AGM & Seminar
22 & 23 November 2017
Christchurch Memorial RSA
Christchurch, New Zealand
Celebrating 30 years service to pilotage in New Zealand

Registrations and programme - www.nzmpa.org
For further information contact - agm2017@nzmpa.org

THE AUSTRALASIAN MARINE PILOTS INSTITUTE

2017 SPRING WORKSHOP
FREMANTLE

*REGISTRATION NOW OPEN*

Pilot-Tug Master interaction | LNG Tonnage | pilot training | - more

28-29 November 2017
Esplanade Hotel Fremantle
www.ampi.org.au | facebook/ampi
CONTENTS

Opinions expressed may not be those of NZMPA

1 Cover Design    Eleanor O’Neill
3 Hue & Cry        Hugh O’Neill
5 Shared Mental Model          Steve Banks
6 Engineering Integrity        Hugh O’Neill
8 Justice in the Dock        Hugh O’Neill
10 MNZ: Regulator’s View            Stephanie Winson
11 What can CHIRP do for us?          Alan Loynd
13 Is Individualism Dead?         Jeremy Brew
15 Ports of Call The Intelligence Network

The Hue & Cry

History is like the iceberg that sank Titanic: what we see is the 10% above the surface, but the real story lies beneath (p.8). 100 years ago, the Danse Macabre of Ypres claimed half a million young men in that “war to end wars”. There are limits to stupidity, and Russian troops had had enough: unfed, unshod and unarmed, they had to equip themselves from the corpses of friends and foes. The October Revolution, having deposed the Tsar, then replaced misrule with despotic Bolshevism.

Indian Partition of 1947 ended 330 years of looting: Britain’s parting curse of borders based on religion (as in Ireland in 1925) is classic “Divide & Rule” bequeathing mayhem. Pakistan’s Bhutto built “an Islamic nuclear bomb” (codenamed “Smiling Buddha”) to counter the “Hindu, Christian and Jewish nuclear bombs.” On the 1945 test blast, Robert Oppenheimer quoted Bhagavad-Gita: “Now I am become Death, destroyer of worlds”

1947 also saw the founding of the CIA whose doctrine of “Plausible Deniability” allows US governments to lie more sincerely: endless war provides markets for arms dealers. Democracies are overthrown, and leaders are assassinated – be they President, Prime Minister or UN Leader. Hitherto secret JFK Assassination files are the Rosetta Stone of our times. US Presidents are puppets, though Trump is an unscripted and unhinged Pinocchio (a dangerous precedent?). Trump threatened “Fire & Fury” on North Korea precisely 72 years after Hiroshima and Nagasaki, and 64 years after 20% of the North Korean population died under US bombs.

Government by Generals is called a Junta. Trump’s kakistocracy scorns diplomacy and views the world through a gun sight. Challenging this hegemony is China’s “One Belt One Road” project, which offers to re-set the balance to 2,200 years ago, when the Silk Route across Asia carried goods, ideas and people, creating cultural infusions. The Chinese-built port of Gwadar in Pakistan links to Afghanistan, which may explain the permanent US occupation: the 19th Century “Great Game” (see Mackinder, 1904) reiterated by Brzezinski in 1997, is the ‘logic’ behind every war since 1805 - if there be logic in insanity.

CSCL Jupiter (366m) ran aground in the Scheldt, requiring 15 tugs to re-float. Likewise, the CSCL Indian Ocean (400m) was aground in the Elbe for a week in 2016; she required 10 tugs and 2 dredgers. Folly & Hubris define the Human Condition: accountants’ ‘economy of scale’ is the flawed logic behind such huge ships, without accounting for Murphy’s Law: ships can and do go aground. One would hope that CEOs and MNZ are taking note. Training pilots for specific emergencies (in simulators and manned models) is a top priority to enhance resilience via mitigation. Finally, the recent epidemic of US warships suffering collisions (but not sinking!) is either bad luck or incompetence; neither is reassuring when combined with nuclear WMD. The sword of Damocles hangs by the slenderest thread…
STONGER TOGETHER

Combining dynamic under-keel clearance calculations with the world’s best marine weather forecasts
Increasing operational safety and efficiency

www.omginternational.com  www.metocean.co.nz

www.hartmarine.com.au

PANTOCARENE AROUND THE WORLD

- France
- New Caledonia
- Germany
- Belgium
- Canada
- Norway

Port Hedland
Dampier (Rio Tinto)
Barrow Island (Switzer)
Geraldton
Esperance Port Authority
Flinders Port
Port Phillip Sea Pilots
Bell Bay
Burnie
Tasmania
Gladstone
Port Kembla

Email: info@hartmarine.com.au
Phone: +61(3) 5975 5622
Address: 66 Yuilles Rd
Mornington, VIC, Australia
Last month saw the start of commemorations for the 100\textsuperscript{th} Anniversary of the Battle for Passchendaele in Flanders, Belgium. The recognition of the sacrifices made continue through to November, and offer us an opportunity to reflect upon the blood-bath, mud-bath and stupidity of war. New Zealand troops, alongside those from the UK and Australia, saw notable action on 4 October in the Battle of Broodseinde, and then again a week later on 12 October in the First Battle of Passchendaele. Whilst the first Broodseinde was considered a significant success, the second resulted in the slaughter of allied troops, with New Zealand suffering its worst loss in history with 846 killed and 2,000 wounded on that day, and a further 138 dying from wounds during the following week.

In 2013 I went to the Western Front for 4 days during a holiday, and visited many of the areas where New Zealand, Australian, South African and UK troops saw action. Seeing the rows on rows of headstones, and seemingly endless list of names of those who were never found or identified, allowed me to appreciate the outcome of poor planning for a task that can have catastrophic results. The training courses run by Ravi Nijjer over the last 2 years have made me more aware that a lack of understanding of \textit{Human Factors} by military leaders resulted in the loss of far more lives than necessary. After the relative success in the Battle of Broodseinde, \textit{“Continuation Bias”} saw British Generals Haig and Godley commit the ANZAC troops into a conflict with poor preparation and planning. This was strongly challenged by NZ General Guy Russell and Australian General John Monash, but under pressure from Haig, Godley ordered the 12 October attack to proceed. Prior to the war, Russell had been a Napier farmer (after English schooling and military training at Sandhurst) and Monash was a Melbourne civil engineer. Godley was a careerist soldier who realised that success in the field would normally see promotion, post-war job security and a rise in social status. This attitude would have been a stark contrast to that of Russell and Monash, who saw the preservation of their troops as more important than achieving an objective with unacceptable losses.

Looking at the preparation for the battle for Passchendaele, it is clear with \textit{“Hindsight Bias”}, that there was an expectation of another success similar to the week before. However in the days running up to the battle, rain turned the relatively dry ground into fields of mud, with water filling the multitude of shell holes. I now think about the \textit{“Stabilised Approach”} as used by aviation, and reported on by Ravi in our last issue. Approaching Zero Hour, the original planning intended for the days of shelling by the artillery to have destroyed much of the barbed wire and German defences, with a barrage to precede the troops’ advance across No Man’s Land. The quagmire that faced the artillery and troops before Zero Hour resulted in most guns not being in position to provide the barrage, and the troops struggling to get to the Front Line in time to go Over the Top at 0525. If we think climbing a long ladder then ascending many stairs to a bridge nine decks above and has us gasping for breath at the start of our task, think of those troops struggling through the mud in the dark, only to get in position just in time to hear the whistle go!

If a \textit{“Stabilised Approach”} had been used by military commanders, I feel the chance of achieving the objective whilst retaining more resources would have been far greater. If plans had been made with \textit{SOP’s} in place and \textit{check-lists} ticked off, the decision to go would have been far more justified. However as they reached each threshold with various criteria not being met, a \textit{“Go Around”} should have been ordered. Unfortunately after the initial assault went badly, troops were not called back, and as casualties mounted and little progress was made, British generals were still affected by \textit{Continuation Bias}. It was not until about 1500, and after considering committing reserves into the battle, that sanity prevailed and a retreat was ordered.

Next month I’ll be in Belgium again, this time to attend the commemorations and acknowledge the sacrifices made 100 years ago, by those who did their duty in a culture where \textit{Challenge} was rarely acceptable. Although pilots may not be at war with a visible enemy, we are regularly in a position to commit to an action when we’re not ready or our plan is not proceeding as expected. Pilots are in unique position where even a small error can have a catastrophic outcome; so if criteria aren’t met or you feel uncertain, \textit{never} hesitate to \textit{Go Around}.

\textit{Steve Banks, President NZMPA}
The Titanic Inquiry has always been held in the highest esteem by mariners: it was considered the gold standard of Accident Investigation, which gave us the SOLAS Convention, and all those LSA and FiFi Regulations designed to keep us safe. Recent reflection indicates that such innate trust may have been misplaced.

Both Accident Investigators and historians have a moral responsibility: thorough investigation unimpaired by conflict of interest, asking hard questions in an effort to understand the event, and thus learn how to avoid similar accidents. However, when an organization is tasked with investigating its own malfeasance, then truth will be obscured. Titanic's Second Officer, Charles Lightoller later observed:

"A washing of dirty linen would help no one. The Board of Trade had passed that ship as in all respects fit for the sea ... Now the Board of Trade was holding an inquiry into the loss of that ship – hence the whitewash brush."

Others noted: "Apart from protecting itself, the [Board of Trade] had no interest in seeing the White Star Line found negligent... Negligence on the part of the shipping company might pave the way for millions of dollars in damage claims and lawsuits that would tie up the courts for years, and possibly break the White Star Line”

Isambard Brunel’s revolutionary ship the Great Eastern was launched in 1858 from Millwall Docks in London: she was six times the size of any ship yet built, her other major innovation was her double-skinned hull (made compulsory for oil tankers trading to the US since the Exxon Valdez 1989 grounding in Alaska). Remarkably, the Great Eastern had survived a hull breach 60 times greater than Titanic whilst entering New York in 1862. With pilot embarked, the ship felt a rumble and then heeled slightly to port. No ingress of water was apparent, so the ship carried on and berthed as planned. The following day, the hull was found to be breached by 2.7m x 25m. Since no dry-dock was big enough, the repair engineers (Renwick Brothers) devised and built a watertight caisson, held in place by chains around the ship’s hull. This ingenious response was reported in the journal “Scientific American”

By 1880, ships were built of steel, and steam engines were becoming more powerful: Great Eastern was the biggest in the world until 1899 RMS Oceanic, then 1912, Titanic. The loss of such a ship was a massive shock, and questions needed to be answered. With remarkable speed, one J. Bernard Walker (editor of the “Scientific American”) in July 1912, published his book “An Unsinkable Titanic. Every ship its own Lifeboat”. In his preface, Walker wrote:
It is the object of this work to show that, in our eagerness to make the ocean liner fast and luxurious, we have forgotten to make her safe. The safest ocean liner was the Great Eastern; and she was built over fifty years ago. Her designer aimed to make the ship practically unsinkable—and he succeeded; for she passed through a more severe ordeal than the Titanic, survived it, and came into port under her own steam. Since her day, the shipbuilder has eliminated all but one of the safety devices which made the Great Eastern a ship so difficult to sink. Nobody, not even the shipbuilders themselves, seemed to realise what was being done, until, suddenly, the world’s finest vessel, in all the pride of her maiden voyage, struck an iceberg and went to the bottom in something over two and a half hours’ time! If we learn the lesson of this tragedy, we shall lose no time in getting back to first principles. We shall reintroduce in all future passenger ships those simple and effective elements of safety—the double skin, the longitudinal bulkhead, and the watertight deck—which were conspicuous in the Great Eastern, and which alone can render such a ship as the Titanic unsinkable.

Although not an engineer himself, Walker consulted widely and drew upon the work of acknowledged experts in construction of passenger ships and warships – including Professor J.H. Biles of Glasgow University. Biles was one of the expert counsels on the Titanic Inquiry, so ought to have brought the required insights. Interestingly, the sister ship Olympic (Post Inquiry) had her double-bottoms extended to give a double-skin; her bulkheads were raised and made watertight. Despite the perceived flaws in Titanic’s design, to her credit, the ship remained afloat for 2h40m sinking by the head (thus lifeboats could be launched - and she had more than the legal minimum).

The same stability requirements never applied to RoRo ship design – an open hull devoid of either longitudinal or transverse bulkheads. At college in 1982 (after the European Gateway sank) our stability lecturer explained that the RoRo design was an accident waiting to happen, because of Free Surface Effect (FSE). Sadly, his fears were realized when Herald of Free Enterprise (1987) and Estonia (1994) capsized in minutes, killing 190 and 850 respectively. The main reason for the aforementioned disasters, was insufficient watertight sub-division. If Brunel knew the answer in 1855 (likewise NZ Thomas Isbister’s design of 1883), what went wrong in 1912, and were the right lessons learned at the Titanic Inquiry and SOLAS?

Because RMS Olympic’s construction was altered to improve her integrity, then this was an admission of sorts that Titanic’s design was flawed, though legally compliant. In July 1912, J.B. Walker suggested that the carriage of lifeboats was an admission of bad design i.e. the ship ought to survive all foreseeable disasters without the need to abandon ship. Walker also shows great insight by understanding that marine accidents are a combination of both Human and technical factors. Since there is little we can do about the former, then the design of the ship must be the fundamental guarantor of safety. Walker also examined the design of warships, designed to withstand hostile attempts to sink them. He described how in the Russo-Japanese war of 1904 Russian ships suffered huge damage from mines, yet remained afloat because the hull was sub-divided into 500 compartments. The recent spate of US warships collisions indicates their robust construction; less casualties, had they sunk.

After Herald of Free Enterprise and Estonia, IMO agreed RoPax (i.e. RoRo and Passenger Ships) ships must remain afloat for 30 minutes. Is it so unreasonable to expect ships to have the integrity to withstand such not-improbable bottom damage? (Remember, we cannot design Humans, only ships). SOLAS 2009 resembles Walker’s 1912 principle of survivability i.e. ship as best lifeboat. Let’s hope that other ships, icebergs and rocks play the game. The 2012 sinking of Costa Concordia cost 30 lives, and $2 billion. The ship’s owners paid the Italian Court 1.3 Million Euros to avoid legal scrutiny. Not only must ships be designed for maximum integrity, but naval architects, industry regulators and accident investigators need to be above commercial pressure: their first duty is safety: no man can serve two masters.
JUSTICE IN THE DOCK
(“Save us from the time of Trial”)

Industrial disasters, like the sinking of RMS Titanic (1912) or Pike River Mine (2010) sometimes create changes in the law - provided there is sufficient public clamour. Such new laws are intended to change attitudes, designs and behaviours - in the light of lessons learned - with the hope that such incidents will ‘never happen again’. Like the “war to end wars”, slogans are easy, but unless the right lessons are learned, then Human disasters recur ad nauseam, ad infinitum.

Dealing briefly with the first: the ‘unsinkable’ Titanic (one third of her length breached) took almost three hours to sink slowly by the head, thus allowing the launching of her lifeboats. There have been countless ships sunk since, but they rolled over in minutes thus making escape problematic*. This begs the question: did we learn the right lessons?

Unlike Nature’s Laws of Physics, the Law is a slow and lumbering beast, constantly open to interpretation and challenge. As in war, truth is often the first casualty. Judgement is passed - depending upon the rhetorical flair and powers of persuasion of the arguments presented in court by various counsels. These “hired guns” care nothing for truth - their duty is to serve their paymasters. In a contentious case (where losing might cost millions) such legal battles are savage blood sports, not for the faint-hearted.

My first insight into this reality was when I witnessed my brother (Aidan O’Neill, Q.C.) challenge the UK’s Ministry of Defence. Despite an inconclusive verdict by the Air Accident Investigation Branch (AAIB), the MOD had arbitrarily decreed that “pilot error” was the cause of the Chinook helicopter crashing into the Mull of Kintyre (1994) which killed all 29 aboard. The deceased pilots’ families and colleagues refused to accept the MOD’s opinion and decided to mount a legal challenge. To challenge any government takes both courage and money; the challengers lacked the second, but not the first: working at a reduced fee, my brother accepted the brief. Thereafter, he immersed himself so deeply in the history and construction of helicopters that it seemed he could build one blindfolded (hitherto, I had doubted his ability to change a light-bulb). Such is the preparation taken by legal eagles: very little is left to chance.

The court scene was pure theatre, with the principal actors wearing wigs and gowns, striking poses and delivering impassioned speeches. Including the judge on his bench, there were about ten others in costume. My brother stood alone, representing the deceased pilots; he faced three representing the MOD. Six more sat in a row on high, looking for all the world like the vultures in the Disney cartoon “Jungle Book”. These vultures represented Boeing, the manufacturer of the Chinook. When you consider that the cost of each Chinook is about $100 million, and that the MOD owned about 60, then there is a lot of money blowing between the MOD and Boeing.

The downdraft from helicopters blows loose items far and wide: one of the most striking things to emerge from this turbulence was that these military aircraft did not carry Flight Data Recorders (the “black box” which is compulsory for civilian aircraft). It is thus extremely difficult for agencies like AAIB to discern how a disaster occurred, thus all too easy to lay all blame on the deceased pilots. Patently, the truth is also buried and any inherent fault

with the aircraft is never uncovered: Boeing profits rarely experience the catastrophic dives that their helicopters seem to suffer with surprising frequency e.g. the Greek Orthodox Pope, Petrus VII (2004) and the team of US Navy Seals who allegedly killed Osama Bin Laden (2011). The old saying that truth is the first casualty of war reminds us that since WWII, wars have been fought almost non-stop and that wherever there is conflict, there are rich profits to be had selling weapons and military hardware.

Governments march in lock-step with arms manufacturers: Defence Budgets represent eye-watering amounts of tax-revenue. Since the invention of the revolving door in 1881, there has been a lucrative career path for government ministers and retired military officers to serve on the boards of arms manufacturers e.g. W.H. White (1845-1913) worked for both the Admiralty and warship builders, Armstrong; he received royalties for each ton of ship built. He would play China against Japan, selling ever more warships to each. Despite the human cost, he only cared about his fees. It is neither governments nor manufacturers’ interests to buck the system. The same doors revolve between Wall Street and 1600 Pennsylvania Avenue.

What lessons were learned from Pike River Mine? The unspoken lesson perhaps, was that “Laissez-faire” de-regulation of industry is a lose-lose, because people die, mines close, profits disappear. But the families of the deceased were not to be fobbed-off and have maintained huge pressure on the government for greater accountability and to put people before profits. Although no one in authority was ever punished for the many serious breaches to H&S legislation, the laws have since been changed to reflect the public’s demand for accountability, which extends now all the way to the Board. The legal world has shifted and every level of management could one day find itself in the dock, facing some very hard questions.

Remember: legal counsels are not there to discern truth, but to represent their clients (who pay dearly for their services). Judgements generally go to the deepest pockets, though, one recommendation from the Chinook case was that the military adopt “black box” technology. (PPU is best defence). Cross-examination of witnesses in the dock is the proverbial lamb to the slaughter: when the witness is only allowed to bleat “Yes” or “No”, it is easy to undermine credibility, rendering testimony worthless. If any pilot should find himself in the dock, then any mis-step in his career may be aired to his extreme discomfiture. The immediate lesson for one’s personal survival in court, is to engage the best lawyer one can afford. It is thus far better (and cheaper) to avoid any court appearance by keeping out of trouble: follow the rules and SOPs, and adhere to “best practice”.

The sad lesson for Mankind, is that the truth is all too often ‘inconvenient’ and expensive. Political and financial power will always tend towards concealment of malfeasance, whilst the less powerful are thrown under the bus. Ships will continue to sink, cars explode and aircraft fall from the sky until such time as we place more value on individual Human life, and stop looking for easy answers to complex questions.

The ultimate conflict is that of business vs. service. If all legal representation were paid for by the state, irrespective of whether the client is rich or poor, then justice and truth would be far better served. If truth can be revealed, then we are all winners. Sadly, the prevailing trend in these neo-liberal times is to privatisate all services: fresh air, clean water, transport, pilotage, electricity, health, education, prisons and justice must all be turned to profit. In the end, we are all losers. The old saying about Truth setting us free was never more appropriate.
Maritime NZ – the regulator’s perspective

Stephanie Winson, General Manager Legal & Policy, Maritime NZ

Maritime NZ is proactively involved and very supportive of the efforts of the NZMPA in relation to Bridge Resource Management and the value of a “Just Culture” approach. In fact, at the BRM courses led by the NZMPA, Maritime NZ has had the privilege of a regular speaking slot in which it clearly articulates that its Compliance Operating Model supports a “Just Culture” approach. This is because the model is risk-based and assesses what regulatory tools best address the risk posed by the behaviour/event. Importantly, “Just Culture” recognizes that punishment is an appropriate response in certain circumstances. For that reason alone, “Just Culture” is not the same as “No Blame” and the comparison between Maritime NZ and the Transport Accident Investigation Commission (TAIC) in the article is misleading and misplaced (Ed: see March 2017 issue). The TAIC legislation expressly provides that TAIC is required to approach its investigations on a “No Blame” basis. Maritime NZ, on the other hand, has been expressly created to perform the regulatory oversight role within the maritime sector. This includes a full spectrum of regulatory tools from providing information and assistance, through certification to punitive action such as revocation or enforcement.

Maritime NZ and the Transport Accident Investigation Commission (TAIC) approach investigations differently because Parliament has given us different roles in managing maritime risks. The TAIC Act clearly provides that the information gathered by its investigators cannot be used in court proceedings, while the Maritime Transport Act expressly empowers the Director to enforce and non-compliance with maritime laws. Under the NZ Bill of Rights Act it is necessary that Maritime NZ investigators clearly articulate their intentions and the rights of those being interviewed (including, giving a caution against self-incrimination).

This diagram sets out what factors will be considered when deciding if intervention is needed, and then, what is the appropriate level of intervention.

---

1 See section 4 of the Transport Accident Investigation Commission Act 1990
2 See section 14B of the Transport Accident Investigation Commission Act 1990
This approach sees operators who might be in accidental or one-off breaches of the law or have a good attitude to compliance not being punished. Instead, they are assisted to comply. However, sometimes there might still be a strong public interest in someone being held to account – even if their breach was accidental or involved a human error. This is particularly so if there has been loss of life, serious injury, or significant environmental or property damage. The strict liability offence provisions under the Maritime Transport Act and the Health and Safety at Work Act clearly reflect public policy expectations that in such circumstances a pure “Just Culture” approach is not appropriate.

At the time of an interview we will not have determined what level of intervention is appropriate – be that none, the lowest or the highest. We will gather the facts from interviews, scene examination, and inspection of documents, then apply the compliance model, and finally decide what, if any, action to take.

The Compliance Operating Model is spelled out in detail on the Maritime NZ website. Go to www.maritimenz.govt.nz and search for “compliance operating model”. If you would like further information, please contact the Maritime Officers at your nearest Maritime NZ office.

What can CHIRP Maritime do for us?

In light of the development of the NZMPA reporting scheme, it might be worth considering the possible synergies with CHIRP Maritime. CHIRP is the Confidential Hazardous Incident Reporting Programme based in the United Kingdom, and they publish confidential reports of accidents and incidents so their readers can learn the safety lessons and, hopefully, avoid making the same mistakes themselves. Headed by the Maritime Director, Captain John Rose, who is assisted by two other mariners and an administrator – all of whom are only paid part time – they say their mission is to ensure that everyone involved in shipping returns to his or her family in the same condition as when they left. They accept reports from individuals or companies, but with certain rules. They will not accept anonymous reports, attempts at ‘whistle blowing’, nor anything which involves personality clashes or industrial relations. But they do handle and investigate reports about safety, potential damage to the environment, sexual harassment, bullying or issues affecting the health and wellbeing of seafarers.

Confidentiality is regarded as paramount, and no reporter has ever been identified as the result of reporting to CHIRP Maritime. When a report is received, it is acknowledged immediately. If it is considered worthy of investigation it is entered into a secure database and the reporter is contacted for additional information and to discuss the proposed plan of action. If the reporter does not wish certain parties to be contacted, CHIRP will comply, and an alternative plan will be formulated. At this point, the report will be ‘dis-identified’ so all traces of the name of the reporter, ship etc., will be removed from the database. Only CHIRP Maritime personnel with access to the secure database will ever be aware of the identity of the reporter. CHIRP then contacts third parties as appropriate, investigates the case and identifies the lessons to be learned and possible remedial actions to be taken. The draft dis-identified report is then submitted to the Marine Advisory Board, which comprises 26 shipping worthies with over 700 years of combined marine experience. They evaluate the reports, add comments as necessary, and approve reports for publication. Once a report is ready for publication, the originals in the secure
database are destroyed, so CHIRP cannot even contact the reporter in the future unless the reporter contacts them first.

Reports are published in the quarterly ‘Maritime FEEDBACK’ magazine, and may also feature in video and audio podcasts. It is estimated that 200,000 people read the magazine in its paper format or online at www.chirpmaritime.org, whilst 2000 receive it by email and there are 2800 followers on Facebook and Twitter in 47 countries. All reports are now published in an Annual Digest which comes with a flash drive containing all the year’s safety videos. It is available online, but 500 copies are printed for key stakeholders, including 113 maritime training institutions worldwide. A copy is also officially lodged at the International Maritime Organization headquarters in London.

Naturally, three part-timers cannot do all this without substantial sponsorship, and six core sponsors make generous donations. In addition, a number of companies and organisations sponsor individual activities, or provide services free of charge. The most recent example is the translation of Maritime FEEDBACK into Chinese, sponsored by Wallem Shipping and Dalian Maritime University, and the next target is a version in Tagalog. The CHIRP Maritime website now has a searchable function, so interested persons can search the entire 12 years’ worth of reports by entering keywords. Reports have also been analysed using the MCA’s Deadly Dozen, so causative factors have been assigned to all of them.

Pilotage-related incidents feature regularly in Maritime FEEDBACK. Recent examples have covered improper or dangerous boarding arrangements, including some ships where the naval architect appears to have been determined to ensure that no pilot would ever be able to board a ship safely. NZMPA members will, we suspect, find these reports and the CHIRP comments to be of particular interest.

So much for the many useful services CHIRP Maritime can provide to members of NZMPA. Discerning readers will have worked out by now that this article is also going to be about what NZMPA members can do for CHIRP.

The most obvious service is supplying reports. CHIRP Maritime can only be useful and relevant if the reports it receives are useful and relevant, and pilots are in an ideal position to witness acts of folly afloat and ashore. Their training makes them ideal observers when it comes to ship design, bridge team management, unsafe berths, improper use of tugs, dangerous mooring procedures and a host of other depressing activities. In all such cases, there are valuable lessons to be learned, but nobody will have the chance to learn them if they are not reported. And reporting has never been easier: it can be done in writing, through the www.chirpmaritime.org website, or even from a mobile telephone.

CHIRP Maritime is not limited in scope, so if pilots witness hazardous incidents unrelated to pilotage which they would not normally report to NZMPA, they can still report them to CHIRP. We hope to broaden the links between the two organisations, with your help. Many people aboard ships or working in ports today lack the experience and, sadly, often the skills, which we possess. We can all help educate them so they have a better chance of returning home to their families in the same condition as they left. It is a goal worth striving for.

Alan Loynd
Is Individualism in Pilotage Dead?
"Would less individualism in pilotage result in a safer industry?"
Jeremy Brew

This was a question posed at a conference I attended in 2016. Not one which was subsequently explored to any great degree, but was just posed as a thought provoker. A smattering of hands was raised in agreement at the time but I know from my dealings with pilots from both sides of the Tasman over the last few years that it's a topic many find uncomfortable.

Pilotage was in its early beginnings an extremely individualistic sport. Secret marks and transits, even charts were guarded like the Crown Jewels. In those days, that knowledge was the Pilot’s livelihood. But that culture of individualism continued as pilotage evolved and is prevalent even today. Pilots have bucked attempts to curb their individual style, and not just those with "many years of experience".

Much like the seafaring industry from which we all came, the requirement for approved passage plans and the like, went down like a cup of cold sick with the Masters and Officers who went through the introduction of ISM. What was wrong with the Rule of the Road, seamanship, professionalism - and a smattering of this-is-the-way-I-like-it-done? Early in my seagoing career, I remember senior officers lamenting that ISM was simply dumbing-down seamanship to the lowest common denominator. It may have been the case, but what it was doing was attempting to bring a systems-based approach to an industry ruled by ship's Masters who ruled with their own rules.

Aviation went through similar pains in the early decades of air transport. Airline pilots were picked from the ranks of the Air Force for their superior skill. What the industry failed to recognize at the time was that these dashing young men also had a fair dose of daring to go with their skill - a trait completely out of place in passenger transport. They also came from an environment with a steep hierarchy and a do-as-I-say mentality. Not something that translated well to a cockpit of three or four. The resulting aviation accidents were all too frequent with devastating loss of life on each occasion. The new, fangled Television brought these incidents directly into the homes of more and more families. Tenerife 1977 was aviation’s Titanic moment. Pan Am and KLM 747s collided on a foggy runway with the loss of over 500 lives. The list of human factors elements involved in that crash is as long as your arm and it was then that Aviation really got its act together.

Aviation has eradicated the individual approach to operational matters and those who fail to embrace the notions of CRM, human limitations and a systems-based approach to flight operations find themselves weeded out by
thorough testing, simulation, psychometric testing and evaluation at interview. Every aspect of commercial aviation is regulated and proceduralised, a fact that is universally accepted by all involved. It is hard to believe that in aviation’s early days many involved thought Government regulation of the industry would be a bad thing.

There are several main protests against a more systematic approach to Pilotage:

1. My way is best. I won't be told how to handle a ship.
2. It's one of the main things I like about piloting, I get to do my own thing.
3. There are too many variables, a systematic approach will never work.

I've heard many complaints, almost all of them frivolous. As a newly appointed trainee Pilot I once made the observation that most of the Pilots would swing the ship one way, but one Pilot went the other. I asked why that was, and the response was: "well he just prefers to do it that way". But which was safer? I suppose if I had done my training exclusively with the swing-to-port guy, I would have become a ‘port-swinger’ myself §. Typically, that's the way it works.

I think we need to be a lot more sophisticated in the way we think about our manoeuvres, procedures and processes. There's an awful lot of the "we've always done it that way" in our industry. That's not to say those ways are wrong, it just means those ways were perhaps developed when things were very different, when ships were smaller and tugs less powerful and lawyers less interested in all things maritime. Those ways need to be examined closely, questioned and perhaps simulated to come up with a definitive answer - which way is best, and particularly which was is safest?

What I am alluding to of course, is a comprehensive Port Safety Management System. Not just a box matrix with Likelihood vs. Consequence, but an in-depth look at every decision a Pilot might want to make during the course of a pilotage. It is simply not acceptable in this day and age to leave personal preferences on say, whether to carry a bag up the ladder, or what speed to enter the harbour, or indeed whether to proceed at all in any given weather condition, up to an individual. A comprehensive PSMS will help to protect the port, protect us from ourselves and protect us from the consequences of any ensuing incident.

§ (Ed. Jeremy will be a "port swinger" until Christmas, his leg broken by a car whilst he was cycling.)
WELLINGTON
The lights are on, and we’re back in business! Well close anyway: Wellington’s container gantries have stood motionless since the terminal was severely damaged in the earthquake last November, but it was heartening to see them illuminated in the night sky for the first time recently. Re-commissioning work is proceeding apace in readiness for the projected re-opening of the terminal in mid-September. This will be a remarkable achievement, given the extent of the damage to the wharf and the terminal pad. All credit is due to the port’s engineers who have had to address numerous challenges, not only in this area, but across the port in general. A section of wharf in the immediate vicinity of where the gantries were parked pre-earthquake has been secured to piles driven well back from the face. This area has been isolated from the adjacent wharf, to form a 124m “working island” alongside which ships will berth and along which the gantries will travel. Container exchange will take place over the gantry back-reach rather than on the wharf. The limited travel presents the challenge of berthing ships with both gantries positioned amidships; something we will get used to I am sure. It is anticipated we will accept vessels up to the 266m Kota Lestari class which will present a significant overhang from the working island. New mooring positions have been established well inshore of the old wharf face.

September will also see the delivery of Marine’s new 19.5m pilot launch; a Camarc design built by Q-West at Wanganui. Two Scania engines will power Hamilton water jets, a new direction for us. She will be named Te Haa. For a name that will be bouncing off the airwaves a dozen times a day over the next twenty-five years, it has perhaps the intrigue of Bluey’s Bellerophon, but hardly rolls off the tongue, like Orient’s Oriana or Cunard’s Caronia. Her delivery will mark completion of the Centreport floating plant renewal programme.

Te Haa on trials recently
The earthquake reaffirmed that the rocks on which Wellington stands are all a bit dodgy, but it was still a surprise to learn that when it comes to a significant national roading project, rocks will have to be imported. Over the last few months the small barge WH761 and the even smaller tug Pacific Way have been shuttling back and forth in all kinds of weather between Wellington and Tarakohe with a cargo of rocks and boulders destined for Transmission Gully. An interesting job for pilots prior to the Master gaining his exemption.

On leave recently, I visited the Maritime Museum in Genoa. Half a floor was devoted to the Andrea Doria, showcasing her career from launching to early demise in beautiful black and white prints. Captain Calamai appeared to be held in high regard and praised for his actions after the collision with the Stockholm. There appeared little interest in Costa Concordia

It has been a long, tedious winter in the Pilot Office; with the return of containerships just over the horizon and the first of the season’s troopships not far behind we are all looking forward to being more gainfully employed again!

GISBORNE

The wall of wood continues to snowball towards avalanche status on the East Coast. Monthly log volumes are in the region of annual volumes a decade ago, and shipping numbers are up accordingly. Ship-free days are becoming a rarity, and we are at times experiencing up to 3 or 4 vessels at anchor, awaiting the berth. Not Port Hedland or Hay Point, but on scale, probably not too dissimilar.

Followers of this column will be aware that the forward projected volumes through the Port are significantly more again, in addition to the volumes currently being experienced; that fact has prompted the lodging of appropriate consent applications as I write. Public consultation is well underway, and an associated web page is available at www.twinberth.nz

Just completed was the slipping of the tug Titirangi and the trailing suction hopper Pukunui at Nelson. Port Nelson kindly (including applicable charter rate – so maybe not all that kindly) gave us use of the Huria Matenga for the period our vessels were on the slip. Huria is a good option for us being a near sister to our Titirangi, meaning a fairly seamless transfer for our tug masters & crews, and importantly a draft to suit our inner harbour tug berth. The slippings and associated works went as well as a slipping can go, coming in on budget time-wise and under budget cost-wise: no mean feat - given the age of the vessels involved.

The winter months have been relatively easy on us in terms of significant swell and infra-gravity events, with only one occasion where forecasting suggested we may be unable to ensure the safety envelope around a loading vessel; she was required to vacate the berth for a couple of days.

I know that PFD’s are currently a hot topic around the industry. Apart from the usual imperatives - such as staying afloat and face-up, it has been a struggle to find a jacket-type device, with pockets suited to the warmer months. We have recently started using a lightweight product by S.O.S Marine, which we have found to be ideal. In a similar vein, we have changed out our Petzl helmets for an Apex unit, which provides lighter weight and superior padding. Happy to share details; contact the writer if interested. Cheers for now.

BLUFF

Spring has sprung in the Deep South, by which I mean that the frosts have reduced to only 2 or 3 a week. Although if last summer was anything to go, by I think we would prefer another 4 months of winter: at least we've seen the sun.

The much vaunted Marine Department review is well and truly underway: no
dividends yet, but like diligent investors we await the benefits with baited breath. It has resulted in some staff changes. Industrial change is never easy and it has been sad to have to say good-bye to people who have made the job of providing pilotage and marine services vastly easier over the past 7 years. Gone is the reassuring familiar voice on the end of the phone at 3am, to be replaced with uncertain questions and an end to sleep that night. I am sure things will improve, but that doesn't change the fact that a vast and valuable resources have been moved down the road to be replaced by an unknown quantity.

Another resource which has moved-on is the venerable old workhorse of the port, the mighty VSP Monowai. When she was built for the Bluff Harbour Board in 1974, she was the most sophisticated and powerful tug in New Zealand. Her 28tbp easily handled the vessels calling the port for the next 35 years. But with the arrival of larger container vessels, bulk carriers and tankers, her once mighty 28tbp started to appear slightly light for the job. She has moved on to a happy retirement from Bluff to the Marlborough Sounds, where she will enjoy sun and fine weather while assisting log carriers in and out of Picton. I say to you, Picton Tugmasters, enjoy the open fly bridge, but do on occasion spare a thought for your southern brethren who had to endure the occasional snow shower out there and the even more frequent 50kt Sou'wester. She is a great tug and will serve you well.

We are hoping to appoint a Tugmaster in the next month or so to look after the tugs and move though to pilotage in due course. We are trying to front foot coming retirements in the next 5 years or so. The plan is to settle someone in the job and region before investing in the more resource intense process of Pilotage Training. Retention remains an issue. Still, if I was offered Fleet Captain of MSC Cruises I might find my loyalty challenged as well.

I have just returned from a couple to courses: in both cases, the meat was Due Diligence. This is far more of a challenge then I ever really gave credit for. How do you prove it? Well first, it seems, you have to define it. The way most of us will be familiar with are the risk/mitigation heat maps we've all developed and used. This approach is beloved by external consultants as ALARP (as low as reasonably possible), which is never achievable, because the lowest possible risk is not to do the job at all. Ridiculous yes, but this is where lawyers live (and buy new cars with our careers). You can never win: any risk that exists proves you have failed to comply with your starting premise.

The courts take the view along the lines of SFARP (so far as reasonably possible) What is the risk? What would a reasonable person consider a suitable mitigation? Is it appropriate to achieve its task? Yes? Job done. This approach may well lead to a complete overhaul of ports’ SMS documents. Why set ourselves up for failure should the worst happen?

From sunny ruff and tuff Bluff, enjoy the onset of BBQs and summer jackets. I will have a new SeaSafe winter jacket, which will be worn throughout. (Steve Gilkison)
prior to the ship being allowed to proceed further.

(Long-sighted: a UASC mega-box boat departs Southampton unable to see anything closer than about 200m ahead and 50m either side. She does however have the benefit of her own dynamic restricted area and is escorted out by a harbour launch.)

Fast forward to Otago harbour, and in the past few years, pilots have coped reasonably admirably with geared bulk carriers proceeding in and out of the Victoria channel to Dunedin, despite the fact that some crane and log stanchion configurations presented to the pilot “restrict” visibility of the channel markers to some degree or another. Recently, due to the welcome increase in the log trade, ships have been part-loading in Dunedin and completing in port Chalmers. This has exacerbated the problem somewhat, when logs have been loaded on deck and the view of the narrow channel is “restricted” still further. In recent weeks, we have seen the arrival of ‘L class’ Maersk container ships with boxes stacked so high near the bridge that it has caused a similar “restricted” visibility problem. We have been working together with other parties to the venture in order to mitigate any issues arising from both situations but it seems to be one of those things that occur due to a slight change in trading parameters and the all-encompassing desire to get the largest ships into the available space in the port. This, of course, is normal practice in most ports.

It’s a different sort of “restricted visibility” though, isn’t it? Rule 3 of the Colregs defines “restricted visibility” (hence the reason for the prolific use of quotation marks earlier in the piece) as “…any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, sand storms or any other similar causes.” Does that include visibility restricted by the ship’s structure? It’s not really a “similar” cause to the others, is it? They are weather-related and restrict visibility from far to near, but it is nevertheless a restriction of visibility even though it works the opposite way, by restricting the near visibility but not distant. And the bottom line, from a pilot’s point of view (pun intended) is that all we quite reasonably ask is to be able to see where we are going, preferably with the Mk1 eyeball! That said, is the use of ECDIS, PPU, and VTS an acceptable mitigation of such circumstances? Who knows? Perhaps a stroll out on to the bridge wing is all that is required in some cases; it was fine on my Newport-bound coaster but would be somewhat more disorientating when having to walk 30+ metres across a larger ship in a narrow channel. Perhaps other ports already address this issue; it would be good to learn how the issue is addressed elsewhere. (Craig Holmes)

TAURANGA
Greetings from Tauranga. The port recently broke the now million teu mark for the financial year, so lots of fanfare to celebrate. The large “S” Class Maersk vessels continue with their regular weekly visits with no problems, although they would be very difficult without a PPU, as most of the time visibility is usually somewhat limited. We have recently started an exercise to determine some accurate squat data compared to the vessels data. Our hydrographer, Greg Cox, conducted 3 squat trials on these vessels using the Trimble R6 RTK GNSS system, using GPS and GLONASS (are you still awake? Because I have no idea what it is). A base station was erected outside our office, and the R6 Rover aerial was placed on top of the bridge. The results were encouraging: Squat at 5-8 knots was 30cm and at 10 knots, squat was 32-40cm. Under keel clearances were 2 metres and 3.3 metres; the vessel’s draft at the time was 13.25 metres.
The squat tables on the vessel indicated 47cm and 1.3 metres for the above speeds. We will be doing further trials to determine effects of pitching. We have often wondered if we have been too conservative with our squat allowance and this “initially” proves we have been. We will continue the tests to ensure the data is consistent. We would be interested to hear if other ports have conducted any similar tests.

We now have a star in our ranks: Troy Evans featured recently in the Sunday Star Times: well done, Captain Clunky.

(Tony Hepburn)

NELSON

3 months ago, I very nearly fired off an angry article for inclusion in the June issue. We had just lost an influential member of our team, we were busier than ever, the weather was crap and daylight too brief. There appeared to be no plan to deal with the acute shortage of staff on the pilots’ roster, on the tugs, on the launch, on the lines teams and even in the office. I’m glad I didn’t send the article because I had lost my cool, and it would have appeared unprofessional, although entertaining.

3 months on, I’ve just re-read the piece and nothing much has changed. The days are longer, the weather’s up and down, we’re still breaking records for tonnage and number of moves, and we are still acutely short of staff in all areas within the Marine department.

Fatigue management is a popular topic within HR circles right now. So far though, this has only resulted in meetings to scope the issues and set agendas for next month’s meeting. It has also given rise to a staff-training package which teaches us how to recognise fatigue and how to fall asleep, FFS!! As a team, we are well versed in both.

On a positive note, as a team we have come up with a number of solutions to the problem. These all require the hiring and training of staff, a change to the current rostering system, and a change to the current minimum manning. All these solutions will cost money. I know exactly how much, because I costed it. The costs are substantial but not huge. However, when you put them in the context of our current increased risk scores and rising tonnage, the more prescriptive regulatory framework of PHSC and MOSS, and the 24/7 demands of the industry, they must not be allowed to obstruct progress. And that’s before you even take into account the non-tangibles of increased performance, morale, and productivity.

As a team, we want to provide a professional, efficient service to all our customers. I’m sure our board feel the same. I’m optimistic we will be able to convince those that need convincing on the merits of our arguments. I hope this is not a fool’s optimism. I also hope that the light at the end of this tunnel is not a train coming the other way.

(Matt Conyers)

TIMARU

It’s been a while between drinks for the Timaru update. Tom Veitch, our former correspondent, has been enjoying semi-retirement in the sunshine of Golden Bay. Thankfully, we still have the pleasure of him covering annual leave and any other abnormalities in the roster.

2017 has been extremely busy across the board with shipping up at least 10% year on year. Our new cement berth/terminal is well and truly up and running. Not to mention, other bulk trade increases and three weekly container vessels, which is a vast improvement from just a few years ago.

The big news from the Pilot’s perspective is the recent arrival of our new pilot launch, Kiwa. Which is replacing the Ohau after 37 years of faithful, if not workmanlike service. She arrived with much fanfare and was of course, headline news in a small community like ours. The name Kiwa was a result of a region-wide competition and the winning submission was from Timaru Girls High School. Kiwa meaning ‘Divine guardian of the Pacific Ocean’, which sounds good to us!

After decades of trundling out there at 10 knots, we’ll be spoilt for time and comfort with the Hart Marine launch. We are currently reviewing our pilot boarding position in lieu of increased boarding speeds and the team are looking forward to the extra few minute’s kip this increase
will afford! Of note, we added an advanced FLIR system to aid SAR operations and a bow pushing pad, to assist with berthing some of the smaller vessels we get here.

As part of our ongoing professional development, we’re commencing manned model training at Port Ash. We have two Pilot’s booked to attend later in the year, and the other two will be squeezed in the following (financial!) year. Looking forward to seeing the benefit of such training, especially as to how it translates to manoeuvring within our tight confines.

In July, the team welcomed back Ken Wilson, our former Marine Manager who has been away at Bluebridge for a couple of years. He’s almost back on his ‘B’ license and is enjoying more time on the water than in his previous role. Ken replaced Brett McPhee, who left us for Gisborne, after discovering our surf breaks just weren’t up to it!

We also welcome Grant Bicknell as our new Marine Manager, starting in early October. We look forward to having him join the team after having that position vacant for a number of months now.

Hoping to catch up with a number of you at the AGM this year. We’re looking forward to having increased numbers in attendance due to the Cantabrian connection. (Hadleigh Ford)

**MARSDEN POINT**

We missed out on the last Port of Call. It has been a marvellous “Summer” (oops sorry that was Winter) and they tell me Spring is round the corner.

Shipping-wise, we have been busy as usual: I am given to believe Northport cargo figures are creating a record, lead by log exports, and Refining NZ is proceeding with Project “The Deeper Story” [http://deeperstory.co.nz/](http://deeperstory.co.nz/)

The new cement carrier *Aotearoa Chief* has settled in well, and adequately replaced *Golden Bay* and the Cement Barge. *Golden Bay* was given a well-deserved send-off as she sailed on her last voyage from Portland-Whangarei, after her long service.

Most of you will be aware of the incident involving a drunk ship’s master, who was breathalysed, taken off the ship and eventually fined. I happened to be the Pilot; it was not an easy decision to take. However, it all became worthwhile when I heard he was 5 times over the limit!

Andrew Baker has reached his unrestricted Grade; we have 3 full pilots in the roster. Finally, Richard Oliver (our Marine Officer) is about to step into his Grade 4 license. With the end of year holiday period and Cruise Ships in Bay Of Island round the corner, this will be handy. Our Operation Manager has decided to leave us at year’s end for a fascinating opportunity overseas.

Our Pilot boat got a new lease of life with new engines; the idea is to take it into 2019 and then hopefully get a new one. Safe Piloting to all. (Kirit Barot)

**AUCKLAND**

There’s been nothing of huge note to mention since my last missive. The Winter was particularly appalling, but apparently not appalling enough for that optimistic band of travellers who seek pleasure in cruising at this time of year.

The *Pacific Jewel* and *Golden Princess* both arrived last week for an early kick-off to the cruise season.

We had a visit from the sailing vessel *Tenacious*, which is said to be the world’s largest wooden sailing ship. She spent a couple of months here, before heading off to Suva last week, punching her way into a 30 kt NE’ly and a 3-4m swell. In fact I hadn’t taken her past the Rangitoto lighthouse before one of the more enterprising crew members had started a sweepstake for the first person to start chundering.

It seems that debate still rages on the subject of moving our Port. There is a visionary group that persists (with the seeming aid of a white cane and a dog in a harness) in suggestions for alternative locations. The Right Hon Winston Peters weighed in on the debate last week (it seems like everything happened last week) with a “cast iron” pledge to move us to Marsden Point. Hopefully with this ringing endorsement, it should be proof enough for those that may have initially seen merit in the idea! (Craig Colven)
NEWS FROM PORT ASH

End of winter coming up and we’re sending the last of our strong westerly winds eastwards to those more appreciative of them! I remember well how uninteresting it was to pilot in a flat calm and presume other pilots think the same way…

It was good to meet Dave Duncan and his team earlier in the year and a great privilege to assist with the process in selecting his new pilot Dan Orchard who has (according to Dave) already ‘made his mark’. In ‘pilot-speak’ we could read anything into that but take it as a positive!

Great to see Trevor Morrison and Richard Mackie from Napier back again in July and as always, we build the long-established Napier port outline in our Anchor Bay for practice with the 290m azimuthing podded cruise ship Aquarelle.

On our calendar, we look forward to meeting Thejs Pedersen and Peter Brown from Timaru in October, and a group of RNZN Navigators in November.

Food for thought from the June NI Seaways magazine (MARS201738), in which two passing ships navigating by GPS collided in a European river. Someone on deck suddenly looked up to see approaching lights just before the collision, which infers that the bridge windows were not being used. The article is entitled ‘Mystery collision reveals GPS anomaly’ as the electronic charts showed that the vessels had never made contact.

GPS is used with limited application on Port Ash manned models for basic velocity readings, however, at this stage our models remain a strictly visual training tool for shiphandling. A PPU is a wonderful aid to navigation (wish I’d had one!) but the mark one eyeball and visual judgement still need to be exercised and kept in good order and condition.

Andrew Beazley
Port Ash, September 2017

Advanced Marine Pilotage training
This five day course will update pilots on a range of topics in navigation and bridge management based on the SAS cockpit management and updated with the latest research on ergonomics and master-pilot relationship. It will address issues of concern to pilots such as the application of new technologies, legal aspects of piloting, and the development of RISK management strategies. This course contributes to the pilot's CPD requirements as per Maritime NZ's regulations (MR-90.115). The course may be recognised as upgrade course to renew an expired STCW78 CoC as Master.

- **Duration**: Five days
- **Dates**: 6–10 November 2017
- **Cost**: Enquire on application

Advanced Portable Pilot Unit (PPU) training
Developed by Ports of Auckland and now proudly offered by the NZMS for all current and trainee pilots. The training is delivered by senior PGAL pilots using the latest NavCom Dynamics PPU in the full mission Transas 5000 bridge simulator.

- **Duration**: Two days
- **Dates**: On request
- **Cost**: Enquire on application

Seaways: Module 1 – Certificate in ASD and ATD Vessel Handling
This is a challenging course but also an extremely rewarding one. Driving an ASD/ATD tug at the required standard can only be achieved with repetitive practice over and over again. There are 27 individual exercises followed by a final competency assessment. You will complete each of these to a satisfactory standard before moving onto the next. At the beginning of each days training session you will also repeat all previous exercises. The course is a foundation course and prerequisite for the module 2 training.

- **Duration**: Five Days
- **Dates**: 20–24 November 2017
- **Cost**: NZ$8,400
- **Quote**: Maximum of four students

Seaways: Module 2 – Certificate in Undertaking Harbour Towing Operations
In this module we shall take the high level of tug control you learnt in Module 1 and apply it to servicing a ship whilst under pilot orders. There are 19 individual exercises that must be completed in the simulator plus six supplemental exercises and a final competency assessment.

- **Duration**: Five Days
- **Dates**: 27 November – 1 December 2017
- **Cost**: NZ$8,400

Generic ECDIS training
This Maritime NZ approved training programme is based on IMO model course 127 and STCW Reg I/1 and table A-II/1. Successful participants of this course will also receive a type-specific familiarisation certificate for the Transas 4000 ECDIS system.

- **Duration**: Five days
- **Dates**: 30 October – 3 November 2017
- **Cost**: Enquire on application

Potted Propulsion training
Delivered in the NZMS Transas 5000 full mission bridge simulator, this two-day instruction course will instruct the attendee on the unique manoeuvring techniques and characteristics of Azipod propulsion systems. The training will include both operational and technical aspects of this propulsion system and discuss resource management issues.

- **Duration**: Two days
- **Dates**: 27–28 November 2017
- **Cost**: Enquire on application

Apply now
nzmaritime.com | 0800 744 722
Smartship Australia at a glance

Smartship is a state-of-the-art facility that provides world-class maritime training and simulation services.

Amongst many services, Smartship facilities can be used for testing ship handling skills and behavioural patterns for recruitment or for enabling pilotage organisations to check pilot proficiency across a number of environmental conditions. Port development services also continue to be a major element of Smartship’s operations.

Pilot Training and Professional Development

- **Advanced Marine Pilot Training:**
The AMPT course is approved by AMSA as an ‘approved pilotage training course’ for coastal pilot licensing purposes and is equivalent to the Deck Revalidation Course (Part A).

- **Ship Handling and Bridge Team Work:**
This new offering from Smartship for 2016 has been developed in accord with IMO model course 1.22 (Ship Simulator and Bridge Team Work).

- **Bridge Resource Management:**
Captain Ravi Nijjer will conduct this AMSA approved 4 day course at Smartship. The present BRM course is referred to as 2nd generation course and was fully developed in late 2010.

- **ECDIS Course:**
Smartship has designed this course to meet the increasing demand for instrumental pilotage training. Trainees who complete the course will receive both generic and type specific certificates, with the type specific offering the integrated navigation system NACOS Platinum.

- **Port and Ship Specific Emergency Training:**
The 3 day course exposes pilots to abnormal scenarios using the Full Mission Bridge with feedback used to update company emergency procedures.

We offer

- **Five simulators – operated independently or integrated in any arrangement**
  - Two full mission bridges
  - Tug simulator
  - Two part task bridges

- **Port and ship models**
  - More than 70 port models plus in-house model building
  - 100 ship and tug models readily available

- **Pilot training and professional development**
  - ECDIS including Platinum
  - Ship handling and bridge team work
  - Port and ship specific emergency training
  - Bridge resource management
  - Advanced Marine Pilot training

- **Tug training**
  - Tug handling
  - Contingency training

- **Port development simulations**
  - Infrastructure modelling
  - Testing operational limits

- **Pilot assessment**
  - Proficiency checks
  - Recruitment evaluations.

Contact us

Phone: +61 7 3358 9300
Address: Da Vinci 303, Boronia Road, Brisbane Airport, Queensland 4009, Australia
Email: business@smartshipaustralia.com.au
Website: www.smartshipaustralia.com

Smartship Australia is operated by Maritime Safety Queensland, a branch of the Department of Transport and Main Roads.
Experience the **advantage** with **Navicom Dynamics**.

**Welcome the Next Generation - GyroPilot V3**

The GyroPilot V3 is the new version of our top selling unit – the GyroPilot. In addition to the functional attributes of the existing GyroPilot V2 where it accurately transmits AIS position, provides independent ROT & smoothed Heading data, the GyroPilot V3 now comes loaded with new features. The GyroPilot V3 is also physically tougher, more robust with the same lightweight, form factor, portability and ease-of-use.

**New features include:**

- The ability to (wirelessly) link with external devices by adding-on units to expand the configuration and augment the performance of the Portable Pilot system.
- Easily add-on an independent positioning unit and/or independent Heading antenna with the pairing button which will match devices and remember the paired device between switch-ons.
- On-board pitch and roll sensing to improve gyro calibration for precise Rate-of-Turn (ROT) data.
- Simultaneous AIS and charging through a single connector.
- More robust - full IP67 rating yet lightweight and portable at 300 grams.
- Smarter LED feedback where LED’s show:
  - Battery status
  - Comms link status to laptop/tablet/external device
  - GNSS position quality

**Exciting Introductory Offers available to early inquiries and bookings!**

Navicom Dynamics
Innovate | Integrate | Communicate

Phone: +64 9 915 5330
sales@navicomdynamics.com
Follow us 🌐LinkedIn

www.navicomdynamics.com