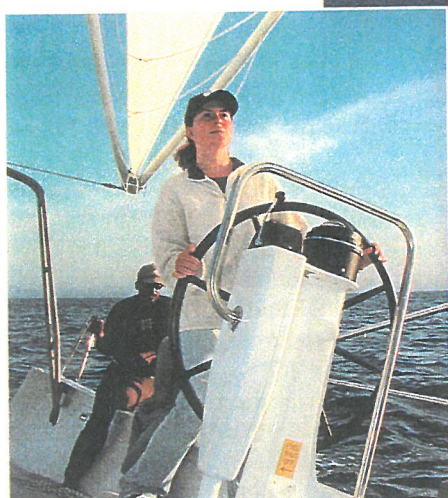


Derek M. Baylis

A Wylie
approach
to marine
science



↑ Deirdre Hall, policy-maker with the Monterey Bay National Marine Sanctuary, at the helm. Wishbone booms make for easy sailhandling.



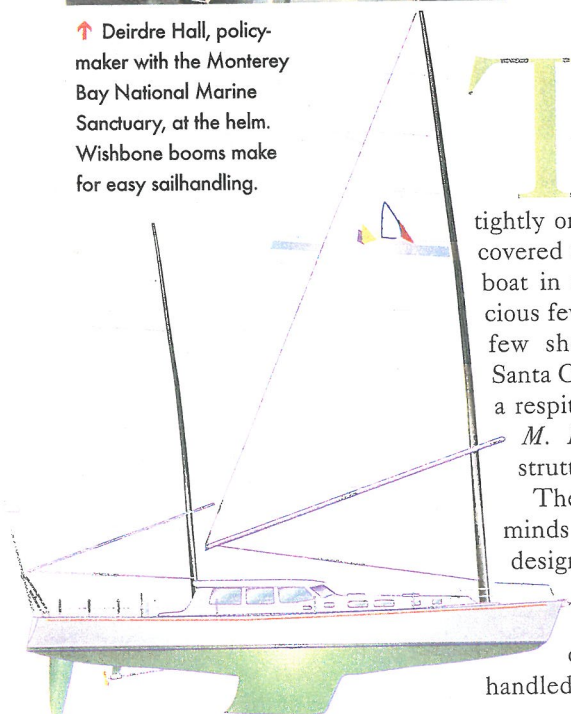
Story & photos by Dieter Loibner

The ketch was flying across the Pacific swell. Main and mizzen — its two wings — tucked in tightly on a close-hauled course, it covered the 100 yards to the photo boat in no time flat, leaving precious few seconds to squeeze off a few shots. Even the notorious Santa Cruz summer fog had taken a respite out to sea to give *Derek M. Baylis* a sunlit stage for strutting its stuff.

The vessel confounds static minds in several ways, as most of designer Tom Wylie's creations tend to do. After more than 10 years of turning out fast, practical and easily handled craft with carbon-fiber cat

rigs and wishbone booms, the public at large still is scratching their heads about single-sail boats that are not sedate nonesuchs. Finally, Wylie puts a second sail on a boat, but guess what. It comes with its own mast. For the record, Wylie designs conventional sloops if he must, although they may lack standing rigging, such as *Ocean Planet*, the boat Bruce Schwab sailed in the most recent Around Alone.

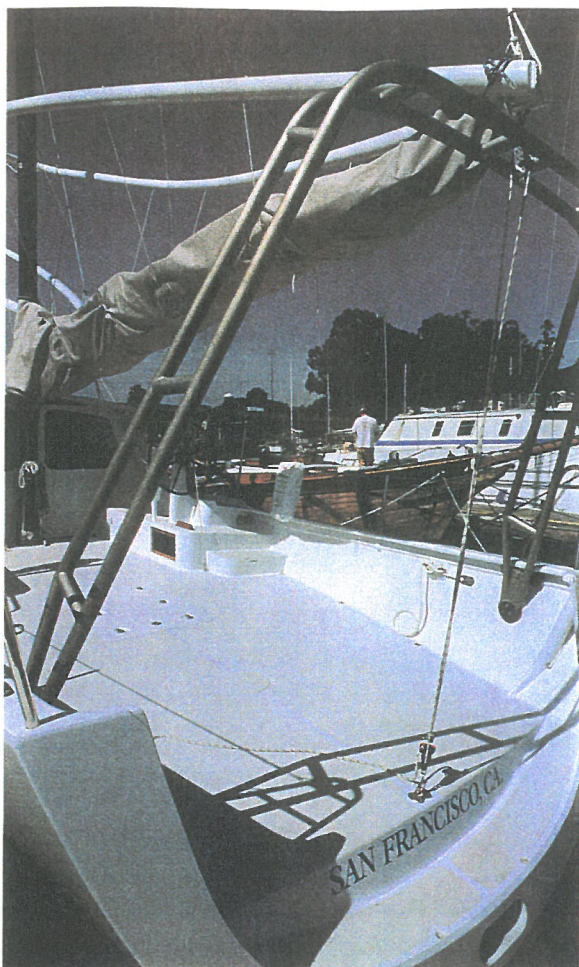
Derek M. Baylis is the latest and largest incarnation of the so-called Wyliecats, which also come in 17, 30, 39 and 48 feet. At 64 feet 11.5 inches, it fits the Coast Guard's Chapter T specifications for charter vessels. For the sixth time in his distinguished career, Wylie has teamed up with his partner in crime, master boatbuilder Dave Wahle, to build a boat on speculation. Amazingly, they are still friends, although Wahle, when asked what his next 65-foot project would look like, answered with a



grunt that could've been mistaken for a four-letter word. "The basic idea for this project goes back to being a kid and to rearing one later on," Wylie recalled of the project's origins. "It is a tribute to the excitement of curiosity and discovery during childhood, or being asked tough questions as a parent about the why and how. This boat is about figuring things out, whether you are a scientist or someone who chooses the ocean as the favorite playground."

→ Baylis' stern gallows and open transom. The removable transom board (not shown) is stored when not in use.

↓ Designer Tom Wylie and Monterey Bay Aquarium Research Institute scientists Amy West and Chris Scholin discuss the deployment options for a water-column sampling device.



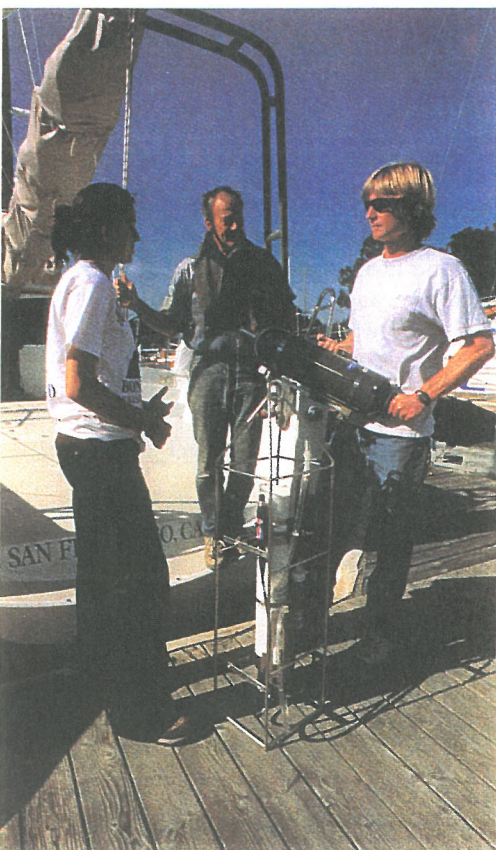
Cat-ketch rigs are not exactly new. Freedom Yachts, for one, has used this concept successfully, but they have yet to go mainstream. Wylie's spin on the concept makes use of carbon-fiber masts that automatically depower the full-batten sails by bending off in puffs, thus delaying the need to reef or switch to smaller headsails as on conventional sloops. Each sail is controlled by exactly two lines, the sheet and the choker, which position the wishbone boom relative to the mast, acting as a combined outhaul and downhaul. Reefing? Sure. There is a provision for a slab reef, but it won't make sense in less than 25 knots of true wind speed. Furling? Are you kidding? Drop it and forget it. The lazy jacks under the wishbone catch the canvas. The sweaty part of sailing these boats is putting on the sail cover.

Sailing on *Derek M. Baylis* in light to moderate winds will convince anyone that it is a sailboat first and foremost. Wylie, like so many other West Coast designers, can't deny the imprint of sleds on his work. These fast downwind machines were designed to go to Mexico or Hawaii in a hurry, which they did and still do. Someone once called them the minimum life-support system for a spinnaker. Going to weather in them is a different matter; slender hulls and tall rigs combine for a tenderness that has to be offset with ballast. About 8 feet of draft seems very little for a vessel this size, and it is. To retain the benefit of relative shoal draft and still achieve good stability while sailing to weather, Wylie opted for a bulb keel with a low center of gravity.

How does this concept fit into a scientific project? "Many oceanographic projects are done fairly close to shore and don't require a huge vessel, so the *DMB* seems a good alternative," explained Chris Scholin, a marine biologist at the Monterey Bay Aquarium Research Institute, who planned to charter the vessel for deploying equipment that takes samples of the water column. "Many marine scientists also love to sail, perhaps because they have come in contact with the sport at the Woods Hole Oceanographic Institution like I did during my education." This statement plays well with the imagined purpose of this particular boat.

The boat is named after someone who made the science of the ocean and figuring things out a livelihood. Derek M. Baylis is a marine scientist who also happens to be the patriarch of one of America's best-known sailing families that includes World Match Racing champ and Rolex Yachtswoman of the Year, Liz Baylis, and Trevor Baylis, last year's world champion in the International 14- and 18-foot skiffs. Derek M. Baylis Sr. also was an early influence on Wylie's and Wahle's sailing careers.

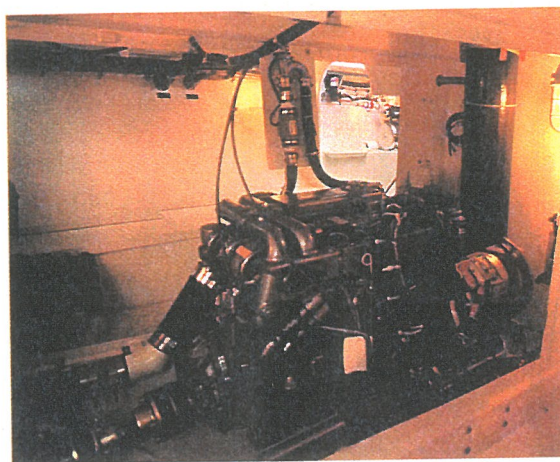
Another idea behind this multiconcept vessel is metamorphosis. Draw up something that serves as a platform for scientific and educational purposes, like *Derek M. Baylis*, or as a comfortable passagemaker that can stretch its legs with a husband-and-wife crew. The latter has resonated with Randy Repass, founder of West Marine, who has become a financial partner in the project and is having his version of the Wylie 65 built at Westerly Marine in Santa Ana, Calif. (See the interview on page 45.)



"I'd like to see her used by the scientific community and as an educational platform," stated Amy West, who is associated with MBARI and acts as the liaison to arrange charters.

Apropos platform: The back third of *Derek M. Baylis* is an open platform, confined by — get this — a drop-in stern plate that can be retired to the cabin top when it is time to deploy and retrieve scientific gear, like ROVs (remotely operated vehicles) or AUVs (autonomous underwater vehicles). The superlight titanium A-frame on the stern can be lowered and raised via block and tackle to aid lifting operations. In a pinch, the mizzenmast and its sparse running rigging can be called into action, too. Of course, the cruising version will have a similar

→ Baylis' large, well-lit engine room. The easy access facilitates service to the 100-hp Yanmar turbo diesel.



setup, which opens up possibilities for entertaining large parties or storing and launching a RIB, kayaks, surfboards or (gasp) a personal watercraft.

And then there is the environmental friendliness of a sailboat. "Why would you want to chase a marine creature with a smoke-belching, fuel-guzzling old tug, when you can do it quietly without pollution?" Wylie asked. "And even if you want to motor, an efficient hull with moderate displace-

ment will allow you to maximize distance while reducing fuel costs." With a 100-hp Yanmar auxiliary, the Wylie 65 is capable of motoring at approximately 12 knots maximum speed or 10 knots cruising speed. At 10 knots it cruises 240 miles in 24 hours and sips two gallons of diesel per hour, which compares favorably to 50 gph or more on similar-sized powerboats at similar speeds. The boat's total fuel tankage of 243 gallons is split between 105 gallons in the keel fin and 138 gallons in an aluminum tank, good for a range of 1,200 miles. Repass said he wants to extend the fuel capacity of his boat to ensure a 2,000-mile motoring range to be independent in the doldrums or along the lonely stretches of Alaska's coast.

Derek M. Baylis does not need a lot of fancy construction materials to be fast. The hull is built from a PVC-cored E-glass sandwich using epoxy resin and Kevlar reinforcements. The decks are kept light by using a balsa-core sandwich of glass and carbon. The design checks in at 35,000 lbs and can

Derek M. Baylis

carry up to 5,000 lbs of equipment. Chapter T compliance allows a grand total of 49 passengers for day trips, enough for a school class plus chaperones. On longer excursions, it can accommodate 12 passengers plus two crew.

One of the most conspicuous, distinctive and practical features of the Wylie 65 is the room with a view, the deck-level saloon in the pilothouse, where slaving in the port-side galley is nearly as much fun as sitting around the cabin table on the other side and enjoying a meal in plain sight of your surroundings. Forward to starboard is the inside steering station, with the repeater screens for radar, GPS, compass, chart plotter, etc., and the joystick (an option that was not installed on *Baylis*). "This arrangement extends your cruising options for colder climates," Wylie pointed out. While sitting inside in dry comfort, one still can stand watch and sail the boat. All the helmsperson has to do is look up through the hatch in the cabin top to check the sail trim.

Derek M. Baylis

designer
contact
builder
contact
description
dimensions
displacement

Tom Wylie, Wylie Design Group, Canyon, Calif.
Tom Wylie 925-376-7338
Wyliecat Manufacturing Plant, Watsonville, Calif.
Dave Wahle 831-724-6267
Cat-rigged ketch
LOA: 64' 11" LWL: 57' 6" B: 14' 9" D: 8' 3"
35,000 lbs

Navigation & communications

- Δ Furuno 1623 radar
- Δ Icom 700 SSB
- Δ Icom M127 VHF
- Δ Raymarine ST60 Tridata wind instruments
- Δ Raymarine ST 6001 autopilot linear drive

Aux. engine & propulsion

- Δ Yanmar 100-hp turbo
- Δ Gori 3-blade folding prop

Capacities

- Δ Water: 160 gal
- Δ Fuel: 243 gal (105 in keel, 138 in tank)

Electrical

- Δ Northern Lights 6-kw genset
- Δ Bass custom electrical panel

Galley

- Δ Force 10 3-burner electric range/oven

- Δ Waeco 86 refrigeration
- Δ U-line SP 18 icemaker, microwave outlet, pressure saltwater & hot/cold fresh water
- Δ Honduran mahogany & fir joinery interior

Deck & rigging

- Δ Vinylester resin E-glass balsa core deck w/carbon reinforcements
- Δ Freestanding carbon-fiber masts w/wishbone booms, 80' above waterline

Sails

- Δ Santa Cruz Sails
- Δ Sail area: 1,500-sq-ft main, 500-sq-ft mizzen

Other

- Δ 45-lb Titanium A-frame w/1,000-lb lift capacity
- Δ Lewmar 1500 electric windlass
- Δ Spade 200 55-lb aluminum anchor on titanium bow roller

Behind the aft end of the linear galley — which also is the setup spot for a portable wet-lab on scientific excursions — is the companionway to the dungeon, which houses the engine, the work bench and the Northern Lights



generator that feeds the vessel's heavy-duty 24-volt/110-volt power system. The space below is advertised as a walk-in engine room, but in reality you have to crouch and crawl because of the restricted headroom under the cockpit floor. To port there is room for two stacked pilot berths or, more precisely, two machinist bunks, which lack a separator to the engine room. But it is spacious down there, with easy access to the auxiliary and other vital systems and the wired innards of *Derek M. Baylis*. Winos would have no problem finding a spot to keep a good-sized stash in a climatized rack.

The other accommodations are more commodious, even plush by Wylie standards, with mahogany joinery (cherry is an option) and lots of light and air through eight deck hatches, four solar vents and 10 opening ports. *Derek M. Baylis* features two double seaberths on each side of the companionway and four bunks with lee cloths in the downstairs saloon. One

↑ A spartan interior gives *Baylis* a work-boat feel. Bunks are equipped with lee cloths for a secure night's rest.

→ The dining table in the pilothouse will do double duty as a conference table for scientists in the course of research.

↓ The galley easily converts to a wet lab for researchers.



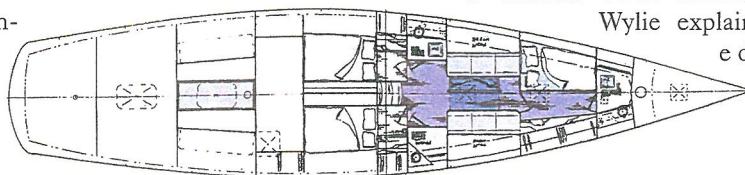
self-contained Watermate head each to port and starboard of the saloon and a third one in the lavatory in the forepeak, forward of the captain's cabin, satisfy the Coast Guard's requirements and most likely the needs of a full house on a day-

sail. A private owner will likely opt for separate cabins with private heads instead of the couchette layout, eliminating the bunkhouse in the downstairs saloon.

Derek M. Baylis sails well, too well, perhaps, for lumbering along at 3 knots to

watch and research sea creatures. "That's where this sail plan comes in handy, because it is adjustable without a million deck hands,"

Wylie explained,



↑ *Derek M. Baylis'* workboatlike accommodations.

touting the easy handling of a sail area that is divided 1-to-3 between mizzen and main. "Tuck away the mizzen; drop the main halfway; deploy a drogue or a hawser to keep pace with slow-moving marine life." The beauty of cat rigs is that whatever you do — banging upwind or gentle beam reaching — the deck remains uncluttered. There are no tracks and lines to trip over, no boom to decapitate unsuspecting crew, and the two steering stations (sporting the old steering wheels of Larry Ellison's IMS Maxi *Sayonara*) leave the passageway from deckhouse to stern wide open. As if to underscore Wylie's message, Deirdre Hall, a policymaker at the Monterey Bay National Marine Sanctuary and a relative sailing novice, took the helm without fear and guided the boat along close-hauled at a steady clip from the leeward steering station.

Not surprisingly, the Wylie 65 makes do with only four winches, three of them electric. But there is still need for some elbow grease when the call goes out to crank up the 1,500-square-foot main. Crew working on the bow or the mast winches have a safe place to do so in a seaway, in the lowered bow section, sharing the space with the electric Lewmar windlass and the hatch to the anchor locker. Uncluttered decks are also a safety feature because there are fewer chances for passengers to be in harm's way, important to the educational aspect of *Derek M. Baylis*. "She definitely sails well and is easy to handle," opined Jeff Canepa, a veteran of the marine industry and a lifelong sailor who sailed *Derek M. Baylis*. "Her relatively low bow and narrow hull are in line with a sled character so she'll be fast. But she may get wet when the breeze is on." But then again, legendary record-breaking sleds like *Merlin*, *Pyewacket*, *Taxi Dancer* or *Pegasus* don't have pilothouses with inside steering stations.

No matter how the topic is sliced and diced, *Derek M. Baylis* is a sight to behold as it glides downwind effortlessly, its sails spread like wings while the crew is clustered in small-talk groups, holding a cockpit cocktail party on the blue ocean that still holds so many secrets waiting to be explored. **AYR**

Dieter Loibner is a freelance writer and sailor based in San Francisco.