

• Case Study	• News	• Digital Ship Athens	• Events- Promotions
<p>FB Large Allowance Plans with Infinity at Kyklades Maritime and Teo Shipping</p> <p style="text-align: right;">Page 02</p>	<p>Maritime Labour Convention to come into force on 20 August 2013</p> <p style="text-align: right;">Page 03</p>	<p>Navarino presents at 10th Digital Ship Athens 2012</p> <p style="text-align: right;">Page 04</p>	<p>Navarino sponsors the South America GS Adventure</p> <p style="text-align: right;">Page 04</p>

Navarino and Inmarsat sign Global Xpress VAR Agreement

Navarino is pleased to announce that it has signed an agreement with Inmarsat to become a Value Added Reseller (VAR) of Global Xpress® for the maritime market. Given that Inmarsat will appoint only 8-10 VARs globally, we are immensely proud of this achievement.

Global Xpress will be launched in 2013, with full global coverage available by late 2014. It will offer downlink speeds of up to 50Mbps, and up to 5Mbps over the uplink, from compact user terminals. With superior engineering and quality, and backed by the L-band resilience of FleetBroadband, the Global Xpress solution will exceed the levels of service



offered by existing broadband VSAT services. Global Xpress will offer significantly better throughput, at prices comparable with today's slower VSAT services. Global Xpress will be available globally through smaller antennas than today's standard VSAT Ku antennas. This will enable many more ships to take advantage of the superior speeds and service. As the need for better crew benefits grows, Global Xpress will be ideally placed to provide a high-quality user experience for browsing, voice and media services. In addition, integrating the ship into the corporate office as a



part of the enterprise will become reality. Navarino CEO Dimitris Tsikopoulos said: "Global Xpress is the best response to the increasing need for data-driven and cost-effective communications at sea, offering the shipping industry unprecedented data speeds and global coverage. Our customers have the highest bandwidth requirements and Global Xpress with its combination of a new super-fast Ka-band satellite network and the existing FleetBroadband service will deliver a quality, global service with the utmost reliability. The deployment of Global Xpress will herald a revolution in maritime communications and will have a significant impact on how the shipping industry can improve its profitability through achieving long term cost efficiencies."

Frank Coles, President of Inmarsat Maritime added "Navarino is a highly specialised integrator, reseller and developer of maritime communications services. Its worldwide installation and support capabilities will certainly aid the swift deployment of Global Xpress amongst their customers in both Europe and Asia, and we are delighted to recognise them as the first Global Xpress VAR in Greece. I believe Navarino is well positioned to offer the next generation of Inmarsat services to its current and future customers."

For any further information on this important announcement please contact your Navarino account manager.

Editor's note

by Christian Vakarelis

Hello and welcome to the new version of our Newsletter. Of course the obvious changes are to the presentation and layout, which we think help bring a cleaner, more readable look to our quarterly publication. In terms of changes to the content, we are going to include case studies that give our readers real, practical information on what some of our customers are doing with their satellite communications, and explain the ways and means used that may give some of our readers useful information and suggestions for their own vessels. There will also be a News section each month that brings you the latest developments in the industry and highlights the most important new products and services in our ever changing maritime industry. I think these slight changes will make a big difference to our Newsletter and make it more relevant and interesting for all our readers. I do hope you enjoy the changes and please do let us know what you think!



Case study

Crew Internet with Infinity at Kyklades Maritime and Teo Shipping

As part of our revamped Newsletter, we will each quarter bring you some case studies of existing customers, which go into detail about how they are using their satellite communications, and which may give you some ideas for your own fleet. In this edition we look at two companies - Kyklades Maritime and Teo Shipping.

Kyklades Maritime

Kyklades Maritime has 6 vessels using the 3GB plan with Infinity on their vessels. They use two FBB antennas, one FBB 500 for business use, and one FBB 250 for crew use, with usage of the 3GB plan split over the two terminals. Business email and applications are done using Rydex software, which allows them to email, and synchronise folders with NS5, the PMS systems.

The crew can get online using a dedicated computer in the ships office, and Kyklades have also set up wifi access points on board so that crewmembers can also surf the internet using their own computers, smartphones and tablets. Kyklades sells crew internet PINs in denominations of 25 MBs, and usage has been high, as graph 1 shows. In yellow is the crew usage, and in green the business usage, and as one would expect, crew usage is by far where most of the 3GB of the plan is consumed.

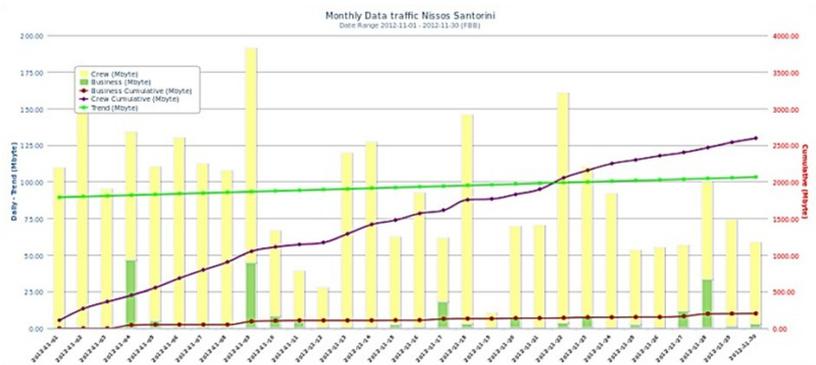
Graph 2 shows the level of compression achieved across all Kyklades vessels on their data traffic through Infinity in November. In red is the uncompressed data, and in green the data that was actually sent through Infinity after compression. As clearly shown, the compression gain is very significant, almost doubling the allowance of both business traffic and of crewmembers PINs.

Teo Shipping

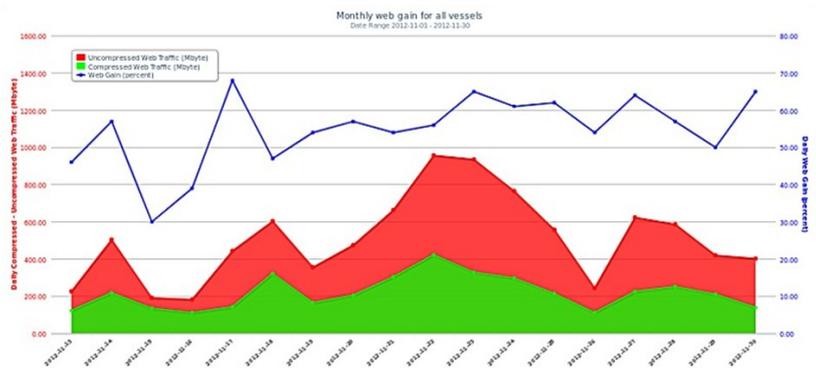
Teo Shipping is using the 10 GB Very Large Allowance plan, together with Infinity on their vessel the 'MV Sfakia Wave'. The ship has two Fleet Broadband 500 antennas, one Sailor and one JRC, so that there is always a back up unit if one terminal fails for some reason. They chose this fixed fee plan both to have more options for their business applications, and also to offer their crew internet access at sea. The plan is to set up a VPN for file sharing over the business network, and to begin using PMS and purchasing applications on board.

For the crew, internet access is offered through Infinity using PINs that are sold to the crew, and which have a time limit of 10 hours surfing per PIN. Since the system was installed in January 2012, crew use has grown enormously as they adapt to the ability to get online – at the start of the year Teo were selling forty 10 hour PINs per month, which in recent months has grown to one hundred 10 hour PINs per month.

The office is also very satisfied with the new plan, which this quote from their IT Dept explains "We are very happy with this solution because we have not had ANY problems with this vessel regarding communications. The solution is extremely stable and 'one less headache for I.T.' We are also happy with



Graph 1. Usage on Kyklades vessel, split into crew and business use



Graph 2. Kyklades Infinity compression, uncompressed in red, compressed in green

Screenshot showing what the user sees when he logs in with Infinity PIN

the profit made from the sale of internet PINs – this vessel has consistently made use of the internet service and brought the company roughly half of the cost of the VLA monthly fee each month.”

News

New FBB units from JRC

JRC has recently announced a new model of Fleet Broadband terminal, which provides several new features over their previous units. The new units are called the FBB 501 and below are the new features -



Advanced interfacing

With JRC's new JUE-501 main unit comes a whole new set of reliable interfacing, such as a dedicated non SO-LAS voice distress port and an integrated WAN selector between JRC's main unit and other communication devices, which switches the unit to a secondary network when the primary network is disconnected.



Optional Junction Board In addition to the standard interface, JRC offers an optional junction board packed with a range of additional features. It has 4 telephone/fax lines (RJ-11), 4 external buzzers, 1 voice distress button, gyro and GPS input, remote power switch and multi-purpose dry contact ports.

Satellite blocking The JUE-501 integrates a blockage setting which allows you to register up to 6 blocking areas such as the radar mast or funnel. When the line of sight to the satellite coincides with any of the pre registered blocking areas, the operator can easily recognize that there is a blockage and can take necessary action such as course change, to restore the connection.

Remote Maintenance System (RMS) The JUE-501 supports RMS access via ISDN as well as over a dedicated JRC IP connection, which allows for remote maintenance of supported equipment via the Inmarsat satellite link. Additionally, JRC's new Inmarsat C model, the JUE-87, can be used to poll the status of the JUE-501 from the shore, should the ships IP data connection be unavailable.

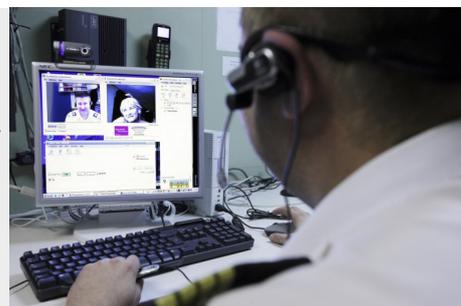
Advanced web interface The JUE-501 Inmarsat FleetBroadband comes with an advanced web interface, built in as standard. This dedicated (Windows based) user interface brings together all operations. Think of it as the hub of your system - view everything and fully manage all operations with a few clicks.

Voice distress button The JUE-501 will support Inmarsat's voice distress service with an optional voice distress button, connected directly to the main unit. A voice distress call has the priority and pre-emption over any calls on the Inmarsat satellite network, guaranteed to get through to an appropriate Maritime Rescue Coordination Center (MRCC). The service is not currently GMDSS compliant.

Maritime Labour Convention to come into force on 20 August 2013

The International Labour Organisation's Maritime Labour Convention has now been ratified by 30 countries, meaning it will go into effect on 20 August 2013. Of particular note for ship-owners will be Guideline B3.1.11.4.j, which states that:

'Where practicable reasonable access to ship-to-shore telephone communications, and email and Internet facilities, where available, with any charges for the use of these services being reasonable in amount.'



Navarino can assist with all aspects on ensuring your vessels are compliant with these upcoming regulations, with options to offer your crew a full range of internet and email options and the ability to offer crew these services free of charge or to bill them for their voice and data usage, with minimum administrative fuss for the office.

The ILO's Maritime Labour Convention (MLC), 2006 provides comprehensive rights and protection at work for the world's more than 1.2 million seafarers. The Convention aims to achieve both decent work for seafarers and secure economic interests in fair competition for quality ship-owners. As an estimated 90% of world trade is carried on ships, seafarers are essential to international trade and the international economic and trade system. The new labour standard consolidates and updates more than 68 international labour standards related to the Maritime sector adopted over the last 80 years.

The Convention sets out seafarers' rights to decent conditions of work on a wide range of subjects, and aims to be globally applicable, easily understandable, readily updatable and uniformly enforced. It has been designed to become a global instrument known as the "fourth pillar" of the international regulatory regime for quality shipping, complementing the key Conventions of the International Maritime Organization (IMO).

The decision by the ILO to move forward to create this major new Maritime Labour Convention was the result of a joint resolution in 2001 by the international seafarers' and ship owners' organizations, also supported by governments. They pointed out that the shipping industry is "the world's first genuinely global industry" which "requires an international regulatory response of an appropriate kind - global standards applicable to the entire industry".

The following countries have ratified MLC, 2006

Liberia, Marshall Islands, Bahamas, Panama, Norway, Bosnia and Herzegovina, Spain, Croatia, Bulgaria, Canada, Saint Vincent and the Grenadines, Switzerland, Benin, Singapore, Denmark, Antigua and Barbuda, Latvia, Luxembourg, Kiribati, Netherlands, Australia, St Kitts and Nevis, Tuvalu, Togo, Poland, Palau, Sweden, Cyprus, Russian Federation, Philippines.

When it comes into effect, the MLC, 2006 will replace 37 existing ILO maritime Conventions and related Recommendations adopted since 1920.



Events- Promotions

Digital Ship Athens November 2012



Navarino stand at Digital Ship Athens

On November 27-28th 2012 Navarino attended the Digital Ship Athens conference, held at the Metropolitan hotel. Besides being an excellent opportunity to meet with several of our customers in a relaxed atmosphere, the conference also gave us an opportunity to present a series of case studies. International Account Manager Christian Vakarelis took to the stand on Tuesday morning to

examine how Navarino customers were using the larger Inmarsat Fleet Broadband plans in combination with Infinity to bring new options for business applications and crew internet to their vessels.

The customers presented were Dorian Hellas, Eletson Corporation, Millennia Maritime, Teo Shipping, Union Commercial, and Promar Shipping. Christian discussed how, thanks to the exponential drop in per MB and per voice minute costs that the larger Inmarsat plans provide, shipping companies can use Infinity to pass on these lower per unit costs to crew, using PINs for both data and voice which can be either sold or given for free to crew members to get online and talk with home. PINs can be set up according to customer's wishes, and the number of MB and minutes per PIN can be set as desired very simply. What's more, PINs can be set up with a time limit that gives for example 10 hours of surfing per day and/or allow surfing only at certain times of day.

All this and more were discussed during the presentation. We wish to thank our customers who agreed to participate in the case study presentation and inform all our readers that the presentation will shortly be available on the Digital Ship website, or you can ask your Navarino account manager for a copy.



Mr. Christian Vakarelis

Navarino sponsors the South America GS Adventure

Navarino is pleased to announce that we shall be sponsoring two Greek motorcyclists, Stavros Derdas and Thanasis Vavaroutas, as they travel through Latin America to undertake the South America GS Challenge. Navarino will be supplying them with Inmarsat Isatphone Pro and a BGAN 500 terminal as well as airtime, to help them stay connected throughout their adventure. Both units are the only reliable satellite terminals that can handle the rough and tough of



Mr. Stavros Derdas

such a trip, while providing excellent coverage throughout the South American region. Below is how they describe the trip in their own words, we wish them both the best of luck!

"In the middle of December 2012, we're going to live one more dream! Stavros (nickname pirate) and I, Thanasis (nickname Jefe), we will begin a new motoadventure, the Crossing of South America!



Our motorcycles, BMW 1200GSAdvS, will be shipped cargo from Greece to Buenos Aires, Argentina, where we will catch them up travelling by plane. The expedition will start from Buenos Aires. We will head south to Tierra del Fuego, to Ushuaia! Then, we will drive north crossing the legendary Ruta Cuarenta (Ruta 40), starting from Cape Virgenes. We will visit National Parks, mountains (Andes) in different altitudes, valleys, archeological sites, and much more....



Mr. Thanasis Vavaroutas

During our trip we will cross the borders Argentina-Chile a lot of times to visit magnificent places in both countries. We will drive in Carretera Austral visiting the southern part of Chile, and our next target will be Valparaiso and Santiago, Chile, and we will be there in the first days of the new year, 2013. At this period of time, Rallye Dakar 2013 will be on, and we will be there to watch it closely, for at least two stages from San Miguel de Tucuman-Cordoba to La Rioja. Consequently, we will drive our motos over Andes to Montevideo, Uruguay, and we gonna fly back home from Buenos Aires.

Two riders, three countries, 38 days, 13.000 kilometers approximately in asphalt and gravel, some of them against the strong winds which blow in Patagonia!

Follow now our news about the preparation for Crossing South America and later the trip, through our blog...."

For more information, please visit the website:

www.southamericagsadventure.gr



Tip of the Month

This month we bring you some pointers to make sure your web browser is best set up on board to minimise MB consumption when browsing.



Firstly we recommend that in your web browser settings you turn off automatic caching and history deletion, then increase the cache volume to the maximum recommended by your browser.

Something else that will stop unnecessary MBs being consumed is to set the 'Play animations in web pages', 'Play sounds in web pages' and 'Show picture' settings to 'OFF'. Finally, enable both your Windows Pop Up blocker and Content Control. These tips should help you get the most for your MBs, without wasting your allowance on stuff you don't want to download.