

# Digital Ship

March 2009

www.thedigitalship.com

## FleetBroadband goes global

February 24th 2009 marked the completion date for the repositioning programme of Inmarsat's three I-4 satellites - and the commercial introduction of global coverage for FleetBroadband

A little over fifteen months after the initial launch of Inmarsat's next-generation FleetBroadband service, the satellite operator's flagship communications system is now finally available on a global scale, with seamless coverage for vessels operating around the world.

At the time of writing Inmarsat has confirmed the scheduled global commercial availability of the satcoms service on February 24th, following the repositioning of the company's three-satellite constellation and transfer of all services to their respective spacecraft in their new operational regions.

Consisting of the most sophisticated satellites Inmarsat has ever produced, the I-4s, the network offers bandwidth speeds of up to 432 kbps to the deep sea merchant market, demarcated under three regions - Americas, EMEA and Asia-Pacific.

The repositioning of the I-4 F1 satellite, the first of the three satellites to be launched in March 2005,

was the final piece in the global network puzzle.

It began its journey to its new home at 143.5 degrees East on 6th February, following the successful transfer of all Inmarsat's broadband services to the I-4 F2 satellite, which is now the I-4 EMEA satellite.

Testing of the system was undertaken while the spacecraft was actually travelling to its new orbital location, meaning that Inmarsat was afforded the opportunity to have the system 'go live' almost immediately upon its arrival in position, and begin global commercial availability of FleetBroadband.

### Worldwide coverage

The global availability of the FleetBroadband system is something that Inmarsat has been building up to for almost three years, since the launch of that first satellite.

The land-based version of the system, known as BGAN (Broadband Global Area Network) was initially available over the

first two I-4 satellites, launched in March and November 2005 and covering the world's major land masses, but with no coverage over the Pacific Ocean.

The FleetBroadband service for the maritime industry was launched in November of 2007, ahead of the company's plans to launch a third I-4 satellite and make the service available across the globe.

A problem with an unrelated satellite launch by another company pushed back the scheduled April 2008 launch of that third satellite, but once the mission was finally completed, in August 2008, Inmarsat was finally in a position to begin moves to fill the coverage hole over the Pacific, and preparations for the satellite repositioning programme got underway.

Inmarsat is now hoping to see the take-up of its latest satellite communications offering accelerate as it reaffirms its position as a globally available maritime satcom operator.

"We were established as a global operator, and



The launch of the third Inmarsat I-4 satellite in 2008 brought the promise of global coverage for FleetBroadband

it's important for us to deliver our broadband services globally," said Piers Cunningham, head of maritime business at Inmarsat.

continued on page 2

## IN THIS ISSUE

### satcoms

Globecom takes on maritime VSAT market - 4

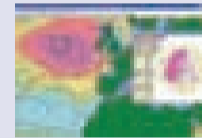
BSM completes FleetBroadband trial - 7

Tanker TV - a step toward crew retention at Unicom - 9



Iridium satellite in collision over Russia - 12

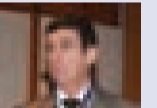
### software



New software aims to reduce rolling risk from resonance - 14

Eniram nets Euro 5m financing deal - 17

Going green and saving money at Interorient Navigation - 18



### electronics and navigation

Search and rescue emergency distress signal frequency changeover - 27



The future of training technology - 29

The human factor and the Digital Ship - 33



Dealing with faulty navigation systems - Dr Andy Norris - 38

inmarsat iridium THURAYA Globalstar GSN 3G EDGE WiFi WiMax VSAT E-MAIL • DATA SYNCHRONISATION • INTERNET • INTEGRATION • REMOTE CONTROL • ANALYSIS TOOLS • 24/7 SUPPORT • MAXIMISED USE OF BANDWIDTH The Maritime Communications Experts™

© 2009 DIALOG AS. ALL RIGHTS RESERVED.



Morten Lind-Olsen  
CEO, Dialog

## Congratulations, Inmarsat!

- on your contribution towards providing truly global broadband coverage.

The shipping community is facing a range of new and exciting opportunities. The challenge now is to take control and optimise usage. Working closely with early adopters of broadband, Dialog has developed Dialog® Connection Suite™ to meet the requirements of the new broadband era.

More than 20 shipping companies have chosen Dialog® Connection Suite™. Customer feedback applauds smooth installations, user friendliness and simplicity: "We can now plan hands-on with our ships as if they were branch offices," and last, but not least "we have taken full control over usage and cost!"

**dualog**  
ALWAYS IN TOUCH

www.dualog.com  
(+47) 77 62 19 00 or sales@dualog.com

Meet us at Digital Ship Oslo  
March 10 - 11 to learn more  
and receive a live demo!



## Resonance warning software launched

[www.awtworldwide.com](http://www.awtworldwide.com)

Applied Weather Technology (AWT), has launched the latest version of its BonVoyage System (BVS) software for optimising marine voyages, with Version 5.6 offering advance warning about threats of severe rolling due to resonance.

The system also features forecast, real time Naval Coastal Ocean Model (NCOM) current data, which allows vessels to prepare an optimal passage plan based on the currents, potentially saving time and fuel.

Vessels using the new system can receive alerts warning about forecast sea conditions which, when combined with the vessel's course, speed and stability, could lead to resonance. Resonance is a phenomenon that can cause certain types of vessels to roll and can lead to crew

injury, cargo and vessel damage.

BVS 5.6 will display warning symbols along the ship's course that are forecast to a maximum of 16 days ahead. This enables the user to evaluate not only the forecast weather along the route, but also the potential for heavy rolling along the route.

In addition, the ship can continuously monitor for potential problem areas and make the appropriate speed and heading adjustments to minimise the potential for severe motions. When reviewing potential resonance conditions, the user can call up a polar diagram display along the course where the warnings are firing, and this display will graphically show the combinations of course and speed where heavy motions are most likely to occur.

At the same time, the chart also indicates which heading and/or speed might

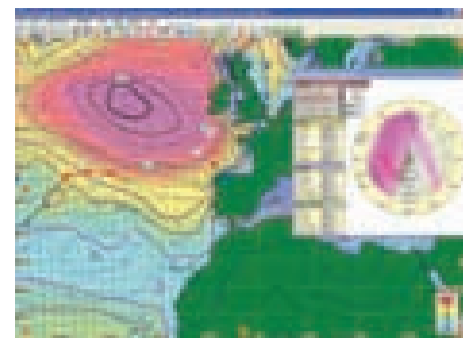
assist in the avoidance of the potentially damaging conditions, thereby minimising the potential for damage.

A.I. Shaad, Master of the M.V. Dubai operated by the United Arab Shipping Company, tested the resonance alert features within BVS 5.6 during voyages in the Atlantic and Mediterranean.

"In my opinion, the resonance alerts are the best features of the new version of BVS," said Captain Shaad.

"I believe the resonance features will help navigators on board container vessels to plan their voyages and make decisions to avoid potentially dangerous weather conditions that could lead to resonance, severe ship rolling and cargo loss."

In addition to resonance alerts, AWT has also integrated the latest technology used to determine ocean currents. Users



*The new software aims to combat resonance, which can cause rolling of affected vessels*

can now download daily updates of the Naval Coastal Ocean Model (NCOM) current data.

Other new features added to BVS version 5.6 include enhancements of weather and wave forecasts near coastlines; expansion from 10-day forecasts to 16-day forecasts; additional port locations added to the port forecast database.

## Free shipping podcasts now available

[www.shippingpodcasts.com](http://www.shippingpodcasts.com)

Maritime eLearning company Coracle has launched a new website, [www.ShippingPodcasts.com](http://www.ShippingPodcasts.com), providing free audio content as podcasts on a range of topics including the tanker markets, the dry cargo market, shipping law, marine insurance, ports and terminals, and the P&I sector.

Coracle has partnered with organisations like The Baltic Exchange, Braemar-Seascope, Ince & Co, Reed Smith, The London Club and Willis Marine to create the content for the podcasts.

These audio files are provided for free via the website as well as via iTunes,

and are supported by advertising revenues divided between covering costs and supporting disadvantaged students via the Coracle Education Fund.

"ShippingPodcasts.com fills a gap in the industry for topical and accessible online maritime information," said Coracle and ShippingPodcasts.com founder and managing director, James Tweed.

"Every shipping professional can now access these lively podcasts read by Sony Award winning journalist Katie Breathwick. In this fast moving business, we believe that these easy-to-digest audio updates on the different maritime sectors can only help to keep the industry on its toes."

## Ulysses and Orca join forces

[www.ulysses-systems.com](http://www.ulysses-systems.com)

Ulysses Systems and Orca Company of Japan have announced that they will be extending their partnership in the region by combining their current resources and relocating some Ulysses operations to Orca's offices.

Ulysses has a number of customers for its Task Assistant software system in the Japanese market, such as Iino Marine Services- Japan, New Asia Shipping Hong Kong, and ITML.

"The key objective of the partnership with Orca will be to continue to build on Ulysses' current success in the

region and improve the level of service that is provided to our esteemed Japanese and South East Asian customers through our Tokyo based staff," said Martin Nygate, Ulysses VP of sales and marketing.

S Y Chang, managing director of Orca Japan, added: "Our philosophy is to provide customer-centric technology solutions to our target market. Ulysses' Task Assistant is within this philosophy and we believe that our partnership with Ulysses Systems will increase the quality of the service we provide to the local market, offering solutions that simplify ship operations."

## Marine Software launches planned maintenance module

[www.marinesoftware.co.uk](http://www.marinesoftware.co.uk)

Marine Software Limited has launched a vessel 'Lay-up' maintenance system which can be used either as an additional module for existing Marine Planned Maintenance equipped vessels, or as a stand alone system for any other vessel.

The first system has recently been delivered to Bluewater Ship Management,

for the vessel UND BIRLIK.

Typically, maintenance requirements for laid up vessels with idle machinery differ from the normal running maintenance, and so special Lay-up JobCards can be created for this scenario. These PM JobCards only become active when the system is put into lay-up mode, when they are automatically scheduled.

All normal completed maintenance is suspended but any overdue maintenance remains active unless it is completed during the lay-up period. Class Survey remains unaffected and live whilst the vessel is laid-up.

Depending on the type of lay-up, normal maintenance covering running machinery can be tagged to remain live during the lay-up period.

On reactivation of the vessel, the normal planned maintenance system can be reactivated giving the operator the option to continue with the suspended calendar based maintenance schedule from the date of suspension, or to shift it forward re-commencing from the reactivation date. The specific lay-up PM Cards are deactivated on reactivation of the vessel.

### PORT-IT ANTIVIRUS SERVICE

WE PROTECT YOUR  
DIGITAL SHIP

PORT-IT

[WWW.PORT-IT.NL](http://WWW.PORT-IT.NL)

Tel: +31 (0)6 51 06 89 81  
Fax: +31 (0)10 892 07 57  
E-mail: [service@port-it.nl](mailto:service@port-it.nl)

Tired off sending CD's with Antivirus updates towards your vessels?

Then it is time for the Port-IT Antivirus solution!

The Port-IT Antivirus solution is fully compatible with:

- AmosConnect
- SkyFile Mail
- Dialog
- On Air
- And many more...

Interested? Contact us or visit our website [www.port-it.nl](http://www.port-it.nl)

FREE TRIAL!

The only real maritime antivirus solution

