



# Haber 800C4

HABER 800: 9.50m (31ft 2in) trailable deck saloon cruiser with four centreboards

The gaff rig keeps the spars short and makes for easy raising and lowering of the mast, as well as eliminating the need for spreaders. With the optional second forestay, the extra area of the genoa boosts light-air performance



Open-topped sheaves are used as foot-blocks for the headsail sheets. If you're sailing with both headsails, the genoa needs to be cross-winded



PRICE: from £55,695 (€66,434)



When you're sailing the boat using the boards, the tiller can be hinged up out of the way. These two handles raise and lower the twin stern boards

(CE) moves to leeward (as explained in Boat Skills, PBO January 09). While the CLR also moves forward on most modern, broad-sterned boats, the Haber's hull is designed to make sure this doesn't happen. All it takes to restore the balance is for the bow board to be raised. This moves the CLR aft and counters the rounding-up tendency.

## The storm scenario

Upwind in heavy weather you might be down to just the storm jib, and that often presents a problem because the CE is a long way forward and this, combined with waves knocking the bow off course, often makes it hard to sail upwind. Sometimes the only solution is to carry more sail than you really want, in order to generate more lift from the keel and rudder and more heel to balance the helm. That leads to greater speed and discomfort. With the Haber you simply lower the bow board, thereby moving the CLR forward. Add a partially-lowered main board and perhaps a little stern board to increase directional stability and lateral resistance, and the boat should sail under control at a relatively comfortable speed without the bow being knocked off.

Maintaining control downwind in severe weather is something you're more likely to have to do. Raise the bow-board and main board entirely, drop both stern boards so the hull pivots around the stern, fly a headsail only, and the boat should sail obediently down the waves. When conditions dictate that dead downwind is no longer safe, you head up a few degrees to bring the wind over the quarter, balancing sails and foils accordingly, and you should still maintain your course with minimal chance of broaching.

Boats with conventional keels often have problems



## The boat that seeks the perfect balance

A trailable, deck-saloon gaffer with the option of a cutter rig and up to four centreboards, the Haber 800 is certainly out of the ordinary – but what is she designed to achieve? David Harding investigates



If there was a prize for the production cruiser that combines the greatest number of unusual features per foot of boat length, it would surely go to the Haber 800.

Here's a 26ft (7.9m) yacht with a deck saloon (rarely seen on anything under 32ft/9.7m), a gaff rig (more popular on traditional-style boats) and, if you choose them, three extra centreboards in addition to the standard one in the middle. She's also available as a cutter, with a bowsprit and second forestay.

So what's the Haber all about? Has someone started with a list of experimental ideas and features he likes, and thrown them randomly

together to create a sort of duck-billed platypus of the sailing world, or is there more to it?

If you spend a few minutes chatting to her designer, an enthusiastic and free-thinking Pole named Janusz Konkol, you realise that there's a lot more to it: every aspect of this unconventional craft has been given an enormous amount of thought. Janusz wanted a small, easily-handled cruising boat that didn't need complex systems and equipment and on which minimising the crew's fatigue would lead to safer and more comfortable cruising. It also had to be trailable behind a large car yet safely sailed offshore. That meant

using a fully-retractable centreboard: shallow draught for trailing and launching, and a flush bottom so the boat could skid sideways in severe weather. Ocean-going boats are often associated with deep draught, but sometimes the ability to slip sideways can prevent a knock-down – or worse.

In similar vein, the beam is restricted: easier manoeuvring ashore, and better ultimate stability (as well as better balance) under sail. Low freeboard minimises the effects of the boat's motion on the crew. A pilot-house was chosen for comfort and shelter and because its buoyancy would give the boat a positive righting moment all the way

to 180°. She has a gaff rig to keep spars short for trailing and so the mast can be raised and lowered by one person in about 15 minutes (with no need to remove the boom). No spreaders are needed and, in extreme conditions at sea, dropping the mainsail makes the whole rig shorter. That reduces weight and windage aloft, limits pitch and roll and minimises the chances of capsizing.

### Boards and ballast

The reasoning is all logical enough, provided you accept that the light centreboard (the ballast is internal so stability is unaffected with the board raised), the narrow beam

and the deck saloon's windage are going to result in less initial stability, a lower righting moment at normal angles of heel and less power to windward than on boats with deep, ballasted keels. And if you assess a boat on the basis of her RCD rating you might not consider the Haber to be an offshore cruiser: she's in Category C in sloop form (or B with the extra ballast that comes with the cutter rig). Unlike a lot of bigger boats, that easily achieve Category A because of their size, the Haber 800 has been designed with offshore sailing very much in mind.

Whether the offshore factor will influence many prospective purchasers of a 26-footer is a different matter. Most Haber owners buy the boat because of the deck saloon, shallow draught, versatile rig, sturdy construction, attention to detail and, in some cases, the benefits of the optional centreboards: one at the bow and two side by side at the stern. Their purpose is to allow the centre of lateral resistance (CLR) to be

moved forward and aft so the boat can be balanced to sail herself on any point and in any wind and sea conditions. Even if a boat is perfectly balanced on a particular course, with a fin keeler it usually takes only the smallest shift of wind, sail trim, crew movement or sea state to upset the equilibrium; then either the helmsman or the autopilot has to make a correction.

Boats that are perfectly well mannered most of the time can become a handful in testing conditions, such as when running in a steep following sea, and long-keelers are by no means immune to control problems. At times they can present greater challenges than fin keelers.

Janusz wanted a boat whose hull and rig configuration would make her well mannered even with the standard single centreboard; hence the relatively narrow beam and

moderately proportioned stern. The Haber isn't particularly light by modern standards, either, displacing from 2,400kg (5,291lb) depending on the version, so she's less prone to being thrown around by the waves.

The benefit of the extra boards is that you can keep her on course no matter what. Under full sail in gentle

and moderate conditions you can spread the lateral resistance forward and aft by lowering the bow board (steel) and

one of the stern boards (glassfibre). In fact you need the bow board when using the genoa upwind on the cutter version to avoid lee helm. Then the boat sails as if she has one very long keel, but without the same wetted area. With fine adjustment to the boards and sail trim she'll sail happily unaided. As the wind freshens, heel increases and, with it, the tendency to round up because the rig's centre of effort

The extra boards let the boat keep a perfect course



Limited space below the boom calls for an unusual kicking strap. It's tensioned and secured when the sail is hoisted; not adjusted under way

in these conditions, when a wave lifts the stern and the bow digs in. The CLR moves forward, the rudder's grip is reduced and the boat broaches, ending up beam-on to the wind and waves. Along comes another wave and we're into the classic knock-down scenario, with the keel gripping the water and the hull taking the full force of the breaking crest.

So much for extreme conditions – but what does the Haber offer the rest of the time? To find out I first had a gentle sail around a crowded Southampton Water, then went over to Holland in search of more breeze and some open space.

Our test boat on both occasions had the cutter rig and four centreboards, allowing us to experiment with every combination. If you're sailing upwind in gentle conditions under full sail with the bow board, main board and

leeward stern board, you can tack simply by lifting the stern board: that moves the CLR forward so the boat rounds up and through the wind. Drop the new leeward board once you've completed the tack, and away you go – with no need to touch the tiller. When sailing like this you normally raise the rudder blade slightly, so it becomes totally unbalanced and follows the boat's course rather than exerting a significant influence. We also tried bearing away, sailing dead downwind, gybing and hardening back up again simply by trimming the sails and using the boards, though in crowded waters you would often choose to steer normally. To do this, just raise the bow and stern boards and put the rudder fully down again.

As we had hoped, Holland provided more wind. We started in Enkhausen and sailed north-east to



Reaching without the pole: the genoa sets with excessive twist

Pole in place: now much of the twist has been removed



An uphaul and outhaul line on the pole allow accurate setting of the genoa

Stavoren on the opposite side of the IJsselmeer. A south-westerly wind let us try lots of downwind combinations with the rig: main and genoa goose-winged, main and jib, jib only, genoa only and, best of all, jib one side and genoa the other. Dead downwind like this, with only the stern-boards down, we slipped along at around 6 knots in 16 knots of wind while yawing no more than

15° either way. To help maintain our course we left the rudder fully down, so the leading edge was forward of the pivot point and the blade exerted a steering influence rather than trailing passively. I have never sailed a boat with either a wind-vane or an autopilot that has kept such a good course on a run. This sail combination is both efficient and easy to manage:



The table covers the centreboard case and lowers to form a double berth. Ballast is encapsulated in the bilge

there's no need for a spinnaker or cruising chute on the Haber. With no damping effect from a centreboard, the rolling motion was more abrupt than on a typical keelboat but limited to a smaller arc, making for easy movement around the boat.

**Up and down**

Among many clever features on the Haber is the arrangement of poles for the headsails. Long enough to pole the sails right out so they're almost flat, they incorporate outhaul lines that allow the clew position to be moved inboard or outboard to optimise trim. You can also pole the genoa out to leeward on a reach, in a way that Albacore dinghy sailors will be familiar with. This limits the sail's twist, dramatically increasing its efficiency. It's like having a barber-hauler several feet outboard of the gunwale.

As well as sailing downwind on our IJsselmeer crossing we tried reaching and beating, including setting the heavy-weather upwind rig of just the jib, balanced by the bow board and a little main board. When pressed too hard in 17 knots of true wind under full main and jib she showed that she's not as powerful upwind as a fin-keeler, heeling to about 30° and making 4.5 knots with noticeable leeway. Janusz reckons that tucking in a reef would have helped by reducing heel and letting us use more main

board (because the CE would have moved forward) to limit the leeway. For good measure we explored one of the IJsselmeer's shoals and found that windward ability can be maintained with the main board partly raised (to reduce draught) and the other boards partially lowered. Apparently this is also useful in shallow spots on the Polish lakes. One obvious question is what purpose this self-steering ability serves if you're not in heavy weather, when the safety considerations become important: why not just use an autopilot? Balancing the boat should increase speed by reducing the amount the rudder is used. That in turn reduces physical effort on the part of the helmsman, power-drain from an autopilot and strain on the rudder itself. Downwind it's like having a super-efficient wind-vane self-steering system that follows the shifts. Until you've sailed a boat that doesn't need constant adjustment at the helm you don't realise how liberating it can be. And if you're forced to sail under headsail or mainsail only because of equipment failure, you can balance the boat accordingly.

Overhangs the seats either side of the companionway, so even in the rain (we had plenty on the IJsselmeer) you can keep dry. Raising and lowering all the boards is simple: the stern boards have handles on the forward face of the transom, and the bow-board and main board are controlled by uphauls led to Spinlock jammers. Some of the running rigging is at the mast because it's not practical to lead it all aft, so you have to go forward to hoist the mainsail with its sliding track for the gaff. Cockpit-controlled reefing is an option. Back in the cockpit you find a pair

of Andersen 28 self-tailing primary winches for the headsail sheets. There are no clutches, so with both headsails in use you need to cross-winch. Instead of foot-blocks, Janusz fits modified, open-topped Ronstan sheaves similar to Spinlock winch-feeders. The absence of a top makes the sheets less likely to snag and cross-winch is easier. Notable features elsewhere include two good-size cockpit lockers, substantial bulwarks along the deck, well-placed handholds, and inner shrouds and an inner forestay for a storm rig that allows you to set a storm jib and trysail.

**Accommodation**

Despite her low freeboard and narrow beam, the Haber feels spacious below decks because of the 6ft 3in (1.90m) headroom in the deck saloon.

The galley is to port by the companionway, opposite the enclosed heads with a toilet (electric-flushing if you want it) that slides aft out of the way.

Between the two settee berths in the saloon is a table that hinges aft and down to create a double berth. It's a piece of precision engineering that, jokes Janusz, took him longer to design than the rest of the boat. Forward of the deck saloon, sitting headroom is 3ft 6in (1.07m).

Woodwork is in Polish oak. An internal moulding forms the basis of the interior layout, with the bunk fronts bonded to the hull and doubling as stringers. The moulding is cut away between bonding points to maximise stowage space.

Access to the main service points on the front of the engine (Vetus, Nanni or Volvo) is via the companionway steps; otherwise you can reach the top by removing a hatch in the cockpit sole.

**PBO's verdict**

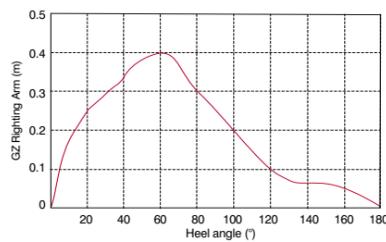
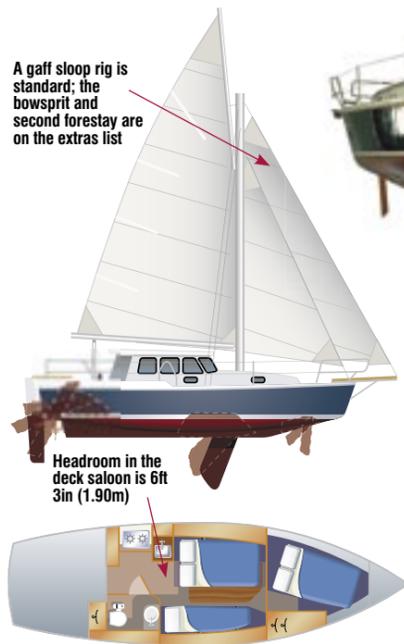
The Haber is a small boat that thinks big. She's one of very few new boats under 30ft (9.14m) designed with offshore sailing in mind. Most people wanting to sail offshore choose larger boats for space and speed, though others prefer the easier handling and lower running costs associated with reduced size.

However far you intend to sail, here's a boat that offers shallow draught, unsurpassed directional stability, a high level of comfort and great attention to detail along with a vast choice of upgrades and extras. It's not often you find all this in a boat that you can trail home and keep in your drive for the winter. PBO

**Haber 800C4 data**

Length (as cutter, including rudder and bowsprit)	9.50m (31ft 2in)
Length of hull (not including rudder and optional bowsprit)	7.93m (26ft)
LWL	7.53m (24ft 8in)
Beam	2.5m (8ft 2in)
Draught	0.58-1.8m (1ft 10in-5ft 11in)
Displacement (as cutter with standard equipment)	2,650kg (5,482lb)
Ballast	600kg (1,323lb)*
Sail area (as cutter, main and 100% foretriangle)	35sq m (377sq ft)
Displacement/length ratio	164
Sail area/displacement ratio	19.56
RCD category	C (sloop version), B or A **
Engine	Vetus 11hp/Nanni 10hp
Headroom (in deck saloon)	1.9m (6ft 3in)
Designers	Henryk Bryliski & Janusz Konkol
Builder	Yacht Service, Poland

A gaff sloop rig is standard; the bowsprit and second forestay are on the extras list



The GZ curve shows the maximum righting moment at 60°. There is no angle of vanishing stability (AVS)

Distributor: Haber Yachts Ltd, County Tipperary, Ireland. Tel: +353 675 0650, Mob: +353 872 433033, www.haberyachts.com  
 Price: from £55,695 (€63,434) (sloop, Cat. C) or £73,543 (€83,830) (cutter, Cat B, C4 version)  
 \* ballast is 800kg (1,764lb) in Category B version  
 \*\* A Category A version is now in development