



SAFE PASSAGE

AMPA

THE AUSTRALIAN MARINE PILOTS ASSOCIATION (AMPA)

AUTUMN 2008

In this issue

Professional Forum 2008

Perfect Visibility

Australians Take a Bow

Woodside Marine Update



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MARINE PILOTS
ASSOCIATION (AMPA)**

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MARCH 2008

COVER PICTURE

Vessel Amving at Port Kembla to
load coal.

Photo: Editor's Collection.

President's Report

Rory Main

Greetings to all AMPA members, and other readers of
Safe Passage.

The Australian Marine Pilots Association (AMPA) has been engaged in initiatives which will have a significant impact on pilotage in all regions of Australia. These projects are nearing completion and are expected to be implemented this year. The following short summary outlines topics which will be addressed in greater detail at the Annual General Meeting which is to be held in Brisbane on 2nd May 2007.

The Pilotage Guidelines, drafted by AMPA members, have now been accepted by all States and Territories and are to be adopted by the National Maritime Safety Council. These guidelines establish the minimum requirements for licensing of pilots in Australia. A copy of the final document will be emailed to members before the AGM.

The Industry Pilot Training Working Group has produced a blueprint for the way forward in respect to the Pilot Training proposal. This is the culmination of a 2003 AMPA initiative to invite the industry to join it in finding solutions to the impending maritime industry skills shortage and, in particular, pilotage.

At a meeting held in Brisbane a blueprint was agreed to which expanded the potential recruitment pool for pilots by creating alternate pathways to a pilotage career, in addition to the traditional Master Mariner's route. It will also give students a number of options to cross over to other sectors of the maritime industry, including the seagoing sector as they progress through the training process.

The meeting also proposed the establishment of The Australasian Marine Pilots' Institute (AMPI). The Institute will replace AMPA and the new governing Council of AMPI will appoint a Marine Pilots' Training Advisory Board (MPTAB) whose membership will include representatives of all those bodies that have a stake in pilotage. The idea is that the qualifications acceptable for membership of the AMPI will be set collectively by industry and pilots. This Board will make recommendations to the AMPI Council for the setting of standards and will monitor the integrity of the alternate training pathways.

A workshop is to be held in Brisbane on Thursday, 1st May which will present the proposal for the Australasian Marine Pilots Institute, the Pilot Training Program and the Pilotage Guidelines. You are invited to attend the workshop to work in collaboration to implement these initiatives which will enhance pilotage in Australia.

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Editorial

Recently when I was on my way from A to B in the country I visited an antique shop or rather one that housed a lot of oldish wares amongst which was the front page of the Adelaide Advertiser. There was nothing special about this other than it was dated 1946 and that the page was full of doom about a possible power cut. This, it turned out was due to a lack of ships turning up in Adelaide from Newcastle with coal, but soon all would be rectified as a collier was being loaded with 8000 tons, yes 8000 tons and in 8 days it would be in Adelaide to relieve the situation. They should be able to manage till then! I think what interested me most was that the ship was carrying 8000 tons and was taking some time to load when in Newcastle today with the number of coal berths there 8000 tons would be poured into the holds in 15 minutes or so. How the ports and ships have changed!

But ships in trouble don't seem to have lessened even with modern technology, the weather still claims some victims, since our last edition we have witnessed a ship on the beach at Blackpool England, another large container ship aground in the English Channel and a log carrier sinking nearby scattering its cargo over a wide area of southern English beaches. Apart from the Cosco Busan, more details of this in the body of the magazine, the only piloted ship to have come to grief that I have read about.

The Lloyds List DCN printed several stories about the high quality of Australian pilots. One headline announced 'Australian pilots lead where others only follow' Capt Steve Pelecanos was featured and in essence was saying that with the growth in the size and number of ships that traditional methods of manoeuvring margins are continually being eroded as the ships get bigger and bigger to fit into ever smaller spaces has fallen to the skills of the maritime profession.

Another headline announced the pilots were plotting a course for new entrants. 'Name, training change to take pilotage to a new era' reported Nicole Holyer in the DCN . This was alluded to in the last edition of Safe Passage.

Thanks to everyone who has contributed to this edition and I always look forward to receiving articles for your magazine. I especially would like to receive some photos of your ports with some activity such as tugs or has lots of white water for the front cover. Please make it portrait type. I am afraid I haven't received any for this edition so Port Kembla will have to feature again.

I have tried to publish the magazine every three months but it isn't always possible to be exact so please bear with me if sometimes it is late in arriving. Sometimes I am dragged away for holidays such a recent trip on the 'Sun Princess ' which was most enjoyable especially as the Sydney pilot Capt Martin White asked the ship's master if I could join them on the bridge for departure from Sydney. Many thanks to Capt. Martin Stenzel the ship's master. Some of you will be meeting him in the ship's trips round Australia in the coming year or so. He told me he was impressed with the quality of Australian pilots and how well they had taken to BRM. He was particularly pleased that they took the time to explain the whole upcoming manoeuvre when boarding.

Capt Paul Chapman's excellent article on 'Concentric Indexing' had a few print errors and Paul suggests that to make it easier for readers to comprehend the article better that they should visit the web site:-
http://www.niqld.net/ni_presentations.htm

Please note the new competition on offer elsewhere in this edition.

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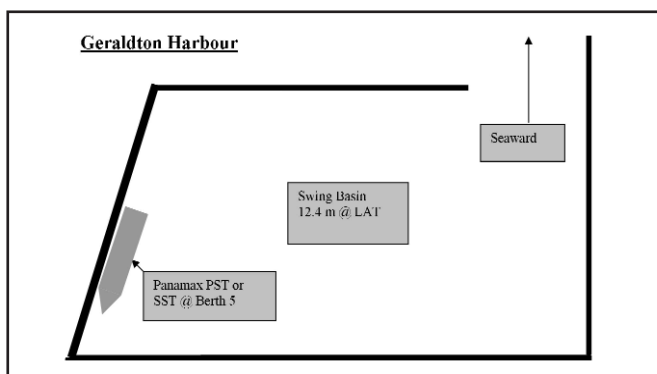
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Professional Forum - March 2008

By Captain Martin North

Much as we try not to be conceited or arrogant regarding professional skill there comes a time when most of us fall into the complacency of thinking we are near top of the 'piloting game'. After piloting 20 years across four states I can say that I felt I had a bit of handle on most things to do with ship handling. Now don't get me wrong. I believe I am as open minded as anyone regarding new things and knowledge and I genuinely feel that if you are closed to new things then it is perhaps time to hang up the lifejacket. No my attitude was more one of comfort in my ability and mild complacency; at least for the tasks that I expected to face in the foreseeable future. Well, as they say life has a myriad of ways of bringing us down a peg or two.

Just to set the scene I think have previously mentioned that the lack of UKC at Geraldton puts ship handling into a higher league than deeper ports dealing with similar or even larger sized ships. At Triabunna I handled 'wood chippers', some as large as 240 m x 36 m at 12 m or so draft and we only had 2 fairly old 32 t conventional tugs. The recent opening of a new Iron Ore Berth here - Number 5 - at right angles to the natural way across the swing basin; as depicted below; has strongly reinforced how minimum UKC markedly effects the hydrodynamics of shiphandling.



There are - as always between pilots - many points of view regarding the best way for the ship at berth 5 to get out and this departure problem has been discussed many, many times. It could be that PST depart Bow to Starboard is best, but then the forward tug has the shorter lever from the pivot point as the ship gains headway and also the ship can end up poorly placed to make the opposite turn into the channel.

SST as depicted offers two choices; back out to be swung right across the basin, to end up aligned facing north on the seaward leads or attempt to swing bow to port whilst holding the stern off the berth to the north. Swinging bow to Port whilst backing slowly requires a greater angle to be overcome and needs great concentration to keep the stern off the berth, but potentially the ship can end up favourably placed for the swing into the channel. Any sternway will assist the forward tug. We have only had a handful of ships to this new berth but is absolutely clear

that any way at all on the ship strongly affects the position of the pivot point and that two 50 T Forward Azimuth Tugs must be used with great finesse to overcome the forces involved. They will not simply skull haul the vessel off the berth with only 60 cm UKC. I have never seen pivot point shifts and resulting lever forces so apparent. The water moving in the basin is astounding.



Loaded Panamax Pulling off berth 5

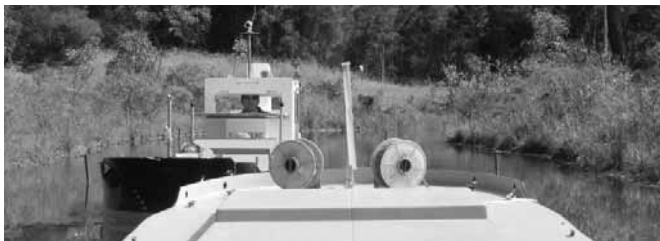
We certainly practiced these various manoeuvres on the ship simulator but in hindsight the simulator greatly under played the various forces involved and tweaks to the dynamics of the simulator to achieve realism probably only made things sluggish as opposed to proper hydrodynamic realism. Just a week or so before our first ship onto the berth two of us from Geraldton went to Port Ash as part of the standard Geraldton training regime which I am diligently working through. Now I have always been a supporter of Port Ash and Cliff Beasley's outstanding efforts to establish a legitimate centre of ship handling knowledge in Australia. I had been for a few informal days 6 or 7 years ago and was reasonably impressed, but subconsciously I think that I had relegated the models as something for new, inexperienced ship handlers. I went willing to learn, but not particularly expecting to gain terribly much.

I was wrong!! The standard 5 day course takes you through quite a journey of discovery, visibly and credibly demonstrating all the underwater forces imaginable. Most of these forces were known to me but some were quite new. Either way they were plainly demonstrated in practical exercises much like my old school days and the science practicals. Very great care is taken by Cliff and his colleagues to scale the entire process of ship handling and like any good science they can demonstrate the theory they put forward. Perhaps most impressive are the passing exercises in the narrow channel where you steer at each other until the very last moment.

Also because they have a view of constant improvement and an inquisitive perspective in all things they will listen to anecdotes or strange experiences that the 'students' relate and try to provide plausible answers. Interaction, under keel clearance, and pivot point are subjects that I now absolutely believe pilots must thoroughly understand to be at the top their game. Yes it's true that these were concepts unknown or misunderstood to earlier yet successful generations of pilots and there are probably still some who get away with not knowing, either through lack of exposure to a wider field of knowledge or through stubborn ignorance. Today we have the knowledge and it is verging on immoral for pilots not to take advantage of such understanding and facilities.

Professional Forum - March 2008

Continued



Passing in the "Canal"

One of the tug Masters here in Geraldton also helped shake my cage. He said that an old tug skipper had said to him that a tug was in essence a pump to shift water from one side of a ship to the other. That's probably not true of indirect towage which I think is more like a very long rudder but it is certainly true of the task we are faced with in Geraldton of pulling a ship out of berth 5. With only 60 cm UKC – by DUKC – the tugs must shift water from one side of the ship to the other, either by squirting it under the ship at pressure, or around the ends. It's like pulling a door bodily through a swimming pool. Every trick, finesse and nuance of ship handling must be understood and then employed for this particular berth alignment to succeed.

All this build up was set to be replicated on our last day at Port Ash. Following a very warm and humid week where transit through the canal put me in mind of Panama the heavens opened and sea level in the entire facility rose overnight by 5 scale metres. That put paid to the planned 60 cm UKC Geraldton berth 5 manoeuvres of Friday. Instead we did some ship to ship transfer exercises, but that as they say is another story.

Unusual Hobart Pilotage

Captain Kim Gibson one of my old colleagues from Hobart has written in with an interesting tale of Piloting 'Apoise'- a super yacht. This luxury vessel was built in 2006 under the code name 'Project Marlin' and was rated; when delivered; as number 59 in the world. In 2007 she was ranked 71st and is rumoured to be valued at US\$120 million. The vessel has 6 decks with 4 guest cabins fitted with king size beds, while a round glass elevator in the lobby transfers those aboard from deck to deck. The upper deck is fitted with a bar, gymnasium and large Jacuzzi so that after your workout you can relax with a cool beverage!

The vessel has twin fixed pitch, inward turning propellers with a 200kw bow thruster. She presented at the pilot station in Hobart on a Sunday morning early this year. Kim boarded on the port side off pilot launch 'Paringa', which tentatively approached avoiding all contact with the ship's side much to the relief of the officers on board. On reaching the deck the crew asked Kim if he could remove his shoes. While somewhat perplexed by this request the pilot quickly realised his pilot boots were not what could be classed as having 'clean soles' as much of their work is at Risdon Zinc works, perhaps the dirtiest wharf I have ever

known. Kim feared that the scuff marks they would cause on the immaculate teak decks would be viewed as rather unfavourable by the very wealthy owner.

On arrival at the bridge, with boots in hand, Kim greeted the Master welcoming him to Hobart. At first glance it looked as if he could not take the Hobart Pilot too seriously as his first look was to the boots in Kim's left hand and then to his feet. Fortunately Hobart Pilots are trained for all eventualities and Kim was wearing relatively new socks. Isn't Christmas and everyone's Mums advice regarding unforeseen circumstances and clean undies great? A ready smile on Kim's face acknowledging the unusual situation he was in broke the ice and the Master became very welcoming and had one of the better coffees on offer, rivalling any 'Lavazza' that could be found locally.

Hobart and Salamanca Markets were well enjoyed by the owners and the crew of the yacht. There is talk of future visits by these 'white boats' this year as there is a super yacht convention being held in Cairns. If this is the case and Hobart becomes a regular port pilots will have to invest in a pair of deck shoes or at the very least some more socks! Perhaps a pair of those old Japanese wharfie boots with a split big toe and platform clogs on raised platform soles "*Risdon for the use of*" will become standard Tasmanian issue.

The wisdom of experience

I recall being told a story 30 years ago by a mate of mine who had served as a training officer on the Cadet Training ship 'Otto' of New Zealand Shipping Company.

On that ship the 'Cadet Captain' was quite someone in charge of 40 cadets, entitled to lots of extra braid, badges and privileges. On this occasion the lad in question with perhaps 2 years sea time was becoming a little conceited and opinionated and was behaving like a Senior Boy in an English Public School.

The ships Captain, a man of great wisdom and experience – which included dogging U Boats in the North Atlantic – decided it was time to have a friendly fireside chat.

The 'Cadet Captain' was given the unheard of honour of being invited to the Captains day room for a drink. In attendance were all the Mates - or Deck Officers as they were called in those days. After some pleasantries the Master began:-

'You know, I was once 'Cadet Captain' the Captain said, 'and I pretty well thought I knew everything about going to sea. Much like you are now'.

'Then I became third officer' the Captain continued 'and I realised that perhaps there were one or two things I had yet to master'.

'When I became second officer I thought, well probably there are quite a few things I needed to get a handle on'.

'Then I became Chief Officer and I realised there is a hell of a lot more to this business than I know'.

The Captain paused and leaned over in a fatherly way. 'Now that I'm Captain' he confided 'I don't need to worry'.

The 'Cadet Captain' looked intrigued and listened eagerly for the sage advice to follow.

The Master raised his considerable voice honed to overcome gales on open bridge ships. 'No' he boomed. 'I can consult a Cadet Captain who knows everything'.

Perfect Visibility: Marine Pilots Receive Renewed Scrutiny

More than one month after the allision between the container ship Cosco Busan and the San Francisco-Oakland Bay Bridge, I don't see any value in playing Monday morning quarterback or making comments on the merits of that case. The situation goes well beyond a simple marine incident and involves the full review of response procedures and a host of other marine-related errors. The facts will come out soon enough and I'm reasonably certain that there is sufficient talent involved with the investigation and that, in the end, justice will be served and the proper "lessons learned" will be fully amplified for all to see.

At this early stage, just one thing is perfectly clear: the Cosco Busan collision will ultimately help to redefine the role of, and the liabilities facing marine pilots in the United States today. One of the most primary questions asked of any deck cadet at any maritime academy is: What is the role of the pilot? And, the answer, of course, is (c.), "the pilot provides guidance to, but is not in charge of the vessel." That tenet has been upheld in many venues, for many, many years. In reality, however, the typical marine pilot who guides a vessel in from the sea buoy to the dock is in complete control of that vessel on the inbound leg. He or she better be, because often the captain of a particular vessel may have never transited that restricted waterway.

One of the key issues being brought to the forefront in the San Francisco case is whether the pilot should have taken the vessel in, given the conditions on board the vessel and the prevailing weather at the time. I did receive a note this week from one U.S.-based state pilot who told me in no uncertain terms, "If we waited for the fog to lift, we would never move and the shippers would be suing us for delaying their goods! The shippers want it both ways. When we take chances and keep moving their ships under less than ideal conditions, they don't thank us. When we make an error or worse, something happens beyond our control, they are all over us. There is a fine line between safety and a risk."

Indeed, there is great risk involved with moving large vessels filled with millions of dollars of sometimes toxic cargoes. It is why state-licensed marine pilots, at least here in the United States, tend to get paid a lot of money. Pay for pilots can and does extend as much as \$600,000 per year in some places, but in others, can be as low as \$150,000 or so. Still, most of us would consider that a good living. And, probably the chief criticism of the piloting systems in use today in this country tends to center around the pay scales afforded these highly skilled marine professionals. But piloting a ship isn't easy work. If it was, then everybody would be doing it.

The recent spate of criminal actions brought against mariners everywhere is old news. It is a reminder, however, that going to sea in 2007 is a far more complicated proposition today than it was just thirty years ago. In this regulatory climate, it is not surprising that so many mariners are choosing not to go to sea and that shipping companies are moaning about not only the lack of mariners, but also the lack of fully qualified professionals. And now, in the choppy wake of the Cosco Busan allision, it certainly appears that the legal focus on marine pilots will be ramped up considerably, as well.

This isn't to suggest that we're going to suddenly experience a shortage of state-licensed marine pilots. Far from it. There will always be a healthy supply of mariners seeking to reach for the brass ring and "make the bar." Going forward, however, the consequences of doing so appear to be changing quickly. And anyone who previously thought that the risks associated with guiding large, deep-draft vessels in and out of port are not commensurate with the seemingly large pay scales, well, it is time to think again.

You are damned if you do and damned if you don't. A recent situation in the port of Boston is a perfect example. Faced with what was initially described as a "steering gear" deficiency on a large vessel looking to enter the port of Boston, the local pilots stipulated certain terms for that vessel's entry, one of which was the use of the most versatile and modern tug in the harbor. Their reward for this prudent position? A letter from another company in the harbor requesting that the pilot be reprimanded for his actions and threatening additional legal action, if it happened again. And in a place (Massachusetts) where the Commonwealth continually battles the federal government over jurisdiction in marine safety matters, this particular disagreement is not yet settled.

Also in Massachusetts, there is a bill in play to license so-called "docking masters." These individuals already provide guidance to vessels and tug boats during some docking and undocking maneuvers. Arguably, the job of ensuring a safe docking operation is as important as guiding the vessel in and out of port. And so, it is probably a great idea to codify their existence. The bill (s.1349) in play, however, also seeks to exclude these docking masters from the regulatory oversight, rate controls and other constraints which have been placed upon the local pilots for hundreds of years. If passed as proposed, the bill would create a two-tiered rate system which also provides for an unequal liability scheme. Doesn't sound like a good idea to me.

Like it or not, increased liability and criminal penalties are coming for marine pilots – docking masters, too. If this reality creates a safer environment, then that's a good thing. But, it is a double-edged sword. Shippers can now expect longer delays for their cargoes in questionable circumstances because these marine professionals will become increasingly reluctant to take a chance in the name of expediency. Eventually, all of this affects the supply chain in one way or another.

Perfect Visibility: Marine Pilots Receive Renewed Scrutiny

Continued

Piloting is a tough job. And, it just got a lot harder. The previously foggy area of responsibility and liability for these professionals is quickly coming into sharper focus. But knee-jerk, band aid-type solutions such as the one proposed this week by Senator Barbara Boxer (D-CA) aren't going to solve anything. Her ridiculous bill – put forth without any idea of how the system actually works – would ensure that the Coast Guard has the authority to order ships to change speed or course in an emergency or during hazardous conditions. At this point – and despite this isolated situation

in San Francisco Bay – I'll put my faith in the pilot. And, I wonder who will be sitting behind the monitor of that RADAR screen at the VTS building. What qualifications will that individual bring to the risk equation and, perhaps more importantly, what will **his or her** liability be? – MarEx

Joseph Keefe is the Managing Editor of The Maritime Executive. He can be reached with comments or questions regarding this or any other article in this e-newsletter at jkeefe@maritime-executive.com.

Cosco Busan

Courtesy San Francisco Chronicle

The pilot of the freighter that struck the Bay Bridge last week, fouling the bay with 58,000 gallons of fuel, told federal investigators that the accident occurred after the ship's radar failed and the captain of the vessel made a monumental error, a lawyer for the pilot said Tuesday.

Meanwhile, Gov. Arnold Schwarzenegger postponed the start of the bay's normally vibrant fishing season, while cleanup crews made significant headway on the worst-hit beaches, and politicians and environmentalists braced for a flurry of state and federal hearings into the spill.

The most startling of the day's revelations came from attorney John Meadows, who represents the pilot of the Cosco Busan last Wednesday. The pilot said the Chinese captain of the ship guided the freighter toward a bridge tower in the fog, the attorney said.

Meadows said his client told him and investigators for the National Transportation Safety Board, which is looking into the crash, that the Cosco Busan's radar "conked out" twice – first before departure and again as the ship was near the lighthouse on Yerba Buena Island.

The pilot was forced to rely on an electronic chart display, showing the track of the vessel and its speed, plus charts of San Francisco Bay. Meadows said the pilot told him he was "not familiar" with the electronic system on the Cosco Busan. "They are all different," Meadows said.

The pilot asked Mao Cai Sun, the captain of the Cosco Busan, to point on the display to the center of the bridge span between the Delta and Echo towers on the western side of the Bay Bridge.

"The master pointed that out," Meadows said. "In fact, several times during the trip. That's what the pilot was heading for."

The channel between the two towers is 2,210 feet wide and

is marked with a transponder device, which should have been picked up by radar or the electronic chart, mariners say. The channel is commonly used by large ships going to and from the Port of Oakland.

"The pilot had to go along with what the master indicated on the electronic chart display was the center of the span," Meadows said. "That turned out to be the tower instead."

The Coast Guard's vessel traffic service says it warned the pilot that the Cosco Busan was off course shortly before the collision. The pilot disputed that view, then changed course.

Moments later, while the ship was going 11 knots, the Chinese lookout in the ship's bow shouted in Chinese and rang a warning bell, reporting that he could see the bridge tower dead ahead.

The pilot had the helm turn hard to the right, Meadows said, and "that saved the ship from going head-on into the tower."

Meadows said problems also cropped up in "bridge management," the communication between the pilot, who had years of experience on the bay, and the ship's officers, who had never navigated the bay in the Cosco Busan. All were supposed to work together and exchange information on how to successfully navigate the harbor.

"While some information was exchanged, perhaps it could be said it wasn't a full transfer of information. It was enough for the pilot to work with the master and get the ship ready for sea," Meadows said.

Meadows said the pilot gave his account to the NTSB in a three-hour meeting Monday. NTSB investigators plan to examine the ship's on-board voice and data recorder, which is supposed to pick up conversations between the ship's operators.

"I think there's going to be a lot of folks out there saying a lot of different things," said Debbie Hersman, an NTSB member. "The voice data recorder could help us a lot in sorting all of that out."

Australians Take a Bow

When New Zealand precision portable navigation company Navicom Dynamics looks back on a great 2007, it is the Aussies they are thanking.

Managing Director Paul Stanley reports that December saw the company reflecting on its most successful year ever – with the majority of sales being made into Australia.

He says Australian port companies have been faster than those in most other countries to adopt PPU technology for use in ports and narrow waterways. Although the need for PPUs was beginning to be accepted worldwide, many Australian ports have been using it for some time now. And the majority of them have bought the Kiwi equipment above that made in Europe.

With word of mouth being a major advertising factor amongst pilots and port authorities, Paul is not surprised that sales of the company's HarbourPilot range of products has increased in Australia. He admits that when it first went on the market there was the inevitable odd problem – largely because HarbourPilot, the Navicom Dynamics PPU, was breaking new ground with its design and technology.

From the start the company focused very hard on customer support, and the team believes this focus is now paying off. The reliability and durability of HarbourPilot has proved excellent, Paul says, but with all PPUs incorporating sensitive technology, it is naive to claim there will never be problems.

What must be promised, he believes, is that any such problems will be fixed as soon as possible, and he takes a personal interest in ensuring that this is the case. He also believes Australian customers feel a sense of security in knowing the manufacturer is next door, rather than over the other side of the world.

However, despite strong sales of HarbourPilot, the company's growth last year was largely due to the success of ShuttlePilot - a newer product for the offshore oil and gas industry. According to Paul, its popularity has caught his team somewhat by surprise. No-one expected ShuttlePilot to challenge HarbourPilot for the title of flagship product – or at least not so soon.



Navicom's first ever sale was to Geraldton Port Authority in WA. Geraldton's HarbourPilot equipment was upgraded last year, and is shown here being used for the berthing of chemical oil tanker British Harmony



ShuttlePilot is used to line up an offtake tanker with the FPSO Stybarrow on BHP Billiton's Stybarrow oil field off WA

ShuttlePilot, a wireless system giving the relative heading and position of multiple vessels (or a ship and a buoy), has been in steady demand on the Western Australian oil fields, where it is used to increase the safety of oil offtake operations.

ShuttlePilot systems are in operation in Australia on the FPSO Nghanurra (Woodside) and FPSO Stybarrow (BHP Billiton), and is currently being fitted to the FPSO Ngujima-Yim, (Woodside).

Australian-based Conoco Phillips recently placed an order for a comprehensive system for the Buyo

Undan field in the East Timor Sea. It is also in operation in Malaysia and New Zealand.

Despite the major focus on ShuttlePilot last year, harbour pilots are not being forgotten. Paul says a comprehensive development programme is nearing its end, and the results will be a big step forward in PPU design. HarbourPilot Lightweight will be the smallest and lightest full-function PPU yet, and will be available in backpack form for extra portability.

While compact, the backpack will still have free space for a pilot's own

Australians Take a Bow

Continued

belongings. Paul believes that for many pilots, who find plastic carry cases awkward, this is when PPU's will come into their own. Navicom Dynamics has high hopes for the product and expects many of the first sales to be made over the Tasman.

A second new product, AISPilot, has just hit the shelves. AISPilot connects to the ship's pilot plug and transmits AIS data wirelessly to the pilot's display. The lightweight unit is designed to automatically detect and overcome any incorrect wiring – a common problem.

Paul says the company is geared up for an even busier 2008 and their

Australian agents, Perth-based Western Advance, are doing the same.

He believes the best endorsement is that the company's first customers are coming back for seconds – after finding new uses for HarbourPilot. And not surprisingly, many of them are Australians.

He quotes Woodside as a good example. They were the first ShuttlePilot customer, but they now have four HarbourPilots for berthing operations at Withnell Bay.

Australian Reef Pilots have also reported great results using the non-docking version, ChannelPilot, for navigating within the deep draught

routes designated by KeelClear, their real-time under keel clearance system. ChannelPilot and KeelClear worked so well together that the two companies have undertaken some joint promotions.

As well as supplying the whole of the Port Phillip Sea Pilots with both software and an AIS capability, Navicom Dynamics currently has 13 HarbourPilot systems in operation in Australia in eight different ports. Last year Australia accounted for 60% of sales by value, and although the company is moving into new markets all the time, Paul says the company is only too happy for its first market to remain its largest.

Letters to the Editor

"Anchoring Very Large Vessels"

I read with great interest your article in the "Professional Forum - Anchoring Very Large Vessels" (Safe Passage Dec 2007) because the idea of using an anchor to control the speed and direction of berthing vessels has long been part of pilotage lore here in Wellington New Zealand. Of course the size of ships in the past were much smaller than they are now - but there again so were the tugs and, certainly, their means of propulsion and their ability to be of real assistance left a lot to be desired. Although the early 70s brought the arrival of three new Voith tugs (one was later sold to Napier) there were still many opportunities to try one's hand at "anchor dredging" on ships of all sizes - even to the "Palliser Bay" container ship class at 250 metres. Tugs were inevitably required to drydock, or alternatively suffered engine "outages" leaving the pilots to berth all normal two tug jobs with just the one tug. Tankers, container ships, bulk carriers - you name it and a combination of one tug and an anchor (together as always with a more than generous dose of Wellington's wind) brought the ship safely to its berth - somewhat slowly but without incident. Then there were the heady days of the Russian fishing fleet visits where a tug was hopelessly too much and an anchor and a smattering of Russian was the only way to gain some control of the vessel's movements. The controlling of anchor movements in a non-English speaking bridge environment was always a challenge - even though challenges as they were then are not properly talked about now.

So what did we learn? Well -

1. Use the inshore anchor and then put the tug on the opposite shoulder. Much head-shaking from Masters on this one who, like most of us grow up with the received wisdom that the anchor to use is the outboard one. Well our thoughts are that the inboard anchor serves three purposes - holding the ship's speed, draws the bow towards the wharf and doesn't get in the way of the tug when the cable stretches astern. The tug acts to take the bow off the wharf, push it onto the wharf or just assist things by slowing the ship down further. The question as to whether it's a problem that the cable may remain stretched out underneath the berthed ship has never been satisfactorily answered. We have never found it so - particularly as we always attempt (with at least 90% success) to raise the anchor after berthing. This is best achieved by passing (well) ahead of the bridge mark, getting the aft spring out smartly, and then dropping back to the mark under the control of that backspring. At that point there is generally enough slack cable to allow the anchor to be raised.
2. How much cable to put out? Well in our water depth (10 - 14 metres) we start with the 1st shackle either on the windless or halfway between the water and the hawespipe - depending on the size of ship. Its easy for the Mate to see and its always easier to let out a bit more rather than try and retrieve too much. To fine tune things we increase the cable length by "so many metres", bit by bit, until things work properly. We have a reasonable idea that the correct amount is out when the cable lies back under constant tension (no jumping) with the vessel is still on Dead Slow Ahead or perhaps Slow Ahead. It should be enough to slow the vessel down markedly when the engines are stopped.
3. How to put the cable out? As crews are less experienced in anchor work these days, we generally believe in walking out the anchor to just under the water prior to starting the manoeuvre, and then walking back the rest of the cable to what you want when you want. Speed through the water at that time needs to be minimal. We have learnt through hard-earned experience that dropping the anchor on the brake (the quality of which one has no idea), or at speed, is likely to leave you with a red face, much cursing, and 8 or more shackles in the water requiring to be retrieved before the vessel can be re-positioned for another approach.
4. When to put the cable out? Well, what we have found is that the best time to lay out the cable is when the vessel is placed properly on its final approach to the berth and at far enough distance from the berth to give the anchor time to properly lie. Too vague you say - well perhaps, but isn't that what piloting is about?

Wellington Pilots still train on the basis of "using an anchor for berthing" and this technique remains an essential part of our port's training programme. If nothing else, it gives us a vastly increased confidence in being able to cope professionally when things start to fall apart - which, inevitably, they tend to do when it is least wanted.

Captain William Corbett
Wellington
New Zealand

Letters to the Editor

continued

Dear Sir,

I have been an avid reader of Michael Greys' column in Lloyds List/DCN for many years. His seafaring background gives him a balanced view (understanding) of various matters maritime from both sea and shore. A remark that stuck in my head many years ago is 'knowledge without understanding is of little value'. [As pilots we are well aware of the truth of those words at the interface with the 'shore' and occasionally the other way].

In his column of the 8th of September 2007 it was mentioned that..."the direct route from the Atlantic to the Pacific straight through the Arctic was actually open this northern summer for the first time in history, the European Space Agency has revealed".

This sent me digging through my library looking for Rachel Carsons book 'The Sea Around Us' published in 1951. Panther Edition 1965. (Rachel Carson was a famous and still respected scientist/biologist ecologist/conservationist).

In her book (Panther edition) on page 211 she writes..." In 1940 the **whole** northern coast of Europe and Asia was remarkably free from ice during the summer months, and more than one hundred vessels engaged in trade via the Arctic routes. Drift ice in the Russian sector of the Arctic Sea decreased by a million square kilometers between 1924 and 1944, and in the Laptev Sea two islands of fossil ice melted away completely, their position being marked by submarine shoals".

Rachel Carson has a lot more to say about melting ice caps and glaciers, cycles of climate change, their effect on history eg. The Viking voyages across the Atlantic and all this in 1950 before the 'current' concept of climate change.

The book is a very interesting read.

Safe Piloting
Capt. Andre Bezkorovainy

Another book which is well out of print and quite difficult to get these days, "Leckys Wrinkles" was a bible to sailing ship masters of the 19th Century. It kept them up to date with all sorts of necessary information for the time and one was the position of icebergs in the Southern Ocean. Quite important for those ships then as many sailed well south to make use of the wind. The book mentions many icebergs aground on a bank (Burwood?) near the Falklands and from memory I think the bank has soundings of about 60 fathoms. I have not heard of this phenomenon since.

Editor

Letters to the Editor always welcome.



Pilots get it right again!

Container Cranes Pass Under Bridge with Feet to Spare

Monday, December 17, 2007

Photo Credit: Courtesy of the Port of Los Angeles.

Two new container cranes from Japan were delivered Thursday evening to the Port of Los Angeles and carefully navigated under the Vincent Thomas Bridge on the way to the TraPac terminal. The cranes came within five feet of the bridge's undercarriage but passed under without incident as television helicopters and film crews captured the scene. This delivery, precisely timed for the lowest tide possible, marks the first arrival of cranes under the bridge since 2002. The cranes were delivered on a barge that was lowered to the water line to allow bridge clearance. Upon arrival at the terminal, the barge was raised up to the dock level. The cranes will be rolled onto the terminal over the course of several days.



Tools for integrating the Mariner's use of traditional navigation techniques within e-navigation

Submitted to the IALA E-Navigation Committee (E-Nav 03) for consideration

By The Australian Maritime Safety Authority (AMSA) and The Nautical Institute (NI)

Summary

The development of e-navigation is to be user needs led so as to enhance navigational safety through electronic integration of systems onboard ships and in shore organisations such as Vessel Traffic Services. This paper focuses on the needs of mariners in particular, and addresses the need to ensure that mariners remain engaged in the process of navigation.

In particular, the authors of this paper recommend the development of tools that will enable the effective integration of key traditional navigation techniques within new e-navigation systems. These tools will help facilitate situational awareness, enable an independent position fixing capability and preserve the ability to assess and monitor the risk of collision.

An "electronic pelorus" is proposed, which would enhance the functionality of the traditional shipboard compasses for taking bearings of fixed and floating objects, by electronically capturing bearings that would then be automatically recorded for use within the electronic navigation system. Also proposed is enhanced radar functionality enabling the electronic capture of radar bearings and ranges for use within the electronic navigation system, and also for the positive alignment of radar images with known geographical reference points on electronic charts using proposed "tie point tagging".

The tools proposed within this paper are commended to the IALA E-navigation Committee for consideration of their operational and technical suitability within the development of e-navigation.

E-navigation

With the advent of e-navigation where greater use of electronic integration is envisioned to reduce human error and workload, it will be essential that mariners have tools and procedures to maintain engagement with the navigation system and so provide a high level of situational awareness in order that good decisions can be made and any navigation system anomalies or failures can be

readily detected.

Electronic Pelorus

Background

The compass has been the primary navigation tool for mariners for many years. Under the SOLAS convention the standard compass must be magnetic but most ships also carry gyro compasses for steering and navigation. In order to take azimuths and bearings to distant fixed and floating objects a sight vane is used. Alternatively, and typically when there was no gyro compass, a separate pelorus¹ could be used to observe relative bearings which were then adjusted to true bearings to enable plotting on the navigational chart.

In navigation terms, observing the bearing of a fixed object ahead or astern assists in the monitoring of a vessel's position with respect to a planned track (i.e. either on track or off track to port or starboard). The observing of beam bearings helps to determine progress along a planned track, and the observing of bearings of distant objects roughly parallel to a new course help in the determination of when to execute an alteration to the new course. Multiple bearings from identified fixed geographical objects can be plotted on a chart and the resulting intersection provides a position fix.

In collision avoidance terms, there is a risk of collision when the true bearing of a target remains constant, or nearly constant, and the range is reducing. Monitoring the visually observed bearing of such a target has always been a highly reliable means of assessing risk of collision.

Although the use of a compass has long been an essential tool for marine navigation and collision avoidance, in recent times its use has tended to wane due to the difficulty of transferring an observed bearing onto an electronic display. In addition, enclosed bridge wings and a general overconfidence in GNSS electronic position fixing technology has resulted in a reduced dependence on the use of visual bearings. This can lead to mariners becoming

disengaged from the process of actively monitoring a vessel's safe navigation, which in turn results in a loss of situational awareness and as a direct consequence, incidents of grounding and collision.

User Needs

User needs within e-navigation that could be met, at least in part, by the use of an integrated electronic pelorus include:

- The need for mariners to be engaged and motivated to actively participate in the practice of navigation.
- The need to identify fixed and floating objects and to be able to plot visually observed bearings (relative to true north) of these fixed and floating objects.
- The need to identify risk of collision by all available means in accordance with COLREGS Rule 7.
- Masters and pilots need to assess the alertness and effectiveness of bridge watchkeepers.
- In the future, shore authorities may need to assess the alertness and effectiveness of bridge teams.

Functional requirements of an electronic pelorus

An electronically integrated electronic pelorus must be capable of visually sighting an object and transferring a line of position (LOP) to a navigation system display. Further functionality may include:

- The ability to transfer a LOP to an electronic navigation system display, possibly by pulling a 'trigger' or pressing a button.
- The ability, once an object has been sighted, to automatically cross-reference it through a graphical means with charted features, or using databases such as lists of lights, sailing directions or a world fleet database. This might result in the cross reference being made through AIS technology so that once an object, such as a lighthouse or another vessel, has been sighted a photographic image and characteristics of the object is simultaneously displayed.

Tools for integrating the Mariner's...

continued

- Bearings of other vessels to assess risk of collision may be able to associate themselves with other target tracking features from radar or AIS to offer more effective tracking and to provide information redundancy and internal confirmation and checking.
- Visual images from the pelorus may be able to be enhanced with low-light or infrared technology.
- LOPs taken with the pelorus may be recorded within the Voyage Data Recorder (VDR) or other equipment so that a master can assess the level of activity of watchkeepers.

Integration of radar derived information

Background

At present a mariner is able to collect range and bearing information from a ship's radar and use it to help navigate their vessel. This is one of the current fundamental functional requirements necessary to facilitate the safe navigation of ships fitted with radar. The functions for which radar information is currently used include:

- monitoring of range and bearings of contacts to help determine risk of collision,
- monitoring of a vessel's progress along a planned track (parallel indexing),
- position fixing by enabling the manual plotting of intersecting radar ranges and/or bearings taken from known or identified radar conspicuous geographic features,
- assessing conditions of visibility,
- warning of heavy rain, with associated reduction of visibility, and
- enhancing situational awareness by the provision of a birds' eye (PPI) perspective.

At present these functions typically involve manual plotting on paper charts, or the manual entry of radar range and bearing information into an ECDIS where the information can be electronically plotted and displayed. The performance of these functions helps engage mariners in the process of navigation, assists with the maintenance of situational awareness and facilitates interaction and engagement with onboard navigation equipment. Within e-navigation it will be vital to address these same Human Element (HE) issues and so maintain the involvement of mariners in the process of navigation whilst ensuring the optimal use of technology.

User needs and corresponding functional requirements

As the onboard functional requirements for e-navigation are developed there will be a need to define functional requirements that capture the above radar related functions. In designing these functional requirements the opportunity should be taken to include enhancements and additional functionality to help improve mariner engagement and navigation safety, which might be able to be easily realised by virtue of better integration of radar and electronic charts.

The onboard functional requirements for the use of radar information within an e-navigation environment could be described as follows:

- a) radar contacts must be able to be selected, or electronically tagged, and there must be a capability

for the automatic monitoring of bearings and ranges of these same radar contacts so as to provide advice to mariners about the likely risk of collision (this functional requirement should basically capture and preserve ARPA functions).

- b) it must be possible to select, or electronically tag, radar conspicuous geographic features and the subsequent use in the automatic monitoring of a ship's progress along a planned track using predefined parallel indexes associated with the current leg of the planned track.
- c) it must be possible to select identified geographic features and to electronically capture their radar ranges and bearings for subsequent use to resolve a relative position fix and determine a calculated geographic position.
- d) it must be possible to designate, or electronically tag, known radar conspicuous geographic features (known as tie points) and for the navigation system to use these tie points to continuously calculate a ship's geographic position (this would require the navigation system to obtain from electronic chart data the geographic positions of the identified tie points and to maintain graphical coincidence of the radar and charted features).
- e) it must be possible for the navigation system to provide a comparison between positions determined via functional requirements c. and d. with positions obtained from external GNSS or other independent electronic means, and to provide the operator with an easy to interpret graphical presentation of these compared positions.

Procedures & Training

If an integrated electronic pelorus and radar functionality are used to help effectively engage mariners, add redundancy for position fixing, improve risk of collision assessment and help document activity levels, best practice procedures and operational training will need to be developed in unison with any technical implementation.

Conclusion

The development of an integrated electronic pelorus and radar functionality, including manual and automatic "tie point tagging", will provide tools that allow mariners to effectively interact with onboard navigation systems using proven techniques and the best practice of good seamanship.

These improved interactions will result in mariners being more engaged, motivated, current, and competent in the process of navigation, rather than being relegated to the role of being a system monitor. In addition mariners will be provided with an effective visual tool for assessing risk of collision, additional and independent position fixing capability, and will have access to auditing tools to monitor physical activity during watchkeeping.

The IALA E-navigation Committee is invited to consider the value of such tools, assess the technological feasibility of development, identify procedural and training needs, and make recommendations for its implementation within the scope of e-navigation.

1 Nicholls's Concise Guide Vol 1, Brown, Son & Ferguson, Ltd Glasgow, 1944 p179.

Woodside Marine Update

By Captain Chris Kaye

The people in the photo are from left to right, Pilot Chris Kaye, Ship's Master Captain Hisao Suizu, Pilots Michael Johnston, Dave Best, Phil Hawke and Ian Harrod. Photo taken onboard Northwest Swift.

The LNG2 facility is now scheduled for commissioning Q1/2 08 and having now undertaken simulation studies at Warash and Launceston we have moved into a phase of dummy runs with NWS Project ships to start getting a real appreciation of the new turning basin. The simulator work has been invaluable as a first step training tool and we are using a Navicom Harbour Pilot system to monitor and record the dummy runs. Ships are requested to arrive to pick up the pilot an hour ahead of schedule and the vessel does a run into the LNG2 basin, turns and makes a departure run as far as the mouth of the channel and then makes a stern first approach to the old LNG1 facility.

The first dummy run was on the Northwest Swift under the command of Captain Hisao Suizu with Dave Best the pilot and all other available pilots observing. The first run in was carried out in a well controlled manner in ideal conditions of a force 3 Sw'ly and benign ebb tide.

Several new recruits have joined the ranks in recent months with Ian Harrod, formerly HM at Esperance, the latest. Others include Geoff Read from offshore/seismic work, Yazdi Khambatta from Teekay FPSO pilotage operations, Peter Dunn formerly pilot at Mackay, and Dave Alley from FPSO operations. Dominic Allery has also returned to the Withnell Bay fold after several years on Woodside offshore installations.

Dredging has commenced on the Pluto channel and swing basin and construction of the associated LNG production facility has also started shore side. The project is hailed as the



"Northwest Swift" Arriving

fastest in history from discovery to commissioning and work continues apace. Spectacular engineering in reality building precision installations in a very hostile environment and of course the ever present need to balance the interests of environmental and indigenous stakeholders.

The Chevron operated Gorgon project has now received approval and talk of 20 to 30 OSV's involved in the construction phase. Mermaid Supply Base is the main supply facility and what is presently a very busy Port is clearly going to get busier all the time.

1st KMPA – AMPA Meeting

17th – 18th October 2007 – Seoul, Korea

Report by Peter Liley, Deputy President

A delegation of 5 AMPA members flew to Seoul to participate in the historical 1st meeting with Korean Maritime Pilots Association. This workshop was the first meeting under the Memorandum of Understanding which was signed in Brisbane 17th September 2006.

After a very warm welcome from Capt Lee Gwee-Bok, President of KMPA and Vice President, IMPA, we heard presentations from 4 AMPA members and 2 KMPA members.

Capt. Rory Main, President AMPA, gave a presentation on Modernisation of Pilotage. Rory reiterated the need for pilots to adopt new technologies in a way which improves shipping efficiency. He warned of the need for additional precautionary measures against undue reliance on technology; saying "It's important that adopting modern technologies the pilot must have a thorough understanding of the limitations and errors inherent in using this equipment." AMPA had worked with the Marine Consultancy Group and Ravi Nijjer in developing courses for pilots who provide instruction in working effectively with the bridge team as well as adopting advanced navigational technologies.

Most existing ports are constrained by current infrastructure and depth, and will seek to use the enhanced navigation equipment to squeeze longer, deeper and larger ships into facilities which were not designed to accept modern ships. Risk creep is prevalent in Australian ports. Pilotage organisations are completing appropriate risk/hazard analysis to define a safe manoeuvre.

Capt Main expanded on new technologies like Portable Pilot Units (PPUs), Dynamic Under-Keel Clearance (DUKC) systems and how such enhanced safe and efficient Pilotage of vessels. He warned that there are certain risks in adopting these technologies and a system is required to manage these risks. That system was a properly structured Safety Management System (SMS). He quoted Capt. Kit Filor in an AMPA 2005 workshop, "The aim of a SMS is to minimize exposure to consequences of an accident and this requires a systematic approach to implementing a SMS.

Capt Main cautioned against the quick-fix SMS as "it's often easier to employ a consultant to assist when implementing a SMS. He stressed that the system is for your organization and must be specifically tailored for

that organization. This requires significant commitment from pilots and their managers and their regulators to a system which identifies the risks of your port and region. He stressed the importance for pilots to have ownership of the SMS.

A SMS is built on a just culture reporting process that "will provide the information which can be analysed. It's this analysis that will that will provide an organization with the best means to identify latent organizational and systemic failures. It's only a just culture that will encourage pilots to make full and frank reports on incidents, risk events and procedural failures within a legal structure which underpins just culture reporting procedures.

Pilotage is a time critical task which is conducted in highly complex environments. Error prevention and error management programs based on system safety and Human Factors (HF) concepts not only improve safety within the workforce but are commercially attractive.

In conclusion Capt. Main said, "The implementation of a safety management system is necessarily slow because of the need for pilots to encourage all industry stakeholders to assist in the process. It is important for pilots and their managers to have personal ownership of the principles of the Safety Management System.

Capt Steve Pelecanos, IMPA Vice President and Chairman BMP, was asked to give his presentation on Brisbane Marine Pilots (BMP) – building an International Reputation for Excellence. Steve began by summarising the history of Pilotage in Brisbane. In privatising the company's focus changed from being one where pilots always argued with their employer to ensuring that the company service delivered was of the highest quality.

"BMP as a young company realised that in order to succeed in business we must have friends and our customers must be our closest friends. The level of friendship should be such that we can call on our friends at anytime and have open and frank discussions about our mutual needs."

Capt Pelecanos added that the second lesson the young BMP learned was that if it stood still and didn't keep pace with changes in other areas of industry it would not survive. And in order that the company should flourish it needs to lead.

BMP adopted the use of DGPS PPU's in the early 1990s. Closely followed by introducing the use of Bridge Resource Management (BRM) into company procedures for pilots. Through BMP's association with Mr. Ravi Nijjer of the Marine Consultancy Group (MCG) we were introduced to QANTAS. As we were unable to find a benchmark in the world of maritime Pilotage, we found a one in QANTAS. QANTAS is the oldest airline in the world and the only one that has never had an accident that has resulted in a death. BMP was the first pilot company in the world to develop and put into place a Safety Management System for Maritime Pilotage.

Capt. Pelecanos warned against resistance to change stating, "Those who are opposed to change will kill the organisation." Steve encouraged Korean Pilots to engage in establishing good working relationships with all stakeholders in the industry to the highest levels. In closing he said, "The choice of where Korean Pilots wish to be in the future is in their hands.

Capt. Chris Kline, General Manager BMP, delivered a presentation on Pilotage Safety Management Systems. Capt Kline said that the main elements in developing an effective SMS in a Pilotage operation are:

1. A core group of fellow believers (to promote organic growth of the SMS)
2. A systematic approach (using Standards like AS/NZS 4360:2004)
3. Risk Reporting and Risk Analysis.
4. Resources (commitment to a Safety Tithe)

Capt Kline expanded on these elements with examples of how BMP grew its Safety Management System.

Capt. Steve Pelecanos was back at the podium again giving a presentation on BRM and the Modernisation of Marine Pilotage in Australia on behalf of Mr

1st KMPA – AMPA Meeting *Continued...*

Ravi Nijjer who was unable to attend the workshop. Mr. Nijjer's presentation commenced with "Modernisation – Involves a shift from traditional 'Pilot centred' to a human factors based 'systems' approach." And to "shift to 'systems' approach requires a change in 'professional culture' of pilots." The presentation went on to explain how BRM developed a place in modern Pilotage. Pilotage had become a high risk operation from

- Increased risks from larger ships, smaller UKC, lower horsepower/deadweight ratios, etc.
- Increased consequences from marine pollution and public liability.
- Intolerance by general public of marine accidents resulting in casualties and/or marine pollution.

Which means that, now, the pilot has become a Joint Manager of a high risk operation.

Capt. Hwang Sung Hyon, Yeosu Port Pilot gave us Australians an Introduction of Korea Maritime Pilots' Association. The Pilotage system in Korea has its roots in the system adopted by the Japanese Colonial occupation of Korea. The first Korean pilot was Capt Ryu Hang Yeol appointed in 1937. KMPA was initiated in 1977 covering 9 local districts and 40 pilot members. Now there are 13 districts, 11 local pilot associations covering about 230 pilot members.

Pilots are engaged through their local associations. The associations employ support staff and own the infrastructure and transfer equipment. Capt Hwang candidly explained the challenges being faced by KMPA and the responses that have been made so far. The challenges are not dissimilar from those faced here in Australia. The big difference lies in the organisational structures managing the ports.

Capt Kim Su (Steve) Ryong, vice President KMPA gave a presentation on the Comparison of Pilotage between Busan Harbour Pilot Association and BMP. Then some comparisons between KMPA and AMPA. Capt Kim was looking forward to the challenges of answering the critics and developing Korean Pilotage into a Pilotage with an international reputation for excellence.

We were treated very generously with a sumptuous Welcome Dinner that evening. The following day was spent learning about our hosts and the rich history of their country, we visited the War Memorial of Korea and a Korean Folk Village. The day was concluded wonderfully with a Farewell Dinner in the beautiful Samcheonggak. I would, on behalf of the AMPA members attending this workshop, like to thank our hosts KMPA. KMPA and AMPA will benefit greatly in our developing this relationship.

COMPETITION ANNOUNCEMENT

Introduction

The aviation industry has a very well known policy of reporting near miss events. These events are investigated, reported on and published for the benefit of all participants in their industry; so that aviation pilots "can all learn from others" and hopefully make them all aware of their own vulnerability and their capacity for making errors. In the marine field, the ATSB investigators examine and analyse marine accidents without attributing blame. Yet despite the efforts of this organisation, AMPA and others, an open culture has been difficult to develop in the maritime industry. Blame still seems to dominate in many of our organisations, however if we can be more open ourselves then perhaps over time we can persuade others to adopt a similar attitude.

The existing culture means that we have a very limited public record of near miss pilotage events in Australia. This negativism prevents pilots gaining an insight into the situations where an incident has been imminent but successfully avoided. Bearing in mind, the oft cited statistic that for every investigated incident there are at least ten near misses, then every Australian port will have a few near misses a year and the the busier ports will have a couple a month.

The Challenge and the Prize

So here is the challenge, write a description of your own nearest miss in about 500 words. The description should

include an outline of setting, circumstances, contributing factors, chronology, and any other relevant factual information and most important of all the lesson(s) learnt and how similar events can be prevented from re-occurring. If you have chartlets, pictures or diagrams that you consider might make your story more easily understood please include these. For those pilots who would prefer personal anonymity and or port anonymity you should edit your story appropriately, however you should include your name and contact details with your entry so the editor of Safe Passage can confirm details of the story with you personally.

All submitted stories will be considered for publication in Safe Passage.

The Judging and the Prize

The "best" story will receive a copy of the recent Nautical Institute publication "Safety Management and its Application" that has a value of \$100.

How will "best" be determined? A good description of the event with adequate detail and the relevance of the lesson will be the main factors.

Who will judge the stories received? Three retired pilots will read each submission and make an assessment. The editor's decision on the winner will be final.

The deadline for submissions is the 30 June 2008 and each submission should be sent to the editor Rob Choppin at rchoppin@bigpond.net.au

News from Port Ash

March 2008

Port Ash has been very busy so far this year with an interesting mix of Australian and North American Pilots and Masters. Late last year we hosted our first Chinese and Thai Pilots – an interesting trend. The RAN continues to use the Centre for both navigation courses and individual ships' workshops. We delivered our first 2-day Refresher Course just before Christmas for eight Senior Queensland Pilots staggered over one week and understand that more Refresher Courses will be required later this year for senior pilots from other states.

The new five seat twin-screw model 'Centurion' has developed well as a training ship in twin-screw form. There are very few of the type in Australia and most of them are either warships or trade across the Bass Strait. So far the RAN has used the model both as TOBRUK and KANIMBLA/MANOORA in varying courses including workshops for bridge teams. There have been enquiries from the Bass Strait ships and we anticipate training of Masters will occur during the year. The model is regularly used during general courses to give pilots a taste of the type and experience piloting from a bridge-forward position.

In twin-screw single-rudder configuration the 'Centurion' is a real challenge to drive and provides all the difficult

handling characteristics of the type which is fortunately not common. Manoeuvring it in the narrow waters of Port Ash provides much entertainment for those watching from the wharf and the shiphandling experts on standby fore and aft...

Captain Andrew Traill has joined us as a regular Facilitator – readers may know him as a serving Reef Pilot who also relieves at Gove and Groote Island on a regular basis. Captain Traill brings a raft of new and relevant skillsets to the current group of harbour pilot facilitators.

We now have two technicians in the Boatshed, Roger Foster and Martin Willis. Neither have seagoing experience but join in the old oil-and-water banter like experienced engineers. Our original 'Chief' Dave Murray now works one day a week for health reasons.

The Centre survived unscathed from the one-in-thirty-year storm that flooded much of Newcastle mid last year and caused the stranding of the panama bulker 'Pasha Bulker' on Newcastle's Nobby's Beach. Apart from anticipated water in the low-sited Boat Shed for a few hours, there was no damage and flood drill worked as planned. If a course had been running, we would have lost half a day of on-water training.

Infrastructure expansion is planned this winter with the boatshed and canopy to be doubled in size to accommodate all ship-models under cover and provide more working space.

Cliff Beazley
22 March 2008

Goro Nickel

In the next edition Capt Bill Hoogendorn will tell us about setting up a new port from a green field site. Here is a synopsis of his tale.

Due to the remoteness of the construction site. Prony Port became the first piece of critical infrastructure to be completed. Material for the Site was sourced from every continent, with the module shipment from Batangas, the Philippines, alone accounted for 23 shipments.

Preliminary work was done with the New Caledonian Nautical Committee, which included the NC Pilotage Association on matters such as the navigation aids for the Bay of Prony, the orientation of the berths for manoeuvring and the tugs to be employed to assist. The Pilotage Association also had to increase their numbers to accommodate the increase in shipping projected for both the construction period and the ongoing operational phase.



Deeply regret to inform you...

It is with regret and haste that I write this letter to you, regret that such a small misunderstanding could lead to the following circumstances, and haste I order that you will get this report before you form your own pre-conceived opinions from reports in the world press, for I am sure that they will tend to over-dramatise the affair.

We had just picked up the pilot, and the apprentice had returned from changing the "G" flag for the "H" and, it being his first trip, was having difficulty in rolling the "G" flag up. I therefore proceeded to show him how. Coming to the last part, I told him to "let go". The lad, although willing, is not too bright, necessitating my having to repeat the order in a sharper tone.

At this moment the Chief Officer appeared from the chart room, having been plotting the vessel's progress, and, thinking that it was the anchors that were being referred to, repeated the "let go" to the Third Officer on the forecastle. The port anchor, having been cleared away but not walked out, was promptly let go. The effect of letting the anchor drop from the "pipe" while the vessel was proceeding at full harbour speed proved too much for the windlass brake, and the entire length of the port cable was pulled out "by the roots". I fear that the damage to the chain locker may be expensive. The braking effect of the port anchor naturally caused the vessel to sheer in that direction, right towards the swing bridge that spans a tributary to the river up which we were proceeding.

The swing bridge operator showed great presence of mind by opening the bridge for me vessel. Unfortunately, he did not think to stop the vehicular traffic, the result being that the bridge partly opened and deposited a

Volkswagon, two cyclists and a cattle truck on the foredeck. My ship's company are at present rounding up the contents of the latter, which from the noise I would say were pigs. In his effort to stop the progress of the vessel, the Third Officer dropped the starboard anchor, too late to be of practical use, for it fell on the swing bridge operator's control cabin.

After the port anchor was let go and vessel started to sheer, I gave a double ring Full Astern on the Engine Room Telegraph and personally rang the Engine Room to order maximum astern revolutions. I was informed that the sea temperature was 53° and asked if there was a film tonight; my reply would not add constructively to this report.

Up to now I have confirmed my report to the activities at the forward end of the vessel. Down aft they were having their own problems. At the moment the port anchor was let go, the second Officer was supervising the making fast of the after tug and was lowering the ship's towing spring down onto the tug.

The sudden braking effect on the port anchor caused the tug to "run in under" the stern of me vessel, just at the moment when the propeller was answering my double ring Full Astern. The prompt action of Second Officer in securing the inboard end of the towing spring delayed the sinking of the tug by some minutes, thereby allowing the safe abandoning of the vessel.

It is strange, but at the very same moment of letting go the port anchor there was a power cut ashore. The fact that we were passing over a "cable area" at the time might suggest that we may have touched

something on the river bed. It is perhaps lucky that the high tension cables brought down by the foremast were not live, possibly being replaced by the underwater cable, but owing to the shore blackout it is impossible to say where the pylon fell.

It never fails to amaze me, the actions and behaviour of foreigners during moments of minor crisis. The pilot for instance, is at the moment huddled in the corner of my day cabin, alternatively crooning to himself and crying after having consumed a bottle of gin in a time that is worthy of inclusion in the Guinness Book of Records. The tug captain, on the other hand, reacted violently and had to forcibly be restrained by the Steward, who has him handcuffed in the ship's hospital, where he is telling me to do impossible things with my ship and my person.

I enclose the names and addresses of the drivers and insurance companies of the vehicles on my foredeck, which the Third Officer collected after his somewhat hurried evacuation of the forecastle. These particulars will enable you to claim for the damage that they did to the railings of the No. 1 hold.

I am closing this preliminary report, for I am finding it difficult to concentrate with the sound of police sirens and their flashing lights.

It is sad to think that had the apprentice realize that there was no need to fly pilot flag after dark, non of this would have happened.

For weekly Accountability Report I will assign the following Casualty Numbers T/750101 to T/750199 inclusive.

Yours truly,
Barnacle Bill
MASTER

New Books

The Nautical Institute has published a monograph on "Bow Tug Operations with Azimuth Stern drive Tugs".

This monograph has been written by one of the world's leading towage consultants to explain the underlying reasons for a number of serious accidents which have occurred recently when using azimuth stern drive tugs in assistance either towing bow to bow or stern to bow. The sections cover: * general introduction and definition; * risks,

effectiveness and operational considerations when working bow or stern to bow; * the importance of experience and training to manage critical situations; * practical conclusions and recommendations; and * cases that have been investigated. The monograph includes a number of informative illustrations to explain the towing forces, interaction effects, design limitations, approach strategies and operational practices. The lessons are addressed to tug captains, shipmasters, pilots, tug operators, marine administrations and fleet managers to identify the potential dangers and ways to avoid them.

London P&I Club urges action on crew stress

By James Brewer

Tuesday 2 October 2007

A LEADING protection and indemnity club wants the maritime industry to pay more heed to accident-inducing stress and depression among seafarers.

London P&I Club underlined the need for recognition and understanding of psychological disorders in the latest issue of its StopLoss Bulletin. The club said: "Too often, such problems are not identified, or dealt with, as quickly, as knowledgeably or as sympathetically as is the case with physical illness and injury. This seems to be particularly the case in the context of the robust working environment typically encountered at sea. "The club views with concern the large numbers of seafarers now being repatriated early, suffering from a range of psychological difficulties. "One report suggests that as many as one in three repatriations which require a medical escort are related to such ailments."

It is a theme that has been increasingly identified by experts, including those working in the International Human Element Forum Alert, a project managed by the Nautical Institute and financed by Lloyd's Register. A recent report from the forum showed fatigue to be more complex than many believe, and that it can relate to environmental, operational, psychological and physiological factors that can affect the health and effectiveness of all aboard ship.

London P&I Club said that great care must be taken to protect the interests of all seafarers when dealing with the issues. In extreme cases, an afflicted crew member could be a danger to others on board, or might be a suicide risk. The bulletin said: "Help and advice is available to masters and crew in recognising — and dealing with those suffering from — mental illness.

"The World Health Organization's 'International Medical Guide for Ships'

provides brief details of symptoms to assist early recognition, as well as limited advice on treatment." More detailed, immediate assistance should be considered, of the type that can be obtained through Radio Medical Advice from organisations such as Italy's Centro Internazionale Radio Medico (CIRM).

The club quoted Francesco Amenta, CIRM scientific director, as saying: "When dealing with psychological problems, including stress, anxiety and depression, requests for medical advice should always be sought at the earliest opportunity.

"What may be lacking in the maritime culture is sufficient sensitivity to health problems. For example, shipping is much more sensitive to technology and safety issues than it is to health problems, so it is perhaps not surprising to hear about the difficulties being encountered in dealing with mental health issues at sea."

Cuttings from Lloyds List

EMPA warning over remote pilotage plan

Justin Stares - Monday 17 December 2007

EUROPE's maritime pilots have warned the European Commission against attempting to expand "remote" pilotage.

Bringing a ship in by issuing guidance over the radio must only be used under strict conditions when putting a pilot onboard is not possible, says the European Maritime Pilots' Association.

"We have to stress that there is no room for shortsighted experiments that jeopardise the quality of pilot services in Europe," Empsa said in its reaction to the latest commission policy paper.

"The safety of shipping and ports and the protection of the environment deserve a different approach than one on purely economic motives."

The association was reacting to a commission statement that "remote pilotage may become a valuable option in the future, to be developed in the framework of e-maritime".

The commission also said it was in favour of pilotage exemptions for frequent users.

"Pilot services welcome technological innovation and a possible commitment in this field by the European Commission to further improve training and pilot logistics," Empsa said.

"At the same time we are concerned about the reference made to 'remote pilotage'.

"Since this is only second best and more expensive than a 'pilot on board', it should only be seen as a temporary solution under strict limitations whenever it is impossible to have a pilot on board."

Remote pilotage is rare and only existed on certain approaches in Germany, the Netherlands and Belgium, said Empsa secretary general Chris Lefevere.

Pilots unable to board due to bad weather guide in ships from a vessel traffic station.

"It has been around for at least 20 years but it is only second best and is used when visibility is poor," said Mr Lefevere. "There are limitations to it.

"It can take minutes to see if a ship is responding properly by radar, whereas if you are next to the master you can see immediately."

The practice is limited to certain types of vessel. In pushing remote pilotage the commission had taken on a position forwarded by shipowners, Mr Lefevere said.

"Shipowners like to draw the comparison between maritime pilotage and air traffic control, but that is ridiculous," he said.

"For air traffic everything can be reduced to standard procedures. In shipping it is quite the opposite. There is hardly any standardisation of equipment or procedures.

"We feel the commission is putting the wrong accent on things. They should be talking about improving the technology of [pilot] launches or simulators."

Remote pilotage only exists in Europe and is used fewer than 50 times a year, he estimated. The practice is restricted to inbound vessels.

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If any of the above information is incorrect or if details change please forward amended information to the editor.

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Safe Passage offers a unique advertising opportunity for suppliers of goods and services to the pilotage and Marine industry. Safe Passage reaches a targeted selection of the industry and more than 300 copies are distributed to pilots, pilot companies both private and government, port Authorities and associated industry groups. Copies are now also being distributed to pilotage groups overseas. There can be significant benefits advertising industry related activities in this magazine. Listed below are the advertising rates for 2008.

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