The IOM Sailing Update

Seattle Area

Sailing Reports & Short Term Schedule /)/)_ /) /)__ (_ October 2010

Seattle Model Yacht Club races International One Meters (IOMs) now, and we have had regular regattas since March 2010. We're all amazing how quickly our fleet came together. We're having fun sailing these wonderful boats cleanly and competitively in three special radio sailing venues. We sail at each venue every month March – October, then in winter it is limited to Whidbey Island where they just don't know when to stop. Our venues:

✓ Coulon Park in Renton, WA: Our beautiful SMYC home with big open water and long "speed" courses. ✓ Surprise Lake in Milton, WA: Gig Harbor MYC's home, a large pond with frequent "Surprising" wind shifts. ✓ Cranberry Lake, Whidbey Is., WA: The ARCS (Anacortes RC Sailors) home, a lake in Deception Pass State Park.

We're not just sailing, as it is social too. After every race we're together laughing at ourselves in a pub and somehow helping each other sail better.

Check us out or contact: Fleet Captain Bob Wells @ 206-232-9036 or Rod Carr, Carr Sails, @ 425-881-2846.

Schedule:

Sat/Sun - October 2 & 3 at Beaver Lake in Victoria, BC

Sat - October 9th at Surprise Lake 10-:00 - 2:00 (IOMs)

10-:00 - 2:00 (IOMs) Seattle Travel Day Sun – October 17th at Cranberry Lake

Sat - October 23rd at Coulon Park 9:30 - 1:30 (IOMs) Sun – October 31st at Cranberry Lake 10-:00 - 2:00 (IOMs)

Sun - November 14th at Cranberry Lake 10-:00 - 2:00 (IOMs) Seattle Travel Day

Sun - November 28th at Cranberry Lake 10-:00 - 2:00 (IOMs)

10-:00 - 2:00 (IOMs) Seattle Travel Day Sun – December 12th at Cranberry Lake

VMSS Beaver Fever Regatta: Our travelling circus continues with six of us from Washington attending: Jerry, Joe, Julian, Steve, Bill, and me; along with our "entourage". Two days of sailing and socializing. Barry Fox tells us there are 15 total boats, so we should get a lot of single fleet heats - perfect.

Race Report – 2010 SMYC Overall Points Summary: Yes our scorekeeper, Jerry Brower, has quietly been keeping track of the points of our monthly Coulon Park racing. It was only the April event that we didn't score, which was a blustery day where we just did laps inside and marveled how calmly Joe's Stealth design performed with a B-rig, the only one we have collectively seen until that time. The summary is attached to the email. I'll note that Jerry would certainly be the leader if he didn't travel to San Rafael, CAN Nats, and up next is the USA Nats. Good luck at Nats Jerry.

Race Report - Coulon Park - 18th Sept. 2010: This was the one we moved from Surprise to Coulon, and everybody got the word – nobody went to Surprise Lake. There were only five of us, but still it was tough to get a great start – compliments to all. Seems to me Joe was most consistently winning the starts? The racing was consistently tight and we had the usual switching of places for who finished first. Notice how everybody had their throw-outs by the 6th race, indicative of how nobody could dominate. The weather cooperated with the predicted light southerlies switching to mid-A northwesterly, which was not predicted. Near the end of sailing the long NW fetch allowed a noticeable chop to form, forcing us all to foot a little more to keep the speed. Rod successfully fixed his leaks from our last race, so he is

in the game. His tuning and tweaking has officially begun, and it will be fun to follow where he goes with this. It started with his new mast ram, added after the first test sail. I talked to him a couple of days after the race, and he has a new jib Mylar already.

It is notable that today was very weed free, not what I expected? Bill, Jerry, and I retired to the Roanoke Tavern on Mercer Island for the post-race session. The open front deck had a booth for us, which is a favorite spot of mine for small groups and great weather. I think we burned up maybe two hours talking sailing. The results after 14 races:

	Bob Wells	05	Mercer Is, WA	V6- Vinaixa- Vickers	21.0	1.0	3.0	2.0	2.0	4.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.0	3.0
	Jerry Brower	42	Lake Stevens	Glam Rock- Gibson	24.0	2.0	2.0	1.0	5.0	2.0	4.0	4.0	1.0	1.0	1.0	2.0	2.0	4.0	2.(
	Joe D'Amico	94	Sequim, WA	Stealth- Bamforth	25.0	3.0	1.0	3.0	1.0	6.0	2.0	1.0	3.0	3.0	2.0	3.0	3.0	2.0	1.(
•	Bill Langjahr	88	Anacorte s, WA	Cockatoo -Beyerlee	41.0	5.0	4.0	5.0	3.0	1.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	4.(
	Rod Carr	02	Redmond , WA	Zoom- Herbert	55.0	4.0	6.0	4.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Race Report - Coulon 25th Aug 2010: Wow, we had 12 boats, the most yet in our 7 months of existence. Thanks to Harry Lyle, SMYC - Victoria Fleet Captain, who schedule their SMYC Championship to coincide with our IOM weekend. His idea was to entice some Oregon skippers to attend and race both Sat. and Sun. It worked, as we had three Oregon skippers racing IOMs and they had more in the Vic fleet. We got the sun too, where the Vics got the rain!

Sailing was fun, competitive, and... interesting. Significant weed arrived mid-day. Slaloming through visible weed clumps at the leeward mark was a 1st for me! On one race we had three boats out of with so much weed they couldn't steer. Jerry showed off his new BG sails to good advantage. At least when he finishes ahead I feel better about not seeing those old baggy sails. We got to see Chris' new Widget (a quick one), a Dave Creed kit that he assembled nicely in 3 months. We got to meet Ron Blackledge and his new Pikanto, a kit from Masterboats (more info below). Rod got his first bullet with "Old School".

Alas the Oregon guys were short-changed a bit on this one. The wind for the 1st half of the day was the almost non-existent for the longest stretch we've had all year. This is the 1st time we haven't got in at least 14 races, and it is all due to waiting for the wind to decide what it was going to do? Weed was the worst we've had yet too, just a week after almost no weed problems. We had eelgrass plus the milfoil too, the 1st significant eelgrass I've noted. I've concluded that the summer weed is just on this big lake drifting with the wind, and some days we get it and some days it is not so much – all wind dependent. The other short-change was after sailing. We always have gotten together after the race at a pub for lunch and discussion. But this time we all had something to disperse too. All the negatives I've mentioned are highly unlikely the next time we sail at Coulon. Despite all it was a still good day and everybody left smiling.

	Skipper	Sail #	Club/City	Hull	Score	1	2	3	4	5	6	7	8	9
1	Jerry Brower	42	Lake Stevens, WA	GlamRock-Gibson	13.0	2.0	1.0	2.0	1.0	2.0	1.0	13.0	9.0	4.0
2	Bob Wells	05	Mercer Island, WA	V6-Vinaixa- Vickers	16.0	4.0	3.0	1.0	3.0	1.0	3.0	8.0	1.0	13.0
3	Steve Young	63	Tacoma, WA	Victory-Firebrace	25.0	3.0	7.0	3.0	4.0	9.0	2.0	2.0	5.0	6.0
4	Chris Brundege	19	ОМҮС	Widget-Chris Dicks	27.0	9.0	2.0	5.0	2.0	8.0	8.0	5.0	4.0	1.0
5	Joe D'Amico	94	Sequim, WA	Stealth-Bamforth	28.0	6.0	5.0	4.0	5.0	3.0	5.0	3.0	7.0	3.0
6	Dave Glassow	38	OMYC	Image-Bantock	29.0	7.0	6.0	6.0	6.0	4.0	4.0	1.0	10.0	2.0
7	Rod Carr	02	Redmond, WA	Zoom SE-Herbert	43.0	1.0	8.0	8.0	7.0	6.0	10.0	13.0	3.0	13.0
8	Ron Blackledge	08	OMYC	Pikanto-Bantock	44.0	5.0	4.0	10.0	10.0	5.0	6.0	4.0	13.0	13.0
9	Larry Stiles	18	Sedro Wooley,WA	Vektor SE-Bantock	58.0	10.0	10.0	9.0	8.0	7.0	7.0	7.0	11.0	13.0
10	Julian Lee	03	Anacortes, WA	Vektor SE-Bantock	59.0	11.0	11.0	7.0	11.0	10.0	9.0	9.0	8.0	5.0
11	Chuck Mallary	45	Anacortes, WA	Kite-Bantock	63.0	8.0	9.0	11.0	9.0	13.0	11.0	13.0	2.0	13.0
12	Rich Murdy	20	Renton, WA	Kite-Bantock	77.0	13.0	13.0	13.0	13.0	13.0	13.0	6.0	6.0	13.0

Tuning Tip #1: (This is a repeat for those who didn't get the previous Update)

Pusher Power: I think all of us here (and we're all IOM rookies) have been missing the tuning power of the mast ram (aka "pusher" or "mast strut" as listed in class rules). I finally stumbled upon how significantly it affected mainsail twist when setting up my boat recently and showed an amazed Rod Carr and Steve Young. To see this in action set your boat up for on the wind, then watch the main leach relative to the backstay as you turn the ram wheel. About one-half turn was moving the main leach twist more than 1" on my boat! Who new? To be sure you also need to trim this in conjunction with the backstay (and thereby the jib luff tension), but the ram is an amazingly powerful and precise tuning device. So reread the Bantock and/or Byerley tuning articles I sent a few weeks ago. Use your vang for downwind twist only as Bantock has noted. Then watch what that ram does! Great stuff! Rod doesn't just jump on the bandwagon of the latest fashion in sailing, but one look at my ram in action and he's adding one (and dumping the difficult to tune lower-lower's)! It is amazing to me that I've been sailing IOMs 6 months now and am just now appreciating the mast ram.

The curious may wonder what I was doing with the ram previously. Well this was a new tool for me and I was faking it just using it to make the main luff look pretty. And I was only looking at it from the side, as I thought the ram only affected the front half or so of the sail. I was using the vang and backstay to control main twist on the wind, and it was not working all that well frankly. When I touched the ram I unknowingly screwed twist up. Plus my downwind twist was crap - way too slack. At least I recognize that I was missing something on IOM tuning and that often my sails weren't right. With this new understanding of the "pusher", this just got a whole lot less frustrating – and fun.

Tuning Tip #2:

Position the Post: So here I was sailing at Coulon with my new found main twist control with the mast ram (akapusher), which was just discovered the weekend before. I've got all the tuning confidence in the world, but the pusher is not controlling twist! Crap, now what's up! I'll admit I'm slow in these matters, but this time I figured it out before the gun.

The previous week we had very light wind and I had raked the mast aft say 4° to induce some helm (that tune worked for my boat by the way). To rake aft I had to lower the mainsheet post to clear the lowered boom. Now with more wind the boom moves up as the rake is eased forward for helm balance in the stronger wind. Since I had forgotten to elevate the mainsheet post; now there is a downward pull on the mainsheet overcoming the twist I'm dialing in with the pusher. (An aside for readers of *Optimizing the EC12M*, this is known as "sheet vanging" or radio control of twist – see page 185. We're not considering this on IOMs by the way.) This is so simple to resolve. Just **keep the mainsheet post just under the main boom.** Then you have mostly lateral pull on the mainsheet. This allows the pusher & backstay to control main twist unaffected; and everything is right in your IOM world again.

EURO IOM Kit Options: Before I get to the kits, here's a brief description of options to purchase your IOM. At the top end we've priced the cost of a new IOM from the top builders with rig(s) assembled, electronics, and shipping – ready to sail as they say. If you just purchase the assembled 1-rig only the cost is about \$4,000US. If you purchase all three rigs then say \$5,000US. One of these is headed our way later this year. If you ask Joe D'Amico he will tell you it is a bargain for all the effort that goes into this wonderful semi-custom product. The quality is amazing with CNC aluminum molds, etc. You don't have to go there. Most of us sail used boats that range is cost from say \$600-\$1,500, but they probably need some work to get up to speed. Or sometimes they are missing something or are not as you want it requiring a change. On the other end of this scale we have Sweat Equity hulls produced by Lawrie Neish on Saltspring Island for materials cost. These you build from the unfinished fiberglass hull and deck. The pride of assembly is all yours, and do well with a boat that you built provides more satisfaction. We have two recent examples in our fleet and I doubt the cost of either one is over \$500 to get on the water with a 1-rig? We have quite a range in cost and/or effort required to get an IOM. But there is another option we haven't discussed much – assembling a more finished kit from Europe. Not all builders will do this, but we have examples of three Widget kits and one Pikanto kit sailing in Oregon:

Ron Blackledge's Pikanto Kit: This was a great looking boat (the 1st Pikanto I've ever seen) and I asked Ron a while back to give me some info on why he purchased this boat and how the process went. Ron installed a Craig Smith fin. Bantock bulb, and RMG-280ES winch. Ron took three months on the assembly. Here's his response from July: "As I said earlier I love my Pikanto. I chose Masterboats (Joop de Jong) because they had the shortest lead time and the deck configuration allowed for a large round mid deck configuration with a plastic lid. Most Pikantos require you to remove your deck patch to get to the electronics and batteries......a pain in my opinion. Joop was friendly but his day job is his main focus. Building IOMs is not his top priority. I was told to expect my kit within three months. It took nine and he forgot to send r/c tray. The quality of the hull was okay but needed finishing and repainting. Overall the hull kit is very basic and requires an experienced modeler to complete. It is a full winter project. I have built several IOMs from scratch. I ordered the large mid deck opening with a plastic lid option. Cost me about \$380 Euros plus wire fund transfer and shipping. The r/c tray(strongly recommended) and two lids added another 50 euros. When you add a fin, rudder, bulb and other hull parts you are looking at least 1,000 US dollars. The website helps explain what you get but I strongly recommend you Email Joop to confirm details.

It is likely Sailsetc and the Croatian (Robert Grubisa) make a better finished and complete Pikanto kit. The Arriva I(very similar to the Pikanto) is probably better quality because Phil Playle is an experienced craftsman. Also I think Morgan, George and Chris like their Widgets. There are a lot of good IOM options out there.



An example of the RC tray like the one on Ron's boat, although this one is a Craig Smith "Obsession" design.

Dave Creed built Widget Kits: There are three newish Creed – Widget kits in Portland now. You saw a picture of Morgan Dewees' red one in a photo in a previous Update. Steve and I admired this high quality boat up close as Morgan roomed with us in Saltspring Island at Westerns. We saw Chris Brundege's yellow one this past weekend. Chris noted that he took three months to complete the assembly. We've all noticed that both Morgan's and Chris' boats are fast. Morgan sent these brief comments to me earlier, "as far as IOM kits go Creed's Widget kit is probably the easiest, fin box is pre-mounted to deck for alignment, ballast is fitted to fin and fin fitted to fin box. Therefore all the difficult alignment tasks are completed. Deck has a flange that fits, just barely, inside the hull so you can't put it on crooked."

Morgan noted that Dave Creed is not easy to get in contact with. Accept that as part of the build challenge, and maybe contact Morgan for hints? I don't recall the cost, but the kit was well under \$1,000US with fins/bulb. Creed enjoys a reputation as a high-quality molder. He is known for his foils in particular, as well as being the new Lintel designer/builder. The Lintel has a pronounced chine, and would be perfect at Hood River, but no so good in our prevailing light air.

Upgrading a Used Cockatoo? We've got mostly used boats in our fleet, so how/what to upgrade is a common question. Bill Langjahr is considering upgrading his Cockatoo, and he asked Jerry and me our thoughts. Always quick to help somebody spend money on boats, I suggested he ask the question to Jeff Byerley, the designer/builder. Jerry and I both opined that he has a fast hull worth keeping, but wondered about foil upgrades? It could use new sails and a new rig would be nice. We know there is the original Cockatoo, a later Cockatoo-2, and the latest is a Cockatoo-08, but we didn't know what Bill had or much about how they differed beyond what is on the Mirage web page? The following email dialogue is instructive both for the answer and how to ask questions to allow good responses. What's Bill going to do, who knows? Whatever it is it'll be an informed decision:

----Original Message----

From: wlangjahr

To: mirage@bigpond.com Sent: Sun, Sep 19, 2010 5:50 pm

Subject: Upgrades, Sails & Masts for Cockatoo

Dear Jeff, I recently purchased a used Cockatoo. I am at least the third owner and not sure which version or when the boat was built. There are no other Cockatoos that I am aware of in the Pacific Northwest, USA to help me identify the version of my boat. The only identifying marks I can find on my boat is the hull number written with a marking pen inside the hull. The number is the same as the registration number USA 288. Since the newer USA numbers are considerably higher, leads me to believe the boat is several years old. Attached are six pictures that may help identify the version of my boat. I am interested in upgrading this boat, if possible, to get closer to your new versions.

- I have noticed newer boats of other designs have longer and slimmer keel bulbs than on my boat and looking at your web site it appears your designs have gone in that direction. I have several questions and would like to order upgrades for my boat, if in your opinion, they would enhance the performance of the boat I have.
- The keel bulb on my boat is 30 cm long and 4 cm in diameter at the widest part. Would your new fin and keel design fit my boat?
- The rudder on my boat is 20.5 cm long, 6.5 cm at the top and 4 cm at the bottom. Has that design changed and if so would the newer design fit my boat?
- I am also interested in your sails for all three rigs along with new assembled masts for all three rigs.

I would appreciate your comments and costs on the items I have listed and any other suggestions you may have.

Regards, Bill Langjahr

----Original Message----

From: Jeff Byerley < miragej@bigpond.com >

To: wlangjahr

Sent: Mon, Sep 20, 2010 7:20 pm

Subject: Re: Upgrades, Sails & Masts for Cockatoo

Bill,

From what I can make out from the photos, it looks like a Cockatoo 2. This differed from the original design in having a narrower foredeck beam and was narrower on the waterline near the bow. They were produced from early 2003 onwards. The new fin can be fitted but is not an easy job. It needs to be reshaped in the head and made thinner. The rudder appears to be standard and the same as the present profile. The bulb appears different, but they do not have a dramatic effect on performance.

The biggest changes have been with rigs and sails. I am using a lighter more flexible mast with relocated shrouds, and also a new cut of sails. This has improved the performance. I have also moved the jib pivot points closer to the jib tack, ie #1 is 75mm, #2 is 65mm and the #3 is 40mm. This allows the jib leech to free off in a gust. Most important on a Cockatoo especially with the #3 rig. You may need to relocate the deck eyes, as you want the jib clew as close as you can to the mast.

The cost of 3x sets of sails with assembled rigs and delivery would be \$1510.00AUD.Approx \$1390.00USD. I am off to the European Champs in France tomorrow night so may be out of email contact for a few days.

Regards Jeff Byerley

Oregon MYC: IOM Captain Update - Sunday 9/19 Regatta: Although the skies were threatening, we made it through the entire day without a drop of rain. The temperature was comfortable and winds were out of the South, averaging over 10 knots...and they were reasonably steady making for some of the best sailing at Tualatin Commons. We set an Olympic style course, had ten boats at the start line, and completed nine races BUT I DIGRESS.......

BULLWINKLE WINS ITS FIRST BULLET IN THE FOURTH RACE!!!! The ever popular and crowd favorite Bullwinkle got a quick start in the fourth race and with great dispatch fought off one competitor after another. Eventually the fleet fell back in astonishment. Just before the finish line, with the lead well in hand, the fearless Bullwinkle took a 360" for show to tease the fleet and acknowledge the cheering spectators. We haven't seen so much excitement since Sea Biscuit raced in the Triple Crown.

The Sports Desk at the Oregonian was notified immediately and they were delighted to say the least. They believe this is the best local sports story since Sotheby's auctioned Tanya Harding's baseball bat for \$63,000. ABC has already caught wind of the incredulous race and wants to broadcast our next IOM regatta. As we speak ABC is cleaning the cobwebs from the Bus and will enlist the services of John Madden to anchor the booth. He will likely be joined by Dennis Miller and Keith Jackson.

In following a long-standing tradition of OMYC, a decal of a bullet will be pasted on Bullwinkle's rig box. This mirrors the practice of national college football powers like the Texas Longhorns, Notre Dame and the OSU Beavers who paste decal stars to players helmets for touchdowns, interceptions, etc. By the way Russ has some cool OMYC decals of our burgee. They look great on your IOM hull and if you are nice he will give you one.

....Now back to the more mundane race report. Mike sailed his Tinto expertly and garnered first place. George G was a solid second with his sinuous bright yellow Widget. The rest of us had our ups and downs but enjoyed the racing and camaraderie. However Dave was complaining about how slow his Image was sailing. He later discovered his hull was full of water. We now know an Image can hold a half gallon of water before capsizing. It was good to see George R again and he will be joining us more regularly. And Herb showed for several races. They both appear to be feeling better. Chip showed up (still working on his Azetone) to help Jay keep score. Morgan and Chris were out of town. However the rumor is they were afraid of the growing competition. The Olympic style course seemed to work well and we may use it again soon. Herb was sailing his Image that is for sale for only \$350. Also I overheard George G is building a Tinto. These are excellent IOMs designed by Graham Bantock....maybe the best in the business. If there is anyone you know who might be interested in sailing with our club, these are excellent buys. Thanks to all of you. Lets see some more first time bullets. We don't want the Big Dogs to get to cocky. Our next IOM regatta will be in four weeks.

Sincerely, Captain Ron Blackledge, proud skipper of Bullwinkle

How close to the deck should the jib boom be? This was the simple question that Bill asked Jerry and I after sailing recently. Jerry gave him the simple answer, "as close as possible". I agreed and pointed out that building to these close tolerances is more difficult, but all the top guys do it so there has to be something to it? Actually I was predisposed to think this way, as our Larry Robinson was a strong advocate of this in the late 8os. He would tell you also that in addition you want the jib leech as close as possible to the mast by the way, but that's another story. The following pictures are a tutorial of how the World Champs locate the jib boom close to the deck on IOMs.

Why? Rod Carr has said that the wind is so light that close to the water that it doesn't matter. His jib boom on "Old School" is well off the deck. Obviously Joe D'Amico isn't drinking the low-boom cool-aid either. He uses a long string swivel too and adjusts the height of his jib boom via a simple bowsies to adjust mast rake. This is a wonderfully simple and easy system to assemble and tune. Following this train of thought suggests raising the jib a little gets the sail into marginally stronger wind?

Well Tom Whidden in his now old book, "The Art & Science of Sails" explained in layman terms that; "All flow across a sail does not go in perfectly horizontal lines from front to back. A significant amount goes over the top, under the bottom, and even in reverse, from front to back. This you may recall is induced drag". Lowering the jib boom to near the deck provides an end-plate affect limiting the vertical air circulation that spills out the bottom causing drag. It is easier not to bother with a low boom, but the evidence suggests that there is a performance gain here.

To facilitate this end-plate affect all current IOM designs have raised foredecks. In addition this elevates the mast ram for greater affect and provides more volume so your bow is less likely to bury downwind. An elegant design solution, if not a traditional solution.



BGs Widget with a simple string swivel. This is the same as Jerry Brower's "Glam Rock", designed/built by... BG. Lots of details to ponder. Photo from Anders Wallin's web site.

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BGs "Arrival". This is a 2-rig, but note the string in the groove. I'm sure this is part of the A-rig string swivel, with the view blocked by the boom. Standard SailsEtc boom and fittings used on this boom. Note how low the boom is though. I imagine the groove adds deck stiffness as well as lowering the boom a few more millimeters.



Craig Smith's "Obsession" with a SailsEtc fitting that allows the boom to be just above the deck. The string swivel is in a tube that recesses to the hull bottom. The tube provides hull/deck stiffness and allows a long string with little resistance to twisting. Photo from Anders Wallin's web site.



Julian Laffin's boat from Hornby Island – hey what's this example doing amongst these world champs? Well with a tip of the cap to our BC friends, notice how they have the low boom & string swivel too on all their Graham Herbert designed Zoom fleet. They just use their own custom fittings, but the concept is consistent. Note there is no luff tension adjustment at the tack? It has to be at the jib head, and I'll be looking to see what they've done with that next time I see a Hornby/Saltspring Zoom?



The hard water solution for a die-hard IOM skipper in Hungary?

Please forward to anyone interested...

Contact: Fleet Captain Bob Wells @ 206-232-9036 or Rod Carr, Carr Sails, @ 425-881-2846.