

ON THE UP AND UP

A BIRD'S-EYE VIEW OF WHAT IT MEANS TO HAVE A 'BUDGIE ON THE BACK' AND WHY HELICOPTERS ARE THE LATEST MUST-HAVE SUPERYACHT TOY.
By Frances and Michael Howorth; Photos by Frances Howorth and Jan Müller





ONCE STRICTLY A STATUS SYMBOL, the utilisation of helicopters aboard superyachts has changed dramatically in the 21st Century. Owners are using helicopters more frequently, giving them and their guests the ability to de-plane at an airport and travel directly to the yacht in a safe, secure, rapid and direct mode. In today's security-conscious environment, this has become the number-one reason for the increasing use of helicopter transportation.



Called the "budgie" by many yacht crews, helicopters can be used to service yachts as small as 35 metres but typically yachts of 50 metres and upwards can afford the luxury of a dedicated helipad. Many owners of larger yachts use helicopters in their day-to-day business so when they vacation or have business that involves their yacht, the helicopter pilot acts very much as the chauffeur.

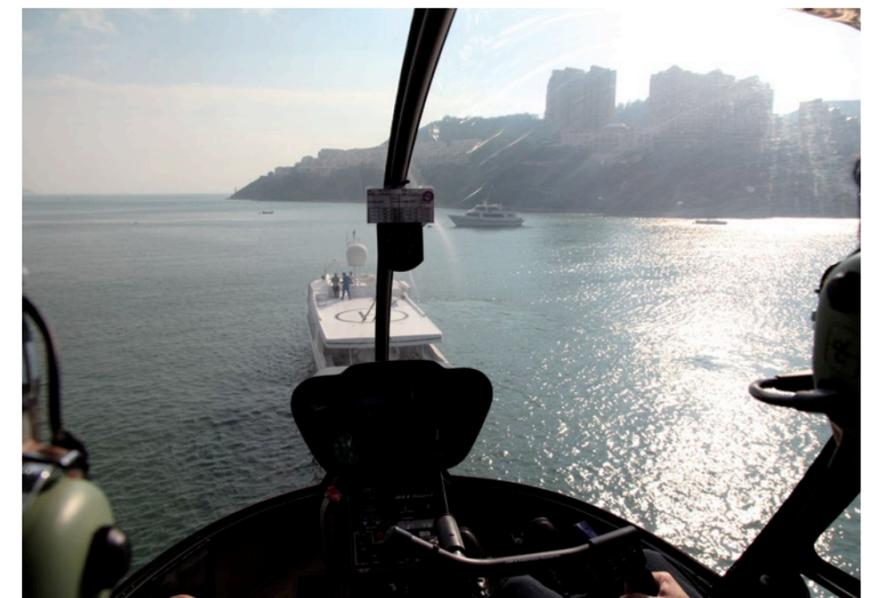
Perhaps the smallest of the most widely utilised helicopters servicing superyachts is the Robinson R44 Raven II series. Available for US\$500,000 fully equipped, this piston-powered machine holds three passengers, is air-conditioned and has pop-out floatation, which allows landing in the water for emergency or necessary use. With a low acquisition price, hourly operation expenses at around \$200 per flight hour, excellent reliability and one of the best safety records of all helicopters, this is the workhorse of the industry.

The next most popular machines are turbine, or jet-powered helicopters. These include the Bell 407 series, a single-engine six-passenger machine, and helicopters from the Eurocopter range, Sikorsky twin-engine helicopters, and those from the Augusta line.

These helicopters range in price from \$2 million to \$12 million and are usually seen on larger yachts mostly because of their high acquisition and maintenance costs. These larger footprint machines generally require the

use of two pilots and have an hourly operating cost of \$450 per hour to \$5,000 per hour depending on the number of hours flown per year.

Once you have determined the use for your helicopter, it becomes easier to choose which is right for your yacht. Cruising in the Arctic, for example, on an expedition yacht would probably require a twin-engine





turbine for safety reasons and the ability to transport passengers in case of a medical or business emergency. Popping in and out of Hong Kong, an R-44 might be perfect as a shuttle for the passengers to and from the yacht and the same machine can be used for crew changes, grocery shopping, provisioning and as a limousine.

Nigel Watson, whose firm Heliriviera services yachts cruising the Mediterranean, thinks that asking “what is the right helicopter for the yacht?” is not really the best starting point, namely because it is just one part of the bigger question of “what is the right helicopter for what we want it to do?”

The key questions:

- How many people does it need to carry?
- What are typical flight times?
- How comfortable is it?
- How fast does it go?
- Is fuel efficiency important?
- Does it need to carry cargo?

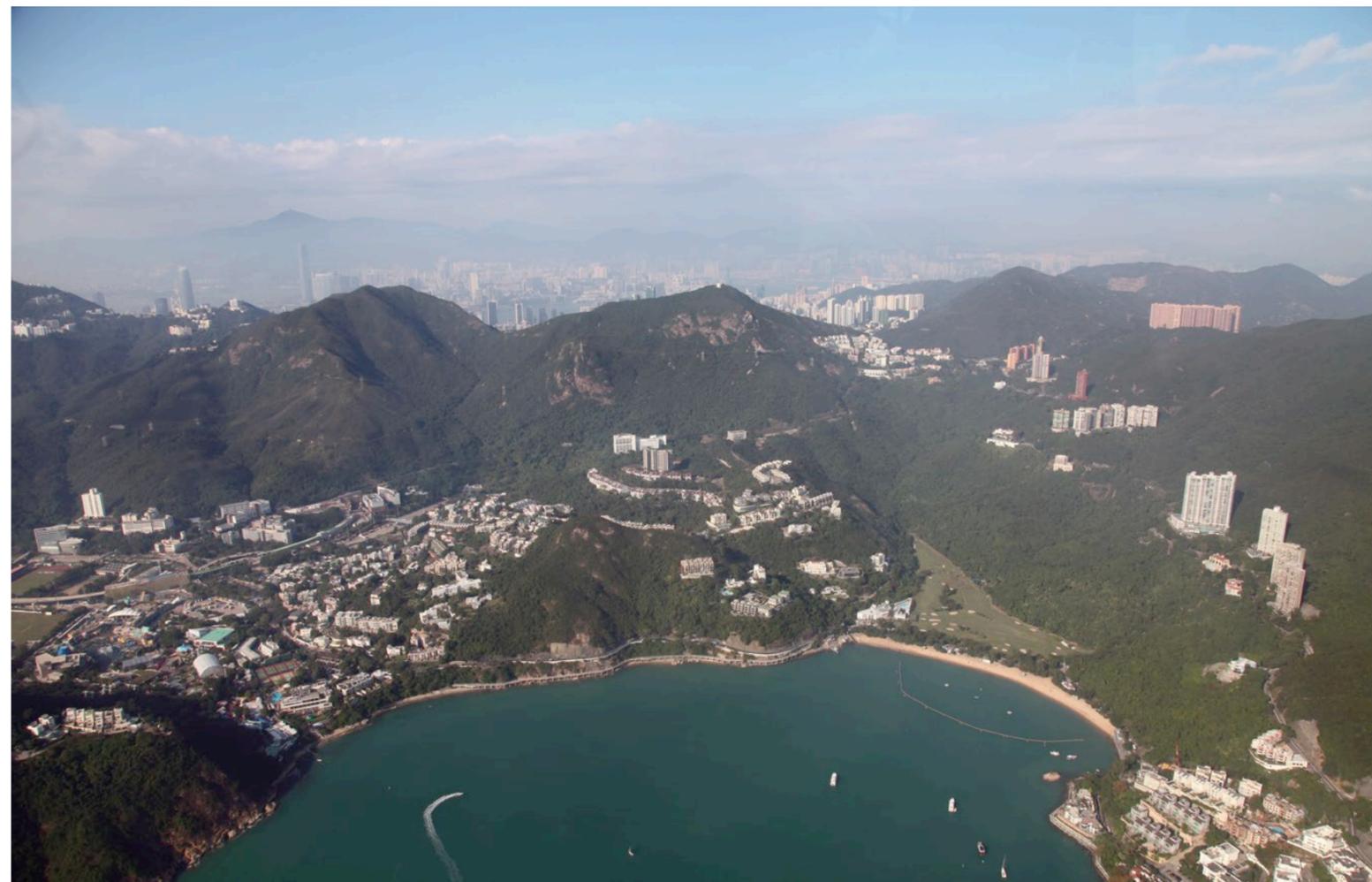
Then there are a couple of other big questions, such as the cost of maintenance and insurance rates and, oh yes, does it fit on the back of the yacht?

Even armed with the answers, Frederique Salti – CEO of Heli Thai in Phuket – believes you still need to be careful as some yacht designers have not really considered the helicopter operations properly. “Sometimes the fact is that all that has been done is that the

yacht’s builders have cleared a space on the upper deck aft to match the helicopter’s footprint,” she says.

Tim Williams with the manufacturer Eurocopter believes the criteria used to select your aircraft should be: safety, style and size of landing pad. Here are a few considerations to bear in mind:

The choice of wheels or oleos (skids) does not really matter on the yacht. A wheeled undercarriage makes for it easier ground handling on





the yacht. Oleos or retractable skids on a wheeled undercarriage make for an easier landing in rough conditions. Wheeled machines need a parking brake, which will ideally retain pressure after engine shutdown, even though the crew will always use chocks.

Normally tail rotors extend over the side of the yacht's helideck, so there is little difference between the various arrangements when it comes to the deck crew's safety. One thing to consider is how the pilots can inspect the tail rotor during pre-flight on the yacht. Noise may also be important and the "fenestron" tail rotor used by Eurocopter is the quietest tail rotor system available by a significant margin.

The need for single or twin engines is an argument that takes place in every helicopter environment. Single-engine aircraft are extremely reliable and safe. But an important consideration is that some high-net-worth individuals will have a clause in their personal insurance that requires the use of twin engines. As most yacht owners will not be doing extended over the sea transits, the added safety factor of a second engine is not normally necessary – considering the increased maintenance expense and initial purchase price.

Blade folding will likely be required if there is a dedicated helicopter hangar on the yacht.

Folding is preferable to removing. A number of military models have this capability, but it is less common on civilian models.

Support is an important factor to be considered when running the aircraft. Superyachts can go all over the world's oceans and a helicopter will need support everywhere the yacht plans to cruise.

Environmentally friendly, or green, features will appeal to many yacht owners conscious of image. Eurocopter has pioneered an easy



to follow and compare rating system similar to that used for other equipment, such as domestic appliances.

A helicopter that is well maintained with parts that are overhauled or replaced as required can keep flying for a long period of time. However, recently certain countries' aviation authorities have placed age restrictions on the import of used aircraft. These range from 10 to 15 years old, in most cases.

Throughout the Asia-Pacific region, the business of helicopters is looking healthy. Manufacturers are optimistic about helicopter usage growth in Singapore, despite the adverse impact on private helicopter orders during the recent financial downturn. But across Asia, there is a shortage of qualified helicopter pilots and this is something that the major manufacturers in the area are trying to tackle as they plough more financial support into helicopter flight crew training.

International law regarding the use of helicopters on board superyachts has changed in recent years and yachts that are operated commercially now have flight crews trained to a specified standard in order for the aircraft to operate with that yacht. Equally it makes sense that even on yachts that are not commercially operated, the crew still need to be trained in helideck safety.

It is imperative that crews that man the yachts understand; that operating a helicopter affects everyone aboard, in particular the captain who must understand his role and responsibilities during helicopter operations, including: aeronautical communications, meteorology, true and relative wind speed and direction, air flow, air temperature, barometric pressure, wave heights and frequency, visibility and cloud heights.

For example the magnitude of the wind speeds over a ship's deck, coupled with the varying rotor speed during the engage and disengage parts of a sortie, expose the rotors to dangerous blade deflections that have in the past resulted in damage to the aircraft and even fatalities. Therefore, an acute awareness of what is going on at the yacht's stern or bow landing pads is required before the captain alters course and/or speed.

The UK's Maritime and Coastguard Agency (MCA) and the Helideck Certification Agency (HCA) administer the rules and regulations governing the use of helicopters on commercial yachts. They have been sensibly thought through to make matters safe on board superyachts.

It seems that when it comes to carrying choppers on superyachts, the business of buying, chartering and crew training is on the up and up.

USEFUL WEBSITES:

Aerolift International Pte Ltd	aerolift@pacific.net.com
Augusta Helicopters	www.agustawestland.com
Bell Helicopters	www.bellhelicopter.textron.com
Eurocopter	www.eurocopter.com
Heli Thai	www.helithai.com
Heliriviera	www.heliriviera.com
Jet Helicopter Leasing	xair44@me.com
Lloyd Helicopters	www.lloydhelicopters.com
Sikorsky	www.sikorsky.com