

The
Power of

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MULTIHULLS

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THE GATEWAY

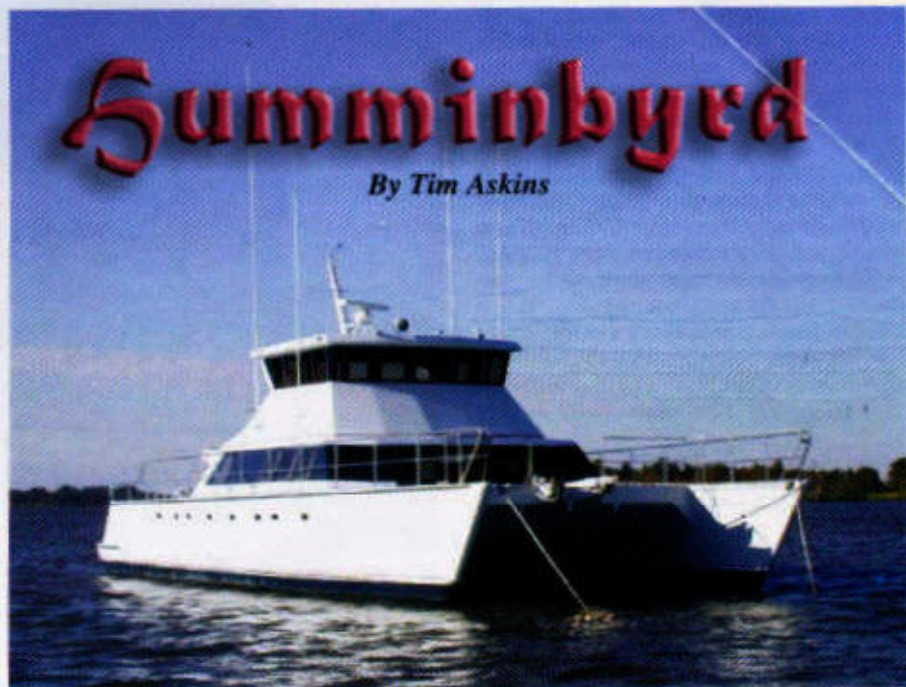
Arriving in south Florida holds a certain air of excitement. The hibiscus and bougainvillea are blooming and the palms are swaying in the trade wind breezes. The sportfishing boats are running out of Stewart and Palm Beach looking for the elusive sailfish. The tourists are all covered in oil. Being here, at the gateway to the Caribbean, stirs memories of past adventures: bone fishing in the Turks and Caicos, trolling for marlin off Walkers Cay and sailing in the Exumas, Virgins and farther south, to the Windward Islands.

Today holds the promise of a totally new experience. The industry buzz surrounding the new breed of power catamarans has arrived in the U.S. markets from Australia and New Zealand. These powerful, economical cruisers offer a new level of comfort and range for the typical passagemaker. It is my turn to get an "up close" look at the performance of these intriguing craft. Orrin and Debbie Byrd of "Cat Craft Marine" have invited my wife Karen and I to join them on the passage from Palm Beach to Marsh Harbour aboard their 62 foot Malcolm Tennant designed power catamaran, *Humminbyrd*.

Having been involved with a variety of boats over the past 25 years Karen and I have begun discussing our ideal passagemaker as retirement looms closer. We have two young children, so living space and safety are primary criteria for our future purchase. We also enjoy offshore fishing, sailing, diving and kayaking. Our passagemaker would have to wear many hats.

We need a boat capable of cruising 25 knots for the runs out to the Gulf Stream, trolling for tuna, dolphin and wahoo, but capable of making at least a 2,000 nautical mile crossing. There must be adequate deck space for fighting and landing large pelagic fish as well as refrigerated iceboxes to store the catch. A flats boat will fit on deck for inshore fishing, and snorkeling. We will carry a kayak, sailboard, and dinghy for the children to explore anchorages after their home study courses.

Several years of boat shows, magazine articles, and brokerage brochures led us towards the catamarans being built mainly in Australia and New Zealand. We traded emails with several charter boat skippers in New Zealand, fishing on catamarans, and they echoed the information we had read. The catamarans are fuel efficient and have an incredibly smooth ride. The New Zealand record for striped marlin is



held by a catamaran, reassurance that the boats are fishable. A meeting with Malcolm Tennant of New Zealand at the Ft. Lauderdale International Boat Show convinced us that the displacement catamaran could be the boat of our dreams.

We placed our recently completed custom Carolina sportfisher with a broker in Palm Beach and booked flights to attend the Palm Beach Boat Show. When the phone rang with an invitation to make a passage on the *Humminbyrd*, we could hardly contain our excitement.

THE BOAT

We drive past the mega-yachts docked at the Rybovich-Spencer yard to find Orrin and Debbie waiting under a large banyan tree near the end of Flagler Drive. Our power catamaran experience begins with the ride out to the boat in their custom-built 16-foot catamaran dinghy. As we near the anchorage, the 62-foot cat visually dominates the other boats. The raised pilot-house and top forward windshield is reminiscent of a displacement trawler or commercial fishing vessel. Orrin is quick to point out that the trawler label is a misnomer as he does not pull nets, preferring to call the boat a utility vessel. Perhaps this is the ultimate Sports Utility Vessel!

As we approached the stern I was impressed with the large swim platforms built into the hulls. Each was approximately five feet by six feet. The dinghy pulled along and I realized the height of the dinghy deck and platforms match perfectly. Several strategically placed hand rails make disembarking and un-

loading our gear a breeze. The 27' beam became immediately evident once we were on the aft deck. The open area is 27' by 11'.

Adjacent and forward is the "back porch," a covered area complete with stainless steel grill, freezer, refrigerator, cook top and sink. There is rod and dive gear stowage and a lounge on each side. Orrin is an accomplished diver, the result of 10 years chartering his sailing catamaran, *Peregrine* in the Bahamas (see MULTIHULLS Sept/Oct '90). This expansive outdoor area is one of many features incorporated from his experience living in the Out Islands. In the lower latitudes he can catch, clean and cook dinner "al fresco" without fussing with the main saloon or galley.

Entering the saloon I am struck with a sense of openness. My eyes are drawn forward to the four 24" Bowmar opening hatches providing an immediate view across the bow and out beyond to the anchorage. Port and starboard cabin sides are similarly fitted, producing a 360° view. Being accustomed to typical monohulled boats, Karen's instantaneous remark is "Oh, I could do this!"

The U-shaped galley is to port and is open to the saloon but separated by a raised countertop forward of the large double sink on one side, and the built-in fridge and freezer amidships. A cavernous wet locker is to starboard while two large L-shaped settees with hydraulically activated tables occupy the forward half of the saloon. The settees are on a platform one step up from the mahogany cabin sole. Once seated, I am treated to an unimpeded view, indicative of the level of detail Orrin and

Debbie put into the planning of their boat. We continue to our cabin a few steps down in the starboard hull. There are two double staterooms separated by a head and shower located in each hull. This arrangement provides a suitable level of privacy with guests on board as the owner's stateroom is to port while the guests occupy the "other" side. When chartering they utilize all four cabins.

The entire interior is done in varnished birch and mahogany. Each piece of furniture and trim is structurally bonded, contributing to the overall integrity of the boat. Orrin points out that there are 124 mahogany doors, each fitted with a lightweight wicker panel providing excellent ventilation inside all cabinets and lockers.

Our gear stowed, we head up to inspect the command center located in the flybridge. Access is via a beautiful mahogany stairway on the aft bulkhead. This is truly a captain's delight. Mahogany flooring and trim accent the lighter birch cabinetry. Every piece of electronic gear is at the fingertips, precisely fitted into a consol that follows the line of the forward windshield.

Orrin opted for some "low tech" features, going with Morris cable controls for the engines and Hynautic steering, feeling these would prove more reliable. The JRC radar sits idle on this trip. The unit failed after only 6 months use and the company refused to warrant the corrosion damage that occurred inside the dome. Navigation is accomplished with a laptop integrated with the DGPS and "The Captain" software displayed on a 17" color screen. The stand-up chart table is to port, allowing the captain to review charts and plot courses without leaving the helm. Being a prudent navigator, Orrin is well stocked with paper charts stowed directly under the chart table.

The now familiar step-up settee is to starboard, wrapping around the cabin to the aft bulkhead. There is room for six adults to sit comfortably. Eye level is now some 16 feet above the waterline and the view is commanding. I began to refer to the bridge as "the harbor master's office." Towering above everything else in the anchorage we are able to survey the comings and goings from our perch. The opening hatches all around provide great ventilation as well. There is a door aft leading to the poop deck allowing the pilot to move outside, when required, without being too far from his station.

THE SYSTEMS

Access to the stand-up engine room is through a deck hatch located in the aft deck. Humminbyrd is powered with twin Cummins 210 HP intermittent



The lounge

duty in-line 6-cylinder diesels equipped with ZF V-drive transmissions. It's hard to believe that this is all it takes to drive two 62-foot hulls at 23 knots. The heart of the shaft system is the "Evolution Drive" that silently transfers all of those horses into thrust. Combined with soft-mounted engines, this system produces a vibration-free ride without a cutlass bearing. Utilizing sealed bearings also improves transfer efficiency by an average of 10% over a

traditional shaft bearing. The entire engine compartment is draped in Soundown fabric insulation to dampen unwanted engine noise.

With 1,500 gallons of fuel on board a fuel management system is imperative. Humminbyrd operates from a 150-gallon day tank that is filled by transferring fuel from any of the main fuel tanks. Underway the vessel trim can be adjusted by shifting fuel from fore to aft, or beam to beam. It is also possible to



The dinette



The Pilot House

clean dirty fuel by pumping through a series of filters into an isolated tank. Each engine is equipped with 180 amp/hour alternators and solenoid switches allowing either one, both, or neither to produce battery charging. There is sufficient room to move freely around the engines for service. Access to the Evolution Drive is through a liftup hatch. Spare oil, hoses, and related equipment are stowed just aft of each engine compartment, making them easily accessible in case of an emergency.

On the pilothouse roof eight "BP" 90

watt solar collectors silently output 24 volts. The output is controlled and monitored by RV Power Product's "Solar Boost 50". This impressive bit of electronic wizardry can enable a PV array to produce between 10 and 30% more energy for the battery system. It comes complete with an LCD display and includes a well-designed three-stage pulse with modulated charge controller.

Energy is stored in a 1,200 amp hour battery bank powering a 6KW Trace inverter. This arrangement pro-

vides most of the energy requirements of the vessel running the generator, an 8KW Kubota three cylinder. The gen set is required to run the air conditioner and the watermaker.

Three built-in refrigerators are cooled with the Refrig-a-Boat circulating system. Each box is custom-built with a minimum of four inches of insulation and all are top loading only. They can each be partitioned to freeze and refrigerate or can be entirely frozen allowing the ultimate flexibility for cold storage.

THE PASSAGE

As the sun rose on Saturday morning, I awoke to the sound of urgently rustling footsteps and the aroma of freshly brewing coffee. The wind had shifted overnight, now barely topping five mph out of the south. Orrin anticipated a window between fronts, so we spent Friday evening making last-minute provisions in preparation for an early departure. Thanks to their careful planning we only needed a few items, and then ventured across the bridge to dine at an excellent Italian restaurant.

I found Orrin already on the foredeck with the windlass control in hand and Debbie at the helm bumping the engines in and out of forward to relieve the strain on the ground tackle.

Humminbyrd usually employs two 75-lbs. Bruce anchors tethered to 100' feet of 1/2" chain. The anchors are set Bahamian style and terminate to a swivel with two one-inch braided rode attached. These are led to each bow and then via a snatch block to the twin anchor rollers and Lewmar winch amidship.

The retrieval process is a breeze. Twenty-seven feet of beam creates a tennis court-sized space to work on deck. Additionally, Orrin has devised two separate lockers with large deck hatches to accommodate the chain and rode for each anchor. We picked up the swivel, separated the two chains letting one out while we retrieved the other. The chain flaked off the winch into its locker and got a quick fresh-water rinse. With anchor one in the chock, it is only moments later that the second anchor is similarly stowed and we were underway. Elapsed time was less than five minutes. Considering the ease of mind afforded by setting two anchors, it is well worth the time.

Lake Worth is still slumbering as we motor towards the jetty. A couple of live-bait fishermen are running into Sailfish Marina to sell their morning catch of goggle eyes and a sportfisherman is already at the end of the rocks. Orrin eased the throttle until the engines were "humming" along at 2100 rpm's, producing 18 knots of speed over the ground. He punched up Memory Rock



The saloon

on the laptop, and we steered almost due east into a tranquil, two to three foot Atlantic swell.

Two hours and forty-five minutes later we sighted Memory Rock. Our Gulf Stream crossing was uneventful which is usually a blessing, but did not provide the kind of test I had hoped for in the big catamaran. Humminbyrd's three and one half foot draft makes it possible to take the shallow, inside cut around Memory Rock, but intermittent clouds were making it difficult to read the water. We altered course to leave Memory Rock to starboard, and steered 078 towards Double Breasted Cays, just south of Walker's Cay in the outer Abaco chain.

Entering the multi-hued, shallow water on the bank, I watched our boat speed increase two knots as the big cat began to feel the bottom. Orrin explains the phenomenon. The hydrodynamic hull form produces a wave that provides lift when the water is twelve feet deep or less, literally pushing the boat forward. He pulled the throttle back to 1800 rpms and we maintained 18 knots. His experience shows that it is actually more economical to run the shallow waters in the ICW than to go outside, due to this effect.

We cleared customs at Walker's Cay before lunch and headed for Double Breasted Cay, then tucked in behind Sandy Cay to anchor in six feet of crystal Bahamian water. Debbie and Orrin launched the dingy and we had lunch on the aft deck. There's nothing like having breakfast in Palm Beach and lunch in the Abacos. Elapsed time was five hours and thirty-three minutes and the total fuel burned was ninety gallons, a bit over one nautical mile per gallon. With a fuel capacity of 1,500 gallons Humminbyrd could easily transit 1,200 nautical miles at 18 knots and double that at 12 knots.

The next couple of days blur into a collage of fishing, snorkeling, conching, and walking on the beach entwined with delicious food and wonderful sunsets. Life on board is truly like a home afloat. We enjoyed the relative solitude of the uninhabited cays with all the amenities one would expect when staying in a condo in some swank resort on the hill. Karen inquired if it is actually possible to have too much fun.

On Tuesday we weighed anchor and headed south, passed Great Sale Cays and the north end of Little Abaco Island. We left Hawksbill Cays to starboard and turned east towards another uninhabited cay where we stopped to snorkel and fish on a shallow inshore reef. Several hours in the water produced grouper, hogfish and triggerfish for dinner. After lunch of fresh conch

fritters we continued south towards the Center of the World Rock and Angel Fish Point arriving in Green Turtle Cay around four p.m.

The luxury of the big cat's speed is evident. We have transited fifty-five nautical miles, spent a few hours diving and still made harbor in leisurely fashion. My previous cruising experiences have been constrained to eight knots. The ability to get underway at eighteen knots is thrilling in itself. The real advantage is the additional options that are opened by the ability to get there. Since there is not a protected anchorage near our dive spot, on a slower boat we may have been unable to make the best dive of the trip.

Karen and Debbie decided to rent bikes and tour the sights on Green Turtle Cay. Orrin and I opted for exploring the bonefish flats and scouting a reported grouper hole off No Name Cay. Apparently, the ladies took the luck with them, as the boys came home with nothing to show for their efforts. Debbie returned with a smart looking haircut and Karen found the requisite T-shirts for the children. Fortunately, we had plenty of fish from our previous dive for another delightful dinner.

Morning began with the incessant crowing of the Green Turtle roosters, a fresh northeaster and overcast skies. White caps were building beyond No Name Cay and Whale Cay Cut was raucous. We listened to the cruising net warn folks away from making the passage through Whale Cay Cut about the time Humminbyrd entered the short steep chop behind No Name Cay. I finally got a look at the big cat in some rough stuff and the ride was impressive. We were cruising along at sixteen knots in four-foot chop and my coffee cup was still comfortable, sitting on the dash of the pilot house.

Entering Whale Cay Cut I noticed that the catamaran has a slightly annoying, quick motion, in a beam sea. The six-foot swells were piling into the shallow water, and they began to break

across the channel. Orrin pushed the throttle up until we were motoring along at eighteen knots and, incredibly, the ride smoothed out. Orrin assures me that twenty-five knots is perfectly comfortable in any seas up to about eight feet. This confirms reports from other sources. Displacement catamarans can handle rough conditions, and the faster, the better.

We transited the cut in about an hour's time, enjoying coffee and breakfast along the way, and soon enough were in the lee of Great Guana Cay, site of the ill fated Disney cruise ship port. We set course for the run down to Marsh Harbor, our final destination. Karen and I relaxed to savor the last leg of our vacation cruise when she revealed that she has not worn any of her Transderm patches during the trip. Karen's tolerance for motion sickness is low to medium and she usually wears a half of a patch for most open water trips. It is another testament to the stable, smooth riding catamaran.

CONCLUSION

The creature comforts afforded by voluminous space on catamarans has been well documented and Humminbyrd is no exception. The sheer amount of deck space is mind boggling, allowing unfettered movement whether for sport, relaxation or emergency maneuvers. While one week in relative calm waters is not adequate to make a comprehensive evaluation of any vessel, I would venture that these boats offer levels of comfort and stability unknown to their monohulled brethren. With oil prices rising to previously unseen heights, the catamaran's fuel efficiency will make them an excellent choice for many types of boating, particularly ocean cruising. The efficiencies of a trawler and the speed of a sportfisherman is a combination hard to find in any other hull configuration. Anyone considering a platform for voyaging would be well advised to venture out on a displacement catamaran before making that final decision.

LOA	62'18.9 m
LWL	56'17.07 m
BOA	27'8.23 m
Draft	3.5'1.07 m
Displ	38,000 lbs
	17 237 kgs
Power	Cummins
	6BT-HD 2x210 HP
Fuel	1,600 gal
	6057 L
Water	350 gal
	1325 L
Range	2000 mi @ 18
	4000 mi @ 9 kn
Max speed	23 kn

