THE OFFICIAL JOURNAL OF SHIPPING AUSTRALIA LIMITED

Print Post Approved PP100007322

SHIPPING AUSTRALIA

Dairy feature
Don't blame the farmers

Container weight declarations a SOLAS requirement

Big BANG costs big BUCKS

Anthony Randell takes the reins at Maersk Australia

PROFILE
DAVID BEGG, managing director, BBC Chartering Australia

Safer NAVIGATION

EDUCATION AND TRAINING IN THE MARITIME INDUSTRY

SPRING/SUMMER 2015


DP WORLD
Australia
We're changing.
We're listening.
We care more.
dpworldaustralia.com.au

CONTENTS

SPRING/SUMMER 2015

Shipping Australia Limited

THE OFFICIAL JOURNAL OF
Shipping Australia Ltd
Level 1, 101 Sussex Street, Sydney NSW 2000
PO Box Q388 Sydney NSW 1230
P: 02 9266 9911 **F:** 02 9279 1471
W: www.shippingaustralia.com.au

PUBLICATIONS COMMITEE
Chairman: Ross McAlpine
Vice chairman: Frank Needs
Executive editor: Rod Nairn
Executive assistant: Sharyn Flood
Feature writer: Archie Bayvel
Graphic designer: Sarah Abrahams
E: design@ontimepublications.com.au

Advertising Co-ordinator:
For advertising contact Steve Moxey
P: 0400 473 200 **E:** steve.moxey@ontimepublications.com.au
PO BOX 43, Woonona NSW 2517

Shipping Australia Magazine is published for Shipping Australia Ltd by Ontime Pubications.

OTP
Ontime Publications

Front Cover:
Patrick's new Sydney autostrad terminal

Image: Patrick

From the bridge

Poor economics drive shipping industry changes

By ROD NAIRN AM, CEO, Shipping Australia Limited

There was not much good news in my summary of shipping trends for the Autumn/Winter editorial, and now six months later, if anything, the economics of shipping are worse. Dry bulk rates are now at 30 year lows and container shipping rates are so low that the more you ship, the more you lose. It is little wonder that market withdrawals and mergers are now becoming realities.

Hanjin Shipping has advised of its withdrawal from the New Zealand and the trans-Tasman services by years end, and the Japanese company NYK has already announced their withdrawal from the Australian container trade by the end of this financial year. It's a tough decision and one wonders whether they could have hung on if changes to coastal shipping laws had moved more quickly and allowed them to carry domestic cargo. It is understood that 160 Australian shipping industry jobs will be lost when NYK exits the container trade here, even though they will still participate in bulk, pure car carrier and some cruise shipping.

Sources in Hong Kong say that CSCL and COSCO will announce the details of their proposed merger during November. Shares in both companies suspended trading in August pending an announcement. The outcome is likely to have implications for the Australian side of their operations; both companies operate agencies in Australia and if there is a merger, then there are likely to be consequential job losses in Australia.

There are other rumours of further Chinese mergers with China Merchants Energy Shipping tipped to merge with Sinotrans & CSC Holdings, though the parent group has denied the claims. In any case, this one will have little impact in Australia.

On a more positive note, Swires have introduced a new service to Hobart. This puts the Tasmanian capital back on the map as a cargo port and is a great step for Tasmanian exporters. Also he successful conclusion of free trade agreements with Japan, Korea and China do provide some potential for increasing volumes into the future and this can only be helped by the more recent Trans Pacific Partnership deal. This deal, which sort of came out of the blue after a near death experience as recently as August, seemed to catch the world by surprise. It promises to level the playing field around the Pacific Rim, and Australia, already a relatively low tariff country, is set to benefit, particularly in the area of agricultural exports. In our feature article, Archie Bayvel takes a look at the dairy industry, which stands to benefit.

Port privatisations are still high on the agenda, despite Queensland putting their plans on hold. In September I took the opportunity to present the Shipping Industry perspective on port privatisation at a Victoria University summit, and the following day was able to put theory into practice by outlining our concerns with the Melbourne Privatisation Bill at the first of the Victorian Legislative Council Select Committee hearings.

While our members continue to have some concerns with the Victorian plan, one has to admit that the Victorian process has provided an extensive series of public hearings and the Government has been willing to concede ground in some areas. Following the final hearing, scheduled for 4 November, the debate will return to the parliament - certainly the members on both sides of politics will have little excuse for not being fully informed. Our remaining concerns relate to the lack of a clear plan to accommodate larger ships, which is complicated by a compensation regime, exclusions of some services from price controls and the cost impact of the up-front capitalisation of the future PLF revenue stream.

Blink and you've missed it. While the

Melbourne privatisation has made slow progress, the Northern Territory Government has wasted no time in sealing a deal for a **99 year lease of Darwin port to Landbridge for the sum of $506 million**. That may seem like a high price on current multiples, but 99 years is a long time. At this point SAL really doesn't know what to think, an 80 per cent Chinese owned Darwin port operator may cause some headaches for the Department of Defence and its northern military base, but the deep pockets of a Chinese purchaser may well provide the opportunity for substantial port capacity development in the Territory's port. In the Territory's *Field of Dreams* there seems to be a lot of money riding on James Earle Jones' famous principle "*if you build it they will come!*"

Shipping Australia has now turned our eyes west. We are expecting the Western Australia Government to introduce a bill to enable the lease of the Port of Fremantle before the end of this year, and we wouldn't like this one to slip through to the keeper without us having a good look at it and maybe even playing a shot. At the same time the mooted privatisation of Utah Point at Port Hedland and Kwinana Bulk Terminal both remain on hold as the economics, particularly of iron ore, has turned against them.

While we are looking west, I would like to acknowledge the support of Patrick Lobo (WWL) who has been SAL's Western Australia State chairman for two years, and stood down at our recent State Committee meeting. I would like to welcome Robert Boyce (MSCA) who has now stepped up to the role from the deputy chair position.

Another development in the west is the creation of a Western Australian chapter of Young Shipping Australia as an initiative of Joel Cockerell (Clyde & Co.). We would welcome members' participation in both these groups. A reminder to all SAL members that your younger staff can take advantage of the fantastic networking and information presentations provided through the Young Shipping Australia networks in Queensland, New South Wales and Victoria.

The Shipping Legislation Amendment Bill was introduced to Parliament on the day before the winter break and immediately referred to a Senate Inquiry. The Bill has since come under some emotional and not always factual attacks by the MUA and Labor. The Senate Inquiry Report concluded that **the Bill should be passed**. It found that the existing Act is an abject failure, Australian shipping will disappear regardless of whether the Bill is passed or not, and Australia as a whole would be a lot better off if the Bill is passed. The Bill

Ship size is not a limitation

Our cover photo shows the launch of Patrick's autostrad terminal in Sydney on 8 October; it is an impressive facility. A fully automated truck gate system, 31 gated truck loading bays, 45 autostrads, 10 quay cranes with capacity up to 20 containers wide and four berths totalling 1400 metres of quay line and up to 16.2 metres draft.

The facility can handle 10,000 TEU ships now and has a current capacity of 1.6 million TEU and tremendous potential for growth.

has now passed the lower house and will be debated in the Senate after Parliament returns on 9 November.

In the meantime, **India has relaxed its cabotage laws** for a number of vessel types including RoRo, PCC and project cargo in an attempt to get more domestic freight off the roads. What a good idea! The European Union is seeking liberalisation to encourage short sea shipping for similar reasons and even Indonesia is considering easing cabotage restrictions to provide better access to international shipping and benefit the domestic economy. Let's hope the Australian Senate will act in the best interests of Australia as a whole and pass the Shipping Legislation Amendment Bill and not bow to heavy-weight lobbying from the protected few.

On a closely related matter, Shipping Australia participated in an ACTU organised shipping summit on 4 September, which was advertised as a forum to identify ways to breathe life into the failing Australian shipping industry. **There is nothing I would like to see more than a strong Australian shipping industry**, but it can only happen if the Australian flag becomes internationally competitive, assisted by liberal regulation and some good investment and taxation incentives, and not by holding every Australian to ransom in an attempt to protect a chosen few.

There were no silver bullets. But one thing that is essential, if we are to be a seafaring nation, is **training and education**. SAL members are doing their part in getting cadets to sea now. This edition highlights the importance of education and training in all aspects of maritime trade and logistics, at both point of entry and throughout a career. With the story on page 41 we bring together a broad range of education and training providers to highlight the breadth of offerings in Australian maritime training.

Remember the Harper Review? If you do, then you might be the only one. If you think that a change in Prime Minister may change the perspective of the Government, then you'd be right. All the Cabinet Ministers who had any responsibility for it have now moved on and there seems to be a general lack of interest. Shipping Australia has been keen to see Recommendation 4 of the Harper Review formally set aside so that Part X of the CCA can continue to support the operation of efficient shipping services. The shipping industry needs long-term regulatory certainty, and Cabinet continually fiddling with a loaded regulatory weapon is not conducive to stability in the industry.

Part X compliance. While the Harper Review remains in limbo, it is probably no coincidence that the ACCC has reminded shipping of the need to comply with the letter of the law if they expect to be protected by the exemptions offered by Part X. Shipping Australia has taken this reminder seriously, informing all discussion agreement and consortia members of the details of the ACCC concerns, providing clarification of regulatory requirements and assisting with variations and regulations. We have also maintained dialogue with the ACCC and informed them of the efforts that industry has taken to ensure compliance.

Guests enjoy a colourful night at the SAL Queensland Shipping Industry Ball

The changes to SOLAS to make it mandatory to provide **verified container weight declarations** have received a lot of attention across shipping, safety and freight forwarder sectors. Shipping Australia has been consulting with all sectors of the logistics industry (and the regulator) in an attempt to ensure that the rules and responsibilities are clearly understood and that the timing and process of making the declaration is as simple and painless as possible. Melwyn Noronha lays out the history and process on page 18; you may be surprised with what you read.

We have recently heard reports that NASA's Curiosity rover has discovered evidence of water on Mars. Here on Earth we are getting very close to seeing **MARS on water**, that's the *Maritime Arrivals Reporting System.* Shipping Australia has been working very closely with the Department of Agriculture to develop the Maritime Arrivals System and live industry trials are now underway. At the same time work is continuing on the development of a new vessel (biosecurity) compliance scheme that is expected to be implemented as part of the MARS initiative. This is a welcomed development as the new scheme is designed to facilitate better biosecurity compliance by vessel operators, and it is much easier to understand. Rules and regulations are designed to influence behaviour, and by the Department making the rules transparent, simple and easy to follow, it will ensure more vessels operators stand a much better chance of understanding their biosecurity obligations and doing the right thing. This will mean better compliance resulting in reduced intervention and faster clearances - saving time and money. You'll find more information on MARS and the new vessel compliance scheme on page 32.

One final note is to congratulate Bill Guest, our SAL Queensland state secretary, on the organisation of yet another tremendous shipping industry ball at Moda Events Portside on 16 October. The event of the year attracted strong industry support with 270 guests. Our thanks to the platinum sponsor, Port of Brisbane Pty Ltd, along with Chalmers Industries, Svitzer, Patrick Terminals, Brisbane Marine Pilots and the Ace Waste Group for their generous support. The focus of this year was to raise funds for Sailability Bayside and a $13,000 donation will go towards upgrading their disabled change/ toileting facilities.

VIEWPOINT

Freight needs equal consideration

By MICHAEL KILGARIFF, managing director, Australian Logistics Council

Much has been written and said since Malcolm Turnbull's rise to power, about the Federal Government's role in our cities. There is universal agreement that unless there is a renewed focus by all levels of government to improve our cities' transport infrastructure,
our economic prospects will inexorably suffer.

Chief amongst these is Infrastructure Australia, which warns in its National Infrastructure Audit that growing congestion threatens to cost Australians $53 billion by 2031, as the population increases to 30.5 million. Infrastructure Australia also reminds us that the economic contribution of our major cities will increase by 90 per cent, to an input of $1.6 trillion in 2031.

From the perspective of the logistics industry, greater Federal Government focus on the workability of our cities is a positive step. It has the financial muscle that many state and territory governments simply don't have to invest in projects to improve the economic efficiency and liveability of our capitals. Similarly, the development of policies that pave the way for greater private sector investment in infrastructure projects is strongly encouraged by industry.

But in the rush to extol the virtues of government investment in trams, buses and rail links in our cities, the need to invest wisely in key logistics projects to improve supply chain efficiency has been somewhat overlooked in the national debate. As attention turns to the crafting of the next budget, it is essential that the Government gives equal consideration to the movement of freight, as it does to the movement of people. In short, any new federal approach to moving people should not be at the expense of supporting supply chain projects to move freight.

Too often, freight is seen as an inhibitor, rather than a creator of wealth, prosperity and opportunity in Australia. But the fact is the health of our cities and our lifestyles are inextricably linked with national supply chain efficiency.

There needs to be greater integration between urban planning and freight planning, to avoid repeating the mistakes of the past that restrict supply chain efficiency. In practice, urban encroachment, a lack of buffer zones, and a tangle of passenger and freight rail on the same lines, are all symptoms of a lack of attention to the needs of freight.

Ensuring there is a strong approach by governments to freight is imperative for three key reasons.

The first, Australia's rising freight task. The Bureau of Infrastructure, Transport and Regional Economics predicts Australia's freight task will double between 2010 and 2030, and is likely to triple by 2050. Unless there is targeted investment focussed on connecting our sources of wealth with our domestic markets and international gateways, our cities will inevitably suffer.

The second is the economic windfall from improving the efficiency of our national supply chains. A report by ACIL Allen and ALC found a one per cent improvement in efficiency of our national supply chains will yield a $2 billion-a-year benefit. It provides the evidence, if it were ever needed, that inefficiencies in the industry will cost Australia dearly unless all governments continue to focus on improving the efficiency of our supply chains.

The third is to maximise the economic benefits that can be achieved through recent trade deals, such as the Trans Pacific Partnership. Maintaining and enhancing efficient national and international supply chains is a fundamental component of any international trade deal, such as the TPP, and will help to ensure Australian businesses receive the full benefits of this and other important international agreements.

These economic realities underscore why ALC is encouraging Government to ensure there is clear responsibility for supply chain efficiency and freight in the new ministerial arrangements. It is critical there not be duplication or overlap between these ministerial responsibilities, particularly as they relate to major freight projects. Freight cannot fall between the cracks, particularly when it comes to responsibility for major infrastructure projects.

The logistics industry looks forward to Infrastructure Australia's 15-year Infrastructure Plan, due later this year, to provide this high level infrastructure blueprint, and to deliver the framework Australia needs to facilitate the more efficient movement of freight across our national supply chains.

The port waters of Geelong welcome about 700 ships a year.

And a raft of capital upgrades over the coming years will ensure the welcome mat stays out for the next generation of bigger ships set to use Geelong's channel network.

The Victorian Regional Channels Authority is committed to providing safe access for all ships - now and in the future. Its long-term development strategy of targeted channel improvements is a key to keeping the network efficient and the port productive in future decades.

While planning for the future is vital, the VRCA is continually improving access for today's ships and the 13.5 million tonnes of cargo they transport through the port each year.

The VRCA is directing millions of dollars into annual upgrades, through projects including a recent $9 million dredging program. With other multi-million dollar capital dredging projects in the pipeline, it's all about providing safe passage for the increasingly bigger ships and larger ship numbers sailing Geelong's way.

VRCA is investigating the installation of Dynamic Under Keel Clearance to allow a potential cargo increase of thousands of tonnes for those larger vessels in the world fleet.

Safety is paramount in Geelong's port waters. High-visibility GPS/GSM controlled lights and beacons as well as virtual beacons clearly delineate the channels while a Smart Dock laser system boosts berthing safety in all conditions.

The VRCA also invests heavily in marine logistics and control systems, with its 24/7 marine traffic management system using technology including automated ship identification (AIS), very high frequency radio (VHF), mobile telephony, satellite communications and real-time tide and wind sensors, available online.

As well as commissioning annual hydrographic surveys, VRCA rigorously tests its channel network's capacity using sophisticated ship simulation and logistic modelling programs.

It's all part of the VRCA's pledge to the ships of today and the visitors of tomorrow - to provide safe and efficient passage into the port and a big Geelong welcome.

Victorian Regional Channels Authority

Level 2/235 Ryrie St, Geelong / GPO Box 1135, Geelong, VIC 3220 03 5225 3500
admin@regionalchannels.vic.gov.au www.regionalchannels.vic.gov.au

DAVID BEGG, managing director, BBC Chartering Australia

With 100 years of shipping in his blood a young man finds his destiny in a one-way ticket to the world

By ARCHIE BAYVEL

It's happened again! We're in the ground-floor foyer of a suite of offices on the way to meet someone important. A flight of some 20 stairs leads up to where a pleasant-looking man in middle-youth waits, hand outstretched in welcome.

One's gaze tends to drop after 14 steps but as it comes level with about his belt one extends one's own hand in friendship.

Only to suffer an admonitory rap on the knuckles as one finds oneself trying to shake hands with a mirror.

That's surprise No 1. Number two comes when the real David Begg is found standing sharply off-left of his mirror avatar, hand outstretched in welcome. He appears not to have noticed the folly. (For flashback to a previous similar incident, please see panel page 9.)

"I sometimes think," says the real David Begg, "that I'm here because of fate. My mother's family were in shipping for more than 100 years."

Only 22 words in and we've already had the déjà vu of Anil Singh and now we're channelling Serena Williams, who's never done telling the world that she was put on earth to be a tennis champion.

Back to earth, however, as David unfolds the tale of *his* personal journey to destiny: "My great-grandfather, Thomas Barraclough, became a partner in a shipping office in Hartlepool, England, 'way back in 1875. They owned and operated a fleet of tramp steamers all through the late 1800s and through World War I, despite losing many of the fleet to enemy action.

"In 1929 they founded Dene shipping, which was eventually taken over by two of the old man's sons, who ran it until 1950 when they took over the Silver Line. In due course my uncle Martin Barraclough took over and operated it until 1974, when it was sold to the Vlasor Group."

So the family business must have been a big part of David Begg's childhood until he came to Melbourne in 1974 with his mother, nee Miss Barraclough, dad, plus brother and two sisters.

"My father was a grain trader and eventually became head of Cargill out here," he says. "His side of my family were plantation owners and traders with imperial India in the days of the Raj.

"But when I left Scotch College, I bought a one-way ticket to the USA, back-packed around the world and didn't come back for almost four years."

But even after all that time his Barraclough blood called him to the shipping industry. It would be hard to forget because a hereditary trait of the family was that many of them had hands with six fingers and David …

No, his hands are perfectly normal, five fingers on both hands. But on the outside edge of each palm a thin white scar with stitch marks along their sides marks where his sixth finger on both hands was surgically removed at birth.

"My mother also had an extra finger when she was born," he recalls.

When he finally did join the workforce it was as a trainee trader and shipping clerk at C. Itoh & Co. He stayed there for two years until he heard there was a vacancy in CSR's shipping group.

He got the job and on his first day there was shown to his desk that was right in front of two model ships. A closer look showed them to be CSR molasses carriers - the *Silver Hawk* and the *Silver Harrier*, both owned by his uncle Martin Barraclough.

"My next job," he says, "took me to Western Australia where for two years I represented the big left division of Mamoet.

"That introduced me to the ultra-heavy lift sector and that captured my imagination. When I saw what heavy-lift ships could do it inspired me to specialise. There was a lot of work associated with the oil and gas industry. Woodside Petroleum was a big customer with both onshore and offshore over-dimensional work, as well as heavy cargo.

"By frequently changing jobs I made sure that every step of my career provided a new and more interesting environment.

"By the early 1990s I was in Singapore with Elite Shipping's commercial division. They had 45 ships throughout Asia, all small multi-purpose heavy-lift vessels ranging from 2000 tonnes to 9000 tonnes.

"Singapore was their rep office for east of Suez and the cargoes were really interesting; no two were ever the same – break-bulk, heavy lift, sensitive military equipment, etc. The skill was in understanding the capacity of the ships and how to use them.

"Back in Melbourne in 1999 I was working for Clipper, trading the joint fleets of Clipper and Elite, which was in the hands of its bankers.

"That year Clipper formed a joint marketing office with BBC which was emerging as our greatest competitor.

"Eventually the joint venture was dissolved and in 2009 BBC took over as a wholly-owned office. Our parent company's head office is at Leer, in Germany, while our national office in Melbourne and a branch in Brisbane cover the market in Australia, New Zealand, Papua New Guinea, and the Pacific Islands.

"As a wholly-owned operation we believe we can talk to clients with more authority than an agent.

"We go where the money takes us. Provide us with an inducement and we'll consider deploying our ships.

"Business today is vibrant and demands real-time solutions and our sector is in the forefront of capital development. People talk to us two years in advance so we can help with their feasibility studies."

"I decided we should join SAL this year because we've been involved with most of Australia's major capital projects on and offshore. If I can add my voice to our sector of the shipping industry, that adds to the collective wisdom.

"The biggest change in shipping I've seen is that the container carriers are getting bigger and bigger, and ships of all kinds are becoming safer.

"I'm passionate about safety regimes. There should be no sub-standard ships on our coast. Nobody's life should be at risk."

While David describes golf and tennis as being in his hobby history, his current spare-time activity is renovating a 1970s Huntsman motor cruiser, which he bought 12 years ago but only got around to working on in March this year. The job's going well, however, and will be almost complete by the time you read this.

A history of folly in the mirror

MUMBAI, SPRING 2011: "… his receptionist says that Anil Singh will be out in a minute and glances to her left giving the impression that he is right there. I look there too and am closely confronted by a man in a wet grey suit (the weather outside is doing its full monsoon bit). I hold out my hand in welcome; he holds out his hand too.

"Mine bumps hard against glass … I am in fact trying to shake hands with my own reflection, the whole wall being one vast seamless mirror including the door to Anil's inner sanctum.

The mirror wall opens and in we go …"

ANTHONY RANDELL, managing director, Maersk Line Australia

So he missed out on the priesthood but life's not all that bad for our Anthony

By ARCHIE BAYVEL

A quick Google check on Anthony Randell reveals that *"by the time he was a year old, Anthony Randell's mother and grandmother realised that despite all their prayers, he would never be a priest. Born in Brooklyn in the summer of 1961, Anthony's particular vocation lay in quite a different direction ..."*

Bloody oath, as they say in Brooklyn, but READ NO FARTHER. IT'S THE WRONG ANTHONY! Google's a big world so it's not all that surprising that there are two of them.

So what is the *real* Anthony Randell, *our* Anthony like?

He's a tallish man with a slightly unusual haircut and a lithe bearing that makes him look younger than his 38 years. Like an Aussie Rules footballer in a suit.

In fact, during an earlier stint in the USA he used to play with the New York Magpies. "Aussie Rules is huge in America," he says. "They're making a big investment in the game.

"I was only an amateur but we trained in Central Park, and I got lots of trips playing teams all over the USA. When I was transferred to Denmark I played for the Copenhagen Crocodiles who have a local rule that there can't be more than five Australians on the field at once."

At the time of this interview Anthony had been in the chair at Maersk for only three days, having just been promoted from the customer service and operations manager roles he's occupied since moving back to Sydney two years ago.

"I've had my eye on this job since the day I joined P&O Nedlloyd 18 years ago and met its managing director, Bob Kemp," he says. "It was only my second job since leaving Perth's Corpus Christi College when I was 17.

"I finished school on a Friday and begun work on the Monday as a runner with Hindle-Buralli, a Fremantle freight-forwarding and trucking company.

"I played a lot of Aussie Rules in those days and one day another player told me there was a job going at P&O Nedlloyd. I applied for it, got it and never looked back. I was about 20 and worked at the Sydney head office as a trader, and in the marketing department of the company's Australia-US network. The company was taken over by Maersk in 2005.

"I never went to university, never got a degree because I believed I could learn what was needed on the job into which I put all my effort."

This is the first time Maersk has appointed an Australian to this post but Anthony has previous experience of being the top man from when he was Maersk's country manager for Taiwan from 2011 to 2013.

"But it's watch and learn for me just now," he says. "I've a good idea of what I need to do but I haven't arrived in this job with any preconceived conclusions.

"I also have a few other ideas to develop. We see solid growth into and out of Papua New Guinea, for example, and this will also remain a key area for us to further develop.

"And I'm all about people and investing in them. Most of my previous roles have been in sales so I've a good understanding of the land-side of shipping, pricing and what customers want.

"Now I want to become more externally focussed, however, because Maersk covers so many

ports with big ships and this industry has so many players today - 23 carriers on the north-south routes, and to be competitive one needs to be able to offer 'something else' and we believe that is further up-skilling our customer service.

"The future of our industry in the face of so much competition may lie partly in further consolidation. The VSAs appear to work well; maybe we need to look at some kind of super-VSA.

"Or more lines might disappear. People must be hurting although there's no sign yet of anyone dropping out.

"Australia is one of those markets where people feel they just have to be in, despite market growth being only 2.5 per cent. With 23 carriers and no double-figure growth Australia's popularity is not driven by profitability.

"Australian is a lot bigger market than New Zealand where the rates have always been higher than here. They don't' have so many competing carriers. But New Zealand is not my baby. Maersk there is run by Gerard Morrison, our former Australia sales manager, who like me reports directly to regional ceo Lars Mikael Jensen, in Singapore.

"What of the future? More cost-effective land-side efficiency with rail taking more trucks off the road, is the next big focus. We're seeing it already in New South Wales with the profusion of big distribution centres.

"Maximisation of existing assets is another area to be looked at although the size of ships coming here is restricted by Melbourne's turning basin and the Westgate Bridge. You can't send a ship to Australia if it can't enter our biggest port.

"On the human side of things: Happy employees mean happy customers but keeping staff happy is about a lot more than money. When we reorganised our customer service department we advertised for existing customer service people rather than for shipping people.

"We felt it would be easier to teach them about shipping than the other way around.

"In the process of doing that we got a very good idea of the pay and conditions we had to meet to attract the standard of people we wanted. Any staff turnover we have now is not a matter of money.

"Of course one has the occasional person who comes up with a fantastic job offer and when that happens we may have to just congratulate them and say goodbye. But people don't leave us just for an extra thousand or two. Australia-wide we now have 115 employees.

"Taipei was a big cultural change for me. I was the only expat in the office but the friendliness of the people made my stay there very enjoyable.

"The office environment was very different from what I was accustomed to. Managers' leadership was unquestioned and I had to gradually work my way into getting them accustomed to my way of working in which staff are encouraged to ask questions. In the end it led to a much higher level of contentment in the team.

"Traffic volumes there were much smaller than in Australia; perhaps a third, although Taiwan is quite congested with a population close to 24 million, each of whom statistically owns 1.2 motor scooters."

Taiwan has about the same population as Australia but on an island half the size of Tasmania that would comfortably fit between Alice Springs and Oodnadatta.

Its major container ports – Taichung, the biggest, in the south and Keelung in the north – are both very busy not least because Evergreen is based in Taipei.

"Back here in Australia, it is the first

time that Papua-New Guinea has been my responsibility," Anthony says. "Inchcape is our agent there and Maersk has a full-time representative in Port Moresby.

"One hears about safety concerns but from my knowledge so far the expats all feel safe enough in their own communities. One of my staff recently moved there in fact and I know that they all seem to like the life there."

Today Anthony lives at Corrimal, south of Sydney, with his wife, four-year-old son and boy-and-girl twins aged two.

"I get up at 4.45 in the morning," he says, "drive for up to an hour to Sydney then go to the gym for about another hour and arrive invigorated at my desk by 7.15."

Meanwhile one can't help but wonder what became of that *other* Anthony Randall ... *He* grew up to become a distinguished New York photographer.

A sea change for Soren

Anthony brings news of Nicolaj Noes' predecessor and past SAL Board member, Soren Houman, former member of Denmark's Royal Guard and assistant to Maersk's worldwide chairman, Maersk McKinney Moller. Where is Soren today? Just about as far from shipping as one can get. He is chief executive officer of the Copenhagen Business School, a Bond University/ Harvard-style institution with 20,000 students and 1300 academic and admin staff.

Don't blame the farmers; it's some old crosspatch in Moscow bears the blame for the blip in our dairying profits

ARCHIE BAYVEL describes our dairying as a vast and largely uncoordinated business needing a book to report its activities. But this story is a start although the poor cows barely rate a mention - and wouldn't get even that but for the $$billions they earn us.

You might expect this country to be almost awash in milk what with our 1.7 million cows having produced an estimated 9.35 billion litres of the stuff during the recently-ended season.

Most of it, around 7.5 billion litres, came from Victoria, whose cows averaged a whopping 15.4 litres a day.

But if you feel we're *almost* drowning in milk, think of the poor New Zealanders who with almost exactly the same number of cows (4.7 million) as people (4.6 million) produce 20.7 billion litres of milk a year.

Yet despite having milk up to their ears and being barely able to move for cows, the Kiwis lead the world when it comes to dairy, accounting for more than a third of the world's international dairy trade and 25 per cent of their own export earnings.

But the real action these days is centered not in the paddocks of the world's deep south but in China and Europe whose purse strings make our markets dance up and down like puppets.

China consumes most of New Zealand's exported milk products and does the same for ours; not only that, it imports around 80,000 live heifers a year from Victoria. They are destined to develop big new dairy farms for China's own fledgling milk industry.

Europe gets a mention because Russia has banned all dairy imports from the European Union for whatever reason. One result of that, according to Mr Noel Campbell, president of Australian Dairy Farmers, is that the international milk market is at a very low point at the moment.

"There's a glut of milk powder around the world," he says, "because of increased production by New Zealand and the USA, plus the effect of Russia's sanctions on its European suppliers who are having to find alternative markets for their product.

"Reducing their price is one way to do that. And that puts pressure on us. I expect the Russian sanctions to last for at least another 10 months."

Who would have imagined that, eh? Some old crosspatch in far-off Moscow sending a shiver through the green meadows of New Zealand and Victoria. Far out!

Just as far-out as some of the rumors one hears about the Australian and New Zealand dairy industries. They

are so much more exciting than the avalanche of reports and figures that disprove them that this report could easily relapse into a Believe-It-Or-Not saga.

Just some of the gossip claims that New Zealand has so much unsold milk powder that it is being used as landfill. And it's hard to find evidence that the Chinese and Japanese are buying up dairy farms like crazy in order to develop them later as residential sites.

The fact is that the past few years have seen a number of big foreign dairy companies take control of our farms and milk processors, either by direct purchase or by acquisition of essential industrial links between the cows and your cheese, yoghurt, babyfood powder and all the other end-products we take for granted. The traditional farmer-owned cooperatives no longer dominate but still account for around 38 per cent of our milk. The largest is Murray Goulburn.

Before Warrnambool Cheese and Butter's takeover by Canada's Saputo early last year, large multinational dairy companies were already operating in Australia for many years, including: Fonterra (New Zealand), Kirin's Lion (Japan), and Lactalis (France).

Even more true is that farmers seem to complain endlessly that they are either being oppressed or robbed by the milk processors in league with their main customers, the supermarkets.

One result of that is Australia's newly created Food and Industry Code of Conduct was drawn up, strangely enough, by the very people from whom the farmers seek protection – the major supermarkets in conjunction with the Australian Food and Grocery Council.

Retailers including Coles, Woolworths, Aldi, and About Life have all signed up to the code which although voluntary is enforceable by the ACCC.

The Victorian Farmers' Federation hasn't messed about with its verdict and has dismissed the new code outright as pure spin. The Queenslanders have been even more outspoken with Mr Brian Tessman, president of the Queensland Dairyfarmers' Organisation, saying the code needs to be mandatory, with financial penalties and overseen by a dedicated ombudsman.

He claimed that Queensland dairy farmers are among the most exposed to major supermarkets' unacceptable actions around fresh milk.

"It has taken four years, Senate inquires, ACCC investigations, extensive court action and litigation before major retailers agreed to treat their suppliers fairly," he said.

"The Federal Government still needs to outlaw predatory conduct of the major supermarkets such as the $1 per litre campaign and also to introduce unfair contract laws."

Although the code is voluntary it is legally enforceable but hedged by so many exemptions and conflict clauses that it would be easy for those fighting for better farmgate prices to describe it as a toothless tiger.

Mr Noel Campbell, president, Australian Dairy Farmers

Devondale products on their way to market

The very words "legally enforceable" and "voluntary" must bring a sparkle to many a lawyer's eye, although not to that of a modest dairy farmer unlikely to afford such a creature.

Already the consumer commission has ruled that some Coles' milk price claims were unsubstantiated and instituted court proceedings against Coles saying it had engaged in unconscionable conduct towards 200 of its smaller suppliers.

While Murray Goulburn's unprecedented 10-year contract with Coles will remain a big talking point for years, it will be diluted by the activities of other big companies and their relationships e.g., Woolworths with Fonterra in Victoria; with Lion in South Australia, Northern Territory and Tasmania; Brownes Dairy in Western Australia; while Parmalat supplies Queensland and New South Wales stores.

In human terms the dairy industry directly employs some 50,000 Australians from cow to counter and, according to ABARE, as many again in support roles.

Victoria is the star milk-producing state with its cows squirting out 66 per cent of our national total, the vast bulk of which is exported through the Port of Melbourne as powder, cheeses, and yoghurts.

A tiny quantity found its way overseas earlier this year as an experimental shipment of pure liquid milk. That market is hard to track but with airfreight costing about 70 cents/litre one could be looking at a retail price as high as $5/litre.

But, as one exporter pointed out, the Chinese are very brand-conscious. Next time you're on a Chinese airliner take a look at the number of ladies wearing Gucci accessories and men wearing a Hubelot, Audemar, or even a Roger Dubuis. (Wondering what these are? Then you are on the wrong plane in more ways than one).

Greater China (which includes Hong Kong and Macau) can't get enough of our premium UHT liquid milk, however, with its demand projected to grow around 50 per cent by 2017.

A recent Dairy Australia report says that around 40 to 45 per cent of our national milk production ends up overseas and accounts for 7 per cent of the world's dairy trade with our main rivals in the world market being New Zealand (37 per cent), the European Union (31 per cent) and the USA (11 per cent).

Last year the main buyers by value for Victoria's $2.3 billion dairy products were China (16 per cent), Japan (16 per cent), Singapore (10 per cent) and Indonesia (8 per cent).

Our biggest milk-*drinkers* are in New South Wales and Queensland where they consume 80 per cent of production.

Victorians pay a strange penalty for their export success – farmers there and in Tasmania get a significantly lower price for their milk. Currently somewhere in the high-30 cents range per litre, whereas the farmgate price in New South Wales and Queensland is more like 53 cents.

This, according to those who should know, is because the high-export states' product is treated as an international commodity on the world dairy market and when that goes down, their revenue goes with it.

In New South Wales and Queensland with most of the milk being consumed as milk, it never gets near the international commodity market and is therefore not so influenced by its fluctuations.

With production costs higher in the northern states, however, both rates are said to be very close to break-even point.

"As for the $1/litre milk campaign," says Noel Campbell, "we weren't very happy when it was first introduced about four years ago and we're still not. It's not a fair return to farmers.

"It would be good to see mid-40 cents for Victoria and Tasmania and perhaps 60 cents for the others. But nobody wants to be the first to pay that".

In fact the price is virtually fixed by the Murray Goulburn Cooperative, Australia's biggest dairy processor with 36 per cent of our market. Most others in the industry wait to see what MGC is paying before announcing their own rate.

Dairy Farmers Milk Co-operative, an independent, farmer-owned body of 1000+ members from around 350 dairy farms in Queensland, New South Wales, Victoria and South Australia, has an exclusive arrangement to transport its members' raw milk to Lion until 2019. Its farmgate pricing schedule for 2015/16 pays its suppliers an average total price of 53.53 cents per litre.

Are our dairy farmers still prospering? As recently as the beginning of this year farmgate prices were much higher and had been so for some years.

Fonterra chief executive, Theo Spierings, claimed recently that most dairy processors in Australia, including Fonterra, were paying farmers too much for their milk. The price did not reflect the collapse of global prices for key dairy commodities, he said.

In New Zealand – where Fonterra has a monopoly and up to 95 per cent of its total milk production is exported – the farmgate price has plummeted over the past two seasons.

In the milk star-state of Australia, Victoria - where the liquid milk market consumes only about 10 per cent of production, with most farmers selling

to the manufacturing sector – farm profitability has been carefully analysed by Dairy Australia.

Over the long term it shows that the industry has boomed, with some 4268 farms –averaging herds of 261 cows and a few with more than 1000 - spread over three distinct regions.

- In the state's Northern region average farm earnings before interest and tax were $393,700, a return of 11.3 per cent
- In the South-West region earnings were $424,647 with an average return of 9.9 per cent
- In the Gippsland region farms, EBIT was $284,948 for a return on equity of 10.2 per cent.

Once milk has been processed into products such as cheese, baby formula, yoghurt, protein powder etc., the money figures move into a quite different ballpark.

A 900 gram can of powdered milk costs around $20 here but can sell for as such as $100 in China, where local milk supplies are nowhere near meeting demand and don't look like doing so for years despite all these imported heifers. (A heifer takes about two years to bear its first calf and graduate to being a milk-producing cow.)

Perceived safety concerns around dairy produced in China, plus a false-alarm scare from Fonterra in New Zealand, help drive demand for Australian dairy products and there are now around 20 major liquid and manufacturing plants in Victoria alone.

Murray-Goulburn Cooperative, Fonterra and Lion (formerly National Foods) are the three largest processors with Warrnambool, Norco, Bega, and King Island, in Tasmania, being smaller brands which have achieved wide international recognition.

And let's not forget Parmalat - remember Pauls? – which, though based in Sydney was acquired in 2011 by Lactallis of France, the giant of dairy giants with a turnover of €19 billion (A$ 29.88 billion) last year, making it the world's No.1 dairy company.

The $450 million all-cash takeover of Warrnambool Cheese and Butter, Australia's oldest dairy company, by Canadian giant Saputo has promoted that company into the ranks of those affected by global price fluctuations.

"These matter a lot nowadays," says Warrnambool's Mr Ben Singh. "There's been a bit of a slowdown in the past six months with some prices coming off by 50 per cent compared to this time last year.

"But it's happening with all milk products with collateral damage to cheese, butter and similar products. Everything pretty well follows the trend.

"It's connected to the China economy. Demand in some areas has disappeared and customers have inventory to last for several months. There should be some recovery as products sell-out or reach the end of their shelf life.

"Our domestic production is going up to satisfy other markets but it's a very open market and commodity prices apply everywhere.

"Chinese demand for baby food is the main sufferer. But it's not a big market for cheese products. They have yet to develop a taste for them and snacks are a very small but growing market.

"We do send a lot of cheese to Japan, however, and to the Middle East including Jordan and Saudi Arabia.

"The Australian domestic market is very big in every category but it's quite a task to introduce new products because competition is so huge. One just has to look at the number of competing brands, including cheese from New Zealand and Europe, on our supermarket shelves.

"Our tankers collect milk from farms in a 200km radius. The farms can store milk at 4°C in their own silos for up to 24 hours but once it's in our system it goes to Coles' distribution centres and from there it's on the shelf within two to three hours.

"$1/litre milk? – We don't play that game although other people think they can make money out of it. Last year farmgate price was close to 60 cents, today it fluctuates about 40 cents.

"As for foreign investment in Victoria's farms … there seemed to be quite a lot a few years ago but it has slowed down and there's been only a little around Warrnambool."

Noel Campbell agrees that foreign purchases of Australian dairy farms are not anywhere near as common as gossip would have us believe.

"There is genuine China interest in buying really large farms," he says, "but there are not many of these and they form a relatively small part of our industry. The main interest has been seen in Victoria and Tasmania.

"Gina Rhinehardt bought land in Queensland and Western Australia with the intention of running dairy cows on it but with the collapse of dairy prices she's currently running beef cattle on these properties."

Media reports at the time said Ms Rinehart had partnered with China National Machinery Industry Corp to invest A$500 million in Hope Dairies in Queensland to supply 30,000 tonnes of baby formula to China starting in 2016.

At the same time Linear Capital, a Tasmania-based private investment firm with links to Chinese state-owned consortiums, was reported as planning to buy 50 dairy farms in western Victoria to create Australia's largest

Why NZ gets a tougher deal than us

In a recent statement Noel Campbell, president, Australian Dairy Farmers said: "It is reasonable to ask why up until now the Australian dairy industry has not been affected by price cuts to the same degree as New Zealand.

"Unlike New Zealand, Australia has more than 50 per cent of its production consumed domestically.

"This provides a dampening effect on the downward trend of international markets on farmgate pricing. Our product mix has also allowed for the pricing trends to be less severe. However, there is no doubt that this international pricing impact is placing downward pressure on expected farm gate pricing that was not even seen two to three months ago.

"Farmers who supply processors who are uncontracted and exposed to world export pricing should treat the 2015/16 season with a significant amount of caution, understanding their underlying costs and being aware of input costs which will affect profitability."

Animal welfare still raises concerns

Dairy farming is not all a world of loveable Daisies and Lulubelles happily being shepherded through the meadows to be relieved of their twice-daily milk cargo.

There's a little thing called premature calf induction in which heifers are impregnated and the birth of their calf brought forward to bring on early lactation so that the bereft mothers can be hustled into the milk-production line. The premature calves are aborted and discarded.

Lots of people want to see the practice totally banned and the New Zealand dairy industry implemented a voluntary ban beginning in June. A survey reports 1.3 per cent of the Australian dairy herd is induced, only half what it was in 2012.

David Basham, chairman of the animal health and welfare committee for national lobby group, Australian Dairy Farmers, is reported as saying: "There's a constantly changing perception in the community about what's acceptable and the dairy industry has decided it's necessary to move away from this practice."

Despite that, there are regular articles in the dairy farm media on the subject and the Australian Veterinary Association publishes a set of guidelines for farmers wanting to hurry along some cows' pregnancies.

The guidelines say: "Properly undertaken, calving induction programs developed with veterinary supervision result in few animal welfare issues for cows and calves."

Reassuring news for those concerned about animal welfare, particularly if they have read preceding paragraphs of the same report which include the following:

"Premature calves must not be allowed to suffer unduly. Calves should be euthanised promptly in a humane manner if they are:

- obviously non-viable
- incapacitated in any way
- unable to stand, walk or suckle within 8 hours
- more than a month premature.

"Appropriate methods of euthanasia are:

- Injection of a euthanasia solution by a registered veterinarian (Note: carcases of calves killed in this way are not suitable for rendering or for use as pet food and must be disposed of by burning or deep burial)
- Captive bolt or registered firearm should be the method of choice for farmers followed by severing of the carotid arteries to ensure death. Carcases should be disposed of quickly and hygienically. "

In reality some may just be hit on the head with a hammer like in the good old days. Who'd be a cow even in such enlightened times!

dairy farming company. Together they were projected to run 90,000 cows and produce 500 million litres of milk.

Mr Campbell said the real big issues facing the dairy industry today were to show activists that it is sustainable, to get ratification of the China Free Trade agreement, and to resolve the price issue.

"The proposed Trans-Pacific Partnership has also stalled, largely because of the approaching elections in Canada and the USA," he said. "It's a very complex electoral issue there. While we are in favour of free trade, it's not an issue likely to be resolved in the foreseeable future.

"The whole-of-industry unification concept is still on the Australian agenda. The processors are prepared to work together on international issues but not so enthusiastic about specific local issues.

"We've been enthusiastic about the China Free Trade Agreement but Labor's expressed misgivings are delaying its ratification so that's not very positive at this time."

The agreement was signed in June this year and is expected to gradually reduce tariffs on infant formula, cheese, milk powders, butter and liquid milk. Eventually all tariffs will be removed from Australian dairy exports to China.

But Australian unions have been campaigning to stop the deal because they say it will cost local workers their jobs.

Ben Davis from the Victorian branch of the Australian Workers' Union says, "It's unfortunate that we can't get an FTA that both protects jobs and creates wealth for the agriculture sector.

"This agreement does not do that."

Australia's Trade Minister, Mr Andrew Robb, said the signing of the Trans-Pacific Partnership represented the biggest global trade deal in 20 years.

"It will deliver enormous benefits to Australia, including unprecedented new opportunities in the Asia Pacific region for our businesses, farmers, manufacturers and service providers," he said.

"It will eliminate 98 per cent of all tariffs across everything from, dairy to beef, wine, sugar, rice, horticulture and seafood through to manufactured goods, resources and energy."

But we can't count our cows yet!

Each signatory has to take independent parliamentary action to ratify the agreement before it comes into force. So while we now have the promise of lower tariffs, the challenge of getting it through the 12 member parliaments, means the timing is far from certain.

The 12 countries signatory to the TPP who together constitute around 40 per cent of global GDP are: Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Peru, New Zealand, Singapore, the United States and Vietnam.

Foreign ownership appears to have benefitted the Australian industry by injecting funds to improve efficiency and maintain profitability, while winding down out-of-date capacities. Saputo's Canadian owner said recently that it was still seeking acquisitions in Oceania and South America.

Some analysts say such acquisitions, particularly by Asian interests, will be the critical dynamics driving Australian dairy products to the apparently inexhaustible long-term markets of middle-class China, India, and Asia in general. For years to come.

Right on Asia's doorstep, our dairy industry and its products seem an attractive and potentially profitable prize for international investors.

PAGE MACRAE
Port Equipment

IS DUST A PROBLEM FOR YOU?

YES? THEN TALK TO US TODAY

MOVE MORE BULK!

Call us today for all your grab needs

PAGE MACRAE
Engineering

CONTACT: Bruce Ennis
PHONE: +64 7 575 5079
EMAIL: portequipment@page-macrae.co.nz
WEB: www.page-macrae.com.au

Image credit: Jim Wilson

Verified container weight – nothing new here!

By MELWYN NORONHA, manager technical services and industry policy, Shipping Australia Limited

Since late 2014, attention has been focussed on the weight of a container, and plenty of literature is being disseminated on this issue. The main reason for this interest has been IMO's adoption of so-called new SOLAS requirements that, as a condition for vessel loading, the weight of a packed export container be *verified* and that verified weight be provided by the shipper to the master of vessel in advance.

At first glance one would consider that such a requirement would be obvious, and why has it taken this long to be introduced.

In reality, **since 1998 Marine Order 42 has required an Australian shipper to ensure that the gross mass of a container is in accordance with the gross mass declared** on the shipping documents. This has been enshrined in the Order and an extract of the Order below (Figure 1) reflects a shipper's obligations.

So, are Australian shippers complying with the existing requirements? What weighing processes are they utilising? Are weight declarations on shipping documentation accurate?

Indications from shipping sources within industry suggest that weights declared across shipping documentation vary and substantial inaccuracies exist.

What triggered this change by the IMO?

Following the *MSC Napoli* incident in 2007, to highlight the importance of container safety generally, the World Shipping Council and the International Chamber of Shipping published a guide, "*Safe Transport of Containers by Sea: Guidelines on Best Practices*, which acknowledged that while the primary responsibility for the safe transport of containers by sea rests with containership operators, there are other parties in the supply chain which contribute to the safe movement of containers. There are those employed by shipping lines involved with the booking and assignment of cargoes and the subsequent arrangements for stowage planning, and there are the freight forwarders, ports and terminal operators and - ***particularly importantly, the shippers, from whom the cargo originates.***

Extract of Marine Order 42

8 Information for master

8.1 Requirement for information

8.1.1 Subject to subsection 8.2, before commencement of loading of cargo at a port in Australia, ***the shipper of that cargo must provide to the master or the master's representative appropriate information on the cargo sufficiently in advance of loading to enable the precautions which may be necessary for proper stowage and safe carriage of the cargo to be put into effect.***

8.1.2 The information in subsection 8.1.1 must be confirmed in writing and by appropriate shipping documents prior to loading the cargo on the vessel. Note a suitable form for providing this information to the master or the master's representative is the "Shippers Declaration" Form, available from the AMSA website at www.amsa.gov.au

8.1.3 The cargo information is to include:

(a) a general description of the cargo;

(b) the gross mass of the cargo or of the cargo units;

(c) any relevant special properties of the cargo; and

(d) the information specified in sub-chapter 1.9 of the CSS Code.

8.2 ***Verification of mass before loading***

Prior to loading cargo units on board a vessel, the shipper must ensure that the gross mass of such units is in accordance with the gross mass declared on the shipping documents.

Figure 1

Packing, labelling and weighing are critical, and if undertaken incorrectly have catastrophic effects on all transport modes. Ships are subject to varying forces and stresses when on the high seas. Torsional stresses play a vital role, particularly on container ships where the cargo is non-homogeneous. Incorrect weight distribution due to mis-declared weights could result in destructive torsional stresses and prove detrimental to the structural integrity of the vessel.

In 2011, through the continued efforts of the WSC and the ICS a formal proposal for a regulation specifying weighing of packed containers as a condition of loading was submitted to the IMO. In June 2012, with the support of Denmark, The Netherlands and the United States a further proposal to amend the SOLAS was made.

So what's new?

The SOLAS amendments were finally adopted in November 2014 and the resulting IMO Guidelines (MSC.1/ Circular 1475) *inter alia* set out the following main principles:

- The responsibility for obtaining and documenting the *verified* gross mass of a packed container lies with the shipper;
- A packed container should not be loaded onto a ship to which the SOALS regulations apply unless the master or his representative and the terminal representative have obtained, in advance of vessel loading, the *verified* actual gross mass of the container; and
- The shipping document declaring the verified gross mass of the container should be signed by the shipper or a person duly authorised by the shipper and can be an electronic signature or the name of the authorised person.

In addition, the guidelines prescribe two methods by which a shipper may obtain the verified gross mass of a packed container. Put simplistically:

- one is by weighing the whole container (Method 1) with its contents; and
- the other is, weighing *all* contents (including pallets, dunnage and other packing and securing material) separately, and adding the tare mass of the container (Method 2).

Method 2 is subject to the certification and approval of the competent authority within the country, which is AMSA in Australia.

The SOLAS amendments clearly place the onus of obtaining and documenting the weight on the shipper. Once the verified weight (using one of the two methods) has been obtained the shipper is required to communicate this information in a shipping document.

There is nothing new for Australian shippers who have been required to declare gross weights of shipped containers in shipping documentation.

The only difference now is that the SOLAS amendments require shippers to follow one of two methods for obtaining these weights, and shippers will be required to validate the method utilised to the regulator.

Impact of SOLAS amendments

From 1 July 2016, as per the SOLAS amendments, a container cannot be loaded onto a ship unless a ***verified*** actual gross mass of the container is provided by the shipper. The shipper is responsible for ensuring that the verified gross mass is communicated in the shipping documents ***sufficiently in advance*** to be used by the ship's master or his representative and the terminal representative in preparation of the ship's stowage plan.

The IMO guidelines acknowledge that the effectiveness of these requirements depends on the timely (or not so timely) provision of the verified weight. Delays could occur at the ship-shore interface, as loading of containers will be denied if incorrect declarations are found to have been made and any associated cost arising from the non-loading, storage, demurrage or eventual return of the container to the tendering shipper will be subject to contractual arrangements between the commercial parties.

Again, **this is not new** as MO42 has required Australian shippers to provide a ships master with the verified gross mass of a loaded container sufficiently in advance.

Developments in Australia

Mindful of existing regulatory requirements and recognising that the SOLAS amendments now prescribe two methods for container weight verification, key shipping industry stakeholders, including the regulator - AMSA, met to discuss the operational implications and implementation.

Facilitated by Shipping Australia Limited's Technical Steering Group, the way forward, including the cultural and behavioural changes that would be required within the maritime supply chain, was discussed and included the following:

1. Shipping documentation – existing and proposed changes
2. Notification time frames
3. Adherence and conformance to requirements
4. Education and awareness

Utilisation of existing shipping documentation, such as the electronic *Pre-Receival Advice* system and the *Shippers Letter of Instruction* are seen as the appropriate vehicles to ensure that the above mentioned prescribed methods were adequately reflected. Stakeholders using similar systems, including paper-based systems, would have to amend them accordingly to meet the requirements.

Sample weight declaration

Cargo Gross Weight:	16883	Kgs	Seal Numbers:	51791 0
Container (Tare):	3120	Kgs		
Verified Gross Weight of Container *(see Note A)*	20003	Kgs	DPI Seal No.:	

Method used for verification of Gross Weight of Container: Method 1 *(Include field)*
Method 2 *Include field (see note B)*

ECN: ACKYC39YY CRN:

Shipper's Ref - Origin: 006SY0199442 - -

Marks & Nos.:
Description of Cargo: MEAT PRODUCTS NOS- FROZEN
Break Bulk Cargo Tonnes Measure
Qty of Packages 1

Remarks:

We the shippers certify that the above information, including the verified gross weight of the container to be true and correct in all respects.

Name of Shipper making declaration (in capitals) : *(Include field for Name)*

Packers Signature: Date Packed:

Packing Co. Name/Location:

Transport Company:

Date: Comments:

Terminal Receiving Clerk's Signature:

Received in apparent good order and condition to the terms and conditions of the Ocean Carriers Bill of Lading.

Notes:

A) Verified Gross Weight of the Container: Means the weight of the container determined using one of the methods at (B) below. It is the requirement for a shipper to verify and declare the gross weight of a container as per Marine Order 42 (see note C) and the International Maritime Organisation's MSC Circular 1475 (see D).

B) Method 1: Weighing the packed container using calibrated and certified weighing equipment.
Method 2: Weighing all packages and cargo items, including the mass of pallets, dunnage and other securing material to be packed in the container and adding the tare mass of the container to the sum of the single masses.

C) Marine Order 42 (Cargo Stowage and Securing)- cl 8.2 *Verification of mass before loading* - Prior to loading cargo units on board a vessel, the shipper must ensure that the gross mass of such units is in accordance with the gross mass declared on the shipping documents.

D) IMO's MSC 1/Circ.1475 - *Guidelines Regarding the Verified Gross Mass of a Container Carrying Cargo*

Figure 2

There has been general agreement that existing advance notification and cut-off time frames for terminal bookings by shippers for export containers would be applied, and any alteration to a container weight declaration after these times could affect the loading of the container. Discrepancies identified would be subject to commercial and contractual arrangements between the parties and as such are not a regulatory issue.

Representatives from Freight Forwarders have raised concerns in relation to the impacts of the responsibility being potentially transferred from exporters to forwarders who could be classed as shippers. The Australian Peak Shipper Association has highlighted the importance of consistent terminology for defining a "*shipper*", along with clarity in the mandatory requirements.

AMSA has accepted that the forthcoming amendments to Marine Orders 42 & 44 (which underpin the Navigation Act 1912) and associated Marine Notice, would reflect the SOLAS requirements.

Relevant tolerances, consistent with applicable Australian trade measurement legislation, which include the *National Measurement Act 1960* and associated *National Trade Measurement Regulations 2009*, will need to be incorporated into AMSA's regulatory guidance.

A regulatory audit regime to monitor compliance is envisaged as part of AMSA's current Port State Control regime.

Education and awareness is seen as vital in ensuring a smooth implementation process and appropriate instructive material, consistent with AMSA's soon to be published regulatory material, will be promulgated to relevant stakeholders by SAL.

Implementation and possible changes to shipping documentation

Shippers and possibly freight forwarders may argue that they cannot be held responsible if the shipping documentation is not sufficiently self-explanatory and fails to prompt the inclusion of sufficient information to ensure compliance with regulatory requirements.

Widely accepted and utilised amongst shippers and freight forwarders are shipping documents such as the electronic Pre-Receival Advice (PRA) system and the Shippers Letter of Instruction. These are utilised to make declarations to satisfy a range of regulatory requirements, including the current requirements as per Marine Order 42, in terms of the gross weight.

With the forthcoming SOLAS and consequential AMSA Marine Order amendments, the above mentioned shipping documentation will need to reflect that gross weight declared by shippers is the verified weight obtained using one of the two methods prescribed.

To assist shippers in this regard, SAL has undertaken consultation with a range of stakeholders including AMSA, and modified existing shipping documentation (PRA) to appropriately reflect the SOLAS amendments (See Figure 2). Similar modifications can be made to the Shipper Letter of Instruction or any other shipping documentation utilised.

From a shipping lines and container terminal perspective, before a container booking can be processed for loading onto a ship, advance notification (from shippers) on the above mentioned shipping documentation, must include the following:

1. **Verified gross mass of the container;**
2. **The method used to obtain the gross mass of the container; and**
3. **The name of the shipper or the person authorised by the shipper to make the declaration.**

Australia, to some extent, has had a regulation requiring the weight declarations of export containers since 1998 however, adherence and compliance of Australian shippers has never been tested. Now that the IMO is formally introducing another step in the verification process (by prescribing two permissible methods) the onus on all shippers worldwide, as well as those involved in the packing of containers, is to stop and think twice before they make a weight declaration.

There have been many examples where miss-declarations of container weights have led to accidents or disasters. With increasing container vessel size, compliance in verifying the container weight, coupled with a sound regulatory auditing regime will prevent "*misdeclared container weight*" appearing as a contributing factor in future container related incidents.

New South Wales Parliamentary luncheon

BY A SPECIAL CORRESPONDENT

Guests in the Strangers Dining room at New South Wales Parliament House were treated to the Leader of the Opposition, Mr Luke Foley MP, providing the alternate government's perspective on shipping and logistics in New South Wales, at Shipping Australia's Parliamentary lunch on 25 September. The shadow Treasurer Michael Daley MP, also attended the event.

The event, sponsored by Patrick Container Terminals, traditionally held in the later part of the year, provides the Opposition with an opportunity to put forward their credentials and ideas on solutions to the challenges facing movement of freight, both around the coast and from the port to the hinterland. Mr Foley didn't disappoint.

After recognising that New South Wales was built on shipping, and noting that technological and communication changes have reduced that dependency, Mr Foley concluded that shipping remains a crucial part the economy "shipping, freight and transport - if we get them right we make a real contribution to increasing productivity and strengthening Australia's economy."

He set Labor's starting point that policy must always be in the interests of the people of New South Wales and that in all areas of policy development, the public interest must prevail over special interests.

Later in response to questions Mr Foley returned to this point, expressing his support for getting more freight onto rail and the development of the intermodal terminal at Moorebank. He noted that it would be easy to play the popularity card to lobby against it but that good policy supporting the development of Moorebank was definitely in the best interest of New South Wales.

With recent publicity and intrigue around the New South Wales Government's compensation arrangements if Newcastle were to open a container port, and similar questions being aimed at the Victorian Government relating to Port of Melbourne, the question of privatisation was bound to raise its head. The Opposition leader didn't shy away.

Mr Foley said that Labor supported the concept of privatisation but stressed the importance of competition, and expressed concerns that the Baird Government had "failed the public interest test" by failing to properly regulate what a private monopoly can get up to. "Selling a monopoly, and limiting competition to boost the sale price, is not economic reform. It's a reckless action whose consequences are now clear—massive increases in charges."

He concluded that "Port Kembla and Port Botany should have been sold to different owners. The Sydney market could then have been served by two competing ports within 100 kilometres of each other"; he didn't get much argument on this point.

Mr Foley was particularly critical of the Government's secrecy over the compensation regime if Newcastle develops a container port, and what would Labor do differently? "What a Foley Government will do differently is end the secrecy," he said.

"We will establish public disclosure arrangements and apply them to the privatisation of government businesses. This will involve the following steps:

- Firstly, the lease or sale contract will be disclosed publicly within 60 days of contract execution.
- Secondly, to assist the public's understanding, a contract summary will be prepared by Treasury and supplied to the Auditor-General for audit for accuracy and comprehensiveness within 45 days of the contract becoming effective.
- Within 90 days of receipt by the Auditor-General, the audited contract summary will be tabled in Parliament and published on the Treasury website.

"These arrangements are already in place for public-private partnerships. We will extend them to privatisations."

Asked about how to maintain the difficult balance of a Government getting the best deal for their State but faced with a demand for transparency in public dealings, Mr Foley came up with what I consider to be the best compromise offered by any State politician to date. "I would undertake to make the full details of any lease agreement public within 60 days", Mr Foley said.

What a simple, reasonable and effective commitment! Any Government that signed up to an 'unreasonable' compensation arrangement would certainly be held accountable by the people if the details of their commercial deals were to be made public within 60 days. Sure, we all have short political memories but most of us could manage two months.

One area that Mr Foley would not be drawn on was the arguments surrounding coastal shipping legislation, preferring to "leave that one to my Federal counterparts". Pity, it would have been nice to have his "public interest over special interest" approach to this one too.

Melwyn Noronha, SAL; Claude Varnier, Patrick; Megan White, CBFCA; Steve Gunn, Transport for NSW; Peter Nash, Patrick

Luke Foley, MP addresses the industry

Ken Fitzpatrick presents vote of thanks to Luke Foley MP

Nikhil Madhavan, David Martin, Ross McAlpine and Andrew Karas, MSCA

Peter Wu, Chems Eddine Makhtout and Nancy Xu, Smit Lamnalco; Shigehiko Ochiai, NYK; Fay Tsoi, Transport for NSW; Michael Chu, Smit Lamnalco

Alexia Smyth-Kirk and Peter Rouse, Patrick; Wilson Rojas, Seaway

Adam Rowlison, Svitzer and Lauren Eyles, Port of Newcastle

Jason McGregor and Adem Long, NSW Ports; Ken Fitzpatrick, AsiaWorld; Grant Gilfillan, Port Authority of NSW

Sindy Healy, Hussein Chahine, Shabana Dean, Wilson Rojas and Peter Wallace, Seaway

Pass, but needs to pay more attention!

By BERNARD GRESSER, director, Infinitas Asset Management Limited

Twice a year, Australian companies produce a report card that shows investors (and anyone else who's interested) what went right and what went wrong over the previous 12 months.

It's called reporting season and this year it wasn't great.

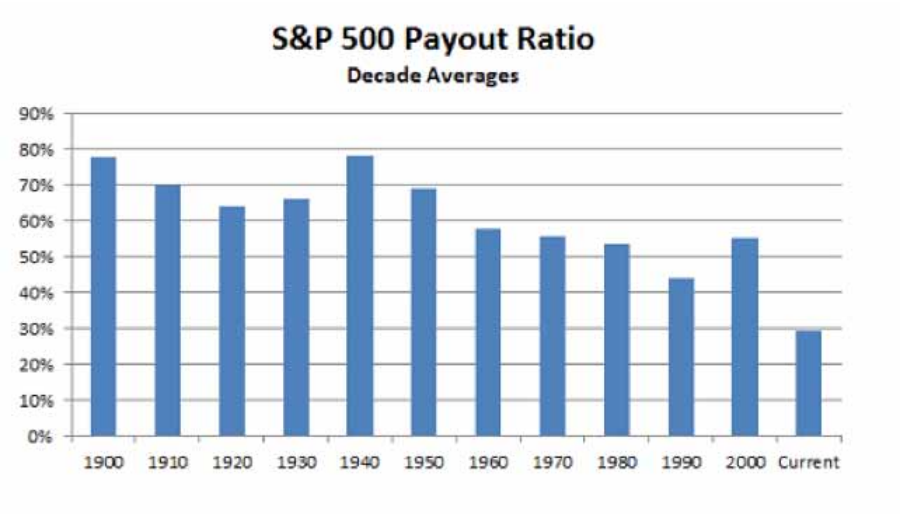
The majority of companies listed in Australia are hitting the point where their growth in dividends can't be maintained as their profits are flat-lining.

Rule one of business is don't spend more than what you make.

In real terms, this is exactly what Australian businesses have been doing since the Global Financial Crisis (GFC), as you can see from the Australian industrials pay-out ratio chart below.

And who could blame them?

Yield hungry investors have rewarded companies that have lined their pockets with dividends.



When you compare Australian companies to the S&P500 (the key benchmark of US listed companies), you can see the major difference is how shareholders are rewarded.

Companies that make up the S&P500 only pay out 30 per cent of earnings on average, as you can see in the S&P500 payout ratio chart above.

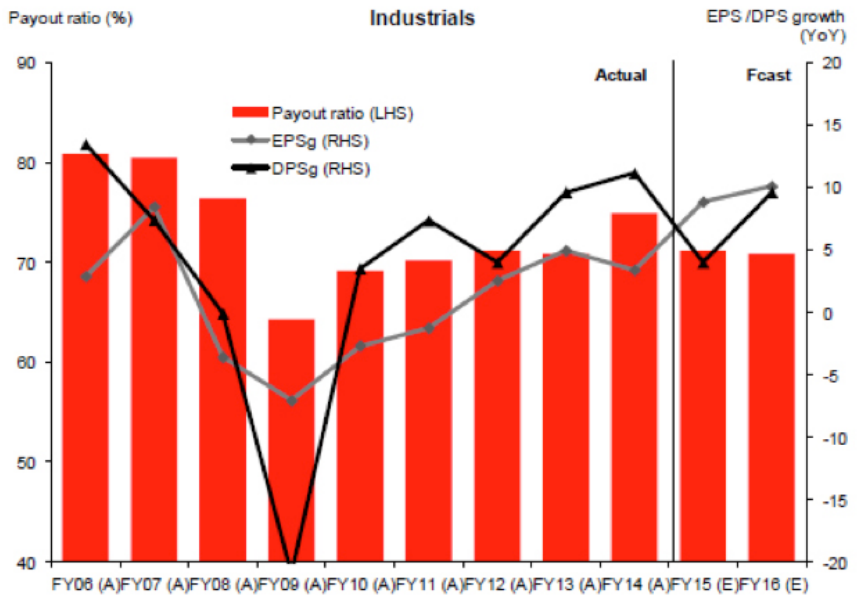
Australian companies have been paying out approximately 70 per cent since the GFC. This only becomes a problem when that lack of re-investment in the business comes home to roost.

In Australia, the prime example of chickens coming home to roost is Myer.

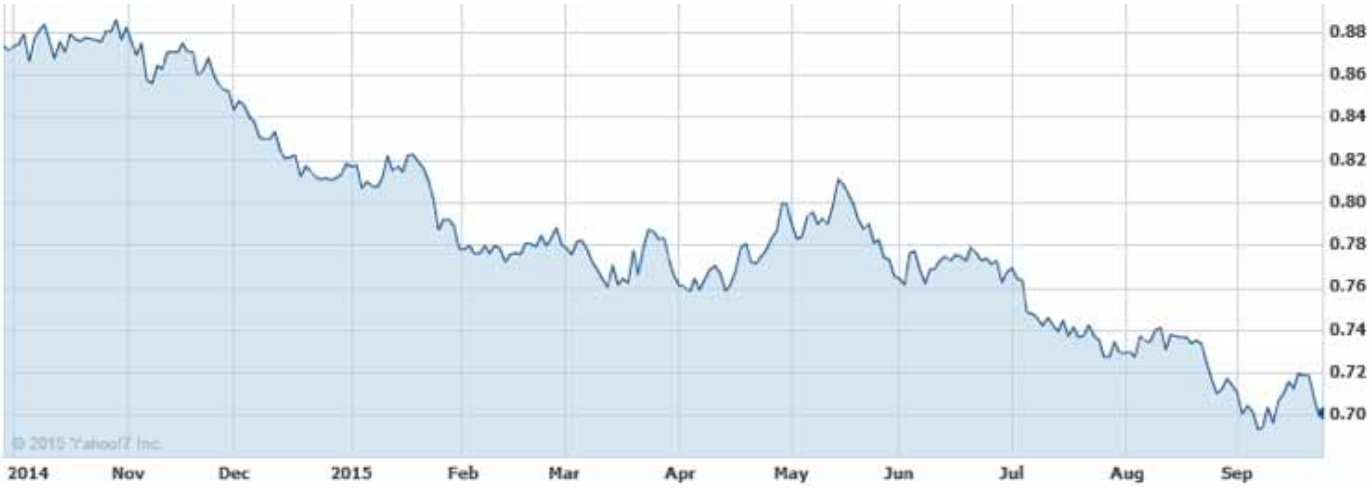
Myer is a household name with a long, rich history. Prior to reporting season, Myer was forecast to be yielding in excess of 10 per cent. A mighty yield, no matter where you come from. But due to myriad issues, Myer's forecast yield was a mirage. Instead of paying investors over 10 per cent, Myer paid their long suffering shareholders nothing, and then asked them for another $221 million.

Global investors look at Australian pay-out ratios compared to the S&P500 and ask the question, "how many more Myers are out there"?

That's a good question and the "*secret sauce*" when it comes to portfolio



Australian dollar versus US dollar



management is avoiding the Myer-like situations of the world.

Reporting season wasn't all bad.

Some companies flourished. Especially those who sold products and services in US dollars.

At the time of preparing this article, the Australian dollar had dropped by approximately 20 per cent against the US dollar, over the course of the year (see chart above).

Just as the rising currency works against these major exporters, a falling currency works for them.

Apart from iron ore, which is up approximately 30 per cent from its year low, it's been a bloodbath in commodities. The Australian dollar dropping 20 per cent over the last 12 months has insulated many companies like BHP, Rio Tinto and Woodside from the full impact of dropping commodity prices.

With Australian official interest rates expected to be lower by year end, the trajectory of the Australian dollar is lower.

Looking forward, apart from offshore earnings, the other broad theme that everyone was desperate to link themselves to, was the pending China-Australia free trade agreement.

In my humble opinion, calling it the "Kind-of-Free-Trade-Agreement" would be more appropriate.

It does make sense for Australia to have a free trade agreement with China, and most countries look at Australia with envy because of what we are enacting.

Of G20 nations, Australia is the biggest exporter to China (see chart at right).

The free trade agreement doesn't do a huge amount for most existing exporters. A 2-3 per cent reduction in tariffs over a five to ten year period isn't huge, but every little bit helps.

Where the free trade agreement is really meant to grease the wheels is with the supply of services. The biggest winners are Australian banks, law firms, et cetera. Essentially any party who previously had to use a Chinese-based firm as a gateway into China, will be able – in time – to provide these services directly.

Time will tell whether these projections are accurate. With major structural changes like a free trade agreement, it rarely goes according to plan. Just look at NAFTA (North American Free Trade Agreement).

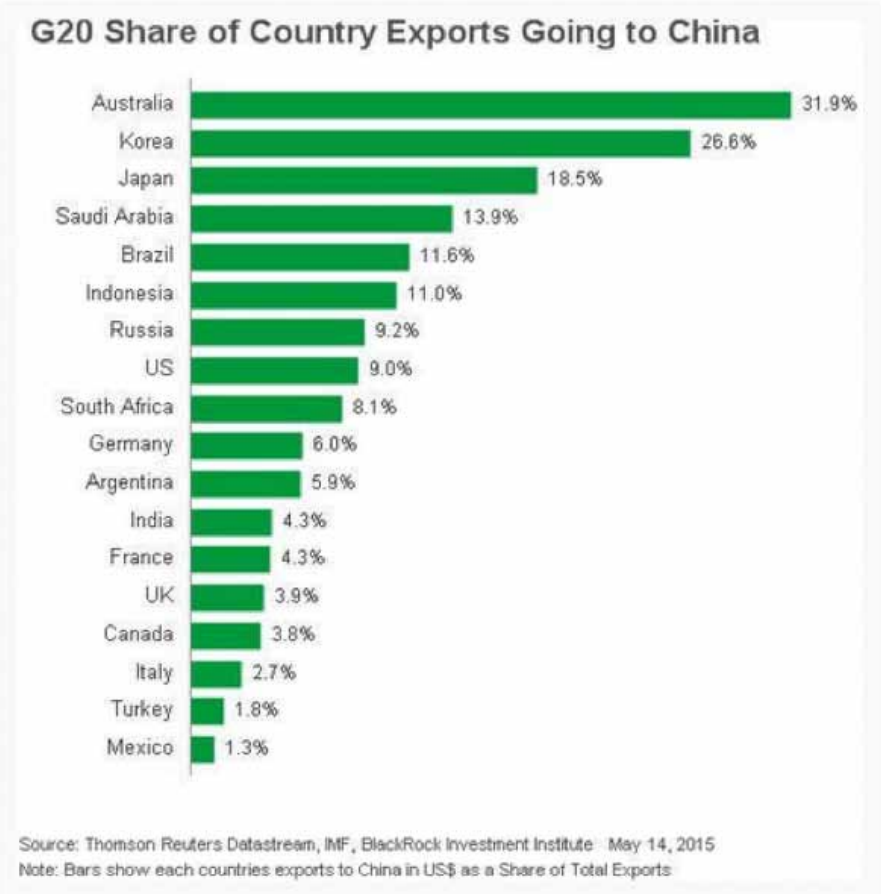
We also have to keep in mind that a lot of Australian companies were already operating in China with solid local partnerships. A great success story is Seek. Of the $A872 million in revenue Seek generated last financial year, $A253 million was generated from China. This was second only to their Australian operations, which generated $A330 million.

Not having a free trade agreement in place didn't stop Seek starting from scratch in China and building a business that generated a quarter of a billion dollars in revenue.

So we can walk away from reporting season here in Australia knowing that some companies are doing well and some companies are not.

The secret is to see who has really delivered and is preparing for the future.

Those who don't prepare for the future end up being not much more than a mirage.



Chafing at the bit for ChAFTA

By TIM HARCOURT

Something happened in the Australian political scene when I was away recently. The issue of the Chinese Australia Free Trade Agreement (ChAFTA) hit fever pitch.

And guess where I was? I was in China. Specifically I was in Shanghai, Xian in North Western China and Hong Kong teaching an AGSM MBA programme and talking with various companies, both Australian and Chinese about the stock market, the exchange rate and ChAFTA.

On the Chinese side, there were some jitters in the Shanghai stock market but, as these are small traders with no institutional investors, it is expected not to greatly affect the real economy in China. At Bao Steel they bemoaned the price of iron ore, and the wish to capture global supply chains controlled by Brazil and Australia but the hot steel kept rolling through the factory. The steel makers and other Chinese industrialists did welcome the recent devaluation of the Yuan as helping Chinese industry but they still aim to transition away from being a "nation of shippers" reliant on exporting, to a "nation of shoppers" by boosting consumption.

Out west in Xian, Director Fu Hua, from Intel, believed the strong growth in the second and third tier cities would counterbalance any drop off in Shanghai and Shenzhen. Hence that is why Intel has R&D facilities in Xian (as does Johnson and Johnson) and manufacturing in Chengdu. In fact, second and third tier cities have created a boom for Australian construction businesses and architects like Hassells (who employ 600 staff in China). As Beijing directs economic activity westward, demand for infrastructure grows, and Australian services providers in building and construction, architects and designers are helping to build 'the great mall of China', and the roads, airports and civic buildings.

Overall, on the Australian side, most Australian exporters support ChAFTA. According to DHL Export Barometer around 58 per cent of exporters think the China FTA will have a positive effect, 41 per cent support the Japan agreement and 38 per cent think the FTA with South Korea will have a positive impact.

And this figure, from experience, generally improves over time if we look at experience with the USA and ASEAN trade pacts. Whilst business representatives I spoke to at AustCham Shanghai see the need for an agreement, there was a view that Trade Minister, Andrew Robb, had "rushed in a bit" and made some concessions to the Chinese Government "that he didn't need to make".

In fact, the main concerns with ChAFTA concern the labour market. Overall, having an open economy is good for workers. My research at UNSW shows that exporters, on average, pay 60 per cent higher wages than non-exporters, have better occupational health and safety and equal employment opportunity standards, spend more on education and training, and are more productive and profitable as a result. Under an open economy Australia has created more jobs than has been lost, exporters create higher quality jobs and most jobs with exporting companies are unionised. Overall we need this dynamism in the labour market that an open economy brings.

And as a former ACTU research officer, I obviously cannot be accused of being anti-union or anti-worker.

But there are some issues that need to be looked at in detail regarding ownership of land, Investor provisions and labour market testing. On some of these issues we need to proceed with caution, as State-owned enterprises do possess monopoly power and can distort markets in other countries.

In the case of labour market testing, we don't need it to undermine labour standards. For example, in some limited cases, China may need to use executives and managers like they do on mining and infrastructure projects in Mongolia, Africa and Latin America.

But we don't want trade agreements to adversely affect labour standards, and the provision of public goods and labour market testing could be tackled without affecting ChAFTA.

And as I am a former Chief Economist of the Australian Trade Commission (Austrade), I obviously cannot be accused of being anti-trade.

All in all, ChAFTA will bring important benefits to Australian exporters in China. Having a 48 per cent tariff like an albatross around the neck of some Australian exporters – particularly in the agribusiness sector – is too much of a burden, especially when they are competing with the likes of Chile and New Zealand, who already have an FTA with China. Remember, Australia is not alone negotiating with China in a vacuum; over 125 countries on earth have China as a larger trading partner than even the United States, just as we do.

Australia has been one of the world's most successful open economies – and reliable trading partners of China – in the past 25 years. Opening up to trade has been a positive step for business, workers and consumers, but we need to support our economics and social institutions – particularly in the labour market – that have enabled Australia to be such a successful open economy.

**Tim Harcourt is the JW Nevile Fellow in Economics, UNSW Business School in Sydney and author of The Airport Economist. www.theairporteconomist.com*

Australian Marine Surveys









OUR SERVICES

"ANYTHING AND EVERYTHING TO DO WITH SHIPPING, WE ARE THERE TO ASSIST YOU"

- ✓ *Pre-purchase and P & I Club Entry Condition Surveys*
- ✓ *Loss and Damage Surveys for P & I Clubs*
- ✓ *Deadweight / Draft Surveys*
- ✓ *Cargo Hold & Tank Cleanliness (AQIS Accredited)*
- ✓ *In-stow and Wharf Surveys for Steel Products*
- ✓ *Stability Calculations for Seaworthiness and safe loading operations*
- ✓ *Cargo Gauging and Securing Surveys*
- ✓ *Bunker Sampling and Quantity Surveys*
- ✓ *ISM / ISO-Internal Audits*
- ✓ *Flag state Inspections*
- ✓ *Expert Witness to local courts.*
- ✓ *Vessels On/Off Hire Condition Surveys*
- ✓ *General Marine Surveys*
- ✓ *Port Captaincy/Supercargo Services*
- ✓ *Bulk Liquid / Cargo Contamination*
- ✓ *Collision Damage*
- ✓ *Superintendency: Cargo & Marine*
- ✓ *Personal Injury Inspections*
- ✓ *General Marine Consultancy*
- ✓ *Claims Investigations*
- ✓ *Hull & Machinery Surveys*
- ✓ *Fixed & Floating Object Damage*
- ✓ *Technical Inspections*
- ✓ *Inspection of Goods – Quality and Quantity*
- ✓ *Marine Engineering Consultancy*
- ✓ *Ro-Ro Cargoes / Vehicle Inspections*
- ✓ *Sampling and Testing*

48 Hume Street
Huntingdale Vic 3166
Australia

Tel: +61 3 9511 0298
Fax: +61 3 9511 0241
Mobile: +61 413 611 764 (24 hours)

contact: amsmel@aol.com
www.amsmelbourne.com.au

Are owners now liable to pay twice for bunkers?

By PETER MCQUEEN FCIArb, arbitrator and mediator and ASHWIN NAIR, solicitor, Cocks Macnish

The decision by Mr Justice Males of the English Commercial Court in July this year in *PST Energy 7 Shipping LLC and Anor v O.W. Bunker Malta Limited and ING Bank N.V. ("RES COGITANS") [2015]* EWHC 2022 (Comm) is the first significant case arising out of the collapse of the OW Bunker group companies in 2014. It turns on the question "Is a bunker supply contract a contract for the sale of goods?" and if not, are owners exposed to potentially having to pay twice for bunkers?

Facts

The Owners of the "RES COGITANS" **(Owners)** entered into a contract for the supply of bunkers with OW Bunker Malta Limited **(OWBM)**, a member of the OW Bunker group of companies. The transaction involved a chain of bunker supply contracts, each of which was subject to English law and contained a retention of title (ROT) clause (this is a clause by which property in the goods, which are the subject of the contract, remains with the seller until payment for the goods is made, or until some other specified event occurs) in favour of each supplier in the contractual chain through to the physical bunker supplier. Each contract provided that payment was due a fixed number of days after delivery of the bunkers and that, in the interim, the bunkers could be consumed. Payment was not made by the due date. In the circumstances the Owners did not want to have to pay both OWBM and the physical bunker supplier.

Argument of Owners

The Owners argued that in accordance with the English Sale of Goods Act 1979 **(the Act)**, OWBM and its assignee, ING Bank N.V. **(ING)** were not able to claim the price of the bunkers because property in them had not passed to the Owners and because the price of the bunkers was not payable on a certain day, irrespective of delivery.

Decision of t Court at first instance

The Court dismissed the appeal of the Owners from an LMAA arbitration award, which was made in favour of OWBM and ING , and held that the bunker supply contract was not one to which the Act applied and that the bunker interests had a "straightforward claim in debt", which was not subject to any requirement as to the passing of property in the bunkers to the Owners at the time of payment.

The reasoning was that, due to the existence of the ROT clause in the bunker supply contract and the expectation that the bunkers would be consumed before payment for them would have been due, the parties could not have intended that property in the bunkers pass to the Owners. OWBM did not undertake to transfer property in the bunkers in return for payment. What in fact the Owners were paying for was the right to consume the bunkers. They had that right because the physical bunker supplier knew that its customer in the chain of contracts was a trader and not an end user and therefore knew, or ought to have known, that that customer would contract directly or indirectly with the Owners to whose vessel the bunkers would be supplied and that those Owners would be authorised to consume the bunkers. Further the Owners would not be liable in conversion because the physical bunker supplier knew that the bunkers would be consumed before payment was due.

In order for the contract to be a contract of sale to which the Act applies, OWBM must have undertaken to transfer property in the bunkers to the Owners and the Owners must have made payment in exchange for property in the bunkers. Neither of these steps occurred. Therefore the Act did not apply.

Decision of Appeal Court

The decision was the subject of appeal to the English Court of Appeal on the sole ground of whether or not the bunker supply contract in question was a contract for the sale of goods to which the Act applies, namely a contract of sale of goods. That Court delivered its judgment ([2015] EWCA Civ 1058) on 22 October 2015, agreeing with the decision at first instance on the solitary ground of appeal. It agreed that the contract was not one that concerned the transfer of property in the bunkers, and that the Act did not therefore apply to it. The Court said that this was a contract whereby OWBM had undertaken to (i) deliver the bunkers to Owners together with a "licence" to consume them for the vessel's propulsion, and (ii) then sell the quantity of bunkers that remained unconsumed at the date payment became due. Although in "commercial terms" the contract was for the sale of goods, its "essential nature" was such that the Act did not apply to it.

Noting the significance of the case, there could well be a further and final appea to the Supreme Court..

Comment

An important implication of this decision is that owners, to whose vessels bunkers are supplied under contracts subject to English law and with extendedcredit terms, face a risk of having to pay twice for the same bunkers, or at least pay their contracting bunker supplier and then have the risk that the unpaid physical supplier of the bunkers may seek to arrest their vessels in order to obtain payment for the bunkers supplied.

Further the Court's characterisation of a bunker supply contract as a contract for *the permission to use the bunkers* does not sit comfortably with the reality that, especially in the context of time charterparties, the unconsumed bunkers are sold to owners and subsequent charterers on redelivery and delivery respectively.

From a commercial perspective, it would probably require a re-think about the utility of ROT clauses for the supply of bunkers on credit terms requiring payment after the bunkers are likely to have been consumed.

This litigation is being be followed with great interest by the international shipping and trading industries and, in particular, by those involved in the collapse of the OW Bunker group of companies, and by those entering into similar bunker supply contracts, as in this case.

Big bang costs big bucks

By CRAIG NEAME and PAUL WORDLEY - partners in London with Holman Fenwick Willan (HFW)

Nearly a month after the explosions, which hit the **Port of Tianjin**, clarity and firmer detail has finally started to develop, with China accusing 23 government and port officials of dereliction of duty. It has also emerged that the owners of the warehouse involved, Ruihai International Logistics, may have illegally obtained licences to store hazardous chemicals, and planning regulations may have been flouted to enable residential complexes to be built within one kilometre of the warehouse.

Although operations have largely returned to normal and China is seeking to draw a line under the incident by detaining suspects, it will take some time for businesses in and around the port to fully recover. Tianjin port is one of the world's busiest, acting as a gateway to northeast China. It handles around 40 per cent of all imported cars arriving in China, as well as containerised cargoes, metal ore, coal and crude oil. According to Clarksons Platou Securities, the port handled 11 per cent of the country's iron ore imports in the first half of 2015. Indeed, BHP Billiton has indicated that its cargoes of iron ore were disrupted by the explosions after authorities restricted vessels, whilst Rio Tinto disclosed that four fully-laden bulk carriers were re-routed in the aftermath.

In the car manufacturing sector, Subaru reported at the end of August that it would continue to divert car exports from Tianjin to Shanghai as its operations at the port were still some way from 'business as usual'. A similar situation has been experienced by both Toyota and Renault SA. These forced diversions will no doubt lead to increased costs for vessel operators, who may be looking to pass these on, and liner operators will face questions around deviation of cargoes, temporary storage, transshipment and even abandonment in some cases. In turn, bulk operators and charterers will come up against issues relating to demurrage, port nomination, access to cargoes and questions of frustration.

When inland legs between ports become necessary, increased logistics costs will follow, and customers buying door-to-door services from shipping lines and freight forwarders will expect them to develop solutions. There is a risk of arguments developing between exporters and shipping lines (and logistics operators) concerning the level of extra freight cost that can be passed on if freight rates have been agreed for road haulage or on a door-to-door basis. Capacity issues could also arise if road vehicles need to divert to other ports which are located further away, meaning fewer haulage and trailer units are available.

Many of the goods which work their way through the port are bought by multi-nationals on Free On Board (FOB) or Free Carrier (FCA) terms from Chinese suppliers seeking to export. In this scenario with facilities destroyed and ports closed, buyers will be exerting pressure on suppliers to find alternative ways to ship the goods to them.

Cargo insurers will be in contact with their insureds, seeking to identify their potential exposure, and considering who they can make a recovery from with regards to the damage. P&I Clubs and freight liability insurers will be confronted by enquiries from members and insureds anxious to clarify if contracts of carriage render them liable for cargo losses. It will be intriguing to see how this plays out in the Chinese courts – will the courts accept jurisdiction for losses and make forwarders, logistics operators and shipping lines liable?

In relation to the shipping containers damaged by the fire, the container shells will likely be insured on a property basis, a large majority with the TT Club. It has been reported that the Club could need to pay out on more than 1,000 containers, although the value per unit involved is relatively small. The nature of the incident may have resulted in the TT Club's exposure being less than it could have been – the explosion took place at the logistics and storage area rather than the port itself (where most of the containers were situated).

With new details emerging all the time, the fallout from the explosions will run and run. Parties involved will be following developments closely with a number of complexities, not least who has ultimate responsibility for the incident, still no closer to being resolved.

Ships upscale, rentals increase, ports move

By DAVID BAYNE

When Melbourne was sited

When Melbourne was sited, fresh water and broad meadows came first and second, and shipping came third.

The illustration to the right shows whaleboats lashed together, lightering cargo from ships in Port Phillip Bay onto mud banks in 1841. Short of funds, the administration charged wharfage even when there were no wharves available.

The below illustration compares a mainliner in the 1840s with a mainliner today, scaling a 14,000 TEU vessel against a long-haul cargo ship of 1840. It was ships of 50 metres in length that framed the decisions when Melbourne was first sited.

Our founders chose a site suitable for that time but today Melbourne constrains ships to half the size of the top mainliners, indeed our largest ships are little more than large feeders by world fleet standards.

And while the world fleet upsizes, Melbourne's constraints endure: Approach channels are limited to 14 metres and 0.6 metres tidal assistance; the instructions limit vessels to 300 metres LOA; beam restrictions within Swanson Dock vary depending on conditions; tugs are small to save space in the basin. Additionally, the Westgate Bridge height is 50 metres plus a 2 metre exclusion zone; Webb Dock could possibly handle larger vessels but the design vessel for the capacity upgrade has been limited to ships of 300 metres LOA (some 6,500 TEU); and Port Phillip Heads, while having 17 metres of water, is difficult due to waves, currents and turning width on the outbound voyage. This means a large under-keel clearance is needed for safety. The lack of rail at Webb Dock is also restrictive, and the inner city location denies the use of high value land for improvement and creates a barrier to expansion.

Illustration by Moorways Pty Ltd

While the Port Corporation is working with dynamic under-keel clearance and other measures to relieve the bottleneck at the Heads, other fundamental problems continue. Not the least of which is the bad fit of using high value land for container storage.

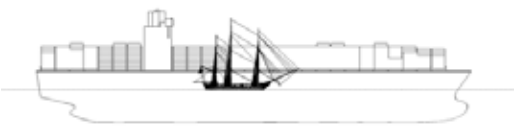
Shipping Australia Limited survey of shipowners

Melbourne limits laden ships to 6,500 TEU, and in September 2015, Shipping Australia Limited polled its members on upsizing to 8,000 TEU vessels if the Victorian constraints were lifted. The poll showed that more than 50 per cent of respondents would introduce 8000+ TEU ships within 5 years.

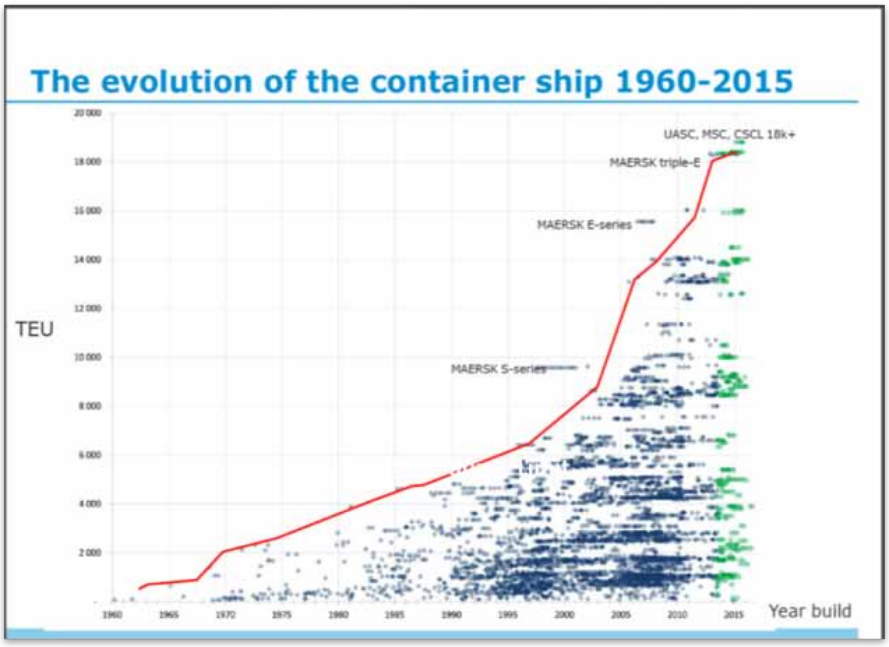
The response is shown below:

Timing for the introduction of 8,000 TEU vessels	Number of lines that would bring in an 8,000+ TEU vessel
Within one year from Sept 2015	0
Within 5 years	7
Within 10 years	1
Beyond 10 years	3

Source: Shipping Australia Limited



Ship size changes over 180 years
Illustration by Moorways Pty Ltd



Sources: DNV -GL, Drewry, Clarkson

This Shipping Australia Limited poll matches Drewry Shipping Consultants of London showing we were due to handle 8,000 TEU vessels on the North China routes. These vessels, having been displaced by 18,000 TEU ships, were set to cascade from the East West deployment. Moreover, shipowners were ready to share cargo slots on these larger ships, a consolidation that would swiftly introduce larger vessels and reduce our freight costs.

Because Melbourne blocks any upsizing all along the coast, it also blocks Sydney and Brisbane from receiving larger ships; therefore, ship owners cannot deploy the most cost-effective vessels even though they were already available from the world fleet. This means while the Melbourne constraints were local, the handicap was national, and this at a time when producers were seeking to improve national productivity.

Australian ships in context

The graphic above shows just how small container ships servicing the Australian coast are in the world fleet, our largest being a third of the capacity of the world's largest.

Ports outgrow sites

Despite objections at the time, Sydney and Brisbane relocated their container cargo terminals from inner city locations to remote greenfield sites. In Sydney encroaching urban sensitivities predicated the move to Port Botany in 1979, while in Brisbane the move downriver to Fisherman Islands began in 1980 and subsequent land reclamation has continued to provide for port expansion.

Today Sydney is 8,000 TEU ready and Brisbane has plans to dredge once Victoria removes the Melbourne constraint. The three stevedores have upscaled cranes to handle 10,000+ TEU vessels in the northern ports. Although this upscaling has been recognised by the private investors, our government officials lag behind. And it is perhaps the speed of the upscaling that has caught our government planners by suprise.

Rapid change

The table to the right shows that now 35 per cent of the world fleet capacity is in ships of 10,000 TEU and above, a size that did not exist 6 years ago.

Some officials have not adjusted to just how rapid the upscaling has been. The 10,000 TEU vessel did not exist six years ago, but today these ships are only mid-sized members of the world fleet. Because ports have to plan for ship sizes ahead of demand, and because lead times are eight to ten years, port planners have been caught out. It is for this reason that masterplans have had to be rewritten and funding has been allocated in American and European ports. It would do well for our planners to take note.

Conclusion

Unfortunately, officials do get it wrong. Some fail to admit to fleet upscaling and the Melbourne bottleneck. They fail to recognise that it is about markets, about importers and exporters, about port clients being able to choose the most effective ships at the most effective port. Some officials are blinded by the chance to sell a port monolopy for high earning multiples, a premium they would lose even with the prospect of competition, so they place barriers to competition.

Despite the facts of upscaling, they choose to look away and favour treasury coffers rather than port clients. They are unwilling to see that ship sizes change, city land values rise and ports move.

It is our industry's duty to alert planners that change is overdue. Most importantly, the officials should not follow the Sydney example and block even the most remote prospect of competition with financial poison pills.

Teu range	Existing fleet average age in yrs
<1000	15.8
1000-1999	11.5
2000-2999	11.4
3000-4999	8.8
5000-7999	8.8
8000-9999	5.5
10000-11999	3.3
12000+	2.3
Grand Total	**10.7**

35% of the capacity

Source: Drewry Shipping Consultants

Sydney: Inner City to Port Botany

Brisbane: Downriver to Fisherman Island

New life on MARS!

By DEPARTMENT OF AGRICULTURE AND WATER RESOURCES

A new Maritime Arrivals Reporting System known as MARS is being developed to make pre-entry processes more efficient for vessel masters and shipping agents entering Australia. MARS will be used by vessel masters and shipping agents to submit the pre-arrival documents required of all international vessels seeking Australian biosecurity clearance.

MARS is a significant project for the Department of Agriculture and Water Resources, and system development is progressing well. The department is currently undertaking industry Assurance Testing in several locations around Australia to ensure stakeholders have every opportunity to review and user-test the system prior to full implementation in 2016.

To date, more than 50 industry participants have registered to be involved in IAT. The IAT process is not only a great opportunity for stakeholders to familiarise themselves with the system and to provide feedback, but also enables the Department to assess the level of change which is required and how this can be supported.

The move to a more modern, efficient and effective system for vessel reporting was made in response to feedback from industry, Government and community groups, as well as growing trade volumes and increasing imports. MARS is one component of broader work by the Department to implement more modern and streamlined service delivery and includes features such as:

- client 'self-service' web portal interface to easily lodge pre-arrival documentation online, view status and see biosecurity directions
- comprehensive recording of data for better targeted, risk-based intervention and reduced intervention for compliant vessels
- greater transparency of departmental requirements
- automated fee processes and better data capture to improve efficiency and effectiveness of invoicing.

A sneak peek of some of the features of MARS is provided below.

Getting to MARS

Vessel masters and shipping agents (known as users in MARS) will be able to access the new MARS through a website known as the application portal. MARS will be a secure portal environment and accessible only through registration, which will provide a username and the password. Access to information will be based on security permissions with access via the Department's website.

Pre-arrival reporting

Vessel entry processes in MARS will be strengthened and streamlined by providing an online application for tracking and managing pre-arrival information.

Registered users will be able to lodge electronic applications and reports, specify how and where they receive correspondence and notifications, browse voyage and inspection history and request additional services, such as Ship Sanitation Certificate inspections.

MARS users will be able to submit various applications, including ballast water and permission to enter a non-proclaimed port, to the Department via the online portal. Through the online portal, users will have the ability to establish and maintain a user profile.

For new vessel entries the system will prompt users to create a vessel profile. The system will then use the vessel profile details to pre-fill relevant fields when submitting key information, such as pre-arrival and ballast water details (see Figure 1).

Communicating with you

Another key concept enabled by MARS includes the Biosecurity Status Document (BSD). The Department currently issues a number of documents and certificates to vessel masters and their agents during the period that the vessel is on an Australian voyage. These documents provide instructions to the vessel master and agent about its obligations in Australian waters and what actions the vessel is approved or forbidden to undertake. The information of these documents will soon be available through the one document, namely the BSD. Sections of the BSD will include:

- Berthing conditions in Australian proclaimed ports

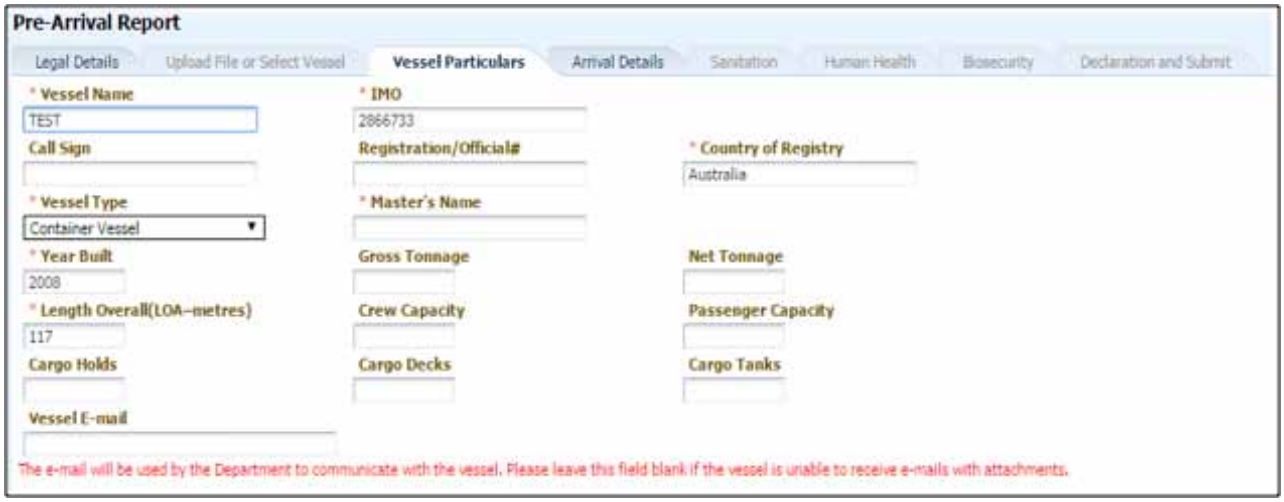


Figure 1: MARS screen illustrating the PAR application process where the master or shipping agent provides details for a vessel including IMO, registration and vessel name

- Berthing conditions in Australian non-proclaimed ports
- Vessel Biosecurity (Including Biosecurity Treatment Directions)
- Vessel Pratique
- Ballast Status.

Key benefits for industry via the BSD include:

1. Where an inspection will be conducted, the BSD will note that 'this vessel is scheduled for inspection at the next port'.

2. The BSD will be emailed to the master and port agent any time conditions change.

3. The BSD is versioned and each one sent replaces the previous version to ensure requirements are clear and visible at all times.

Billing

MARS will allow users to view a summary of invoices, including charges and payment status for each invoice. A shipping agency will be able to see all financial transactions generated from MARS across their agency.

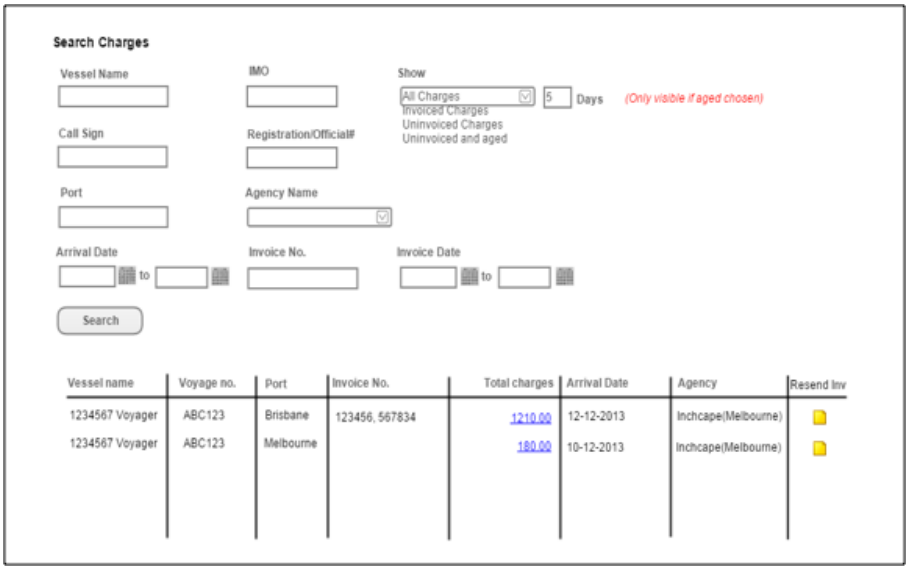


Figure 2: Illustrated view of the searchable facility in MARS to view charges for vessels managed by a particular agent

If the same agency performs business in three ports they will be able to view relevant details, including details of invoices across all three ports. If this is not the preferred option for shipping agents, agents can register as different agencies in each port. Different agencies will not be able to see information for other agencies.

Informed compliance

As part of the MARS initiative, the Department is also developing a new compliance scheme that is expected to deliver a transparent and flexible regime for improved compliance by vessel operators, to be known as the Vessel Compliance Scheme (VCS).

The core objective of the VCS is to provide greater visibility to clients on what department officers look for when they board a vessel and the consequences of failing to comply with these requirements. This is where MARS comes in. Through the MARS web portal, masters and agents will be able to log onto the system and query compliance requirements, status and history at any time.

More information on MARS and the VCS is also available on the department's website at www.agriculture.gov.au/biosecurity/avm/vessels/mars.

Note: The figures depicted in this article are indicative samples only. The final system may differ in look and feel from that shown here.

Help keep stink bugs out of Australia

By DEPARTMENT OF AGRICULTURE AND WATER RESOURCES

The Department of Agriculture and Water Resources has been working with industry across the ports and shipping lines to manage the risk posed by a type of exotic brown stink bug.

The brown marmorated stink bug is a pest to over 300 plant species, including fruit, vegetables and ornamental plants, which could severely damage our $9.23 billion horticulture sector. Its habit of seeking shelter in large numbers around houses, factories and other places over winter also makes it a real nuisance.

In late December 2014 biosecurity officers started intercepting unprecedented numbers of the bugs on vessels transporting vehicles from the United States. Emergency response measures were implemented which saw new and used trucks, boats, cars and machinery imported from the United States treated, to manage the risk that this cargo could be hiding the unwanted hitchhikers.

From 23 February 2015, vehicles (including boats), machinery, and automotive parts arriving in Australia before 30 April 2015, from east coast ports of the United States - and from 9 March from all United States ports - had to be treated before departure. The department's biosecurity officers increased the level of inspection and surveillance to ensure the measures applied off-shore managed the risk appropriately. Implementing the emergency measures was a significant undertaking and the assistance and cooperation of industry - the ports, shipping lines, importers and manufacturers - was integral in effectively mounting a response of this scale.

The 2015-16 measures are based on an improved understanding of the pest's behaviour and industry feedback from last season. Industry welcomes the refining of the measures and the potential alignment of the Australian and New Zealand season, with measures applying to goods shipped from United States ports from 1 September 2015 to 30 April 2016.

While pre-shipment treatments and increased surveillance at ports are still part of this season's response, the measures are more targeted. The range of affected goods has been narrowed, goods manufactured after 1 December do not require treatment, and there is a "safeguarding" alternative available. Importers can apply for their goods to be exempted from the treatment requirements by showing that their supply chain does not allow a stink bug entry point.

All of the department's information on brown marmorated stink bugs that is relevant to industry is stored in the one place on the department's website. A summary of the 2015-16 season measures, frequently asked questions, the industry guide to safeguarding arrangements and information on the bug itself are all located on the Brown Marmorated Stink Bugs page:

http://www.agriculture.gov.au/import/cargo/pests/brown-marmorated-stink-bugs

Safer maritime pilotage

By NIGEL CATCHLOVE, Australian Transport Safety Bureau

Marine pilotage continues to be one of the Australian Transport Safety Bureau's top safety priorities. According to the national transport safety investigator, accidents and incidents involving ships under pilotage often require investigation. And while a contributing factor to an incident may be, for example, equipment failure, inadequate bridge resource management by the bridge team is often a factor.

Vik Chaudhri, ATSB's manager for marine safety investigations, says that navigating confined coastal waters, harbours and ports is always challenging, even for experienced shipmasters and crew.

"The pilotage phase of a ship's passage is complex and places enormous demands on the bridge team, which makes communication and team work essential," Vik says.

"Essentially, the pilot is a local knowledge expert with ship-handling skills, and provides advice to the ship's master to safely navigate the ship and manage risks to avoid a grounding or collision. The pilot also provides liaison with vessel traffic services and authorities ashore.

"Importantly, while the pilot has conduct of the ship, the captain remains in command and is ultimately responsible for the ship," said Vik.

Normally, the pilot joins an inbound ship before it enters confined waters. Today this can be from helicopter, but pilot boats continue to be widely used. In these instances, the pilot climbs a rope ladder, sometimes with a vertical climb of up to nine metres to the deck of the ship. Vik tells us that, "Climbing a ladder involves a high risk of falls, even more so in rough seas when both vessels are often moving – hence, it is vital that crews rig ladders properly."

A pilot's work includes conducting ships' departures from port, and these pilotages are equally if not more challenging, as the ship can be deeply or fully laden, or the crew might be tired from work in port.

Most pilotages go smoothly and without incident but occasionally, things can go wrong.

Recent incidents

***HC Rubina*.** In October 2013, immediately before *HC Rubina* sailed from Beira, Mozambique, the control system for its variable pitch propeller failed. The ship subsequently made its voyage to Brisbane, with the propeller's pitch manually operated from the local control station.

On the afternoon of 29 October 2013, a pilot boarded *HC Rubina* for its passage into Brisbane. While the ship was being manoeuvred off its berth, a flexible coupling for the shaft alternator that was providing power to the bow thruster, suddenly failed. The resultant loss of ship propulsion led to contact with the wharf and minor damage.

In addition to the obvious equipment failures, the ATSB investigation identified a number of other safety factors. The ship's managers had not ensured that the defective propeller pitch control system was reported, as required, to relevant organisations to allow them to consider the risks arising from the defect. Unreported defects are just one of potentially many additional stressors that can add to the complexity of a pilot's job.

As a consequence, Maritime Safety Queensland, in conjunction with Brisbane Marine Pilots, has revised the procedure used to exchange information between vessel traffic

Vik Chaudry, ATSB's manager for marine safety investigation

services and pilots. Specific emphasis was placed on the reporting of defects that could affect the safe navigation of the ship.

***Bosphorus*.** On 29 October 2013, the general cargo ship *Bosphorus* grounded at Lytton Rocks Reach in the Brisbane River, after the ship's helmsman unintentionally put the helm the wrong way.

By the time that the pilot on board the ship realised that the helm had gone the wrong way, it was too late to prevent the ship from grounding in the narrow section of the river.

The ATSB investigation also found that the navigational watch was handed over at a critical point of the pilotage and the risks associated with this change were not considered. Furthermore, neither the ship's safety management system nor Brisbane Marine Pilots' passage plan included any guidance or instructions relating to handing over the watch or changing helmsman during high-risk periods of the pilotage.

Brisbane Marine Pilots has amended their safety management system procedures to address all of the contributing factors specific to pilotage issues identified in the ATSB report. Its passage plan guidance has been amended specifically in relation to watch handovers and changing of the helmsman.

Lessons

The lesson we can take from these investigations is that navigation through confined waters under pilotage is a high-pressure activity, where errors can easily lead to serious incidents.

The clear and open exchange of information between the ship's master and crew and the pilot is vital for effective bridge resource management, both during the pilotage passage and before it begins. Vik says that, "It's crucial that all members of the bridge team have a good understanding of how the pilotage should proceed."

"The pilot needs to understand the ship's handling characteristics and the state of critical equipment such as navigation systems, steering gear, main engine and bow thrusters."

Clear communication is also essential during the passage itself. This is to ensure that the members of the navigation team—

including the pilot, bridge team and engineers on duty in the engine room—understand their roles and responsibilities, and that instructions are fully understood and correctly actioned. Every member of the team must be free to speak up if they notice something abnormal or if they feel that something is amiss.

Pilotage happens in a complex environment. Even under ideal conditions this complexity, combined with long hours and the need for precision, can cause fatigue in both crew and pilot. When confronted with high winds, strong currents, poor visibility and traffic congestion, the task becomes even more difficult. Vik says that in order to avoid a serious incident, "Crews must take precautions to prevent single-person errors going undetected, and the most important precaution is open, clear and timely communication."

Where to from here?

According to Vik, "Australia has an enviable record for pilotage through some very confined waters and highly congested ports and harbours. We also have some spectacular reefs, where a grounding could have severe environmental consequences, and that is why the ATSB will continue to investigate incidents to improve navigational safety."

"It's important to understand, that when things go wrong in transport safety, the ATSB's role is to find out what happened – allowing lessons to be communicated and learned so the event doesn't happen again. We don't investigate to lay blame."

"One of the foundations of that no-blame approach to investigations is the importance of incident and near miss reporting."

"Ships don't ground or collide with other vessels or fixed infrastructure every time there is a misunderstanding, a miscommunication or an unexpected event on a piloted ship. However, it is really important that these matters are reported directly to the ATSB, or through the Australian Maritime Safety Authority, so that our analysts can see if a trend is developing," said Vik.

If you want more information about the *Bosphorus*, *HC Rubina* or any other investigations, please visit www.atsb.gov.au. Further information about Maritime pilotage, including an informative video, can be found on our website under Safety Watch.

About the ATSB

The Australian Transport Safety Bureau is Australia's national transport safety investigator for aviation, rail and maritime accidents, incidents and safety deficiencies. The ATSB conducts marine investigations into accidents and serious incidents involving Australian registered ships anywhere in the world or foreign flag ships within Australian waters.

Further information can be found on the Australian Transport Safety Bureau website at www.atsb.gov.au

The art of navigation

By DR ANDY NORRIS, navigational consultant

The safe navigation of a vessel is a highly complex task needing much knowledge and experience. To become proficient it needs a good mixture of intelligence and hard work, not least, supervised experience gained on simulators and at sea.

Official publications and text books give essential information that has to become engrained into the mindset of the intending navigator. However, the true subtleties can really only be learnt from real 'on the job' experience.

Compliance with the International Regulations for Preventing Collisions at Sea (Colregs) stands as the overriding commitment for marine navigators. Decisions, fundamentally based on these, have to be made quickly, not least on very complex situations that need subtle interpretation of the rules.

If all goes wrong and an accident occurs, it can be debated for days by lawyers and experts – and maybe end up with the navigator being criminalised.

Quite rightly, experienced navigators are proud of their skills, which many consider to be proficiency in the art of navigation, generally meant to portray the subtle skills that experienced navigators develop, in addition to encompassing a deep understanding of the rules and technology of navigation.

There is no way that any particular complex situation being experienced at sea would have been pre-analysed, learnt and instantly recalled by the navigator when meeting an identical situation.

Instead, the mindset of the navigator comes up with a strategy based on many aspects, some of them rule-based but others just because it becomes obvious what the situation requires – the true art of navigation.

For this reason many believe that even into the extended future, humans will have to play a major role in the safe navigation of vessels.

Position fixing

At present, assessing position fixing integrity is an important part of the art. Although GNSS-given position is normally of high accuracy, the navigator has to keep an ongoing check that it remains valid.

Regular formal checks, for instance using radar and optical based sights on charted objects in coastal waters are important, but the experienced navigator would normally sense any significant discrepancy through good situation awareness, not least observing the view from the bridge windows and maintaining an eye on the radar, compass, log and echo sounder – and, of course, the chart.

The skill set needed to be able to physically perform positional checks using radar, optical and dead reckoning techniques is learnable at college but the acquired art includes deciding how much time should be focussed on it in any particular situation and, ultimately, in achieving an early realisation that something is 'not quite right'.

This particular art appeared to decline amongst some with the advent of GNSS use in the 1990s but growing publicity during the present century about its potential problems has led to a resharpening of the essential skills, not least through improved training.

Maybe this is why accidents to SOLAS vessels arising from electronic positional errors currently remain very rare, even though an appreciable number of bridge staff can recount occasions when GNSS position has been lost or was in error, often over periods of several hours and longer.

However, the world's ever-increasing emphasis on high integrity automated positioning will remove the need for any human involvement in the assessment process in the relatively near future.

This is because electronic systems will be performing continuous automatic integrity checks, taking into account primary and secondary positional sources, such as GNSS and DGNSS services, other RF-based positioning systems, radar, gyro, log, echo sounder and into the future, even optically derived data.

Such automatic checks are likely to be far more effective than could be performed by any human, and hence the navigator's role in assessing the integrity and accuracy of position fixing will effectively become redundant.

The system will alert bridge staff if the positional error probability has exceeded normal values but will continue to provide the most accurate position, together with an estimate of its error, by using the best available techniques.

The consequences?

A good human-machine interface for

such a system will keep the navigator well informed of the current position and dynamics of their own vessel.

On the ECDIS display there would be a visual indication of the determined error, perhaps as an error ellipse, providing vital information to the decisions of the human navigator.

But when position and related parameters, such as ground track, heading, STW, SOG, drift, etc., become just a set of numbers with automatic consolidation into a complete high integrity model of the vessel's position and dynamics, does it change the broader art of navigation?

Any art associated with manually assessing position integrity will inevitably fall away through lack of a real requirement. Eventually, teaching of manual positional skills at college is likely to be considered archaic, except as part of demonstrating how machines perform the processes involved.

Significantly, no longer being the prime decider of positional integrity could diminish the overall situational awareness of the navigator. Tasks currently undertaken to fulfil this role naturally increase such awareness.

A mindset change will be needed to compensate for this change. In actuality, it gives more time for the navigator to concentrate on improving overall awareness.

A more fundamental aspect of the change, however, is that it gives information to machines that is presently confined only to humans. Consequently, it allows machines to become even more involved in the navigational process.

For instance, automated analysis taking into account the integrity of all data, could readily merge positional and dynamic information with data that is already available digitally, such as ENCs, maritime safety information, meteorological and tidal predictions, etc.

For decisions not involving other vessels, it potentially allows some very sophisticated decision-making processes concerning navigation, to be automated.

Many accidents today are caused by poor human decisions when integrating such data. It is quite feasible that such automated decision-making would considerably reduce groundings.

Visual detection

Of course, a particularly important and demanding part of human navigational art is in making the right decisions when there are other vessels in the vicinity.

Humans generally remain as the only detector and user of visual information for navigation purposes onboard a vessel. They have to assess the complete situation by correlating the visual view with the information coming from radar, AIS, the chart and all other navigational aids.

Then, with good practical understanding of the Colregs and the handling of own vessel, their role is to react safely and efficiently to the ever-evolving situation.

But developing technology is poised to change even this situation. Electronic surveillance and processing of visual data is already being exploited in the maritime world for defence against piracy. It is also a central feature of evolving autonomous platforms across all transport sectors.

In principle, optical information could be collected more quickly, accurately and consistently by an automated process than by a human.

Existing digital processing power could readily make a good job of comparing the collected optical information with radar, AIS and other sensor information and make an assessment of the complete situation.

Evolving technology will be able determine the appropriate action to be taken by their own vessel taking into account all the known information, not least the collision regulations and the detailed manoeuvring characteristics of that vessel.

The uncertainties that accompany the raw data will be equally apparent to the machine as to a human. The navigational decisions taken would necessarily reflect the integrity of the data.

For instance, decisions based on a target just observed by radar would have much greater error margins than those made that correlate with optical and AIS data.

The process could potentially utilise an extensive database of scenarios developed from a digital analysis of how humans react in similar situations. It would necessarily model the consequences of all possible reactions from the other involved vessels, to determine the best course of action at any time.

The equipment would need to be designed to meet exacting standards such that its own integrity would never be compromised, and that any instances of total failure would be an extremely rare event.

Maybe the human art of navigation is the clever process that we use to compensate for our (grateful) inability to mechanically store and consistently process huge amounts of data – but perhaps that is what navigation is mainly about.

Machines are maybe better suited for such a task – but is that the future we really want?

First published in Digital Ship January/February 2015

A bit less Navy in the future of the Australian Hydrographic Service

By SERGE DESILVA-RANASINGHE*

The Royal Australian Navy's key nautical information agency, the Australian Hydrographic Service, plays a key role in supporting the safety of ships navigating throughout Australian waters. In an exclusive interview, Commodore Brett Brace, Hydrographer of Australia, who heads the Australian Hydrographic Service, spoke to security analyst Serge DeSilva-Ranasinghe about the evolving role and responsibilities of the Australian Hydrographic Service.

Can you begin by describing the role and function of the Australian Hydrographic Service?

Brett Brace: The Australian Hydrographic Service (formerly known as the Royal Australian Navy Hydrographic Service) is the Commonwealth Government agency responsible for the publication and distribution of nautical charts and other information required for the safety of ships navigating in Australian waters. Just recently Government has brought into effect the new *Navigation Act 2012*, and an important aspect for us is under Section 223, which refers to functions of the Australian Hydrographic Service. It firmly indicates that it's part of the Australian Navy delivering the service, and our function is to be responsible for the provision of hydrographic services required by the safety convention, which is defined as the Safety Of Life At Sea (SOLAS) convention. We are to collect, compile, and collate hydrographic data and to maintain and disseminate hydrographic services and other nautical information and other nautical publications. We are also to maintain and disseminate nautical charts, including authorising charts for use in Australian waters.

The Australian Hydrographic Service is essentially split into two components, the survey component, which comprises Navy military personnel within Fleet Command, and the Australian Hydrographic Office (AHO) component, which comprises a blend of military and Australian Public Service personnel currently within Strategic Command. The military personnel provide the bulk of the operational hydrographic surveyors and the personnel required to operate the ships and other capabilities. Those within the AHO provide hydrographic, cartographic, planning, geospatial analysis, records management, quality assurance, policy, and other bureaucratic functions. Overall, the Australian Hydrographic Service comprises about 350 personnel.

Commodore Brace, RAN

The RAN assumed responsibility for hydrographic surveys in 1920 from the Royal Navy, and for the publication of charts in 1942. Over that time we've had a variety of different ship assets to do different types of survey work; old post-war, World War II warships, and other ships converted to do survey work. Our current assets for data collection are two larger hydrographic ships, called *HMAS Leeuwin* and *HMAS Melville.* We have four survey motor launches, they're actually quite large launches, large catamarans. That's HMA Ships *Mermaid, Paluma, Shepparton*, and *Benalla*. We also have the laser airborne depth sounder (LADS), which is Australian invented. The Defence Science and Technology Organisation team came up with this technology, which uses red and green lasers to track the surface of the water and to penetrate the water to the seabed. We use that to great effect in reef waters, where the waters are optically clear. However, a great deal of information comes from industry as well: from commercial surveys, and offshore oil and gas and mining exploration. We have a good working relationship with these industries to give us information, which we then chart; again, to keep the mariners safe.

How would you explain the nuances of undertaking hydrography in the three oceans that border Australia, namely the Indian Ocean, Pacific Ocean and Southern Ocean; and how do you utilise and prioritise your available resources?

Brett Brace: It's a bit hard, because each one has its own level of complexity. Deep ocean areas where there is no genuine threat to surface navigation, either have reconnaissance work done, or scientific cruises might identify submarine volcanoes and things like that. As I mentioned earlier, the role of the hydrographic service is about safety of navigation of surface vessels in those shallower regions. If you can picture areas like the archipelagoes to the north of Australia through to Indonesia, the Philippines, Papua New Guinea, etc. there's lots of shallow reef water. There are generally lots of shallow shelving areas that aren't that deep compared to deep ocean, therefore a lot of effort goes into surveying those areas. For example, through the Straits of Malacca and Singapore, there is very heavy shipping, but it's also not very deep. As more ships need to ply those waters, we need wider shipping fairways and more accurate knowledge of the depth, because there's so much shipping and the ships are becoming so much larger. Therefore you need to be putting your attention to hydrographic and maritime efforts into surveying those routes, and quite often going back and surveying them again and again. Some areas have mobile seabeds with sand waves and other hazards that are dynamic, so surveying in the middle of the Indian Ocean is a very low priority compared to approaches close to land features where there could be other risks.

The work that Australia is doing is primarily for Australia's broader purposes; the safety of navigation in the region and the approaches to Australia, for our maritime interests. We've also got an MoU, a memorandum of understanding, with Papua New Guinea, where we provide hydrographic services. We produce their charts, we aid them with the conduct of surveys, we also send our Navy ships up there. Same sort of thing: it's about safety of navigation throughout their archipelago. Much of the work that Australia and New Zealand do is also about the developing countries, and working with crews, industries, and others to improve the safety of navigation. If you picture that aspect of the South West Pacific, that's the focus of the hydrographic work for the South West Pacific region. However, in the bulk of the South West Pacific region, as is indicated on the International Hydrographic Organization's website, there isn't much survey work going on because it's deeper ocean; more of those are scientific cruises, not Hydrographic Office-sponsored cruises. Compared to the northern parts of the Pacific, primarily the East Asia side, again, a lot of the hydrographic effort is about where the main maritime commerce routes are.

I suppose most hydrographic offices around the world, in terms of ships available to them to do the required survey work, are fairly lean. In terms of who would be doing the most, there are certainly a lot more countries in the East Asia Hydrographic Commission to be able to put hydrographic effort into surveying their waters. In contrast, if you picture the South West Pacific: there's Australia, New Zealand, the UK, France and the US, as Primary Charting Authorities in the region, which might do some survey work, or capacity building through donor-organisations that might fund other ships to come and do some work. However, in the East Asia part of the Asia Pacific, there are a lot more countries with either one or two ships each, so you multiply that by the number of countries that are there, and you end up with a much larger survey force. So they can actually survey the region. If you compare that to, I suppose, the Indian Ocean, there are a smaller number of capable countries. Certainly India is putting a heavy effort into growing their survey ship capability, so they're pushing forward to expand their own coverage. They're also aiding adjacent countries to expand, being a good regional partner, helping the countries either side of them to develop their own capabilities and to provide survey assistance. This includes Bangladesh and Myanmar, around the Bay of Bengal. You can see from a shipping route perspective, obviously there's the 'Iron Highway' heading from the Horn of Africa and from the Middle East, south of Sri Lanka, and then up into the Straits of Malacca and Singapore. That's the area where India is taking on a good deal of responsibility for helping to survey. They build the capacity of other countries, and it helps to collaboratively improve the safety of ships.

In terms of hydrographic responsibilities, tell us how Australia works with regional multilateral hydrographic organisations?

Brett Brace: You're right, there are quite a few. The International Hydrographic Organization has broken up the planet into these regional hydrographic commissions. There are four main commissions that have a direct impact on the work that I do, and relate to Australia. One is the South West Pacific Hydrographic Commission. As it indicates, this is pretty much the South Pacific general area. The Commission also includes areas in what you might describe as more the North Western part of the Pacific, but they're islands that are very similar to developing countries in the South West Pacific. So some of those smaller island nations in the Pacific area are captured under our commission. The name is a bit misleading because it goes across to a boundary basically mid-Indian ocean; effectively if you draw a line south of India, that's the western boundary of the South West Pacific commission.

Hydrographic ship HMAS Melville

HMA Ships Mermaid, Paluma, Shepparton, and *Benalla*

In addition to this, you mentioned the North Indian Ocean Hydrographic Commission. As it indicates, that's a lot of the North Indian Ocean countries, all the way from the horn of Africa, around the northern coast of the Indian Ocean, and around to Myanmar and down to Australia. There's also the Southern Africa and Islands Hydrographic Commission, which is essentially the southern part of Africa; so you've got the bulk of Southern Africa and Madagascar going halfway across into the Indian and Atlantic Oceans. Just to the north of us is the East Asia Hydrographic Commission, which pretty much follows its own description: it's the majority of the East Asian countries with the eastern limit being pretty much the middle of the Pacific. Essentially there are four commissions that cover the Indian Ocean region and Australia that I get involved in, to varying degrees.

For example, the one that we're primarily involved in, for very obvious reasons, is the South West Pacific Hydrographic Commission. It was decided in November 2013, at the meeting in Vanuatu, that Australia would become Chair of that Commission until the next meeting. At the subsequent meeting in Cook Islands in early February 2015, Australia was re-elected as Chair. We have a very strong role there in working with New Zealand, a very strong player in the region, and France, UK, and US, to help build the capacity of countries in the region, and help them to build their own hydrographic capabilities. If they can't build their own, we work with capacity building organisations such as the Asian Development Bank and The Nippon Foundation etc. The International Hydrographic Organization has its own capacity building funds, the International Maritime Organization as well. There are lots of organisations that, for the interest of the mariner, have funds available to help countries develop their maritime and, in our case, hydrographic capabilities. So we have an assisting role in guiding capacity building. We are a member of the South West Pacific Hydrographic Commission, an observer in the East Asian Hydrographic Commission and we're an associate member of the North Indian Ocean Hydrographic Commission. The other one I suppose, which is quite important internationally to the south, is the Hydrographic Commission on Antarctica. We're obviously a member of that commission, and that again is primarily about safety of navigation for mariners in the Antarctic region, and charting, surveys, and related activities.

Tell us what the Navy is doing to increase its survey capability? How will this enhance Australia's shipping safety and help to facilitate trade: for example, are there any new demands coming from the cruise industry?

Brett Brace: As a capability provided by Defence, the scale and scope of those capabilities is the remit of Government. The nature of Australia's hydrographic surveying requirements, which includes military requirements, is shaping towards an appropriate blend of industry-supported and military capabilities. I would expect a greater contribution from industry in the conduct of our national hydrographic surveying programme, *HydroScheme*. The Defence White Paper 2015 will guide the future of Australia's hydrographic capability. In regard to priorities, I focus on what the mariners require, as guided by such authorities as AMSA; it's all about safety of navigation and protection of the marine environment, with other threads that relate to improving the efficiency of maritime commerce. But of course, we are constrained by the resources made available. The cruise industry is but one of the many maritime players. We work with the cruise industry to aid in the development of their industry; the attractiveness of remote areas is also part of the challenge. The overall challenge is balancing the holistic national interest within the available resources, and not focusing on a specific maritime sector.

Given that the First Principles Review recently concluded, tell us how this has affected the AHS, especially by way of planned reorganisation, and how do you see the AHS evolving into the future?

Brett Brace: This interview will be one of the last published while the position of Hydrographer of Australia and the functions of the Australian Hydrographic Office reside within Navy. The First Principles Review (FPR) of Defence recommended that the geospatial agencies within Defence, which includes certain functions of the Australian Hydrographic Service, be consolidated into one geospatial agency – the Australian Geospatial-Intelligence Organisation (AGO). The transition of those elements of the AHS residing within Navy Strategic Command will transfer to AGO early in 2016. This is a significant milestone in the history of the AHS as we move to AGO, after the best part of a century with Navy. The ships, LADS and operational capabilities will remain with the Navy.

Our history is a proud one and we must remain focussed on our primary role - services to the mariner for safety of navigation. Dwelling on the past and how we used to do things will not be acceptable and will not realise the direction from Government in agreeing to the FPR recommendations. We have a fantastic, once in a century, opportunity to take charge of our future. The 2015 Defence White Paper and the underpinning Force Structure Review are likely to similarly paint a very bright future for Defence's hydrographic, meteorological and oceanographic capabilities. Changes will come in how we do business and how we deliver outcomes for the mariner and for military operations.

Thanks for the opportunity Brett.

**Serge DeSilva-Ranasinghe is a security analyst, defence writer and consultant. He is also a Research Fellow at the US Perth Asia Centre, University of Western Australia and a non-resident Fellow at the National Security Institute, University of Canberra.*

Learning how to learn – options for education and training in maritime logistics

By ROBERT DICK*

Everyone has the right to an education. A right protected by a United Nations Convention – the shipping industry needs to should value that right and the opportunities it affords.

Memories of our time at school might vary from something we would rather forget, to a rich and rewarding process not only for what we learnt but also from the social aspect – people we met, long lasting friendships, or somewhere in between.

We came away from school knowing all about the three R's and a bit more – but we should remember another purpose of education is to learn how to learn - that skill may last a lifetime. Education more formally comprises learning experiences from pre-school, primary school and secondary school. Further education and training often becomes a life-long practice.

For many the education process may extend into university. There are opportunities for tertiary studies in shipping and logistics in Australia. At another level, and for those wishing to gain and insight or focus their skills, vocational education and training (VET) might be more applicable. TAFE colleges are the largest provider of VET courses, which are specific to the workplace skill required. VET is designed to deliver more workplace specific skills and competencies that are applicable in a wide range of industries that includes trade and office work, retail and hospitality, for example. An apprenticeship is a well-known VET method.

Which is most appropriate for the individual depends on circumstances and career choices. Even university graduates may choose to undertake VET or industry training courses in order to provide the practical level skills that make them instantly employable.

Provided the course has been delivered by a Registered Training Organisation, successful completion of a training course means that the trainee is awarded a certificate that is nationally recognised. The trainee then has the flexibility to apply those skills in the relevant industry across Australia. Respective State Governments apply national regulations that ensure training providers deliver courses to the national standard.

Many VET courses also offer the opportunity for individuals to update their skills at any stage in their careers, possibly to a higher level. On-the-job training may also be provided by an in-house company programme, when an experienced mentor guides the learner.

For those entering the workforce after school without yet having decided what they want to do, it becomes are matter of hard thinking about what they really 'want' to do and what they are suited for, to settle on the right fit for them. The availability and use of learning resources either in the VET sector or university can then help the person to realise their objective.

In-career training. Who should or must undertake training should be coordinated by the human resources section of an organisation. Career planning for employees will be a significant factor but training in some subjects is mandatory. For example, international conventions applied through the Australian Maritime Safety Authority require shore-based personnel involved in the movement and shipment of dangerous goods to complete a course that the Authority has accredited.

What does training actually achieve? Basically, learning should produce a change in behaviour where the individual displays the application of the knowledge they have hopefully gained. Acquiring knowledge purely for its own sake is not what we are talking about here. Carefully selected vocational training, must be applicable to workplace responsibilities for it to be of any value. The design of training programmes and the subjects to be covered must therefore respond to industry needs, this is the starting point. Industry consultation, for example through surveys, will help in the design.

Tailoring options. There are many ways of learning and individual differences might mean different preferences for the way in which it is delivered, making it difficult to be precise about the ideal way for all students. At school and university there is little choice. In a training environment most prefer face-to-face delivery, where interaction between students and between student and teacher is highly regarded. That format is always dependent on class sizes, particularly in courses that are

presented by private organisations, where covering the cost is important. For subjects that require the development of manual practical skills, class attendance is obviously mandatory.

Traditional distance learning by correspondence course, which requires the student to complete a course virtually on their own and to correspond with a tutor by mail, is rare these days. This method is suitable for students in remote locations where access to the internet might not be possible. The Institute of Chartered Shipbrokers is an excellent example of how this might operate. Students do not attend classes but follow a learning programme through manuals, assisted by a locally based tutor. Qualifying examinations are held annually at the same time in about a hundred locations around the world. Examination papers are sent to the Institute's centre in London where they are marked by a committee, and students advised of the results.

On-line training or e-Learning has gradually taken over from traditional distance learning. With the development of support systems has revolutionised vocational training and is now increasingly used as an adjunct in university courses. The format enables course material to be attractively presented with colour and animations that promote interest and engage students.

Advantages and disadvantages. The most obvious benefit is that the learner can complete the course at any time and at any location where access to the internet is possible. For the employer this avoids costs associated with transport, accommodation and problems that might arise with the employee being away from their work. The cost to the employer for the purchase of the on-line course is also reduced; discounts are usually available depending on the number of employees taking the course.

The main disadvantage for the person taking an online course is that normal classroom interaction is not available. This is a major factor in the failure of many students to complete an online course. A well-designed course that employs techniques that create a virtual classroom where direct contact with a tutor can be managed could partially overcome this; bulletin boards where students can post questions/comments/criticisms also help. Quick quizzes and exploring internet-based material enables the student to check their progress and widen access to source material. Most courses also offer the opportunity for revision back to earlier topics/subjects, if the student is unsure on any point.

A key factor employers need to manage is adequate supervision of people completing an on-line course: to assist where necessary and to ensure that the course is fully completed within a specified time. The individual's progress can usually be monitored by a supervisor through access to reports produced by the course programme.

Education in shipping. The shipping industry in Australia has characteristics not shared by many other countries. Many ports of varying size are scattered around a long coastline, some in very remote locations. Shipping is an international business and ships are subject to a considerable amount of regulation, mostly enforced through governments – Federal and State. Commercial procedures are similarly widely applicable in contracts and chartering. It is therefore imperitive that personnel are conversant with the applicable rules to ensure the unimpeded movement of ships and cargoes through ports, and fully protect their principal's interests. Appropriate training courses provide the access to this essential knowledge.

Shipping Australia responds to changing industry training needs. Shipping Australia, from its beginnings as the Australian Chamber of Shipping, has responded to the training needs of the industry by presenting courses, originally through TAFE, and then through its own resources. In that respect no other organisation in Australia has delivered training courses to so many in the shipping industry, at ports large and small around the coast, than SAL. Those courses were also presented in Canberra and, of all places, at a sugar mill in North Queensland. This is a good example of how face-to-face courses can be adapted to different circumstances.

SAL's face-to-face courses were always well received, but they took people away from their workplace, which in small companies created problems. Larger companies could manage this for the course duration, usually two days, but downsizing in staff began to make it difficult to reach the number required to justify the cost in running course. SAL then turned to converting the courses to on-line presentation with considerable success. A distinct advantage with on-line format is the ability to update the course content and make changes virtually as they occur.

Two courses were created. ***Introduction to Shipping*** is a basic level course for people who have just entered the industry and with little or no knowledge of shipping. ***Fundamentals of the Maritime Industry*** has a more advanced content with wider coverage aimed at developing a wider and firmer foundation of shipping knowledge.

A specialised area of shipping known as the *Reefer Trade* (dealing with refrigerated container cargo) was later added as a stand-alone course for those working in that trade. Other sectors such as the *Bulk Trade* and *Chartering* are planned, to be developed as separate modules. These courses remain available for face-to-face presentation if required. Internationally the situation is much the same as in Australia. Shipping organisations such as BIMCO also offer on-line courses, as well as classroom format at various major ports around the world.

The success of industry training courses in the shipping industry in Australia provides direct benefits to employers; better competency and job satisfaction, increased productivity and reduced staff turnover. That success will be assured as long as companies continue to contribute ideas to course content and adopt training policies that ensure that appropriate staff are provided in-career development training as part of their employment conditions.

Vocational training will always have a place in the shipping industry but its value extends beyond shipping companies to freight forwarders, government agencies and others who have a connection with the maritime logistics and trade.

**Robert Dick is an experienced trainer and educator. Robert developed the course content for Shipping Australia on-line courses and undertakes maintenance of these courses and development of new subjects as a consultant.*

Shipping Australia Limited

Online Training Courses

Introduction to Shipping

"Introduction to Shipping" is designed to introduce anyone working in either the shipping industry, or an organisation that has a connection with the movement of goods or people by sea, to all the major aspects of the Australian shipping industry.

Brimming with practical information, examples and interactive activities, this course provides a detailed look at the role and functions of the shipping industry and the responsibilities of organisations, companies and agencies that support it.

Cost: $200 Member, $300 Non-member

Fundamentals of Shipping

The Fundamentals of the Maritime Industry aims to establish a foundation of industry knowledge, and to take that a step further by introducing the learner to more detailed subjects and building on that foundation.

Cost: $500 Member, $600 Non-member

Reefer Cargo Handling

Reefer Cargo Handling is the latest on-line training course aimed to extend the knowledge of this unique and increasingly important sector of the shipping industry. The course explores the important factors that influence the transport of perishable goods and provides the learner with an appreciation of the: who, what, where, why and how of refrigerated cargoes.

Cost: $100 Member, $200 Non-member

For further details and pricing please contact Matthew Whittle at Shipping Australia on 02 92669905 or email mwhittle@shippingaustralia.com.au

Special bulk and combo rates apply on application GST not included in the above

Get on board with a maritime qualification from ECA Maritime College

If you've ever watched *Pirates of the Caribbean* or *Master* and *Commander,* you'll know that the best adventures happen at sea. These days you're unlikely to be sailing aboard the Black Pearl, but with an accredited qualification from ECA Maritime College, you could soon be climbing aboard a vessel that's much more comfortable.

A career at sea offers travel opportunities, competitive salaries and in some cases the chance to captain a multimillion dollar vessel.

Gold Coasts Sam Hinton is a skipper of several commercial ships in Queensland. He's currently studying toward his ***Master >35M Certificate in Maritime Operations*** through ECA Maritime College. When he's finished he'll be qualified to act as master on commercial ships up to 35 meters long in the EEZ, as well as be Mate of a vessel <80 m long in inshore waters.

"I'd reached a stage in my career where I needed to upgrade my qualifications to be able to move forward in the industry. But as I work away a lot, my work schedule is unpredictable, so I wasn't sure how I could study and work full-time. But through the flexibility and support of ECA Maritime College I am on my way to achieving a qualification which will allow me to captain larger commercial vessels, as well as broaden my knowledge and skills base."

ECA Maritime College offers flexible delivery for both individual and corporate clients in accredited training courses ranging from Coxswain to Master >35M and MED3 – MED1, allowing students to earn while they learn.

ECA Maritime College CEO and Director, Kelly Harvie, said ECA Maritime works with students and their employers to determine the best way for them to complete their studies offering a wide range of study options to suit all learning styles.

"Students can complete their qualifications by attending classes face-to-face at our Brisbane campus, completing on-the-job training and assessment, and by studying online through our e-campus or a combination of these options. We also recognise that some people working in the industry have years of experience, which can be mapped against a qualification through recognition of prior learning, reducing the amount of time to complete a course.

"We are also able to develop in-house training programs for companies which accommodate their work schedules, eliminating unnecessary time off work for the crew while they train toward a qualification in the Maritime industry," Ms Harvie said.

In 2015 we have started to expand our scope of registration to start including some Blue Water courses, we can now offer STCW10 including Security Awareness Training over an 8 day period at our Brisbane campus conveniently located 10 minutes from the Brisbane airport. Our final AMSA check off will be conducted at our first class early 2016, please contact me directly should you wish more information regarding these courses, ceo@ecamaritimecollege.edu.au . We would like to see more of the Blue Water courses on our scope and would be happy to discuss with companies their training needs so we can accommodate real training programmes to suit the marine industry and your company work schedules.

All of ECA MARITIME COLLEGE talented trainers actively work within the maritime sector, ensuring students has access to trainers who are up-to-date with what's happening in the industry. This industry knowledge ensures that students studying with ECA Maritime College come away with a qualification that is highly recognised within the industry.

For more information about flexible training opportunities for you or your crew please, visit www.ecamaritimecollege.edu.au phone 1300 787 599 or email Brisbane@ecamaritimecollege.edu.au. Or visit us at 11/17 Rivergate Place, Murarrie QLD 4172 (Rivergate Marina, located under the Gateway bridge on the south side just 15 minutes from the Brisbane airport).

ECA Maritime COLLEGE

AMSA Approved Courses within minutes of the Brisbane Airport

ECA Maritime COLLEGE

STCW10 – AMSA APPROVED
Certificate of Sea Safety Training – CoST
Security Awareness Training – SAT

Hi Shelda & Kellie
A picture tells a thousand words.
Orals out of the way!
Thanks for all your help. Regards
Steven Lock

What our students appreciate about us:

- All our trainers actively work in the marine industry
- Maritime Authority Oral Exam preparation
- Supported remote study programs
- The course standard and length
- Additional tuition if required
- Administration assistance
- Student support services
- Small classes
- Result driven

Course List

Elements of Shipboard Safety – ESS (NC)
Coxswain Grade 2 Near Coastal (NC)
Coxswain Grade 1 Near Coastal (NC)
Master <24M Near Coastal - M5 (NC)
Master 35m Near Coastal - M4 (NC)
Mate up to 80m NC (or Mate 4) (NC)
Marine Engine Driver Grade 3 -MED3 (NC)
Marine Engine Driver 2 - MED2 (NC)
Marine Engine Driver Grade 1 MED1 (NC)

RTO # 31344
Nationally Recognised Training

1300 787 599
www.ecamaritimecollege.edu.au

NEW DIVISION OF ECA MARITIME COLLEGE

VERY COMPETITIVE RATES

Maritime Commercial Services
Crewing
Deliveries
Project Management

As an education facility we often had to turn people away from this industry due to their lack of on the job experience. So we contacted some of our corporate clients and met with them to discuss the opportunity of delivering vessels with our experienced staff who at some time or another had already worked for these companies. The support we have received has been extremely positive and we have had great success with these projects. To assist these companies we have provided very competitive rates and have been offering this service behind the scenes for the past 6 years. We would like to offer this service now to the entire industry in a bid to secure more work for these students and staff, while we are focused on the training the delivery and all aspects of these deliveries must come first. If you have vessels that need to be delivered and staff that need to be trained please contact us so we can design a program around these deliveries and offer real training on the job.

Delivery - 2 x Split Hopper Barges - Adelaide to Brisbane
We provided all the crew and operations to ensure vessels passed all AMSA requirements prior to sailing

Delivery - Gladstone to Brisbane

Project management PNG - Managing a fleet of vessels out of Port Moresby

Tug and Tow - Brisbane to Gladstone

Our database consists of qualified crew for deliveries or short term contracts from Master 1 to Coxswain and all Engineering levels with AMSA medicals and STCW Safety Training. We have been successfully delivering vessels and project managing for the past 6 years.

Call us for a quote today.

1300 787 599

Interested in a career in supply management, logistics or international freight forwarding?

Sydney TAFE has courses that can launch and further your career in Supply Management, Logistics or Freight Forwarding. Sydney TAFE has been the most trusted brand for vocational education and training for over 120 years. In that time almost a million students have placed their trust in Sydney TAFE.

Complementing our strong links with industry, expert teachers and world-class facilities, Sydney TAFE continues to provide relevant training to the community, with flexible payment options and access to government funding and VET FEE-HELP loans for eligible qualifications.

Studying logistic related courses at Sydney TAFE means you can become involved in major operational and/or managerial positions in domestic and international logistics.

Sydney TAFE graduate and Ambassador Sergei Simov successfully completed a Diploma of Logistics at Sydney TAFE. In the beginning he found working full time and studying a challenge but he soon found his feet.

Studying Logistics meant that Sergei's time management and communication skills improved as did his work/life balance. This was important as a key to a successful career in logistics is well developed time management and communication skills. Most of his assignments, he says, revolved around problem solving which is an important skill in logistics.

"I always felt motivated and it was my teacher's support that kept me motivated. They and my fellow students really helped me develop leadership and communications skills", says Sergei. For Sergei, group discussions and 'hands on' experience really enhanced his time at Sydney TAFE and he is looking forward to an exciting career in Logistics.

Sydney TAFE recognises prior knowledge and life/work experience so that students can finish their qualification in less time. If you are already working in the industry, you can apply for recognition of prior learning so that you don't have to study what you already know.

Sydney TAFE is always developing innovative ways to deliver its courses, including evening and online options. Sydney TAFE also offers you the opportunity of adding value to your skill-set through other programs and short courses.

Whether studying for a certificate, diploma or a degree, you can be confident that Sydney TAFE will continue to maintain a strong, trusted and reliable presence in the community and provide you with the skills you need for the career you want.

METLworks

Industry training body Maritime Employees Training Ltd (METL) recently celebrated 5 years in operation, and the CEO, Simon Earle, reflects on the challenges and successes of the journey.

Since commencing, METL has been responsible for the qualification of over 130 seafarers. 41 per cent of all trainees engaged were already in the industry and looking to up-skill, a core strategy of METL being to retrain and retain skills within the industry. 7 per cent of trainees have been indigenous and 6 per cent female, which demonstrates our commitment to equality and access. We are an accredited White Ribbon Workplace.

METL received the Transport & Logistics Industry Skills Council Award for Excellence and Innovation - Maritime in 2014, and was a finalist for the NSW Department of Industry Small Employer of the Year in 2015.

Key to this success is the careful selection of employees and ongoing mentoring which has led to a retention rate of 92 per cent, compared with a national average of 52 per cent for traineeships and apprenticeships (NCVER, June 2014). There is also the flexibility. As we partner with a number of shipowners and operators, trainees get to work on different vessels, with different crews, equipment and procedures which delivers better training outcomes.

METL serves a diverse group of stakeholders, and managing and meeting everyone's expectations is often a challenge. Being a new organisation and working closely with employers and the union, we have had our critics, which is understandable but unjustified.

METL provides a quality value-added service. Beyond industry training requirements, we have introduced a range of additional training to build on safety, skills and knowledge. This includes a work-hardening program, food safety units, drug and alcohol training, domestic and family violence training, accredited dogging courses and access to deck-watch-keeper understudy programs for selected, completed trainees.

As needs change and as the industry changes, we need to respond to ensure we remain relevant. We have some exciting projects in the pipeline which will expand our reach and provide more for both employees and employers.

One such project is the Maritime Aggregate Demand Model, or MADM, which sees METL collaborating with Macquarie University on a tool which calculates the future training requirement for seafarers across occupational streams including Deck Officers, Engineer Officers, Integrated Ratings and Cooks. METL is also extending the scope of our RTO to deliver a range of short courses deemed necessary for seafarers to undertake specific duties.

Simon Earle, chief executive officer, METL

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 offerings

- **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.

A world-class ship simulator centre serving the global maritime industry

What's changed?

New control room

Smartship is in the process of adding a second control room. The new facility will enable 3 independent exercises to be run simultaneously and allow easier traffic flow within the control room areas. With this addition we will have better utilisation of our bridges and services and also a more efficient way to cater for our growing client base.

Upgrade to ECDIS Navigation System

Smartship is going Platinum. A vast majority of cruise ships and vessels are now moving towards the latest Integrated navigation system 'NACOS Platinum'. Smartship has invested in obtaining the same hardware and software used on ships so that we can provide world-class training and up-to-date maritime simulation services.

Smartship is Going Green!

Our facility will soon be shining like the sun. At the end of this year Smartship will be installing 384 solar panels to reduce Smartship's carbon footprint. The panels will cover the entire roof space, producing 154,800kWh of energy each year. Smart going Smartship.

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 & professional development offerings

- 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.

Queensland Government

Summary of selected port tariff increases

Following are a list of port cost increases for 2013, 2014 and 2015 that have been notified to SAL.

Note: *Best endeavours have been made to ensure that this table is accurate, however, some distortions may arise through averaging of different components.*

Port	Service	1 July 2015	2014	2013
Albany	Navigation Fee	2.6%	2.6%	1.9%
	Berth Hire	2.7%	2.6%	2.0%
	Infrastructure Fee	7.2%	2.7%	2.1%
	Pilotage	2.6%	2.6%	2.0%
Brisbane	Wharfage (Full Containers)	2.0%	2.8%	2.3%
	Harbour Dues (Full Containers)	2.0%	2.8%	2.5%
	Port Access Charge (Motor Vehicles)	6.7%	7.7%	7.7%
	Berth Fisherman Island	2.0%	2.8%	2.5%
	Security Charges (Containers)	2.4%	3.1%	2.6%
	Towage	3.5%	5.0%	3.5%
	Pilotage all services	N/A	3.5%	3.0%
	Vessel Utility Charge (Water)	2.2%	3.0%	2.5%
	Transfer Bulk Liquid Application Fee	2.0%	2.8%	2.5%
Darwin	Wharfage (FEU)	31.0%	3.6%	-57.0%
	Berthage	15.9%	1.8%	5.8%
	Pilotage	0.8%	3.6%	0.0%
	Port Dues	0.8%	3.5%	5.0%
Flinders (SA Ports)	Cargo Service Charge	1.5%	2.9%	2.9%
	Harbour Services Charge	3.9%	2.9%	2.9%
	Navigation Charges	2.7%	3.9%	3.2%
	Pilot Charges	5.1%	7.5%	3.8%
Fremantle	Wharfage & Berth Hire	2.5%	5.0%	5.0%
	Tonnage (avg)	2.5%	5.0%	5.0%
	Pilotage (avg)	2.5%	7.0%	5.0%
	Dynamic Under Keel Clearance System	2.5%	32.8%	5.0%
	Port Improvement Fee per TEU	2.5%	5.0%	5.0%
Gladstone	Harbour Dues (avg)	2.5%	3.1%	4.4%
	Tonnage/Wharfage (avg)	2.9%	3.6%	4.8%
	Mooring Dues (avg)	4.0%	4.0%	6.5%
	Security Charge (avg)	2.5%	3.3%	4.3%
Mackay	Ship Charges (Tonnage Dues) (avg)	2.2%	3.0%	3.1%
	Cargo Charges (Harbour Dues) (avg)	2.2%	5.8%	5.6%
	Service & Security Charges (avg)	2.3%	3.0%	3.8%
	Towage	N/A	5.0%	2.0%

Port	Service	1 July 2015	2014	2013
Newcastle	Navigation Services	3.9%	0.0%	2.8%
	Pilotage	Restructure	2.6%	2.8%
	Site Occupancy	3.9%	0.0%	2.8%
	Wharfage	3.9%	0.0%	2.8%
Melbourne	Wharfage (Full Containers)	0.0%	0.8%	5.2%
	Wharfage (Empty Containers)	2.7%	0.6%	5.3%
	Non-Containerised/General Cargo	2.8%	0.7%	5.2%
	Motor Vehicles	2.7%	0.7%	4.9%
	Dry Bulk	2.6%	0.9%	4.8%
	Bulk Liquid (avg)	10.0%	10.4%	13.3%
	Channel Fees (avg)	2.7%	0.8%	4.9%
	Berth Hire	2.7%	0.7%	5.2%
	Wharf Access	2.0%	28.6%	4.1%
	Area Hire Yarraville	3.0%	0.8%	5.0%
	Towage	13.0%	8.0%	10.0%
	Security	2.8%	0.8%	5.0%
	Pilotage	4.0%	4.0%	3.0%
	Infrastructure Charge	2.8%	2.6%	0.0%
Port Botany & Sydney	Import Wharfage (Full Container)	2.4%	6.6%	2.5%
	Export Wharfage (Full Container)	3.7%	10.8%	2.5%
	General Cargo (avg)	2.4%	14.6%	2.5%
	Bulk Liquid Wharfage	2.3%	2.7%	2.7%
	Navigation: Standard	4.7%	9.6%	2.5%
	Navigation: Pax, bulk liquid & gas	4.7%	9.6%	2.3%
	Pilotage	4.7%	9.8%	2.4%
	Towage	3.5%	5.0%	3.5%
Port Hedland	Tonnage	0%	3.6%	5.0%
	Wharfage	0%	3.1%	5.0%
	Berthage	0%	3.0%	5.0%
	Temporary Storage	0%	3.2%	7.7%
Port Kembla	Navigation	2.4%	2.5%	3.0%
	Pilotage	N/A	18.2%	2.9%
	Site Occupancy	3.0%	3.0%	3.0%
	Wharfage Berth 206	3.0%	N/A	N/A
	Wharfage (Full Containers)	3.0%	21.0%	3.0%
Portland	Port Tonnage	3.0%	4.0%	5.3%
	Wharfage	2.9%	3.9%	5.2%
	Berthage	3.1%	3.9%	5.3%
	Mooring	3.9%	4.0%	4.8%
	Pilotage	3.9%	4.0%	4.5%
	Towage	3.6%	4.4%	4.9%
Townsville	Cargo Charges	5.0%	5.5%	5.5%
	Towage	4.0%	4.2%	4.0%

Emma Fensom, Smit Lamnalco (Australia); Melwyn Noronha, Shipping Australia Limited; Ken Fitzpatrick, SAL chairman

Biennial Newcastle luncheon

On 24 July 2015, Shipping Australia's New South Wales State Committee hosted a luncheon at the picturesque Newcastle Club. The event attracted a full house attendance of over 120 shipping industry executives, including the Mayor of Maitland City Council.

Sponsored by the Port of Newcastle with support sponsorship from Svitzer and Newcastle Stevedores, the event had two guest speakers in, Geoff Crowe, chief executive officer of Port of Newcastle, and Hennie du Plooy chief executive, Port Waratah Coal Services.

Shipping Australia's chairman, Ken Fitzpatrick introduced the speakers, who both provided interesting insights into the future of the port.

Hennie du Plooy, Port Waratah Coal Services

Geoff Crowe, recently appointed as chief executive of the Port, having served as a director of the Hunter Valley Coal Chain Coordinator and held leadership roles with Port Waratah Coal Services, reflected on the topical matter of port pricing and commented on Shipping Australia's support of Glencore's application to the National Competition Commission for the declaration of the shipping channels, a decision for which was pending.

Looking to the future he commented on the potential broadening of utilisation of the port, identifying box throughput, bulk liquids, fertiliser and cruise shipping as opportunities for growth.

As chief executive since 2011, Hennie du Plooy provided a brief summary of the changes at Port Waratah Coal Services, including an update of the development at Terminal 4. In acknowledging the downward trend in coal prices he emphasised that coal volumes were being maintained and that there was no doubt that coal would continue to be part of the world's energy mix for the foreseeable future.

Geoff Crowe, Port of Newcastle

Both speakers answered questions from the floor and Shipping Australia chairman Ken Fitzpatrick thanked them for their contributions and presented them each with a gift.

Ross McAlpine, SAL's acting New South Wales State Committee chairman, who hosted the event, commented on the splendid venue and service of the Newcastle Club and thanked all guests for their attendance and SAL's Secretariat for organising the event. We'll be back in 2017!

David Phillips; Chris Raley, Thompson Clarke Shipping; Thomas Charter, AsiaWorld

Greg Asher, Port of Newcastle; Michael Kilgariff, Australian Logistics Council

Angella Razborsek and David Callaghan, Port Authority of New South Wales; Keith Wilks, Port of Newcastle; Alison Nolan, Port Authority of New South Wales

Kristen Keegan, Hunter Business Chamber; Jonathan Vandervoort, ARTC

Grant Gilfillan, Port Authority of New South Wales

Richard Howard and Graham Clark, Clark Shipping; Keith Wilks, Port of Newcastle; Glen Hayward, Port of Newcastle

Steffen Risager, Svitzer; Ron Sorensen, Port Authority NSW

Gary Dodd, Mission to Seafarers

Ben Hart, Smit Lamnalco (Australia); Matthew Shanks, AsiaWorld

Ian Doherty and Bob Shueh, Patrick

Brett Allan and Lloyd Dawber, Moly-Cop

50 years of maritime heritage preservation

By SYDNEY HERITAGE FLEET

Sydney Heritage Fleet is a community-based non-profit organisation and in 2015 celebrates 50 years of acquiring, restoring and operating some of Australia's most historic sailing, steam and motor vessels.

The organisation began in 1965 after strong lobbying from a group of public-spirited steamship enthusiasts resulted in Sydney's 1902 VIP steamer *Lady Hopetoun* being handed over to the Fleet for restoration and operation. This iconic steamship is the Flagship of the Fleet and is regularly seen steaming on Sydney Harbour.

Other vessels followed. After 66 years of service the 1902 steam tug *Waratah* was to be scrapped. However, a successful bid to purchase her was accepted and the old tug steamed down from Newcastle to join the Fleet.

In 1970 the Queensland pilot steamer *John Oxley* was also destined to be scrapped. This vessel was the last coastal steamer in Australian waters and the fledgling museum again put in a bid to purchase her. The bid was accepted and *John Oxley* steamed from Brisbane to join the Fleet.

A tall ship for Sydney…

In 1972 the Fleet learnt of the hulk of the 1874 bark *James Craig*, which lay aground in Recherche Bay in Tasmania. Volunteers visited and re-floated the old hull and *James Craig* was towed to Hobart. Here the hull was further strengthened and the long ocean tow to Sydney took place in 1981. The ambitious restoration of *James Craig* then began in earnest.

John Oxley restoration

Onzie and Joe, father and son team riveting John Oxley stem

Restoration skills and capability

At this time, the Fleet was already well into restoring the steam tug *Waratah*, with hull repairs successfully undertaken using hot riveting instead of welding. This successful restoration work established a 'can do' attitude within the Fleet and also laid the foundation for *James Craig* being restored to sailing condition using hot rivets instead of welding.

As is the case today, funds were very limited in those early days and only small amounts of steel plate and consumables could be purchased. Timely sponsorship

came from within the museum's own governing body through the generosity of the Fleet's exceptional supporter, Robert Albert AO. This fortuitous support, combined with high levels of sponsorship from industry, accelerated work to a new pace.

Entire strakes of *James Craig* hull plating and extensive amounts of structure were replaced. A new white beech deck was laid along with new bulwarks and deck structures. A complete new sailing rig was manufactured and fitted. Legislation required engines and modern safety systems and two MTU diesel engines and ZF gearboxes were donated and installed.

In 2000 a restored *James Craig* was recommissioned and become one of the few operational 19th century sailing vessels in the world. Today *James Craig* sails regularly on Sydney Harbour and to sea. She has sailed interstate to Melbourne and Hobart.

Sydney Heritage Fleet today

The Fleet now comprises ten major vessels, a large collection of smaller boats plus an extensive collection of heritage engines. This collection is one of the largest in Australia.

The old and the new (Image credit: John Spiers)

The 1903 schooner *Boomerang* was donated in 1987 and the 1908 motor launch Protex in 1981. Other vessels include the 1943 harbour launch *Harman*, the 1955 Botany Bay workboat *Berrima* and RAN motor tugs *Bronzewing* and *Currawong*.

The steamship *John Oxley* is the Fleet's current restoration project. Work on the hull is basically complete and work teams are now repairing steel decks, machinery, piping systems and superstructure.

Steam Tug Waratah

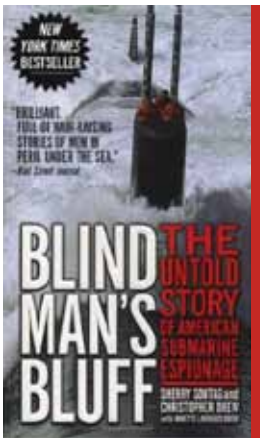
The project relies entirely on generous sponsorship and a team of dedicated metal fabricators, engineers and woodworkers, most of whom are volunteers.

Funding and location permitted, the 1912 Sydney ferry *Kanangra* will be the next vessel to rest on the Fleet's slave dock. This would present the opportunity to continue the Fleet's work and ensure the skill sets needed to repair riveted hulls are actively preserved.

The Fleet's 1250 strong membership and around 450 devoted volunteers restore, operate and maintain the fleet of heritage vessels. In the process they preserve the traditional skills and techniques of ship repair, square rig and marine steam.

In 1998 the trading name Sydney Heritage Fleet was adopted to distinguish the Fleet from the federally funded Australian National Maritime Museum. The organisations are complementary, but totally separate in funding, administration and role.

Sydney Heritage Fleet is funded only through donations, sponsorship programmes, membership subscriptions and income from the commercial operation of its vessels. Sydney Heritage Fleet is a not-for-profit tax-deductible gift recipient under Australian Taxation Office rules. You can find further information at www.shf.org.au



Playing spy games on the fringes of crush point and nuclear annihilation

BLIND MAN'S BLUFF, The untold story of American submarine espionage
By SHERRY SONTAG and CHRISTOPHER + ANNETTE LAWRENCE DREW
$28.75 Harpers Paperback, 432 pages

This is the story of Cold War spying in deep silence on the lip of the abyss that no boat can survive. Go deeper and the pressure crushes you faster than your nervous system can tell you're dead; float higher and the hiss of your super-silent pumps betrays your presence.

And the size of the spy submarines!! Think of the midget subs (24 metres long and 47 tonnes) that penetrated Sydney Harbour in 1943; then think again of America's *Seawolf* and many others longer than a football field and weighing 8000 tonnes and more.

Remember the most deadly submarines ever - Hitler's U-boats of WWII, which weighed only 700 tonnes and rarely exceeded 50 metres – and one appreciates that Blind Man's Bluff is about underwater warfare on a new scale.

The objective in the 1960s and 70s was to track Russia's fleet and eavesdrop on its radio messages. One US mission went within five kilometres of the Russian shore at Okhotsk so a tapping device could be attached to an underwater cable.

More amazing: Subs returned many times to update the tap. Most amazing of all is that the most noteworthy information obtained was Russian telecom operators' accounts of what they did to local girls. One runs out of exclamation marks.

Many of these penetrations of sensitive Russian areas coincided with high-flying negotiations promising eternal peace between the USSR and the USA. Had the Russians detected any of these incursions who could have blamed them being interpreted in the heat of the moment as precursors to a US attack?

For centuries armed men caught tunnelling under castle walls have been treated with extreme prejudice.

How would you react if you felt the need to keep a shotgun in the kitchen – still commonplace in our outback – and one day you find a dangerous killer lurking beneath your floorboards?

Pop would go the weasel, eh? There goes New York! Another Pop! And Washington's gone followed quickly by Moscow, Omsk, Domsk, and about ten more Ruski cities!

Talk about intruders under the floorboard! This was Guy Fawkes and his barrels of gunpowder having a quiet smoke in your loo.

When first published this true and amazingly detailed story was hailed by the Western Press as a masterpiece of research by the authors, and of great bravery by the sailors who risked and lost their lives in exercises that today seem outrageous.

The excuse is, of course, that the USSR was spying on us; the excuse of the school slag who gives everyone the clap but seeks exculpation by saying: "Everyone's doing it."

That the USA proclaimed the Axis of Evil and the Russians said god-knows-what, is beside the point. The miracle is that nobody in The Kremlin, with massively armed American subs inside their territorial waters, panicked and hit The Button.

What restraint, what fail-safe procedures, what restraint again. Think of the gaping-mouthed packs of wild-eyed men we see on TV rampaging through Middle Eastern cities. They too want The Bomb, and nuclear parity seems only fair. What would they do faced with similar provocation?

There were collisions and near misses between the good guys and bad guys. One underwater crash between the *USS Tautog* and USSR submarine K108, the *Black Lila*, left the American crew deeply depressed, certain they had accidentally tipped their Russian rival into the crushing pressure of the abyss with loss of all hands.

Thirty years later Boris Bagdasaryan, the captain of *Black Lila* emerged to tell that his sub and its crew had survived. There had been no plunge past crush depth. The Russians had simply stayed silent while the Americans, sad as they were, fled the scene. (These massive submarines could travel under water at up to 50 knots – that's 93 kph).

In the end, according to this exhaustively researched book, there is no evidence that a single piece of critical information was derived from this $multi-billion operation.

Worse, one feels that had a single nuclear armed USSR submarine been detected playing Russian roulette three miles off Martha's Vineyard or in San Francisco Bay, quite a few Russian cities would have been nuked to hell and still glowing strong.

Alarming thought? You betcha!

Give yourself a treat and read this book and be terrified of the men who run our world. Regardless of whether they're for us or agin us. ***- ARCHIE BAYVEL***

AUSTRALIAN SEAFARERS' WELFARE COUNCIL

The shipping industry depends on the seafarers that crew the ships of the world's commercial fleets.

The welfare of those seafarers is a major factor in the safe working and operation of the industry. However, until early last decade, there had been little in the way of a coordinated national approach to this vital human aspect.

The *Maritime Labour Convention 2006* encourages the development of welfare boards at the port, regional and national level.

The Australian Seafarers' Welfare Council (ASWC) promotes the development of existing welfare facilities and assists in coordination of port/regional welfare committees.

Australian Government
Australian Maritime Safety Authority

Australian Government
Australian Transport Safety Bureau

Shipping Australia Limited

The Mission to Seafarers
Caring for seafarers around the world

RioTinto

itf

Apostolatus Maris

Ports Australia

SSH

ASA
Australian Shipowners Association

For more information on the ASWC please visit

www.amsa.gov.au/seafarers_welfare