



Reef Pilot - John Foley



Evan Farmer, Capt. Neil Farmer's son, practices new boarding arrangements soon to be adopted by the pilots at Port Botany.



President's report

On behalf of all AMPA members we extend our appreciation to Captain Kit Filor who retired from the position of Deputy Director of Surface Safety at the Australian Transport Safety Bureau (ATSB) this month. Kit has been instrumental in developing procedures which encourage a reporting culture in the Australian Maritime Industry. He was instrumental in formulating the International Maritime Organization (IMO) Code for the Investigation of Marine Casualties and Incidents. With the establishment of the Australian Transport Safety Bureau, the Maritime Industry has an independent body which will investigate marine incidents and identify both the active failures, where a person in the front line makes a mistake and the latent or systemic factors.

Kit has spoken at many AMPA conferences and workshops where he has readily shared experiences in marine investigations and has encouraged us to be aware of the "latent failures and seek to develop barriers in the operational systems". Kit, we hope you have an enjoyable retirement; however we also hope that you will still be available to share your experiences and knowledge at future AMPA workshops.

Maritime Safety Queensland has been able to develop reporting process based loosely on the ATSB model. Pilots in Queensland are encouraged to make reports which help the Pilotage organizations identify latent failures and thereby greatly enhance the management of risk mitigation in pilotage. The AMPA executive is making approaches to other State Maritime Authorities to encourage a similar 'just' reporting culture.

It is extremely concerning that Victorian Maritime Safety has chosen to take Civil Action against a pilot. In taking action against an individual, the regulator is not looking to change the underlying problems that allowed an incident to occur. The following comment made by Kit Filor at the AMPA workshop (June 2005) supports the proposition that:

"Perhaps, we too readily equate safety management systems with a legal obligation to fulfill a duty of care to employees and society in general. Never forget that such systems are there to protect you and me in our daily lives. If safety management systems become the accepted norm and a dynamic cultural feature of an organisation, it will of itself reduce the risk of accidents... If safety management systems are not dynamic, but become a stagnant backdrop to work, then collective blindness, rigidity of thought, decoy problems, rejection of external criticism, regarding outsiders as cranks, poor information processing, creeping non-conformities and disregarding warning signs of danger will bring the system
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Tim Turner, Greg Martin, Sue Blackwell and John Hirst.

Editorial Apology

In our last edition I omitted to acknowledge Mr. Greg Martin Sydney Port's CEO in our photo montage of the conference. Sydney Ports were one of the major sponsors for the recent pilots' conference. Safe Passage extends an apology to Greg. Another apology is due to Mr John Hirst for calling him Tim. Hopefully we can make amends by reprinting the picture?

Since the last edition the APL Panama was refloated, an Egyptian ferry sank in the Red Sea with a tragic heavy loss of life. More recently the Cougar Ace, a car carrier with about 5000 cars aboard settled at its angle of loll of about 80 degrees in the N. Pacific. It has since been towed to the Aleutians and righted. It is thought the ship was in the process of ballast water exchange when the incident occurred. Sadly a surveyor who went aboard to assist died in an accident. None of these ships were being piloted at the times of their accidents.

Thank you to everyone who has contributed to this edition, please keep the articles coming. My pleas seem to fall on deaf ears for news of piloting personnel in the ports as well as port news, I must assume you do not want such things mentioned?- Ed.

Special Points of Interest:

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Captain John C.H. Foley	15

Professional Forum - August 2006

Martin North – Hobart

martin.north@tasports.com.au

Simulators

The topic of ship simulator dedicated to pilot training is one that has been discussed by AMPA members over a few years now and it appears to be gathering some momentum. I was discussing this with AMPA President Rory Main a little while ago and it is apparent that for many specific pilots' objectives we need skilled, experienced, imaginative pilots sitting at the simulator's operator's seat. Like many other organisations Hobart Pilots have been using simulators for some time and we have found that our 'local' venue at AMC in Launceston is best run with an experienced pilot assisting the operator so as to vary the settings in a realistic way and to generate credible, stressful situations that require cool clear thinking and decisive action to resolve. Whatever the outcome of the exercise, valuable lessons can be learned particularly by way of a detailed forensic debrief. With the best will in the world the simulator operator alone cannot understand the nuances of a particular port or the ramifications of a ship system failure or a significant weather change at 'this' point as opposed to 'that'. Only an experienced pilot operating in familiar waters can bring that dimension to those sorts of intense training exercises.

To use Rory's words Hobart is using the simulator for 'recovery' simulations rather than just familiarisation with a port area or

basic ship handling skills. For the latter I believe that 'Cliff Beasley's' Port Ash manned models are probably the better option within Australia. By 'recovery' I am talking about placing the ship into a situation that would not normally occur, or one which a training pilot would avoid if at all possible on a real ship. In our case an engine or rudder failure near the bridge is a very real possibility that has happened and these are clearly best explored on a simulator. No rational master would let you lock the rudder over or stop the engine 600 m from the Tasman Bridge in a position similar to that shown below, yet this is exactly the situation that would require the utmost commitment to decisive action and a meticulous preparedness of thinking. Grounding is preferable to striking the bridge and extraordinary as it may seem we practice that outcome as one mitigating conclusion. It is clearly our responsibility, as Hobart pilots, to be prepared for just this sort of eventuality. How can you acquire such confidence without practice and still preserve the bridge structure? The answer is clear, focused coaching with highly trained and appropriately experienced simulator controllers. We would all be aware that this is the way that the airline industry does things, and although most airline pilots are regarded as anxious over their simulated emergency procedure training, there is no doubt that it is the best option available to them, and to us.

Technical questions

'Safe Passage' must end up in some unlikely places. I received the following e-mail a couple of months ago:-

I'm not yet a Pilot. I'm studying to become. In the last days of June there is the competitive entrance examination for the "Corporazione Piloti dello Stretto di Messina e del Porto di Gioia Tauro". I'm 34 years old. In the past 8 years I was for two years tug's Captain in the port of Gioia Tauro on ASD tugs 3110 4000Hp built at the Dutch Damen Shipyard. The last 6 year I worked as Chief Officer and Master on board 120 m ferries fitted with Voith-Schneider or Kamewa azimuth propellers sailing in Messina Strait.

I do not have access to "Safe Passage", I have heard about the forum on a page of the above magazine I have downloaded from internet, during one of my research. I'll be happy to receive some old copies, with inside ship handling technical matters and surely to takeout a subscription of the magazine.

DATA:

*Containership berthed starboard side alongside to a pier.
Length Overall: 290 m
Windage Area: 9280 m²
Height above the waterline: 32mtr
Mean Draft E.K.: 12mtr
Engine Power: 50000 HP
Wind on shore to the port of the ship: 15 Knots
Current on shore to the port side of*



Cape Delfaro 193 x 28 x 10m, approaching Tasman Bridge main navigation span from the north, about 600m off making 9k. The run of the surface current onto the Stb'd 1/4 is apparent looking through the legs to the right, which is why this ship is well over to starboard. From here she drifted across to the centre. A main engine failure at this point is manageable since she has enough way to steer through. Rudder lock is another matter, since the escort tug is only capable of overcoming about 10 deg of helm at 9k. The thing to balance is speed - high in case of engine failure so minimising set and often leeway - and low due to the effective speed of the escort tug. All this is best explored on the simulator.

Professional Forum

continued

*the ship: 0,5 Knots
Depth alongside the pier: 12,90mtr
Tugs available: Nr. 4 tugs of 3000HP
each fitted with CPP.*

QUESTION:

*Are the 4 tugs able to move sideways the ship against the wind and current at the speed of 1cm/s (0,01mtr/sec)?
Capt. Giuseppe Raffa*

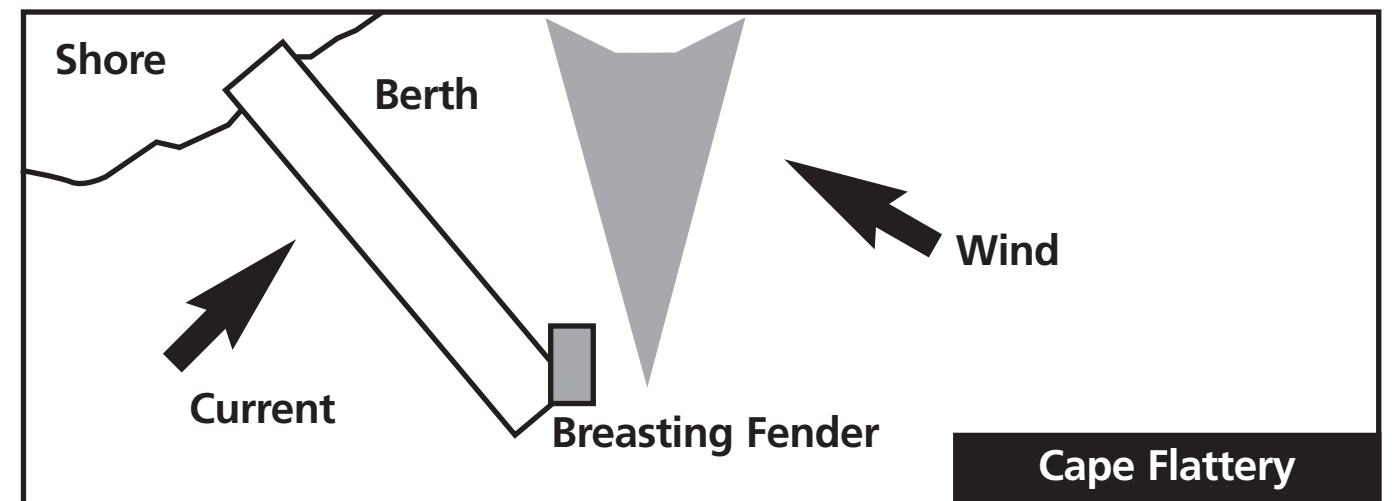
It very interesting that Captain Raffa refers to a 'Competitive Examination' in order to become a pilot. I have heard of this sort of thing before - in the USA I think - and it is a system of selecting prospective pilots that perhaps seems at odds with 'our' way, which is normally to select more on personality and then give them the knowledge and training to discharge the duties. Most people can be taught, but personality - or more specifically emotional intelligence - is well fairly set by the time a person obtains a Masters Certificate.

Still Captain Giuseppe Raffa's question is valid and poses some interesting thoughts. I have been unable to answer the question in a scientific way. Can Tugs totalling

12000 HP move this ship sideways against 15 k wind on 9280 m² windage and 0.5 k current on 3480 m² underwater cross section? Personally I doubt it but someone from a container port on a river may have the answer. Swanson Dock in Melbourne, Brisbane Fisherman's Island, Adelaide Outer harbour and Fremantle all come to mind. Tables exist for the windage, but I have had no luck in finding a formula for current broadside on. It's all about water pressure and hydraulics. I also wonder if the question is a realistic one or if it is set just to get applicants thinking about the various forces. With such onshore conditions it may be better to pull the bow off and drive the ship out with its engine, if sufficient room exists. Of course, you would also have to question the design of this berth, being at right angles to the current. Please send in e-mail if you have any views or suggestions for Captain Raffa.

The question puts me in mind of Cape Flattery north of Cairns where the open jetty is set across the prevailing current, but parallel to the prevailing wind. Now it is some time

since I was there so I apologise if things are different today. Tugs were not available so some fairly advanced and self-assured ship handling was called for. The Panamax sized ships were brought in - in ballast - with the current, sometimes up to 1 knot, acting off the one sided berth. Wind is normally down the berth from seaward and if angled correctly to the wind the ships could 'sail' up current. Using great skill pilots change the angle of the ship to 'tack' onto the berth, or to 'Set' off. An anchor was dropped and once the ship landed on the breasting-fender lines were run to pull the ship alongside. Departure was simple - if exciting - as singling up often resulted in great tension on the remaining lines and the ship strained to move off. Current once at a loaded draft was by far the predominant force over the much reduced windage. Experienced pilots were - and I presume still are - able to work this very challenging place even in conditions outside of those it was designed for.



Finally I was recently invited to attend a fairly high powered scientific workshop here in Hobart dealing with issues arising from global warming and the consequential rise in sea level. People from CSIRO and other scientific bodies mingled with National Parks delegates, Council engineers and academics. I learnt that certain older parts of Hobart have storm water drains to seaward of the shoreline and progressively marginally higher tides together

with aging infrastructure is resulting in an ingress of seawater, and subsequent overloading of storm water pump stations, particularly through the night when domestic waste water is at its least. Amongst the many voices who recognised slowly rising seawater level as problematic due this sort of thing I was alone in seeing a benefit - to ships carrying capacity. These very well informed people were most surprised at the TPC concept as applied to ships, particularly that a

10 cm rise in sea level meant an additional 500 tons on a Handymax type ship and much more to Cape sized vessels. I did also suggest that the City Council write in, requesting a night curfew on ship movements in the port, on the basis that the ships wash pressure wave might overload the foreshore storm water system. They declined and alas it looks as if we must still work nights despite global warming.

Tug tow rope systems and planned maintenance procedures

The other topic that is relevant, and that I will touch on here, is the tow rope systems in use in Australia. I would also like to also explain some of the specific techniques used to join different types of rope together.

The systems in use in our region are generally a mother or main towrope and that varies in length from 90 meters to 110 meters. This rope varies in size from 96mm twelve or eight-strand mixed fibre rope, to 80mm or smaller double braid or parallel cored polyester. This mother line will then have a Plasma or HMPE grommet of between 11 and 22 meters secured to the outboard end of the mother line.

Experience has shown us that in our region that 44mm Plasma 12x12 is an acceptable size and strength rope for grommets. Initially we tried smaller sizes, but these did not give the

return in length of service that the cost demanded.

This size rope is large enough for ships crews and pilots to accept on sight. It is also big enough not to jam under roller fairleads. There are still the occasional ship's crews that try to heave the grommet in, like a messenger up on deck, but this is now the exception. This size of Plasma will give a calculated strength of 242 Tonne.

There are also still "Lash-up" tugs in service in Australia. They generally use eight-strand polypropylene ropes although a few are moving to twelve-strand polypropylene/polyester mixed fibre ropes which enable them to have a lighter rope with out comprising on strength.

We are just starting to see the introduction of indirect towing as a routine in ports in Australia and as such no specific tow rope systems have been introduced. (Most of this work is currently of the passive escort type.)

I am aware that in the US, many tugs

are fitted with either all HMPE main hawsers and tails or a combination of HMPE and nylon or polyester ropes. These tugs will often be fitted with the Render/Retrieve type winches particularly the more modern and recent builds.

As we are currently having a phase of new builds of tugs coming into service in Australia where the average bollard pull of these new vessels is in the region of 65 Tonne to 70+ Tonne. Hence there is an increased market for Plasma (HMPE) type tow ropes to be used as the total tow rope, but no tug companies have yet embraced the concept of Render/Retrieve winches so there are some challenges in dealing with the lack of elongation that is a characteristic of this type of rope (This will need to be addressed in the near future!)

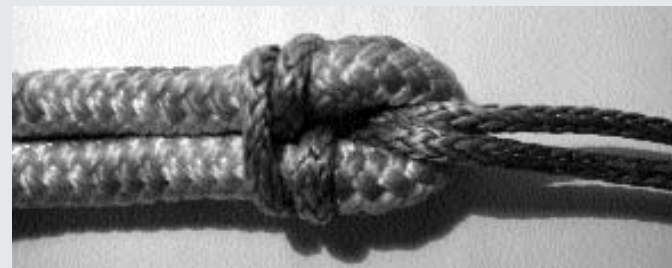
We have found in Australia, by undertaking trials, a few simple methods of connecting the smaller diameter HMPE lines to the Mother lines that may be of interest, so I will explain these to you.

CONNECTIONS BETWEEN GROMMETS AND MOTHER LINES

The connection between the grommet and the main line is generally with a "Strop Bend" often referred to as a "Cow Hitch". Some times a "Double Strop Bend" is also used. This distributes the load between the two sides of the eye on the Mother Line in a more even manner.



Strop Bend (often incorrectly called a Cow Hitch)



Double Strop Bend

NOTE: It is important when forming the Strop Bend to ensure that it does not roll into an actual Cow Hitch. If this does occur the bend should be reformed before the incorrect bend is allowed to have weight applied, as it is not only an unsatisfactory connection because of its tendency to present a very proud surface that is prone to abrasion, but the bend in this form is very difficult to pull apart.



Cow or Rolling Hitch

Tug tow rope systems

continued

Of course, it is quite easy to form these bends, but after one or two jobs with the tug applying its full power to the bend, the greatest challenge facing the tug crew is to undo this join!

Of course, all rope salesmen prefer the 'knife' method, but owners sometime frown if a rope that has undertaken less that the minimum expected work is cut and destroyed!

A Strop Bend that has to be released can be done so very simply by placing the eye of the mother line over a convent bollard and heaved in. This action will force the sides of the eye of the mother line apart and thus break the bond of the Strop Bend. The HMPE rope can then be worked free.

Some tugs may not be able to exert sufficient force with their winch and in such cases the eye of the mother line should be placed onto a shore bollard and the tug's own power in conjunction with the winch break should be utilised.

EMERGENCY TOW LINES

In Australia, we have developed various types of Emergency Tow procedures in collaboration with the towage operators.

We have a couple of systems that are used in Australia, but their effectiveness is only as good as the ability of the tug crew's capacity to deploy them.

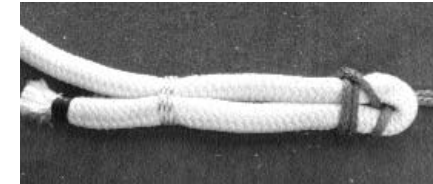
At sea the most fearsome situation we can confront is FIRE. As such, every ship's crew will practice their fire fighting routines on a regular basis. This is often a mandatory requirement. But, we should also encourage tug crews to practice the various techniques of setting an emergency tow line in the event of a failure of the main tow rope because a tow line failure can lead to significant loss and damage.

THE FIRST SYSTEM - NO EYE SPLICE!

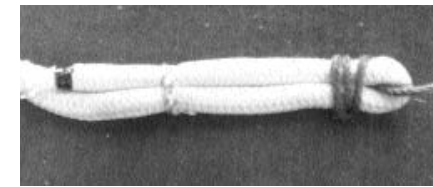
The first system we developed is one that enables a grommet to be secured to a damaged main tow line without the need for a pre-spliced eye. We called this the TN system, after the tug master that came to us

with the concept.

It involves securing the spare grommet to the main tow line with a bend known as a "Simon Bend".



Simon Bend lashed



Simon Bend front

This Simon Bend is formed in a generous bight of the damaged tow rope, and heaved tight with the tow winch. Once this is done the tail of the temporary eye that has been formed in the main tow rope should be secured to the body of the main tow rope to minimise further damage to the tow line and to make the recovery of the tow rope easier.

This system will not necessarily enable the Pilot to utilise the full power of the tug, but with practice it should enable the tug to apply effective assistance to the berthing or sailing manoeuvre reasonably quickly.

THE SECOND SYSTEM - PLASMA EMERGENCY TOW ROPE

The second method we have been working on with one of the major towage operators is an emergency tow rope system comprised of a length of 44mm Plasma 12 x12 (HMPE Rope) with two meter soft eyes in each end (this size Plasma rope is suitable for tugs up to 55 Tonne BP, of course a larger HMPE would be used for more powerful tugs).

The length is determined by the general operation in a specific port, but the idea is that this rope is stored with instant access to the forecastle in the event of a tow rope breaking. If needed, this emergency towrope can have one eye quickly fitted to the forward bollards and

the other passed up to the vessel. With practice, this deployment should only take a few minutes and the tug should be in a position to continue to assist with the vessel movement.

Of course, the key to the success of these emergency tow systems is PRACTICE, but the benefit is the ability to turn what could be a disaster into a successful evolution with a minimum of disruption. These systems, of course, should be practiced and used in consultation with the Pilots.

In the full paper I have included some information about the types of ropes available today and also how Tug crews can care for their rope and the types of factors that affect it. I provide some guidelines for developing before and after use routines to maintain their ropes as well as suggestions in regard to handling the rope.

This is an extract from a paper that I delivered at the 19th International Tug & Salvage Convention in Rotterdam in April this year.

The full paper can be read or downloaded from www.robert.underhill.com.au

Robert UNDERHILL
Defence and Maritime Sales
 Jeyco (1992) Pty Ltd.
 PO Box 1590, Bibra Lake DC. WA 6965
 U1-32 Howson Way,
 Bibra Lake. WA. 6163
 P +61 8 9418 7500
 F +61 8 9418 7511
 M +61 (0)40 998 8226
 E robert_underhill@jeyco.com.au
 W www.jeyco.com.au

Marine pilot transfers

A preliminary investigation of options

Marine pilots commonly use a pilot ladder when transferring on and off ships at sea. This transfer task has been identified as posing 'high' or 'extreme risk' with potentially catastrophic consequences. Just in the past year, 6 deaths have been attributed to this task. Results of a review of the limited available accident data from Australia and overseas suggest that the main mechanisms of injury and disease from the transfer are body stressing, being hit by objects, and falls from a height. As well as suffering fatalities, another consequence of these events has been early medical retirement due to serious and ongoing disabilities.

The aim of this project was to provide a preliminary investigation of the options for making these transfers safer, with less risk of personal injury and death for marine pilots and for other personnel involved with the task.

The specific objectives of this project included:

1. To determine the rationale for the current pilot ladder design, and identify if the existing research on ladder design is consistent with and supports the pilot ladder design or if changes are required to improve safety.
2. To identify and describe transfer and climbing systems used for similar tasks in other industries, including:
 - investigating fall protection systems; and
 - investigating mechanical methods for transferring personnel to and from heights.

In addition, an analysis of the mechanisms of injury from ladder transfers was undertaken to ensure that any control options were properly targeted to the specific risks.

The task of transferring at sea between vessels occurs within a complex legal web for occupational health and safety issues. This is compounded by the vessels being from a large number of different countries, with operators and personnel reportedly having varying levels of interest and skill in Australian maritime safety requirements, and in the steps needed to achieve a safe pilot transfer.

A review of the background to the task shows that the current system has not changed over hundreds of years, with the pilot continuing to transfer on a rope and timber ladder, with no mechanical assistance or protection. The rationale behind the design decisions for the current IMO ladder was not located, and it appears that the design evolved over many years and was most likely based on feedback from various stakeholders. The evidence indicates that the ladder design and rigging arrangements are not within the control of pilots as there have been many recommendations to improve the safety of the task proposed by pilots and their associations through various international forums, and these have often not been accepted. For example, the book 'Pilot Ladder Safety' written by a senior pilot provides a lot of practical advice for making the transfer task safer, but much of this appears to have been overlooked or forgotten.

The ergonomics and safety literature regarding ladder design and use confirm that the pilot ladder is extremely difficult to climb when compared with other ladders – even if it is stationary and on land. Given the added physical and cognitive demands on the pilot when the ladder is used in darkness and in adverse weather conditions, safe transfers are challenging. The literature suggests a number of design changes, including the provision of more toe room, reduced step height, different handhold systems, better attachment systems, and use of more modern and reliable materials. The accommodation ladder position and angle also requires review.

If pilot ladders continue to be used a serious and thorough investigation of fall protection systems must be undertaken. While these systems are clearly not infallible, they could at least offer one level of protection from falls from a height. These systems appear to be commonly used in all other industries where personnel are working at heights, although other working environments are unlikely to be as difficult as those faced by pilots working at sea. It is also evident that to achieve a suitable system demands skilled engineering by people who specialise in this field, and the task should not be left to others to fabricate or to install.

Given the inherent difficulties with fall protection systems, the use of mechanical access methods must also be further explored. The only time mechanical hoists were used for the sea transfer task appears to have been a very brief period more than 30 years ago. As a result of a number of systems failures and subsequent negative feedback from pilots, hoist systems quickly fell out of favour and are now almost extinct in Australia. While these early hoists clearly had problems, with the changes in technology since this time, there are likely to be improved methods that could now be applied to the process. It is recommended that this area requires further investigation before abandoning the concept altogether.

As well as hoists, a number of other 'mechanical' methods were reviewed for this project, including: passenger lifts and elevators; personnel baskets; and self-hoisting devices. Unfortunately, this preliminary review found that none of these methods appeared to be easily applicable to the sea transfer situation, however further examination is warranted. The use of helicopters for sea transfers was outside of the scope of this project, however a brief review of the status of this method suggests it also needs more serious consideration, including for transfers to vessels that do not allow landing, but require the – winch on – winch off' system.

In summary, this preliminary review of the options indicates that there are many ways to further improve the safety of the sea transfer task for marine pilots.

If pilot ladders continue to be used as a transfer method, the following short and medium term risk control options are proposed:

Short term

- Survey pilots regarding their experiences and opinions regarding transferring with the pilot ladder – This includes conducting a brief 'audit' of ladder rigging and compliance with the current requirements, and also to gather pilots' perceptions of the pilot ladder and rigging and where design improvements could be made to make the transfer task easier and safer.
- Further investigate the possible use of fall protection systems.

Marine pilot transfers

continued

- Investigate current safety gear – This should include a review of the personal protective equipment used by pilots and the safety equipment used on pilot boats. The aim is to reduce the severity of any mishaps such as falls onto the deck, falls into the water, being struck, and also to reduce the general wear and tear on the pilot's body from the physical demands of this task.
- Review and improve administrative controls – This includes considering and managing adverse weather conditions (such as having limits to work), and the effects of shiftwork and working in different lighting conditions such as darkness.

Medium term

- Continue to investigate ladder design features including conducting assessments in laboratory settings – This includes developing mock-ups of various designs and conducting scientific trials to determine their value. Any new designs would incorporate findings from the pilot survey as well as available data from the safety science and

ergonomics literature.

If pilot ladders are no longer used

It is also strongly recommended that ladder use is gradually replaced by another or other transfer systems. Helicopters are already well known and in use in many ports, and anecdotal reports suggest that this system is effective and poses less risk to pilots than the ladder transfer. Other 'mechanical' systems are not commonly in use, and these warrant further investigation for places where helicopters are not available.

Short term

- Further investigate the use of hoists and other mechanical systems

A number of additional recommendations regarding control options were presented by the author at the recent Asia-Pacific Marine Pilotage conference, and these also require investigation. These other recommendations include reviews of:

- Ship and pilot cutter design and their interaction including assessing if changes to cutter and/or ship design could facilitate safer transfers, and reviewing

communication systems and ship preparation with regards making a lee and ship speed for the transfer etc. The role of cutter crew and ship personnel in the task should also be reviewed, ensuring the pilot has appropriate assistance where and when required.

- Training and practice in the transfer task – including assessing and ensuring the pilots' functional fitness for the task so that neither the pilot nor the crew are placed at additional injury risk; and providing pilots with appropriate remedial assistance to help them to achieve safe work methods.

In conclusion, the findings of this preliminary investigation indicate that there is a lot more work to be done to thoroughly investigate ALL of the options that may assist in making sea transfers safer, and there is a need for scientific testing and user trials of any changes. In this way the marine pilotage community and other personnel involved with the transfer task can be confident that any changes do not introduce new risks, but eliminate or reduce the current health and safety problems with this task.

Thanks to Health & Safety Matters Pty Ltd, report to the ATSB, July 06. – Ed.

President's report

continued from cover

undone. Safety management is not necessarily easy, but it is worthwhile and essential at both an individual and collective level."

The Korean Maritime Pilots Association (KPMA) has analysed pilotage systems around the world and believes that the work being done by AMPA is far ahead of anything being done in other jurisdictions. KPMA has sought to sign an exclusive MOU with AMPA to join with us in the continuing development and modernization of our profession.

It is fitting that the MOU will be signed in Brisbane (on 15th September). Brisbane pilots have been prominent in driving many of the changes that AMPA has been championing. They are supported by and work closely with a very enlighten maritime regulator (MSQ) and is a tremendous

model of how maritime safety should work.

Australian Pilots are recognizing their function as *risk managers* and, in many ports pilots are working with the Port management to enhance safety management systems. To assist in developing these systems further, the next AMPA workshop will be on Human Factors. AMPA encourages all Ports in Australia to work cooperatively with the Pilots to develop operational systems which recognize the hazards in handling ships in their ports.

The skill of the pilot takes years to develop and a large part of this skill is the knowledge of the Port, from the operational and the mariner's perspective. Regulations, Acts, Codes and procedures have been developed over time to ensure the highest standards of pilotage in our ports.

AMPA is concerned that some Port Authorities may see the perceived lack of qualified Master Class ones as a reason to dilute the pilot training program of pilots and employ individuals with minimal knowledge of our industry. To assist Ports to access suitably qualified prospective pilots AMPA has developed a database of Associate Members. Therefore any persons who are interested in becoming a pilot in Australia can join as an Associate member and notify AMPA of their wish to be included in the 'prospective pilots' list.

Lastly I would like to welcome the Port Phillip Sea Pilots into AMPA. We look forward to your active involvement in developing professionalism in pilotage in Australia.

The four stages of learning and development

Capt. Neil Farmer – Sydney Pilot

During our career, all pilots will take part in coaching and training new pilots. This is a more complex process than we might realise and as our intention should be to maximise the learning process we must be aware of all aspects of learning. Jule Fuller presented an interesting paper on learning at the pilotage conference earlier this year hopefully made us all more aware of the importance of how we train as well as what we train. She made us aware that we all have different learning styles and our pilot training techniques should therefore address these different styles.

Jule also described to me the four stages of learning and I felt it was important to keep this in mind when coaching and leading new pilots. As new pilots come to the profession with many years experience at sea I believe it would be safe to assume that most would skip stage one.

I also believe that the danger period for new pilots is when they progress from stage 3 to stage 4 with a burst of over confidence. Most pilots would agree that this happens after three to four years and we should bring this to the attention of new pilots and possibly relate to them some of the frights we had at that stage.

Competence refers to skills and knowledge.

Commitment refers to a person's confidence and belief that they can perform the task unassisted.

Stage 1 - The person has **low competence and high commitment** therefore we refer to them as **unconscious incompetent** because they don't know (unconscious) that they don't know (incompetence). Enthusiastic beginner is another term for them and we never let them loose unsupervised because they can create havoc.

Stage 2 - The person has **some competence and low commitment** and we refer to them as **conscious incompetent**. What happens is as they progress they realise they don't know and their confidence is now low as a result of now knowing that they don't know.

Stage 3 - The person has **high competence and variable commitment** and they are known as **conscious**

competent. What happens here is that although they have the skills to do the job they sometimes doubt their ability to do so. Now a person could be at stage 4 and regress to stage 3, if they are de-motivated by either externally or internally such as if someone was to have an accident or incident they would naturally lose confidence in their ability to do the job at certain times. Although they have the skill they doubt themselves and therefore regress on the learning development ladder.

Stage 4 - The person has **high competence and high commitment** and are referred to as **unconscious competent**. They just perform things automatically there is no need to think about performing the task (unconscious) and because of this they certainly don't doubt their ability in any way and nor should they.

Attached to each of these stages of learning is a model for leading and coaching people. The idea is that you diagnose a person's development level and then apply the appropriate leadership style to maximise the person's performance and move them along each of the stages as efficiently as possible.

Direction refers to telling someone what to do, how to do it, when to do it.

Support refers to giving positive encouragement and feedback on how well they are doing.

Stage 1 - low competence and high commitment needs **high direction** to compensate for the low skill and **low support** because they already have high commitment thus they already believe in their ability and don't need any more encouragement or support

Stage 2 - some competence and low commitment needs **high direction** as they have only some competence and **high support** because they now doubt their ability to do the job.

Stage 3 - high competence and variable commitment needs **low direction** because they have high competence and **high support** because they sometimes don't believe in their high skill level.

Stage 4 - high competence and high commitment needs **low direction** and

low support due to the fact that they have both skill and confidence. These people are the best to manage as you can just allow them to get on with the job. A leader's job is to get everyone to this level in all tasks. If a leader over manages these people it is known as external de-motivation and causes them to regress to stage 3 or if something happens that affects their confidence (internal de-motivation) then they can also regress to stage 3. **The quickest way to get them back to stage 4 is to encourage and remind them of their past skill level and place them in situations where they can demonstrate these skills with lots of support and encouragement from the leader.** After all they just have to recapture a former belief which tells them that they can perform the task very successfully.

Finally

With the introduction of Standard Operating Procedures, I believe that training now takes on another dimension. On the job training will be focused on staying within these safe parameters detailed in the SOP's and a common "comfort zone" will evolve. As we know, the measure of a good pilot is the ability to recognise when he or she is outside his own comfort zone and has the ability and skill to recover and return to this comfort zone safely. All pilots will be confronted with this situation during their career when things go wrong. Simulator and Man Model training will be the only opportunity for pilots to explore the outer boundaries of the common comfort zone and test their ability to recover in preparation for the time when they have to deal with potentially catastrophic situation.

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The application of bridge resource management

(The Practical Approach from a Pilot's Perspective) By Captain K. Fuge, Brisbane Pilot.

As a pilot thinking about this subject, I asked myself this question. "Does it mean how we'd like to do it, or how we actually do it, or how to make the best out of limited resources?"

In 2004 I attended the Star Cruises Ship Simulator in Port Klang, Malaysia to participate in a Competency Audit for Maritime Pilots. This course consisted of a 5 day simulator course examining BRM methods and using them in a variety of exercises under varying degrees of stress. All Star Cruises bridge teams attend this course for training and the team work achieved by this training is very evident when piloting their vessels.

Following the simulator course I sailed on Superstar Virgo on a 3 day cruise out of Singapore to observe the BRM methods and how they were applied. The bridge team during berthing and sailing consisted of captain, staff captain, 2 watch officers and lookout, all of whom had been trained at the Star Cruises facility in Port Klang. There were formal briefings involving all members, closed loop communications were used in English, between the three nationalities involved, challenges were invited if the plan was departed from and a debrief followed where the outcomes were analysed. Pilots were invited into the bridge team as an extra member, but most just let the events happen around them without integrating fully. Even without the pilots involvement, the team operated efficiently and effectively and to an external observer was most impressive. An ideal standard to aim for.

In practice well trained bridge teams are in the minority and as a pilot I aim to get the best out of the resources that are available. One thing I can do is to maximise my own resources as much as possible. This process may start ashore while waiting to board by checking the latest information available from Notice to Mariners, berth and channel surveys and expected weather conditions.

On the way out to the vessel, I listen to the VHF exchanges between pilot launch and bridge team and from this

I can gauge whether to expect some language difficulties which may affect BRM performance. The standard of the pilot ladder and the way it is rigged is also an indication of performance efficiency to be expected. If I expect to be using a tug forward of the bridge, I take mental notes on my way to the bridge of what bits and leads are available to make it fast to and note what the SWL is, if displayed. All this information is adding to my own resources should they be needed.

A 4,100 TEU container vessel usually involves a climb of around 8 meters up the pilot ladder then another 90+ stairs to the bridge, invariably in the hours of darkness. Pilots of advancing years are usually out of breath when they get to greet a silhouette of unknown age or nationality with an outstretched hand which may miss it's first attempt at contact. This is not an ideal situation in which to establish a business relationship. The first five minutes on the bridge is one of the most important parts of the pilotage.

Before any attempt is made to initiate a Master/Pilot information exchange it is crucial to confirm that the vessel is in a safe position and on a safe course. It is important to be friendly and to impart confidence without appearing aloof or unapproachable. A good way to start is to request the Pilot Card and confirm the drafts and vessel particulars. Some ship's officers are only interested in their Safety Management System which requires the pilot's signature and as soon as this is obtained the card is quickly removed from the pilot for filing. Most pilots are now prepared for this and request that they retain possession of the document for their reference during pilotage. Bridge Teams in uniform with rank insignia is very beneficial to pilots so it is apparent who the Master is and it maybe someone other than the best English speaker. Comparison of Passage Plans can now take place so both the bridge team and pilot share the same mental model with limits and responsibilities defined.

Closed loop communications should be encouraged and challenges invited from anyone that is concerned that the plan is not being followed. It should be confirmed with the master that the pilot has the navigational con of the vessel (in a compulsory pilotage

area) and the time logged.

Closed loop communications can be enforced by repeating any unacknowledged order or response until it is acknowledged in some form. Contingency plans impart confidence to a bridge team as it shows that the pilot has thought through most situations that are likely to occur. Some form of speed prediction approaching restricted channels or berths gives the bridge team a comfort level in knowing what speeds the pilot intends to navigate at. If a master suddenly starts quoting GPS speeds during approach it usually indicates a level of concern.

On longer pilotages watch changes should be monitored by the pilot. Whilst most Passage Plan details are passed on, the invitation to challenge rarely is. If this is omitted it should be reinforced by the pilot to the new watch along with a briefing if necessary.

One of Brisbane's Standard Operating Procedures is to confirm a course alteration waypoint by more than one means (ie visual, radar, electronic chart) and confirm the next course with the bridge team before altering course. This is promoted by alarms set up on the waypoints of an ECS at 0.7 miles and the bridge team advising the pilot that the vessel has reached this position by radar monitoring. In the event that advice is not forthcoming from the bridge team due to distraction or disinterest it needs to be stimulated in some form. This can be done by the pilot pointing to the waypoint navigation aid and stating... "That is ABC Buoy next course is 123 - do you agree"? This obviously requires a "Yes/No" response and attempts to rectify the deficiency.

Situational Awareness is probably one of the key skills that a pilot adds to the bridge teams resources due to his local knowledge and his/her ability to think ahead and predict what is likely to happen in 30minutes time.

A pilot's situational awareness can be summarised as follows:
A PILOT POSSESSES ENHANCED SHIP HANDLING SKILLS AND JUDGEMENT AND HE USES HIS JUDGEMENT TO PREVENT GETTING INTO A SITUATION WHERE HE MAY BE REQUIRED TO DEMONSTRATE HIS SKILLS.

Confidential marine reporting scheme

The ability to report unsafe conditions, practices or procedures aboard ship in confidence is available to everyone and anyone in Australia interested in a safe shipping industry. The Confidential Marine Reporting Scheme offers the opportunity for pilots, ships' crews, waterside workers or the general public to report on matters of safety that concern them, without risking reprisals from the ship owner or management.

The scheme was a recommendation of the Review of Great Barrier Reef Ship Safety and Pollution Prevention Measures that was set up following the grounding of the Malaysian flag *Bunga Teratai Satu* off Cairns in November 2000. The scheme is primarily aimed at pilots and other seafarers.

A confidential reporting system is a valuable tool for managing and promoting operational safety. Once accepted as a legitimate and trustworthy system by the industry in which it operates, it can enable visibility and the potential redress on a range of matters such as:

- (a) unsafe or unsound practices;
- (b) poor employee attitudes to safety;
- (c) unsound policies;
- (d) deficient rules, regulations or documentation.

The reported safety concerns can be brought to the attention of individuals or agencies with the power to address the safety issue.

- Any confidential reporting scheme must:
- protect the identity of the reporter;
 - be voluntary; and
 - protect the reporter from punitive actions.

What may be reported in confidence?

Any matter that could, or would, endanger the safety of individuals, crews, the ship or the environment may be reported.

What is not reportable

- Criminal acts and industrial relations issues
- Matters that responsible persons (a master, owner, agent or pilot) are already obliged to report under Australian law.

Where a person has a statutory duty to report an unsafe condition a confidential report cannot be accepted. An example of this is the obligation placed on Coastal Pilots by Marine Orders Part 54.8.2.1.



Bunga Teratai Satu aground on Sudbury Reef. 2 November 2000

If a pilot, during the course of his or her duty, becomes aware of a deficiency relating to a ship that renders, or has the potential to render, the ship unseaworthy, he or she must report the deficiency to an AMSA surveyor as soon as practicable.

Assessing the seaworthiness of a vessel is a matter for judgement of individual pilots. However, some safety critical issues may be assessed as not affecting the overall seaworthiness of a ship, such as a faulty pilot ladder. The reports which will not be accepted under the scheme are detailed on the back of the reporting form.

How the scheme works

The scheme is a confidential scheme. **It is not an anonymous scheme.**

Reports will be accepted by toll free phone (1800 020 505), e-mail (cmrs@atsb.gov.au), fax (02 6274 6461) or on-line www.atsb.gov.au/notification/cmrs/cmts_online.aspx, or by posting the form attached to the information sheet to the Australian Transport Safety Bureau (ATSB). All reports are received and processed in a secure office.

A preferred method for the ATSB to contact a reporter must be provided. Reporters should be careful to use a means of contact that will not lead to them being identified, other than by the CMRS officer. Each report will be de-identified so that there is no reference to, or any information that could, identify a reporter. The report will then be assessed and there may be a need to contact reporters for more information. While balancing the need to protect the reporter's identity the scheme must also ensure, to the maximum extent possible, that each

report is accurate and is submitted only for the purpose of promoting safety. It is important that the scheme deters people from making vexatious reports with false information or reporting a matter purely to pursue an industrial dispute.

Where an unsafe, or potentially unsafe, condition exists the de-identified report will be forwarded to the Australian Maritime Safety Authority for follow-up action. If there is a concern that the identity of the reporter may be deduced from the report, the reporter will be contacted and the risks and options for reporting discussed.

As the reporter's identity is destroyed, the reporter may seek a reference number which allows him or her to contact the CMRS office to enquire what action has been taken. In this way the reporting loop may be closed.

Importantly the scheme has legislative backing, which provides that a report received under the scheme is not subject to the normal rules of public access and the requirements to retain documents. Importantly the information is also exempted from the Freedom of Information Act.

ATSB's Role

The role of the ATSB is that of a 'firewall' around a post box. The ATSB has no regulatory or enforcement role and hence is an independent party. This is further reinforced by separating the confidential reporting office being separated from the other ATSB functions.

The ATSB urges pilots to make use of the scheme to improve safety at sea.

Forthcoming IMPA Congress in Cuba

Hi All,

Last week at the invitation of our Cuban colleagues I visited their country to be with them on their launching of the 2006 Congress. They offered wonderful hospitality, good planning and an open approach to suggestions and ideas. The Congress hotel Melia Cohiba was used as a base and all of the facilities for the Congress were shown and are entirely appropriate. The hotel is a couple of miles from 'Old Havana' but taxis are available at any time and are inexpensive. There are a variety of rooms available from a normal double to a Royal Suite and it will be the venue for a number of heads of state attending the non aligned nations meeting in September. Plans for staging the congress are now well advanced and it is clear that our colleagues have the full support of their management in this exercise. As a result of our talks there will soon be links to the Cubanacan Travel agency website

and the Sol hotels website on the IMPA Congress web page. This will enable anyone wishing to extend their stay either pre or post conference to do so simply and an idea of the range of options. Communications between Havana and the Wellington are now both speedy and effective. What became clear at the opening event, which took the form of a reception with speeches preceding it, was that our congress is important to a much wider public. I had been made most welcome on the previous day at the Ministry of Transport where a number of the most senior members of the maritime administration all declared their appreciation of the visit. At the reception the Minister for Transport Sr Carlos Manuel Paso shared the stage and expressed the governments full support of the event and promised help if needed. My remarks with translation were broadcast on the radio news that evening-in full! fortunately it was a

brief speech. Significant efforts are being made to restore the facades of old Havana and it is clear that there were several years of hardship some time ago. A number of ambassadors were present at the event and several are also expected at our opening ceremonies. The British ambassador made himself known at the reception and promised to assist if necessary as well. What is now required is a good supply of bookings, the first are trickling in and I would urge you to get your respective shows on the road in this regard. As well as a great congress, those attending are in for a truly fascinating tourist experience in a country which has only recently opened its doors fully to the wider world. Please pass on this message to your colleagues, see you soon.

All the Best
Steve Pelecanos
IMPA Vice President

Reprinted with thanks from Lloyd's List Daily Commercial News – Pilots 'deserve every cent'

Sir

I refer to your article, "Newcastle pilots to match Sydney pay" (LLDCN, June 8 2006).

It seems to be one of those human frailties that, no matter which side of the table you're sitting on, negotiations over remuneration levels, always tend to get somewhat emotive.

Many compare their own remuneration levels with others whom they believe to be in similar professions.

It is also true that many of us think that our own job is very important and that we deserve – or at least would like – more than we currently earn.

I think that, try as we might to avoid it, there is generally some undercurrent of jealousy that underpins our thinking.

I am not in a position to make judgements on other people's remuneration levels in our industry, except to note that the maritime industry generally tends to remunerate its workforce at levels that are higher than many other industries.

You can, for example compare someone in a management role in a port authority to a similar role in say, the retail industry.

For marine pilots, the task of

comparing is somewhat more difficult but those academics who spend their life looking at risk and pressures placed on individuals, class ours as a "highly operational, time-critical" profession and tend to compare the work we do to that of airline pilots, surgeons, and those professionals who work in similar roles in the oil and gas and nuclear industries.

There are those non-mariners in our industry who do not have the capacity to intimately understand the pilots' role; they tend to feed off each other and eventually believe their own hype.

This behaviour is harmful to the harmony of the industry, but nevertheless an unfortunate reality with which pilots have learned to exist. I feel competent and comfortable in commenting on pilots' remuneration levels.

I have firsthand knowledge and experience of the effect of our job on individuals' families, their health and the pressures under which they work. We should also not lose sight of the fact that it takes some 20 years of education and experience for an individual to arrive at the threshold of a marine pilot's job.

Every day, the safe transit of billions of

dollars worth of ships and cargo through the highly sensitive marine environments of Australia is entrusted to the care of our pilots. I fully support the outcome of the remuneration negotiations in Newcastle.

I am naturally of the opinion that the pilots who work in that port deserve every cent they get.

However the comparison to the remuneration of other private pilot companies is inaccurate and can only serve to add to the hype that sometimes floats around our industry.

I wish to categorically attest to the inaccuracy of the article in this regard and point out that the matter might have been clarified with a simple phone call by its author.

I would also like to assure your readers that Australian marine pilots' salaries are meagre when compared to their colleagues in other parts of the world.

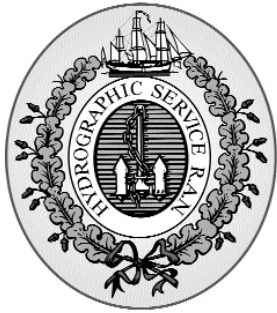
Australian pilots' salaries (as a multiple of the national average wage) are in the lowest quartile among the OECD countries and if we include all the other second and third world countries, our remuneration levels are in the lower half.

Steve Pelecanos
Chairman – Brisbane Marine Pilots

Charting Australian Waters

The Australian Hydrographic Service

ROYAL AUSTRALIAN NAVY



The Australian Hydrographic Service (AHS) is the Commonwealth Government agency responsible for the publication of official nautical charts and other nautical information required for the safety of ships navigating the seas and oceans around Australia.

This is the first of a number of articles intended to inform mariners of the important roles and activities of the AHS. The initial editorial will provide an outline of the roles of the AHS, its personnel and its assets. Future articles will cover Hydrographic Surveying, Nautical Charting and Electronic Charting.

History

The AHS has its origins in the British Admiralty Hydrographic Office, which was established in 1795. The Admiralty carried out surveys and published charts for the Australian coast throughout the 19th century in support of the defence and commercial development of the colonies. The Royal Australian Navy (RAN) assumed responsibility for hydrographic surveys in 1920, and for the publication of charts in 1942. In

1946 Federal Cabinet formally appointed the RAN responsible for providing Australia's hydrographic service. Today the AHS remains part of the RAN, continues to conduct hydrographic surveys and publishes a suite of paper and electronic charts and nautical publications.

Roles

The Australian Hydrographic Service comprises the Australian Hydrographic Office (AHO), Hydrographic Ships (HS), Survey Motor Launches (SML), a Fokker aircraft fitted with a Laser Airborne Depth Sounder (LADS) and a Deployable Geospatial Survey Team (DGST). The AHS fulfils both a military and a national function.

Military Role

Navy hydrographic surveying personnel collect data that is used to produce Nautical Charts and supporting products as well as hydrographic Military Geospatial Information (MGI). This is used to maximise freedom of manoeuvre for warships and submarines. It can be combined with other geospatial information to assist strategic and tactical level planning for Australian Defence Force (ADF) operations.

National Role

The Australian Hydrographic Service (AHS) is the Commonwealth Government agency responsible for charts, tide tables and other nautical publications for all ships navigating the seas and oceans around Australia. AHS charts cover more than 30,000 km of Australia's coastline and more than one eighth of the earth's water surface, stretching from as far west as the Cocos Islands in the Indian Ocean, east to the Solomon Islands and from the Equator to the Antarctic.

Hydrographic Personnel

Navy hydrographic officers and sailors undertake extensive training to prepare them to man and operate the ships and equipment. At the higher level, both officers and sailors are awarded internationally recognised hydrographic surveying qualifications. Some of the tasks undertaken by hydrographic surveying personnel include:

- Manning Navy's purpose-built hydrographic ships and units.
- Operating sophisticated digital data acquisition systems.
- Inshore survey operations including the erection of tide poles, fixing positions using theodolites, electronic distance meters and establishing Differential Global Positioning System (DGPS) reference stations.
- Survey related seamanship tasks including; seafloor sampling, observing water clarity and the deployment of current meters and tide gauges.
- Conducting hydrographic surveys.

Defence civilians compile nautical charts at the Australian Hydrographic Office for use by commercial and recreational ships and vessels, as well as those specifically intended to support Defence operations and exercises. Hydrographic ships and units will also compile charts while deployed as part of a task force to support short notice operations. Most recently, this role included surveying then producing charts of tsunami affected areas in Sumatera to permit landing of disaster relief stores and equipment.

Locations and Activities

Australian Hydrographic Office (AHO) Wollongong

The Australian Hydrographic Office is headquarters for both military and defence civilian personnel in the Australian Hydrographic Service. The primary functions of the AHO are data management and quality assurance, production and delivery of hydrographic products, technical development and the coordination of policy, plans and procedures to support operations at sea.



A Modern Hydrographic Office

Charting Australian Waters

Continued

Hydrographic Ships - Cairns

Two 2500 tonne ships, HMA Ships LEEUWIN and MELVILLE, fitted with multi-beam echo sounders, carrying three 9 tonne Survey Motor Boats (SMB) and the ability to support a helicopter. The ships have crew of 57, with three crews rotating between the two ships.



Hydrographic Ship - HMAS MELVILLE

Survey Motor Launches - Cairns

Four 360 tonne launches, HMA Ships PALUMA, MERMAID, SHEPPARTON and BENALLA, operate in shallower and more confined waters. Survey Motor Launches (SML) generally work in pairs and are designed for operations in Australia's northern waters. The ships each have a crew of 14.



Survey Motor Launch - HMAS PALUMA (foreground)

Laser Airborne Depth Sounder Flight - Cairns

LADS is fitted in a Fokker (F27) aircraft and is capable of surveying extensive areas of shallow water (0-50m) in quick time. The unit consists of a Navy team of 8 survey staff, along with 9 contracted staff to support the aircraft and systems.



Laser Airborne Depth Sounder - Fokker F27

Deployable Geospatial Survey Team - Wollongong

This specialist team provides hydrographic support to the Fleet during exercises and operations. It is capable of deployment at short notice, and has worked in areas as diverse as the Antarctic and East Timor. DGST consists of a core team of 4, augmented as necessary for particular operations. A second team is being established in Cairns.



DGST preparing for surveys in Antarctica

Australia has one of the longest coastlines of any populated country in the world. The task of the Australian Hydrographic Service is to ensure mariners navigating in Australian waters are confident in the accuracy of their 'Navy' charts and publications. The charts and publications produced by the AHS have undergone numerous quality control checks and are fully backed by the Commonwealth of Australia. Mariners can be assured of the expertise employed by the AHS and therefore the accuracy of its products and services.

In the next article in the series about the AHS we will discuss the methods used to collect survey data. In subsequent articles we will include charting issues and the relative merits of official nautical products versus commercially derived products.

More information regarding the activities of the Australian Hydrographic Service, and its products & services, can be found on their website - www.hydro.gov.au

Port Authority not Liable for Pilot's Negligence

On 15 April 2002 the 87,500 GRT bulk carrier SA FORTIUS was entering Port Kembla in New South Wales, Australia when it struck the bulk coal terminal, causing damage of approximately AUD16 million (USD 12 million). The port is a compulsory pilotage area and a local pilot, Captain Stephen James, employed by the port authority, Port Kembla Port Corporation ("PKPC"), was on the bridge at the time of the accident.

The coal terminal sued the owners of the ship, Braverus Maritime Inc, in the Australian Federal Court. The owners, in turn, cross-claimed against, PKPC alleging that the accident was due to its pilot's negligence. We are grateful to Michael Fisher, a partner in the Brisbane law firm of Thynne & Macartney for a synopsis of the decision, on which the following report is based.

The judge at first instance ruled that the incident was the result of the negligence of both the master and the pilot. The court ordered that Braverus reimburse the terminal operator's repair costs, but upheld the long-established common-law rule (now incorporated into the Australian Navigation Act) that the owner and master of a ship are responsible for the negligence of a voluntary pilot, and that this exemption also covers compulsory "pilots", thanks to the wording of the act.

Braverus appealed, alleging that the trial judge had erred in confirming PKPC's immunity. At the end of December, the full court rejected the appeal. In doing so it upheld the first instance judge's finding of immunity. In this respect the decision is unremarkable. However the twist in the tail is that Captain James, while he did not lack the appropriate

qualifications or experience, was not actually licensed at the time of this incident. He should have been, and everybody involved believed that he was, but due to a bureaucratic oversight he was not.

Braverus argued that the fact that Captain James was unlicensed altered the legal position, and robbed PKPC of its usual immunity. It maintained that the immunity of the pilot and his employer relied upon the pilot being a properly licensed officer. If the pilot was not licensed, the employer would remain liable for the negligence of its employee in the same way as it is for any other employee. PKPC's response was that during a voluntary pilotage a temporary master/servant relationship was created between the master and owners of the vessel and the pilot: that relationship was not dependant upon the qualifications or licensing of the pilot, and operated to the exclusion of any pre-existing employment relationship between the pilot and the corporation. As the Navigation Act specifically makes the position for compulsory pilotage equivalent to voluntary pilotage, the employer was not responsible for the negligence of the pilot, irrespective of his status: compulsory or voluntary, licensed or not. The court agreed with PKPC.

Braverus also appealed on the basis of section 52 of the Australian Trade Practices Act 1974, relating to misleading or deceptive practices in "trade or commerce". Other sections of the act make a corporation liable in civil damages to those who have suffered loss or damage as a result of reliance upon misleading and deceptive conduct in breach of section 52.

Braverus argued that the pilot's conduct in giving advice to the master during the pilotage was in trade and commerce, since pilotage formed part of PKPC's overall business in running the port and the corporation charged a fee for such services. Braverus alleged that that pilot's advice was, in this case, misleading and deceptive because the pilot implied that following his advice would result in the vessel being brought safely to berth when (as it happened) that did not occur. Finally,

Braverus argued that because their master relied upon the pilot's advice he refrained from giving his own engine and steering orders that might otherwise have averted the collision.

The Court of Appeal agreed with Braverus that the pilot's activities came within the description of trade and commerce and that his conduct was misleading and deceptive. However the court agreed with the first instance judge who had found that, on the evidence produced in this particular case, the master had not placed relevant reliance upon the advice of the pilot. In fact the evidence was that at a particular point prior to the collision, the master had formed the view that the vessel was in danger and something had to be done to avert a collision. The reason he refrained from taking any such steps in time was because of his own negligent misjudgment and not as a result of any reliance on the pilot.

Overall, the decision is interesting in two particular respects, namely:

- a. The confirmation that pilot licensing is not of itself relevant to the immunity of the pilot's general employer for his negligence; and
- b. The perhaps slightly surprising confirmation that incorrect operational advice from a pilot is "in trade or commerce" and could constitute "misleading and deceptive conduct" in breach of the Trade Practices Act.

It is understood that the shipowners are intending to appeal to the High Court of Australia.

The full text of the decision can be found on the website of the Australian Federal Court at <http://www.austlii.edu.au/au/cases/cth/CAFC/2005/256.htm>

Courtesy of the Australian Legal Information Institute's Web pages.

The application for special leave to appeal to the High Court failed. Chief Justice Gleeson and Justice Calinan heard argument from the Fortius's QC and then the decision was made that if the matter proceeded to the High Court the chances of appeal success was minimal and therefore the appeal was dismissed. – *Ed.*

Captain John C.H. Foley Half a Century of Salt Spray

On 16th February this year Australian Reef Pilots' senior pilot Captain John Foley celebrated a maritime milestone - on that day 50 years ago he joined his first ship as a fresh-faced youngster of just 15. John had begun a sea-going career that would take him around the world several times and inevitably lead him to the peak of his profession - a pilot in the Great Barrier Reef.

The spark of ambition to join the illustrious ranks of the then Queensland Coast and Torres Strait Pilot Service, now Australian Reef Pilots, came early in his career. In 1957, after less than a year as cadet, his ship loaded sugar in Cairns and set sail for the UK. But the ship embarked a pilot to guide it through the treacherous 'Reef'.

"That was enough for me," said John, "The calm tropical seas, the maze of reefs, rocks and coral cays through which we weaved our way - and this majestic man standing by the compass giving soft voice and hand commands to the helmsman to keep us in mid-stream: it was all too much. I was hooked."

John had a blueprint for his life, and from then on all of his career moves were directed towards achieving one uncompromising goal - to become a Reef Pilot.

In order to achieve his goal John had to attain command of a ship and gain plenty of experience in Great Barrier Reef waters. The first step was to get the right qualifications. The 2nd Mates, 1st Mates, and Masters 'tickets' took time, but in June 1965 at the Sydney DOT offices, at the tender age of 25, he held in his hand that coveted 'pink slip' telling him he had 'passed his Masters Foreign-Going'. A week or so later a small, black, gold-engraved Certificate of Competency arrived in the mail.

John then looked towards Reef experience and promotion to captain. Both came earlier than he could possibly have predicted or hoped.

Within a week of obtaining his Masters ticket the tanker company Ampol Petroleum offered him a position as 3rd Mate. John was then Chief Officer with Union S.S.Co but he took it because Ampol had just opened a refinery in Brisbane and he and his wife Denise were keen to move back to Queensland. He was already accumulating that vital experience getting three consecutive voyages through the Reef.

But he had also been targeting local Queensland companies with ships operating in the Reef. John Burke Ltd was one of them. It was a family company with a pedigree in local shipping going back to the mid-1800s. The Gulf of Carpentaria was known by local mud-skippers as Burke's Flamin' Ocean. In late 1965 John Burkes found themselves with a new ship about to arrive and not enough captains. The Company responded to John's earlier overtures and offered him a command. His first Burke's command was the imported 'Alagna', a general cargo ship servicing the Queensland coastal ports and the outposts of the Gulf of Carpentaria and Arnhemland. He was just 26 years old; he was 'the Old Man', and he was the youngest man on board.

More importantly, every voyage took him through the Great Barrier Reef: he was perfectly positioned to launch himself into Reef pilotage, gaining both command and Reef experience with every seagoing moment.

At the age of 27 John had met all the basic qualifications to become a pilot. He'd already expressed his interest to the legendary Pilot Service Secretary Norman Rogers, but now he began to apply in earnest with each declared vacancy.

Successive vacancies came and went but 1975 John got his break He'd heard he'd been kept back - not for lack of experience but because he was considered too young.

The long-awaited interview with the Queensland Marine Board took place and shortly afterwards a License to Act as a Pilot with the Queensland Coast and Torres Strait Pilot Service arrived in the mail. John was 35 years old, the

second-youngest pilot ever appointed and his 31 year Pilot career began.

His first ship was the Blue Funnel Liner 'Rhexenor', a regular trader at the time. She was fast, had excellent equipment for the day, a very comfortable pilot cabin, good food, and superb personnel. The next ship, and the one after that, and many, many more over the years since - were quite the opposite.

Comparing his first 20 piloted ships with a colleague who had joined the Pilot Service at the same time, John noted that fifteen of them had either defective radars or no working radars at all. The standard of accommodation and food left a lot to be desired on most of them. Inevitably along came the ship with absolutely nothing working on the bridge, inedible food, a vermin-infested pilot cabin, and hostile bridge personnel.

His decade of concentrated Reef experience with John Burkes came to his aid with these second-rate ships. To prepare himself for the occasional 'cough-drop' he developed pilotage techniques based on the compass (gyro preferably, but magnetic if necessary) complemented by his depth of knowledge of the area, and underpinned by the best radar around - two Mark-1 eyeballs.

"The space-age brought satellite navigators, which then evolved into GPS; from then on no ship need wonder where it was; an LCD screen on a little grey box gave a position second by second - accurate to within 10 metres. The later DGPS is even more accurate.

The art of pilotage calls on knowledge, visual assessment and real-time judgement." But the next progression of GPS certainly did impact on pilotage. Electronic charts - the display of charted information on computer screens - were on their way and soon, like the gimmicky screen in James Bond's car, they dovetailed in the satellite-positioning facility provided by GPS.

There would be few pilots anywhere in Australia these days who don't embark on their ships with a laptop computer. On the bridge, they find a suitable platform, set up the computer, run a long lead with an aerial out to the bridge wing (or simply pop out their Bluetooth wireless aerials) and hey presto! In minutes they're looking

Captain John C.H. Foley Half a Century of Salt Spray

Continued

at a screen full of chart, complete with the planned ship's track and an outline of the ship itself tracking along it. John says: "It's marvellous equipment, but still only an aid".

In the late 1970s the QCTSPS commissioned a prominent historian - Jean Farnfield - to chronicle the Pilot Service story. Jean got started but soon after had to withdraw due to family reasons. John had been doing some historical research of his own, about a British naval officer who was the first to transit the Inner Route of the Reef as we know it today. He offered to take on the task. The result was 'Reef Pilots - the History of the Queensland Coast and Torres Strait Pilot Service', published in 1982 and launched by the Governor of Queensland, the late Sir James Ramsey.

John's writing paralleled pilotage from then on. 'Timeless Isle - an illustrated history of Thursday Island' soon followed. The book became a revenue-raiser for the fledgling Torres Strait Historical Society, which John had helped establish in 1977. John is the Society's sole Honorary Life Member and holds the coveted membership No.1.

The next book echoed several years of involvement by John in an exciting modern-day exploration development - Hydrographers Passage.

"I was flying from Mackay to Brisbane after a tour of duty and happened to bump into an old friend at the airport. John Wardle had been my radar instructor at nautical school. I hadn't seen him for years. I asked him what he was doing and he told me he worked for Decca Navigator and was hoping to persuade the Federal Government to install a chain across the Reef off Mackay. Why there, I asked. Because the Navy has found a navigable channel there that might be suitable for commercial shipping, he answered.

"The importance was obvious, with Hay Point's coal export terminal close by. A channel across the Reef would cut hundreds of miles off the voyage to Japan, where most of the coal goes.

"I figured this channel the Navy had found was unlikely to be straightforward navigation, and pilotage might be required. I couldn't wait to get home and ring Norman Rogers. He made some discreet

inquiries, which confirmed the story - and we set up what we called the Creal Committee to prepare a pilotage service."

The Creal Committee, comprising Norman Rogers, two senior pilots and John, became pivotal to the development of what was eventually called Hydrographers Passage. The passage opened in late 1982: John accompanied Senior Pilot and fellow Creal committee member Captain Donald Grant on the first transit.

It was - and still is - a globally unique service; the pilot boarding ground at Blossom Bank, outside the Outer Barrier, is over 100 miles from the mainland. Pilots are transported to and from their ships by helicopters. Hydrographers Passage slices 250 miles off the old route south of the Great Barrier Reef.

Later, in 1987, 'Coral Gateway - the Hydrographers Passage Story' was published, launched by Keith Williams, whose Hamilton Island resort provided the helicopter base and accommodation for the pilots.

"I knew the story of the passage," recalls John, "and Keith offered me use of a raft of high quality illustrations his helicopter pilots had taken; together they made an interesting book."

John's next two books were about maritime disasters. 'The Quetta - Queensland's Worst Disaster', was about the liner 'Quetta' which sank with 134 lives after striking an uncharted rock in Torres Strait in 1890. The book earned John a Fellowship of the Royal Historical Society of Queensland. And 'Centaur - The Myth of Immunity', is regarded as the authoritative work on the sinking of the Hospital Ship 'Centaur' off Brisbane in 1943.

In mid-1993 the Queensland Government handed over jurisdiction of pilotage in the Great Barrier Reef to Canberra. Opening public services to competition was being pushed Australia-wide at that time, and the Department of Transport declared that coastal pilotage in Queensland would be no exception. This 'deregulation of pilotage' was uncharted waters: only two other pilotage districts in the world had experimented with competition, both in the USA, and

neither had made the transition without immense upheaval. Coastal Pilotage was entrusted to the Australian Maritime Safety Authority.

Predictably, bitterness and division followed. A second pilot service emerged, from which, shortly after, a third detached itself. Most of the existing pilots prior to deregulation formed themselves into the Queensland Coast and Torres Strait Pilots Association. In 1995 this became Australian Reef Pilots Ltd. John was one of the three elected inaugural directors of this company.

At John's suggestion, ARP began offering cruise lines help with planning. For the past decade John has been ARP's Cruise ship Coordinator, working closely with cruise lines year-round to help plan their Great Barrier Reef voyages. His name is now synonymous with cruising in Queensland, having developed several new cruise ship destinations in the state. ARP is a member of Cruise Down Under, the peak marketing body for Australia's cruise destinations.

His reputation in the cruise industry led to him being asked onto the Board of Brisbane Cruise Wharf Pty Ltd, the company developing Portside Wharf, Brisbane's first cruise terminal. The terminal opens in August this year.

John's pilotage career now spans 31 years. He has been a Senior Pilot with Australian Reef Pilots since 2002. When asked for the four most memorable ships he has piloted - for good or bad reasons - he came up with the following:

Lih Yih 202 A Taiwanese longline fishing vessel that had been arrested by the RAN for illegally fishing in Australian waters, and towed to Thursday Island. The captain had to appear in the Cairns Magistrate Court and was told to take his ship to Cairns. It was under escort by a Fisheries Protection Vessel. It had to be piloted - John drew the short straw - but to prevent the captain making a run for it a Federal Police agent was sent along as well.

It was the filthiest ship John had ever seen. Fortunately the FPV catered for John and the AFP officer, so they didn't need to live on the food that the crew had to put up with. The problem came when the skipper woke up to the fact

Captain John C.H. Foley Half a Century of Salt Spray

Continued

that the Lih Yih 202 was outrunning the FPV - and also that at one stage the open sea was just 20 miles away. John had been told that the skipper could expect a rough reception back in Taiwan if his ship and catch were confiscated, so the sudden excitement among the crew prompted him to alert the AFP officer.

A drawn pistol and a menacing look defused the situation.

After the Lih Yih 202 arrived in Cairns the case was dropped because of a legal technicality and she was released - with her catch.

Pogoria. A Polish tall-ship in Australia for the 1988 Bi-Centennial celebrations. John piloted her from Brisbane to Torres Strait. 'She was a barquentine, and she responded beautifully to the southeast winds. It was an incredible experience to see those square sails billowing to the wind - with no other sound but the wind and the sea. On the last day we were keen to get into Thursday Island Harbour before dark - the crew had a basketball match arranged with the High School - so the captain ordered maximum sail. The Bosun told me he'd never seen so much canvas aloft on her. I took her up through Albany Passage: ironically there was no-one anywhere around to

witness what must have been a magnificent sight.'

FNS Jeanne D'Arc A French aircraft carrier, piloted from Pt Moresby to Darwin. 'The ship itself was not comfortable, but I wouldn't have missed the experience for the world. Just watching aircraft movements off the flight deck was mesmerising. The ship's charts were interesting, having two Longitude scales - one based on Greenwich, the other on Paris.' France, of course, was the only nation to vote against Greenwich being awarded the Prime Meridian.

John was privileged to eat in the Senior Officers' Wardroom, where he got first-hand experience of the French attitude to good living. 'The food was superb, the meals lengthy - and the looks of horror on their faces when I said I had to return to the bridge, just priceless.' At one meal, after listening to two officers having an animated and very lengthy debate over politics, philosophy and art, John commented that on an Australian ship the subject long since would have been about sex. An officer replied: "But we are French men, we live sex... there is nothing left to talk about!"

The World. Arguably the most talked about cruise ship of 2003. Virtually a

floating apartment block. John piloted her from Brisbane to Darwin. "I was supposed to leave the ship in Darwin," John recalls, "but things didn't quite turn out that way. The day we arrived in Darwin word came from the ship's management company that the entire Asian schedule had been cancelled due to SARS. That afternoon, I sat down with the captain and designed a schedule that took the ship back south to Sydney and north again to Cairns before heading off to the Marshall Islands."

During his time on 'The World', a Coastwatch aircraft reported the ship at anchor in a prohibited area of the Great Barrier Reef. 'Both myself and the captain were hauled off to the pokey for questioning. The Coastwatch report was incorrect, but once the prosecution process was set in train it had to run its course; we had to wait 18 months before the case was finally dropped.'

At 65, Captain John Foley is still a full-time pilot. Is retirement on the radar?

"Not just yet," says John, "I've long since set the parameters: I'll continue as long as health permits, professional satisfaction continues, and stress is held at bay."

Commercial Pressure works on Nigerian Pilots

HAWK (CYPRUS) Limassol, Jun 15 -- A press report, dated today, states: Bulker Hawk (26122 gt, built 1994), carrying bulk cement, ran into trouble two weeks ago, as it got stuck at the Lagos port harbours as a result of the low water level. The vessel was forced to berth against the advice of maritime pilots who warned that an accident could occur, should the vessel be forced to berth. A visit to the Lagos harbours where the vessel got stuck, revealed that plans to discharge the vessel of its content had to be suspended as the agent has waited for another three days for the water level to rise before it can properly berth and discharge.

Sources close to the Nigerian Ports Authority (NPA) disclosed that pilots had

to use a tug boat to push the vessel, whose draft was put at about ten metres while the draft of the Apapa port channel is about nine and half metres, making it impossible for the vessel to berth under normal circumstances. It was learnt that the pilot had to bring in the vessel because if he had refused to do that, he would have been reported to the management of the Ports Authority as to be demanding money from the agent before bringing in the vessel. This, the agent Vanguard further learnt, could lead to the sacking of the pilot. Efforts to get comments from both the Public Affairs Department and the Lagos Channel Management Company (a subsidiary of NPA in-charge of the

management of the Ports Authority water channels), was futile, as Mr Chris Borha, Assistant General Manager of the Public Affairs was said to be out of town. Vanguard's effort to speak with the Captain of the vessel was also abortive, as he could not understand a word of English.

A source close to the harbours' department disclosed that 48 hours after the vessel ran aground, a few tons of its content were evacuated to allow the vessel to get afloat. The source also disclosed that the vessel will have to go for checks so as to carry out every necessary repairs on the damage it might have sustained. (Note -- Hawk was reported arriving Apapa-Lagos

Pilot Ladder Safety

Capt. Alex Amos

Climbing pilot ladders is, generally, part and parcel of a Marine Pilot's life. Helicopters are the only real alternative and their use is not always possible or practicable. **However; pilots are entitled to safe access to and from a ship!**

Accidents involving pilot transfer, often fatal, occur at frequent intervals. This year alone, two pilots in the USA tragically lost their lives while transferring between the ship and the pilot boat. A pilot in Sydney fell from a pilot ladder and suffered serious injuries. We don't know how many accidents and near misses involving pilots occur each year around the world, something that concerns the International Maritime Pilot's Association (IMPA) and an issue to be discussed at the next IMPA Congress in November this year.

IMPA does in fact have a iWorking Group Committee at this time and that Committee is investigating a number of proposed changes to the SOLAS regulations (SOLAS V, 23 and IMO Resolution A889) that may improve pilot safety.

AMPA has written to the Australian Maritime Safety Authority (AMSA) about a number of matters relating to pilot transfer using pilot ladders which support some of the IMPA discussion points.

These issues include:

- Boarding "high sided" ships using "combination arrangements".
- Certification and inspection of pilot ladders
- Rubbing strakes (or sponsons).
- Tripping lines.
- Recommended nine (9) metre mark.
- Attachment of one side of the pilot ladder to the accommodation ladder.

The above issues have also been raised with IMPA, and, additionally, the following comments have been passed on to the IMPA Pilot Ladder Working Group:

- Changes to the excellent IMPA "Pilot Boarding Poster" which are in relation to the attachment of the manropes to bulwark stanchions.

- Marking of the pilot ladder rungs to indicate to the ship's crew exactly how much ladder is being lowered over the side.

Room in this edition of *SAFE PASSAGE* will not allow full explanation of each of the issues that we have raised with AMSA and I will deal with the first two topics in this edition. It is important to say that the issues that are "Australia only" concerns but issues that have been raised by many of our colleagues that we meet at the various congresses and from personal contact with the writer.

HIGH SIDED SHIPS:

Ships are getting larger by the day and high freeboards, in excess of 9 metres are now the usual rather than the exception. Tankers will soon be all "double hull" thus increasing the freeboard substantially. For example, a new build "Aframax" tanker will have a moulded depth of almost 22 metres; however, the "ballast condition" draft has not increased. This will result in a freeboard of approximately 14 to 15 metres. Larger tankers and bulk carriers will have greater freeboards than this. Container ships are also increasing in size with correspondingly increased freeboards.

The SOLAS Regulations:

The Amendments 2000 to the International Convention for the Safety of Life at Sea (SOLAS), Chapter V, Regulation 23, Pilot transfer arrangements, Clause 3.3 states that safe and convenient access to, and egress from, the ship shall be provided by, (3.3.1) a pilot ladder requiring a climb of not less than 1.50 metres and not more than 9.00 metres above the surface of the water, so positioned and secured that: (3.3.1.3, *each step rests firmly against the ship's side* [etc], and in 3.3.2, *an accommodation ladder in conjunction with the pilot ladder, or other equally safe and convenient means, whenever the distance from the surface of the water to the point of access to the ship is more than 9 metres. The accommodation ladder shall be sited leading aft. When in use, the lower end of the accommodation ladder shall rest firmly against the ship's side, within the parallel body length of the ship and, as far as is practicable, within the mid-ship half length and clear of all discharges.*

On ships that have freeboards in excess of nine (9) metres, and the SOLAS regulations are clear that this means *the distance from the sea surface to the place of embarkation*, the pilot boarding arrangement must consist of a pilot ladder rigged in conjunction with an accommodation ladder. There are, of course, variations to this arrangement such as a combined accommodation ladder with the pilot ladder attached through an opening at the lower end of the accommodation ladder. The Whelin *Pilot Embarkation Platform (PEPS)* and the Whelin *PELS* system which consists of the same horizontal platform system as the PEPS system but with a rigid framework from the deck of the ship instead of the accommodation ladder. With this system, the pilot climbs to the horizontal platform and then the platform and frame system are hoisted to the access deck or place.

However, with all arrangements and systems, the whole arrangement will only work if both the pilot ladder (and manropes) and the accommodation ladder/platform section rests firmly against the ship's side, as the SOLAS Regulations and Recommendations require.

How can the pilot ladder and accommodation rest firmly against the ship's side if they are not secured to the ship's side?

As seamen, we know that a ship moves about in any seaway to a greater or lesser extent. For the pilot ladder and accommodation ladder to *rest firmly against the ship's side* then it must be secured to the ship's side. Obvious? Not to some it seems!

New build ships with freeboards in excess of nine (9) metres and no practical means of securing the pilot boarding arrangements to the ship's side are arriving at our ports everyday. How do the Owners expect the ship's personnel to meet even the most basic requirements of IMO if securing points are not provided? What about the safety of the ship's crew while they are rigging a *combination ladder*? I recently witnessed the crew of a container ship attempting to rig a *combination ladder* while the ship was rolling heavily in an eight (8) metre swell. The accommodation ladder on which two crew members were standing while rigging the pilot ladder was swinging off the ship's side by approximately one to two

Pilot Ladder Safety

Capt. Alex Amos

metres each time the ship rolled. The accommodation ladder could not be secured to the ship's side by any means, either by securing points or a suction pad. I advised the Master of the ship that I could not board the ship and strongly suggested that he get his crew off the accommodation ladder.

It is clear that for a combination arrangement (accommodation ladder and pilot ladder rigged together) to rest firmly against the ship's side then it must be secured to the ship's side by built in securing points or suction pads or a combination of both.

Both pilots and ship's Masters should be aware of the SOLAS requirements and also the Australian Maritime Safety Authority (AMSA) Marine Notices 9/2006 and 8/1998 which refer to, amongst other matters, pilot transfer requirements.

CERTIFICATION AND INSPECTION OF PILOT LADDERS:

It is pleasing to note that AMSA have been successful in drawing the attention of shipowners, operators and ship's personnel to the maintenance and inspection of accommodation ladders. **AMSA Marine Notice 3/2005 refers to this issue.**

AMPA has submitted a proposal to

AMSA that pilot ladders and associated equipment should also be subjected to a more rigorous inspection procedure, to be a matter of routine and not, mainly, when a pilot lodges a complaint to AMSA. Further, we are proposing that pilot ladders should be clearly identified. A possible method could be an "identification tag" attached to the bottom of the ladder where the embarking pilot can see it readily. The "tag" would need to be secure (tamper proof) and would indicate the identification of the ladder and the date of the most recent survey. Supporting documentation would need to be retained onboard the ship so as to ensure that a history of regular maintenance, inspection, repair and survey. There does not appear to be a requirement for this in relation to pilot ladder although items such as lifting gear (chains, wire rope etc) must be identified as to date of inspection and testing.

Pilots have seen some ladders onboard ships which have obviously been in service for many years and are used, in many cases, until they break or condemned by pilots.

In the context of pilot boarding arrangements, what rules or regulations pertain to accommodation ladders, or an

"accommodation type" ladder when used specifically as part of a *combination arrangement*? Pilot Hoists are referred to in SOLAS V/23 and have a wide scope of requirements attached to their use. But nothing about accommodation ladders when used for pilot boarding. A number of issues come to mind such as:

- What weight comes on the falls should the accommodation swing on and off the ship's side when the ship rolls?
- How are the accommodation ladder's hoisting and lowering systems managed to prevent accidental lowering or raising when being used for pilot boarding at sea?

The recommended 9 Metre Mark should become compulsory. The mark is the only way a pilot can be sure of the height of the "access point". The intersection of the red and white vertical sectors should indicate the nine (9) metres from the access point on deck and not simply the official freeboard which may be quite different from the distance between the sea surface and the point of access. We have seen some ships where the recommended 9 metre mark was thought to simply indicate the pilot access.

A GOOD LADDER??

Note the large "block and tackle" being used as a "tripping line", the large "sponson" (at least cut away so that the ladder rests on the ship's side but what about the pilot boat?) and the overboard discharge. We hoped that it was the ship's sewerage system!



Working with Australian pilots

The purpose of this Marine Notice is to give guidance to masters and watch keepers regarding working with Australian pilots in Australian waters.

Pilot Boarding Arrangements

The attention of shipowners, operators, masters and pilots is drawn to the provisions of Marine Orders Part 21 (Safety of Navigation and Emergency Procedures) paragraph 17, IMO Resolution A 889(21) and SOLAS Chapter V/23 regarding pilot transfer arrangements.

It is noted that responsibility for safe pilot transfer practices rests with each of the ship's master and crew, pilot and launch crew. Unless these parties observe both the spirit and intent of the regulations noted above safety will be compromised. AMSA stresses that all parties must acknowledge the risks associated with transfer operations and adopt and follow recognised international industry standards and practices.

To this end, maritime authorities in Australia support both the Australian Marine Pilots Association and the International Marine Pilots Association in implementing their SOLAS based objectives for ensuring a safe and secure means for pilots to board and disembark from vessels.

It is expected that all Australian pilots, where possible, visually inspect the pilot transfer arrangements before using any equipment provided. If the boarding or disembarking arrangements do not comply fully with Regulation 23 of Chapter V of SOLAS and IMO Resolution A

889(21), the pilot may require the vessel to make changes and delays may result from the need to change an improperly rigged, inadequately maintained or poorly positioned pilot ladder.

Masters and watch keepers are also reminded that they should confirm with the pilotage service provider the exact requirements for the positioning and height above the water that the ladder must be rigged before the vessel arrives at the agreed pilot boarding place. Strict attention should be paid to the freeboard of the vessel to determine whether a combination ladder needs to be rigged, and to securing such ladders to the ships side. In all cases, ladders must be rigged clear of sponsons and obstructions on the ships side that might present a hazard to the pilot vessel when alongside.

Masters and watch keepers should also comply so far as possible with requests from pilots as to the course and speed required to provide a safe lee for boarding or disembarking vessels. Coxswains of pilot vessels, signal stations, VTS, or VTIS services should also ensure that all requests to vessels as to course and speed in order to facilitate pilot transfer are initiated by the responsible pilot.

It should be noted that Australian pilots are required to report all instances of non-compliance with Regulation 23 of Chapter V of SOLAS or Marine Orders Part 21 (Safety of Navigation and Emergency Procedures) and that vessels whose pilot boarding arrangements do not comply may become subject to a higher priority for inspection by Port State Control.



A serious breach of the Marine Orders in relation to transfer operations is a valid reason for AMSA to consider that a major non-conformity exists in the vessels safety systems as covered by the ISM Code and vessels that do not comply will be the subject of appropriate action by AMSA.

Bridge Resource Management (BRM)

Scafarers, shipowners and pilots are reminded of the importance of well-planned Bridge Resource Management (BRM) and efficient watch keeping techniques to enhance safety and reduce human and systemic errors in navigating ships. Mariners should be familiar with the provisions of Appendix 1, 2, 3 and 4 of Marine Orders Part 28 (Operations Standards and Procedures)¹ and the requirement to plan their voyage.

and the STCW 1995 Chapter VIII – Watchkeeping.

Australian communities are sensitive to incidents that affect the marine environment such as collisions or groundings in ports, harbours, or other waterways including the Great Barrier Reef and other environmentally sensitive regions - particularly if such incidents result in pollution.

Effective BRM should begin at the initial passage planning stage and include the following:

- Navigation and operational tasks and responsibilities should be clearly defined and delegated;
- Dangers that may be met at all stages of each voyage and the precautions and contingency arrangements necessary to manage these risks should be identified;
- Priorities should be set and constantly reviewed;
- The vessels position, speed, and heading with respect to other vessels and to physical features of navigation should be continuously monitored;
- Monitoring of the vessels navigation against the authorised passage plan should be continuous;
- Deviation from the authorised passage plan or standard operating procedures should be noted and acted upon immediately;

- Electronic aids should be used in an informed and careful manner; and
- Support for the master and pilot when navigating should be sufficient and positive at all times.

Vessels engaged in regular short voyages where the nature of the trade is such that they are frequently under some form of pilotage are of concern. In these circumstances, there may be a tendency to ignore (through familiarity) the need to constantly review and revise the passage plan.

Analysis of maritime incidents suggests that up to 80% are caused by human error and not by mechanical breakdown or lack of competency. Many incidents are attributed to "single person" error, where a mistake made by one person was not noticed or corrected by other members of the bridge team in time to prevent an incident from occurring, i.e. an incorrectly applied helm order. Where marine casualties have occurred with a pilot on board, many have been attributed to flawed master/pilot relationships. In many cases, when the pilot boarded the ship, the master and deck officers ceased to monitor the navigation and the position of the ship.

The master and the bridge team should remember that they are always responsible for, and are in charge of the safe navigation of the ship, even when navigating with a pilot; and should be aware of Section 410B of the Navigation Act,

410B Civil liability in relation to ship under pilotage

- (1) A pilot who has the conduct of a ship is subject to the authority of the master of the ship and the master is not relieved from responsibility for the conduct and navigation of the ship by reason only of the ship being under pilotage.
- (2) Despite any law of the Commonwealth or of a State or Territory, the owner or master of a ship navigating under circumstances in which pilotage is compulsory under such a law is answerable for any loss or damage caused by the ship, or by a fault of the navigation of the ship, in the same manner as the master or owner would if pilotage were not compulsory.

¹Current Marine Orders can be found at the following web site;
http://www.amsa.gov.au/Shipping_Safety/Marine_Orders/Marine_Orders_currently_in_force.asp

- (3) If a pilot:
- (a) does an act, issues an instruction, or provides information or advice in or in relation to the pilotage of a ship; and
 - (b) that act is done, that instruction is issued, or that information or advice is provided, in the course of the pilot's duty and in good faith; and
 - (c) that act, instruction, information or advice affects the navigation of the ship so that loss or damage is caused to or by the ship;

neither the pilot nor any pilotage provider responsible for the provision of the pilot's services is liable in civil proceedings for that loss or damage.

Also section 7 of Marine Orders Part 54 (Coastal Pilotage) and section 3.3.38 of Appendix 1 of Marine Orders Part 28 (Operations Standards and Procedures).

Australian pilots expect masters and watch keepers to participate fully in the navigation of their vessel during pilotage. The master and the deck officers must continue to monitor the safe passage of the ship, critically appraise the pilot's advice and incorporate the pilot fully into the bridge team in a mutually supportive manner to ensure the efficient and safe navigation of the vessel. All BRM procedures still apply when a pilot boards the ship, and the bridge team should conduct a pre-passage briefing together with the pilot to ensure a shared view of the intended passage prior to its execution.

Reporting of Incidents

Australian pilots work under various "Safety Management Systems" and "Codes of Conduct" required by pilotage service providers. These have a common feature of requiring pilots to report all incidents relating to the safety of navigation that they may observe, including "near miss" events, or mechanical or operational non-conformances.

The requirement for pilots to report exists to enable data to be generated over time for analysis and used in identifying recurrent events that may have previously been treated as isolated incidents and not indicative of a common problem.

Future events can then be guarded against or an apparent risk reduced or removed by introducing appropriate scheduling or port operating procedures.

Masters and watch keepers should also be aware that pilotage service providers have a requirement to pass relevant information about incidents that are reported to them by pilots to Australian Authorities.

Dianne Rimington
A/g Chief Executive Officer
24 May 2006

Australian Maritime Safety Authority
GPO Box 2181
CANBERRA ACT 2601

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AMPA Executive

President: Rory Main
Vice Presidents: Welwyn Gamble, Stuart Noble, Mark Slater
Secretary: Chris Haley

Deputy President: Peter Liley
Treasurer: Stuart Noble

AMPA COUNCIL

Area	Name	Location	H. Phone	H. Fax	Mobile	Email
Nth Qld	Peter Dann	Mackay	0749549479	-	0479791041	pilotpte@mackay.net.au
Nth Qld	Elizabeth Datson	Cairns	0740335653	0740337875	0417731769	lizdat@austarnet.com.au
GBR	Welwyn Gamble	WBR	0733561311	-	0412226822	gamnaut@bigpond.com
GBR	Andrew Traill	Aust Reef Pilots	0249270234	-	0427784966	snailtraill@bigpond.com
Brisbane	Peter Liley	Brisbane	0754510456	0754510194	0407655926	pliley@brisbanepilots.com.au
NSW	Jim Dargaville	Sydney	-	-	0418259003	jdargaville@smartchat.net.au
NSW	Stuart Noble	Newcastle	0249547292	-	0419809671	stuart.n@optusnet.com.au
Vic/Tas	Richard Toone	Melbourne	0398196063	-	0412341010	rtipilot@optusnet.com.au
Vic/Tas	Martin North	Hobart	0362430253	0362436116	0418331930	martin.north@hpc.com.au
SA/NT	Simon Moran	Darwin	0889817378	-	0401117058	simon.moran@nt.gov.au
WA	Rory Main	Fremantle	0893413555	-	0419910456	rmain@fremantlepilots.com.au
WA	Mark Slater	Dampier	0891830884	-	0414233255	markslater@aapt.net.au
WA	Ted Lysons	Port Hedland	0891731442	-	0418938331	tysons@westnet.com.au

Unit	Head	H.Phone	H.Fax	Mobile	Email
AMSA	Alex Amos Peter Liley	0299733020 0754510456	0299733310 0754510194	0418259575 0407655926	alexamos@bigpond.net.au pliley@brisbanepilots.com.au
IMPA /Training	Steve Pelecanos	0733410923	0733410923	0403347757	spelecanos@brisbanepilots.com.au
Environmental	Chris Haley	0242712238	0242712680	0400358250	cwh@cyberelectric.net.au
Fatigue	Martin White	0295248470	0295248472	0418259673	marsan@comcen.com.au
Transfer Equipment	Bob Hall	-	-	0419901455	bob_hall@optusnet.com.au
SAFE PASSAGE	Rob Choppin	0242264610	-	0414960792	rchoppin@bigpond.net.au

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

Advertising in Safe Passage

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 2006.

AMPA ADVERTISING RATES – 2006

Full Page Ad in Safe passage (Black and White)	\$300.00
Full Page Ad in Safe passage (Colour, back page)	\$500.00
Half Page Ad in Safe passage (Black and White)	\$200.00
Half Page Ad in Safe passage (Colour, back page)	\$350.00
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The Editor (Rob Choppin) rchoppin@bigpond.net.au

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