

OFF TRACK Danish Yacht & LISA Airplanes

Danish Yacht & LISA Airplanes OFF TRACK

A Little Sea Air?

By BOB STEUART

All the best ideas are simple and lead observers to wonder why they had not been thought of before. One such is a new collaboration between a two well-known European manufacturers, one specialising in 'superyachts', the other in leisure aircraft.

The two companies announced at the recent Monaco Yacht Show that they are developing strategies that will enable clients to combine the enjoyment and benefits of luxury boating and leisure aviation. Owners of high-end motor yachts who have been using small helicopters will be offered a whole new concept that looks like a lot of fun.

Danish Yacht is a state-of-the-art superyacht shipyard located in the port of Skagen in Denmark. The company was founded in 1988 as Skagen Yachtyard, and its products swiftly gained a strong reputation. The yard, which changed its name to Danish Yacht in 2000, works with leading designers and specialises in one-off sail and motor yachts between 80 and 150ft in length, characterised by outstanding craftsmanship and advanced materials. It builds boats in carbonfibre, Kevlar, glassfibre, polyester and epoxy, as well as steel and aluminium. It is a substantial company, with production facilities housed in three halls occupying an area of 5500sq.m, and including joinery and metal shops.

Danish Yacht's partner in the new enterprise is LISA Airplanes, based at Le Bourget du Lac in the Savoie region of France, close to Chambéry/Aix airport at the foot of the Alps. This company was founded in 2002 specifically to create high-performance leisure aircraft, with an emphasis on innovative engineering. Its most recent development is the 'Hy-Bird', an electric powered aircraft that resembles a glider and is attracting a lot of interest.

LISA's two-seat 'Akoya' aircraft, which underwent its maiden flight in 2007, is equipped with folding wings that can individually rotate fore-and-aft on the airplane, thus facilitating stowage on the decks of superyachts – much like jet fighters on aircraft carriers. The lightweight, fuel-efficient aircraft can take off from and land on the ground or, using a specially designed hydrofoil system, on water.

LISA holds a patent on its 'Ri&Flex' wing, which is a combination of a rigid carbonfibre wing and a flexible, textile flap. When the textile is opened out, the surface area of the wing is increased by almost 70 percent and a camber is created. This allows the 'Akoya' to take-off from conventional runways and land in less than 330 feet. The 'Ri&Flex' wing is retracted while the craft is in the air, and has no detrimental effect on cruising speeds or



agility. The high-performance textile is tear-proof and resistant to hostile environments, such as sea water.

For marine take-offs and landings, the landing-gear is retractable and LISA's engineers have ingeniously combined two hydrofoils in the shape of an inverted 'V'. The hydrofoils, combined with the high lift of the 'Ri&Flex' wing, can lift the fuselage out of the water at very low speeds and dispense with the need for a step or fairing. The 'Akoya' fuselage therefore offers both aerodynamic and hydrodynamic virtues and this is claimed to be the first craft to be both agile in water and fast in the air.

LISA Airplanes co-founder Erick Herzberger said of the new venture with Danish Yacht: "We're designing a unique system for superyachts to carry pleasure aircraft. We also have a strategy in place with our aircraft engineers and designers to further develop our range to produce larger aircraft, which can also be used with large yachts. The joint input from the design team at Danish Yacht and LISA Airplanes is already showing that these innovations are taking us to a successful partnership."

Jonathan McDonnell of Danish Yacht added: "We're constantly researching and analysing new ways of bringing additional benefits to owners and their captains, which are in keeping with the design, aesthetics and functionality of their yachts. So this is proving to be an extremely exciting project."

The Paddock Issue 31 - November 2008 page 92

The Paddock Issue 31 - November 2008 page 93

All the best ideas are simple and lead observers to wonder why they had not been thought of before. One such is a new collaboration between a two well-known European manufacturers, one specialising in 'superyachts', the other in leisure aircraft.

The two companies announced at the recent Monaco Yacht Show that they are developing strategies that will enable clients to combine the enjoyment and benefits of luxury boating and leisure aviation. Owners of high-end motor yachts who have been using small helicopters will be offered a whole new concept that looks like a lot of fun.

Danish Yacht is a state-of-the-art superyacht shipyard located in the port of Skagen in Denmark. The company was founded in 1988 as Skagen Yachtyard, and its products swiftly gained a strong reputation. The yard, which changed its name to Danish Yacht in 2000, works with leading designers and specialises in one-off sail and motor yachts between 80 and 150ft in length, characterised by outstanding craftsmanship and advanced materials. It builds boats in carbonfibre, Kevlar, glassfibre, polyester and epoxy, as well as steel and aluminium. It is a substantial company, with production facilities housed in three halls occupying an area of 5500sq.m, and including joinery and metal shops.

Danish Yacht's partner in the new enterprise is LISA Airplanes, based at Le Bourget du Lac in the Savoie region of France, close to Chambéry/Aix airport at the foot of the Alps. This company was founded in 2002 specifically to create high-performance leisure aircraft, with an emphasis on innovative engineering. Its most recent development is the 'Hy-Bird', an electric powered aircraft that resembles a glider and is attracting a lot of interest.

LISA's two-seat 'Akoya' aircraft, which underwent its maiden flight in 2007, is equipped with folding wings that can individually rotate fore-and-aft on the airplane, thus facilitating stowage on the decks of superyachts – much like jet fighters on aircraft carriers. The lightweight, fuel-efficient aircraft can take off from and land on the ground or, using a specially designed hydrofoil system, on water.

hydrofoil system, on water.

LISA holds a patent on its 'Ri&Flex' wing, which is a combination of a rigid carbonfibre wing and a flexible, textile flap. When the textile is opened out, the surface area of the wing is increased by almost 70 percent and a camber is created. This allows the 'Akoya' to take-off from conventional runways and land in less than 330 feet. The 'Ri&Flex' wing is retracted while the craft is in the air, and has no detrimental effect on cruising speeds or

agility. The high-performance textile is tear-proof and resistant to hostile environments, such as sea water.

For marine take-offs and landings, the landing-gear is retractable and LISA's engineers have ingeniously combined two hydrofoils in the shape of an inverted 'V'. The hydrofoils, combined with the high lift of the 'Ri&Flex' wing, can lift the fuselage out of the water at very low speeds and dispense with the need for a step or fairing. The 'Akoya' fuselage therefore offers both aerodynamic and hydrodynamic virtues and this is claimed to be the first craft to be both agile in water and fast in the air.

LISA Airplanes co-founder Erick Herzberger said of the new venture with Danish Yacht: "We're designing a unique system for superyachts to carry pleasure aircraft. We also have a strategy in place with our aircraft engineers and designers to further develop our range to produce larger aircraft, which can also be used with large yachts. The joint input from the design team at Danish Yacht and LISA Airplanes is already showing that these innovations are taking us to a successful partnership."

Jonathan McDonnell of Danish Yacht added: "We're constantly researching and analysing new ways of bringing additional benefits to owners and their captains, which are in keeping with the design, aesthetics and functionality of their yachts. So this is proving to be an extremely exciting project."