**WESTFLIGHT**

LOA 43’, LWL 33’, Beam 9.5, Draft 6’
Displacement: 20000 lb
Owner: George Cadwalader
Designer: H. G. May
Built 1948 by Berthon Boat Company, Lymington, UK

*Westflight* is a 14 ton (Thames Measurement) Gauntlet, a name so chosen after the design proposed in 1933 by H. G. May of the Berthon Boat Company was rejected by the client who had originally commissioned it in favor of one from another architect. May thereupon threw down the gauntlet, challenging the boat built to the rival design to a race. Berthon built May’s boat, the two antagonists squared off in the Solent, and May won handily. Thus it was that the forty or so boats of varying lengths but similar design that Berthon was to build in the years just before and after World War II were known collectively as Gauntlets. (There is some confusion about who actually did the drawings. May was in charge at Berthon but some attribute the design to Rodney Paul.)
She was launched in 1948 as Toffee Apple although the fact that she was copper riveted above the waterline and fastened with much inferior naval brass screws below suggests she might have been built in two stages, possibly begun before the War and finished after it was over and copper was still in short supply. We bought her in 1979, intending to sail her to Brazil so that our two boys could learn something about their mother’s native land. But this was not to be. I thought I knew more than I did about wooden boat construction and so evidently did the surveyor who declared her “rough but sound.” What we both failed to notice was that the wood around the 1/2” cooper rivets with which her iron floors were fastened to her frames had broken down to the point that there wasn’t much left holding her together. So, instead of sailing to Brazil, we trucked her into my backyard where she sat for the five years it took to rebuild the entire boat. I was helped in this project by many friends, foremost among whom was Bob Williams without whose superb work the job would probably never have been finished.

She went back in the water in 1984, changed somewhat from her original design. Her high bulwarks were gone, replaced by a lower oak toerail. Gone too were the iron floors, replaced by oak. The interior bulkheads, which before had been simply tabbed in place were now built as structural members strongly fastened to the frames. Externally, four new monel straps on each side, set in flush to the planking and running from the waterline down over the lead, helped tie the whole structure together. We’d added a bowsprit, converted her from a 7/8th to a masthead rig, and stiffened the mast with carbon fiber.

We sailed her that way for the next fifteen years by the end of which time the planking had become a bit chewed up along the waterline by ice and I was also getting mightily tired of mandatory annual haul-outs to paint topsides and bottom. In 1999, after reading an article describing how Tim and Pauline Carr had put a new veneer skin on their old Curlew, I decided to do the same with Westflight. Despite the protestations of wooden boat purists who were aghast at this heresy and unmoved by my argument that the result would not be much different than had she been built double planked in the first place, I contracted with Damien McLaughlin in North Falmouth, MA to oversee this job. An expert at using vacuum bagging to turn out beautifully fair cold molded hulls, Damien is unflappable in a crisis which is a useful asset when racing the clock to form an airtight covering over a very large object in less time than it takes epoxy to kick. Under his supervision we first sandblasted off all the old paint and reefed the cotton out the seams. Westflight then sat cooking in a heated shed for the nearly two months it took to bring the moisture content in the planking down to below 15 percent. That done, we payed the seams with a flexible epoxy putty and skinned her over with three layers of diagonally laid 3/16 fir veneers, each one impregnated with epoxy and vacuum bagged tight to the hull. The final step was to cover the topmost veneer with a layer of 6 ounce, tightly woven glass cloth and spray that with three coats of Awlgrip. We relaunched her in the Spring of 2000.

Now, nearly nine years later, this modification remains an unqualified success. Westflight stays in the water year around and, by using an ablative bottom paint
(International Micron Plus), I am able to go two seasons between haul-outs. The Awlgrip has lost some of its shine but remains perfectly serviceable. There are no leaks and no signs of delamination anywhere, all of which convinces me that, if carefully done, cold molding a new skin over a carvel planked boat can add many years to her life while at the same time substantially reducing annual maintenance.

In her first incarnation as *Toffee Apple* and later *Gay Gauntlet*, *Westflight* cruised the North Sea, the Baltic and the Med before crossing to the Caribbean where she was sold to the first of a succession of progressively more careless owners, before beginning her new life in Woods Hole. She hasn’t been as active in her current incarnation as she was in her first, but she has taken us all up and down the New England coast, to Nova Scotia, the Azores, and a number of times to Bermuda, although never in the race which, undoubtedly, is a source of annoyance to Mr. May’s ghost!

One of the sawn frames after the iron strap floor had been removed to reveal the broken-down wood around the rivets. This damage was caused by a build up of caustic lye in the wood, as a result of electrolytic action between the copper and iron.
A new oak floor with some of the not-yet removed iron strap floors further forward. As can also be seen, the boat was built with heavy sawn frames alternating with lighter bent ones. Where the turn of the bilge is too pronounced to have allowed getting out the sawn frames from single timbers, they were made in two pieces, joined by a doubler. With these, only the lower halves needed replacing. With the full length bent frames, we had to chisel out the damaged ends and scarf in new ones.
Routing out slots in the mast to accept the carbon fiber, a job made necessary after we converted from a 7/8 to a masthead rig and found the mast too limber above the upper spreaders.
Applying the veneers: The forward half of the port side has been coated in slow curing epoxy and the veneers stapled to the planking. The vacuum bag consisting of a heavy plastic sheet is sealed around its edges with a sticky gray clay like material much like Mortite and the vacuum pump is drawing the air out from behind it, pressing the veneers hard against the hull. Aft, the veneers are being fitted. This is done by laying the full width veneer planks against the hull, allowing them to follow the contours as necessary to lay flat, but making sure that the gap between the one already in place and the one being fitted next to it in no place exceeds two inches. A small air driven circular saw with its fence set to two inches and held against the inside edge of one or the other of two adjoining veneers is then run up (or down depending on which edge serves as guide) the full length to cut an even two inch space between them. In the above photograph, this process has been completed with all the veneers stapled fair to the hull and exactly 2 inches apart from top to bottom. The next step will be to number them sequentially and take them back off. Epoxy thickened with linen fibers will then be troweled onto the hull, the #1 veneer stapled back exactly where it came off and a full length 2” wide veneer strip stapled next to it. Next will come veneer #2, then another 2” strip, then #3, another 2” strip, then #4, and so on until all the numbered veneers are back where they came from and interspaced with the precut 2” pieces fit tight between them. The vacuum bag will then go on, and after the epoxy has cured will begin the time consuming job of pulling out all the staples and sanding everything fair before starting all over again with the second layer laid diagonally to the first.
The main cabin as it looks today. Seat backs swing up to make an upper bunk and can be adjusted for angle of heel by moving the stops which screw into the brass quadrants set in flush to the bulkheads forward and aft of the settees. The stove barely visible in the bottom left of the photograph is a gimbaled Tasco propane two burner with an oven and the cabin heater is a Dickinson Newport propane fireplace. The blue and yellow handles at the top of the picture are to the gas shutoff valves for each.
The engine box serves as one of the three steps up to the companionway, the other two doubling as storage boxes. The loudspeaker makes it possible to hear the radio above the noise of the engine and the odd looking contrivance just above the radio itself is actually a folding fourth step put there to assist in climbing over the storm shutters when they are in place.
There is good access to the Westerbeke 4-107 with the engine box removed. The panel behind the fire extinguisher also lifts out for access to the reverse gear, and wet exhaust.
An outboard motor priming bulb is installed in the fuel line to facilitate bleeding air out of the fuel system. This is particularly handy on older engines such as ours, with multiple bleed screws which must be opened sequentially as fuel is laboriously pumped through the system with the small lift pump on the engine. With this bulb, I open only the final bleed screw on the high pressure pump, squeeze the bulb until I get a stream of bubble free fuel, close the screw, and the job is done.

The workbench in the forepeak has tool storage in the two drawers beneath. No cruising boat should be without a machinist’s vice!
The door to the head when shut. Close observers will spot the door latch handle on the bulkhead just under the spare compass. Why it is in this unusual location is because we forgot to install the latch on the door until after the mirrors were in place, by which time it was too late!
The telescoping tiller is shown here with the pin rail which is used to adjust the rudder angle to compensate for weather helm, a necessary step to get the boat close to balanced before engaging the self steering vane.

The telescoping tiller is shown extended. Gullible people have been persuaded that this is actually the bilge pump!
The Fleet Surgeon’s Preventers, so named because of Dr. Fischer’s article describing the danger of jibes. Here one part of the lines shown running through the blocks at the end of the bowsprit runs outboard of everything and terminates in a fitting which, when rigged, clips into a car on the underside of the boom. The other part runs inboard along the side decks and can be taken around a winch to haul the preventer tight. Unlike Dr. Fischer’s recommended system, which remains permanently rigged, this one has to be hooked into the boom when needed, a less satisfactory arrangement made necessary by the length and weight of Westflight’s boom.
The self-steering system is such an effective member of the crew that we have named it “Mr Ratcliffe” after its inventor. The auxiliary rudder turns through a full 360 degrees which is a great advantage when backing down.