40m SkySail MOTOR YACHT

This 40m Motoryacht represents a new development in yachting, merging the benefits of a low resistance, fuel-efficient hull form with an unusual propulsive device – a fully automated, self-tending kite.

Rob Humphreys had been keenly aware of the potential propulsive power of kites since the late Seventies, when the local 'Jacob's Ladder' team made their first forays into kite technology for a possible entry in the relatively new Weymouth Sailing Speed Week. Although this early-day work never came together in a convincing fashion there was much promise in their efforts, and last year when the Humphreys team was introduced to SkySails' work and their development of an automatically controlled system, it was immediately aware that here was a step forward that needed taking seriously.

The Hamburg-based SkySail GmbH has been targeting its development towards the commercial sector, seeking to make a convincing point that the SkySail concept can lower operating costs for shipping companies by offering power-assistance to reduce fuel consumption. Obviously, the benefits of this technology sit very comfortably alongside the overwhelming need to find ecologically responsible solutions for the future, and the technical case they have made through exhaustive product development and testing is most compelling.

Of course, man's harnessing of wind-power at sea is as old as his desire to give up paddling, and the efficiency with which today's sailing boats consume huge distances over the oceans of the world with negligible environmental impact should be a role model to future co-existence with our planet. The Humphreys office has its own vast experience of sailing yacht development, in terms of both speed and endurance. Boats like Ellen MacArthur's Open 60 Kingfisher represent the speed equation, whereas for endurance an outstanding example is the Humphreys-designed Challenge 72 – the twelve-boat fleet has aggregated over one million sea miles, all of them under sail.

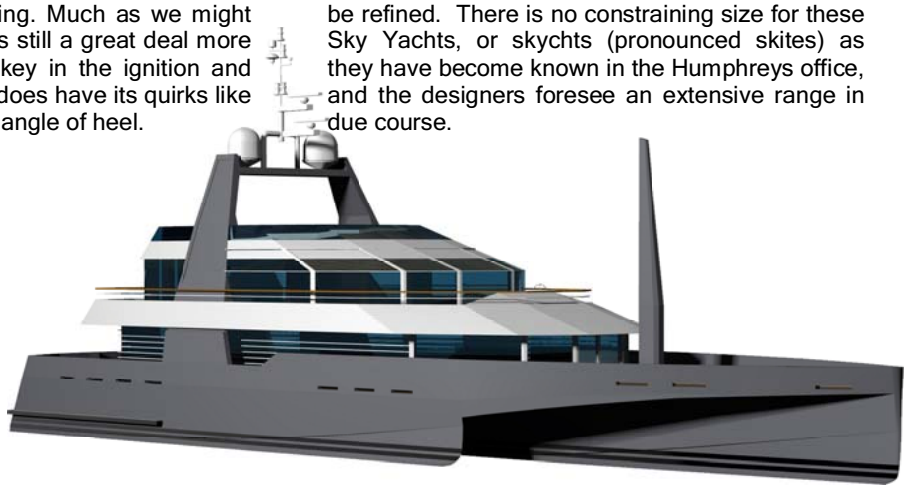
However, despite ongoing breakthroughs in sailing yacht technology it is not everyone who can be persuaded to take up sailing. Much as we might believe otherwise, sailing is still a great deal more complex than inserting a key in the ignition and grabbing the wheel, and it does have its quirks like having to tolerate life at an angle of heel.

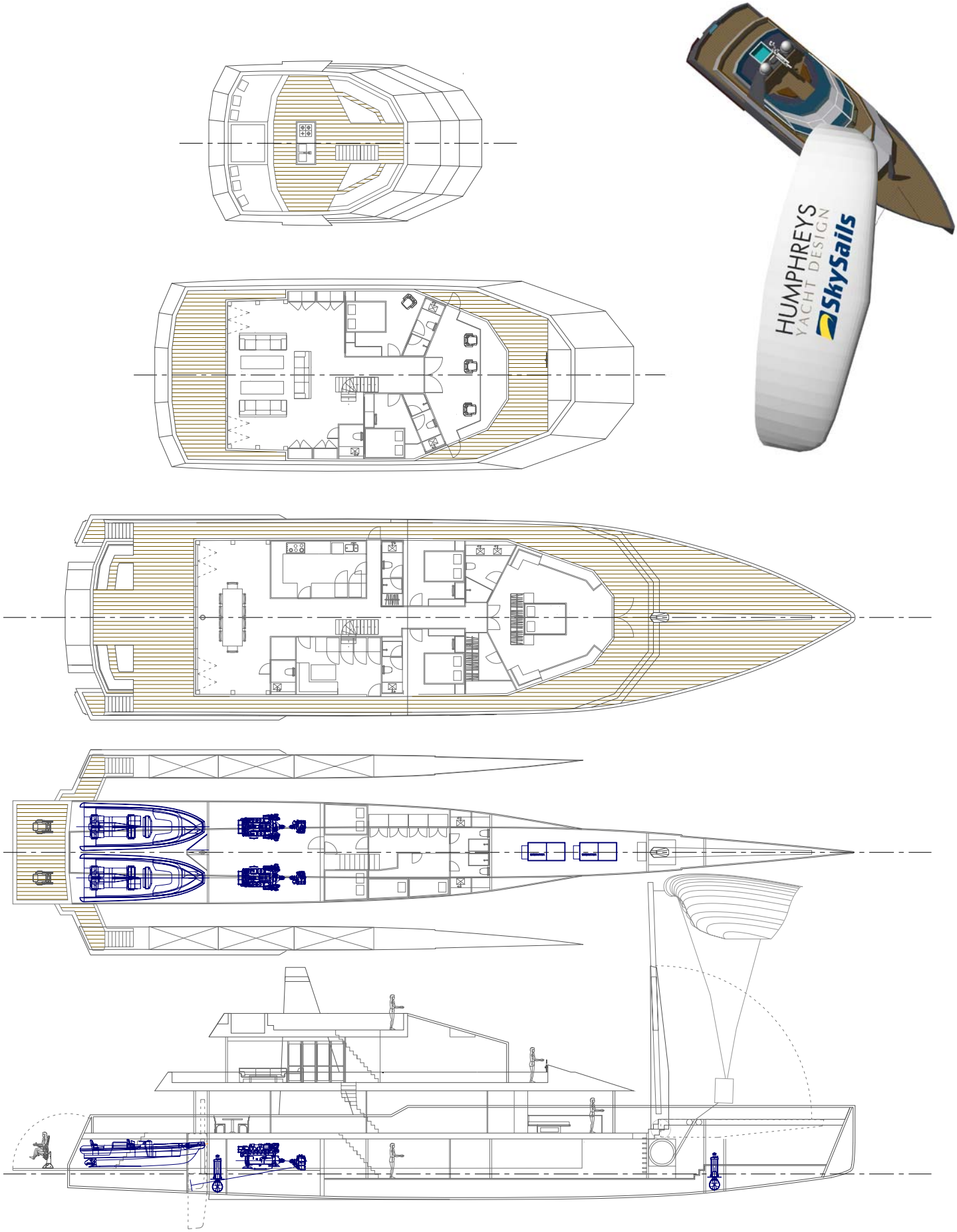
What the Humphreys office foresees in the SkySail development is a whole new genre of leisure craft, and over the course of the year it has been researching and developing configurations that make best use of the wind's motive power delivered in this way. It is still a case of 'work-in-progress', but the first snapshot of this new development is a 40 metre SkySail-supplemented motor yacht shown here.

The use of the word 'supplement' is chosen carefully. While we expect this family of boats to be able to 'sail' very efficiently under SkySail, we foresee that fundamentally the boats have to be very efficient and seakindly motoryachts, and in this respect the common denominator for efficiency under both forms of motive power is low hull resistance. Thus our work on this generic set has evolved towards slender body hulls that derive stability from wave-piercing outriggers – they are in effect trimaran derivatives, which will have long range capability under engine, not to mention the 'free' miles under SkySail. What we envisage is a motoryacht with the trans-oceanic freedom of a large sailing yacht, able to fly the SkySail for sustained periods for relatively fast, comfortable and quiet sailing.

The multihull configuration creates a wide overall platform, generating considerable potential for accommodation, as displayed in the 40m design featured here. Furthermore, the pods growing out of the centre hull, designed to be clear of the water under 'sail' but to produce additional planing and anti-squatting surface aft for fast motoring, create additional accommodation volume in the main hull. All in all, the yacht represents an intriguing package of comfort and trans-oceanic capability, with additional features like the integrated solar panels in the superstructure making for a high degree of self-sufficiency.

Work has also been progressing on a series of smaller designs and the intention is to build as a first step a 15 metre yacht, where prototyping can be refined. There is no constraining size for these Sky Yachts, or skychts (pronounced skites) as they have become known in the Humphreys office, and the designers foresee an extensive range in due course.





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