

THE YACHT

report

The leading magazine for the design, construction, management, ownership & operation of luxury yachts

Issue 115

July 2010



INSIDE ANGLE

Issues affecting superyacht yards plus their opinions

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Valuation: Time for Transparency

Owner James Caan commented at GSF (Global Superyacht Forum) 08 that we are incredibly shy of revealing how much superyachts cost. Assessing value is swathed in mystery and the techniques rarely discussed. The glib “a yacht is only worth what someone will pay for it” is no longer enough. We received two views of how it should be done from Ron Kleverlaan and Andrew Williams. One is a pragmatic call to look at condition, and not “street price”. The other technique – intense, technical, academic even abstruse – succeeded in closely predicting Apoise’s auction closing price.

In November 2009 I visited the Global Superyacht Forum (GSF) in Amsterdam. It was ten years ago since I first visited the event, then named Project. I might have missed one, but it has become routine to travel to the capital of my own country every year and listen to some interesting debates and discussions about the industry that has become a large part of my life since I started as a yacht broker in 1997, in the south of France. Unfortunately I did not have the right personality to be a yacht broker and after a short period I changed to the financial and technical management of yachts. From there it went on and today I work as a full-time surveyor, project manager, consultant and yacht manager.

At GSF there are usually some subjects that are relevant to my daily work. I do enjoy participating in these sessions, although I must admit I am a bit of a

coward and prefer to write an article five months after the event rather than asking questions or commenting directly ‘en public’. I will do my best next time, I promise!

On day one of GSF 09 there was a debate about Business, Brokerage and Financial Matters. In this debate the valuation of yachts was discussed. Following this discussion, I thought it would be interesting to learn if our industry is ready for a valuation standard. Therefore in this article I try to explain my thinking behind the idea of creating a quality standard for yachts on which our valuations can be based in order to get some conformity in yacht values.

During that GSF debate it surprised me that only one person used the word “surveyor” when talking about valuation. That was Martin Baum from Pantaenius; the brokers and

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other speakers spoke about the valuation of yachts based on only a few main parameters; builder, length, age, charter records and historical sale prices. Sometimes they will maybe look also at the technical specifications. None of them mentioned the overall general condition.

I did not have the impression that these speakers would first visit the yacht to determine the value. Instead it seems they feel they have enough paper data on their desks to fix a value without seeing the yacht. From a surveyor's point of view, that would be great because it would save us all a lot of travelling. We could just look at the picture of a yacht and guess that it will have value x; job done. In real life it is a little different and we actually look at various parameters that I feel are much more relevant in determining the real value of the yacht such as:

- The general appearance of the exterior paint on the hull and on the superstructure; what kind of work is required to keep it to a good standard or to bring it back to an acceptable standard? When does this need to happen? What are the approximate costs involved?
- The overall quality of the maintenance of the machinery and systems on board; is a planned maintenance system in place? How long has it been in place? Is there a maintenance history or log? What is the overall condition of the main components of the yacht? Are any major repairs imminent?
- The overall condition and appearance of the interior; how is the woodwork, the carpets, the upholstery? Have they been well maintained over the years? Does the interior include everything that an average buyer would expect on board a luxury yacht and are the components of acceptable standard (such as AV and lighting systems, HVAC, Internet, fridges and bars etc)?
- The overall organisation of the

ship's documentation; is the vessel in Class? Has it remained continuously in Class since the delivery? Is the yacht-owner or the management of the yacht well organised and do they take the statutory surveys seriously? Are all required safety certificates in place and what is the general atmosphere on board towards safety and regulatory matters?

- What is the general attitude of owner and crew towards the maintenance? Were the financial means made available to keep all the above matters up to an acceptable standard?

The problem is that the parameters on which the asking price is determined are not clear and not to an agreed standard.

We survey yachts and we do valuations and usually take into consideration the general condition of the vessel in all its aspects: structural, technical, aesthetical and operational. Only after on-board inspection are we able to estimate a value.

The yacht broker's view on the value of a yacht is understandable. The yacht broker needs to add yachts to his portfolio. He will propose an optimistic asking price to his client with some room for commissions and a negotiation margin. The problem is that the parameters on which the asking price is determined are not clear and not to an agreed standard.

Some will use the historical sales price, some will use charter records, some will use the pedigree of the builder and hopefully some will use the actual general condition of the yacht as the main parameter to determine the asking price. The yacht broker is naturally driven by his commercial goal to sell the yacht. He will sell for whatever value the seller will agree to sell and the buyer will agree to buy.

Only once a MYBA MoA (Memorandum of Agreement) has been signed and a 10% deposit paid has the buyer a chance to look deeper into the

yacht and try to understand what the quality of the yacht really is. Real deficiencies that make the yacht 'unseaworthy' (as described in the MYBA MoA) or a system unable to be operated can of course be used to cancel the deal. But if there are small defects and lack of standards or maintenance that devalue the yacht they cannot be used as a contractual reason to reject the yacht. They have to be taken for granted by the buyer in most cases.

Isn't it strange that you first have to buy a multi-million-euro yacht before you get the chance to look

at its condition? Shouldn't there be an obligation for sellers to give information about the yacht's actual condition to potential buyers prior to any legal binding agreements being signed?

Insurance companies are very much commercially driven yet it seems they will accept any value that the client deems appropriate; the higher the insured value, the higher the premium will be. Risk management and control seems of secondary importance for the insurers or maybe I should say for the insurance brokers. Some underwriters do ask for surveys to understand if there are excessive risks on the yachts they insure; however, due to commercial pressure, they seldom change the insured value of a yacht.

OK, it is clear we are all here to earn money and keep the business going; in the past 10 or 15 years it has been good business for most of us with too many buyers in the market and not enough yachts to sell. In that situation it does not really matter how you value a yacht, you just sell it to the highest bidder. Now things have changed and we have many yachts for sale but the excess of buyers has gone. Also the people who want to buy are not willing

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to just throw their money over the side to see what happens. They want value for that money. And they are right! But they are a little lost too because the yachting industry forgot to grow up; how do we tell these people what to buy and what to pay for it? I believe it is time for transparency and an industry quality standard.

THE INDUSTRY QUALITY STANDARD

I would be very interested to understand how other professionals in our industry feel about the idea of creating a quality standard for existing vessels; a standard that can easily be recognised by owners, potential buyers and their brokers, as well as being accepted by insurance companies. The industry could use this quality standard as a basis for the valuation of the yacht. This quality standard should be based on the overall condition of the vessel, not on its historical sales price, charter record or where it has been built. It would be primarily based on a set of fixed criteria that we have to establish that will together determine if a yacht is of A, B or C standard.

Independent surveyors could provide a short report and confirmation of the standard after inspection based on the fixed criteria. It is my view that the inspection should be initiated by the selling broker or owner and made available to the potential buyer or buying broker. We should maybe make the quality report a MYBA standard and an obligation for all MYBA members to use that format.

Such a report will help the seller to understand if he should maybe lower his asking price if the yacht is C-standard. Clearly a buyer will be prepared to pay a little more if the yacht is A standard. Most of all, it is important that the information about the real general condition of the yacht is communicated openly to the public and that this information is genuine, up to date and backed up by independent professionals. Buyers will have a better idea of what they are willing to pay and brokers would be providing an excellent service by informing their clients about the yacht's quality through an independent source.

Many of you may think or believe that if a yacht has a valid IACS Classification, a flag survey certificate and an MCA certificate of compliance the yacht is in good condition. That myth is used as a selling tool in many cases. These certificates do not say much about the general condition of the yacht; they say something about how the yacht has been constructed and if it was constructed according to



international regulations. It also says something about the safety equipment as required under specific regulations and something about the crew and if they are capable of navigating the yacht or if the anti-fouling applied is TBT free and so on. These certificates deal with regulations, not with the value or quality of the yacht.

We see yachts in shocking overall condition that are still capable of maintaining their class certificate. In contrast we have also seen yachts that are not classed yet have been so well maintained that they are in excellent overall condition. Of course there will always be other variable parameters that will co-determine the final value of a yacht such as the situation of the market, the pedigree of the builder and possibility for commercial exploitation of the vessel.

The aim is to get to a situation where buyers, sellers, brokers and insurers can benefit from a transparent system that gives information about the overall condition. Everybody will judge their basic value on the same criteria: A, B or C. This will ease the jobs of many professionals and give the most important people of our industry – our clients – a fair and independent indication of what they buy and what they own.

Ron Kleverlaan
Marine Surveyor
Waterman Marine Consultancy

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Valuation by Numbers



Apoise recently sold at auction for €34.75m; the model got within about 15% of the sales price.

The effects on the brokerage side of our industry following the economic crisis of late 2008 have been profound. Although there seems to have been a pick-up in activity of late, this comes from a low base and prices remain depressed. It is normal for markets to behave this way in the aftermath of a financial shock. Sellers are reluctant to lower their prices and buyers bid very low. This situation obtains until a new market level is reached. In thinly traded, illiquid markets such as ours we can expect disruption to persist for much longer than, for example, in the stock or foreign exchange markets. Is there anything the industry can do to assist buyers and sellers agree on fair market value? I believe there is and the answer comes from the real estate market.

Due to the size of the residential real estate market, there is a massive body of research available on market pricing and factors affecting liquidity. By contrast,

the yacht industry is miniscule and, as far as I am aware, has not yet attracted any serious academic study. Although there are clearly large and obvious differences between the two markets, there are also a number of similarities which would suggest that the tools and techniques from real estate research can provide some useful insights when applied to the yacht market. For example, yachts and houses are both relatively illiquid assets, taking months rather than days to sell; they both require substantial search efforts on behalf of the buyers and sellers; in both markets deals are normally conducted through brokers and; both markets are asymmetric – that is sellers generally have more knowledge than buyers.

A common technique for valuing houses is hedonic regression modelling. This is academic jargon and although the maths involved is complex, the principle is easy to explain. Hedonic modelling is an attempt to break down the price of a good or service into its component parts. In the case of a house the individual attributes which might be considered include: plot size, floor area, number of bedrooms, desirability of neighbourhood etc. Regression analysis is a technique to explain the relationship between a dependent variable and one or more independent variables. When carrying out regression analysis to determine house prices, the price is the dependent variable because it depends on the independent variables such as plot size, number of bedrooms etc., which are being used in the model.

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A couple of years ago, as part of an MBA project, I carried out a hedonic regression analysis into yacht prices. Taking selling price as the dependent variable, I chose the following independent variables:

Length
Year of build
Motor or sail
MCA compliant
Classed
Builder reputation

Whilst it is clear that length and year of build have numerical values, this is not so for the other attributes. These are known as dummy variables and in the case of motor or sail, MCA compliance and Classed, these are assigned zero or one (in effect yes or no) depending on whether or not they are in that particular category. Builder reputation is a subjective variable but is an important factor in the price of a yacht. In order to quantify this I sent out a questionnaire to a number of yacht brokers listing 161 of the major construction yards and asked them to rate them as: 2 = Excellent, 1 = Good, 0 = Average. I received a response from 10 brokers and took an average of each of their yard ratings to use in the analysis.

I had a data set of 61 yachts ranging in size from 21m to 55m. The sales took place over a seven-year period between 1999 and 2006. The data set is relatively small due to the difficulty in obtaining accurate selling prices and therefore the results should be treated with caution. Another drawback with the methodology is the selection of variables and the possibility that important ones have been omitted. The selection was based mainly on an intuitive feeling that the ones chosen were influential in setting the price and also because the information was readily available.

I would have preferred to have included gross tonnage either in addition to, or instead of, length as this gives a more accurate indication of the size of the accommodation.

Unfortunately, gross tonnage is rarely included in yacht sales specifications.

I used a professional statistical software package and, having entered all of the data, the results displayed in table 1 below were obtained:

Using this model, the sale price for any yacht can be calculated using the following formula:

$$\text{Sale price} = -267.157636 + 0.47586 \text{ Length} + 0.127773 \text{ Year} - 1.937022 \text{ M/S (S)} + 1.408667 \text{ MCA (Y)} + 1.422487 \text{ Class (Y)} + 5.914795 \text{ Builder rep (E)} + 2.752616 \text{ Builder rep (G)}$$

Table 1: Multiple Linear Regression – Hedonic Pricing Model

Dependent Variable – Sale Price

Variable	Beta	St. Error	t-Value	Probability
Intercept	b0 = -267.157636		t = -3.418723	P = 0.0012
Length	b1 = 0.47586	r = 0.710412	t = 7.348657	P < 0.0001
Year	b2 = 0.127773	r = 0.407562	t = 3.249199	P = 0.002
M/S (S)	b3 = -1.937022	r = -0.223683	t = -1.670773	P = 0.1007
MCA (Y)	b4 = 1.408667	r = 0.173773	t = 1.284633	P = 0.2045
Class (Y)	b5 = 1.422487	r = 0.152679	t = 1.124706	P = 0.2658
Builder rep (E)	b6 = 5.914795	r = 0.497322	t = 4.173237	P = 0.0001
Builder rep (G)	b7 = 2.752616	r = 0.318014	t = 2.44195	P = 0.018

Analysis of variance from regression

Source of variation	Sum Squares	DF	Mean Square
Regression	3025.960959	7	432.280137
Residual	639.036664	53	12.057296
Total (corrected)	3664.997623	60	
Root MSE = 3.472362			
F = 35.852164 P < 0.0001			

Multiple correlation coefficient (R) = 0.908646
R² = 82.56379%
Ra² = 80.260895%

Durbin-Watson test statistic = 1.484026

(The Variable “Intercept” is a sort of constant in calculations such as these rather than a coefficient of a yacht – Ed.)

The analysis of variance shows that the model is statistically significant. The R² figure means that the model accounts for 82.56% of the variation in sales prices; therefore, for the data set in use, this model appears robust. However, not all of the variables are equally significant. The probability column in the table shows the probability of the beta coefficient value being arrived at purely by chance. The smaller the number, the more significant the beta coefficient is likely to be. It can be seen that length, year of build and excellent builder reputation are the most statistically significant variables and Class is the least.

The numbers in the formula are the beta coefficients from table 1. They represent the change in price, in millions of euros, for each of the variables in the equation. Taking each coefficient in turn:

Length: for each metre in length, the value of a yacht increases by €0.47586m.

For each year, the value increases by €0.1277773m – note that this is the year of build and not the age of the yacht. This means that more recently built yachts will be worth more than older yachts by the amount above for each year of difference.

The coefficient for motor/sail (S) means that if a yacht is a sailboat it is worth €1.937022m less than

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a motoryacht, which is equivalent in every other measure. (Though S/Ys are more complex this may be due to smaller absolute volume for given LOA and the lower desirability generally across the market of sailing yachts – Ed.)

A yacht which is MCA compliant is worth €1.408667m more than a non-compliant yacht. A classed vessel is worth €1.422487m more than one that is not classed.

A yacht built at a yard with an excellent reputation is worth €5.914795m more than a yacht built by a yard with an average reputation.

A yacht built at a yard with a good reputation is worth €2.752616m more than a yacht built by a yard with an average reputation.

To take an example, the likely sale price of a 67m Lürssen (a builder with an excellent reputation) motoryacht, built in 2006, which is MCA compliant and classed would be calculated as follows:
Sale price = $-267.157636 + (0.47586 \times 67) + (0.127773 \times 2006) + 1.408667 + 1.422487 + 5.914795 = €29.78m$

The observant reader might recognise *Apoise* in the equation above. This yacht recently sold at auction for €34.75m. The fact the model got within about 15% of the sales price is interesting, although perhaps coincidental as the data set did not include any vessels of this size.

As well as providing a simple means of calculating a likely sales price, this tool is useful for giving values to the different attributes of a yacht. When an owner asks his broker if it is worth getting his yacht classed, or put through MCA compliance the broker can give him actual figures based on the model. Using the equation above, it can be seen that a classed and MCA compliant yacht will fetch about €2.8m more than a non-Classed, non-compliant vessel of the same age, size and from a yard with the same reputation. The owner can then make an informed decision on whether or not it would be worth the investment.

For the reasons mentioned above and also because it is now a little dated, this particular model provides limited predictive power. Nevertheless, the technique is valid and regression modelling can provide a powerful tool to brokerage houses having large amounts of sales data to draw upon, enabling them to maintain an up-to-date index of prices for their own business purposes and for the benefit of their clients.

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