

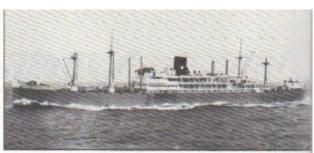
The Newsletter of the Nautical Professional Education Society of Canada

(Society founded in 1995 by the British Columbia Branch of The Nautical Institute)



November 2023

The Captain's Underwear



Eastern Prince

by Captain L Scott

I was reminded of "the good old days" – sailing on the *Cingalese Prince* and *Eastern Prince* around the world. On one trip, we carried a deck cargo of wild animals and reptiles from Borneo. They had been caught by a "bring 'em back alive" fellow and he was a passenger taking them to the Bronx Zoo. As Mussolini had decided to attack Abyssinia, we were forced to sail around the Cape. The weather worsened on the way south, so it was necessary to move the cages from the deck into No.4 'tween deck. All except four large cages holding a family of orang-utans that were in the comparative safety of the fo'c'sle space and under cover. More about them later. (I sailed on the *Cingalese Prince* and *Eastern Prince* but once Mussolini's name appeared I realised these must have been earlier 'Prince' boats. David).

One box contained a 25ft python that was expected to sleep all the trip (having been given a whole pig to eat before sailing). Unfortunately it was disturbed and broke out of the box, and there was then a loose snake in the 'tween deck. Captain Finch came to the 'half deck' with the hunter. "We want three volunteers to help recapture the python", he said, "You, you and you". It was explained to us that it would be 'a piece of cake'; the hunter would lead the way, grab the python's head to prevent it coiling, and we would help to pick it up and re-stow it in the box. Easier said than done! Carefully opening the hatch at the vertical iron ladder, we went into the dark 'tween deck, following the torch held by our leader. He spotted the snake in a corner and was just about to reach for it when up it shot, waving its head in a menacing manner. I don't remember whether I was first out of the hold or not, but we had the hatch secured in no time. Next day another attempt was made. This time we found the snake in a deep sleep with the bumps of a dozen chickens visible inside – it had broken into a box of live chickens, that were the food for the carnivores, and eaten the lot. We were able to make a tunnel over the snake, using bags brought up from the lower 'tween deck. The snake was woken by prodding it and shining the torch at its face – it slithered away from the light and into the box that had been placed at the end of the tunnel.

The four orangs were a family – a huge male, a smaller female and two babies. We apprentices helped 'Mr. Hunter' to feed the animals and found the orangs especially interesting. At night the two adults slept holding hands through the bars of their separate cages. The big red-haired male was a powerful animal with a long reach and, when near the bars, he could nearly reach the ladder (from the deck to the fo'c'sle head). Unfortunately, the only person who didn't know of this danger was Captain Finch. Picking up the cable at the anchorage in Cape Town we had a fouled anchor. The Captain, immaculate as usual in white shorts and shirt, trotted up the long foredeck to assess the situation. He swung round the ladder rail to ascend, and the orang, close to the bars, shot out a huge hand and just managed to





grab the Captain's shorts. Luckily they gave way – the Captain vaulted the fo'c'sle rails and ran back down the deck in his underwear – much to the amusement of the passengers lined along the bridge rail.

There was also one night when it was thought that the big orang had escaped and had peered through a porthole at a Junior Engineer in his bunk. After searching the accommodation with loaded rifles at the ready, it was found to be a false alarm – it was later ascertained that the Engineer had been awakened to see a face at the porthole, with the moonlight behind it. The dark shape had said nothing and disappeared. It was actually another Engineer looking for a fourth at bridge, and thinking his friend asleep, he had not disturbed him.

I was on the *Eastern Prince* in Buenos Aires on the usual run from New York, but this time we loaded a cargo of meat and headed up the South Atlantic for the UK. We were in company with another of the Group's vessels, the *Highland Brigade* or a sister, and it was our duty to keep station on her. A few days out and we had to reverse course for several hours until dark, the lookout having spotted the smoke of a very fast moving vessel right ahead and crossing. I've often wondered since if we just missed a Raider!

We were zigzagging along near the Azores when the Highland boat put up "K" flag (Stop your vessel instantly). Thinking that we were making it all too easy for the subs, we hove to, and our friend passed slowly to starboard.



Using a megaphone and order came across for us to lower a motorboat and send our doctor over to perform an immediate operation. Our Captain wanted to know why their own doctor could not do the job. "It is our doctor that needs the op," came the reply. Having sent the doctor over, we once again resumed full speed and our zigzag pattern. We didn't see our doctor again until berthed in the UK. He had to borrow clothes as the weather got colder because he embarked in 'whites' and we arrived during the winter. His transfer in mid-ocean was to no avail however, as the patient was too ill to have an operation.

After one or two trips across to the States bringing back

much needed war equipment, it was decided to convert the *Eastern* to trooping. During one of the many raids on the Liverpool docks, we received a direct hit; I was lucky enough to lose only my cabin and possessions. Some months later I rejoined her to sail out on the first trooping voyage to the Cape. The ship I'd just left, the *Javanese Prince*, was sunk on her next trip from Liverpool.

My two years on the *Eastern Prince*, carrying troops between South Africa, Suez, Persian Gulf and India, was full of incidents. We joined in the re-occupation of Madagascar – a bit of a non-event actually. Far more hair-raising was our trip in the Mediterranean taking South African miners to Beyrouth (Beirut). On that occasion, our 'one' ship had 'two' destroyers as escort. One night a gunner fell asleep at his post and accidentally fired off tracer bullets. As this was the signal that an enemy periscope had been sighted, you can imagine the activity that ensued – 30 knot destroyers dashing about with their searchlights scanning the sea. Our Captain had to do some explaining when he was summoned to the Escort Commander on arrival at destination.

A couple of trips to Basra were made, during which the temperature was over 100 °F at midnight, and kilted bagpipers played on No.3 hatch as we sailed up the Persian Gulf. We brought out from Basra the first of many Polish refugees, taking them to Mombasa for settlement. I'll never forget the sight of these unfortunate old men and women emerging from the holds to visit the deck latrines and washhouses. They had been shorn completely of hair and had lost all sense of dignity in the Russian Camps – they all emerged on deck without a stitch of clothing! Panic stations for a while until interpreters could instruct the 'passengers' to wear clothes. On arrival in Mombasa the Poles disembarked, expecting to leave for South Africa. Another troopship with boiler trouble came in to port listing drunkenly, and we were told to prepare to embark her RAF troops bound for Bombay. One Warrant Officer was my brother Edward. When I got over the shock, I went to the Captain. I knew that the first rule of the Company re passengers was – "their best interests can be served by the Officers adhering strictly to the navigation of the ship". Captain Smith said, "It's a chance in a million – make the most of it!"





I don't know why the Eastern Prince was picked to be Commodore ship for a big convoy to Singapore because our engines were not too reliable by this time. We had on board a retired Admiral as Commodore of the Convoy and he carried with him a couple of signalmen. Our bridge watches were more than usually active, with flag signals etc. We were taken by surprise one morning, just before noon, by a Morse signal from a ship in the outer column -"Unidentified object over the convoy". The sky was clear blue and cloudless, and search as we might there wasn't anything to be seen. The Admiral gave his signalman orders to reply "Acknowledged" probably thinking that would be that. But no! Shortly after a further message was flashed to us - "Unidentified object is still over the convoy. I request permission to open fire". After some further fruitless searching of the sky, someone had an idea - probably he can see Venus (this was not altogether unlikely as we had used that planet for a latitude position at about 10.30am when it was on the meridian). So the next reply was, "Permission granted but suggest the range is forty million miles". Almost at once tracer bullets were streaking aloft. Then we were almost blinded by a huge daylight-signalling lamp from the horizon - "Stop firing at my balloon". Unknown to us we were being screened by a battleship and he had sent up a weather balloon. Next day he showed himself to us, steaming through the centre columns of the convoy before disappearing again over the horizon. Although we did not know it at the time, we had our first view of an RDF (Radar). The Admiral saw that over the big guns there were some unusual objects and sent a message to the battleship asking for an explanation. "A highly secret aid to gunnery", came the answer, much to the chagrin of the Admiral. He demanded to know the name of the Commanding Officer but that didn't help!

Our convoy spent several weeks in the Indian Ocean not reaching any destination; in fact we returned to Colombo – eventually taking the same troops down to Fremantle. While at anchor in Colombo harbour, the Captain asked for a volunteer to cox the motorboat taking a sick man to hospital. When the poor fellow was lowered into the boat, the sheet covering him moved, and I saw he was covered in smallpox sores. Arriving at the isolation hospital berth, I (and three crewmembers) found ourselves taking special showers – our clothes steamed and our boat sprayed with a disinfecting solution. It was the SW monsoon period and I had gone ashore in a gabardine raincoat – when it was returned to me the sleeves had shrunk almost to my elbows.

I left the *Eastern Prince* in Bombay after two years and came home, with several shipmates, on a Cunard trooper – an uneventful voyage, thank goodness.

Sea Breezes. November 1953.

Short-sea shipping opportunities underlined for Great Lakes region

Hamilton, ON – A new study sheds light on the potential advantages of short-sea shipping services between southern Ontario and the US Great Lakes region.

The study is authored by Fluid Intelligence, a data-analysis partnership of HOPA Ports and the McMaster Institute for Transportation & Logistics, with support from Transport Canada. It highlights the numerous trade flows that could benefit from integrating marine transportation alongside trucking services.

(Photo of Desgagnés vessel from Port of Hamilton)

"Short-sea shipping is an idea whose time has come," said lan Hamilton, President & CEO, HOPA Ports. "This study gives us the real data we need to identify the most promising commodities and routes, where marine transportation can help address our mounting goods movement challenges."



Currently, over 12,000 trucks per week make cross-border trips between Southern Ontario and US Great Lakes port areas, carrying non-perishable commodities that are ideal candidates for a marine service to handle the long-haul 'middle mile'. By exploring short-sea shipping services on the Great Lakes, the study envisions a future with reduced highway and border congestion, lower greenhouse gas emissions, and improved supply chain resilience.





Short-sea shipping, a widely adopted approach in Europe and Asia, is an increasingly appealing alternative to road transportation in the Great Lakes region. Factors such as population growth, highway congestion, driver shortages, and rising fuel costs have contributed to a growing interest in marine transportation. Importantly, short-sea shipping offers a significant environmental advantage, as one marine vessel can carry the same cargo capacity as 963 transport trucks, while emitting just 15% of the CO2 per metric tonne/km.

As Canada's busiest economic region, southern Ontario's critical infrastructure struggles to keep up with the demand on its highways. Issues such as highway congestion, border delays, lack of transportation redundancy, and truck driver shortages have been exacerbated by population growth and density. The economic cost of congestion in the GTHA alone is estimated to be up to \$6 billion per year.

The Fluid Intelligence study's key findings highlight the immense volume of cross- border goods movement within the Great Lakes region and the complex supply chains involved. The Great Lakes Region accounts for more than 50% of all U.S./Canadian bilateral border trade. If it were a single country, it would have a GDP of US\$6 trillion, making it the third biggest economy in the world.

Approximately 28.5 million tonnes of cargo per year originating in Ontario are transported by truck to the US, with 70% destined for a Great Lakes State. Conversely, at least 24 million tonnes of cargo per year originate in the US and move by truck to Ontario, with 55% originating in a Great Lakes State.

The study focuses on specific routes and commodity flows that are excellent candidates for new marine services. These include the potential for marine services between southern Ontario and ports on Lake Michigan and Lake Erie. Chicago and Milwaukee, with their concentration of economic activity and strong connections to the GTHA, stand out as promising origin/destinations. Overall, there are approximately 5,000 (within a 50km radius) and 12,000 (within a 100km radius) truck trips per week between five US Great Lakes ports and southern Ontario, all of which present excellent opportunities for modal alternatives.

By diverting just 10% of the existing cargo currently moved by truck between southern Ontario and the Port of Chicago, for example, the transportation system could save 220 tonnes of greenhouse gas emissions per week.

By Maritime Magazine 2023-06-23

"Foundational Study on Cross-Border Short Sea Shipping Opportunities" is available for download at https://www.fluidintelligence.ca/

Horses Adrift: I left school at sixteen to attend sea school for three months, and joined the Port Line

motor ship *Port Adelaide* as deck boy on January 9th 1949. Two voyages later, I was Ordinary Seaman on the *Port Wellington*, which was loading general cargo in King George V Dock, London. Our destination was the Australian coast via the Canary Islands and Cape Town.

m.v. Port Wellington

The day we sailed from London, deck cargo in the form of nine racehorses, including one stallion, plus one Hereford bull and one heifer was loaded. The horses and cattle were contained in very strong, wooden loose boxes made of two-



inch timber, braced in all directions and fastened to the deck ring bolts with wire strops passed right over the top of the boxes and secured taught by bottleneck screws. The boxes took up the whole area on the starboard side of the after well deck between the central accommodation and the poop, with a narrow walkway between the two cargo hatches and the loose boxes themselves. The port side was still the preserve of the crew's deck golf course.





The bosun, McRitchie, was in charge of the stock, but delegated the clearing out, feeding and grooming to me, which was to take no more than two hours each morning, Saturday and Sunday included.

The trip as far as Cape Town was uneventful, and, having been brought up on a farm I soon settled in to the routine of looking after the animals without fuss or bother. Leaving Cape Town, bound for Adelaide, the skipper took a great circle route and we headed for fifty to fifty-five degrees south. About six days out of Cape Town the weather deteriorated. One night was particularly bad. The great grey beards of the Southern Ocean rolled on unceasingly and appeared as high as the vessel itself. The wind was at gale force and green seas were coming aboard the starboard side with regularity. The vessel rolled, pitched and shuddered as she shook herself from the huge waves. Life was generally uncomfortable; it was impossible to sleep and one had to hang on to the side of the bunk at all times to prevent rolling out. About 0400, all hands were suddenly called and told to muster on the after deck as soon as possible because cargo was adrift. When we arrived on deck the seriousness of the situation stopped us in our tracks. Three horse boxes were smashed to pieces. It was pitch dark and the horses were nowhere to be seen. The other six horse boxes had been shunted aft and piled against each other, their horses still inside them. The cattle boxes were not affected.

As our eyes became accustomed to the light, we saw three horses. One was by the after rail, one by the mainmast deckhouse and the big black stallion was standing quivering in the engine room recess at the far

end of the well deck. We secured all three horses with a halter and tied them at the forward end of the well deck, where it was relatively sheltered.

By this time the "Old Man" had been advised of the situation and he immediately hove to in order for repairs to begin. The carpenter ordered the tonnage hatch** to be opened allowing us to obtain dunnage, wire rope and new bottleneck screws.

Being hove to, the ship was now relatively comfortable and reasonably steady. Spray still came aboard as the seas were huge and the wind still at gale force, but she was no longer shipping green ones. It was bitterly cold and my first job was to feed the horses where they stood and rub them down with wads of straw to warm them up.

Eight ABs, two ordinary seamen and four apprentices, under the guidance of the bosun and carpenter, then set about building three new horse boxes, straightening the others up and bringing some form of normality back to the after

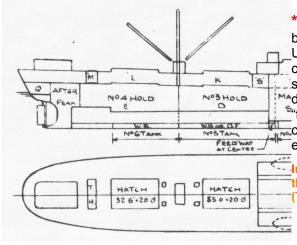


well deck

We worked steadily all day, drenched with spray and in temperatures not much above freezing and by 1800 all horses were rehoused. Apart from the odd wound, which we had dressed, they were none the worse for their ordeal.

A tot of rum was poured for all hands, and we went to dinner a crew well satisfied with the day's work. On arrival in Adelaide, the horses, all in very good health, were handed over to their new owners, who never knew the ordeal they had had been through. The bosun no doubt received his gratuity over a whisky in his cabin, while I resumed the normal duties of an ordinary seaman on a general cargo vessel in the fifties.

Malcolm Heron (New Zealand)



** Tonnage Hatch: The Port Wellington would have been known as a "Shelter Decker". What was called the Upper 'Tween Deck was in fact the Main Deck. What many called the Main Deck was in fact the Shelter Deck. The shelter decker would have an alleyway running at main deck level on either side of the accommodation. The small "tonnage hatch", which would be aft of the last cargo hatch, could not be secured, so that the 'tween deck space was exempted from certain tonnage calculations.

In this plan showing the after deck of the ship *Atlantic City*, the Tonnage Hatch is aft of the No.4 Hold and is marked T H. (Tony Crowther provided the plan)





My 1951 edition of "The Boatswain's Manual" describes "tonnage hatch" as: -

Hatchway and space which is only provided to conform to certain regulations. It is only found on Flush Deck Steamers, and is always situated on the after deck. Wooden hatch covers are fitted over the opening, and although tarpaulins are provided no cleats are fitted to the coamings for "battening down". Stores and other gear not liable to sea water damage are stowed in this compartment.

What does it mean "to batten down"? Before the introduction of steel hatch covers, a cargo hatch was covered with wooden boards on top of which were tarpaulins. The boards sat on beams which were lifted or rolled into place.

Referring again to The Boatswain's Manual: -

Battening down hatches means to position the hatch beams, put on the wooden hatch covers, spread the tarpaulins, ship the battens and wedge them to the coamings.

Hatch beams had to be shipped in their proper places or the wooden hatch covers would not fit properly.

Hatch boards had varying dimensions and needed to be placed in their correct positions. Three or more sections of hatch covers may be found in a hatchway. The proper way to "cover up" was to start with the end sections first at the sides and work towards the middle.

Tarpaulins were made from a special tarpaulin canvas. One or more of these were spread over the wooden hatch boards. The ship's carpenter usually supervised the spreading, tucking in and wedging of the tarpaulins. The nature of the voyage, as well as probable weather conditions, determined the number of tarpaulins to be used.



Tucking in three tarpaulins had its problems because they might not fit snugly in their cleats. It was



common practice to fold either the first or second tarpaulin (usually the oldest) in at the edge of the coamings. At the corners the cover had to be turned away from the direction in which heavy seas were likely to come across the deck.

The "turn up" of the tarpaulin had to just touch the bottom of the cleat. If the steel battens were allowed to rest on a bight of the canvas, the canvas might be damaged.

Once the battens were in place hard wood wedges were hammered into the hatch cleats, with the longest side next to the coamings otherwise the sharp edges of the iron cleats

would cut into the grain of the wood when hammered tight.

Locking Bars were then laid across the battened hatch. These were locked to the coamings to prevent unauthorized access to the hold.

It can be seen from the above that the task of "battening down" was time consuming and labour

intensive. The reverse procedure, "stripping the hatch" was very much the same. Removal of the hatch boards would begin in the centre of the middle section, working towards the sides of the hatch. These boards had to be stacked neatly close to the coamings. Care was needed to prevent damage. Hatch beams that were landed on deck probably needed dunnage to sit on. Tarpaulins had to be rolled up and had to be thoroughly dry if they were to be stowed away for any length of time. Once again, time and labour were involved and it was during the 1960's that such methods of covering a hatch were replaced by the development of rolling steel hatch covers.







But, even then, they had to be covered with tarpaulins and battened down!

The chances of seeing the wooden hatch boards today are probably quite slim.

However, if you Google "Hatch Board Coffee Tables" you will find many available to purchase on line

– as a coffee table (see picture above).

Crowley & Port of San Diego Celebrate All-Electric Tugboat Charging Station

Crowley and the Port of San Diego broke ground for the shoreside charging station designed to provide clean energy for the company's forth-coming <u>zero-emissions tugboat</u>, *eWolf*. Joined by key partners and community stakeholders, the ceremony marked a significant step forward in the industry's journey to decarbonization and reduce emissions in the San Diego community.

The charging station is a microgrid charging facility that will allow vessels to recharge quickly while reducing peak loads on the community energy grid. It is equipped with two containerized energy storage systems provided by Corvus Energy, a leading supplier of reliable energy solutions in the maritime sector. The station is designed to operate on off-peak hours from the community's

energy grid, and it includes a solar power array to support renewable energy use. The technology is also designed to support other electric equipment and vehicle operations, if needed.

Each energy container will house battery modules with storage capacity of almost 1.5 MWh, for a total capacity of 2,990 kW. The station will be equipped with battery monitoring system, HVAC and firefighting and detection technology.

C CROWLEY C CROWLEY

"We are proud to share in this moment with the City of San Diego to showcase an industry-first, shoreside charging station at the Port of San Diego," said Matt Jackson, vice president of advanced energy for Crowley. "Building a sustainable, zero-emission port of the future requires pioneering new and innovative technology, as well as a commitment to partnerships so we can

meet the needs of our communities, customers and people."



"We are proud to work with Crowley and are grateful they chose San Diego Bay as home of the first all-electric tugboat in the United States," said Chairman Rafael Castellanos, Port of San Diego Board of Port Commissioners. "Their commitment to sustainability in the maritime industry directly aligns with our own efforts and goals to reduce emissions and

improve public health in our communities while also supporting efficient and modern maritime operations."

The *eWolf* and its shoreside solar charging station are the result of a partnership among Crowley, the San Diego County Air Pollution Control District, the California Air Resources Board, the Port of San Diego, the U.S. EPA and the U.S Maritime Administration.

The eWolf, under continuing construction, is a crucial component of the shared commitment between Crowley and its federal and local partners to invest and develop emissions-free





technology. It is designed to operate at its full performance capabilities while running entirely on electricity.

The products and services herein described in this press release are not endorsed by The Maritime Executive

AUG 11, 2023 BY THE MARITIME EXECUTIVE

https://maritime-executive.com/corporate/crowley-port-of-san-diego-celebrate-all-electric-tugboat-charging-station

Collision of cutter and cargo ship possibly caused by micro-sleep

By admin On In Insurance Marine News, Keep, Marine Hull, Marine Liability

A 'microsleep' was the possible cause of the collision between fishing cutter **Z60-Blue Angel** with cargo ship **Amadeus Aquamarijn** (IMO 9223423) near Texel before dawn on December 23rd 2021, according to a report from the Dutch Safety Board.

The Board called on ship owners and maritime training institutes to pay extra attention to reduced alertness.

The trawler hit the ship several times and tore a large hole in the hull. There were no injuries, but the damage to the freighter was extensive.

According to the Dutch Safety Board, the cutter's mate did not see the freighter and therefore did not divert. The helmsman might even have fallen asleep for a very short time. Alternatively / in addition, poor visibility through the night and the draft of the freighter might have played a role.

Although it was plausible that the coxswain of the cutter had the freighter on the radar, fatigue, combined with an alarm system being turned off, seemed to play a role in the collision.

Eventually the helmsman of the *Amadeus Aguamarijn* alerted the fishing cutter of the situation.

The Dutch Safety Board also considered it important that the crew of fishing vessels switch on navigation and warning equipment again after fishing. "During fishing, the CPA alarm goes off frequently. Because this is perceived as disturbing, the crew turns off this alarm while fishing. The shipping industry should use a simulator to pay more attention to practicing non-standard situations.

2000-built, Netherlands-flagged, 1,898 gt *Amadeus Aquamarijn* is owned by Amadeus Silver BV care of manager De Bock Maritime BV of Alkmaar, Netherlands. It is entered with NorthStandard (Standard Club London Class) on behalf of Amadeus Silver BV.

https://www.nhnieuws.nl/nieuws/322762/microslaap-mogelijk-oorzaak-van-aanvaring-viskotter-met-vrachtschip-bij-texel

https://insurancemarinenews.com/insurance-marine-news/collision-of-cutter-and-cargo-ship-possibly-caused-by-micro-sleep/#:~:text=Collision%20of%20cutter%20and%20cargo%20ship%20possibly%20caused%20by%20micro%2Dsleep,-By%20admin%20On&text=A%20%27microsleep%27%20was%20the%20possible_from%20the%20Dutch%20Safety%20Board_

Investigation Finds Master Asleep at the Wheel in Washington State Ferry Accident

Investigators with the National Transportation Safety Board say the Captain of the Washington State Ferry *Cathlamet* likely suffered from a bout of **microsleep** when the vessel struck a mooring dolphin at a Seattle terminal last year, causing more than \$10 million in damages.

The National Transportation Safety Board (NTSB) has released its <u>report</u> into the July 28, 2022 incident, attributing the accident to fatigue and complacency.

According to the NTSB, the *Cathlamet* had just completed a crossing of the Puget Sound with 94 people on board and was approaching the Fauntleroy Ferry Terminal when it collided with the dolphin. Fortunately, only one minor injury was reported.

The investigation revealed that the ferry's Master, who was at the helm, had ceased rudder commands approximately 30 seconds before the collision. However, no corrective action was taken to adjust the ferry's course, reduce speed, or sound an alarm.

The Master also had no recollection of the events leading up to the collision and appeared unaware of how the ferry ended up striking the dolphin. Investigators concluded that these circumstances were consistent





with the Master experiencing a momentary lapse of consciousness known as a microsleep, likely caused by fatigue.

"Fatigue can have significant impacts on decision-making, alertness, and reaction time," stated NTSB investigators in their final report. "Mariners need to understand the consequences of sleep deprivation and recognize the dangers of fatigue-related issues, such as microsleeps. When fatigued, mariners should arrange for a qualified watchstander to take over their duties and refrain from being on duty when they are unable to fulfill their responsibilities safely."

In addition to fatigue, the NTSB highlighted complacency as a contributing factor in the accident. The *Cathlamet's* bridge team failed to comply with Washington State Ferries' policies during the docking and undocking procedures. Specifically, the Quartermaster did not actively monitor the Master as the ferry approached the dock, as required by company policy. This oversight prevented prompt intervention when the Master became incapacitated.

"Complacency arises when operators repeatedly perform tasks without consequence, leading to a diminished awareness of inherent risks," the report explained. "To combat complacency, operators should strictly adhere to established procedures, such as operating checklists, to mitigate single points of failure.

Companies should also emphasize the importance of following procedures through comprehensive training programs."

An internal investigation by Washington State Ferries previously found the Master had <u>lost situational awareness</u> for unknown reasons as the Captain refused to answer any questions during the investigation. That investigation did rule out both drugs and alcohol.

The NTSB's report serves as a reminder of the critical role fatigue management and adherence to safety protocols play in ensuring the safe operations of maritime transportation. It calls for increased awareness and proactive measures to address fatigue-related risks and combat complacency among ferry operators.

Marine Investigation Report 23-21 is available online.

https://gcaptain.com/investigation-finds-master-asleep-at-the-wheel-in-washington-state-ferry-accident/?subscriber=true&goal=0_f50174ef03-2a3d184934-169937937&mc_cid=2a3d184934&mc_eid=35ccf165ad

Should you call the Master? Many of you will be familiar with the TV programme "Who wants to be a millionaire" (or its derivatives). When the going gets too tough, the contestants have the option to "phone a friend" to help them with perhaps finding the right answer. Think of calling the Master in the same vein and you won't go too far wrong.

At the Command Seminar in Glasgow, the UK Marine Accident Investigation Branch (MAIB) told us of a number of investigations into incidents in the English Channel where the outcomes may have been very different if the OOW called the Master at an early stage. This resulted in some interesting discussions around this point where a number of Cadet/Junior Officer delegates recalled experiences on their own vessels where they (or one of their colleagues) had been in doubt as to whether they should call the Master. I am sure that it also raised a few eyebrows amongst the more senior delegates ... what on earth was going on?

Every Master that I sailed with, as far as I recall, will have written into his Standing Orders "if in doubt call me". I know that I have done the same over a number of years in command and, in fact, repeat the expression in my night orders every night. So why do I do that?

Although I have delegated the overall safe conduct of the vessel to the OOW, the responsibility for the vessel remains with me and, in the unlikely event of a collision or grounding, I will not thank any of my officers for not calling me in plenty of time. As Master I do not consider that I must be on the bridge at all times and I sincerely hope that I do not give the impression that I do not trust my watchkeepers. I also sincerely hope that I am approachable and not a man to be feared.

I, too, have been through doubts as to whether or not to call the Master, but now that the buck stops with me I do not want to find myself on the end of an inquiry where, had I known in good time what was developing on the bridge and outside, I could have given advice and assistance to the OOW. I may have taken over and intervened to provide a different result.

To all OOWs, if the question "Should I call the Master?" has ever crossed your mind, the unequivocal answer is "YES!" You have obviously considered that there are elements of doubt in your own mind: has your appraisal of the situation been adequate; do you have confidence in your decision making; are you looking for support and, possibly, guidance?







These elements of doubt may be due to a general lack of confidence in your ability in the situation in which you find yourself, possibly through lack of experience, or you may find yourself overwhelmed by a collection of factors that you may have dealt with individually in the past but are now present all at once.

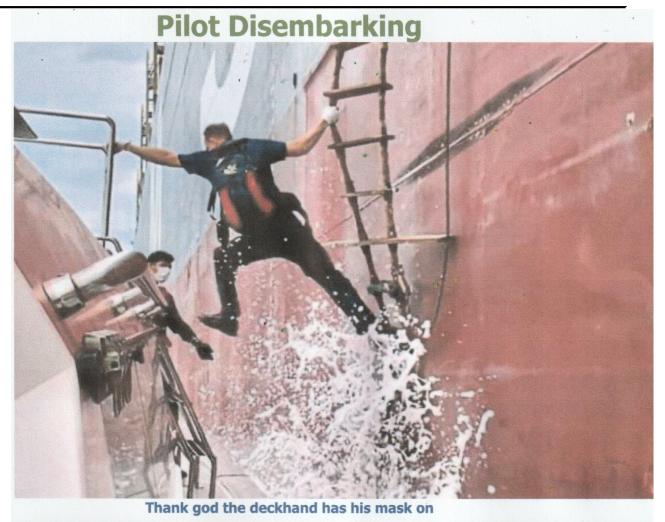
It may be tempting to call one of your fellow watchkeepers before you call the Master, particularly if you think that the Master is unapproachable or authoritarian. After all, they too are watchkeepers and they may readily understand your

doubts and they may be more inclined to give you advice and guidance in a non-judgemental manner.

Even at 0300 hrs, on a cold, dark rough night, I would far rather be called to give you the support and guidance you want than to find out in the morning from the conversations on the bridge that there had been a problem and that I did not know about it. I may not be in the best of moods at that time of night but I can assure you that you would prefer to see me grumpy, tired and dishevelled than to see me after the event, which you could have avoided had you called me! If in doubt, ASK the question.

Captain Trevor Bailey FNI. Captain's Column. Seaways. January 2015. (Captain Bailey is Master of the *Hebridean Princess*).





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The Smart Sextant - by Captain Barb Howe.

It's arrived, like a barista's best or a sommelier's finest – variously described as intriguing, venerable, ultimate, premium, angular, combined, complex, balanced and bold. The smart sextant is here.

A smart, or digital, sextant eliminates the need for spherical trig gymnastics on a pocket calculator, a Nautical Almanac and Nories Tables. No need for a chronometer either, it's built in, as are ephemeris details of more than 50 celestial bodies. What was once considered an instrument – now smartened up, is another digital device. (Take a look at: https://www.youtube.com/watch?v=2C9-LMNNzH4)

The modern sextant, first used for position fixing at sea, was designed by John Bird, a mathematical instrument maker in the 1750s. A sextant works on the optic principle that when a ray of light is reflected from two mirrors in succession and in the same plane, the angle between

the incident and the reflected ray is two times the angle between the mirrors.



A sextant "sight" allows an observer, with the help of the mirrors, to look simultaneously at a celestial body and the horizon – and measure the angular distance between them, called the altitude of the body. Sight reduction is the process by which, with the time of the observation and the altitude, a position line can mathematically be determined. A smart or digital sextant is still a sextant, but with a sight reduction device attached

to it that does the calculations.

Position fixing by sextant is not just done at sea. Early Boeing 747s, well before civilian GPS, had ports for taking sextant sights. Cockpit crew were also known to smoke near the port, which would suck out the fumes. Reportedly, although perhaps an urban myth, a vacuum cleaner hose could be fitted to the port and used to hoover out the cockpit.

More than 50 years ago, the Apollo program carried space sextants as a failsafe navigation system. Good thing! Two days after Apollo 13 was launched an oxygen tank exploded, crippling the spacecraft. Short on oxygen and without power to run the inertial navigation system, astronaut James Lovell cancelled the plan to land. Instead he went around the moon and plotted the safe re-entry manually for a splashdown in the South Pacific – with a sextant.

Having a "robust, mechanical back up with as few parts and as little need for power as possible" is essential – it's all about "where is my spaceship", says Greg Holt, NASA Manager and Navigation Specialist.

A sextant, smart or otherwise, and a paper chart are un-hackable. If you're headed across an ocean, or into space, don't forget your toothbrush, clean socks, and a sextant.

Let's see what we know about the sextant and sight reduction: -

- 1. What is ephemeris data?
- 2. What is an hour circle?
- 3. What is the Greenwich hour angle (GHA)?
- 4. What is/are the limbs of the sun or moon?
- 5. What is declination?

- 6. What is the celestial equivalent of longitude?
- 7. What is meridian passage?
- 8. What is the difference between the horizon glass & the index 4. mirror on a sextant.
- 9. What is an azimuth angle?
- 10. What does zenith mean?

Answers are on Page 13.

Captain Barb Howe is a regular contributor to the "Western Mariner" Magazine with the column "Deck Watch".

This was Deck Watch Quiz # 224. It appeared in the September 2023 edition. www.westernmariner.com





The Seven Seas: Several years ago at a Convocation Ceremony for Nautical Science and Marine Engineering students at the British Columbia Institute of Technology, a speaker, referring to the seagoing experience of one graduate, suggested he had 'Sailed the Seven Seas'.* But had he? I remember ongoing discussions in a nautical journal many years ago about the meaning of 'Seven Seas'. So I referred to Google.

The phrase "sail the Seven Seas" has had different meanings to different people at different times in history. Ancient Hindus, Chinese, Persians, Romans and other cultures, mention the term "Seven Seas". The term historically referred to bodies of water along trade routes and regional waters; although in some cases the seas are mythical and not actual bodies of water.

The term "Seven Seas" has evolved to become a figurative term to describe a sailor who has navigated all the seas and oceans of the world, and not literally seven.

Why 'seven'? The number seven has a great deal of historical, cultural and religious significance: lucky number seven, seven hills of Rome, seven days of the week, seven wonders of the world, seven dwarves, seven days of creation, seven Chakras, seven ages of man, seven deadly sins and seven virtues — just to name a few.

The term "Seven Seas" can be traced to ancient Sumer in 2300 B.C., where it was used in a hymn by <u>Sumerian</u> high priestess Enheduanna to Inanna, the goddess of sexual love, fertility and warfare.

To the Persians, the Seven Seas were the streams forming the Oxus River, the ancient name for the Amu Darya, one of the longest rivers in Central Asia. It rises in the Pamir Mountains and flows northwest through the Hindu Kush and across Turkmenistan and Uzbekistan to the Aral Sea.

To the <u>ancient Romans</u>, the *septem maria*, Latin for Seven Seas, referred to a group of salt-water lagoons separated from the open sea by sandbanks near Venice. This was documented by Pliny the Elder, a Roman author and fleet commander.

The ancient Arabs defined the Seven Seas as the ones they sailed on voyages along their trading routes with the East. They were the Persian Gulf, the Gulf of Khambhat, the Bay of Bengal, the Strait of Malacca, the Singapore Strait, the Gulf of Thailand and the South China Sea.

The <u>Phoenicians</u> were expert sea traders and their sailors set out to in search of markets and raw materials. Their Seven Seas — Alboran, Balearic, Ligurian, Tyrrhenian, Ionian, Adriatic and Aegean — were all part of the Mediterranean.

The Greeks and Romans gave rise to the medieval definition of the Seven Seas. During this time, references to the Seven Seas meant the Adriatic Sea; the

Mediterranean Sea (including the Aegean Sea); the Black Sea; the Caspian Sea; the Persian Gulf; the Arabian Sea (which is part of the Indian Ocean); and the Red Sea, including the Dead Sea and the Sea of Galilee.

During the Age of Discovery (1450-1650), after Europeans began exploring North America, the definition of the Seven Seas changed again. Mariners then referred to the Seven Seas as the Arctic Ocean, the Atlantic Ocean, the Indian Ocean, the Pacific Ocean, the Mediterranean Sea, the Caribbean Sea, and the Gulf of Mexico. Other geographers identify the Seven Seas at that time as the Mediterranean and Red Seas, Indian Ocean, Persian Gulf, China Sea, and the West and East African Seas.

The Colonial era, which saw the tea trade sailing from China to England, gave rise to another description of the Seven Seas: the Banda Sea, the Celebes Sea, the Flores Sea, the Java Sea, the South China Sea, the Sulu Sea and the Timor Sea. Their expression "sailed the Seven Seas" meant sailing to the other side of the world and back.

Modern Seven Seas

The modern list of the Seven Seas that is most widely accepted by geographers actually lists the oceans:

North Atlantic Ocean: the portion of the Atlantic Ocean that lies primarily between North America and the northeast coast of South America to the west, and Europe and the northwest coast of Africa to the east.

South Atlantic Ocean: the southern section of the Atlantic Ocean, extending southward from the equator to Antarctica.

North Pacific Ocean: the northern part of the Pacific Ocean, extending from the equator to the Arctic Ocean.

South Pacific Ocean: the lower segment of the Pacific Ocean, reaching southward from the equator to Antarctica.

Arctic Ocean: the smallest of the Seven Seas, it surrounds the North Pole.

Southern Ocean: also known as the Antarctic Ocean, it consists of the southern portions of the Pacific, Atlantic, and Indian oceans and their tributary seas. It is the newest ocean, being designated by the International Hydrographic Organization in 2000.

Indian Ocean: stretches for more than 6,200 miles (10,000 km) between the southern tips of Africa and Australia. https://www.livescience.com/27663-seven-seas.html

Also take a look at: -

https://oceanservice.noaa.gov/facts/sevenseas.html and https://www.theguardian.com/notesandqueries/query/0,.-7733,00.html

* Another speaker, an engineer, told how he often wished he'd been a deck officer. He well remembered his Grade 7 teacher chastising him for staring out of the classroom window at the beautiful day outside. The teacher told him to work and study hard because "nobody will ever pay you to look out of a window".





Deck Watch Quiz (Page 11) Answers: -

- 1. Ephemeris data is celestial information such as position, twilight, times of rise, transit and set etc. It's the information stored in a digital sextant.
- 2. An hour circle is a celestial meridian made by projecting meridians of longitude on to a celestial sphere.
- 3. GHA is the hour angle between the prime meridian of Greenwich and an hour circle through a celestial object measured westerly through 360°.
- 4. The limbs are the upper and lower points of tangency on the circumference of the sun or moon. The lower limb gives the least altitude from the horizon.
- 5. Declination is the celestial equivalent of latitude. It's the angular difference of a celestial body north or south of the celestial equator. Declination is required to identify the location of a celestial body.
- 6. GHA is the celestial equivalent of longitude on earth. Declination and GHA of a celestial body identify its location.
- 7. Meridian passage (or transit) is when a celestial body intersects an observer's meridian.
- 8. The horizon glass is the fixed mirror, and the index mirror is attached to the movable index arm.
- 9. An azimuth angle is the bearing of a celestial body from the observer.
- 10. Zenith means the point on the celestial sphere directly over an observer.

Panama Canal Traffic Is Being Throttled by Climate Change

The <u>Panama Canal</u> doesn't have enough water. A lack of rainfall, blamed on <u>climate change</u>, is leading to a steady decline in water levels on the vital conduit. The problem is so bad that quotas are being imposed on how many ships can pass through it, a move set to snarl trade in energy, consumer goods and food as carriers are forced to sail thousands of extra miles to make deliveries.

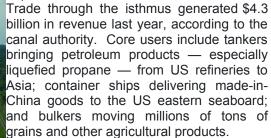
Restrictions started this month and will continue through at least February, the canal's managing authority said. By then, trips will be limited to 18 per day, a 50% drop from a year earlier. Excluded vessels will likely alter course to the Suez Canal — adding at least a week to the journey between the US and China — or around the bottom of South America. Such voyages will burn more fuel and lead to higher freight costs.

"It's really a disaster playing out in slow motion," said Peter Sand, chief analyst with Oslo-based Xeneta, which analyzes ocean and air freight markets. "We expect this will drag on for at least another year."

The crisis mirrors what happened to Europe's rivers during record-setting heat waves in 2022. The Rhine and Danube, for example, were evaporating at such a rate that trade valued at about \$80 billion annually was disrupted. It affected oil refining, power generation and corn farming.

This October was the driest on record in Panama since record-keeping began in 1950. The level of Gatun Lake, a body of freshwater that vessels navigate on their way through the canal, has dropped to an

unprecedented low.



Severe traffic restrictions appear to be particularly challenging for propane traders. US inventories of propane and propylene have risen to their highest seasonal level on

record, while Asia's demand for the petrochemical feedstocks keeps rising.

The US is expected to export as much as 12% more propane this winter compared with last, according to a government forecast. Much of those exports need to go through the canal, and delays there can be costly to shippers and consumers alike.







To one shipper, avoiding the wait was worth \$2.85 million — the amount paid in an auction to skip the line next week, said Oystein Kalleklev, chief executive officer of shipping companies Flex LNG and Advance Gas.

More than half of US propane shipments went to Asia in 2022, according to data from the US Energy Information Administration.

Prices in Asia surged to the highest levels since January this week at more than \$750 a ton on mounting concerns about delays, according to traders who specialize in that market. That jump took place even amid signs of softer demand in the region, particularly from China's petrochemical sector.

For container carriers, the drought is the latest in a string of events that roiled capacity during the past several years — whether it was the pandemic-related chaos gripping China's manufacturing exporters or the blockage of the Suez Canal by a giant ship that wedged itself into its banks.

The February curtailment in booking slots will hit just as importers seek to restock after the holidays. Though spot container prices from Asia to the US Gulf and East Coasts through Panama have declined in recent months, they have been "ticking up" recently and may continue to rise as the waiting line lengthens into February, Sand said.

The canal bottleneck has the effect of reducing capacity and putting a floor under seaborne freight rates for goods for vessels going through.

Transpacific freight likely will be rerouted through US West Coast ports and then loaded on trains or trucks to reach the East Coast, rather than wait to transit Panama, said Glenn Koepke, general manager of network collaboration at Chicago-based FourKites Inc., a supply-chain visibility provider.

That should put upward pressure on rates and "help provide a needed bump to the steamship lines and freight forwarders who are struggling with profitability," he said.

The snarls mean it takes about 10% longer for a container to move from a Chinese port to a destination on the US East Coast, according to project44, a supply-chain data company in Chicago.

"Expect lead times for the canal to remain high, and as drought conditions continue, additional restrictions will most likely follow," project44, a logistics firm, said in a research note this week.

About 38.4 million long tons of grains — the vast majority of it going from east to west — went through the canal in 2022, Panama Canal Authority data show.

If waiting times are too long, some agricultural traders will consider diverting grains through the Suez Canal, said Jan Rindbo, chief executive officer of D/S Norden A/S, which operates a fleet of oil and bulk carriers. It's also possible that fertilizer shipments from Europe to the west coast of South America are replaced by supplies from Asia, he said.

"There are big challenges with the canal with the drought they have," Rindbo said. "It is not a challenge that is going away."

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https://gcaptain.com/panama-canal-traffic-is-being-throttled-by-climate-change/?
subscriber=true&goal=0_f50174ef03-e8a8866a3b-169937937&mc_cid=e8a8866a3b&mc_eid=35ccf165ad

Record Year in the Northwest Passage as part of busy Arctic season.

2023 was a record year with 42 full Atlantic/Pacific transits of the Northwest Passage. 13 cargo ships, 11 cruise ships and 18 yachts succeeded. This was well ahead of the previous record of 33

including 22 yachts in 2017.

Of the cargo vessels, 10 were voyages either beginning or ending at ports in Quebec Two ships made both east and west voyages during the short season. Although only open briefly from August to early October, the route is roughly 3,700 nm shorter from Eastern Canada to Asia, saving days at sea and fuel.

Biglift Barentsz

The most interesting was by the Dutch heavy lift ship BIGLIFT BARENTSZ. She carried four giant container cranes from Nantong, China to Savannah, Georgia via Capetown, South Africa in July





arriving in late August. After unloading the cranes, the ship sailed north from Savannah September 4 in ballast (empty) to return to Asia via the Northwest Passage, becoming the first ship to circumnavigate the globe via the tips of both Africa and North America at least in a single season. She passed Nome September 26 and had an ETA in Korea October 7.

11 cruise ships also completed crossings, mainly between Greenland and Nome, Alaska. Most notably, ROALD AMUNDSEN linked two cruises - Vancouver to Nome then Nome to Halifax. There were also numerous cruises confined to Nunavut and Greenland.

In addition to the Northwest Passage sailings, the Arctic was very active this year. The two sealift operators NEAS Group and Nunavut Sealink and Supply Inc. (NSSI) had 13 ships and two tankers while the Woodward Group had four product tankers serving 49 communities in Quebec and Nunavut.

Plans by B2 Gold of Vancouver to open the Goose gold mine by 2025 in Nunavut's Back River district prompted a rush of ships to Bathurst Inlet south of Cambridge Bay. September traffic included four Sealift ships, two tankers, two chartered ships from Montreal and a freighter with a full load from Turkey.

Baffinland delayed iron ore shipments from Milne Inlet until mid-August consistent with an agreement with Inuit at nearby Pond Inlet not to use icebreakers at the start of the season to reduce disturbing narwhals. Two icebreakers are currently working as the season nears its end to

help complete this year's shipments if ice conditions require it.

In August, the HAUKE OLDENDORFF became the largest ship to call the Canadian Arctic when she loaded 165,000 tons of iron ore at Milne Inlet. She returned for a second load at the end of September. Hauke Oldendorff

Upgrade work on the Hudson Bay Railway limited traffic at Churchill with just a few sealift calls and a cruise ship visit. Marine Transportation Services barge service struggled this summer. The town of Hay River, including the MTS terminal, was evacuated twice due to wild fires. Low

was aground for days suffering hull damage.

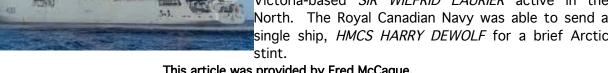
water on the Mackenzie, particularly near the ramparts south of Fort Good Hope made the river impassible in certain areas. Cargo was trucked to Inuvik, then barged to communities in the Beaufort. The tug VIC INGRAHAM, returning to Hay River with empty barges in a marked channel,

Teck's Red Dog zinc mine and port north of Bering Strait in Alaska continues to ship over 1 million

tonnes of concentrate per year. A significant portion is shipped to Vancouver Wharves then forwarded by rail to Teck's smelter at Trail.



The Canadian Coast Guard had eight ships, including Victoria-based SIR WILFRID LAURIER active in the North. The Royal Canadian Navy was able to send a single ship, HMCS HARRY DEWOLF for a brief Arctic



This article was provided by Fred McCague. It appeared in the November 2023 edition of the Western Mariner Magazine www.westernmariner.com



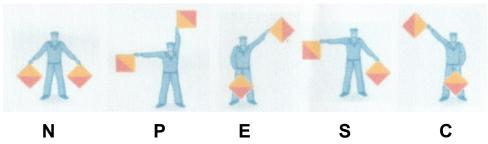
Have you read any of this edition's articles before? It is quite possible.

This Newsletter is shared with Nautical Students who are just beginning their careers and they might not have seen earlier editions. With them in mind I do repeat items. In this case: 'Should you call the Master?' & 'The Seven Seas'. For everyone's benefit there is the description of 'Shelter Deck' and 'Tonnage Hatch' (Pages 5 & 6). We are not likely to see such ships today but it does show how things have changed. A group of us had some interesting discussions about them. My first ship, the *Syrian Prince* was a Shelter Deck vessel. I paid little attention to it at that time but

I have always remembered loading cow hides at the Port of Venice. My "Cadets Journal" reads — "Cow hides were loaded into the port alleyway of No. 3 'Tween Deck (I did not know it was really the 'Main Deck'). Special precautions were taken for the safety of their stowage. Dunnage was laid with straw mats on top. This was covered with a burlap separation cloth which was also spread up the bulkheads." My memory also tells me that those hides did not smell or leach any liquid, unlike the



hides I saw being shipped out of Vancouver in containers in the 70s & 80s. David



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