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Technology Update

WHO SHOULD THE "THIRD MAN" BE ON DAY ONE OF A NEW BUILD?

My article this month is an extract from my presentation at the Future of Superyachts Conference held at the Nixe Palace, Mallorca, in early June.

So who should be the Third Man on a new build?

The third man should be the owner's OWN electronic consultant. Why is this? Is this to help the owner understand the complexities of the electronic systems? No, the foremost reason is because electronics control every aspect of a yacht today. Electronics are almost as important to the yacht as its ability to float.

Usually, on day one of a new build, a team is assembled which includes the naval architect and the interior designer. The naval architect's role is to design the yacht to float, move through the water, be safe and secure and to look good. The second member of the team, the interior designer, utilises the interior space and makes the interior look good, stylish and comfortable to reflect the owner's desires.

However today, there should be a third member of the new build team, and this is the electronics consultant. As the electronic systems are used to control virtually everything on the modern yacht, they are a very important consideration from day one.

So why are the electronic systems so important?

Probably the single most important factor that allows an owner to spend more time afloat is the ease with which he can communicate with his office, business, colleagues and clients worldwide. If he can do this seamlessly when on board by voice, email, remote workplace, VPN, video conferencing or by using his own GSM phone then he will be able to use the yacht more. All these technologies are totally dependant on electronics.

Apart from being able to communicate easily what can an owner do onboard to relax and enjoy his time afloat?

- He can download and print his home newspaper
- He can control his environment, such as air conditioning
- He can listen to music and watch movies
- He can watch sport and TV
- He is still able to do that business deal whilst having fun
- He can be sure his family are all safe

All these activities and more are available courtesy of the electronic systems.

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The owner's family, friends and guests are also dependant on the electronics:

- The kids can survive by texting their friends at home
- They can all play electronic games
- Dock their iPod and listen to their own music
- Electronic stabiliser control even helps to prevent sea sickness.

Those important guys that run the yacht and look after the guests, the captain and the crew, would be unable to answer the following questions without the use of electronics:

- Where are we?
- What's the weather forecast?
- Will we collide with that ship?
- How deep is it?
- Are we running low on fuel?
- What is her blood pressure?

This is just a small but obvious illustration of how we all take the electronic systems which we use for granted. And I haven't even mentioned other areas such as machinery monitoring, safety systems, the galley, etc.

Everything today is controlled by electronics.

Where do we start?

At the initial design phase a clear appreciation should exist of the core technologies the owner wants to run on board. This will enable the foundation to be designed that will handle the predicted demands required.

An early "wish list" meeting will provide a general idea of what, where and how much of everything is required. The owner can specify in his own way, what he wants to achieve. Then combining the owner's requirements with all the ship's essential systems, it is possible to gauge the length and breadth of the data plumbing required to run all the services and to leave room for expansion.

This is analogous to the actual water plumbing and electrical load calculations that take place to plan and design these systems. However, planned data plumbing is a relatively new concept and is rarely executed.

To date on yachts, the electronic systems have been patched on as they have been desired, thought about or been invented. The end result is often an unreliable and unstable system which may cost more due to higher maintenance requirements and duplication.

Your Third Man's ideal profile

Your Third Man should be able to make suggestions and recommendations to help plan and build the Specification and to

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define exactly what should be in the Build Contract before this is signed. He should be very aware of what is currently available, and also what is around the corner. He should have world class expertise with heaps of experience specifically relating to understanding the applications and use of the technologies, their reliability and serviceability on the front line.

Probably the most important characteristic of your Third Man is that he should be “commercially unbiased”. He or his company should not be a supplier of systems to your project, as there is a chance that you will not receive the best advice.

Your Third Man should be your best friend, and should be there to stop you falling into traps due to your own inexperience. He should help you make decisions at the right time and plan the critical path.

You can discuss and he will advise you whether to go “simple” of “complex”. The simpler the systems appear on the surface the more complex they are behind the scenes.

You can discuss and plan the ergonomics and aesthetics which are sadly often forgotten when simply requesting a quotation. There is nothing like a cool, good looking and easy to use device. Take the iPhone as an example.

He should advise you on equipment redundancy and technical security. You should be considering disaster recovery, backup systems, firewalls and server duplication.

You should consider crew technical training during build and transition crew training in relation to self help, remote support and/or possible maintenance contracts from suppliers, which all will impact on your Cost of Ownership.

Cost of Ownership is simply the running cost of the systems over time. Your Third Man should be able to advise you when looking at cost savings on the new systems. It may not be prudent to cut the cost on new systems as these cost savings may increase your running costs over a ten year ownership period due to using lower quality systems that require more maintenance and support.

Finally, your Third Man should help you to future proof the systems as well as can be anticipated, either by adding further capacity or buying the latest equipment at the last minute, so the very latest systems are actually installed. This may include running cables in for anticipated systems that will not be available until after the handover.

By using and finding your Third Man from day one, the result will be:

- The foundations will support the requirements



- The core of the foundation will be flexibility
- The systems will be specified to enable tenders to be compared
- The systems specified will use reputable equipment
- The initial cost and cost of ownership will be reduced
- The systems should be the very latest available and ready for the future
- Yard and subcontractor overlap issues should be lessened and smoothed
- A full depth of service, pre and post launch will ensure continuity, involvement, handover, training and ongoing support to enable greater reliability and use for the owner and guests, for continued enjoyment of his yacht.

So please don't overlook the importance of the Third Man!

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