

POWER AND MOTORYACHT

JUNE 1988

\$ 3.00

TEMPEST 60



An American builder's interpretation of the classic European day boat.

By Richard Thiel

Tempest Marine has never been what you'd call conventional. Their first boat, the Tempest 44, was a unique marriage of race-bred, deep-V hull (24' deadrise, 4.64 length-to-beam ratio), nearly midship-mounted Caterpillar 3208TA diesels, and a maintenance-free drive system invented by Tempest president Adam Erdberg which falls somewhere between an inboard and a surface drive.

The 44 began life as a one-off for company owner Dick Simon who wanted a boat that combined good rough-water performance, good speed (40+ mph cruise), and good cruising range (350 miles). Instead it developed into a successful production model. Last year, the Coast Guard purchased five, slightly modified 44s for service in south Florida as Fast Coastal Interceptors (FCIs).

After the success of the 44, Tempest introduced the 32 and 38, two smaller, more conventional sportboats based on the 44 hull but with MerCruiser gasoline stern drives. Then last year, the company plunged into the sport cruiser market with the 42 Elegante, based upon a relatively beamy (12'6") hull designed by Baglietto for use with water jets, but modified by Erdberg for his hybrid drive system. What sets the Elegante apart is that it's



TEMPEST 60

PHOTOGRAPHS BY GÖRAN AND BENNY ÖRTENGREN

partially constructed in Italy and finished to American specs at Tempest in North Miami.

First Impressions

Now comes the latest iconoclast from Tempest, the 60, a boat that borrows a little from each of the previous Tempests. Like the 44, she mates high performance Caterpillar diesels (this time the new 1,000-hp 3412TAAs) with Endberg's T-Torque Drive, and like the 42, she combines a generous beam (15'9") with flashy Euro-styling. Like all Tempests, the 60 is not only fast in perilous conditions, but strong enough to survive unscathed.

And like all Tempests, the 60 has a couple of tricks up her sleeve—actually more than a couple. First, she gives new meaning to the term "semi-custom." While only one basic accommodation plan is offered, each owner can make minor changes in the layout as well as select his own finish materials. That may not seem an earth-shattering concept until you understand that Tempest has stepped completely out of this part of the equation, designating First Impressions of North Miami as principal interior designer for the 60.

Here's how it works. After executing an agreement to purchase, the 60's owners meet the First Impression designers at their studio and together work out a general theme for the new boat. Next, they consider all varieties of fabrics and materials. To make the process easier, First Impressions has in its office a full-scale mock-up of the 60's interior to which owner and designer can affix various materials. Tempest saves time and manpower and the customer is more likely to see his dreams turn into reality.

The interior of our boat, Hull No. 1, may or may not be typical of future boats, but it's certainly striking. Cabinets throughout are black lacquer accented by gold Geobe plumbing fixtures. The walls are covered with a tan synthetic suede, accented in both staterooms by bands of contrasting colors.

The carpet is beige and the furniture is upholstered in a complementary tan suede-like fabric. While there are mirrored surfaces, they are kept to a tasteful minimum. Much thought has obviously gone into the lighting, which consists of an eye-popping array of spot, direct, indirect, tube, and marine neon (yes, neon) lights. In the master stateroom, a headboard of black Lexan peppered with pinpoint white lights gives the impression of a starry night.

A Plan Of A Different Color

The plan that Tempest has chosen is also unique. Unlike the classic European dayboat, which typically splits the space between a massive saloon and large master stateroom, the 60 offers two staterooms, each with private access to a head, and a more compact saloon.

Forward guest accommodations consist of a V-berth, cedar-lined hanging locker, and a compact portside head with hand shower. Like the master, the guest stateroom has its own air-conditioning controls and entertainment center. Ventilation is handled by a hatch in addition to four opening ports that present something of a cranky, if minor, problem. They're installed on the tubside where they look stylish but fill up with water after a rain or hard run. When an unsuspecting guest opens them, he or she is likely to be doused with a cupful of water. A small drain would do the trick.

The saloon is compact for a 60-footer, yet roomy enough to entertain eight or ten guests. Portside, the U-shaped galley is designed to function equally well as a bar. It includes a full range of appliances, a peninsula with two stools for either dining or drinking, and a remote-controlled TV concealed within a circular black Lexan enclosure. To starboard there's a comfortable U-shaped sofa that can sleep two.

Considering how the rest of the accommodations are scaled down, the master stateroom is surprisingly large. Enjoying the boat's full beam, it combines a queen-size bed, large cedar-lined hanging locker, and separate entertainment center with a portside head that includes a full-size tub. Ports on both sides provide cross-ventilation, but for warmer climes there is separately zoned air conditioning.

Engineering That Says Shhhhh

The 60's two aluminum-alloy fuel tanks are directly abaft this stateroom's aft bulkhead, which yields two benefits. First, they form a thermal and acoustical barrier between engine room and living space, supplementing standard foil/lead/foam insulation. As a result, the stateroom and saloon are surprisingly quiet either underway or, since the generator is at the after end of the engine room, at anchor. Second, since fuel is concentrated just forward of the massive Cats and just abaft midships, the 60's center of balance, and thus her running trim, is minimally affected as fuel is burned.

That's typical of the kind of engineering lavished on this boat. In the engine room, accessible by a hatch in the cockpit,

you can clearly see the massive balanced stringers and the supporting frames on three-foot centers. The engines sit atop foundations of 6061 aluminum, fabricated into full-length caps which are then through-bolted on ten-inch centers. All interior surfaces not covered with insulation are gleaming white, the better to spot any oil or fuel leaks. The duplex Racors, sea-water strainers, and Caterpillar gauge panels are all within easy sight.

Everywhere you see and feel the mass and strength of this boat. Yet thanks to careful selection of materials and laminates, and liberal use of lightweight composites, she's surprisingly light: her bare hull weighs a mere 7,500 pounds and even after engines, drives, tanks, and all the luxuries are installed, she still manages to come in at around 45,000 pounds.

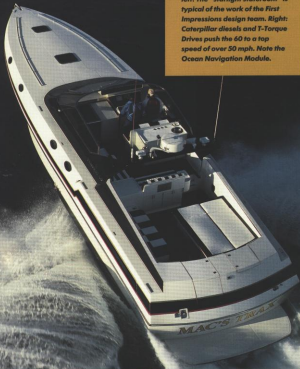
This is also a boat bristling with innovation. Follow the Caterpillar's 10' exhausts and you'll see they dump into a transom overhang required by the T-Torque drives. When the 60 is at rest, the exhaust exits underwater for maximum quiet. On plane, the exhaust ports are above the waterline to minimize back pressure, yet the sound is still sufficiently enclosed to be well muffled.

Between engine room and transom, the exhaust is routed through an after compartment that can be ordered either as a lazarettie with cavernous storage and washer/dryer, or as crew's quarters with a double berth. Access to this cabin is provided by a hatch roughly in the center of the aft coaming. To port of it is another compartment whose top folds away and whose fore and aft sides drop to expose a collapsible ladder that leads down to the swim platform.

Crowds Without Crowding

One of the basic aims of the classic European dayboat is to allow an owner to transport a large number of passengers in comfort, particularly in good weather. So on the 60 there's a flexible seating arrangement that begins with a collapsible sun platform aft to starboard and a bench to port. Forward and up a step (above the master stateroom) is a large L-shaped settee, plus room for three more passengers on the forward helmman's bench, behind which is a seat/war with ice-maker and refrigerator. In all, it's possible to carry at least a dozen people.

The other basic aim of the dayboat is to provide the owner with a fast, exciting boat to run. As for performance, the 60's test results speak for themselves, although we hasten to point out that, thanks to effi-



(Opening spread) Like those of all Tempest 60s, this saloon and master stateroom are custom designed for each owner. This page, upper left: A surprisingly spacious engine room houses the first pair of 1,000-hp Caterpillar 3412TAs, here visible with twin "dry" turbochargers. Lower left: The "starlight stateroom" is typical of the work of the First Impressions design team. Right: Caterpillar diesels and T-Torque Drives push the 60 to a top speed of over 50 mph. Note the Ocean Navigation Module.

cient Caterpillar diesel power, she also enjoys excellent cruising range.

The Tempest 60 also excels in helm ergonomics. As you'd expect, there's a full complement of four-inch VDO instruments, including pyrometers, gear of pressure, rudder angle, and engine synchronization gauges, compass, and tachometer. They are clustered in a pod forward of the panel, where it meets the windshield. This puts them just below the helmsman's line of sight when driving, so he barely has to take his eyes off the water to check on course, time, or engine condition. Likewise, Tempest uses simple, single-lever controls by Kobelt which fall comfortably at the right hand. And as for the wheel, it can be adjusted vertically within a range of six inches by means of an internal hydraulic cylinder.

With the gauges forward, there's sufficient room to place all electrical and alarm functions directly in front of the helmsman. Tempest developed an electrical control panel for the 44 a few years back which proved so successful even the Coast Guard adopted it. It consists of a series of buttons colored according to function which are back-lit when activated. These include engine power, navigation and anchor lights, bilge pumps (which light when automatically activated as well), spotlight, and windlass controls. Also in this panel is a button to raise the twin docking lights out of the foredeck (powered, incidentally, by Bennett rams), and a control to raise the Ocean Navigation Module.

Ah yes, the Ocean Navigation Module, another Tempest innovation designed to make the 60 adaptable to a variety of uses. For normal inland operation, it can remain retracted into the space between the helm and the instrument pod. For offshore work, it's hydraulically raised to reveal an arsenal of gear.

The pod contains a Vigil RX radar

monitor, Icom IC-100 VHF, compass, Northstar 800 Ioran, Wagner Micro-pilot autopilot with remote control, and II Morrow EZ Nav chart machine. There is also a video monitor connected to an engine room camera focused on the supplementary Caterpillar gauge panel. Remarkably, not only the module, but all of its electronic gear is standard equipment.

Tempest's fire alarm system is part of the helm and it features a schematic of the boat with monitor lights for each function. It not only keeps watch over the usual lights and pumps, but also detects high bilge water in the three watertight compartments and the presence of water in the Racor separators. In addition, above each smaller VDO water temperature, engine oil pressure, and gear oil pressure gauge is a red light coupled to the alarm system so that when that macous bell rings, the helmsman knows the cause.

Finished To A T-Torque

To finish off a thoroughly professional helm, Tempest fits Kiekhaefer mechanical trim plane indicators. Trim planes are important on any boat, but on a boat equipped with T-Torque drives, they are crucial. That's because Erdberg's system uses fixed propeller shafts on 60° centers exiting through the transom at approximately 8", each supported just forward of its propeller by a strut cantilevered from the transom. The rudders extend from a separate box or "T-strut" also cantilevered from the transom.

Since shaft angle is moderate and props are well shaft the hull, the T-Torque Drive doesn't generate the concentrated after lift common to inboards, and, on the other hand, cannot be trimmed in to modify propeller thrust like a stern drive. Consequently, trim planes are helpful (but not absolutely necessary) in lifting the hull over the hump quickly, but their shape is

crucial. Unlike inboards and I/Os, T-Torque's propellers are well shaft the planes and thus can be affected by turbulence induced by deflected planes. Erdberg fabricates his own tapered-hull planes so the props get a clean bite.

According to Erdberg, the idea behind T-Torque is to increase efficiency by operating the non-cleaver props on plane in a semi-surfacing condition where they are more efficient while keeping them submerged at slow speed for good maneuverability. Since the propellers are well shaft the boat, they also operate in cleaner water.

But there are other advantages as well. All of the T-Torque's components, save its propellers, are of identical 316L stainless steel, minimizing the chance of electrolysis. Since shafts exit the transom at a moderate angle, draft is only 3'10" on the 60. And for identical reasons, the lowest point on the boat is the keel, not the propellers, which means a boat with T-Torque is more likely to survive a grounding intact.

In spite of its Continental appearance, this is an all-American boat. There are only four foreign components (all from Italy): windshield, companionway door, portlights, and wheel. Maybe that's a result of a now-favorable currency exchange rate or maybe it's emblematic of a new sophistication in American boat-building. A few years back, it would have been quite unusual for a U.S. builder to make this boat—but then you couldn't really call Tempest your average builder. □

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