In tough trading times, investments in new technology have often been subject to much scepticism over their true return on investment (ROI), but for condition-based maintenance (CBM) this is now beginning to change. With the ability to monitor in real-time the performance of equipment, ship-owners are now able to identify and prevent catastrophic failures of equipment and thus reduce their costs, as well as improving their fleet’s efficiency.

In this article, Out of the Blue asks Danny Shorten (Lloyd’s Register), Sachin Mohan (Exmar) and Peter Townsend (SwissRe) for their opinions on why CBM is a smart investment for ship-owners, insurers and the wider shipping community.

When did you first begin to look at CBM?

Danny: Since the commercial development of monitoring techniques in the mid 80’s, Lloyd’s Register (LR) has been looking at how it can help owners to utilise this technology to have a positive impact upon safety, reliability, environmental compliance and classification. Initially launching ‘descriptive notes’ to assist owners and engineers in exploiting preventative maintenance and condition monitoring techniques, within Original Equipment Manufacturer (OEM) supported calendar based scheduling, LR has moved further forward recently, making it easier to allow maintenance to be based upon the needs of the machine and not the needs of the schedule.

What do you see as the major benefits of CBM?

Sachin: From Exmar’s perspective, CBM offers a range of tangible and interwoven benefits to ship-owners who adopt the technology. Exmar believe that the benefits of CBM can
We certainly ended 2013 with some optimism trickling back into the global economy and in reality the year turned out to be far better for business and the global economy than virtually any commentators were predicting. Hopefully this optimism will now start to resonate through the shipping industry during 2014 and beyond.

The challenges of vessel over-capacity in the market now appear to be easing as growth returns, or at least stabilises, in the traditional import markets of the US and Europe. In tandem with this, 2013 has seen the increased growth of South-South trading routes, a phenomenon which will continue to grow in 2014 and beyond.

With these early trends in mind, 2014 would appear to represent the first signs of light on the horizon for the shipping industry, after a lengthy period of tough trading conditions.

We have continued to invest in our business throughout 2013 with a major JLT Group reinsurance acquisition, Towers Watson Reinsurance Brokers, and also investments throughout JLT Specialty. The marine team has been no exception; we have made some key investments in building out our specialist capability, which will enhance our existing marine broking services in London, Dubai, Hong Kong, Taipei and Rotterdam.

In this edition of Out of the Blue, we examine condition-based maintenance systems and their mutual benefits for ship-owners and insurers, as well as a commentary on wreck removal issues in the 21st century and a feature on our new colleagues in Dubai.

As always, we welcome your comments and observations, while hoping that in this newsletter we continue to highlight some less explored but significant aspects of the marine market today.

We hope you enjoy it.

Kevin Lugg
Executive Chairman of Marine Division, JLT Specialty Limited

Cover story continued

be broadly separated into three thematic areas, which all complement each other:

- Cost savings
- Enhanced reliability/improved planning capability
- Greater maintenance efficiency.

Peter: The way I view CBM is that in the market it’s very difficult for us to get premiums up. So if we can’t get premiums up, let’s try to find mechanisms to get claims down. CBM, carried out in conjunction with owners who buy into the project, is one example of this.

A weak market benefits no-one, and I include ship-owners in that statement. In a weak market, less diligent ship-owners can still get their risks placed without too much difficulty. Whist that is the case, it is ever more difficult to differentiate between top quality owners and those who pay maintenance budgets little more than lip service.

The key is to work on a partnership basis with quality owners to provide real differentiation through risk reduction. If we work with owners and in conjunction with them to resolve the base causes of the more preventable losses, which in many cases is machinery damage either through crew negligence or mechanical breakdown, then we can create an alignment of interest that would benefit all parties.

Do you have any experiences of CBM in practice currently?

Sachin: As an example, one of our vessels suffered a failure of a shaft alternator on a product tanker, which incurred a significant replacement cost as well as a loss of trading revenue while the vessel was out of service.

As the vessel had five other sister ships all employing this piece of equipment, Exmar installed CBM on all six vessels. When a change in normal operating conditions was then identified on a sister vessel, Exmar was able to monitor and eventually repair the piece of machinery before the equipment could deteriorate further and cause a catastrophic loss. The second incident therefore cost us only 7% of the amount that we incurred from the first loss, owing to the fact that we didn’t need to replace the machinery part, as well as reduced revenue losses from repairing instead of replacing equipment.

Peter: It’s an area of the business that we are really digging into at the moment and where we are trying to find systems that we think will work.

We started from a fairly low base in our knowledge as marine insurers. We are becoming ever more focused on all aspects of risk, principally because margins in the insurance industry are so tight and (if you looked at the IUMI Stats), the last 17 years have been loss-making globally.

For the moment we are focusing on this area (CBM) as an area where we think there may be an opportunity to work with clients for a common benefit, because if we are working
on very tight margins then we need to support those ship-owners that are making the difference to their risks.

What does the use of CBM mean for ship-owners who use a calendar-based maintenance system?

Danny: The traditional planning system, where vessels are required to undergo surveys and inspections according to a time-based schedule works well for time-dependent issues. However, optimisation based upon the needs of the machine creates a number of challenges for the industry. One example is where machinery is taken down and opened to facilitate the survey process. Apart from being inconvenient, unnecessary interventions can often increase the risk of later breakdown. Performing maintenance with no reference to the machine’s needs also means that some machines will be over maintained and others will be under maintained.

Classification should not be an obstacle to condition/risk-based maintenance or inspection. Our solutions give great advantage to shipping. Yet, many ships still run PMS systems and carry out performance and condition monitoring activities, but without alignment with their class. We need to understand why this is and get a clear message out there that we are very keen to engage with companies who look to optimise maintenance activities.

Apart from direct cost savings, what other benefits do you think CBM can provide?

Sachin: The enhanced reliability of a vessel has clear advantages for the reputation of ship-owners, such as helping them to retain orders from clients, as well as winning new clients from their improved reputation.

The use of CBM is also important to maximise the value that ship-owners can utilise from their employed machinery. By ensuring that the standard of equipment is operating the way it is intended to, ship-owners may be able to make savings in areas such as fuel consumption, where a poorly balanced motor may be drawing excess amounts of current to operate. In addition, a well-maintained piece of equipment is likely to last longer and therefore represent better value for money over its useful life span.

Peter: If reliability improves and if perception of that ship-owner improves, the ship-owner’s brand becomes stronger.

In the past people have perhaps not run their ships to the highest of standards. When it goes wrong, we pay for the repair, that fixes it and they go on trading. I think margins are tighter (now) on the shipping side and some owners cannot afford to have their vessels out of service for any period of time, as they have their banking covenants that they need to cover and large mortgages that they need to address. The asset is very important, it needs to be earning, therefore for some of those ship-owners there is a greater requirement.

The way I view it, somewhere in the region of 25% of losses will be a result of machinery breakdown, with another 25% the result of crew negligence. If we can get these losses down by early identification and early detection, we can take away (or at least significantly reduce) the catastrophic losses and reduce the number of claims.

With an expected improvement in loss incidence, we can reflect that (ship-owners benefits) in the part of the premium that we allocate to cover these risks.

With thanks to Belgibo, Exmar, Lloyd’s Register and SwissRe Corporate Solutions for their contributions.

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If reliability improves and if perception of that ship-owner improves, the ship-owner’s brand becomes stronger. — Peter Townsend, SwissRe Corporate Solutions
Meet the MENA Team – Interview with John O’Flaherty

Since the spring of 2013, JLT Specialty has been building its marine capability in MENA and when, on the 1 October 2013, Capt. Abhijit Naik joined the JLT marine team based in the Dubai International Finance Centre (DIFC), the final component of the largest and most experienced marine team in the region fell into place.

Our new team and indeed all the regional specialty operations located in our DIFC office are led by John O’Flaherty, formerly CEO of Aon Bahrain and leader of AON’s regional marine business. John is a marine insurance veteran of more than 20 years standing, having worked with ship owners and underwriters before turning to broking. In fact, John’s nautical roots go back even further than his time at AON to his time with the UK’s Royal Navy, whom he served for several years after leaving university.

Welcoming John and his team on board, Out of the Blue asks John for his thoughts on the biggest challenges and opportunities facing the industry in the MENA region.

Welcome all to JLT! John you’ve personally been in the region for more than ten years now, what drew you to the Middle East?

John: In a word, opportunity. I’d worked in Europe and in Asia previously and though I thoroughly enjoyed my time in both environments, I could see that the growing importance of the maritime sector in the Gulf Cooperation Council (GCC) territories would place a critical importance on the role of the specialist marine broker and I have been proved right.

From my own experience of successfully growing a marine insurance broking and risk consulting business in the region, what really counts for our clients here is expertise and service, especially for growing businesses where in-house resources may be stretched. In this respect, the strength in depth of our new team – which includes the region’s only dedicated, experienced marine claims resource – means we are uniquely placed to meet these expectations.

The oil and gas sector would appear to be the major driver of the region’s growth, but presumably there are a number of other factors to consider as well?

John: Of course the oil and gas industry bankrolls much of the economic activity in the region, but you are correct to suggest that it is not the only factor. There is a much broader economy developing now, which is partly in response to the enlightened approach of many of the region’s governments, who have driven a number of initiatives aimed at creating increased economic flexibility.

The existence of the DIFC in Dubai for example (where JLT is itself located), is a free zone that allows businesses to operate within a unique legal and regulatory framework. This is modelled closely on international standards and principles of common law, and is tailored to the region’s specific needs, with a view to creating an optimal environment for financial sector growth. It’s a great operating platform for us. Similar initiatives exist elsewhere in Dubai and elsewhere in the UAE, and in other GCC territories, including Qatar.

Many of these target broader industry sectors and a number are heavily populated with ship-owning and operating enterprises supported by foreign investment, notably from India, all taking advantage of the legal and regulatory environments created by the various free zones.

Meanwhile, there has always been very significant local “onshore” investment in ship owning and operating. Add to this the sheer dynamism inherent in the region and you have a heady mix.

Are there any clouds on the horizon?

John: Obviously there are challenges in the region. The sanctions in place in Iran have reduced opportunities for some of our clients, while Iraq, Somalia and Yemen present unstable trading environments. But we are greatly encouraged by the powerful resurgence among our clients.
of Dubai following the setback in 2009, and in the majority of our region there is huge optimism about the future in general and shipping in particular.

You must be very excited by JLT’s recent acquisition of a controlling interest in Insure Direct?

John: The opportunity to partner with an established UAE broker, especially one whose local shareholder is Istithmar, is of course tremendously exciting. It helps that Ken Maw, Insure Direct’s CEO, and I are old friends, and that we bring complementary skills to each other’s businesses. We are both very much looking forward to exploring the significant synergies that clearly exist.

You obviously travel extensively throughout the region. What’s your favourite destination?

John: Very hard to say. Nothing beats coming home. Bahrain is home at present and I’ve enjoyed living on the “Island of Golden Smiles” – I’ve brought my family up here. Dubai soon will be home; I am relocating to be closer to the team. The sheer energy of Dubai never fails to impress, though Doha is catching up fast. For some tranquility the varied scenery that is increasingly encountered travelling south; to Oman and Yemen, for example, is very pleasing. Then again there is the excitement of the Grand Prix, at home in Bahrain and in Abu Dhabi, which has a fabulous purpose-built facility. One of my most memorable trips however, was travelling on a ferry from Muscat through the Straits of Hormuz. Incredible landscape!

Final question, how do you see your team working with the Marine Division in the Big Blue Building?

John: As colleagues, friends and partners. Many of our clients place great value on the role of the London market in their business, and we in turn value the tremendous expertise and experience that we can access from our the London team – an award-winning team, of course! Even in the short time that we have been part of the JLT family we have found working with the London team to be a thoroughly rewarding experience. They have been patient with us, as we adapt to a new system and a new operating model, but most of all they have helped us to provide the outstanding service that brings new clients to JLT’s MENA marine team in ever-growing numbers.

News in brief...

➤ Chinese billionaire Wang Jing plans to invest USD10 billion for building a deep-water port on the Crimean Peninsula in Ukraine. The cost of the first phase is estimated at USD 3 billion, which includes building a new deep-water port, reconstructing Sevastopol port and developing an economic zone that will house technology-focused companies. The cost of the second phase is estimated at approximately USD 7 billion, which will include an airport, a liquefied natural gas terminal and a shipyard. Construction is expected to begin by the end of 2014.

➤ In September, a military Sealift Command ship hit Mathews Bridge in Florida. The bridge, which carries 56,000 vehicles daily, has been closed indefinitely. The incident occurred when the 821 ft USNS 1st Lt. Harry L. Martin (T-AK 3051) struck the Mathews Bridge and the port-side stern ramp impacted the bridge.

➤ South Korea’s Daewoo Shipyard is building a 382 metre long, 124 metre wide catamaran to carry decommissioned oil rigs. This giant catamaran will have the strength to lift 48,000 tonnes, approximately the weight of four Eiffel Towers, and more than four times the capacity of the current top heavy lifters. It will be able to remove the topside of the rig and carry it on the bow; moreover, it will reverse to lift the jacket at the stern, thus transporting both sections to the shore.

➤ Maspion Group plans to build 12 new container ports in Indonesia to serve logistics sea transportation needs. The decision came as group’s President Director, Alim Markus, complained about a lack of good infrastructure, owing to congestion at all the country’s ports, which was slowing down businesses in every sector. Maspion currently has four ports in Gresik, East Java; and is planning to have 16 ports in total by 2014. The ports are scheduled to become operational in 2015.

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As has been well documented in the media, following the successful negotiations of the P5 + 1 with Iran over discussions regarding its nuclear programme, some sanctions imposed against Iran have been suspended for a period of six months till mid-July 2014. Whilst world leaders expressed positive sentiments that progress has been made on negotiations towards resolving one of the longest standing issues in the Middle East, questions have been asked as to exactly how certain sanctions relief will be interpreted, implemented and enforced. This will likely remain an issue for all commercial parties dealing with Iran throughout this period.

It is of course, fundamental for all trading parties to consider carefully whether to seek independent legal advice prior to the resumption or commencement of any trading with affected Iranian persons and entities.

After strong encouragement from the ‘Better Together’ campaign, led by Alistair Darling, there are now signs of British business leaders beginning to make their voices heard over the issue of Scotland’s independence. While it is clear that no business has thus far wished to be accused of prejudicing the outcome of the referendum later this year, there is little doubt that the uncertainty around Scotland’s future has required businesses to examine the issue when reviewing and deciding on their future development and investment plans. It would therefore appear that as the referendum date draws closer that further such statements should be anticipated from businesses in the region.


This article was contributed by Toby Stephens, Holman Fenwick Willan LLP

According to Lloyd’s Intelligence List, every year there are approximately 1,000 serious marine casualties. In most cases, early and effective salvage enables the ship to return to normal service. However, in some cases, the complexity and cost of the salvage and repairs required is unattractive and uncommercial. Here the vessel is declared a constructive total loss and wreck removal ensues.

The 21st century has seen the most complex and costly wreck removals of all time, most notably the MSC Napoli, MSC Chitra and Costa Concordia. Each has experienced unique modern challenges. This article examines these challenges and comments on how they could be overcome.

Wreck removal in the 21st century has experienced a dramatic rise in operational costs. The increase in vessel size is a contributing factor. Since the 1990s, container ships have grown from approximately 5,000 to 12,000 TEU. Such ships carry thousands of containers and the cost of removing and storing them during wreck removal is complex and slow. Moreover, such removal operations require specialised equipment, which is not always immediately available due to demand from the offshore industry. This causes delay, which has a knock-on cost consequence.

A further modern challenge is increasing intervention from local and national authorities. Such intervention is costly both in time spent in dealing with the authorities and in money expended in complying with their orders or with the vast amount of environmental regulations. Whereas in the past, it was permissible to leave the vessel where she sank, today complete removal of the wreck is demanded. Further, the authorities now take a ‘zero tolerance’ approach to oil pollution and require full clean-up. Bunker fuel is the most serious pollution threat and removal operations are complex, costly and time consuming.

The increasing cost of wreck removal combined with risk pooling and the current insurance/re-insurance structure has caused changes in the arrangements for P&I clubs and the re-insurance market. Traditionally, insurance companies have covered physical losses and damage to hull and machinery, while P&I clubs have covered third party liabilities. Each P&I club operates as a mutual agreement between ship owners to share third party claims between USD 9 million and USD 7.5 billion (USD1 billion for oil spills) in agreed proportions. The 13 largest
P&I clubs, accounting for 90% of ocean-going vessels, form an association called the International Group (IG), which re-insurers claims between USD 70 million and USD 3.1 billion in the wider insurance market. Following losses such as MV Rena (USD 240 million) and Costa Concordia (USD 560 million), combined with the increased probability of losses reaching the IG’s retention amount, premiums for P&I club members and individual clubs’ retentions have risen, which are ultimately passed back to ship owners.

The above challenges are both caused by, and affect, a plethora of stakeholders in the marine industry. A recent Lloyds report suggests that increased dialogue between stakeholders and local and national authorities is key to overcoming some of these challenges. Ship owners, insurers, contractors and authorities should – in their own interest – engage in discussions and agree on areas of collaboration.

The clear lesson to all is to have in place proper emergency response procedures that cater for the worst case scenario, bearing in mind the additional challenges set by new technologies and modern attitudes to the environment. 

Complex claims handling – call in the specialists!

In these frugal times where shipowners are suffering from smaller margins and low rates, there is huge pressure to minimise costs to their business. It is therefore becoming more and more important for service providers to provide a competitive and cost effective service whilst maintaining the high quality standards expected across the industry. Unfortunately, casualties continue to happen and in a poor economic cycle disputes tend to increase as all parties are under pressure to recoup costs and consolidate their economic standing.

In such situations it is inevitable that at some point the parties involved will need to take legal advice and this can be expensive. There is a perception that speaking to a lawyer means the clock starting as soon a phone call is made but that does not necessarily need to be the case and there are alternatives to the traditional law firms. One such alternative is a claims management firm. They operate in much the same way as maritime law firms but take a more commercial approach to claims handling.

Chris Beesley is Chief Executive Officer of C Solutions Limited, a legal and claims consultancy headquartered in the Lloyd’s Building in London and with a network of 13 offices in the majority of the maritime hubs. The firm is staffed by lawyers, experienced claims handlers from the P&I and H&M sectors, Master Mariners and insurance industry professionals with over 150 years’ combined claims experience. He says: “In much the same way as the insurance broker looks after his shipowner client, it is important to us that our clients can come to us with a general question and know that they will get a sensible answer without a bill arriving in next week’s mail.

We employ the same skills that we developed during our previous lives with the major international law firms and we work closely with brokers to identify the issues and options available, and ultimately resolve matters in a speedy and efficient manner, allowing our clients to focus on their core business. Key to our philosophy is the understanding of our clients’ commercial and technical operations when providing legal advice. It means that we can be flexible when working towards solutions and this flexibility extends to how we approach fees. Much of our work is undertaken on an hourly rate basis, but we appreciate that this will not always be the best approach for the client, so will consider a fixed fee, lump sum or contingency/no cure-no pay fee structure on appropriate cases. This last approach removes some of the risk from the client and of course means that there is no immediate outlay on costs and less pressure on the purse strings.”

As the industry continues to innovate in order to reduce costs, service providers are attempting to do the same and claims management firms are now providing a viable alternative to the traditional maritime law firms.

Rob Whaley, Head of Marine Claims at JLT, commented “It is important that when a loss happens the whole team supporting the shipowner act in a co-ordinated manner, have complementary skills and case manage together. This is the key role of the claims broker to act as the conduit between all parties concerned in the loss. This also provides the right message to the insurers that owners manage their casualties in a professional manner”
**About JLT**

JLT Specialty is a specialist insurance broker, risk management advisor and claims consultant.

Our success comes from focusing on defined sectors where we know we can make the greatest difference. In Marine we have a dedicated team of almost 80 using their insight, intelligence and imagination to provide expert advice and robust – often unique – solutions. And our partner teams work side-by-side with you, our network and the market to deliver responses which are carefully considered from all angles.

It’s that approach that inspires our clients’ trust and confidence, led to us becoming broker for more than 6,500 vessels and to become the one of the largest brokers of Marine insurance business in the world.

JLT Specialty is a member of the Jardine Lloyd Thompson Group of companies, a company listed on the FTSE 250 index of the London Stock Exchange. Jardine Lloyd Thompson Group plc is one of the world’s largest providers of insurance and employee benefits related advice, brokerage and associated services and their client proposition is built upon deep specialist knowledge, client advocacy, tailored advice and service excellence. They place clients first, champion independent thinking and expect to be judged on the results they deliver.

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**Lawsuits**

Brazilian ship builder OSX Brasil SA filed for bankruptcy protection on 11 November, becoming the second company controlled by former billionaire Eike Batista to seek court protection from creditors. OSX has BRL 5.34 billion (USD 2.29 billion) in debt and could seek to completely or partly restructure its debt. Batista’s oil producer company OGX Petróleo e Gas Participações SA also sought protection from creditors on 30 October.

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**Piracy Issues**

Piracy issues in the Gulf of Aden are still a threat to marine traffic in the area. On 9 December, two ships were simultaneously attacked by pirates off the coast of Yemen. Both vessels escaped the attack, owing to the alertness of the crew and security team. Recently, NATO Shipping Center sent out a warning regarding the current conditions as being favourable to piracy activity in high risk areas.

After around three weeks, West African pirates released the American Captain and Chief Engineer of the C-Retriever; US flagged platform supply vessels owned by Edison Chouest. They were kidnapped in the Gulf of Guinea on 23 October. For privacy reasons, no additional information on the two individuals or the circumstances surrounding their release was provided by US State Department.

According to International Maritime Bureau analysis, piracy has dropped to its lowest level in seven years. In the first nine months of 2013, 188 incidents have been reported, compared with 233 for the same period in 2012. Attacks in seas around Somalia have drastically fallen, with ten incidents attributed to Somali pirates, compared with 70 incidents for the same nine months in 2012. Attention has again moved to the Gulf of Guinea, which accounted for all crew kidnappings worldwide in 2013, especially in Nigeria and Togo. Moreover, there has been an increase in armed robbery attacks in Indonesia.

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**Global Service**

The JLT International Network is JLT’s global retail and distribution platform. Comprised of fully owned, partly owned and partner operations, it provides on the ground service and support to JLT’s international Risk & Insurance and Employee Benefits clients in 135 countries, making it one of the largest networks of its type in the world.