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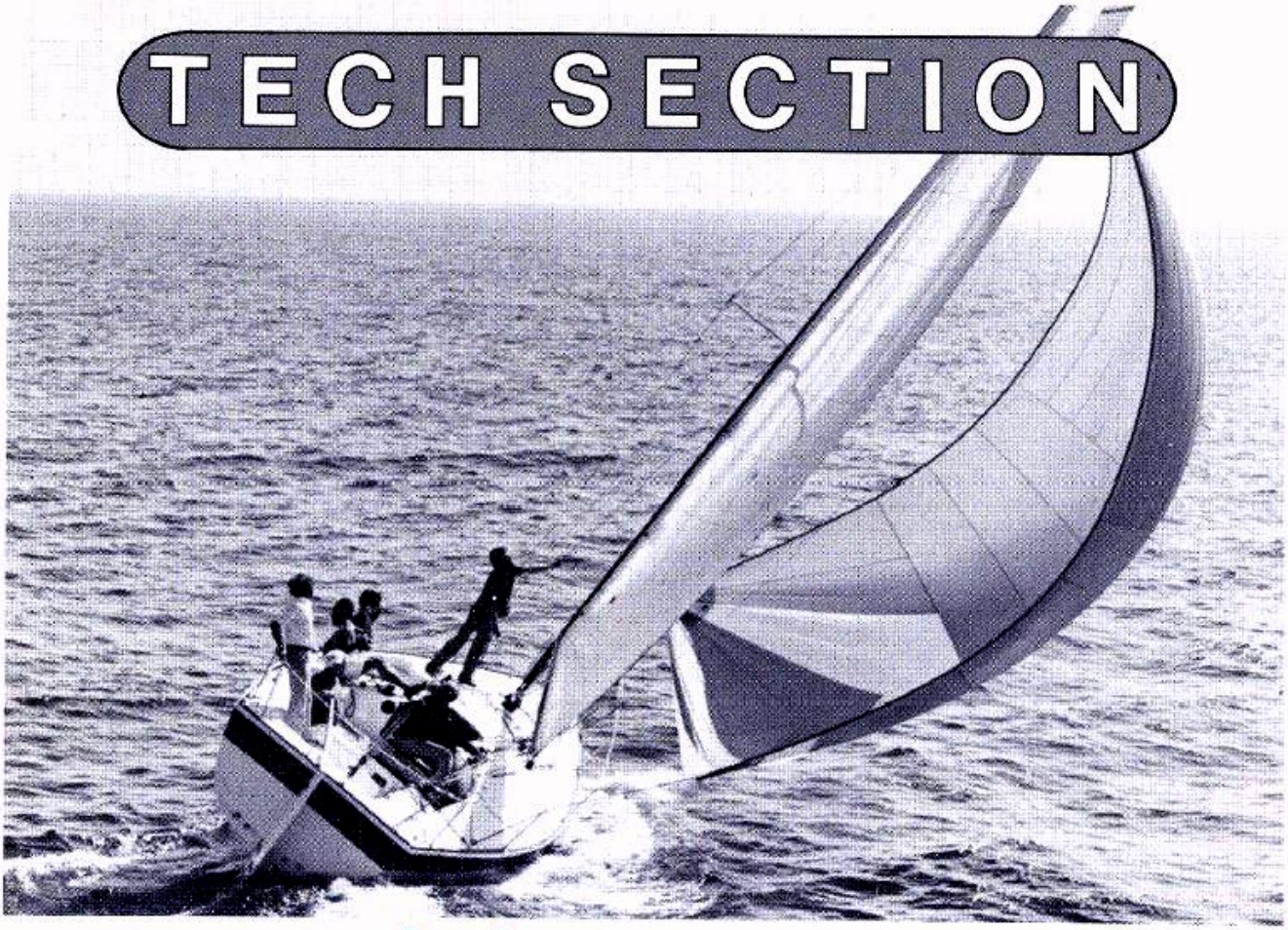
TECH SECTION



PEARSON FLYER 30

By Earl R. Hinz

Seatrials℠

Photos by Bob D'Olivo

Designed by Bill Shaw, the deck layout is efficient while simplicity is the key below decks. This is an economical and functional day sailer.

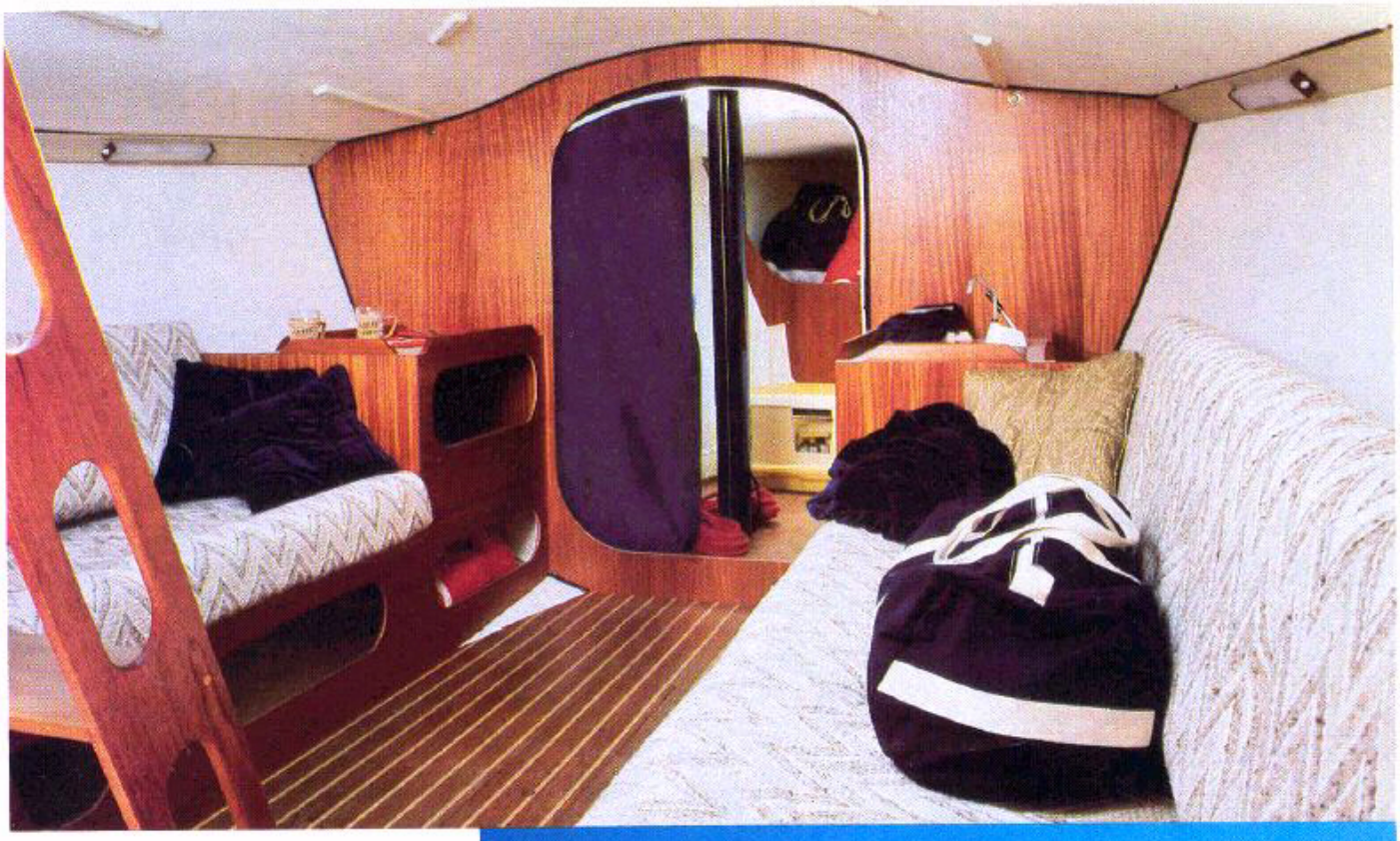
Calling a spade a spade is what Pearson Yachts set out to do with their 30-ft. Flyer and it wouldn't hurt to take notice of their message. Most sailboats are day sailers, not by anyone's definition, but by their use pattern. Marinas are filled with them. Sometimes they are called racing boats for ego purposes; sometimes they are called cruising boats for family attraction; but most of the time they are called racer/cruiser boats to rationalize the investment. Regardless of what you call them, they have one thing in common—they are used predominantly for day sailing.

Can you take a different approach and make a day sailer equivalent to all of these boats and give the owner more for his money? Maybe even less money? Pearson thinks so and I tend to believe that this may be a better approach than trying to make the small, occasionally-used boat look like a mini-yacht thereby compromising performance and flexibility.

You won't be overwhelmed by the traditional lines of the Pearson Flyer 30 for there aren't any. There wasn't anything traditional about the Volkswagen, either, but it gave the American public what it wanted (and needed) and became a leader for doing so.

The Pearson Flyer 30 looks like a big dinghy sitting at the dock and shows no pretense of being a mini-yacht. Functional lines and values show throughout its design—a flush deck for maximum interior space and easy deck operations; a broad beam at the sheer for deck space; a narrow beam at the waterline to preserve the fine entry of the bow; an overhanging rudder for steering power; a high efficiency fin keel for sailing performance; and a large flush-decked cockpit for sailing comfort.

I have always thought well of the construction of Pearson boats and the Flyer is no exception. It is basically contemporary fiberglass construction with stainless steel for most metal fittings and a minimum of exterior wood. In order to shave unneeded weight out of the hull, a fiberglass/balsa sandwich is used there as well as in the deck. This is a feature developed by the ULDBs that is seeing an increasing application in many boats. Pearson has made hull and deck virtually a monocoque structure by bonding them together as a sandwich at the sheer. It is a neat, clean joint well suited to a small fiberglass boat.



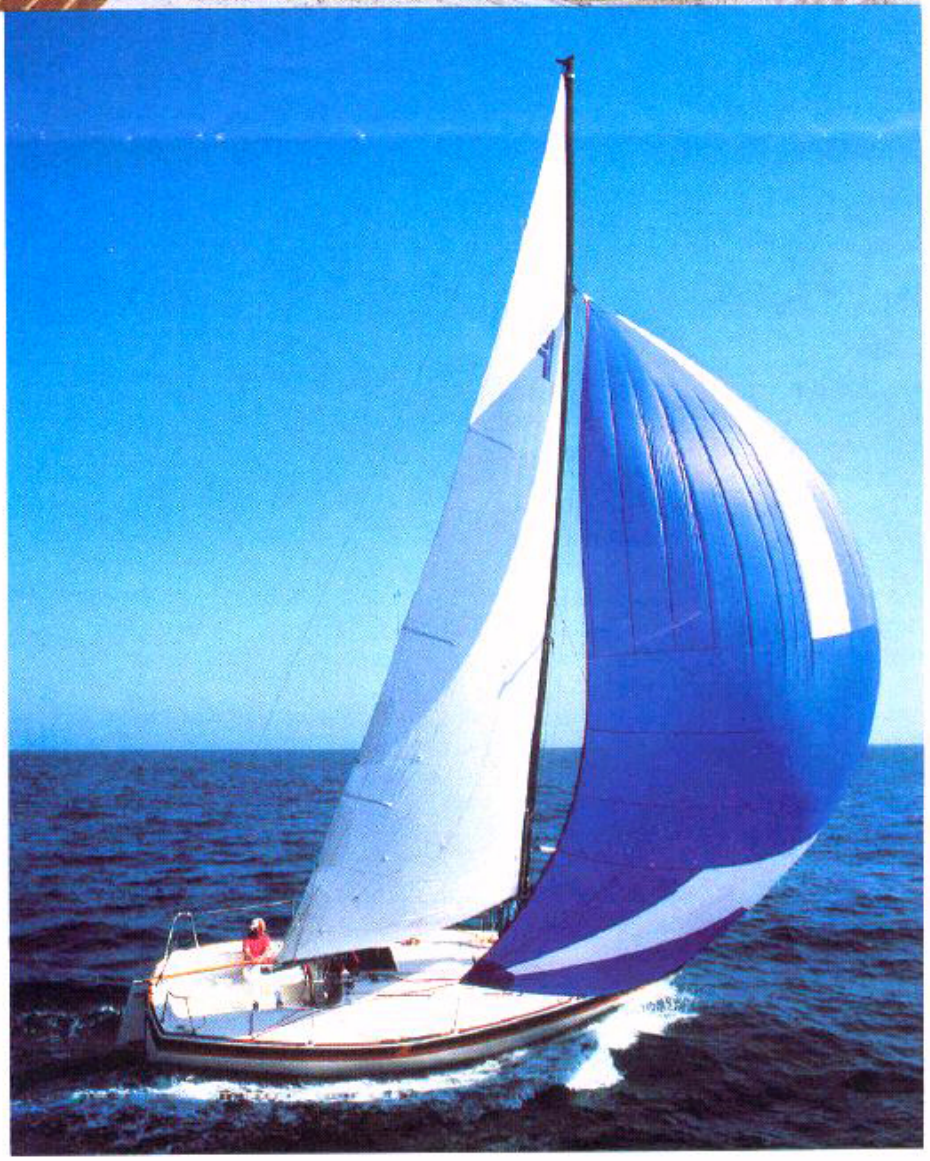
The keel is a lead fin attached with eleven bolts to the keel stub on the hull. The entire keel is faired over with a filler and painted to assure smoothness.

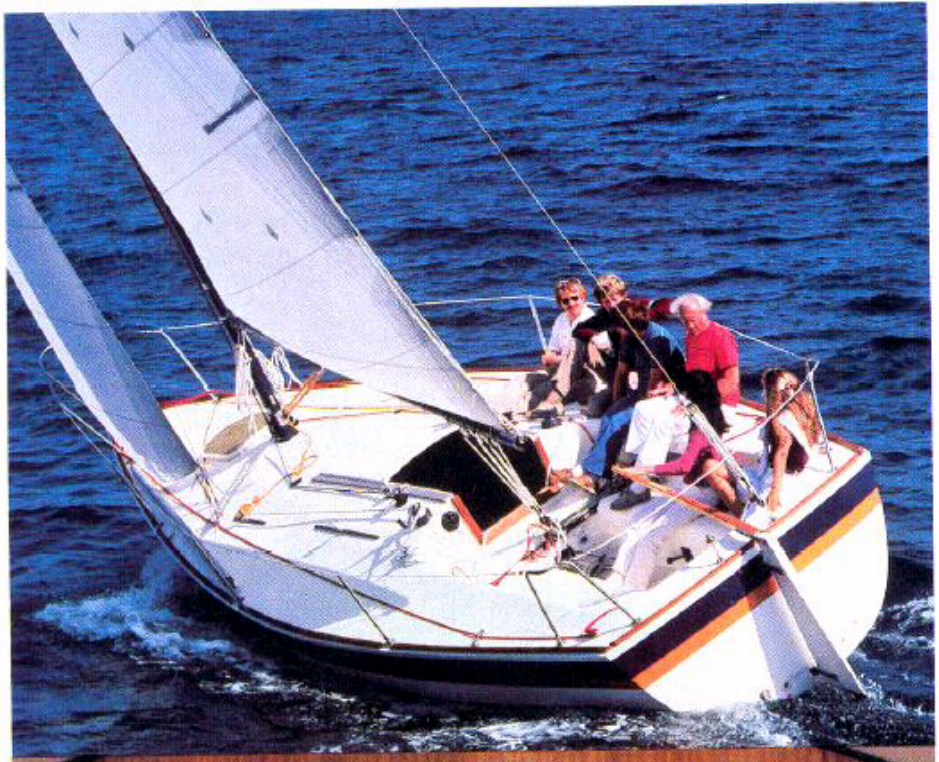
You won't be disappointed when you step down in the cabin of the Flyer but you will say that it is different. What, only berths for four persons in a 30-ft. boat? That is correct. That is adequate space for the average four-person family for overnighting or short vacation cruises and plenty for a normal crew of four persons on overnight races. The bonus that it gives you is a large sail bin forward eliminating the need for shifting sails between berths.

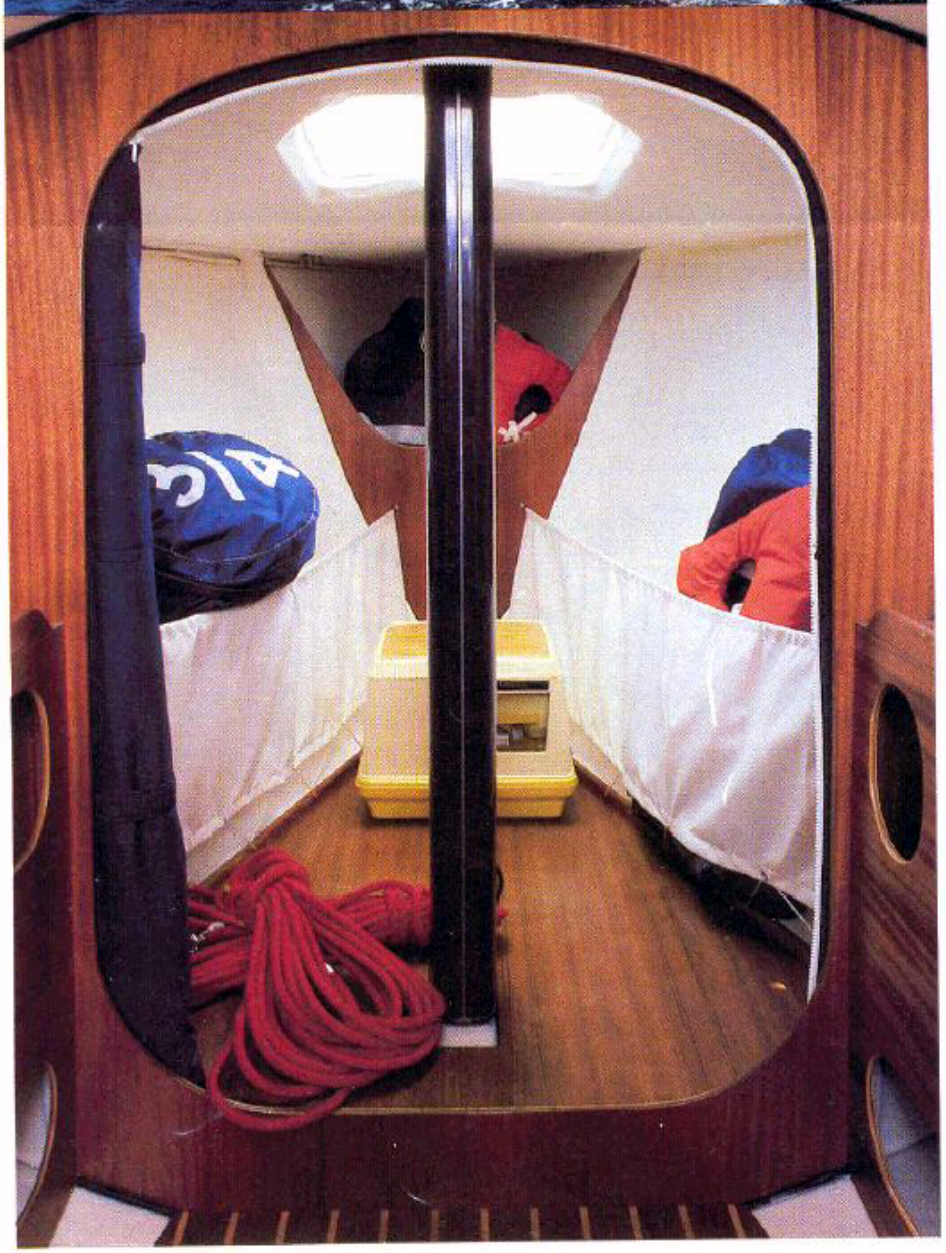
Besides being a sail bin, the forecastle area also serves as the head compartment with the inclusion of a portable toilet and a privacy curtain across the bulkhead opening.

The main cabin of the boat provides two of the four berths with its settees while quarterberths provide the other two spaces. All of the berths are nestled right up to the hull sides to give maximum interior space. While there is storage space beneath the berths, there is little behind them which cuts down on the cubage of constrained stowage in the boat. But then, how much storage does the day sailer really need?

Continuing with the day-sailing theme in the galley, Pearson has







made it adequate for light meals while racing or overnight sailing. A sink is the only permanent piece of galley equipment besides countertop cabinets. These can be supplemented by options such as a two-burner alcohol stove and an insulated cooler. The secret to food preparation on a boat such as this, is to prepare full meals ahead of time so that minimum time is spent fixing meals underway. Come to think of it, maybe the cook wants the day off when sailing and would prefer to prepare the meals ahead of time in a well-equipped kitchen at home.

The interior construction of the boat has been made simple and light to keep costs down and performance up. It borrows design concepts from ULDB experience such as thin mahogany plywood bulkheads without edge moldings; a hull inner layup that is done carefully enough to allow paint to be used as its finish; and the omission of a headliner which permits through-bolting of deck fittings without cover-up problems. That is not to say that Pearson has not covered up the exposed ends of the throughbolts in the cabin top for they have very attractive molded plastic caps to do that. The rest of the cabin overhead is painted because the quality glass layup permits the surface to lay exposed to the eye.

There is plenty of light inside the cabin from the hatches and the windows in the hull sides. Ventilation, however, may be a problem because there are no provisions for ventilating in cold or foul weather. The balsa-cored hull will help stabilize interior temperatures but it will still get stuffy when lying at anchor. Since it is so hard to do a proper job of installing ventilators after a boat is built, I would like to see the Flyer add some all-weather ventilation to the rest of its features.

Another of those good features is the auxiliary engine that will get home when you are caught out day sailing and the wind quits. It is a one-lung diesel of distinguished heritage —a BMW with all of 7 hp output. The installation is a clean, simple package located under the cockpit. Engine, waterlift muffler, spun aluminum fuel tank and battery lie in a line with reasonable access from the quarterberths.

I was pleasantly surprised how smoothly this little rascal ran, which

PEARSON FLYER 30

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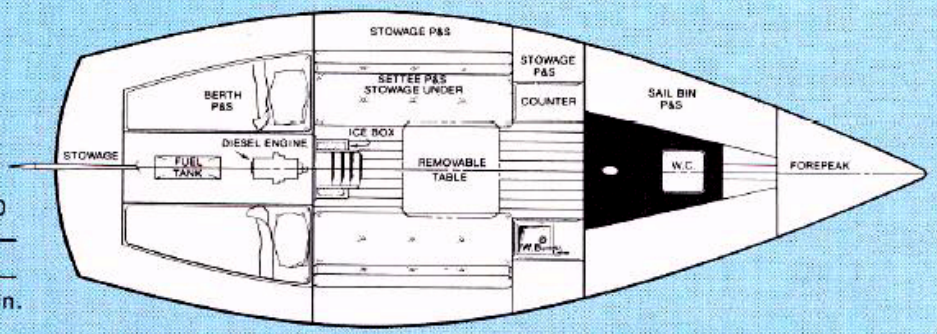


DESIGN INFORMATION

Length, overall	29 ft. 11 in.
Length, waterline	25 ft.
Beam	11 ft. 1 in
Draft	5 ft. 9 in.
Freeboard, stem	4 ft. 1 in.
Freeboard, stern	3 ft. 10 in.
Reduction Gear	2.7:1
Mast height	48.5 ft.
Displacement	6135 lb.
Ballast	2700 lb.
Fresh water capacity	4 gal.
Displacement/length ratio	175
Beam/length ratio	.37
Ballast/displacement ratio	.44
Sail area/displacement ratio	21.9
Theoretical hull speed	6.7 knots

PROPULSION INFORMATION

Engine:	BMW D-7 one-cylinder diesel, 7 hp at 3600 rpm
Gearbox:	BMW multiple disc clutch, reduction 2.7:1
Propeller:	Martek MK. II, 2-blade folding, 13-in. dia. by 11-in pitch
Fuel capacity:	8 gal

SAIL INFORMATION

Type of rig:	Fractional headsail sloop	
	I = 35	J = 10.5
	P = 39.8	E = 13.10
Sail area:	Total	456 sq.ft.
	100% foretriangle	182 sq.ft.
	Main	274 sq.ft.

PRICE

Base price $26,995
(FOB Portsmouth, RI)

Includes:
Single lever throttle/clutch control
Folding propeller
12v DC electrical system
55 amp.-hr. battery
Master Battery switch
Grounding system
Smoked plexiglass windows
Stainless steel sink with hand pump
Manual bilge pump
Tapered aluminum mast—coated
Tapered aluminum spreaders
Internal halyards
Internal outhaul and reefing
Four winches
Backstay tightening tackle
Inboard and outboard genoa tracks
Bow and stern pulpits
Single lifelines
Teak cabin sole
Hull graphics

FACTORY OPTIONS

Spinnaker gear	$905
Boom vang	150
Additional jib halyard	270
Additional halyard winch	95
Lower lifeline	160
Single Ritchie compass	205
Two burner alcohol stove	135
24 sq. Igloo cooler	65
Portable toilet with deck pumpout	70
Dining table	470

is not the nature of a one-cylinder engine. But I didn't think it was as quiet as it should be, so I checked for soundproofing around the compartment and found none. In fact, the quarterberth closures are simply cloth panels which have no sound absorption capability. But for a day sailer, is that really important?

The deck and cockpit of the Flyer are literally one and the same. The crowned flush deck extends aft to surround the cockpit which, therefore, has no coamings. The benefit of this is that the crew can comfortably sit on the deck outside of the cockpit for better weight distribution when heeled and improved visibility for the helmsman.

You couldn't ask for a cleaner deck to work on than this boat. It is large and uncluttered although all of the gear is there for sailing including spinnaker handling. The size of the deck makes it look empty, but Pearson has carefully laid out the sailing rig for simple operation.

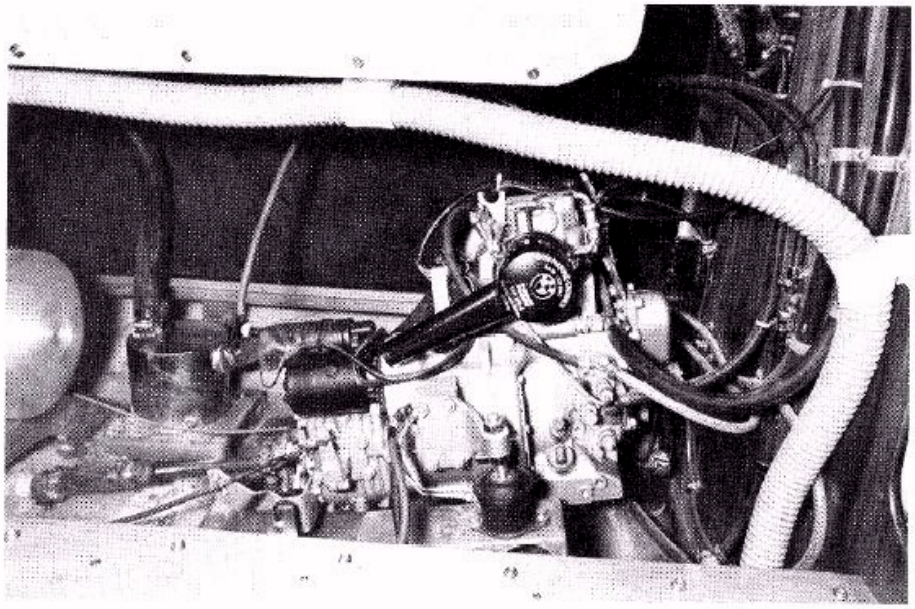
The aluminum mast by Kenyon is keel-stepped and stayed with cable rigging. Single spreaders are used with upper and lower shrouds terminating in a single chain plate on each side. Halyards are internal and led aft through swiveled mast base turning blocks which are, indeed, a well-designed detail. Bending control for the 7/8ths-rigged mast is a six-part block and tackle in the backstay at the transom. It, likewise, is simple and effective.

Sailing the Flyer turned out to be every bit as fun as the slick brochures said. Transoceanic Yacht Sales of Newport Beach, CA, furnished the boat which was fresh from the local in-the-water show. The day was ideal—warm, sunny and with a wind of about 10-12 knots and a calm sea. A full sail inventory was not yet aboard the boat but we had main, 100 percent headsail and a ¾-oz. spinnaker which served nicely for the day.

With the 110 percent jib flying, we beat our way off the coast in a series of tacks to get sea room for what we knew would be a dramatic ride downhill with the spinnaker. This boat trimmed easily with only a touch of

DESIGN COMPARISONS

Design Parameter	Cal 9.2	Pearson Flyer	J-30
Sailing rig	Masthead	Fractional	Fractional
Length, overall	29 ft. 11 in.	29 ft. 11 in.	29 ft. 10 in.
Length, waterline	25 ft. 1 in.	25 ft.	25 ft.
Beam	10 ft. 3 in.	11 ft. 1 in.	11 ft. 2 in.
Draft	5 ft. 7 in.	5 ft. 9 in.	5 ft. 3 in.
Displacement	7050 lb.	6135 lb.	7000 lb.
Displacement/length ratio	199	175	200
Sail area	388 sq.ft.	456 sq.ft.	453 sq.ft.
Sail area/displacement ratio	17	21.9	19.9



The one lung BMW diesel engine will get you home even when the wind quits. It is the smallest diesel engine in BMW's marine line weighing in at only 154 lb. The engine is raw water-cooled using a geared pump; has a cold start system for manually priming the engine; and has hand crank emergency starting with a compression release.

weather helm—hardly noticeable on the long tiller. Tacking was straightforward with the boat coming through the eye of the wind without losing much speed. The large cockpit and deck-mounted winches kept the crew ahead of the helmsman so there was no cockpit congestion when tacking.

After we had worked our way offshore sufficiently far for a run back, the crew set the spinnaker for the first time on this boat. If you had anticipated that we would have a problem the first time, you would be wrong. With both sailmaker and factory rep aboard, nothing could go wrong!

Most of the time was spent close-reaching with spinnaker and the boat behaved with great dignity. To test the power of the outboard-mounted rudder, I let the boat round-up a number of times. Each time I was able to bring it back down with the rudder without needing to touch the spinnaker. Certainly the rudder has plenty of power and if you tend your helm properly, you will not have round-up problems.

Sailing the Pearson Flyer is a lot of fun. It has real get-up-and-go because it is light and has a large sail area. You realize the advantages of the large flush deck when you change sails. The crew does not get in each other's way and there is no sliding off the edges of the cabin trunk.

Finally, you don't slide off the financial brink when you purchase this dyed-in-the-wool day sailer. By keeping the boat simple and light without a lot of rarely-used cabin amenities, Pearson is able to put it on the market for $27,000. Add sails and transportation and you are looking at about $35,000 ready to go and do battle around the marks or simply to enjoy a pleasant day sail with the family.

I'll doff my watch cap to the Pearson crowd for taking an honest look at how boats are used and coming up with a design tailored to contemporary boating life. The result is a fine boat that will give endless sailing pleasure to its owner.

DESIGNER'S COMMENTS

William H. Shaw

With today's inflation and high interest rates, modern auxiliary sailboats in the 30-ft. range have become out of reach price-wise for many potential buyers. The Pearson Flyer 30 was designed first and foremost to be priced *well below* other boats of similar size.

We achieved this goal by carefully analyzing how people used their boats and taking a new approach at meeting their needs. Our research concluded that a sizable market segment was paying for expensive cruising amenities they weren't using. For example, we found that for many sailors, overnights aboard were a rare event and that most of their time aboard was spent day sailing or relaxing in the cockpit at the dock. For these reasons, in designing the Flyer we concentrated above decks and purposely kept her simple below.

The flush deck is an ideal platform for sail handling or sunbathing and the 8-ft. cockpit is bigger than many 40-footers! Since we wanted the Flyer to be exciting and fun to sail we gave her plenty of sail area and a modern fractional rig with an internal reefing system which is easy to handle. The hull, deck and rig were designed to be as lightweight as possible to maximize performance, however, Pearson's normal construction standards are still followed. Last fall in fact, a Flyer made an extensive ocean passage, surviving gale conditions without incident.

Belowdecks, the Flyer is a study in functional simplicity. In the forepeak there's space for a water closet and sail stowage. The main cabin has a minimal galley, two settee berths with backrests, and two large quarterberths.

All components are high quality —varnished mahogany bulkheads, Scotchguarded mattresses, teak and holly sole, and BMW diesel engine. Although simple, the interior is extremely comfortable from a lounging standpoint. The perfect spot for relaxing before eating dinner ashore!

Lastly, in keeping with the original low price objectives, we're promoting the Flyer as a One Design Class with a limit on the amount of sails and equipment a boat can have. Judging from the number of Flyer fleets that have been established, the idea seems to be working!