their 6KV2, the Spektrum DX6e, and the Graupner mz-12 offer very high quality and additional programming options that will come in handy as you become more experienced at RC sailing.

- Futaba 6KV2 transmitter/receiver system (one of many very good Futaba options) - \$250

- <https://www.towerhobbies.com/product/6k-v2-8-channel-s-fhss-t-fhss-air-system/FUTK6100.html>

- Spektrum DX6e w/receiver - \$200

- <https://www.spektrumrc.com/Products/Default.aspx?ProdId=SPM6650>

- Graupner mz-12 w/Falcon 12 receiver - \$220

- <https://www.graupnerusa.com/12CH-24GHz-radio-with-voice-telemetry-and-multiple-models-S1002-PRO.html>

Vintage Model Yacht Fittings Kit

See the specific list below. Ordering the complete list of items will be needed to finish your boat.


Images of most of the items can be viewed at the website: <http://modelyachtfittings.com/> See the discussion on the next page for more thoughts and details.

Other options are available from several resources including Midwest Model Yachting (<http://www.midwestmodelyachting.com/>) but none of them package Vintage Marblehead or Marblehead kits, so all fittings would need to be purchased separately.

These brass fittings from Model Yacht Fittings on the list are being produced by Roger Cousineau (a former Maine resident and WBS alum) and are very similar to the AJ Fisher fittings that were produced for vintage pond yachts decades ago. There is one difference though, Roger's are better made than the originals; they are gems and are actually cheap in cost when one considers the labor of production involved. (It's definitely a 'labor of love' for Roger. He once mentioned that he makes about 25 cents an hour manufacturing them.) Ordering the complete kits also assures you that you'll have everything you need.

Due to changes in the cost of brass stock, the prices below may change periodically. These prices are over a year old. Roger recommends that you contact him directly before ordering.

Vintage Marblehead Fittings Kit

Item	Description	Qty	Cost	Total
MYF-TB-PB3	Turnbuckle, Quick connect hook and eye	5	14.00	70.00
MYF-SP-TEE-L	Large Shroud Plate Tee 2 1/2" long Jib Rack	1	12.75	12.75
MYF-SP-TEE-LG	Shroud Plate -Large 3 1/2 inch Tee Plate	2	14.00	28.00
MYF-SP-MH-L3	Shroud Plate, 1 inch 3 hole to match large Tee	1	8.75	8.75
MYF-DFT-1	MYF-DFT-1 Deck Fairlead 1/4-28 Thread	2	8.75	17.50
MYF-GN-FM-L	Gooseneck, Flat Mount, Large	1	44.00	44.00
MYF-BV-MH	Boom Vang , Adjustable, Flat Mount, Marblehead	1	45.00	45.00
MYF-MS-Custom	Custom Mast Step	1	22.50	22.50
Mast Tang	Mast Tang Custom	6	2.65	15.90
Mast Crane-P	Mast Crane for Marblehead w/shackle	1	15.00	15.00
MYF-JS-Custom	Custom Jumper Strut VM	1	25.00	25.00
10019CE	10019CE Turnbuckle 2-56 Thread with mast mount	1	15.50	15.50
Custom Spreader	Custom spreader (Pair) Marblehead w/tangs	1	14.00	14.00
Cable .027	Rigging Wire ss .027 dia 7 Strand	35	0.41	14.35
Wire Crimp Sleeves	.032 Dia Al. Crimp Sleeves .187 Lg.	30	0.35	10.50
Hardware Kit-VM	V M Hardware Kit Screws, eyes, spare hex bolts & nuts,	1	19.50	19.50
Custom Photo CD	Photo CD containing rigging photos	1	0.00	0.00
S&H	Shipping & Handling USPS Priority with tracking	1	13.75	13.75
Insurance	\$3.50 per \$100.00	1	7.50	7.50
Wooden Boat disc...	Student discount for Wooden Boat School		-20.00	-20.00
				
Quote is good for 30 days			Total	\$379.50

Other things to be aware of concerning the course:

1. I do not recommend that you bring sails for the boat to the course. There are a number of reasons for this. If you mount the sails on the rig during the week it will complicate the size of container you will have to travel from Brooklin with after the course and the risk of damaging them will be increased in travel. Also, there will be plenty to do besides mounting the sails, and that is a simple operation to complete after the course. But, this is not a task that will be overlooked, as I can easily demonstrate attaching the sails to a rig. I highly recommend that you take a lot of photos of the sample rigs that will be on display.
2. You should make plans before arriving at WoodenBoat concerning how you will transport the additional items (besides the hull you will bring with you) on your travel back to your home. In particular you should think about how you will transport (or ship) the mast. Basically a length of PVC tubing should work fine for shipping or commercial travel. The mast for course boats is a maximum of 76" LOA. A length of PVC tubing several inches longer (to allow for wooden plugs at the ends) than the mast LOA would be sufficient. The tubing should have an internal diameter of at least 2" to allow for some packing material.
3. I am assuming that you will be able to ship items to your home thru the WoodenBoat Store as in the past.
4. I encourage you to work at your own pace and do not get caught up in getting the boat finished in just this one week. That may mean that you do not use all the items on the inventory above. But you definitely should bring all the items pertaining to the phase appropriate to your progress, if for no other reason than it would be a shame if a task did not get done because the materials were not at hand.
5. The same tools you brought with you to your first Building Vintage Pond Yachts course would be appropriate to bring to this class.
6. If you're bringing a Dremel tool, consider purchasing a Dremel #EZ406 EZ Lock Starter Kit, as it is excellent to use when cutting brass rods and tubing which will be needed for the rudder, spreaders, etc.
<https://www.amazon.com/Dremel-EZ406-02-Cut-Off-Mandrel-Cutting/dp/B000FBLRVA>