

• Cover Page	• Events and News	• Market News	• Out of the office
<ul style="list-style-type: none"> Supporting Piraeus high school students at the World Robotics Championship in Thailand <p style="text-align: right;">Page 01</p>	<ul style="list-style-type: none"> Metrostar is ready for the digitalisation of shipping Working with Bureau Veritas on cyber <p style="text-align: right;">Page 02</p>	<ul style="list-style-type: none"> Avin International chooses GT Maritime Navarino's cultural training <p style="text-align: right;">Page 03</p>	<ul style="list-style-type: none"> British adventurer Ash Dykes is halfway along the Yangtze river <p style="text-align: right;">Page 04</p>

The Navarino ‘Going Beyond’ initiative supports the Ralleios High School Robotics Team as they compete in Thailand



Navarino’s ‘Going Beyond’ initiative is a new scheme aimed at offering support to innovative and aspiring individuals. The Ralleio High School of Piraeus Robotics Team has demonstrated everything that we, at Navarino, value deeply and their participation in the World Robotics Olympiad (WRO) 2018 is something to celebrate.

Distinguished in the Pan-Hellenic robotics competition after their tenth time participating and through winning first place, the Ralleio High School Team have exceeded even further in the 2018 WRO by finishing an impressive 16th out of 90 global teams. Eirini Dileris and Eleni Kougioumtzi, as well as their coach Mr. Yannis Tourlos, took first place in Lyceum class with the E – T team at the Pan-Hellenic robotics competition, allowing them to compete on a global scale. This is the fourth year that the Ralleio High School team have been invited to the WRO through their success across Greece. In 2009 the team travelled to Korea, in 2013 to Indonesia, 2016 to India, and in 2018 to Thailand.

Started in 2004, the WRO has been dedicated to promoting robotics in Science, Technology Engineering and Mathematics (STEM) education worldwide. The competition provides a global platform for science, technology and education. In 2018, more than 26,000 teams participated with over 600,000 young people inspired for STEM.

We believe that talent such as that displayed by the Ralleio High School team needs to be given the opportunity to thrive and flourish, and what better way to do that than to offer our support. These bright individuals are an example of what the future of Navarino will look like and their passion for science and technology is something that needs to be invigorated.



Editor’s note

by Christian Vakarelis

Welcome to another Navarino newsletter! As we begin 2019, all of us at Navarino would like to wish our readers a peaceful and prosperous year full of happiness.

We begin this year with an exciting new service from Iridium. Following multiple successful satellite launches that have been capturing headlines, the Iridium Certus service is now live and commercially available. We are really excited to begin offering this entirely new L-Band connectivity solution.

Navarino is proud to have been a part of the Ralleios High School team who headed to Thailand recently to compete in the World Robotics Championships. They did really well and these talented, ambitious youngsters made Greece proud.

Also covered in this edition are new developments at Avin International, who have just started a rollout of GTMaritime, and you can read about our work with Bureau Veritas in creating new cyber security certifications for maritime.

We also have a case study on Metrostar Ship Management, which has worked with Navarino to bring advanced connectivity to its fleet. I would like to thank Mr Matthew Maheras for his time and for talking to us about how he is using advanced solutions to ‘digitalize’ his fleet.

And finally, Ash Dykes continues his expedition up the Yangtze, we catch up with him as he reaches halfway!

Events and News

Metrostar uses Fleet Xpress and Infinity to ready its vessels for shipping's era of digitalization



Mr Matthew Maheras, IT Manager at Metrostar

Metrostar Management is an Athens-based ship operator. The company manages four sophisticated tankers (two product tankers and two oil tankers). In this interview their IT Manager, Mr Matthew Maheras, explains how the company is using both Fleet Xpress and the Infinity Cube from Navarino to enhance their communications and lead Metrostar vessels into the digital age.

'All of our vessels have Intellian V100 antennas combined with Furuno Fleet Broadband 500s. We use Iridium Citadel installations for back up. We have also put Infinity Cube in place to help us manage the available bandwidth and optimize the way it is used across separate business, crew, and operational technology networks.

'We operate advanced vessels that are now ready to take full advantage of the ongoing 'digitalization' of shipping.'

We chose a Fleet Xpress CIR plan which gives us 1 MBp/s download and 256 kbp/s upload speeds. The reason we chose this CIR plan rather than the

MIR only plans is that we feel the CIR plan, with its guaranteed minimum speed, was important to enable us to use various Operational Technology and advanced 'Internet of Things' solutions that help us run our vessels and our business more efficiently.

For example, one way that we use the high speed, reliable bandwidth of Fleet Xpress is for Kyma performance monitoring. This gives us, among other things, a near real-time overview of fuel consumption via automated reports which allows us to make adjustments quickly where needed. Furthermore it is a very useful tool when charterers ask for, or question, the fuel performance of our vessels.

We use Navtor over Fleet Xpress and we have also been able to implement Office 365 onboard. Because it is an online service which on occasion might need around 2 GB of updates in a month, the fixed fee, unlimited bandwidth available over Fleet Xpress has allowed us to replicate the Office 365 environment that we work with in our offices on our ships too, which is a big plus.

In addition, our crews have benefitted from the higher bandwidth that Fleet Xpress provides as well. We give every crew member 200 MB of data each month for free, once they have used that they are able to buy more in 200 MB increments.

Like most of us, the crew 'Bring Their Own Devices' which allows them to stay connected using the exact same tools they use on land for news, VOIP calling and social media. They also use GTMaritime's Mail4Crew, which gives them an email account that follows them across the fleet and daily news updates, which is popular.

Using the monitoring tools that Infinity offers, we are able to manage and control the content available to the crew at sea and we see that VOIP calling is what they use most of their data for. On average, our crew members use about 1 GB each per month in total.

Overall I would say that thanks to Navarino, Fleet Xpress in conjunction with Infinity has brought a whole new realm of possibilities to how we communicate with our fleet, both for operational, business purposes but also for our crews. We operate advanced vessels that are now ready and able to take full advantage of the ongoing 'digitalization' of shipping.'



Navarino works with Bureau Veritas on new cyber security certification NR659

Navarino is proud to have been invited to be a member of the Bureau Veritas Working Group that created the new cyber security certification NR659. Angel, our fully managed cyber security solution designed specifically for maritime, and our other cyber security services mean that Navarino has built a wealth of experience on vessel security.

The latest NR659 certification applies to the design, construction, commissioning and maintenance of computer based systems where they depend on software for the proper achievement of their functions.

NR659 focuses on the functionality of the software and on the hardware supporting the software, by means of a cyber risk analysis, in order to reduce the volume and the impact of cyber incidents during the whole life cycle of the vessel.

For full information on this important new addition to cyber defence for maritime, you can read the full NR659 rules here <https://bit.ly/2AEhOK7>.



Market News

Avin International begins rollout of GTMaritime across entire fleet



Avin International operates a modern fleet of oil and chemical tankers of various sizes. Based in Maroussi, Athens, the company recently decided to upgrade its vessels messaging software from Rydex to GTMaritime.



Mr Rob Kenworthy, GTMaritime CEO

In combination with Navarino's Fleet Xpress and Infinity Plus, the company's IT department decided that with the previously installed Rydex approaching its 'End of Life', it was the right time to look at what the market could offer to enhance their vessels communications. After looking at various options they chose GTMaritime from Navarino as a very tested, reliable solution which is regularly updated with new features. Kostas Katsoulis, Navarino's Commercial Director said 'Avin is one of the most advanced shipping companies in the market. We are delighted to be able to offer them such an innovative and dependable solution as GTMaritime, with whom we have been partners for many years, thanks to their innovative and dependable solutions for the maritime world.'

Iridium's NEXT satellite constellation is now fully launched and its new global L-Band Certus service goes live



Following the eighth and final launch for Iridium's historic launch campaign with SpaceX in January, a total of 75 new satellites have been deployed by Iridium in less than two years. The Iridium satellite constellation is the only communications network with pole-to-pole coverage of the entire planet. It is comprised of six polar orbiting planes, each containing 11 crosslinked satellites totaling 66 in the operational constellation, creating a web of coverage around the Earth.

Since the launches began, the constellation has been undergoing a one-for-one replacement, new satellite for old, achieved through a highly choreographed in-space maneuver known as a 'slot swap.'

Navarino would like to congratulate Iridium on the successful launch of Certus and we are looking forward to seeing what the world's latest L-Band service can do!

Navarino begins business culture project for staff to ingrain our corporate values across all departments



Navarino has this quarter begun an 18-month business culture project that aims to instill our corporate values in our employees throughout the company. Over the course of the first module, staff were put into groups of inter-departmental teams that through a series of lectures, cooperative tasks, role play and games were designed to foster a spirit of teamwork and understanding of the Navarino corporate values.



Navarino has seven corporate values - Teamwork, Agility, Respect, Accountability, Integrity, Innovation and Knowledge which form the basis of how we expect our staff to work and behave in the workplace, both to our customers and to each other. As the culture project progresses throughout the coming year, it is expected that each of these values will be further enshrined in the philosophy of the company and in its staff.

The culture project is being run by Mr Barry Kyriacou, who runs Danatcon, a Cyprus-based talent management consulting and training company. He said 'Navarino is a fast growing company that is among the leaders in its field. It is exactly the right time for its staff to develop a 'performance culture' by creating a mind-set where everyone understands and accepts that they are accountable for delivering on their targets.'

Performance should be the whole company's business. This culture improvement training aims to develop positive behaviours throughout management and staff that will help enable Navarino as a company to achieve its strategic objectives.'

Navarino CEO, Dimitris Tsikopoulos added his perspective on the goals of the training- 'At Navarino we understand that it is essential to have a common understanding throughout the company of the values we wish to display to our customers and to each other as colleagues. This enables us to improve as individuals but also as a company, with everyone working towards a common goal. I see this cultural training project as part of a long-term effort to instill in each employee the importance of a common culture that helps us grow ever closer and to perform better, both as a team and as a company.'



New Fleet Broadband plans introduced by Inmarsat for 2019, large allowance plans now available for as little as one month

1 month	12 months	24 months
100MB	100MB	150MB
375MB	375MB	500MB
750MB	750MB	1GB
1.5GB	1.5GB	2GB
5GB	5GB	6GB
9GB	9GB	10GB
20GB	20GB	20GB
40GB	40GB	40GB

Inmarsat has made some significant changes to the Fleet Broadband plans for 2019. One of the most important changes is that now vessels can activate the larger FB plans without long commitments for as little as one month at a time, with 12 and 24 month options also available. Furthermore, some of the 2018 plans have been replaced with larger allowance plans.

In addition, new Flexible 36 month plans have been introduced. These plans offer 500MB, 1.5GB, 6GB and 10GB allowances which over the 36 month contract enable vessels to move up or down between any of these packages without penalty, as often as required. These are useful for vessels which may enter drydock or layup, as the vessel can move from a larger plan that was in use during operations to a smaller one until it returns to sea, when it can move up again.

For full details of these new packages please contact your account manager.

Out of the office

Navarino-sponsored Ash Dykes reaches the half-way point of his extraordinary mission to walk the Yangtze river



British adventurer Ash Dykes began his 4000-mile trek across the Yangtze river in China in August of 2018. So far, the explorer has reached his 2000-mile milestone after more than 136 days of intense hiking. Ash represents a distinct part of Navarino’s values; the gumption to explore beyond our limitations, undertake incredible opportunities, and give-in to curiosity. Hence our enthusiasm to sponsor such a brave individual. Ash’s trek thus far has not been easy; eight out of his nine team members have had to leave the expedition due to illness or fear for their lives. Not long after the trek’s initiation, Dykes was tracked by a pack of wolves for two days straight, and he has faced the very real threat of aggressive wild yaks, cobras, and giant hornets.

In addition to Mother Nature’s wrath, including temperatures of –20 degrees Celcius, snow blizzards, landslides and glacial river crossings, Ash has had some particularly difficult encounters with Chinese authorities. ‘The Isatphone provided by Navarino has been the unsung hero on this trip!’ he said. ‘It has got me out of lots of dangerous scenarios, particularly when I was picked up by Chinese authorities and needed to reach my logistics team in China for assistance.’ Navarino wanted to ensure that Dykes carried out his journey with the most relevant equipment available – equipment that could be life-saving. ‘The Navarino kit has been amazing. The BGAN system allowed me to interact with everybody when I was in the mountains with no data signal, and the Isatphone has also been instrumental in helping us get members of the team suffering from illness or injury to safety quickly. It has genuinely been a lifesaver.’

‘The Yangtze has been incredibly clean so far, as the Tibetan people will not so much as fish out of the river, let alone throw rubbish in it. I’m really interested to see how China’s wild west compares with its more industrial and densely populated eastern region.’

As Dykes continues his trek, Navarino will be watching from the side-lines, fascinated and inspired by Dykes’ ability to overcome such an intense challenge.

