

Narrator: Welcome to the Quarterdeck with Benjamin Strong and Coast Guard Admiral Jim Watson.

Benjamin: Hi, it's Ben Strong from Amver.com and welcome to episode three of the Quarterdeck. I'm joined by my co-host, Admiral Jim Watson. How are you, Admiral?

Admiral Watson: I'm doing just fine, Ben. It's good to hear from you. I understand you've been doing some traveling so I'm real interested in what you have to report for this podcast.

Benjamin: I think we've both been on the road and I've just returned from Helsinki, Finland where I attended the Arctic Shipping Summit up in Finland. You were on the road as well sir?

Admiral Watson: I was and I got a chance to stop in to New York City. I was delighted to be a speaker for the New York Marine Society and I also had a chance to visit your office while you weren't there as well as the Sandy Hook Pilots and a lot of the different locations along the Hudson River and New York City Harbor.

Benjamin: Well the L.A. Long Beach folks might argue that they're the busiest port. I think most people agree that New York is a pretty darn busy port so we're glad to have had you up here and I'm sorry that I missed you but I know our paths will cross again soon. But today I think we wanted to kind of dedicate this podcast to talking about arctic matters. We've got a great interview with Craig Eason from Lloyd's List who spent some time on a (indisc.) tanker up in the Arctic and actually has a good first person account of his experience sailing on an ice class vessel and an ice class tanker. And the Coast Guard is no stranger to the arctic with our own 17th District having responsibilities in Alaska and the Northwest Passage and lots of arctic area and we certainly have a lot of search and rescue from an amber standpoint, search and rescue interest in the arctic. But let me just tell you, if I may, a little bit about the Arctic Shipping Summit that I attended. There were probably, I would say about 350 people representing all of the Arctic nations. Interestingly enough, there was one panelist from China talking about China's interest in the Arctic and if there was one take away that the Professor shared with the group it was that we should not be afraid of China's interest in the Arctic. And while a lot of people might say that, well what interested does China have in the Arctic, when you consider the amount of goods that are being shipped from China and the shipbuilding going on in China, either a, I would say that Chinese shipbuilders are going to look at whether or not they need to start building ice strengthened vessels as the IMO expands with the polar code, whether, what kind of new architectural naval and shipbuilding architectural requirements they may be, and whether or not it's economical for them to ship either through the Northern sea route or the Northwest Passage. But it was interesting to just have some folks not from the United States, Canada, Norway or any of our other Arctic partners there discussing shipping. One of the other interesting arguments that was proposed or one of the other topics that was proposed at the Arctic Shipping Summit was whether or not people are actually going to use the Northwest Passage or the Northern sea route. It was interesting that Rosadamflot (phonetic), the Russian icebreaker service, has had 15 inquiries for escorts through the Northwestern, I'm sorry, through the Northern sea route, and while that may not seem like a lot, that is certainly more than none and it's, I think it's going to be interesting to see how Russia deals with vessel traffic through the Northern sea route. But there were some arguing the fact that sailing in, how did they, the best phrase that came out of that was "ice-free doesn't mean that there's no ice" and the analogy was that there are still going to be icebergs and berg-y (phonetic) bits and things that could be, and a considerable amount of fog. I think that there were some actual mariners there who said, "When you sail in the Arctic, the fog there can be debilitating and while you may not be iced in, certainly the challenges that go along with navigating through fog and having to slow steam sometimes three, four, five knots may take a toll on the money saving that is presumed to be sailing through the Northern sea route or the Northwest Passage." But there were some interesting debates. There is no shortage of interest in sailing through the Northwest Passage or any of the Arctic sea routes. And Admiral, the Coast Guard has a posture on our activities in the Arctic and protecting shipping up there. Don't we sir?

Admiral Watson: We certainly do. The Coast Guard plays a large role worldwide in safety and security and environmental protection and managing the variety of activities. Obviously the Arctic Shipping Summit covered shipping and the movement of goods and I think it makes perfect sense that nations like China would be interested. It's basically an alternative way around the world. When the Coast Guard looks at this area, we

certainly look at those increased activities but then you overlay interest by the, with fishing industry, by the oil exportation, oil and gas exportation, cruising even recreational activities. And our challenge there is that there are, there's really no infrastructure there above the Arctic Circle. It's formerly been so ice covered that there hasn't been a whole lot of activity, no need for the Coast Guard to develop any presence there and yet, there's well over 1,000 miles of Alaskan coastline that needs a Coast Guard as the area opens up due to the melting ice. So we've got some plans in the works. We're doing a lot of activities that haven't been done on a regular basis in many, many years, in fact, forever to try to address these situations, but really we're just crawling as opposed to walking or running because of the challenges that exist there, trying to just create an infrastructure, a base if you will to operate from and then knowing how you have to do things in those difficult environments. As you mentioned, it's not just the ice. It's, there are challenges with lack of navigational aids, with bottom conditions that have not been thoroughly charted. Fog, there's actually a choke point there in the Behring Strait where the distance between Russia and Alaska is actually only about 50 nautical miles and part of that is very shallow. So it does present some challenges and I'm really glad to hear that there are conferences like what you attended and others that are looking at this and particularly focusing on the safety of life issues.

Benjamin: And that's a good segueway into what Amver does. Not only is the Coast Guard, the United States Coast Guard interested in Arctic shipping and search and rescue and the protection of the Arctic environment and all things Arctic really, but Amver, I've had the opportunity to serve on one of the working groups of the Arctic Council to help strategize on how are we going to perform search and rescue in the Arctic, and one of the, in fact it was the Arctic Marine Shipping Assessment that actually mentioned Amver by name as one of the, as a search and rescue system because it uses commercial ships and because a lot of these commercial ships can rely either on each other or they can travel in packs. There are several different tactics and theories on how shipping can be made safer almost immediately because of that lack of infrastructure. But I've had the honor of serving with the emergency preparedness and working group on the Arctic Council helping to develop some tactics and strategies and one of the things that we're specifically working on is how we can link the various regional ship reporting systems of the Arctic together with Amver so that if there is some maritime accident, whether it be a cruise ship or whether it be a ship taking out product and supplies from a mine in Canada, can we marshal enough commercial resources to get to that particular incident and help those people while waiting for either an ice breaker or additional cutters or even aircraft depending on the environment that the vessel may be in distress. But if I could, I'd like to share with our listeners an interview that I was able to tape with our friend, Craig Eason who's from Lloyd's List, who had an opportunity several years ago to transit on a, to sail on a Sovcumflot polar tanker up in the Arctic and he has some great insight on what it was like sailing there, the challenges on the bridge and some of the challenges that the crew faced and just what, a lot of our listeners perhaps don't sail in the Arctic and I think this gives a good, a nice overview as to what it's like to sail in the Arctic. So if I may Admiral, let's take a listen to our interview with Craig Eason.

Benjamin: Hi, it's Ben Strong from Amver.com and I'm in Helsinki, Finland at the Arctic Shipping Summit Informa maritime event and I'm joined by Craig Eason, the Technical Editor and Nordic Correspondent for Lloyd's List. How are you, Craig?

Craig: I'm very well. Thank you.

Benjamin: I appreciate you joining us and I wanted to sit down and talk with you for a bit because you not too long ago had a blog on Lloyd's List on Eason on Ice and it was about your experience on the (indisc.) tanker.

Craig: Yes, it was basically, it was an opportunity for me to go out and see the development both at that type of vessel and to get a feeling for the crew and how they actually (indisc.). It's an opportunity as an ex-Mariner to get back into the ship as well that I took advantage of, so I was on board for just under two weeks.

Benjamin: Where did you put them?

Craig: Well I flew into (indisc.). I joined the ship in (indisc.) and we went from there to the (indisc.) platform to load the cargo, crew and take it back to (indisc.) basically. That meant going through some fairly thick ice

(indisc.) and that was the bit that I was most interested in was the ability to use this huge piece of technology to go to a platform or through thick ice, go to the platform and then stay in position in that platform while the ship loaded the cargo. And the whole thing was just a fascinating opportunity.

Benjamin: How was the, first of all, what was it like with the crew? How were you received by the crew as kind of an outlier?

Craig: Well it was quite funny really because I joined and it was a fully Russian complement. And I was a little bit worried at first but when I got on board and made it clear that for starters, all the officers, deck officers and engineers, they only speak English so that concern was gone. Then I found that what they really did appreciate was the fact that I knew a ship as an ex-navigating officer, not a case of talking the talk or being part of a clique, but I certainly knew what boundaries were. I knew where to go, not to go, what not to do. I could be sensible around what I was asking, the requests that I made (indisc.). And I had empathy as well for the work they were doing. I could understand what they were doing. I could understand the challenges they faced and I was able to ask questions and have a genuine interest about their wellbeing and their life on board the ship.

Benjamin: You were the proverbial fly on the wall there.

Craig: It was. It was a fly on the wall but also to use that English expression, like a (indisc.) holiday. I wasn't there doing the job so to speak but I certainly knew what they were doing and could sort of take part in certain elements and some of the procedures.

Benjamin: Now this was a Sovcumflot ship? And what ice class was this vessel?

Craig: It was (indisc.) ice class and it was one of their vessels that basically had two (indisc.) which didn't give it dual-acting capabilities but certainly made it a lot more maneuverable through the ice so there were times when it was, when we went into thick ice. I was able to see how the captain could use the ice (indisc.) control to almost (indisc.) some sort of space shuttle operation, two hands just (indisc.) and able to sort of expertly move it, spin this massive vessel on a (indisc.). He could just turn it around just in the channel and go somewhere else. So half the time when you're in the ice, the officers were spending all of their (indisc.) staring out at this white blanket and anybody who has been to sea will know the importance of keeping a good navigational watch. But that's to do with keeping a watch and looking at the ship being, looking at the navigational challenges.

Benjamin: Oh, I'm sure it takes on a whole different (indisc.).

Craig: Totally different because you're constantly looking at this blanket white and only burning blanket white at times if the sun was out. And they'd be looking for the channel to be different from where the ice is weak. They'd be looking for open water. They'd be looking for signs that would say yes, we can take the ship that way because sometimes they may find themselves going 20 degrees to starboard because that's the way the weakest ice falls.

Benjamin: Okay.

Craig: And going off track and we need some way to go back up. And when I looked at what the (indisc.) of the ship it was a zig-zag but it was constant looking through the binoculars, looking at the ice, looking at the ice radar and the level of concentration was phenomenal. And this was one of the things that I underestimated when I actually joined the ship was the level of concentration these navigating officers had in terms of actually being able to do this job and we're not talking about doing it for a couple of hours and then that's it for the week. We're talking about constantly doing this and going on watch, coming off watch, going on watch, coming off watch and it was impressive.

Benjamin: So, interesting. What would you say, well what were some of the ice thicknesses? Did you go through some pretty challenging thicknesses?

Craig: I went out and stood on it.

Benjamin: Alright, so that's --

Craig: -- quite thick.

Benjamin: That's pretty thick.

Craig: I wouldn't say I would be safe to put a truck on it (indisc.) actually, but I gather some of the ice was near one meter thick.

Benjamin: Wow, okay, so this was serious (indisc.).

Craig: In places. We're also talking about some challenges where there were ridges where one of the ice shelves had gone over or under another one (indisc.) like that. From the top of the, from being on the bridge and looking down at the ice, it didn't look that much but I can assure you when I was down on the ice I could see these ridges and some of them were sort of up to my shoulders in height. We're talking fairly thick ice then. So and this ship, of course, had to have the capability of pushing through it.

Benjamin: (Indisc.).

Craig: No, there wasn't. It was a really interesting voyage. It was fascinating to see the operation of, the operation of the ship. It was good to see the interaction between the ship and the crew in all aspects. Down in the engine room there were three engines and the way that they used the engine power. They would have one engine, two engines, and then when they needed it because they went through a thick bridge, they seemed to quite easily be able to turn on a third (indisc.) engine and power through the (indisc.) drop down (indisc.) again so it was a very dynamic use of the ship.

Benjamin: Were there concerns either from the master or from the crew in the engine room about use of resources or bunkers or --

Craig: No, but one of the interesting things during that trip wasn't actually they were (indisc.) but we went, we left (indisc.). We went (indisc.) to the edge of the ice. When we got to the edge of the ice, we wedged ourselves into the ice and sat there and stayed because at the (indisc.) platform they have an ice blanket and a support vessel. They had had to come to the edge of the ice to meet a bunker in vessel which obviously didn't have the ice (indisc.) to break through into the ice to go to the (indisc.) platform.

Benjamin: Okay.

Craig: The captain (indisc.), the tanker I was on, is not allowed to go to the platform on its own without having the support vessel or the ice breaker available. So we had to wait until these two vessels had finished bunkering before the three of us then went in together. And ironically, I think, remember we went in and (indisc.) had followed us because we were bigger. We broke the, we made the way for the ice breaker.

Benjamin: The nuclear ice breaker?

Craig: No, no, no. This is, I think it's called the (indisc.) and it's a specific built ice breaker for that region.

Benjamin: Now when you were taking on product at the platform, were you iced in then?

Craig: No. The whole idea or the reason for having the ice breaker there is you keep a very exact position of the ship. You direct yourselves within a certain angle of the (indisc.) that points out from the (indisc.) and you have

to stay there I think if I remember rightly within 11 degrees. You can't vary. If the ship changes the angle then it has to break off. Now the thing obviously that can change the angle is the ice moving down so continually we have the (indisc.) ice breaker circling around the ship on the platform breaking the ice and just trying to shift it (indisc.).

Benjamin: So there are some unique challenges for that particular ice breaker (indisc.) as well.

Craig: Yes. It sounds (indisc.).

Benjamin: (Indisc.) cutting a channel or keeping, there are --

Craig: No, they're (indisc.) the ice and they're breaking it down and making sure that what comes down towards the tanker and the platform doesn't actually (indisc.) the loading operations.

Benjamin: And then as far as the crew on the bridge for the loading operation, it's not, that's a bit of a respite there.

Craig: That's even more intense.

Benjamin: Exactly.

Craig: They stand and, they all stood at the controls and for the (indisc.) constantly just tweaking, making sure, which I don't think has had full (indisc.) capabilities so the officers would patiently break into two six-hour watches, so six on, six off. But during those, that six- hour watch, there'd be two officers on each watch and they would then spend an hour a piece of those six hours at the controls. So you'd have very three one-hour periods (indisc.) six hour. Then you'd have six hours off and then you'd go back on the bridge and do that. The loading operation took a total of, I think if I remember rightly about 18 hours.

Benjamin: Wow.

Craig: I was pretty (indisc.) doing that but (indisc.) very much (indisc.).

Benjamin: This is no slip shop crew then. These are really --

Craig: No, these are --

Benjamin: -- highly skilled professional mariners.

Craig: It's incredible just sitting down with them and learning about their own experiences up in the Arctic. The captain that was there was a fantastic guy, a hell of a character. He was telling me about all of his career in the Arctic and he'd been working up in the Arctic for about 20 years.

Benjamin: Wow.

Craig: It started on some of the (indisc.) or something like that or timber ships and he'd developed this respect and understanding of the Arctic and he could point to the ice and just tell me exactly what was going on. You were getting radar pictures of the region, ice radar pictures, and he was able to say, "I think this, that and the other. If we do this route, we're going to have a problem of drifting ice here," and had all this back-up information in his head and he was able to (indisc.) go that way. It's best to go that way. And in doing so, he actually sort of saved time or saved potential problems of getting stuck in the ice, (indisc.) that was drifting in the wrong direction.

Benjamin: Wow, that's amazing. Really, this guy knows, he really knew his stuff.

Craig: He was (indisc.). The chief officer is there with trained captains anyway. What was good though is they also had a third mate who was just, still a little bit wet behind the ears, nonetheless you could see that this is the beginning of his career as an ice navigator. He was able to, he's got an opportunity, this sort of learning profession to learn from these people around him.

Benjamin: Real indispensable training there.

Craig: Unbelievable.

Benjamin: Based on some of the discussions that we've had here, talking about the Northern sea route and there's discussion of the Northwest Passage, do you see Arctic shipping, ice shipping increasing or do you think that depends?

Craig: It will increase. There's, and as we've heard throughout this conference over the last two days, there's increased demand of two types of shipping. The transit shipping that will take cargoes over the Northern sea route seems to be kind of a thought that this will develop more slowly than the other shipping which is the one that's actually in the region, so the ones that are pulling out dedicated cargoes of minerals or oil/gas from the Arctic region. Now the vessels that are going up there offering some sort of support, the drilling capabilities up there, and the other infrastructure projects that we have, that is the area that seems to be developing a lot stronger, a lot faster and that's why you're going to need these kinds of crews, the skills and I wonder sometimes whether we've got enough people to do all that, the capability. We're going to start spreading that skill base too thin. That's when we might start finding (indisc.) problems. There needs to be some way of ensuring (indisc.) ice competence related to (indisc.) level --

Benjamin: Sure.

Craig: -- so that people actually have the opportunity then to (indisc.) on the captain (indisc.) to actually learn from other people and to develop (indisc.) progression, succession, the knowledge that (indisc.) needed.

Benjamin: So perhaps there's a business model for the Russians or the Fins or some people for ice training.

Craig: Well yes, there is already and they have a very dedicated area for ice training. It's a very important area for Finland and for Russia. (Indisc.) have got their own ice training. There's ice academies already in existence and so it's a very much, it's being developed. It's being developed but whether it's being developed quick enough, it's developing (indisc.) shipping that's going to go on there. I just don't know. The other problem you're going to have is ships that visit this area for a short period, they're going to have, they won't have necessarily ice dedicated troops. They may have people going up to New Finland or into the Arctic. Those have gotten their experience. It's just that somebody has contracted a cargo to pick up cargo from in the Arctic region. So they could turn up without the right equipment. That's a liability in itself. This ship may only do one lifting in the Arctic region a year or it may do it once every five years, and as a result there's no experience. So you need to be able to make sure that you've got an ice pilot on board but even so, that ice pilot has to have confidence that the people on the ship know what they're doing. There's no point in teaching them to sort of understand what ice is all about from scratch. There needs to be a certain level of understanding.

Benjamin: Sure. They've got to be competent with the vessel that they're on, not just newly aboard.

Craig: And there are things to bear in mind with people who go to sea and can navigate (indisc.) oil tank. They (indisc.) cargo endorsement. I know there's talk in the nautical institute as well about having something similar for ice so you can have an ice endorsement. It doesn't subtract anything. It's just one of those things that says yes, I'm an experienced navigator and I've had, and I've got a basic understanding of what being in the ice is all about.

Benjamin: What, of your understanding of the proposed polar code with the IMO, will those types of endorsements be there?

Craig: I don't know. I don't know and I, in a way even though I say what I say, I'm also concerned about a polar code that's going to be too prohibitive because if you start legislating too heavily then you end up then having no shipping going up there at all. People are going to be too scared to go up there. The risks, the political and legislative risks are too high even though we're looking already at the physical risks and the training risks. We've got to be careful. We've got to strike a balance there.

Benjamin: I appreciate you taking some time and talking with us. If folks want to learn more about what you have to say about Nordic issues or technical issues, they can go to Lloyd'slist.com and probably just put Craig Eason or your last name, E-A-S-O-N, in the search box and all of your products will come up.

Craig: Exactly.

Benjamin: Thank you so much. I appreciate it.

Craig: You're welcome.

Benjamin: Alright. And we're back. That was an interesting interview with Craig and it really shed some light on the challenges of what the Russians or what anybody is facing as they sail in the Arctic. Admiral, you mentioned some things such as the, our 17th district and their Arctic domain awareness flights which I understand have already started now for the 2011 kind of Arctic season. But I also noted that the Coast Guard Authorization Act which was just passed, the Coast Guard is taking steps to implement different recommendations from the Arctic Marine Shipping Assessment. Is that right, sir?

Admiral Watson: Yes, we are. There's, first of all we're very focused on the Arctic Marine Shipping Assessment and we're working with the Arctic Council and the IMO as far as working beyond our own walls here within the Coast Guard on the issues. So much of what we do will depend on what international shipping does, what the commercial activities are that will drive the need for a Coast Guard mission set-up there. The Arctic Awareness flights are being conducted with our C1-30 Hercules Aircraft. They actually launch from Kodiak and it's a long ways to get up there. It's 1,000 miles just to get from their base up to the Arctic seas and the (indisc.) Sea up there where they begin these awareness flights of the activities north of Prudhoe Bay. Those flights are being conducted every two weeks between March and November. They survey the sea ice. They monitor the vessel traffic. They try to report back on what might be the challenges if different contingencies come up regarding the activities that they see there, and they test, they test their equipment. We've had some challenges with our airborne navigation equipment, our communications equipment, and just being able to do the kinds of things that we take for granted below the Arctic Circle. So those flights have been very valuable and we will continue to do them and look forward to getting more information from the international bodies working on projections of activities there.

Benjamin: Well it's interesting that you mention the, some of the challenges faced even by the air crews up there because that was a common thread among the participants at the Arctic Shipping Summit in Helsinki is that all the equipment, whether it be a small boat, whether it be trucks that may be used to truck infrastructure and boom or even environmental response equipment, everything seems to work differently in the Arctic and we've never faced these challenges before because there was always ice there or just the challenges of working with the indigenous populations there who perhaps the ice for them is really land versus frozen water for us that may be viewing things for a shipping standpoint. It's just, it's fascinating and I don't think we're alone, at least that's not my understanding talking with the participants in Helsinki. We're not alone in these challenges. All of the Arctic nations are facing it and arguably the rest of the world that's engaged in shipping and looking for either a less expensive, a faster yet safe way to move goods back and forth from Asia to Europe and the United States, so it's an interesting dynamic and it's certainly one that's not going to go away.

Admiral Watson: Yes, I mean there's international cooperation. Everybody sort of facing the challenges together as they evolve has been I think a fascinating area for the Coast Guard to be participating in. We're working very closely with the Canadian government. We have both a North Atlantic Coast Guard forum and a Pacific Coast Guard forum that involves countries like Norway and Denmark and Russia and Sweden and all of the countries in the Arctic Council, and we discuss these things that are forum meetings and have actually had joint exercises. The one that my command here has been directly involved with has been with the Canadians on some of their high latitude activities that have been done jointly between the U.S. Coast Guard, the U.S. Navy, the Canadian Navy and the Canadian Coast Guard, so those things are very, very helpful. Back to some of the things that the 17th District is doing with our populations in Alaska, as you say this is something that appears to be new and a little concerning to them so there's a tremendous amount of outreach to the residents of the northern parts of Alaska. We've had pollution exercises, we've had emergency towing exercises, amass casualty response because we have had some cruise ships up in that area. We've definitely increased our boating safety outreach activities and I think they appreciate that. They sometimes feel so remote from the mainstream United States agencies that when we go up there and we talk about wearing life jackets and all that, that actually, it touches them. There's commercial fishing vessel safety exams that are being modified for the commercial fishing fleet that goes up that way. And then, of course, there's an awful lot of activity involving the ports that are really more like small boat harbors but they're being looked at for increased activities and the potential that we could have to do some more of our port type of functions of working with pilots, working with terminal operators and that sort of thing than we have in the past.

Benjamin: Well it's, certainly to the people up in Alaska and I know that all of our Arctic partners are working with the residents that are, that live in that, above the Arctic Circle, it's no surprise that we truly are engaged in trying to get our hands around, wrapped around the Arctic issue and how we're going to respond to things and train people to work in that environment, better and safer and just ensure that there's less risk to life and property and to the environment. And I think in some regards and in keeping in mind that we're a lifesaving podcast as part of the Amver system, I would be remiss if I didn't say to our listeners if you're in shipping and you, regardless of where you sail, but especially if you're sailing in the Arctic and you're going to be, perhaps you're an offshore supply vessel and you're working around some platforms and things in the Arctic, perhaps you're, you work with Sovcumflot and you're sailing the Northern Sea route, we'd like you to enroll your vessel in Amver and we'll have a link in the show notes on how to do that. But right now, really one of the best resources for search and rescue is going to be other commercial ships. One of the fears that people mentioned at this Arctic Shipping Summit was the cruise industry up there and it poses a threat and I don't think it's anything that any of our, collectively any of our various maritime organizations, whether it be the U.S. Coast Guard or any of our Arctic partners is taking lightly and we're exploring all means to provide search and rescue services up there. But an actionable, something that a shipping company can do today is enroll in Amver, make themselves available and answer the call for help should something happen up in the Arctic because we're probably all familiar with the cruise ship Explorer that sank in Antarctica and Amver has a strong relationship with the International Association of Antarctic Tour Operators. I hope that we can build that same kind of relationship in the Arctic with both the tour and cruise industry and the commercial shipping industries, so I would certainly say if you're sailing anywhere in the North Polar regions, enrolling your ships in Amver helps us exponentially.

Admiral Watson: Absolutely. I think we're more dependent on Amver and those bi-latitude waters as well as you mentioned down in the Antarctic than we are any other places in the world and we highly encourage this buddy system for ships transiting up there particularly ones carrying passengers, but really any type of vessel that is entering into ice infested waters should be traveling at least in pairs if not in a larger group with a ice breaker that's outfitted for the purpose. One of the things that the Coast Guard is also engaged with is the improvements that need to be made in our own inventory of ice-breaking Coast Guard cutters. We really have three polar ice-breaking cutters but over the last several decades they've been almost totally devoted to research and scientific support. And they're spread pretty thin because they do work in both the Antarctic and the Arctic and two of the vessels are over 30 years old and one is in the yards and is going through some multi-year yard upgrades, so we're very thin in that capability to actually provide heavy ice breaking. But it's, there's a strong focus on that right now and we're working toward a future with a lot more capacity than we currently have.

Benjamin: Well there's certainly no shortage of challenges and it's good to know that we are working to address those challenges and we're working with our partner countries encouraging the commercial sector to assist where possible. I'm going to make sure that we've included some links to the 17th District with their Arctic domain awareness fact sheets and just to their news page so that if people are interested in learning what the Coast Guard is doing specifically up in Alaska, they can have that. Admiral, are there any other resources that people can turn to if they want to learn more about what the Coast Guard is doing from an Arctic standpoint?

Admiral Watson: Well I think you can always go to the Commandant's Compass site and pick up information when it's breaking on developments. There's also, I think a fair amount of reporting that is going on in the industry news outlets. We will be I think constantly talking about the Arctic in the various venues. I'm sure there was some discussion of it at CMA and of course you have these focus meetings all around the world, so I would be on the lookout for Coast Guard presentations throughout the year on Arctic developments.

Benjamin: We've actually got an emergency preparedness working group meeting of the Arctic Council coming up in June where I will be presenting on this Amver partnership with the various Arctic nations and their regional ship reporting systems which besides just helping to build kind of a blanket of safety around the Arctic from a business standpoint, if we get all the countries agreeing to share this information in a similar arrangement that we have with other regional ship reporting systems, those who are familiar with the Amver know that we have information sharing agreements with Japan, with their Jazzrep (phonetic) system, with Australia and Ausrep (phonetic) and with the Chilean search and rescue vessel tracking system, Chilrep. But from a business standpoint, it's less bridge work. It's one message that you have to send that's then forwarded to various vessel reporting schemes that may be required by a particular flag state or by where a vessel is sailing. So from a business standpoint, it saves you time, it saves money in satellite transmission costs and it increases safety so it's a no-brainer. And then in later this year, a similar Arctic shipping summit that I attended in Helsinki will take place in Canada. It will be the North American Arctic Shipping Summit. In fact, if I can, if they have a link available, I'll include that in the show notes as well for people who may be interested in either seeing what papers are going to be presented or in attending. But I think that anything that we can do as an industry to build awareness and, on safety, on the indigenous people, on the environment, anything to just make Arctic shipping safer then we're certainly doing ourselves a favor.

Admiral Watson: Absolutely. If I could just go through some of the key things of our Arctic strategic plan, it includes goals of protecting the Arctic environment and conserving its biologic resources ensuring that we have a natural resource management and economic development plan that's environmentally sustainable in the Arctic region, strengthening institutions for cooperation among the eight Arctic nations that make up the Arctic Council and we are going to spend a lot of time working those relationships, and, but also involving our Arctic indigenous communities as we've already talked about. That's a key part of our plan. And then finally, enhancing the scientific monitoring and research in those regions so that we can know where the environment is going to inform where we need to be going in terms of our capabilities and overcoming our limitations.

Benjamin: Certainly a comprehensive approach so that if people are concerned about the Coast Guard or Amver or anybody's interest in the Arctic, we're, we've recognized where the challenges lie and where we may have shortfalls and working to address those, and it may take some time so we're going to rely on our partners, indigenous peoples and the commercial sector to help us there regardless of, not just focusing on search and rescue but whatever type of incident may evolve in the Arctic. I should add, and like we say with every podcast, this isn't just Admiral Watson and I talking about whatever the topic may be, whether it be the Arctic shipping or whatever, we'd like to hear from our listeners so if you have questions about the Arctic, anything about the Coast Guard, about Amver, commercial shipping, if there's something that you want to ask somebody that's a decision maker or in a command position in the Coast Guard, this is probably the best forum for you to do that so I know Admiral Watson, you'd agree with me. People can leave comments on the blog from this particular podcast and we're happy to share what we know with them. Correct?

Admiral Watson: Absolutely. I'm gaining a real appreciation for this forum of information sharing to the maritime public and I do look forward to any questions or comments that they have.

Benjamin: Well sir, I think we've had a good discussion of things in the Arctic. We've heard what it's like to sail there. We're trying to strong arm our listeners to see if we can elicit some questions and perhaps there are some folks out there that may also have something to add in the comments because they sail there regularly, but hopefully we'll hear from our listeners and I look forward to meeting you again next month sir so we can share another topic on the Quarterdeck.

Admiral Watson: I'll see you next time, Ben. Good talking to you.

Benjamin: Thank you, Admiral.

Narrator: You have been listening to the Quarterdeck. (Indisc.) know about the Amver program at Amver.com. The Quarterdeck theme song is called Botany Bay by the Blaggards, available at [Musicalley \(phonetic\).com](http://Musicalley(phonetic).com) (indisc.).