Narrator: You are listening to the Quarterdeck, with your host, Benjamin Strong.

Ben: Hi, it's Ben Strong from Amver.com, and I'm joined by some friends from the National Weather Service. Paula, how are you?

Paula: I'm fine. How are you?

Ben: I'm good, thank you, and I've got Jim with us as well.

Jim: Hi.

Ben: How are you doing?

Jim: Good. Good.

Ben: Great. And we're gonna talk a little bit about Amver Seas program which is a way for Amver participants to kinda kill two birds with one stone. They're providing weather observation to the United States, probably used globally.

Paula: It is globally, yes.

Jim: Correct.

Ben: OK. And they;'re sending their Amver position reports as well. But I should start this out by saying I get a lot of phone calls, maybe one or two a month of people saying, How do I download Amver Seas. Oh I don't have an optical drive, I've got windows 7. So, today, let's see, perhaps we'll try to cover the whole gambit of what Amver Seas is, and why we want to encourage ships to use the program and then how to get it on your computer and if there's any changes coming. I don't know, why don't we start with, what actually is the Seas software? Well, what's the program?

Jim: Uh, basically it's a way for the crew members to, uh, take the weather elements, observe them and then put them into a piece of software that encodes it so that we can interpret that data with a computer. That's basically what it;s about.

Ben: Now why do you, I'm gonna sound naive, but I'm gonna assume that you're collecting this weather data because there aren't weather posts out in the middle of the ocean.

Jim: That's correct.

Paula: That's true and we use it also for ground truth for satellite data and buoys. We have, you know, cus if we just had that without the ship data, we'd have nothing to compare it to for ground-truth. And so, yes, it's really important, and for all the forecasts provided, we use the ocean data as a basis for aviation forecasts, for open water forecasts, for everything.

Ben: So my experience with weather data at sea comes from the movie, A Perfect Storm. Where on the bridge of that fishing vessel this weather map comes up off the fax machine.

Jim: That's correct.

Paula: Yeah.

Ben: So, you're collecting all this data but you're also providing a product to Mariners.

Jim: Right. Well, what's going to happen is we're gonna take those weather observations that they send in and we're gonna use them to make an analysis. And a way I tell the masters is, if I know it's happening now and I have a good computer model, I can tell you what's gonna happen tomorrow and the next day. but if I don't know what's happening now, no matter how good my model is, I'm not gonna be able t tell you what's gonna happen tomorrow. So those observations become very important because that's the foundation for a good forecast.

Ben: hence the need for ships to participate and send you this information.

Jim: It's a win/win.

Paula: Yes.

Ben: Is there, you know, a lot of folks ask on the Amver side what's the cost of Amver. What does it cost a ship to participate in the weather observation program?

Paula: Nothing.

Jim: Nothing.

Ben: Nothing? P

aula: Nothing, nothing. We incur all the costs for transmissions if they use the Stat-C and, but if they do use email that's usually absorbed. They can't even notice it on the cost-wise of the ship because it's such a small thing.

Ben: Yeah. and actually we've done that from the Amver stand point, to figure out, how big is an email with, you know, not ones and twos, but just plain text, and it's insignificant, it really is. It's cents to send that email. And then the other advantage as the Amver guy from the Amver stand point is that, the information that's in that weather observation includes position record, the IMO number of the vessel, gets the latitude and longitude.

Jim: It doesn't have IMO number, it has the call sign.

Ben: Call sign. Thank you. But it's got an identifier.

Jim: That's correct.

Ben: So then we can plot the vessel along it's path as well.

Jim: Right.

Paula: Right.

Ben: And now ...

Paula: Well, when they do use the software, before they can create an observation, and we are upgrading it, it won't be the same, they have to fill out what is kind of called an administrative page. We'll have all that pertinent data, the IMO we;'ll have, you know, whether they have a medical staff and it will have a lot of their meta data on it. So, in case the coast guard does need it, you know, they know all the information. That there is medic staff, all the location, so, they will have the IMO if they need it. If they're registered through the Amver seas program.

Ben: And the advantage is that for the ship is that they're killing two birds with one stone.

Jim: That's correct.

Ben: They can send in their weather observation, they can have their Amver message sent off to us and it's one less transmission.

Jim: And to you, if they're doing the hour, six hourly weather observations, you get six reports instead of the, or eight reports instead of just the one.

Ben: Right. Right. So it really enhances our ability to predict where a ship maybe in reference to some kind of distress at sea.

Paula: Yeah.

Ben: Now, I guess I'll get to one of the big questions. I have a new laptop, I don't have an optical drive. How do I, I won't even go that in depth. Pull into a USB port, how do I get Amver Seas onto my system? Onto my computer? Jim: You go to www.vos.noaa.gov. V-O-S is vos. And then you would click on the PMO page, that's Port Meteorological Officers.

Ben: Thank you.

Jim: And it's on the left side of the page. And it brings up a picture of a map of the United States and shows all the places where PMO's, Port Meteorological Officers are located. And then you just call the nearest one and you say, hey, can you come help us? And we will certainly do that. Ben: And we'll include a link to that on the show notes to this so that people can access it directly. Paula: And they do have the capability of using a thumb drive to download it as well as a disc, but we are in the process of using the software developer to enhance and improve and make it more compliant. So, we will in the near future have a URL that they can just go to and download it right on their computer, laptop, whatever.

Ben: OK. And I've talked to PMO's in the past and from folks who have called us, different ships, and I've never had a PMO say, Oh geez, I don't know. You folks like to go out on ships and you like to meet the folks who are making the observations.

Jim: It;s how I make my living.

Ben: Right! Nobody should, you know, to shippers who are listening and you're having trouble with your Amver seas software, you know, you can, we'll have a contact there, a link that you can follow in the show notes. but don't hesitate to call because you guys are pretty nice and you'll go out and you'll help that ship get situated.

Jim: Absolutely.

Paula: Yes. And even if that particular PMO can't, if we know their schedule and they can give us a heads up at what port they will be in, we'll try and schedule it for some other port, some other time. And as far as the Amver, we are updating that. One of the problems, I wouldn't say problem, but, you know, hold backs, was that we only had 13 wave points on the software. But we've corrected that and it will basically be unlimited in the future.

Ben: Wow. OK.

Paula: So, that's one of the reasons, that's why some ships would have to go to a commercial vendor for that, but no longer because we'll have unlimited wave points.

Ben: OK. So the accuracy and the, the ability to really find out where that ship is, has been enhanced.

Paula: Oh yeah.

Ben: That's fantastic. How many messages, how many ships are reporting through the weather system, through the observation system?

Jim: I'll pull on a daily basis somewhere between three and four thousand. Ben: OK. Paula: That's real high.

Ben: And, I mean, what's your ideal number? I mean every ship obviously, but.

Jim: Yeah, that would be the ideal, but, no that's actually pretty good, that's useful. You know, we'd like to have five, six thousand directly, but, we're happy with the size of the fleet we have right now. As long as we're getting quality observations.

Ben: Right.

Paula: Right. That's the main thing we have to mainly emphasize to the ships is that we really need quality observations. We really need them to be alert to the data that they're sending us. Because NCEP [??] of the sea, the people who take those observations and put them into the models, is their observations are holding data that's skewed and off of bias, then basically they kick it out, we don't even get to use that data. and that does happen because people, the calibration is off, adjustments are off. A lack of a good visit from a good PMO. So, right now I think we've got a good compfr0ptable number that we can handle well and make sure the quality is there.

Ben: So, if the ships crew has a question on just how accurate their instruments are for collecting weather data, a PMO can help them calibrate that as well?

Paula: We can do it, yes, we have report cards and we do, we have report cards and if they want to know we certainly can send them a wonderful little pdf that will show them every element that they're observing.

Ben: Oh. OK.

Jim: If their equipment is flawed, we can help them correct it and get them back on track.

Ben: Now does this, I mean, ships have a limited time in port. In know that you guys are very flexible as far as your ability to come out to the ship. Is there a cost for that? does the charter have to cough up some money or the shipping company?

Jim: No charge.

Ben: So these visits are complimentary? You come out and you can help kind of tune up the programing instruments and the software?

Paula: Yeah. And even if they're not in the program, as a courtesy we visit if we have the time. Of course we put out this program ahead of the ships but, even if they're not in a program. Because if that particular ship is in an area where they need pressure reading for some reason, they're not in the program, they will be contacted for that data. And so it's real important to make sure that they're instruments are reading correctly.

Ben: Right. OK.

Paula: So, that's very, very important. No, we visit all ships.

Ben: Great. Now, is this information shared worldwide as well, or is it just a US thing?

Jim:Yes, it is, there's three countries primarily that have super computers required to do the modeling. That's Germany, the United States, and Japan. We share all the data among those countries.

Ben: How about the Met office in the UK or the World Meteorological Observations?

Jim: They're part of the European community so they fall under the German collection agency.

Ben: OK. So these products are, will be on say the North Atlantic or the Pacific. These are products that a mariner in the Indian Ocean may get.

Jim: Right, southern hemisphere, the whole thing.

Ben: OK. Do you see an increase, or, let me ask this. Is there an are in the world where you don't, where you use more information and perhaps you don't have a lot of reports coming from?

Jim: The room [??] between Chile and New Zealand is particularly void of information. So that's an area where we're constantly seeking out ships that are on that route.

Paula: That would be precious if we could get data, any data from that area. Yeah,

Ben: Now how about the Arctic, is there talk about the Arctic or trying to increase, i don't know if surveillance is the right word, but recording from the Arctic?

Paula: Oh definitely we need more ships there. There are two there right now on the South Pole, it's like The Palmer and The Lawrence School. They're research vessels, they're down there. but there;'s not very many on the pole in the Arctic.

Ben: Right. Man there's such an emphasis on shipping in the Arctic, of the northern sea route, and the

northwest passage.

Jim: Northwest passage.

Paula: Yeah.

Ben: Yeah, there;s a certain school that says there are gonna be so many ships up there. Obviously you're gonna want weather reporting and then there's another school, train of thought that says, you now, just because it's not ice, or ice free, doesn't mean there's no ice. but even if there's bits and pieces of ice, there's fog and there can be a host of different navigational issues. So, I can see where the polar regions may be important for you from a weather standpoint.

Paula: Oh yeah. It's important for them to send their ice reports. And we even have on our software mammal recording.

Ben: OK. Paula: And so we're really tied in full circle with environmental concerns. So, anything that they view that's out of the normal in their shipping area.

Ben: So they can do ice reporting as well?

Paula: Yeah, they can do that.

Ben: Through this?

Paula: Yeah.

Ben: Really? OK. Does that tie in with the International Ice Patrol?

Jim: Yes. Yeah that's forwarded to them.

Ben: Oh. OK. Interesting. All right. And we just did for listeners of the podcast, recently did an interview with the International Ice Patrol as they're getting ready to commemorate the 100th anniversary of the Titanic sinking. Which is why the ice patrol and Amver were founded. That's good to know that there's really a one stop reporting shop, as far as, we found whales or.

Jim: Right. Whale sightings, those kind of things are all available to be reported in our software.

Ben: fantastic.

Paula: And believe it or not, we're really marine debris, for all the tsunami debris that's coming from japan. We're looking at that too. And so we're encouraging ships that if they do see any that they need to report the lat and long with their idea what they're looking at and send it in. That's the idea, that's really getting to be the big buzz right now in the marine department

Ben: In fact that's one of the , for folks who are a little geeky or interested in the types of visitors that come to the Amver website, one of the most searched terms is Japanese Tsunami debris.

Paula: Yeah.

Ben: And we have written a story, I'll include a link to it, but we had written a story about tracking that debris. And I know that NOAA got some efforts to track the debris, but that's one of the main search terms to get to Amver, is where is this debris. So if there's a way for ships to report that through seas I think that's important that we share that as well. That's good. I didn't know that. That's great t know. Wow, this is good. Well there's some exciting things happening with Amver Seas. Hopefully we can get some of those Chilean, New Zealand vessels that we have to start sending the weather observations and we'll make sure that folks that have any questions, or troubles, or concerns about either their instruments, their collection, or their Amver Seas software, that they know how to get a hold of their PMO.

Paula: Good.

Ben: And they can get things tuned up. One last question, are there PMO's in foreign docks?

Paula: Yes.

Ben: Oh. OK.

Paula: Absolutely. And you can go on, we have, it's called find a PMO, where ion the world is a PMO. and this was put on by New Zealand and Australia, they've got this little website. It's wonderful. You have to download Google earth and then it will explain to you how ot download the software, but it's find a PMO. I can't remember the website off the top of my head, but.

Ben: Well, we'll work on that offline and then I'll include a link to that here as well.

Paula: Wonderful. They've got the whole globe, they've got all the PMO's in the world right there at your fingertips.

Jim: And there's contact information so if you need to contact.

Ben: Oh, that's fantastic.

Jim: And there's like 37 countries or something that have PMO's.

Paula: Yes.

Ben: Oh wow, OK.

Paula: And also, I mean, there's always on our website for Vos, we have mariners weather logs, the pdf file right there and they're very backed. we have every PMO contact right there, headquarters, the individual PMO's, so we have all that information.

Ben: Thank you for reminding me about the weather log, the mariners weather log. because you have this magazine that you put out, is it quarterly? P

aula: No, three times a year.

Ben: Three times a year, but this is where you high light different sea stories, that's perhaps not the right phrase, but good work that the ships are doing, any changes to the programs.

Paula: marine interests, human interest stories from the crews perspective, weather, sightings, anything.

Jim: I just wrote an article about the tear of grief. I'm sure you can see the tear of grief from your office.

[Laughter] Ben: I probably can, exactly.

Paula: That will be the cover story on the next issue for August actually.

Ben: OK. Well I thank you guys for taking some time to kind of share the Amver Seas story with us. and I hope that, that again, any of our Amver participants that have questions or trouble will reach out to the PMO's. We'll have links to everything.

Jim: Give me a call.

Ben: I appreciate it. Good. Thank you guys very much.

Paula: You're welcome.

Jim: You're welcome, thanks.

Narrator: You have been listening to the Quarterdeck. Learn more about the Amver program at amver.com. The Quarterdeck theme song is called Botany Bay by the Blaggards, available at Musicalley.com. Or follow the link in our show notes.