Pegasus 50 Frequently Asked Questions

Hull and keel

- What is the material of the hull? Carbon?

Hull construction is a hybrid between carbon and glass fibres, SAN/PVC core and vinyl ester vacuum infused resin. For some purposes glass fibres is even superior in performance, like outer skin due to possible punctual loads.

- Never seen a keel like this?! What are the benefits? Draft?

Tandem keel initiated from a search how to improve directional stability while under autopilot to reduce its activity and consumption. I want to have more lateral resistance of the keel while manoeuvring at zero speed in confined spaces. So increased keel lateral area. But increased area is meaning more friction drag and less speed under sails. On Shipman 63, keel lateral area is 1,6% of Sail Area, with strong side wind I found it insufficient, so keel fin lateral area is increased to 2,1% SA. Keel with such area would really be a “cruising”, fat (thick) chunk of iron wing and I wanted to do something better. Finally we have two sleek fins connected with top and bottom plates to form one, stable frame. CFD and VPP research showed a benefit of 20 seconds/mile in favour of tandem keel compared to standard single keel fin; 13 hours benefit across Atlantic. And tandem fins are 400 kg lighter what moves into bulb to increase stability. Keel draft is 2,3m. (More about this in Designers comments)

Sailing

- Is all sail handling done from the cockpit including reefing?

Yes, all sailing functions led to cockpit, including furling or reefing mainsail, J1 and self-tacking J2, and furling Code0 and Asymmetric

- Same reefing system as Shipman 63?

Furling boom solution or single line reefing with strong and oversized lazy bag. Both solutions are proven on bigger boats.

- Foresees Pagasus 50, besides Main, Jib, Cutter Sail, also Code Zero and/or Gennaker?

Yes, Code 0 and Asymmetric on bow or fixed bowsprit. Both sails on endless furlers, to furl tight top of the sail. Sails could be stored furled even with 30kts of wind. Sail bag along stanchions for storing other sail. Endless furling rope will be possible to put on electric winch as well and furl sail with winch.

Rigging

- What kind of rigging (PBO)?

Carbon C6 rigging not planned due to cost. PBO not existing any more, replaced with carbon rigging, better for clients as does not need regular replacements any more.

- Do you use back stays?

Yes, fixed backstay with manual hydraulic tensioner. Mast crane (head) extended to 650mm to gain sail area and fat top mainsail.

Winches

- What kind of winches and how many are provided? Electric or hydraulic?

All 4 winches are electric, size 60.

Electricity

- Does Pagasus come with a generator? If so, where is it located?

Yes, generator is highly recommended for safety. Fisher panda Neo5000i, 3,6kW constant power generator, located in engine room, behind engine. Access from top through cockpit floor hatch and from both side technical room. Fully insulated from interior for air born noise and smell.

- If not how do you manage power of long distance cruise

Mastervolt Alpha Compact 28/110 Volvo Penta (VP) with Alpha Pro Reg.

Solar panels

- How many panels and what is the ampere these panels could provide?

Solbian SP130 (130W / 24V), solar panels are positioned on coach roof, as we will make cabrio type cockpit roof to get extra air and view into cockpit area.

- Are other alternative energy sources considered; wind or water?

Yes, Watt & Sea POD 600 W water generator fastened straight under the hull.
Output at 5 kts: 10 Amps @ 12 V (120 W) with the 240 mm propeller). At 7,5 kts: 6-7A @ 24V, up to 20A@24Vdc at higher speed (information from real use on the ocean)

Technical room

- - Where is the entrance to the technical room? From the cockpit floor or from the sides? What is in the technical room besides the engine

There are TWO technical rooms: port and starboard, Access through 800x600mm hatch in aft part cockpit seat. Ladder with two steps. Interior height 1650mm.
Port side technical room all systems related to water (fresh pump, sea water pump, water maker, cooling water seacocks, plastic boxes for storage, fenders on long trips
Starboard technical room, electrics and electronics, diesel heater, ventilators, fuel separators, plastic boxes for storage

Water

- Does Pagasus have a watermaker? If so, where is it located?
- If not how big are the water tanks and where are they located?

Yes, watermaker Schenker ZEN 50 LIT/H. 24V in starboard technical room.

Diesel

- how big are the diesel tanks? And where are located?

One (1) integrated stainless steel diesel tank under front seat in salon, 470 L (700x700x1020mm) - not so sensitive to heel, (could be increased up to 700l)

Galley

- What is refrigerator and freezer capacity? Assuming a 3 week ocean cruising with 4-6 people what storage for food and kitchen equipment is there?

Three refrigerators:

1. front opening 130l, air cooled, compressor in technical room
2. 2x drawer fridge/freezer 100l, water cooled, compressor under sink
3. drawer for bottles, 39l, in cockpit table

Stainless steel box for dry storage, top loading under navigation seat
Ventilated storage under saloon floor in plastic box organizers

Saloon

- I like the layout (square rather than round on the Shipman 63).

Gimballed salon settee, +/- 10 degrees, complete settee rotates along longitudinal axes allowing people to sit or sleep at level. This reduces fatigue and greatly improves comfort.

Garage

- How does this work with the swimming platform?
- Where to put the outboard engine? Electric engine?

Access to dinghy garage from folding platform and cockpit floor hatch. 240/260cm standard inflatable dinghy with hard inflatable bottom (like SUP boards). Electric Torqeedo motor 1,3kW, disassembles, battery stored in technical room, rest inside dinghy

Anchor

- What kind of anchor system does Pagasus have?

Fixed anchor arm, on port side of bow, 100mm offset from CL, self-launching, 25kg Rocna anchor, 60m 8mm SS chain

Cockpit

- Operation out of the cockpit?

Chain counter display with anchor deploy and retrieve buttons on starboard console, operations from steering position with proximity alarm at anchor retrieval.

Delivery

- When will you build the first Pagasus50?

First two boats are planned for launch in 2020, first will be ready for test sailing in July 2020.

Costs

- What will be the estimated cost for an yacht with full options?

Full options, sail away Globe version, ready for ARC or circumnavigation, 850,000€ excl.VAT, sail away GT version starts form 650.000€ excl.VAT

Competitors

- Who do you see as your main competitor?

Amel 50
Hallberg-Rassy 48
Garcia Exploration 52
Discovery 48 (55)
Southerly 480 (540)
Moody 54
Wauquiez Pilot saloon 48
X yachts XC50
Pegasus 50
Grand Soleil 52
Beneteau First 53
Swan 54,
Solaris 50
Euphoria 54

But I have to mention in terms of quality of materials used and concept we are more niche product and totally unique.

Pegasus 50 Storage plan:

Sails:

1. Gennaker or Code0 furled on position (tight furled furling system with torque rope), up to 30kts of wind
2. Gennaker or Code0 furled, stored in mylar sail bag with strong zipper fixed to stanchions on fore deck
3. Gennaker or Code0 furled, stored in watertight mylar sail bag (box), suspended at four points from ceiling in front cabin. Access to storage bag through deck hatch. Bag is easily removable after sailing in case cabin is needed for sleeping.

Fenders for day use stored in watertight mylar sail bag (box), suspended at four points from ceiling in front cabin, for long term deflated and stored in technical room

Running sailing ropes and mooring ropes on dedicated rack in port technical room
Water hose and equipment in plastic storage box (1) in port technical room

Swimming equipment in plastic storage boxes (2) in port technical room

Sailing equipment (blocks, winch handles, spare parts,..) plastic box organizer (1) in starboard technical room

Bikes (two) or foldable electric scooter in protective in bag starboard technical room

Tools for repair in two plastic storage boxes (2) in starboard technical room

Shore electric cable in starboard rope storage (step to deck at steering)

Dinghy store in dinghy garage under cockpit, transversal positioned partly deflated. Electric pump in starboard technical room with filling hose reaching platform. Short distance storage on platform. Platform is high enough to be kept open during motoring and sailing.

Dinghy electric motor: drive inside dinghy with access from cockpit floor, battery stored in starboard technical room

Food and supply storage:

1. Galley front opening fridge 130l
2. Galley drawer fridge/freezer 100l
3. Galley stainless steel box storage 100
4. Cockpit table drawer fridge for drinks 39l
5. Dedicated storage for cutlery and galley equipment in galley lockers (see separate equipment specification)
6. Dry food and drinks storage in six(6) 50 litres plastic box organizers under saloon floor with forced ventilation
7. Dry food storage 300 litres in front locker in port cabin
8. Storage in movable sitting boxes under saloon table (50 litres)

The perfect boat: what makes an ideal offshore cruising yacht?

Jimmy Cornell gives his expert analysis of the essential features that any offshore cruising yacht should have.

Complete article by Helen Fretter: https://www.yachtingworld.com/cruising/perfect-boat-makes-ideal-offshore-cruising-yacht-113123/4

Safety

Whenever I am invited to express an opinion on a yacht, I always start by looking at the boat primarily from the safety point of view. Very few boats satisfy me on all the following questions (By Jimmy Cornell on 22.11.2012):

- How well protected is the cockpit?
- How exposed is the person at the helm?
- How safe is it to work at the foot of the mast or on the foredeck?
- Are there sufficient handrails provided?
- Do stanchions and lifelines look strong and reliable?
- How dangerously low does the boom pass across the cockpit?
- How easily accessible is the main bilge and is it provided with a pump of adequate capacity, as well as an emergency backup?
- How accessible is the steering mechanism and what provision has been made for an emergency?
- Is the liferaft stowed in an easily accessible place from where it can be launched by the weakest member of the crew?
- How can the dinghy be stowed safely while on passage?
- How easily accessible is the anchor chain?
- How easy it is to board the boat from the water or retrieve an overboard person?

Read more at https://cornellsailing.com/fr/2012/11/cornells-survey-of-global-cruising-yacht-movements/

Figures obtained from Panama, Tahiti, Bermuda, and Horta, made it possible to calculate their average length. To arrive at a realistic figure, only boats under 60 feet were taken into account as very few of the larger boats would fit the description of a standard cruising boat.

https://cornellsailing.com/2017/08/jimmy-cornell-where-do-all-the-boats-go/

Among the 775 boats that arrived in Horta, in the Azores, on completion of their passage from the Caribbean, the average length was 43.8 feet. The average among the 556 arrivals in Tahiti was higher, at 45.2 feet. The Bermuda average for the 560 boats was 46.9 feet, while 45.9 feet

was the average for the 617 boats that had transited the Panama Canal. The overall average length for the 2,508 boats under 60 feet that called at the above locations was 45.3 feet. The above results included both monohulls and multihulls.

The number of catamarans on long voyages has been steadily increasing and this was a good opportunity to find out their actual proportion among cruising yachts. Once again, I referred to the detailed statistics obtained from the Azores and found that 22 of the 184 of the arrivals in Lajes were catamarans (12%), and 103 of the 775 (13%) among those in Horta. The percentage had risen to 17% (185 of 1058) among the Panama transits. The highest percentage (19%) was recorded in Noumea (New Caledonia), with 61 catamarans from a total of 328 boats. This is not surprising bearing in mind the large number of French boats based there, many of them catamarans.

The situation in some rallies confirmed this trend, with 17% in the Blue Planet Odyssey, 19% in World ARC, 14% in the ARC (35 of 259), and 17% among the 209 boats in the Pacific Puddle Jump. The Atlantic Odyssey achieved the highest percentage, with 11 catamarans among the 39 boats (28%) in the 2015 event.

Early in 2016, the tourism office of French Polynesia conducted a wide-ranging survey to assess the impact of pleasure craft on the communities in the various island groups they visited during 2015. The survey drew on three sources: entry and exit data compiled by immigration, customs declarations submitted by each vessel, and a questionnaire completed by each captain. 234 captains responded positively and the results are highly informative as they provide a unique insight into such a significant sample of long distance boats and voyagers.

Among those questioned, 43% described themselves as being on a world voyage, 46% on a round Pacific voyage and 11% on an open-ended cruise. As for crew, 51% of the boats were sailed by just a couple, 13% had a crew of 3, 20% a crew of 4 and 13% had larger crews, while as many as 10% were singlehanders.

PEGASUS YACHTS

BOAT AND CREW SIZES AROUND THE WORLD

In a survey on the global movement of sailing yachts in 2015 (published in Yachting World February 2017 issue), I obtained facts and figures from 50 locations around the world, including the most frequented cruising destinations such as the Azores, Tahiti, Bermuda and Panama Canal.

AVERAGE YACHT SIZE

HORTA, THE AZORES
43.8ft

TAHITI*
45.2ft

BERMUDA
50ft

PANAMA CANAL
51ft

AVERAGE NUMBER OF CREW

SAINT HELENA
3.3 +

VAVA'U
3.5 +

COCOS KEELING
2.6 +

MARQUESAS
2.7 +

PERCENTAGE OF CATAMARANS AT CRUISING LOCATIONS AND RALLIES

The number of catamarans on long voyages has been steadily increasing and my global survey was a good opportunity to find out their actual proportion among cruising yachts.

THE AZORES

13%

ARC 2016
14%

WORLD ARC
19%

BLUE PLANET ODYSSEY
17%

PACIFIC PUDDLE JUMP
17%

ATLANTIC ODYSSEY
26%