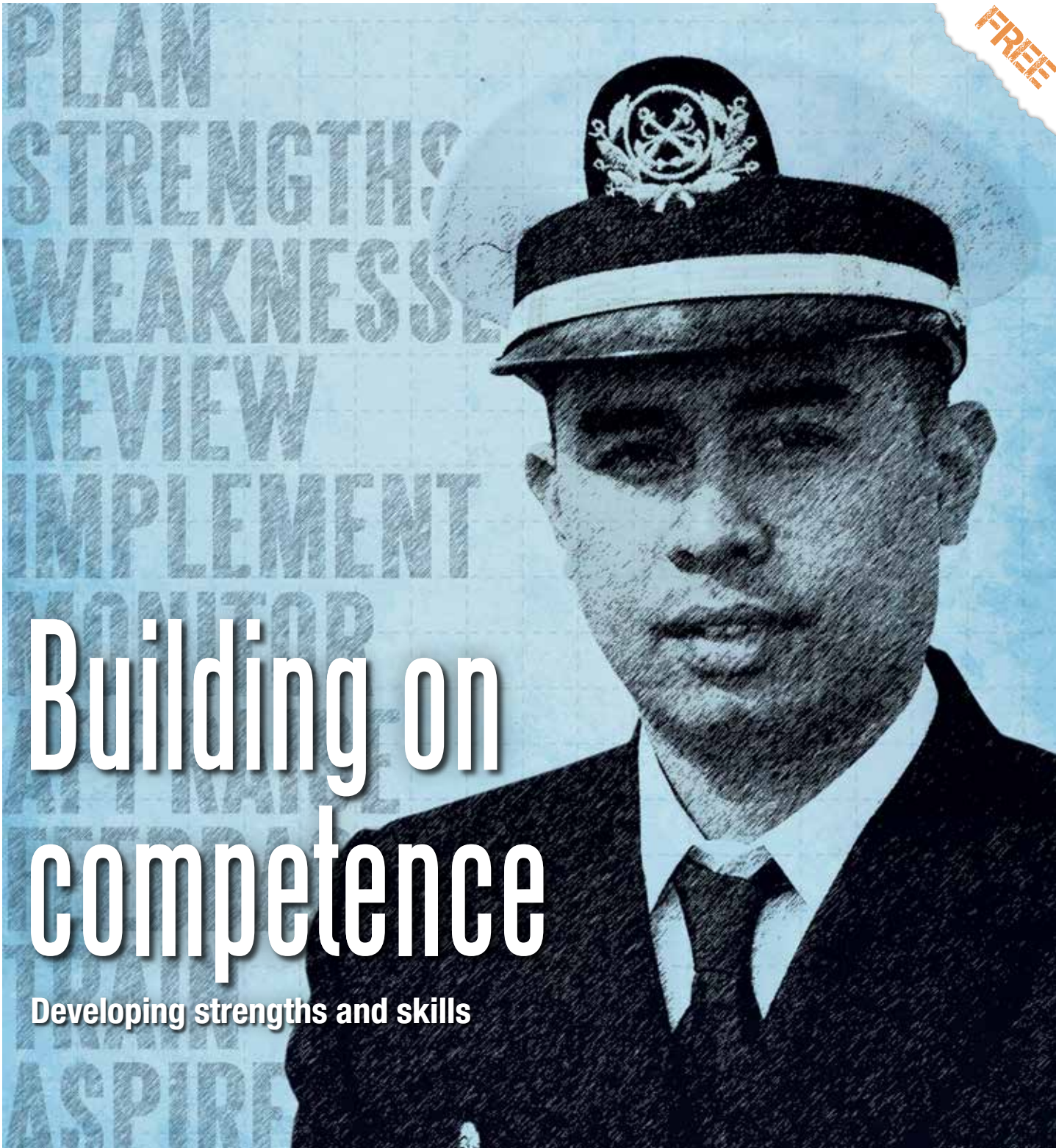


NAVIGATOR

THE

Inspiring professionalism in marine navigators

FREE



Building on competence

Developing strengths and skills



A free publication by **The Nautical Institute** in association with the **Royal Institute of Navigation**



Comments on competence

You've worked hard, studied for years, completed the required sea time experience and are now the proud owner of a brand new Certificate of Competency (CoC). Issued by your Flag State, this tells the world that you are 'competent' to be a Third Mate, Second Mate, Chief Mate, or even Master of a merchant ship – well done!

However, do you really feel like an expert? If you're like most people, you will be very proud of your achievement, but also aware that there is much more to learn before you feel fully confident in your new post. It probably took a few years in your previous role before you felt able to relax and trust your abilities and judgement. So why is this, when you've passed your exams and been certified as competent?

A popular theory (the Dreyfus & Dreyfus model of skill acquisition) suggests that a student passes through five distinct stages: novice, competence, proficiency, expertise, and mastery. In the novice stage, a person follows rules as given, without context or

sense of responsibility beyond obeying what is laid out for them. Competence is characterised by active decision-making when choosing a course of action. Proficiency is shown when an individual develops intuition to guide their decisions and devise their own rules. So, progression moves from rigid adherence to rules to a more intuitive mode of reasoning, based on accumulated knowledge.

In the maritime world, the IMO has identified the 'competencies' of a navigating officer, describing them in the STCW Convention and Code. Maritime schools teach these subjects and the flag states then assess if you, as a student, are truly 'competent' in these areas. This fulfils their legal requirements, but should not be your end goal as a professional navigator.

Many ship owners ask for more than just the IMO-defined minimum competencies in their deck officers. Instead, they require them to display greater proficiency above and beyond this, before they are promoted

to the next level. Some ship owners/managers define extra competencies related to their business, for example specialist operations or commercial knowledge. The IMO is concerned with safety, security and environmental protection; the ship owner must try to be profitable too.

In this issue of *The Navigator* we aim to show you how to 'build on competence' and further your knowledge. We will reveal tips for demonstrating your own skills and identifying those of other people.

At The Nautical Institute, we are delighted by the high level of support and praise that *The Navigator* is receiving, not to mention the number of navigational officers contacting us for further learning opportunities. We've set up a separate area of our website for those inspired to learn more. Please visit our blog at www.nautinst.org/navinspire for regular updates and new material related to issues raised in this publication. Tell your friends too; there's plenty of learning to go about!

INSIDE THIS ISSUE

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IFAN

03 ALL AT SEA

Contributions from readers of *The Navigator*

04 – 05 PLAN AHEAD

NI Training and Quality Manager, Theresa Nelson shows how simple planning can have a great effect on developing professional competency throughout your career

06 – 07 PERFORMANCE REVIEW

Gilbert Maturan, Global Training Manager at Teekay, explains how analysing performance places the emphasis firmly on developing existing competencies

08 WATCH OUT

Accident report: A collision involving two ships revealed worrying gaps in competency

09 WHO'S NAVIGATING?

Navigational officer Kyle Macleod reveals how he keeps on top of developing

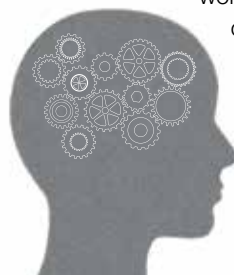
his knowledge and skills, both ashore and at sea

10 WAY POINT

Dr Andy Norris discusses the importance of building on competencies, especially when it comes to technology at sea

11 TOP TEN

Ten key things to remember about building on competency



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We welcome your news, comments and opinions on the topics covered in *The Navigator*. We reserve the right to edit letters for space reasons if necessary. Views expressed by letter contributors do not necessarily reflect those held by The Nautical Institute

Good day! I'm a deck cadet onboard the vessel *MOL Growth*. Today, we received a distress message that four yachtsmen capsized on a boat near Sepetiba, Brazil. All four were saved by our crew. This was very good practice for a young cadet. So good luck, and don't forget, safety first!
Dmitry Marushchak, Deck Cadet



The most important aids to navigation of all!

I am a Master, currently serving onboard the Ethiopian Flag general cargo ship, *M/V Assosa*. I was happy to read the issue about CPD. It is a lifelong learning process, which makes us a fully-fledged professional and, above all, human.
Captain Sileshi Siyoum, Master

I hope it is smooth sailing for everyone! I'm a South African deck cadet, doing my second sea phase on *SS Gemmata*, a Singapore-flagged LNG carrier. It was always my dream to sail on tankers. *The Navigator* has been helpful throughout my cadetship. Thanks to technology, I have caught up with all the issues since October 2012 via the mobile app. To all seafarers out there, I suggest you get yourself the app and get up to speed before the hard copy even gets onboard ship.
Bonga Brian Xhakaza, Deck Cadet

I am a trainee Third Officer onboard *LNG Clean Ocean*. *The Navigator* is very informative reading. All crew members onboard my vessel wait in line to read each new edition with great pleasure. All topics are always discussed and feedback shared. Great job!
Andrei Romanenko, Third Officer

Professional development is a very inspiring topic for me. Reading about it was like an eye-opener for seafarers. There are many doors open to us, not just at sea but also onshore. I keep myself motivated while onboard by learning as fast as I can, because whatever success we achieve onboard will become our tools, or passport, when working onshore. I salute navigators sharing their

comments in *The Navigator*. They are just like mentors for us; in a simple way, their ideas can change our perceptions.
Joseph Inding Jr, Second Officer

I'm presently serving as Chief Officer on *MSC Joy*, a Malta-flagged containership running in the Baltic and North Sea. I've read every issue of *The Navigator* since I was a Third Officer.

Being a seafarer is a tough job, taking our time and a lot of nerve, but giving us something special instead, that cannot be put into words. Good seamanship is something that is always upgrading and developing. Sharing this knowledge among my colleagues and shipmates is important to me. It makes us closer; it makes us a crew!
Denis Artyushin, Chief Officer

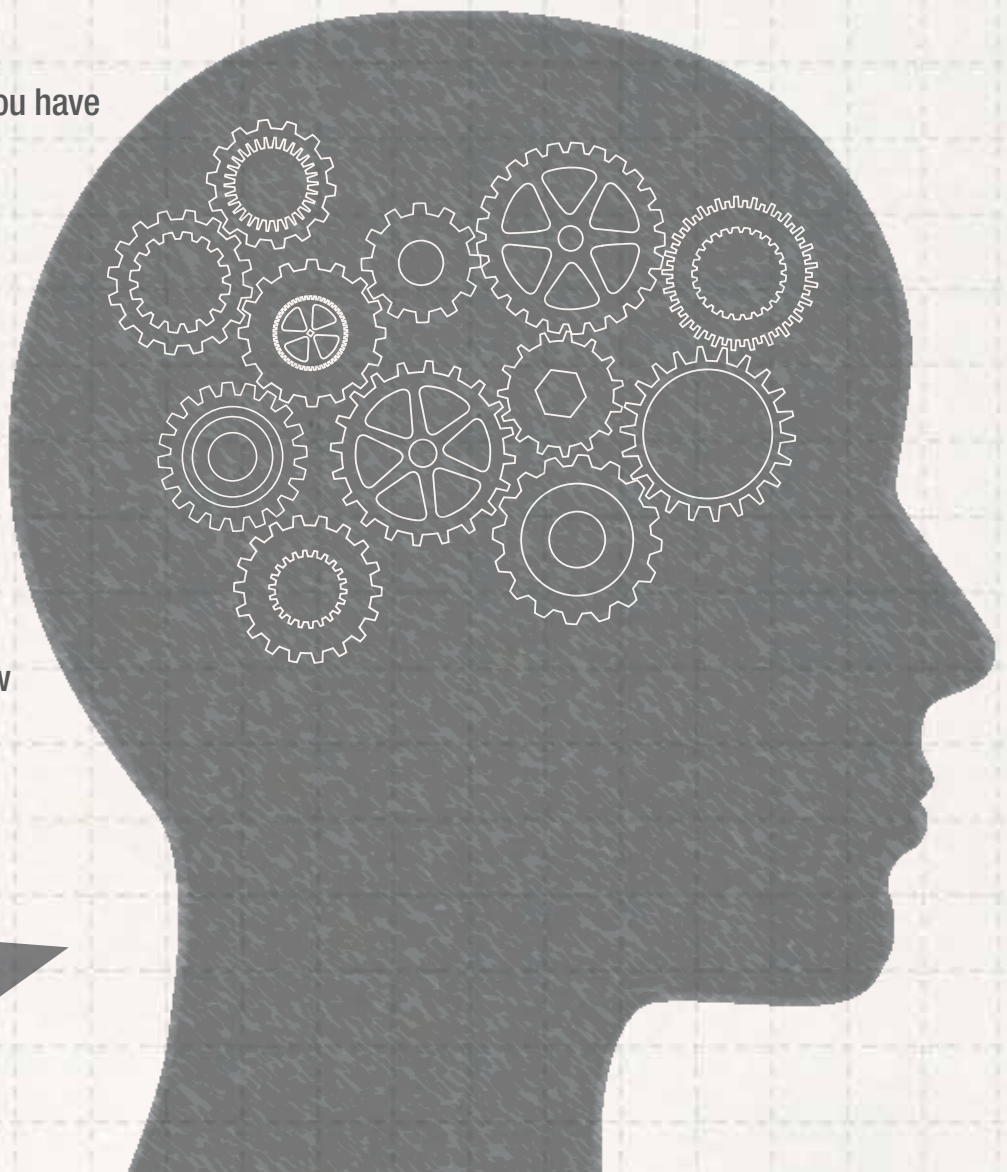
I'm Third Mate on board the VLCC *Watban*, a 300,361 DWT tanker, 340 mtrs long and 56 mtrs wide. The remarkable thing about being on a VLCC is when you realise the value of the cargo you carry on a routine voyage. Let's see: we're carrying 298,258 MT (95% load), which is 2,104,246 barrels of crude oil. Multiply by \$45 per barrel equals about \$94.7 million. That adds even more responsibility during navigation and cargo operations!

High standards of safety and good seamanship practices are the only things which help to avoid big environmental damage, economic loss – and most important, help to bring seafarers home safe to their loved ones.

Max Khromov, Third Officer

Plan ahead: navigating your way to greater competency

You are a young, junior officer. You have been trained and have received a Certificate of Competency. You join a ship and are given responsibility for your own navigational watch. Are you ready? Do you know everything you need to know? If not, how do you go about learning, now you aren't at nautical school anymore and don't have any instructors to guide you or a task book to show you what you're supposed to know?



The first thing you should do as a navigating officer in a brand new role is go back to what you have already learned and apply it to your current situation. All seafarers learn that in passage planning, one must Appraise – Plan – Execute – Monitor (IMO Resolution A.893(21)), in order to navigate safely between two points. The same model can be used to steer a course towards becoming a competent navigator.

Appraise

Figure out what your strengths and weaknesses are. For example, if you have just obtained your Certificate of Competency, you may have the International Regulations for the Prevention of Collision at Sea (IRPCS) memorised and be able to identify any light or signal that you see or hear. On the other hand, you may not be familiar with the radar or radio equipment onboard your particular ship. Over your first few days or weeks, note down these strengths and weaknesses. Don't become disheartened if there are a lot of things you don't seem to know – everyone with more experience than you started in exactly the same place!

Plan

Since you may be in charge of a navigational watch, which means that the safety of the crew, cargo and ship is in your hands, it is imperative that, once you have identified your strengths and weaknesses, you make a plan to address them as quickly as possible.

Why should you address your strengths? If you know something well, but don't practice or review it, you will experience what is known as 'skill or knowledge fade'. In other words, you will forget. In planning, you must allow time to regularly review the things that you know well so that the knowledge doesn't fade.

In addressing weaknesses, you need to develop a plan of attack. To start with, identify strategies that work for you. Are you good at learning something by reading about it? Do you remember better if you hear about something? Or do you need to draw pictures and diagrams? Whatever way you learn best, you will need to have a record of the things that you learn. Why is this important? Let's take an example.

Perhaps you don't know how to carry out the trial manoeuvre on your ship's radar. Another officer explains it to you. If you don't make notes of what he or she tells you, it will be difficult to remember the next time you try to perform that function. You might look in the radar manual. Again, if you don't make your own notes, you will not be able to consolidate the knowledge in your own mind. By taking notes, you are putting the information into your own words, deepening your understanding. A photo taken on a phone can aid a visual learner. Look for manufacturers' demonstrations on the internet, or for onboard computer based training (CBT) if you are an audio/visual learner.

Keeping a record serves several purposes. First, it helps you to understand something better by putting it into your own words. Second, it makes it easier to recover the information – it is your record and so you know where to look for it when you need it. Third, if you are persistent in keeping a record you will soon realise how much you have learned. Lastly, it is a way of evidencing your professional development (see *The Navigator*, issue 9).

NEVER HESITATE TO ASK A QUESTION IF YOU DON'T KNOW SOMETHING, OR HAVE ANY DOUBT, OR ARE UNCERTAIN ABOUT WHAT YOU SHOULD DO

An important part of any plan is to set goals. Just as you set estimated times of arrival and departure for the various ports you will call at on your passage, you should set estimates for how long it will take to address the weaknesses you have identified, as well as how much time you will spend reviewing the things you know so you do not forget them. It might help to set a goal of what you want to learn by the end of the week and then break that big goal into smaller, daily chunks.

Part of your plan may be to find a mentor. Try to find someone onboard ship with whom you can speak about the

questions and challenges you encounter. This may be a means of establishing a relationship that can become of great benefit to you. Never hesitate to ask a question if you don't know something, or have any doubt, or are uncertain about what you should do.

Execute

You know what you need to learn and you have developed a plan. Now you need to carry the plan out. This will be the hardest part. Being a competent navigator is only a part of the responsibilities you will have as a deck officer. You may need to carry out safety checks, take part in drills and work cargo. Somewhere, you'd also like to find time to eat and sleep! You may be tempted not to take 15 minutes to review the IRPCS or spend the half hour it takes to read about trail manoeuvres on the radar. You'd much rather watch a movie.

Just remember, everything you learn now is up to you. You must motivate yourself. In order to execute your plan with success, you need to eat well, get as much sleep as you can and stay physically fit so you can remain mentally alert. An excellent resource for learning about these matters is The Nautical Institute's publication, *Human Performance and Limitation for Mariners*.

Monitor

The only way you'll know if you are making progress is if you monitor your plan. At the end of each day, see if you have met the daily goals you set for yourself when planning. At the end of the week, see what you have accomplished. Reflect on what went well with your plan and what didn't. Think about how you feel: are you pleased with your progress and proud that you are becoming a more competent navigator? Or do you wish you hadn't spent the last three days watching the entire season eight of *Dexter*, instead of familiarising yourself with the ECDIS on your ship?

Even if your plan falls apart for a few days, don't give up – get yourself back on track and arrive at the end of your passage a competent and experienced navigator.

Author: Theresa Nelson MNI,
Training and Quality Manager,
The Nautical Institute

Building on competence

As technology advances, competencies that are required today will not be the same as those needed tomorrow. **Gilbert Maturan** describes how global maritime company **Teekay** supports its people in their quest to build on competency at sea

For young officers starting out, the process of completing years of maritime education, carrying out the required sea experience, attending shore-based training courses and acquiring the Certificate of Competency issued by their flag state can be considered quite a feat in itself. Yet, in meeting STCW standards, they have only achieved the minimum entry requirements, prior to deployment onboard a vessel. Once employed, they must complete further company-specific training and meet higher standards that go beyond the “minimum competencies”.

This raises a vital question for officers. Are you ready to rise to the challenge of becoming an excellent navigator?

Here are some practical tips to help you build on your competence – and confidence:

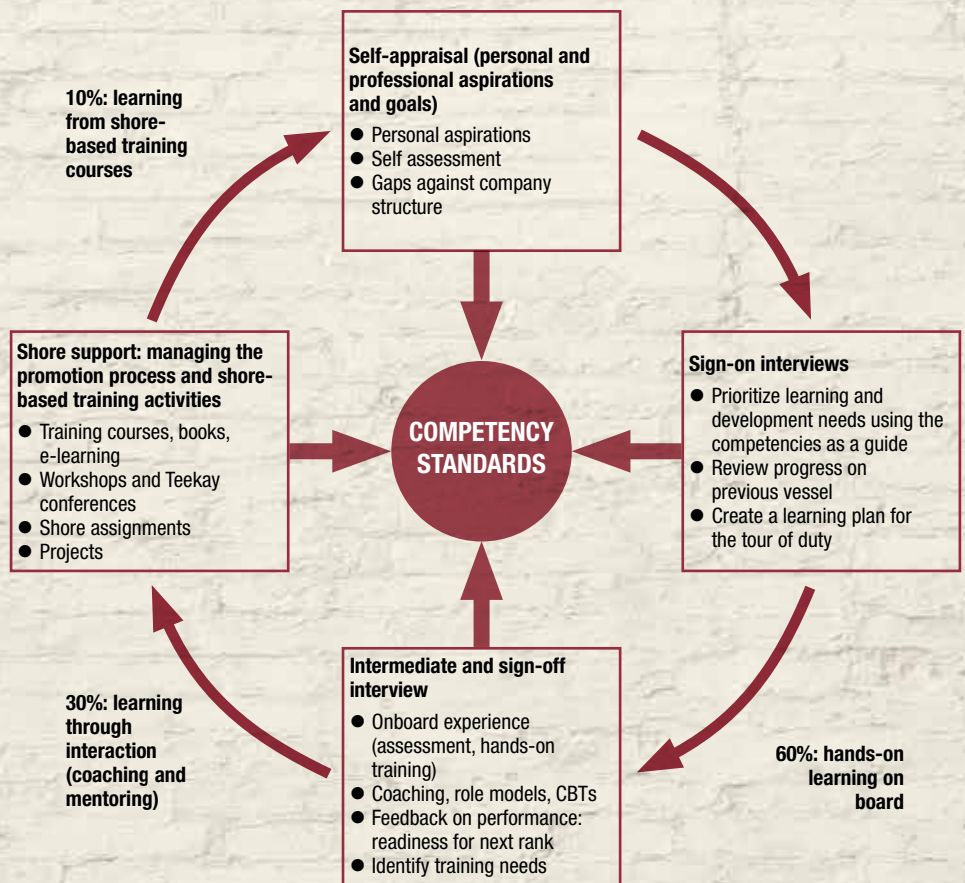
1 Know your competence

Carry out an accurate and honest appraisal of your competence against the expectations of your company. Identify your strengths and weaknesses, along with any gaps in your knowledge or skills that need addressing.

2 Create your learning and development plan

Write down your personal aspirations and learning goals for the future, again based on what your company expects of you. If the company has a competence matrix, use this as a guide. Prioritise areas that are critical to your tasks/duties for your specific tour of duty. Discuss them with a senior officer or supervisor to see how you might be able to work towards your learning goals.

SCOPE Process – This diagram shows an overview of the SCOPE process components and how they contribute to Teekay competency standards (see case study).



3 Be proactive and engaged

Be enthusiastic and show a positive attitude to all your tasks, seeing them as opportunities for hands-on learning onboard ship. You can supplement this by reading manuals and studying operating procedures etc. Engage with all drills and training exercises to hone your proficiency.

4 Look for role models, coach and mentors

Observe your colleagues and take inspiration from positive role models. Be open to learn from people with more experience than you and take the initiative to approach mentors/assessors and ask them to evaluate your performance and give you

feedback. It will help build your confidence if a third party confirms that you can do your job properly, and allow you to identify any gaps that need to be addressed.

5 Make the most of your performance reviews

Make sure you keep track of your own progress in achieving your learning and development goals. You need to show a consistently positive attitude, and maintain a high level of knowledge and skills onboard to achieve a positive report.

6 Attend shore-based trainings courses

Any gaps in your competencies not addressed while onboard should be prioritised after you have completed the tour of duty and disembarked from your vessel. Coming ashore gives you the chance to attend shore-based training courses, e-learning, workshops and conferences.

7 Remember that it's a cyclical process

When returning to your vessel, repeat the process described above until you feel that you have achieved your development goals and are confident enough to carry out your duties to the best of your abilities and be promoted to the next rank, once you are ready.

To be an excellent navigator, you must set your mind towards a positive attitude towards building on competency and realise that it is a continuous process of learning and developing skills. If this can be anchored on a well-structured professional career development plan – whether it is one developed by a company, like the one in the case study, set out by a professional body, or even developed by yourself – you can be certain that you are on the right path to success.

ARE YOU INSPIRED?



Case study:

How Teekay offers SCOPE for developing

Teekay's 'Seafarer Competence for Operational Excellence' ('SCOPE') initiative is well established and recognised by the industry as a top competence management system. Designed to improve all seafarers' performances, it is based on best practices developed by Teekay. SCOPE offers Teekay employees a clearly defined career management path, from recruitment to training, including transitions to positions ashore. It sets out one single standard to assess each seafarer according to what is expected of someone of their rank.

definition focuses on overall knowledge and understanding, as well as aptitude, experience and, finally, attitude and motivation.

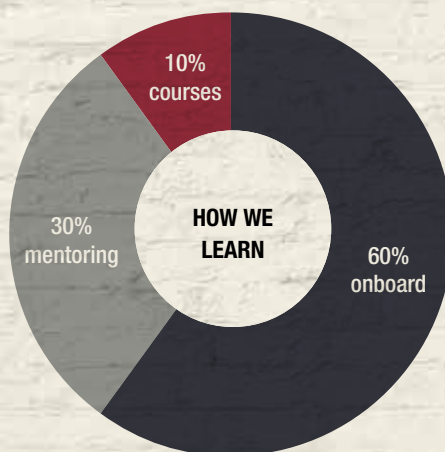
Finally, Teekay has identified a set of required competencies for all ranks of seafarer, divided into two main groups. Firstly, there are the skills and knowledge, based on the company's own best practices, that employees must demonstrate alongside their basic STCW competencies. These enable seafarers to carry out their role onboard ship safely and successfully. Secondly, those in management positions must also possess leadership behaviour competencies that allow them to lead and work with others.

Each Teekay competency is valid for five years, starting from the date the competency was successfully achieved. After five years, seafarers are then formally re-assessed and revalidated to ensure that they remain up-to-date and confident in their knowledge and skills. All Teekay seafarers have their own Continuing Professional Development (CPD) portfolio, or structured professional career development plan. This documents the results of their competence assessments and analyses how well they perform during their day job. It allows for continuous improvement, provides opportunities for career development and is a highly effective mechanism for giving and receiving feedback.

The aims of Teekay's CPD strategy are as follows:

- > To provide a framework for discussion, support and encouragement by the seafarer's line manager
- > To set goals that will lead to improved competence and performance of the individual, greater teamwork and overall improved organisational performance
- > To provide a tool to manage performance objectively and achieve strategic company objectives, while fulfilling Teekay's philosophy of promoting from within the fleet where possible.

TEEKAY BELIEVES THAT LEARNING HAPPENS AS FOLLOWS:



60% of learning occurs onboard, through practical, hands-on experience

30% takes place through interaction with peers (coaching and mentoring)

10% comes from formal, short courses taken while ashore

Teekay also carefully defines 'competence', referring not only to a person's overall ability, but also their motivation to fulfil their defined role safely and successfully when judged against the company's exacting standards. This

WATCHOUT

In this series, we take a look at maritime accident reports and the lessons that can be learned

Collision highlights **competency** gaps

What happened?

A general cargo ship and a bulk carrier were travelling in a Traffic Separation Scheme (TSS) at night when they collided, causing damage to both vessels. The collision was brought about by the cargo ship turning into the path of the bulk carrier in order to avoid a fishing trawler in the vicinity.

Weather conditions were clear and visibility was good. The general cargo vessel was on an autopilot-controlled route and the Second Officer had just taken over the watch. On checking the radar, the Second Officer took note of the bulk carrier's presence. He later spotted a fishing trawler off the starboard bow, but did not use any AIS data to find out her status

The Second Officer on the general cargo ship assessed that his ship needed to give way to the trawler. However, the trawler's skipper was also making arrangements to change course. An intervention on the radio by Dover Coastguard was timely and well-intended but, inadvertently, it almost certainly influenced the Second Officer on the general cargo ship into taking action, altering course *towards* the bulk carrier. The Second Officer gave no sound signal to warn of the change of course. He also failed to notice the bulk carrier's proximity to his vessel. At no point did he check visually, nor by radar, that his intended manoeuvres were safe. The resultant switch in direction caused his ship to collide with the bulk carrier.

Why did it happen?

The Second Officer was relatively inexperienced and had never taken the watch alone at night before. He didn't call for help from the Master or other senior officer, and did not have adequate situational awareness himself to cope with the situation. He did not make proper use of visual checks, nor the navigational equipment at his disposal, so was unable to react in good time to course changes made by the other vessels involved. By the time he realised what was happening, he was unable to prevent the collision.

The issues

- > The Second Officer was very inexperienced and he had not yet developed sufficient competency to keep a bridge watch in the Dover Strait at night by himself.
- > After taking action to avoid the fishing vessel, he was uncertain as to the action he should take next and he lost situational awareness.
- > Although it was dark, the Second Officer on the general cargo vessel was not supported by an additional lookout. He did not call for the Master, nor anyone else to double check his decisions.
- > The Master's decision to allow an inexperienced officer to keep the bridge watch by himself in the Dover Strait at night was ill-judged and contrary to international requirements.

What changes have been made?

- > The ship manager has adopted a more structured approach to the training and development of its junior officers. It also issued instructions to its fleet regarding the use of an additional lookout and electronic aids for collision avoidance.
- > The Merchant Navy Training Board has started to prepare guidance for companies and seagoing officers covering junior officer development and confidence building.
- > In addition, the Maritime and Coastguard Agency has taken action aimed at improving the vessel traffic services provided by Dover Coastguard.

This summary is an edited version of UK Marine Accident Investigation Branch (MAIB) report 25/2014



If you find our accident reports useful, check out The Nautical Institute's Mariners' Alerting and Reporting Scheme (MARS). A fully searchable database of incident reports and lessons, updated every month. Seen a problem yourself? Email the editor at mars@nautinst.org and help others learn from your experience. All reports are confidential – we will never identify you or your ship.

Never **stop** learning!

Navigational officer, **Kyle MacLeod** talks about why he loves his life at sea and how he builds on his competencies and skills, both onboard ship and ashore

What interested you in building a career at sea?

When I decided to go to sea, I knew I wanted to be a deck officer; there was never any question of being an engineer (although I do like learning about that side of things). I've always liked the travel aspect of the job, as well as the skills and one day being different to the next. I didn't fancy the idea of working 'nine to five'. It's a job where hard work can see you rise relatively quickly throughout the ranks. I can certainly say that my life has been more interesting since I came to sea.

What were your thoughts when you first went to sea?

I was excited when I joined my first vessel, but after the first few days I felt a little overwhelmed. There was so much to learn on the bridge and on deck. It took me a few weeks to prioritise my learning. Eventually, I found my stride. It eventually sinks in that you are on your way to becoming an officer. Overall, I found the experience exciting. I couldn't wait to get home and tell everyone what I'd been up to. A lot happens during a four-month trip.

What do you like best about working at sea?

This might sound like a cliché, but the best thing is that every day is different. It is never boring. There is always a new skill to

Name: Kyle MacLeod

Current position: Second Officer

Training: Glasgow College of Nautical Studies, Scotland

learn or a new challenge to overcome. You plan as much as you can, but there are always changes. Dealing with problems and overcoming obstacles can be tremendously satisfying, especially as your experience grows. Time off is nice, but I always look forward to going back to sea. You quickly become as comfortable at sea as you are at home.

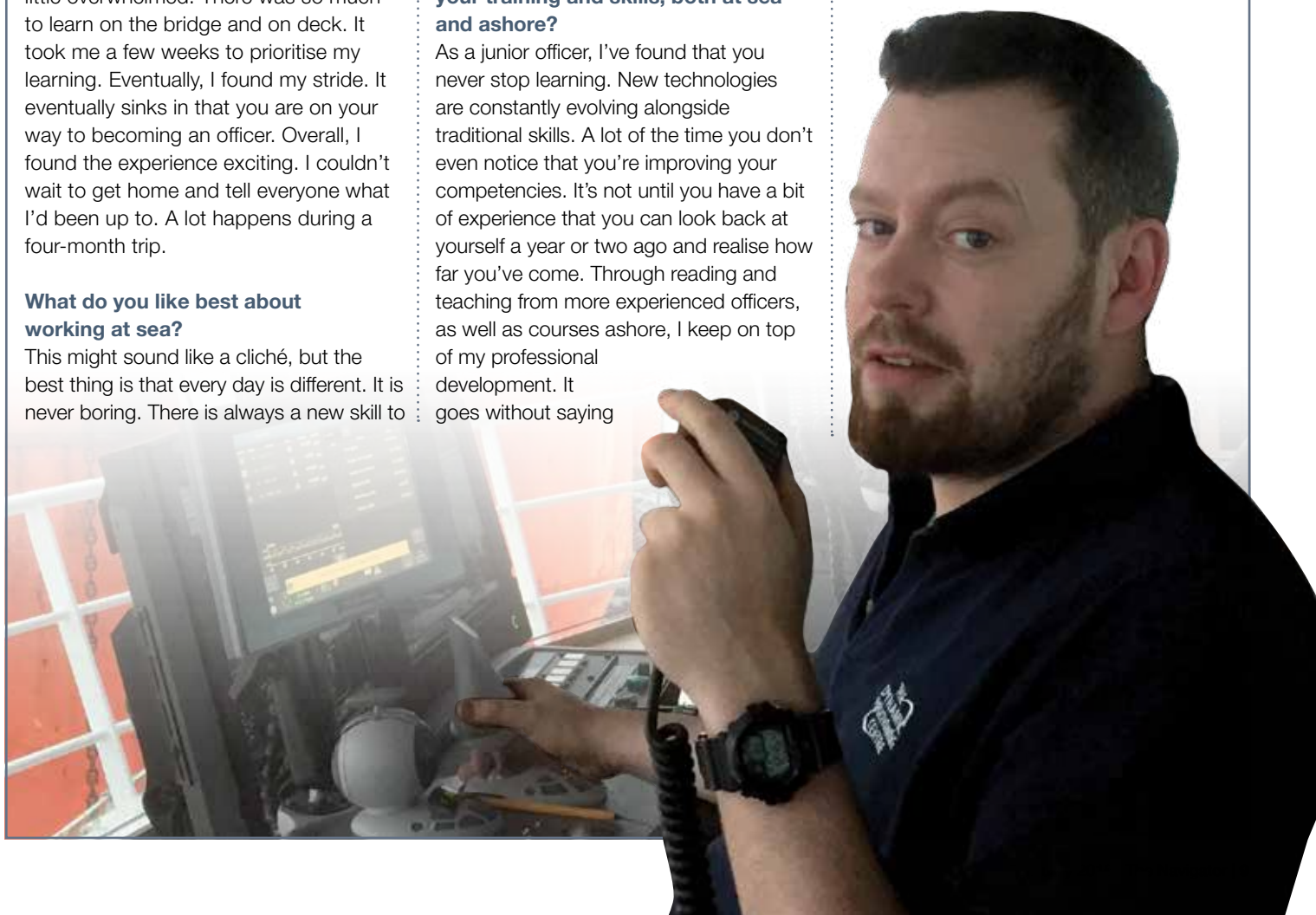
How do you keep up with building on your training and skills, both at sea and ashore?

As a junior officer, I've found that you never stop learning. New technologies are constantly evolving alongside traditional skills. A lot of the time you don't even notice that you're improving your competencies. It's not until you have a bit of experience that you can look back at yourself a year or two ago and realise how far you've come. Through reading and teaching from more experienced officers, as well as courses ashore, I keep on top of my professional development. It goes without saying

that you need to take advantage of every opportunity for training that presents itself.

How could the shipping industry better support mariners in building on their competencies?

Where practicality allows, I would like to see more online training available to seafarers. It already exists in many companies. Distance learning or online learning and certification have obvious advantages to seafarers. Many don't necessarily like having to attend courses when they are home and prefer to include training as part of their daily work schedule. There are still many ships that don't have the internet or the resources onboard to cater to this, although I understand this is improving all the time.





WAYPOINT

Dr Andy Norris FRIN FNI

Exploring competencies

Dr Andy Norris, an active Fellow of The Nautical Institute and the Royal Institute of Navigation, looks beyond basic competencies and asks how navigators can build on what they already know

There is no limit to the degree of competence that can be achieved in a job as demanding as a bridge officer. Raising your own competence not only reduces the likelihood of your decisions contributing to an accident, but also significantly increases the chances of bettering your career.

An important part of enhanced competence is in staying up to date with the emerging issues within the maritime world, well before they contribute to formal training and legislation. Keep an eye on news about the latest maritime accidents – would you have been misled under the same circumstances? Also, visit websites such as those of IMO, IHO and IALA regularly, to see the direction that international thinking is going and how it might affect future navigation-related tasks. This will help you fully understand the reasons behind proposed changes, most of which are directed at enhancing safety, perhaps in areas where you never realised there was an issue. This will greatly help your own awareness of potential problems.

An area often overlooked is navigation-related research into technology. Much of the work in this field is aimed at reducing weaknesses in our present systems, some of them quite newly recognised. For example, many bridge officers have only recently become aware of the vulnerabilities of Global Navigation Satellite Systems (GNSS) to simple jamming and interference, even though this has been causing ever-increased discussion by specialists over many years.

Of course, all bridge officers have been taught never to rely on any single navigational aid – but detailed knowledge about potential problems really assists you in detecting them, and improves your



USEFUL LINKS

www.imo.org – International Maritime Organization

www.iho.int – International Hydrographic Organization

www.iala-aism.org – International Association of Marine Aids to Navigation and Lighthouse Authorities

AN IMPORTANT PART OF ENHANCED COMPETENCE IS IN STAYING UP TO DATE WITH THE EMERGING ISSUES WITHIN THE MARITIME WORLD



decisions on the actions needing to be taken as a result. Somewhat ironically, most maritime users of GNSS actually experience very high levels of availability and accuracy, giving the false impression that technology is always right.

Technical details

Because of the vulnerabilities of GNSS, and not just jamming and interference possibilities, technologists have put in a lot of effort into looking at alternative systems to satellite positioning. For example, there has been a huge growth of interest in inertial systems based on MEMS (micro-machined

electromechanical systems) and, more recently, nuclear magnetic resonance (NMR) principles. Understanding more about such systems highlights their important potential advantages – they are totally independent of any system external to the vessel and cannot be jammed.

Perhaps this knowledge helps emphasise the advantages of using established dead reckoning/estimated positioning (DR/EP) techniques at sea. All modern ECDIS systems have a DR/EP mode that operates parallel to the normal GNSS-based system, greatly simplifying the technique. Few navigating officers seem to use this facility, even though it could be invaluable in detecting gross GNSS problems, particularly in ocean waters. Admittedly, you have to be knowledgeable to use it – but that is what enhancing your own competence is all about.

Good use of web search engines, at least when onshore, will help you keep in touch with evolving navigation technology. Simply entering the term 'navigation technology' results in numerous interesting links. Do check the origins of the source, but just about every link resulting from this particular search item will lead to interesting and often highly valuable information. In addition, the websites of the Royal Institute of Navigation and similar bodies offer great insights into how the wider navigational world is evolving.

TAKE 10

In this issue of *The Navigator*, we have looked at how to build on competencies to improve knowledge and skills. Here are ten points to remember

1

Well done!

Completing years of maritime education and sea experience, attending shore-based training courses and acquiring your Certificate of Competency (CoC) are all feats in themselves. Once you have met STCW minimum standard, the next stage of your journey begins.

2

Proficiency = competency + experience

Understand that a lot of experience and further learning will be needed, in order to build on your competency.

3

Planning makes perfect

Create personal aspirations and learning goals using a competence matrix as guide. Prioritise learning critical to your tasks for the tour of duty.

4

Be positive

Always be enthusiastic; hands-on learning onboard is extremely helpful, as is reading manuals, operating procedures and CBTs. Get actively involved in all drills/training to hone your proficiency.

5

Write it down

Keeping a journal of your goals and learning activities helps you plan and reflect on your professional development. It is also useful to review your progress regularly, so you don't forget what you've already learnt. The Nautical Institute's CPD scheme is an excellent way to do this.

6

Embrace all things new

The industry is always evolving. By monitoring new developments in technology and regulations, you will prepare yourself to use them effectively and become more aware of any existing deficiencies.

7

Mentoring matters

Observe colleagues and take inspiration from those who are positive role models. Be open to learning and ask mentors/assessors to evaluate your performance and provide feedback while you demonstrate your skills.

8

Ready resources

In addition to onboard learning materials and shore-based courses, there is a wealth of information online, including manuals, trade journals, video tutorials and, of course, books from respected publishers like The Nautical Institute.

9

Performance review

Periodically review your performance and reset your learning objectives. It may be useful to seek advice from others about what future learning goals might include.

10

Pass it on

Recognise that every navigation officer on the bridge must continually learn and gain experience. Help them do that by sharing your knowledge with those junior and senior to you. Maintain realistic expectations of other people's levels of competency.

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AND THE WINNER THIS ISSUE IS...

Congratulations to our Navsnap winner Hamza Belmedani, second mate onboard the LPG carrier *Rhourd El Fares*



Hamza Belmedani
NAVIGATOR CHAMPION