PILOTS CONFERENCE “2020 VISION”

Dates: 28th & 29th September
Venue: Barclay Theatre, Otago Museum, Dunedin
Hosts: Port Otago Ltd. & SouthPort (Bluff)
Reception: Sun 27th
Partners’ Program: Mon 28th

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Opinions expressed may not be those of NZMPA

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Psyche – Listening to the voice of the PPU Co-Pilot (p.16)

The Hue & Cry
The Napier NZMPA conference saw the ripening of workshopped projects from the 2018 Conference: big ideas need time to percolate. The focus remains the “Good Practice Guide for Pilotage Planning” - a Herculean task; those pilots who have shouldered that burden are creating a milestone legacy in bridging the gap between bridge teams and pilots.

With a few colleagues nearing retirement, I have been thinking (p.19) about the concept of Legacy: will our passing be like a ship’s wake - a temporary disturbance? Or quaint relics of a bygone age, as Masefield wrote of sailing ships: “They mark our passage as a race of men, Earth will not see such ships as those again.”

It is a time of Legacies: the 250th Anniversary of Captain Cook’s arrival in New Zealand. His charts were still in use 200 years later. His defeat of scurvy; his theories on Polynesian navigation from Asian origins have proven true. But Cook’s legacy also provoked cultural controversy - when civilisations collide.

It is 40 years since the Erebus Disaster when an Air NZ DC 10 crashed killing all 257 on board. The toxic legacy of a politically flawed accident investigation still rankles - for which PM Jacinda Ardern officially apologised. Judge Peter Mahon damned the attempt to blame the pilots as “An orchestrated litany of lies” which phrase is his heroic legacy of speaking truth to power.

The philosophy of BRM is Ravi Nijjer’s legacy to Australasian Pilots. When I cover BRM during MPX, I explain that it simply means that the pilot is a fallible Human Being and that I very much need their help, thus reinforcing our Common Humanity. Whether that will save us from harm is moot, but it does help gain trust and support. There are forces beyond our control, thus BRM, good procedures and training is the best we can do as mere mortals to load the dice in our favour.

Up in Auckland for a Simulator course last month, I had a conversation with pilot, Craig Colven who had been thinking about the role of luck in marine accidents. At that very time, the Ovation of the Seas was sailing from Wellington when she lost one propulsion unit: there was much luck in both weather and availability of tugs. As recent events at White Island have shown, fickle fortune once again intervened in the affairs of men. One can only imagine how terrible the suffering for everyone involved. It is no consolation to blame Nature.

Loading the dice in terms of UK Democracy, the recent landslide in favour of an amoral self-serving snake-oil salesman clearly shows that propaganda can persuade turkeys to vote for Christmas.

Christmas celebrates the legacy of a genuine peacemaker. He had clearly upset the Establishment with his message of hope for the poor and down-trodden, his forgiveness and understanding of the Human condition, and his message of Peace and Goodwill to all Mankind. Speaking truth to power comes at immense personal cost. The “Good Practice Guide to Life” remains a work in progress. We are challenged – How do we respond?

Psyche opening the golden box – J.W. Waterhouse

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Last month NZMPA held our annual seminar/conference in Napier, and saw what was close to a final draft of our Good Practice Guide for Pilotage Planning launched to fellow pilots and stakeholders by working group members. The guide stemmed from discussions at last year’s seminar in Wellington, when it was decided that the adherence to a passage plan was the single thing that could most significantly reduce future incidents due to the issues identified by TAIC. Our concerns were further supported by another TAIC incident report which was released just 3 weeks before this year’s seminar. That report on the grounding of the Leda Maersk in Otago in June last year identified similar issues to those found in the three earlier incidents which resulted in TAIC putting Navigation in Pilotage Waters on their Watchlist in October last year. In all cases the importance of having a shared understanding of the passage plan was crucial if BRM was to be effective, however that did not happen and the resultant delay in any challenges from the bridge teams didn’t prevent the groundings. What was different in the latest case however was that for the first time the use of a PPU (Portable Pilotage Unit) was involved in the incident, unlike in the previous cases where the pilots chose not to use All Available Means.

Whilst the PPU is seen by many as new technology, it differs little in many respects to the car GPS which has been around for almost 30 years, with the first automotive GPS introduced by Mazda in 1990. The marine PPU however is a box of tricks by comparison, and is far more interactive than the automotive equivalent. For this reason TAIC commented in their latest report that “if pilots are to use them, they should be fully trained and proficient in their use”. The pilot on the Leda Maersk encountered problems which he couldn’t readily resolve at the time, and he chose to discontinue using the PPU. As a result, the support of this important aid to navigation was lost to him when he would have greatly benefited from it to navigate a very large ship in a very narrow tidal channel, with visibility obstructed by cargo stowed in front of the bridge and at night when terrestrial references were not visible.

How the loss of the PPU may have influenced the final outcome in the latest case can easily be considered with the benefit of hindsight, however this insight is something that only becomes apparent after events such as this. We can however consider how the PPU may have assisted to complete the task successfully if we consider the numerous ways it can aid us before, during and after the passage. Before even leaving the office, the appropriate passage plan can be selected to suit the vessel, the berth and the weather on the day. Once aboard the ship the chosen plan can be discussed with the bridge team in greater detail than may be possible on a chart or ECDIS, and a cross-check can be made to ensure the pilot’s and the ship’s tracks are matching. During the passage the cross-track distances and rates of turn can be monitored closely, as can the speed which is very hard to judge during darkness. The berthing manoeuvre can be monitored with respect to ROT, speed and clearances, and even the relative position of tugs. Subsequently the recording of the passage can be used for training, quality management and investigation purposes. With all of the above to consider and to have to required level of expertise to operate and understand the equipment, it is unfair to expect that all mariners will become proficient from purely reading the manuals and/or attending basic training courses. It is clear that many pilots, myself included, are not fully proficient in the use of their PPUs, and this needs to be remedied urgently. It was also realised that a course needed to be developed that covered both the generic and type-specific aspects of PPU usage, and for this reason a group of pilots was tasked with establishing what this course would look like. Lew Henderson presented to delegates in Napier on what could be included in the PPU course and what the expected outcomes should be. It was considered that this is so important that course participants must be able to demonstrate the required level of proficiency and understand the limitations of the equipment if they are to be considered Fit for Purpose in Today’s World. The association will continue to explore the options for developing a PPU course in the New Year, which will both ensure practitioners are trained to a high standard and be able to demonstrate proficiency with their chosen equipment.

Finally a new initiative available to pilotage stakeholders was announced following the Napier Seminar, and this was that an NZMPA Pilotage Advisory Panel had been established. This panel is made up of six experienced pilots who possess various skills and knowledge to enable them to offer advice to our industry. The panel is John Clarke (Chair), John Barker, Paul James, Nigel Meek, Lew Henderson and myself. The latter three all have retirement in their sights, so will be replaced as and when required.

As Christmas approaches and our last edition of The Pilot is published for the year, I would like to thank our editor Hugh O’Neill for his 32nd Edition of his excellent publication. Thanks also goes to our Executive team, our Napier Seminar organisers (particularly Colin Sellars and John Pagler) and all other supporters and sponsors of our organisation, both internally and externally.

Merry Christmas & A Happy New Year
SAFETY UPDATE: SECURING PILOT LADDERS

By G. Pollock, Specialist Maritime Officer, Maritime NZ

Maritime NZ has issued a safety update, “Securing pilot ladders”, to raise awareness of potential risks of using improperly secured pilot ladders. I presented to the New Zealand Maritime Pilots’ Association (NZMPA) conference about the safety update.

Agents, owners and operators of foreign ships visiting New Zealand are forwarding this message and the safety update to Masters and senior officers, as soon as possible.

Maritime NZ is telling Masters and senior officers to check their ships’ pilot ladders to ensure they are safe – the safety update provides advice about the checks they should make.

Maritime NZ and the NZMPA have been working closely together on a number of matters involving pilot safety, including pilot ladders, over the past year.

As part of this work Maritime NZ conducted a focussed inspection campaign on pilot boarding arrangements on foreign-flagged vessels. The campaign identified three main areas of concern:

1. improperly rigged pilot ladders and unsafe deck access
2. construction of pilot boarding arrangements that isn’t compliant with the law
3. pilot boarding arrangements that haven’t been routinely inspected by ship’s crews, which could potentially lead to injury or death.

Of the 68 ships inspected, 40% of pilot boarding ladders were found to be not safely rigged.

The safety update has been issued as a result of the campaign.

Back ing up the safety update, Maritime NZ is using its various tools under the Maritime Transport Act and Health & Safety at Work Act, as well as Port State Control powers, to require any ship observed with unsafe boarding arrangements to address those before it can leave port. Port State Control officers will raise deficiencies related to such practices which must be rectified to ensure boarding arrangements are safe before the ship departs port.

Maritime NZ is continuing to work closely with NZMPA to help ensure pilots’ safety. It is advising pilots to notify Maritime NZ of all safety incidents, and reinforcing that pilots have the legal right and responsibility to not use a ladder that they believe is unsafe.

Maritime NZ is sending the safety update to agents, Class surveyors, recognised organisations, maritime pilots, and to maritime industry media.

The safety update is on the Maritime NZ website at:

SAFE OUTCOMES VIA GOOD PRACTICE AND EFFECTIVE PLANNING.

NZMPA annual conference 11/12 November 2019 – Napier.

- All presentations from speakers were captured electronically. Our webmaster (Troy Evans) will upload them to the web site in due course.
- Specific papers presented on day 1. Workshops and AGM on day 2.
- President Steve Banks reviewed NZMPA work over the past year and set the scene around the conference title of “Safe outcomes through good practice and effective planning”.

Day 1 - Welcome to your host port – Todd Dawson – Chief Executive Napier Port.

- More frequency of bigger ships in a port that can’t expand fast enough. Systems and processes improving accordingly. Expressed confidence in the success of their recent share market float. Talked about the need for a social license for acceptance of the ongoing activities by the wider stakeholders and general public around the port and city.

Setting the scene – Ravi Nijjer – Training facilitator, Consultant, BRM expert – Marcon Pty Ltd.

- Spoke of the need to be able to develop short term strategies in response to the rate of change in our industry. Compared that with the traditional view in a quote from a William Falkner novel that “the past is never dead. It’s not even past”. Gave an example of the 144hrs of magnetism lectures in a master class syllabus unchanged over many decades although some ships no longer carry a magnetic compass. The maritime industry remains very resistant to change. This may be too conservative in an era when larger ships keep coming and safety margins reduce. Ravi gave examples of the three legs of the piloting activity; visual piloting, integrated bridge team piloting, PPU piloting and then reviewed the TAIC Watch-list announcement from 2018 to show that the most likely point of failure continues to be during “controlled” turns in approach channels. All of this making the point that good practice and effective planning are essential but not always conducted.

Inside the PPU – Dale Marsh – Sales, Business Development manager, Navicom Dynamics.

- Many, but not all NZ ports have made the carriage and use of PPU’s an integral part of normal pilotage operations. Dale reviewed the many iterations of the aerial systems and software packages from the “clunky” early days to the increasing pace of new innovations today. Navicom perceives itself as a systems integrator i.e. it supports a number of configurations of software and hardware rather than manufacture and market only bespoke equipment. The value for NZ is that Navicom is a local and easily accessible supplier and supporter of the technology.

Matthew Conyers - Marine Manager Marlborough & pilot Picton.

Introduction to NZMPA Pilotage Planning Guide

- Matthew is one of the team that developed this Guide. Also Colin Selloars (Napier pilot), Lew Henderson (Wellington pilot), Peter Willyams (Auckland pilot), Lawrence Clark (Otago pilot), James Mariner (Interisland Line master), Troy Evans (Tauranga pilot)
- The document went through wide consultation and 16 iterations including at least three occasions when it was torn up and restarted. It offers a detailed list of drivers for a nationally common version of a good procedures guide. In the concept of risk assessment only consequences and precautions (but not likelihood) were considered, on the basis that the guide tries to capture all possible options for successful outcome of the critical navigational elements of pilotage planning. The flow diagram on page 8 offers a very useful one-page picture of the process. The whole intention is to communicate a shared mental model, one
model, a shared model, a model that is updated to reflect changes, no surprises and no confusion. Close reference throughout the development was made to the IMO Standard Marine Vocabulary.

Operator’s perspective on pilotage passage plans – Mike Drake & Tony Herriot – Director Marine Operations & Senior Master P&O Cruises respectively.

- P&O Cruises have contributed 9 months of Tony Herriot’s time to the project of ensuring the practical application of a long list of regulatory requirements have successful practical application for the berth to berth passage planning team including the pilot. They are conscious of the need to contribute to industry improvement for the consistent use of ECDIS and PPU. A driver is that increasingly bigger ships are using an unchanged space. They discussed technical drawbacks about available band width for download of incredibly dense S100 series charts; the requirement to develop small file size with all available information. “A picture is worth a thousand words” and it is essential to have a physical plan available in its entirety for all actors, so as to be monitored and supported. A common language protocol must be observed.

eMPX – Jason Ranston – Senior Project manager Ports of Auckland.

- The MPX process and documentation includes too much variety, in no small part because “every pilot is different”. There is no standard for MPX documentation. The eMPX software offers a standard template to enhance the master/pilot exchange experience and improve the shared mental model by being transferrable to any port as a standard template and responsive to improvement with input from users. The intention is to market it internationally.

Jason introduced a new concept for me, “Vapour-ware”; something which doesn’t yet exist except in a perceived need. The eMPX is a response to that need.

LINZ; Our changing context. Moving to data 1st and digital centric - Adam Greenland & Verena Bosselman-Borsos – National Hydrographer & Technical Change Leader respectively.

- In 1770 James Cook drew NZ charts which were still being used in the 1950’s. Paper charts are now being phased out. Current ENC’s are captured from paper charts. However, LINZ is capturing ever more dense data sets to advance marine science while also supporting safety and trade for New Zealand. Products and methods of distribution are changing as we move from S57 to S100 series. The data will be “agnostic as to vendor software” and its presentation will; be limited only by imagination of the stakeholders. There is a strong push to automate and speed up as much of the process as possible.

MNZ Response to notifications & compliance operating model. Inspection campaign on pilot ladders. Gerard Pollock & Pelin Fantham – Flag state, port state, ISM officer and deputy director of maritime compliance systems delivery, respectively.

- We were assured that the feedback forms that we observers provide to the web site or through the NZMPA site are greatly valued. They are all reviewed. Then acted upon in terms of criteria such as harm, conduct, public interest, frequency and consequence.

The 2018 focus on pilot ladders was reviewed. 1046 SOLAS ships visited NZ. 6723 port calls were made. 12,101 pilot jobs. Of the ships that were checked no less than 40% were deemed to not have safe access to the deck or were improperly rigged. The primary defect was choking the side ropes on the deck by strapping them to deck rings with D shackles. Damage to side ropes, damage to step chocks, damage to whippings. These are as much 2015 Health and Safety at Work Act problems as they are Part 53 rigging problems. There are responsibilities for individual workers and for PCBU’s (person conducting a business or undertaking). Ships cannot be “detained” in the legal sense, for this problem but can be told they must provide suitable arrangements before they leave. A subtle but effective difference. There will be a
safety bulletin for proper rigging of pilot boarding arrangements to be uploaded to the MNZ website. It will be dated 8/11/19.

An introduction to TAIC and how we conduct investigations – Aaron Holman & Martin Harper – Chief Investigator & Manager for Surface Investigations respectively.

- After offering a brief history we were told in no uncertain terms that TAIC is about investigating for the sole purpose of avoiding the same occurrence a second time. Their reports result in safety recommendations. They take some time because they must be right and must avoid the “jungle drums” in our small industry. Substance users are a subset of problems which will be highlighted as a Watchlist item. There was no comment about the current Parliament debate to soften the approach to THC cannabis. Anybody involved in an investigation will be assisting an INDEPENDENT enquiry which cannot be used in a regulatory, civil or criminal action. Their triage process decides which accidents to investigate and how an accident will be investigated.

RSD-E tug and electric propulsion – Sjoerd de Bruin – Area Manager Damen.

- RSD – Reversed stern drive. Damen is here not just for the transaction but for the relationship. 80 tonne+ bollard pull are being supplied in some ports. They are made very stable by a hull; design that increasingly includes much greater beam to length ratio. Damen will build no more than two electric tugs in the foreseeable future. One for PoAL and one other with different operational work requirements, in Europe. The results when both are in service, will be analysed to decide if the concept will be efficiently successful in the future. As problems develop, they can be solved by reference to one or other of the two tugs. Damen can collect an enormous amount of data from the sensors on every piece of equipment. The information can be sent to the Damen clinic and displayed on dashboard which they can develop for customer requirements.


- The traditional master/apprentice model was very well illustrated by picture reference to the old Walt Disney movie, The Sorcerer’s Apprentice, which painted a convincing picture of the problems which can occur when the apprentice doesn’t realise what he/she hasn’t yet learned. The new PoAL model, which is currently sitting with MNZ for approval, was explained in some detail. In summary there has been a decision to invest at the front end for a new trainee, with plenty of simulation and manned models plus observations. Existing pilots will receive train the trainer skills and/or competency assessment skills to operate in the new structured training program based on achieving competencies.

Proficiency and training plans for PEC masters – James Mariner – Master Interisland Line

- The current training plan has been 4 to 5 years in the development. Interisland Line spends NZ$1M per year on training officers. We were reminded that the PEC is no less than a pilot license in a ship specific case. Existing PEC’s will need additional training when the new larger ship proposals become reality. From August 2020 a points system will be in place to ensure continuing professional development. 80 points must be achieved within a range of options within each five years to maintain a current PEC at Interisland line. Involvement in a formal navigation incident investigation can contribute some of those points because such events are important professional development opportunities.

Managing long period waves and v/l surge in Lyttelton – Dr Brett Beamsley & Dr Giles Lesser – Met Ocean Solutions & OMC International.
• Waves were broken down into sea, swell and infragravity. There is a complicated structure propagating into the confines of Lyttelton harbour. It was measured in real time by two sensors reading 50 times per second. Certainly an example of the age of big data. The objective was to measure the effect of a proposed extension to be built at the container terminal. It proved the value of real time data gathering rather than virtual models.

DAY 2
AMSA phone application for incident recording and reporting – Conrad Adams – Australian pilot.
A reporting portal approved by AMSA which in demonstration showed extreme ease of use. Very quick opening of all pages, whether information pages or reporting pages. All regulations immediately available to discuss with ship master. Easy population of reporting fields either with auto-population or free text insertions and tick boxes. Closed loop communications confirm as soon as a sent report has been received. A large number of addresses can be set up ahead of time. NZMPA resolved later in the day to investigate purchase of this product and linking to NZMPA web site.

• This sessions threw up a number of interesting concepts and ideas to consider along with the detail of the Planning Guide. We also looked at a number of the best examples from aspects of various MPX documents around NZ. Our events are often low frequency but high consequence. Thus MCA is now taking a proactive approach by analysis to try and predict the likelihood of the next occurrence and forestall it. The idea that “any job you walk away from is a good job” is entirely unacceptable in this day and age. Every incident is an opportunity to analyse and improve. We now understand that “whatever way the pilotage is conducted must be able to withstand the scrutiny which has become possible in the age of big data”. Due diligence means using all available knowledge because this is the only thing defensible in law. If one sets up a plan, uses the PPU, follows the plan then the chance of accident will be minimised. There must be consistency of presentation. Different images detract from the possibility of a shared mental model. Defined passage plans can be used as a repeatable teaching tool. The community standards of acceptable risk have changed over time. Would manned flight to the moon have happened if it was postulated today? An interesting concept was put forward that part of this approach is due to reduced family size. There is no redundancy in a family of one or two children although there probably was in a family of eight or nine. Einstein was quoted. “You can’t solve problems by using the same thinking that created them”.

Review of Leda Maersk grounding Otago – John Clark – Pilot
• John focussed on the difference between ECDIS presentation and PPU presentation. The channel is 73m wide at that point. The ship’s beam is 37m. The ECDIS cross track error was set at 55m. Visual observation of approaching beacons was impossible without walking to the edge of the bridge wings because of container stacks to the full width of the vessel. No visual navigation, limited PPU navigation and an ECDIS navigation constrained by the perhaps unsuitability of IMO ECDIS specifications for harbour pilotage transits. We were left with serious introspective questions to ask ourselves. We were also privileged to have two Otago pilots in the room and able to provide some interesting additional knowledge. Some discussion of the value of a PPU predictor versus cross track error when navigating a long ship around the corners of a narrow channel.

The value of formally analysing any recent ship incident reports within any group of pilots and using that to influence any local changes of process cannot be too highly recommended.
PPU Training Course proposal – Lew Henderson – Wellington Pilot

- Lew presented many more questions than answers as he developed a proposal for a three-day course to learn about use of PPU hardware and software as well as connectivity. While he broadened the scope and drilled downwards it became increasingly obvious that there is still much for even a “super-user” to learn about the technology and much more navigation capability that we can all draw from it. Lew merely Headlined all of the many aspects that he had researched, without attempting to suggest how it might become a training program or who might deliver it. The audience was left with much to ponder on this subject.

Conclusions and wrap up – Ravi Nijjer and Bob Hubble.

- Bob applauded the fresh perspective that has been brought to the concept of pilotage planning. He reminded us that improving in this way also develops resilience to the inevitability of change. Training always lags behind technology. At the same time technology-reliant young people are very accepting of technology change but may fall into the trap of placing an inordinate reliance on it. He introduced the concept of thinking time which should be allowed for within alarm boundaries. Do we know why we set boundaries? Do we give ourselves sufficient time to think and then react appropriately after a boundary is breached? From his aviation background Bob related the very strong focus on protocols around data access and data use in a world where so much new data is created every second.

- Ravi reminded us about three words that had been repeated several times during the day; Consistency, Repeatability, Standardisation. These are the basis for a shared mental model which facilitates timely and easy intervention by the bridge team if required (if a non-conformance is detected). The pilot planning guidelines team were urged now to develop working examples of pilotage plans so as to observe the theory in reality. In passing he mentioned idea of piloting as management of kinetic energy. All of the planning is to ensure the kinetic energy does not get away on us in an uncontrolled manner.

- The creation of the Good Practice Guide to Pilotage Planning will be a pillar that underpins a Pilot Operations Safety Management System in any port.

- The remainder of the second afternoon was taken up with the NZMPA annual meeting including election of our national committee, administrative amendments to our Rules, including a new class of associate membership; harbour masters. Steve Banks was re-elected President for “one more term” and the next annual meeting was announced for Otago in 2020. Hugh O’Neil is chairing the organising committee. The level of membership fee was increased by $50. This had nothing to do with any perceived cost of living increase and everything to do with the large number and scale of increased activities by the volunteer force within our management committee. NZMPA is engaging frequently with Maritime New Zealand as our regulator and other organisations as our industry partners, to provide support and expert advice to a degree never before seen within our group. There have also been international engagements with groups such as our Australian equivalent, AMPI, and even our umbrella organisation IMPA. These are all expected to continue as we improve such engagements and outcomes for our New Zealand industry.
PEC Masters Update

Training Plans, Proficiency Plans and CPD

Napier – 11th-12th November 2019

At the Napier AGM and Seminars, I presented to the delegates a brief overview of what a NZ Coastal Shipping company was doing in terms of Training & Proficiency for Pilotage Exemption Certification. On behalf of Interislander, I explained the regime we had in place, and in addition, our current CPD program. This presentation is available for viewing on the NZMPA website.

The training and proficiency plans were designed to meet Rule 90 requirements and to set out a guideline for a candidate to obtain, and then maintain PEC currency. I made a comment during the presentation, that a key goal for our efforts and involvement with NZMPA is to encourage our PEC Masters to conduct his or her pilotage at the highest professional standards in line with international, and national pilotage standards. The benefits of doing so, include route and traffic management standardisation, plus the use of the same terminology, procedures and communications when interacting with Port Pilots, tugs, port services and other port users.

Good Practice Guide to Pilotage Planning Section 5, pertaining to Pilot Exempt Vessels was reviewed and the current basic and generic format suits its purpose as a guideline only, at least for a first edition. When published, pilot exempt operators can adopt this section as they see fit, with recommendations and feedback incorporated in a 2nd Edition in the future, if necessary. Also, any agreed terminology and guidance on pilotage planning can be incorporated into existing or revised passage plans to match the standards adopted by our Ports.

PEC Masters present at the Seminars were Albert Ubles from Strait Shipping, James Harvey and myself from Interislander. Also present was Mark Hansen from NIWA, who will be pursuing his Wellington PEC very soon.

Acknowledgement is due to Strait Shipping management who continue to support our efforts by renewing their Associate Memberships every year. Also, a thank you to Interislander for supporting our initiatives and the membership of their Masters. A warm welcome extended to new Associate Members Rowan Dixon and Johnny Karlsson.

Thank you again to NZMPA on behalf of our PEC members, and also Napier Port and the organizing committee for being fantastic hosts. Best wishes for the holiday and festive season, and a prosperous 2020. See you all in Dunedin.

James Mariner
The ‘Pilotage Planning Working Group’ of the New Zealand Maritime Pilots Association, (NZMPA) has written this paper to discuss the current benefit and future requirements of official hdENCs for New Zealand pilotage areas.

In October 2018, the Transport Accident Investigation Commission (TAIC) put ‘Navigation in pilotage waters’ on its Watch List. The Watch List calls the attention of regulators, operators and training providers due to a string of incidents with recurring safety outcomes.

The Watch List documentation provides the following statements relevant to this paper:

- “Safe navigation of a ship through pilotage waters requires every part of a ship’s voyage to be planned”
- “All members of the bridge to have a common understanding of the plan”
- “Training and use of electronic chart display and information systems” – The NZMPA interprets this statement to also include a pilots PPU.
- “Safe conduct of a ship through pilotage waters depends on high standards of passage planning. Pilots and the bridge team must share an understanding of the navigation plan, and know where the ship is allowed to go. If the ship deviates into unsafe waters, members of the bridge team must be able to challenge those in charge”

Through extensive research and development of a ‘Good Practice Guide to Pilotage Planning’ the working group has arrived at the conclusion that the optimum solution to the above involves integration and use of official hdENCs. These official hdENCs can be used with confidence by all users, this includes bridge team (ECDIS) and the pilot (PPU). An official hdENC can be loaded onto a pilots PPU and be legally (compliant with IMO resolution A.817 and MSC.232(82)) loaded onto ships ECDIS, whereby allowing all members of a bridge team to be referencing the same charted and planning information simultaneously. This is the foundation for a shared mental model and for applying maximum situational awareness to a pilotage operation by the bridge team.

The working group has determined that the most effective method of ensuring that all members of a bridge team have a common understanding of the plan and therefore develop a shared mental model is through the use of ‘official’ hdENCs. This is due to:

- The same hdENC being used by the ship and pilot simultaneously – all bridge team members using and reviewing the same information.
- Additional bathymetry information and high resolution data, therefore allowing the set up and use of effective and reliable safety depth and safety contour functions to ascertain where the ship can be navigated or not.
- High resolution data enabling safe navigation by showing the safety margin available for manoeuvring, focusing on high precision operations such as turns, navigating in confined waters or a narrow channel, swing basins, berthing and areas where tidal influence has a significant impact on safe navigation.
- Using hdENCs for safety of navigation follows the principals of Bridge Resource Management (BRM), ensures maximum situational awareness by the bridge team, sets up the foundation for a shared mental model and can act as an effective communication tool in situations where English is not the first language for bridge team members.
Other benefits of using hdENCs for pilotage areas:

- Ability to input real time tide data into a pilot’s PPU and ship’s ECDIS, enabling a safety-margin to be automatically adjusted for changes in tidal height.
- Improved accuracy and increased data allows for review of existing procedural safety margins in pilotage operations. This is important, as the existing safety margins are being eroded by an increased frequency in larger vessel calls. And vice-versa, the additional accuracy may show that the safety margins have increased.
- Improved confidence provided to chart-users due to the increased scale, accuracy and availability of high resolution data.

The current standard of ENC charting is not sufficient in scale, accuracy and detail to achieve the above benefits. As this paper is written from the viewpoint of the NZMPA, there may be many more benefits to ports and the NZ industry than those listed.

This paper has explored the benefits of official hdENCs being developed and produced for NZ pilotage areas. Going forward, there are three possible scenarios that the NZMPA working group can see at present:

1. Official hdENCs produced and in use by ports/pilots and available for use to calling ships – discussed above.
2. Unofficial electronic charts produced by individual ports for use by pilots and ports only.
3. The status quo.

There are ports in NZ, who have realised the benefit of high-resolution chart data and have produced their own ‘in-house’ unofficial hdENC. Although this is a step in the right direction, the working group believes this option does not meet good practice, particularly where official hdENCs are available. In this scenario, the unofficial hdENC is only available to one bridge team member – the pilot (PPU). This still leaves significant challenges for the pilot, in order to develop and maintain a shared mental model and does not enable the bridge team to effectively monitor the vessel’s navigation using existing ENCs. Unofficial hdENCs are unable to be loaded onto a vessel’s ECDIS system as they do not meet the requirement of IMO Resolution A.817 and best industry practice.

Doing nothing and maintaining the status quo, is not considered a reasonable option by the NZMPA. The technology used in pilotage operations has advanced in recent years with mandation of ECDIS on ships and developments in pilots’ PPU technology. The NZMPA considers it reasonable that charting keeps pace with these technological advancements, to allow these systems to be used at their full capability and potential for increasing safety of pilotage operations. Current large scale port ENCs represent their coverage areas in a generalised way using relatively small scales as they were created from the original paper chart product. For operations in confined waters, additional special requirements exist with respect to accuracy and the level of detail required. These requirements must be reflected in the official ENC to enable safe navigation.

Recommendations:

1. NZMPA to continue engagement with LINZ NZHA to further discuss charting requirements for NZ pilotage waters.
2. LINZ NZHA and NZMPA to develop partnerships with NZ ports to discuss the need of such a product and for
3. NZMPA Pilotage Planning Working Group to require the use of hdENCs – when available - in pilotage operations in order to meet good practice.

The attached two pictures show the difference between an existing ENC and an official hdENC currently being used as a trial at Napier Port.
Voice-Enhanced PPU as Co-Pilot

Introduction
At our NZMPA 2019 Conference in Napier, I was unexpectedly gifted a Navman car navigation system. During the conference, there was the usual discussion about failures in BRM, how the Bridge Team had failed to support the pilot. It occurred to me that elements of Navman may suggest some possible improvements. (N.B. this idea does not replace current practice, but may add another defensive level). Before proceeding, we need to quickly review how we got to this point.

What is BRM?
Bridge Resource Management is currently defined by Ravi as “People, Equipment & Procedures” which implies the combination of all means – both Human and Technical - to mitigate one-man-error. BRM started with Swedish ferries 30 years ago: Kari Larjo’s design concepts and philosophy were modeled on the Pilot & Co-Pilot on aircraft. Identical twin consoles for Nav and Co-Nav, and “Thinking Aloud” to create “shared mental model” and the conditions for “Challenge & Response”. This all worked well in a predictable environment i.e. identical equipment and procedures, thorough training, minimal “Power Gradient” etc.

Swedish Ferry BRM model & Pilotage
Pilots do not exist in a vacuum - although our skill-sets, equipment and procedures form a distinct entity. We hope to complement the Bridge Team. However, the inherent flaw in this model is that we have one fallible Human pilot hoping to be challenged by another fallible Human Bridge Team. There are inevitable mismatches in equipment, training, experience, culture, procedures and local knowledge.

The Challenges of Challenging & Being Challenged
It is difficult enough for one pilot to challenge another, thus extremely difficult for a Captain or mate to challenge the pilot. And if challenged, how might the pilot react? Might he freeze like a deer in the headlights? Might he countermand the challenge, thinking he knows better? BRM dependent on Human Challenge is imperfect.

Accident Investigations Identify “Failures in BRM”
The concept, meaning, understanding and application of BRM remain elusive: we can theorise what it ought to be, but only if there is an incident is it found wanting. If there is no incident, we cannot assume that BRM was working well. In one sense, it might be akin to identifying Luck as a factor. (N.B. BRM training was accelerated by the need to avoid incidents which might deem certain casino-ships “unlucky” to superstitious Chinese gamblers). Good BRM certainly improves the odds of success.

PPU as Co-Pilot
The technology of voice-enhanced car navigation has been around for decades: it ought to be an easy fix therefore to adapt to marine navigation. The PPU with voice can then act as a technical Co-pilot to the Human Pilot. A ‘robot’ can easily challenge a Human because devoid of all emotional baggage. There are many reasons why an aural system is the best way to challenge a pilot in visual mode as invariably occurs when closer to danger to maintain focus without distracting his gaze. As in Smartship, we aim for “the seamless integration of visual and instrument pilotage”.
PPU – Track Performance Score

Introduction

Have you ever thought after a job that you had stayed pretty close to track throughout? If it were possible to score such a performance, might this give the incentive to improve the score and aim for a personal best? There is a Human propensity to aim for the bullseye. And then – if safe – conduct the pilotage without reference to the PPU. Comparing Visual vs. PPU scores should prove the value of the PPU whilst improving the visual skills; such resilience/redundancy is necessary because PPUs and Pilots can both be fallible. One is a check upon the other.

Caveat:
Lest anyone be concerned that management might take an unwelcome interest in such scores, then perhaps an ability to disable the score could be engineered?

Relevant Parameters:
1. XTE. If Track within say 10m for 100% then a score of 100% and pro-rata
2. If XTE ever exceeded say 40m, then deduct 50%?
3. If SOG ever exceeded the range, lose 10%?
4. If UKC ever less than 10%, lose 90%

What about ROT?
Since ROT is simply a function of SOG and XTE, then there is no need to score this. ROT simply has to be enough to maintain the XTE tolerances

XTE in very long ships or in beam wind?
This is where such measurements may be problematic e.g. swept path and pivot points, pods vs. propellers, quality of helmsman and his ability to steer ROT, Bow Thruster usage, effects of wind and tide.

Analytical Tool?
A broader analysis of scores might indicate that the tracks on the PPU are not in the right place since the ship will tend to follow the pivot points and we will always prefer to stay on the inside of curves. Likewise, the speed ranges may not reflect the optimum e.g. on passenger ships, it may be better to keep the speed at 8 kts until half way around Deborah Bend.

Navicom Reaction
When I first broached this idea to Navicom, Dale Marsh said that Troy Evans in Tauranga and Jeremy Brew in Newcastle had suggested something similar...There is rarely such a thing as an original idea.

Voice-Enhanced PPU as Score Announcer?
Before you can switch her off, she might announce (in a French accent) that you have done very well, or in a Jewish Momma tone that you were never going to be good enough...Best to press the Mute Button first?

BRM & The Challenges of Challenge

When we were first introduced to the concept of Bridge Resource Management (BRM) we gained phenomenal insights into the Human Condition. This quest to understand the complexity of our very essence is likewise part of said Human Condition, as in the ancient Greek injunction “Know Thyself” carved in stone at the Oracle of Delphi. Because evolution is a slow process, we are physically and psychologically little changed from our hunter-gatherer ancestors. How we move, perceive, think, act, feel and communicate are all dynamic features influenced by each other and by external agents in our psychological, physical and social environments. If knowing oneself is a tall order, then knowing others...
must be nigh impossible: bards, writers, theologians, poets and artists for millennia have constructed models to attempt a representation of the Human Condition. Shakespeare has Hamlet ponder the question:

“What a piece of work is man, How noble in reason, how infinite in faculty, In form and moving how express and admirable, In action how like an Angel, In apprehension how like a god, The beauty of the world, The paragon of animals. And yet to me, what is this quintessence of dust?”

It is of fundamental importance for pilots to have some insight into how they function and how they interact with others, with Captains they have just met from diverse backgrounds and cultures. This is one of the many features which makes the job so fascinating – an experience quite alien to airline pilots. We also have to instantly perform at a high level, on ships of diverse type and size, with bridge equipment we have never seen before. This can be stressful, and Humans do not function best when stressed, or even worse - distracted. Of all people, pilots should be more forgiving of the Captain of the Costa Concordia - distracted by a phone call - and not be swayed by a vitriolic press seeking to implant the owners’ narrative of his folly, whilst ignoring myriad questions such as the ship’s watertight integrity to withstand the not-unforeseeable risk of hitting a rock or iceberg or other ship. Civil Aviation has long been aware of the dangers of “one-man error” and had introduced the concept of co-pilot at an early stage. But as we know from the Tenerife disaster of 1977 (when 583 died) there are major challenges to mounting a challenge (see below). There are also problems in reacting to a challenge e.g. does the pilot accept he is wrong and then correct his error? Or might he enter a state of denial, disabled by cognitive dissonance. We are now in the realms of character, not competence. As Joseph Conrad well knew: We are all Lord Jim. Conrad himself gave up the sea after just one trip in command.

Interestingly, when we look at the etymology of the word ‘Challenge’, we can see that there is a host of meanings and implications which rather suggests the complexity of the concept. “Challenge” derives from 12th Century French, derived from the Latin Calumniare - ‘to accuse falsely, misrepresent, slander’. Challenge can be a powerful accusation of wrongdoing and a call to account by combat. Challenge puts us to the test, and the concept deserves deeper examination than is cursorily given.

When an accident investigation deems that a pilot not being challenged somehow indicates a “failure in BRM” we demean both the concept of challenge and the philosophy of BRM. The current focus apparently lies in improving the “shared mental model” to ensure that all minds are focused on identical goals. Although this may indeed improve the chances of a challenge being mounted, there is precious little time between a successful challenge and one too late.

How difficult is it to challenge another? How difficult is it to challenge ourselves - iron-bound in our certainties, ideologies, self-image and prejudices? How difficult is to challenge a whole group? These are questions of universal import. Advertisers and rulers already know our every weakness, with our preference to conformity. We are social creatures who prefer the safety of the herd to the loneliness of the maverick. Rather than voice any genuine concerns, we will submerge that inner voice to give the answer that our master wishes to hear. Imagine the difficulty of working for someone like Stalin, Hitler or Donald Trump. Sycophants thrive in dysfunctional hierarchies – they are the Yes Men. But who has the courage to say that the emperor is naked? When whistle-blowers like Mordechai Vanunu, Edward Snowden, Chelsea Manning, Julian Assange dare to blow the whistle on powerful Establishments, then speaking truth to power requires reserves of courage that few possess. The extreme punishment meted out to Conscientious Objectors like Archibald Baxter in WWI show that standing up for your principles leads to a very lonely road, a veritable Via Dolorosa. When a judge dares challenge the Establishment, his career hits an icy mountainside. When a President challenges the Military Industrial Complex, his head is blown apart on live TV as a warning to any who dare repeat the attempt. It is so much easier to keep our heads below the parapet and leave the challenges to someone else.
BRM is a superb philosophy with universal application: it allows us to know ourselves better, how we function as individuals and with each other. It is of paramount importance to pilotage - but one fallible Human system (Bridge Crew) is a most unreliable check on another fallible Human system (the pilot) because of the difficulty of challenge. A mechanical device has no such qualms and would make for more timely intervention. Throwing down the gauntlet, I would like to see BRM better used in Accident Investigation itself, to attempt to reconstruct the thoughts and perspectives of both pilot and bridge team. Simulators could also play a part in such reconstruction, and hopefully the pilot himself might better understand the incident. The whole point of accident investigation reports is for the rest of us to learn lessons so as to avoid future repetition. But if “BRM failure” becomes the “Deus ex Machina” to explain an incident without deeper insights, then we are all the poorer. They might as well blame Bad Luck.

Legacy & Leadership

“Always leave the job better than you found it” – Mike Battrick, London Pilot

“No Legacy is so rich as Honesty” – William Shakespeare

On our first day at Port of London on 3rd January 1999, the first pilot we three newbies met was Senior Pilot, Mike Battrick. Captain Battrick had organised a tour by pilot boat of the 120 berths we would need to learn and the various idiosyncrasies of the tidal effects, both on the berths and in every part of the river. There was a lot to take in, and the next 6 months required heroic depths of study to memorise so much information, tested through 4 stages of advancement to Unlimited Pilot within 3 years 6 months.

Tripping with 75 different pilots gave 75 different ways of doing the job: I never failed to be impressed by the disarming candour of those pilots, keen that we should learn from their hard-won experiences. There was patently a culture of adding to the collective knowledge to help raise the standards of the pilotage profession. I am forever grateful to my London colleagues, most of whom will now be retired, satisfied that they left the profession better than they found it. That candour is their legacy.

Mike Battrick was also a strong advocate for an in-house simulator. Respected both by his juniors and management, money was duly allocated; thereafter 2 pilots together spent 5 days every 2 years in the Simulator. Mike was one of the four operators, and we would spend as much time in de-brief as on the simulator. The quality of instruction was phenomenal.

One could also learn from bad exemplars of one’s profession. Deep Sea masters were of variable quality, and I learned much from some of the worst i.e. when I get to be captain, I will not operate in such a fashion - not the greatest legacy one could imagine. Eventually, one reaches the heights of one’s profession, and the last few years might include some reflection on one’s legacy. Will we leave the job better than we found it? Or will we simply have used the profession as the means to an end, hoarding knowledge for power and stifling all initiatives as if they were a threat? Will colleagues sing our praises or rejoice our departure?

Lest we forget, pilotage is a service industry: we serve ports, ships’ masters and the public. Then ships got bigger than the ports were designed for: it is only by raising the professional standards can we continue to serve all our responsibilities. Training is the essential element, and those trainers have created huge legacies e.g. Captains Larjo and Pettersson, originators of BRM, Ravi Nijjer who adapted BRM for general usage in Australasia, Paul Stanley for his development of PPU, David Christie, Hans Hederstrom, Peter Listrup and Antonio de Lieto for their leadership at Smartship and CSmart, Cliff Beazley for his Manned Model lake, and not forgetting Kees Buckens for his unstinting drive for recruitment and deployment of a generation of NZ deck officers. As Sir Isaac Newton said: “We stand on the shoulders of giants”.

Finally, the part played by the NZMPA must be acknowledged. Although but few, we have endeavoured to keep up with the achievements of our Australian colleagues represented by AMPI. The founders of NZMPA (Jon Mayson, Euan Crawford, Ray Barlow) deserve every credit, that despite the ingrained opposition from certain ports (who seem to consider NZMPA as dangerous as a Trade Union, God forbid!) their vision has flowered – particularly under the indefatigable leadership of Captain Steve Banks. John F. Kennedy’s Inaugural Address is both legacy, and a definition of legacy:

“Ask not what your country can do for you – ask what you can do for your country.”
PORT OTAGO

A Sense of Perspective
Her latest trials and tribulations in Tauranga notwithstanding and we won’t know all the details as we go to print, it seems that the *Ovation of the Seas* had an engine failure of some description in Wellington Harbour and was disabled for a short period of time. The vessel was as such managed and nothing untoward happened due to mitigating procedures and other factors already in place in Wellington Harbour and aboard *Ovation of the Seas*, combining to ensure that the above-mentioned nothing untoward happened. That didn’t stop us in Otago speculating as to what might have happened if the same thing occurred whilst rounding Harington Bend with the same or another large vessel. Well, if the worst came to the worst she would probably run up on a bit of sand or gravel, or maybe even something slightly harder, resulting in a shorter or longer stay at the maritime panel-beaters. The media would have a welcome field day with pictures splashed nationwide and with luck internationally. It would most likely be escalated and be hailed as tantamount to another maritime disaster. What a great picture it would be. The snapchat and twitter feedback would be ginormous and the people at the sharp end, “Hello Mr Pilot, can I have a word?”, would be lashed to the grate, hung from the yard and keel-hauled …or nowadays maybe just cyber-bullied and trolled. But it wouldn’t really be a disaster at all would it? Nobody dies, do they? It’s unlikely that anyone would even be physically injured. Backing out of a driveway and squashing an infant child is a disaster, a proper tragedy, a real shit start to the day. It won’t make the front page though, because it’s not quite as photogenic is it? Not really going to make a million ‘likes’ on FB. And sad to say, it’s far a more common occurrence *ergo* less newsworthy, than big ships going aground in harbours.

Rather unfortunately and regrettably more photogenic is the tragedy that has occurred involving a visit by guests from *Ovation of the Seas*, which coincided with White Island clearing its throat at the cost thus far of at least 5 lives lost and a number of souls unaccounted for. Any professional mariner, master or pilot, who feels like they are in the cross-wires and up to their neck in the brown stuff could ask themselves if they would rather be the pilot of the *Ovation of the Seas* as it slid to a halt on the putty in their harbour, a close relative of an untimely visitor to White Island or the driver of a family car that reverses over its youngest intended occupant. 100% of us have the same answer. It’s all a question of perspective. Speaking of which, the report has just come out about the *Leda Maersk* tragic disaster. Like the *Molly Manx* before her (author takes a bow and continues) the *Leda Maersk* spent a minute or two at most on the putty before being recovered to the channel and berthed with no damage whatsoever sustained. Port Otago Limited procedures for mitigation of such events were in place and shown to be effective, in that experienced and trained pilots were able to recover the situation with the minimum of fuss using the procedurally allocated assets to do so.

However, the investigations have missed that, as they effectively stopped at the moment of grounding, instead concentrating on the lack of PPU training for pilots and repeating the BRM mantra, as in *Leda Maersk* 1.8. “The commission repeats the three key lessons made in a previous report (Molly Manx)*:

- There must be an absolute agreement and shared understanding between the vessels bridge team and the pilot as to the passage plan and monitoring against the plan
- Vessel’s bridge teams must actively promote and use the concept of bridge resource management, including the incorporation of plots into the bridge teams to manage voyages properly

* author’s parenthesis
A vessels ECDIS is an important system for monitoring the progress of the vessel and warning the bridge team when things could go wrong. It is essential that it be configured correctly for the phase of navigation and the proximity to navigation hazards."

And who could argue with that? Except to say that the commission can repeat these three key lessons and a few others *ad nauseum*, but it won’t get them done. Neither a pilot nor his port nor the vast majority of bridge teams - if indeed the vast majority of bridge manning may be described as such - can do anything about it; BRM works but BRM isn’t working.

Pilots will continue to deal with whatever excuse for a bridge team is presented to them. Competent bridge teams are such a rarity that when, to give a bespoke example, Carnival Cruise ships present themselves around the world, they are constantly met by bemused pilots unable to comprehend the concept of integrating with Carnival’s fully swept up competent bridge resources. Ports can do little to assist in either enhancing the quality of lesser bridge teams or dissemination of quality BRM apart from trying to train their pilots and provide maritime assets, including training, as best they can in the face of conflicting demands on budgets from mariners demanding the assets and stakeholders wanting justification for the expense.

One question from port company stakeholders might be “If some ships come into our port using competent BRM, why don’t they all do it?” Answers on a postcard, please? Ports are given very little guidance and that which is given is flawed. They are saddled with a utopian vision of how the authorities think ports should be run, then told to assess their own risks, put their own slices of Swiss cheese in place and standby for a hyper-grilling when after all that, there is a minor aberration.

The investigators appear essentially correct in their findings but need to fire their recommendation salvos somewhat further upstream than pilots, ports and bridge teams, to target where such recommendations can be implemented. State governments and their muffled maritime mouthpiece, the IMO, need to legislate to change the minimum manning standards and bridge team training requirements such that a pilot and his or her port are presented with a competent bridge team, not just when a cruise ship appears at the pilot diamond, but every time. Good luck with that.

*(Craig Holmes)*

**GISBORNE**

The Port has not experienced an operations-disrupting weather event for the best part of a month now, and the subsequent reduction in the required intensity around forecast-monitoring is very welcome. Constant scrutiny of multiple weather forecasting models to try and make the optimum call on operations can become exhausting at times. The conference season has been and gone and both the Sydney AMPI affair and the NZMPA event at Napier providing some useful discussion in amongst the various sales pitches. The lack of standards and certification around PPUs was canvassed in Sydney and it is a good point, particularly given the fact that the product booths were dominated by several different PPU makers all spruiking their wares.

Jorgen Strandberg, who had spoken about the Shipping Industry of the Future on Day 1, took to the podium on Day 3 to give an impromptu summary of the discussions he had witnessed over the preceding days; sandwiched between some praise and encouragement, he delivered some solid constructive criticism of some of the basic tenets of discussion around passage-planning in particular; words to the effect that it’s all very well discussing what the pilotage providers intend in the way of passage-planning, but ultimately the pilotage-plan is a document which is offered to the Master for his consideration, and it is at the Master’s discretion whether to accept that plan (apologies to Jorgen if I have not encapsulated his message exactly).

Napier was all about standardisation in passage-planning and consistency of approach across the various pilotage districts. At Gisborne, we’re reasonably well ahead of what’s been proposed, and we look forward to refining our advice around the minutiae of the proposed guide. We probably just need to make a delineation between Passage Plan and Pilotage Plan, but the source data is already well-displayed and communicated to vessels well before arrival at the Port.

Headlining the highly disruptive winter was the delays to shipping but consequent to those conditions is the challenges to carry out any substantive dredging across the winter, and of course the prevailing SE’ly swells tend to migrate sand into the channel. Hence, we have *Kawatiri* here on short-term charter to remove approximately 30,000 cubes of material as a catch-up measure to get us back on track for the in-house dredging campaign across the summer months.

Logs of course continue their incessant flow across the wharf, and we are now seeing the first of the
cruise vessels with the seasonal reefer trade approaching not far behind. Romanticising back to those conferences this morning however as I went through our succinct, yet thorough pilotage plan with the Master of a deep-draft log ship prior to departure: discussions, drawing pictures, jointly assessing the ship’s ECDIS and associated routes, drawing pictures, etc. Item 4 is making the aft tug fast after letting-go the ship’s moorings – yes, there is one arriving vessel which we will establish a safe-passing with in the roads after which I will disembark and transfer to that vessel – yes, pilot ladder to be rigged stbd side, 2 metres, 2 manropes – yes.

Moments later, on the bridge wing; we can let go the stern lines Captain - first we make tug fast? – no first we let go the stern lines. What side pilot ladder? - Stbd side Captain – You want manropes? – yes please. Approaching the outer end of the channel; you go to another ship at anchorage now Mr Pilot? – no Captain we arrange a safe-pass with the ship on the approaches and then I go to that ship on the approaches.

In keeping with the recommendations of multiple incident reports and in shadow of the TAIC Watchlist, we go through a pilotage planning process which at times (probably 20 - 30% or more at Gisborne) the ship’s Master fundamentally does not comprehend and yet the vessel movement carries on regardless. This is the reality of global trade, but it is also an institutionalised paradox. I suggested from the floor of the Napier conference that the next conference could maybe have an agenda item based around these sorts of issues. Maybe we should see if Jorgen’s up for a speaking role.

(Chris Kaye)

**BAY OF ISLANDS**

Nothing too exciting to report from Bay of Islands: cruise ships just get bigger and bigger, with the consequential reduction in available space which everyone is dealing with. Great pilots’ conference, and the Passage Planning work will be equally helpful to harbourmasters.

On a different note, I was recently returning from visiting relatives in Cornwall, and on the spur of the moment stopped off at Plymouth, quite forgetting the extent of maritime history there until I walked around. By sheer coincidence, on arriving at Plymouth Hoe (a large park overlooking the harbour) I came on a large crowd of elderly gents dressed in blazers and medals who were archetypal old navy guys, standing around a bronze statue of a watch-keeper. After a few queries, it turns out it was Merchant Navy day, and the statue was to be unveiled later that day. This following a campaign for many years to get recognition for the war effort by the MN. Planning on returning later, a further explore found a huge monument to both wars, with the individual name and rank of 7,200 Royal Naval personnel of the First World War and nearly 16,000 of the Second World War who were lost or buried at sea. Seeing the individual names row upon row is difficult to describe.

On a lighter note, the next statue along is a very jaunty one of Sir Francis Drake. this guy was quite a dude to say the least, with an impressive CV of achievements. A wander to the other side of the harbour brought me to Lawrence of Arabia’s house, who apparently renamed himself Shaw and joined the RAF keeping a low profile until his early death from a motorcycle accident.

Returning to the unveiling, it turned out to be difficult to get to, due to expensive fencing, mainly in place for the University Awards, so a quick trip up Smeaton’s Tower provided a good platform; this turned out to be an impressive trip in itself - not only a marvel of engineering for Eddystone Rock, but also the fact it was dismantled and re-erected on the Hoe. A wander around the Mayflower exhibition, followed by the oldest pub in Plymouth finished the day. A visit to the old victualling yards being converted to posh apartments was a highlight before leaving. This place fed the Navy that was a powerhouse in its day: 50 tons of bread, and 50 tons of beer a week, and 100 bullocks a day processed. (Didn’t mention anything about veggies so I’m guessing not many vegetarians around then.)

(Chris Kaye)

**MARSDEN POINT**

I missed out on the last two Ports of Call, but now there is so much breaking news regarding the Port’s future that my head started spinning out of control!! With plans for a new dry dock, the potential shift of POAL to Marsden Point, and a rail link, the Government is opening its purse for the above projects, and it all looks like it is coming to fruition - fingers crossed.

We have been involved in several simulations for the Dry Dock feasibility studies report and 330+Mtr container ships, and all looks do-able. Our in-house simulator has ticked all the boxes - and why not? We have even worked out office space for POAL operation staff when they shift.

Coming back to our Bread & Butter, shipping-wise, there has been no reprieve, with a small one-week drop in log cargo. If that was the forecasted log cargo recession, then we will take it!! North Port berths are experiencing near-full occupancies.
We are in the process of thoroughly reviewing and formalizing our Pilot CPE, Proficiency Plan, annual and Peer assessments. I understand many other ports are doing the same or have done something in this regard. We are wondering if there any basic guidelines available from NZMPA, in order that all ports are on the same page – especially the Pilot proficiency plan or CPE.

With the cruise season and holiday season around the corner, we will also be going to the Bay of Islands to help the Harbour Master with the cruise ships - a busy time ahead.

I am sure you guys had a successful NZMPA Conference in Napier. None of us Pilots could make it, but our Operation Manager was in attendance. Richard Oliver, our Pilot-in-waiting, has completed the penultimate license stage and is waiting for the Super Gold card members to call it a day or to strike the 7 digits! He has a better chance for the latter.

We are looking forward to a busy and glorious summer. Safe Piloting to all. 

(Kirit Barot)

**AUCKLAND**

Contrary to what you might be reading in the papers, the removal vans haven’t yet arrived, and the Port is still here, as busy as ever. Just when we thought the lunatic fringe had been put back in their box, it seems a couple of Pork barrel politicians from up the road are attempting to unleash the hounds yet again. I’ve always found it difficult to take these self-important protagonists seriously and their latest grandstanding efforts have done nothing to make me change my opinion, so it’s business as usual here for us, as we continue providing for our city and they continue talking bollocks.

Holly Clayton has just recently passed her C-grade license, and I guess is now anxiously waiting for the mail to arrive from Wellington. It will be good to have her in the team, especially as the America’s Cup fast approaches, with its threatening invasion fleet of super-yachts.

Matt Holbrook recently attended the Check Pilot course in Brisbane. He spoke very encouragingly of the experience, and I was hoping to get some more details to pass on to our readership, but despite repeated appeals for a few paragraphs for inclusion here, he appears to have been far too busy (now I know how an Editor feels, Hugh!) so hopefully upon reading this he will be inspired to enrich us all in the next edition.

One of my problems as the local roving reporter, is my difficulty in sourcing newsworthy material from my colleague’s. This is probably not helped by the fact that I usually write it just before deadline as I wait in the pilot hut between jobs at some ridiculous hour of the morning. Whilst this could be considered a constructive use of down time, it’s generally not the best time to be ringing around my workmates pleading for something worthy of print, and because of this I am unable to expand in more detail a recent email from Nigel who witnessed the rather unorthodox closed loop communication technique displayed by the master of a vessel approaching Bledisloe 2 when he suddenly chose the moment to pull out a prayer mat and get down on all fours behind the bridge front to have a few words with his creator. A more junior Pilot may have taken this Master’s sudden appeal to the Almighty as a bit of a blow to their skill and confidence. It’s a good job we had our most experienced and senior Pilot on the job.

On behalf of our team I’d like to wish Merry Christmas to all, and another safe year of Piloting. 

(Craig Colven)

**BLUFF**

Greetings from the Pearl of the South! SouthPort has been busy improving on various aspects of the business: we have recently completed a multi-beam survey of the entire harbour and will be in conversation with LINZ shortly on developing a high-definition ENC bathymetric chart for the harbour. This is something that is no longer considered a luxury but a must-have, and the pilotage team is very pleased with the development made in this aspect of our business.

Our rock solid and dependable Pilot Launch, the *Takitimu II*, which was purpose-built for the Foveaux Strait by the local Gough Bros. Ltd. has recently received a major upgrade to her electronic navigation system. Among the many upgrades, there a couple of features I find really impressive. The first is a thermal-imaging camera which enables the vessel to quickly locate any MOB particularly in the hours of darkness. This feature combined with a proven cradle recovery system at the backdrop of the launch and the excellent crew that drive her, make her a reliable team member and an integral part of the Pilotage team. The second feature I personally like is the 3D echo sounder which enables our launch to quickly respond to and clarify any suspected changes to the seabed in the harbour, and being a tidal port with strong flows, this certainly is a very handy tool to have. The rest of the electronic navigation equipment is the latest you can get for a boat of her size.

We are well and truly into the cruise ship season and for us this translates as covering Pilotage for Fiordland along with our colleagues from Port Otago. The number of cruise ships wishing to visit...
Fiordland has been steadily increasing over the years and at the moment doesn’t seem to have a downward trend in sight. We now have a standardised set of passage plans through the Fiords with the information being communicated to the vessels and available on the Environment Southland website. We are also trialling Navicom Dynamics Gyro Pilot which I have taken with me for one job so far on the Majestic Princess and found to be very useful.

On a different note, the latest report on the collision between the Norwegian frigate Helga Ingstad and the tanker Sola TS in the Hjeltefjord in Norway brings to light a lot of good findings. In my view something that stands out is the fact that most incidents involving large vessels in NZ waters and the latest one in Norway has occurred during the hours of darkness. So something that really stands out is what kind of additional control measures do we need during hours of darkness? In my opinion, pilotage today must be an equal use of visual and electronic navigation techniques. That being said – taking a PPU out with you is of little use if you have not been trained in its use – practical training, so that the mind is quickly able to switch between visual and electronic and interpret them both to be able to best decide on a course of action. However, is that the only control measure? I leave you to dwell on that…From the team in Bluff, here’s wishing you all a joyous and blessed Christmas and a Happy New Year! Safe seas and fair winds! Soli deo Gloria. (Paul James)

WELLINGTON

It’s been a strange past month or so. Having been involved in the AMPI Conference in Sydney and the NZMPA Seminars in Napier plus some leave and I have avoided work for ages. Still my comrades have soldiered on through the spring weather and kept the flame shining. Well they had the settled weather and now its blowing a gale for a week. The cruise season is in full swing and added to that is a visit by a selection of interesting vessels together with HMB Endeavour to celebrate Cooks visit some 250 years ago. It has bought some controversy but much less than in other regions.

Still whatever your thoughts it is a splendid little ship and it shows the determination and courage of those who sailed her so far from home to a land barely known. The pure feat of navigation leaves me in awe as I gaze lovingly into the screen of my PPU as it guides me on my chosen track. How far we have come. From a time when an accurate clock was the key to now when modern position fixing is accurate to decimals of a metre.

As I write this, the wind is from the West and gusting more than 40 knots. I see she is still alongside and that’s the safest place in these conditions. Sailing Cook Strait in 40 kts under sail will test any mariner. I shall watch their departure with interest from the 11th deck of a Cruise vessel wishing I was down there with them.

We must all thank Colin and his team for a fantastic Seminar and AGM. The venue was great, the organisation smooth, and the content captivating. Well done, guys. (Lew Henderson)

LYTTELTON

We have had visits from several long-line fishing vessels preparing for their voyages to the pristine icy cold waters of the Ross Sea to target toothfish. The toothfish would have thought they were safe from human predation as they live in an area which spends much of the year covered in sea-ice. Though not a fisherman, Liam Neeson sums it up with his words: “I will look for you, I will find you and I will kill you”. These vessels are modern and well equipped. The Nordic Prince has a bow and a stern-thruster. Things have changed from the days of the Oyangs when some fishing vessels were never a first-choice job. A line that was frequently used by older Pilots, with memories of what we would now generously call a near-miss with these vessels was: “I will let the junior Pilot do this one as he needs the experience” as if he was doing him a favour.

The Albatross arrived this week on her first visit to carry out maintenance dredging. The infill in the areas deepened by the Fairway was what was expected, so the Engineers are happy with their predictions. Soundings are a good example of how sometimes the old ways are what we revert to, even when they have been superseded by technology. Since the introduction of multi-beam echo sounders, we receive a three-dimensional chart that can be viewed from any angle. We recently had the need to verify the depth at a berth: the method used was the trusty old lead line - a piece of rope with a weight on the end with leather marks attached. (Finlay Laird)

NAPIER

Plenty of Napier entertainment was on show for what was a well-attended NZPMA Conference. Colin Sellars was tireless in the planning and organising of the programme and accounts, with dozens of emails sent to sponsors and speakers alike, whilst Nigel’s usual slick MC work oiled the
daytime timetable. I am sure we are all grateful for the contributions of our sponsors who help us fund Officers’ attendance at international conferences. It would appear that collectively we are all proceeding in the right direction, albeit at different speeds with our ‘Good Practise & Effective Planning’. One thing is clear, the glue that binds us all together is the NZMPA - and the work of the NZMPA Passage Planning working group. Well done lads! Our third tug *Kawaka* arrived the other week to great fanfare and a liberal helping of meat pies and cake (meat pies are always good!). She’s a real beauty, and we are all looking forward to her coming into service. The *Kawaka* is not only for the increased size of tonnage and ships when berth 6 comes into operation, but also to increase the scope and safety of our current operation. Berth 6 planning proceeds, and the infrastructure team is also growing to cope with the extra planning. Not too sure what the blue-eyed penguins will be thinking about the increased traffic flow to the new site office and the area in general. If they manage to avoid the roving sea lion and Orcas that show-up periodically, they may get the chance to enjoy their new habitat! Being the only port still using shorelines is a bit of a thorny issue for Marine, with the other ‘shoreline’ ports moving to ShoreTension units. The sooner we proceed in that direction will bring a collective sigh of relief from Pilots and Mooring. Visits have been made to the ports using the units and there appears to be a big thumbs-up especially with the latest units. The impact of a busy port with a small footprint hits home every day; it’s great for the port and shareholders, but a struggle for Pilots and the Marine team. Increasing the size of the team is part of the answer, but a robust roster and good management of the ‘systems’ is crucial. I guess we will not be the only team who will be sorely tested as the season ramps up. Cheers and Merry Christmas from Team Napier. (*John Pagler*)
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