

STERN DRIVES: THE 10 BEST

# BOATING

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# TEMPEST FUGIT

*Tempest 42: A diesel-powered sport yacht that's ready to fly.*

BY SHAW McCUTCHEON

IT'S UNUSUAL TO find a boat that has something truly distinctive about it. We see, of course, a lot of boats that are slightly different from the rest, and we often note styling features specific to a company. But it's difficult to find something as important as, say, a drive system, that is particular to one, and only one, company.

So here we have Tempest Marine, a builder of European-style sportboats and motoryachts located at the dead end of North Miami's 188th street (right across from Cigarette and down the block from Magnum

and Apache) that has developed the *T-Torque*. This surface-piercing-propeller drive system was mounted on our test boat—a 42' Sport Yacht powered by twin 412-hp Caterpillar 3208TA diesels that propelled it to 41.5 mph at WOT. And you won't find a T-Torque drive anywhere else in American boating. Tempest jealously guards the design from competitors (the prop size and pitch are classified), for it's what has given the company a secure niche in the specialized strata of the big-sportboat builders.

This niche is small in-

deed. But if there is any boat that epitomizes the Tempest approach, it is this 42, which combines the T-Torque, a deep-V hull for true offshore performance, diesels for range and reliability, and a 12'6" beam that provides more belowdecks than an 8'-wide performance boat, but more speed than a mainstream sport cruiser with a beam of up to 15'.

Looking back at the sport cruisers we've tested over the past few years, the 42 is quite different from all of them, yet has something in common with each. It has the Euro-styling and



PHOTOGRAPH BY SHAW McCUTCHEON

**BEAT THE CLOCK**—With the rooster tail hurling aft at WOT, our Tempest 42, powered by twin Cat 3208TA diesels, hit 41.5 mph. At this speed, the 42's range is an impressive 259 n. miles.

**EUROPEAN TRADITION**—The 42 was designed for those who want to entertain above and belowdecks. Lots of lacquer, of course, and with 6'8" of headroom, you'll never complain of neck spasms.



PHOTOGRAPH BY SHAW MCCUTCHEON

*DRIVE DESIGN—Tempest uses its own surface-piercing propeller drive system, called T-Torque, which gives the 42 greater speed (nearly 42 mph) and greater mobility in shallow water (2'10" draft).*

forward-facing radar arch of the Sunseeker Martinique; the sporty, Med-style cockpit of the Sea Ray 370 Sun Sport; and the belowdeck luxury and headroom of a Baron 43 Express or Trojan 12 Meter, without the girth of a 14' beam.

The 42 itself is styled in the classic European tradition, with lots of party space topside and lacquered finish belowdecks. The basic boat was originally a Baglietto design that Tempest purchased in Italy and modified in Florida. The V-bottom was sharpened to 21 1/2 degrees, the hull and deck were strengthened and the interior restyled to suit American tastes. But the superb Italian cockpit arrangement remains—a huge circular sunpad with a curvaceous bench seat to match.

The guy who buys the 42 gets a solid boat—saving weight was not a high priority. The interior seems larger than it should (6'8" headroom) and is capable of sleeping four very comfortably or can entertain a party of six to eight revelers belowdecks during a storm, sans claustrophobia.

But what really sends the temperature rising is the sexy drive system that shoots out a raceboat-like rooster tail. Unlike raceboat high-tech, however, the T-Torque system is as maintenance-free and user-friendly as a conventional inboard shaft unit.

### Torque Tech

The T-Torque drive is a fixed system, which means that the propshaft cannot be steered port or starboard or trimmed up or down, as on Arneson drives. Instead, Tempest designed a one-piece driveshaft from transmission to prop and angled the shafts down at a relatively shallow 7 degrees. The boat is carefully balanced so that it runs at roughly 3 to 4 degrees

## PROPULSION AND PERFORMANCE Tempest 42 Sport Yacht

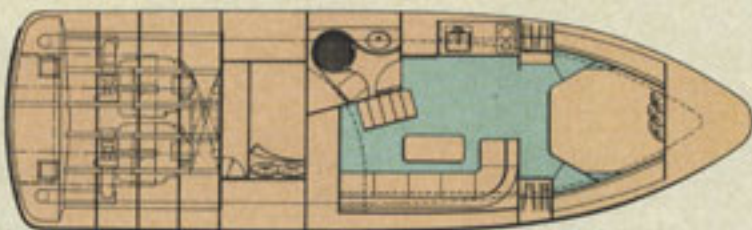
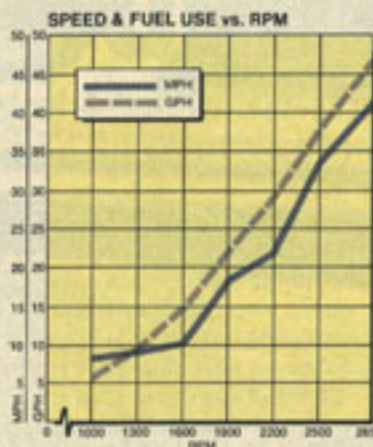
**Standard power:** twin Caterpillar 3208TA V-8 diesel inboards

**Optional power:** twin Detroit Diesel 6V-92 diesel inboards

**Test boat power:** twin 412-hp Caterpillar 3208TA diesel inboards with 636 cid, 4.5" bore x 5" stroke, swinging custom 4-bladed Tempest propellers through 1.1:1 reduction

rpm	speed			fuel use		efficiency			operation	
	knots	mph	% of max.	gph	% of max.	naut. mpg	stat. mpg	n. mi. range	angle	sound level
1000	7.4	8.5	21	5.9	13	1.25	1.44	422	2.0	78
1300	8.1	9.3	22	9.8	21	0.82	0.95	278	2.5	80
1600	8.9	10.2	25	15.0	32	0.59	0.68	199	3.0	81
1900	16.2	18.7	45	22.6	48	0.72	0.83	243	3.5	85
2200	19.1	22.0	53	29.6	63	0.65	0.74	218	4.0	86
2500	29.1	33.5	81	38.0	81	0.77	0.88	258	4.0	88
2850	36.0	41.5	100	47.0	100	0.77	0.88	259	2.0	88

Advised fuel capacity 375 gal. Range based on 90 percent of that figure. Performance measured with four persons aboard, 7/8 gal. fuel, 1/2 gal. water, and standard cruising gear, without the use of trim tabs. Sound levels taken at helm, in dB-A.



<b>LOA</b>	42'0"	<b>Bridge clearance</b>	8'8"
<b>Beam</b>	12'6"	<b>Max cabin headroom</b>	6'8"
<b>Draft</b>	2'10"	<b>Fuel capacity (gal.)</b>	375
<b>Displacement (lbs., approx.)</b>	19,000	<b>Water capacity (gal.)</b>	75
<b>Freeboard forward</b>	4'7"	<b>Base price (w/ Caterpillar 3208s)</b>	\$359,000
<b>Freeboard aft</b>	1'10"	<b>Designer</b>	Tempest design team

**Standard equipment (major items):** T-Torque drive system; trim tabs; anchor and anchor windlass; microwave; electric stove; forward-slanting radar arch;

transom shower; wet bar with stowage; shorepower cable; Halon automatic fire extinguishers; air conditioning; TV; VCR; radio; water heater; power steering.

when up on plane, resulting in an efficient 11-degree angle of attack at the props. The shafts are positioned far apart (36", compared to only 19" with the Arnesons) for more maneuverability at low speeds, and are 32" abaft the transom.

The rudders are directly abaft each prop, extending from either side of a heavy-duty 1/4" stainless-steel "T" fastened to the transom. The steering cables pass through this "T" and the rudders rotate 35 degrees in either direction, slightly more than those on

on plane since the drives couldn't be trimmed in for the optimal planing angle. The reversed chines help maintain lift, so when she does plane at approximately 1900 rpm, you can still dial back to 1600 (about 10 mph). Since the 42 is designed to run without tabs, use them only to get on plane and then bring them out of action.

For those accustomed to using gasoline power to get 40-plus-mph speeds, the Tempest's 47-gph fuel consumption and 259-mile range at full throttle are impressive, indeed. Figure that a

most other performance boats.

Transmissions are either Twin Disc or Allison, depending on the engine used. Tempest also installs a special sacrificial plastic buffer between the transmission and the shaft coupling that should extend clutch life and reduce shock when the boat takes some air.

Tempest's goal, according to Adam Erdberg, company president and the drive's designer, was to build a 42-footer with superior performance (there are no protrusions such as struts to slow the boat down), easy maintenance (no more than a conventional inboard drive), and great shallow-water capability (just 2'10" of draft for this 19,000-pounder). And build it they did. The 42 has fulfilled its purpose so successfully that the U.S. Coast Guard uses it as an interceptor boat.

### Tempest Moves

So how well does the 42 perform? Although it takes a moment for it to get up on plane—a characteristic common to boats with surfacing drives—it's a great performer, with excellent maneuverability at cruising speed. (A hard turn, however, slows her appreciably.) The T-Torque system gave us excellent low-speed maneuverability, as well, but required a heavy dose of throttle to get up

pair of gas powerplants with the same horsepower might push the boat a bit faster, but fuel consumption would be in the neighborhood of 70 gph. In fact, in the diesel-powered tradition of this boat's European cousins, the 42 is offered *only* with diesels—standard power is twin 412 Cats. Tempest also offers twin Detroit Diesel 6V-92s as an option (add approximately \$40K to the base price).

That's a very conservative approach. And the construction takes a similar tack. According to Erdberg, the company has deliberately chosen not to use high-tech, lightweight axial fabrics and complex resins, preferring instead to remain with tried-and-true mat and woven roving throughout the boat. Bottom and hullsides are solid glass, while the upper decks are reinforced with Klegecell foam core between layers of glass. The stringer

system is glass-encapsulated plywood.

Reducing noise and vibration are important to Tempest, but so is maintaining performance. Often, to cut noise levels, you have to install mufflers, rearrange exhaust systems, put in heavy shielding, etc., all of which can hamper performance. Tempest has tried, with a good deal of success, to reduce noise without compromising efficiency by installing the exhaust outlets on the underside of the swim platform (which also covers the drive shafts). Vibration is reduced by flex-mounting the engines on the stringers. The prop placement, well abaft the boat, keeps the rooster tail from hitting the swim platform and making more noise.

Our loudest sound-level reading was 88 decibels, very quiet considering that Tempest doesn't install muf-

flers on Cat-powered boats, and does so only reluctantly in DDC-equipped models. A reading of 88 dB-A on an unmuffled boat is darn good.

### Tempest Persona

While she performs well for her genre, the 42 also is a formidable party machine. The cockpit and aft deck are huge and contain such goodies as a round cocktail table that recedes into a compartment underneath a sunpad; a wide bench-style helm seat suitable for two, just forward of another large sunpad for the hobbyist tanner (there's space for four tanners, plus another two on a foredeck sunpad); and an open transom leading to the swim platform. (There's a guard rail to hold in the unwary.) An aluminum frame on the curved-glass windscreen in an early model has been replaced with more sturdy (and more weather-

proof) stainless steel. The helm has VDO gauges and controls in all the right places.

Access to the engine room is either through a hatch in the stern or through another hatch under the sunpad just abaft the helm. You drop down to an odd space (good for cover stowage, etc.) and enter forward of the engines through a hatch in the bulkhead.

Entry belowdecks is via a companionway covered by a sliding fiberglass door. Three steps down to the salon area. Galley to port, an L-shaped settee with high-low table to starboard. The electrical panel and stereo are on the aft starboard bulkhead, while the entrance to an athwartships berth underneath the helm is to port. The galley contains a single sink with a Euro-styled faucet, microwave, electric stove, refrigerator/freezer and a lot

of good stowage space (everything is standard).

The queen-size master berth is on the centerline. It's a wide opening and there are no privacy curtains, so be discreet. Open stowage areas line both sides (curtained, with a light inside), and a square hatch provides light from above.

Optional equipment is minimal. Some of the big-ticket items include a teak deck (\$3,700); saltwater wash-down system (\$695), 5kw diesel genset (\$12,450); TV and phone shore connection (\$495); searchlight (\$1,750) and a cabin ice-maker (\$1,875).

So what are we to bid for this beauty? Base price with the Cats is \$359,000; with the 6V-92s it goes up to \$399,000. Since the Tempest 42 is like no other sport cruiser we've tested, a clear-cut price comparison is hard to come by. Smaller sportboats, such as

the Sunseeker Martinique (36') and the Sea Ray 370 Sun Sport, both with gas power, go for considerably less—between \$130K and \$170K. Larger sportyacht models, such as the Trojan 430 with twin 430-hp diesels, goes for \$376K and the Baron 43 with twin 535-hp diesels goes for \$445K. So, Tempest's price tag isn't at all unreasonable, especially considering you get a very seaworthy boat with Italian styling, enough room for a large party as well as enough range and power to get you where you want to go *fast*. And with that rooster tail rising up astern, the Tempest 42 will turn a lot of heads. It definitely turned ours. ⚓

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