

**CALLING ALL VESSELS!**

**SAILOR® FleetBroadband**



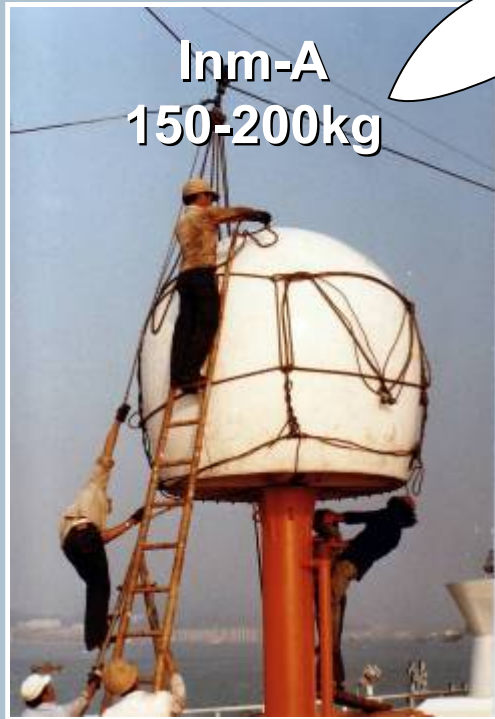
Thrane & Thrane A/S

Digital Ship Cyprus

February 5th, 2008

Henrik Møller

# Evolution of Satcom



## What is FleetBroadband?

- Two services - extensive range of applications...

	FB250	FB500
<b>Data</b>		
Standard IP	Up to 284kbps	Up to 432kbps
Streaming IP	32, 64, 128kbps	32, 64, 128, 256kbps
ISDN	–	64kbps
<b>Voice</b>	4kbps and digital 3.1kHz audio	
<b>Fax</b>	Group 3 fax via 3.1kHz audio	
<b>SMS</b>	Standard 3G (up to 160 characters)	



### Standard IP

For email, internet and intranet access via a secure VPN connection, at speeds up to 432kbps over a shared channel.



### Streaming IP

Guaranteed data rates on demand up to 256kbps. Choose the data rate on a case by case basis, depending on your application.



### Voice

Make voice calls at the same time as accessing your data applications. Voicemail is also available. Group 3 fax is supported via the voice channel.



### ISDN

Supports ISDN at 64kbps for your legacy applications.



### SMS

Send and receive text messages – up to 160 characters.

## FleetBroadband an evolution of BGAN

- Thrane & Thrane has supplied the ground infrastructure and user terminals for Inmarsat's BGAN satellite system
  - Early access to RAN for testing purposes
  - We had the opportunity to take a technology step into the future – and we took it !
  - Well Proven Terminal Technology with thousands of activated EXPLORER terminals in the field



## SAILOR<sup>®</sup> FleetBroadband - the new benchmark for broadband Internet at sea and standard IP applications

- SAILOR<sup>®</sup> FleetBroadband offers global Internet, voice and data coverage\* based on the Inmarsat network
- Unique and rugged design
  - Smaller, more affordable hardware than other Broadband solutions in the market today
  - Easy to install and use
- Fast and reliable service through a well-established network of Onboard Service

\* When 3<sup>rd</sup> Inmarsat-4 satellite is in operation



## SAILOR FleetBroadband family

- Building on our knowledge from our EXPLORER Family we have not just one but two powerful SAILOR FleetBroadband products on the market. Both **type approved and now in the market!**
  - SAILOR 500 FleetBroadband – primarily targeting Merchant market, High-End Leisure and Fishing market
  - SAILOR 250 FleetBroadband – primarily targeting Leisure and fishing/workboat market

**Type Approval Certificate**  
Inmarsat FleetBroadband - Class 8

Certificate Number: B8TTE1

Inmarsat Global Limited

By: *Jan Cooper*

Name: Jan Cooper

Title: Product Manager  
E&E Systems

Approval Date: 20<sup>th</sup> December 2007

1. This certificate does not authorize the operation of the F8B Class 8 UE in the Inmarsat System. Such authorization requires registration after installation in accordance with regulatory procedures established by Inmarsat. In addition, the operator must file Class 8 UE with the relevant national licensing authorities.

2. This certificate is immediately an invalid certificate if the conditions that Inmarsat has determined, on the basis of test results submitted by Thrane & Thrane and accepted procedures approved by Inmarsat, for the use of the Inmarsat System. The certificate is also rendered void if the performance or safety for purposes of the F8B Class 8 UE and Inmarsat FleetBroadband System are not at least equally valid or in accordance with the conditions, set, or revised after its issue.

Inmarsat does hereby certify that the F8B Class 8 UE identified herein is acceptable for use with the Inmarsat Satellite Communications System as of the date of this certificate.

Inmarsat Global Limited  
92 City Road  
London, EC1Y 1AX  
United Kingdom.

**inmarsat**  
Satellite Communications Network™

**Type Approval Certificate**  
Inmarsat FleetBroadband - Class 9

Certificate Number: B9TTF1

Inmarsat Global Limited

By: *Jan Cooper*

Name: Jan Cooper

Title: Product Manager  
E&E Systems

Approval Date: 20<sup>th</sup> December 2007

1. This certificate does not authorize the operation of the F8B Class 9 UE in the Inmarsat System. Such authorization requires registration after installation in accordance with regulatory procedures established by Inmarsat. In addition, the operator must file Class 9 UE with the relevant national licensing authorities.

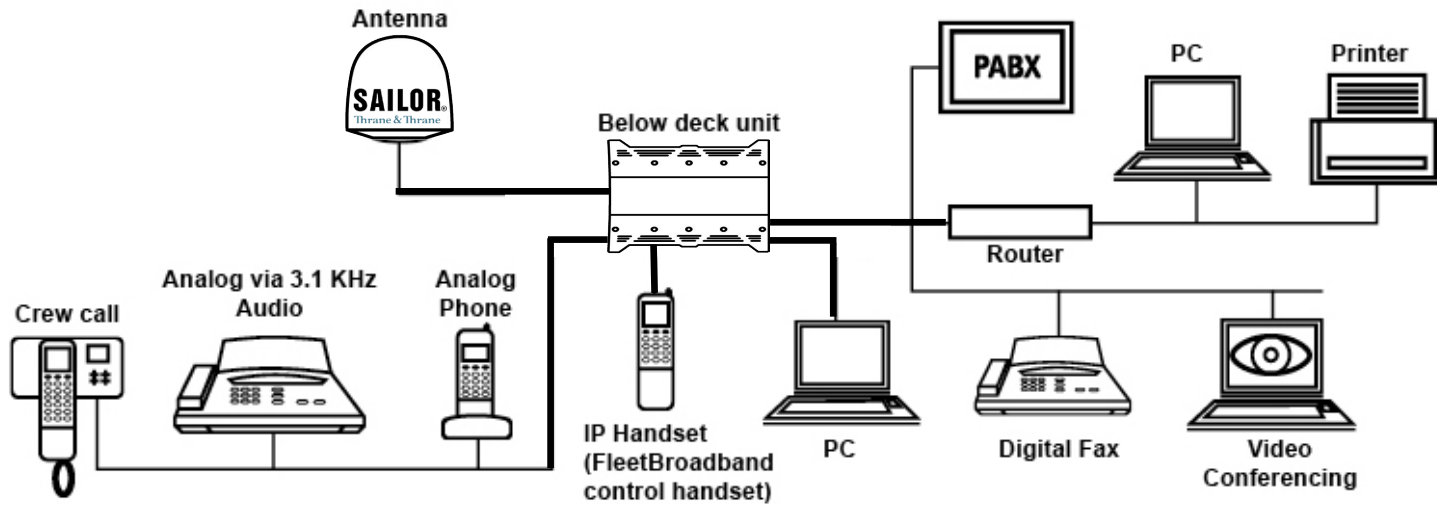
2. This certificate is immediately an invalid certificate if the conditions that Inmarsat has determined, on the basis of test results submitted by Thrane & Thrane and accepted procedures approved by Inmarsat, for the use of the Inmarsat System. The certificate is also rendered void if the performance or safety for purposes of the F8B Class 9 UE and Inmarsat FleetBroadband System are not at least equally valid or in accordance with the conditions, set, or revised after its issue.

Inmarsat does hereby certify that the F8B Class 9 UE identified herein is acceptable for use with the Inmarsat Satellite Communications System as of the date of this certificate.

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**inmarsat**  
Satellite Communications Network™

# SAILOR FleetBroadband family



## SAILOR FleetBroadband - Below Deck Unit

- One Below Deck - two SAILOR FleetBroadband products
  - Unique design
  - Built-In web server
  - Supported interfaces/services
    - SIM Card
    - 4 x Ethernet/PoE
    - 2 x 2-wire interfaces
    - ISDN (Only SAILOR 500)
    - L-Band output
    - Remote On/off
    - I/O interfaces
  - Built-in PABX
  - Basic / extended cable support
  - Rack Mount option



## SAILOR FleetBroadband – Above Deck Units

- Small and Compact hardware for any vessel
- Fast and easy installation
  - SAILOR 500 Above Deck Unit
    - Ø: 630mm, H: 605mm
    - Weight: approx. 16 kg
    - Single coax cable
    - Built-in GPS
  - SAILOR 250 Above Deck Unit
    - Ø: 270mm, H: 300mm
    - Weight: approx. 5 kg
    - Single coax cable
    - Built-in GPS



## SAILOR IP Handset

- SAILOR IP Handset – the identity of the system
  - Unique Thrane & Thrane design in two versions
    - Wired IP Handset (LAN CAT-5 cable)
    - Wireless IP Handset
  - Powered over Ethernet (PoE)
  - Supports VoIP SIP-Server
  - Handset can be used to configure the terminal
  - Up to 16 handsets per BDU
  - QVGA color display with Night color option
  - Hands free and Headset options
  - Local calls and call forwarding
  - Easy to install, No drivers needed





Thank you!

Questions – come see us at the stand