



# Satellite Solutions for Commercial Marine

BROADBAND DATA



COMMUNICATIONS



TELEVISION



**Empowering Your Vessels with Broadband**

# An Introduction to KVH



- **Leading provider of maritime “Triple Play”**
  - Satellite television
  - Satellite communications
  - Maritime broadband Internet access
- **Full-service vendor for services and hardware**
  - Inmarsat service provider since 1998
  - KVH mini-VSAT network developed in partnership with ViaSat
  - Manufacture and integrate end-to-end hardware solutions
  - International sales and distribution
  - 24/7/365 service center with global support in all major ports
- **Public company -- Nasdaq: KVHI**
  - \$82M in sales in 2008, financially strong
  - U.S. military “Outstanding Partner Award”
  - ISO 9001:2000 certified
  - Facilities in Rhode Island, Illinois, and Denmark



- **Global leader in mobile satellite TV**
  - 150,000 systems deployed since 1996
  - The world's most popular, powerful and user-friendly maritime satellite TV system
  - Proven performance and reliability
- **Excellent for improving crew morale**
  - Live sports, news, and entertainment
  - Helps to connect seafarers with their lives ashore
- **Works with TV satellites around the world**
  - Extended coverage from high-efficiency antennas
  - Easy switching between satellites
  - End-to-end solutions



- **KVH -- Inmarsat service provider for 10+ years**
  - Offer hardware and service in end-to-end solutions
  - Serve over 2,200 active Inmarsat subscribers
- **Inmarsat's new FleetBroadband service**
  - Brand new satellite constellation – Inmarsat I-4's
  - More compact and lighter terminals
  - Less expensive service with faster throughput
  - Legendary reliability
- **KVH offers innovative airtime packages designed to make Inmarsat service an affordable solution**
  - Value added applications
  - Integrated broadband solutions



# KVH TracPhone mini-VSAT System



- **New generation maritime VSAT**
  - KVH and ViaSat teaming to offer global service
  - Well over 500 systems fielded since 2007
- **Next generation, fully integrated hardware**
  - Robust, efficient, spread spectrum technology
  - Service provided by full transponders in most regions
  - KVH manufactures, integrates, and supports all hardware
  - KVH manages and supports satellite airtime
- **60 cm antenna is 75% smaller than 1m VSAT**
  - Lower hardware costs
  - Fast, easy installation in optimum location
- **Global satellite network with seamless roaming**
- **Extremely competitive airtime packages**



KVH® INDUSTRIES  
**MINI-VSAT**  
B R O A D B A N D

# Improved Business Applications



- **Communications at sea changing dramatically**
  - New services offer global coverage and broadband speeds at affordable prices
  - Hardware is smaller, less costly, and fully integrated
- **Financial benefits of maritime broadband now affordable**
  - Save fuel with better weather and sea data for route planning
  - Reduce time in port through more efficient logistics & reporting
  - Reduce maintenance costs via remote monitoring & diagnostics
  - Reduce IT costs through automated updates and remote support
  - Efficiently comply with new ECDIS regulations
- **Reduced costs and improved operational efficiency will provide fast return on investment**



# Boost Crew Morale & Retention



- **Affordable crew calling solutions funded by crew**
  - Voice over IP calling cards
  - Maritime GSM services
- **Easy to manage e-mail accounts**
  - SPAM filtering and optimization
- **Onboard Internet cafés**
  - Self-funded with metered service and automated billing
- **The challenge is expectations that connections at sea same as connections at home**
  - Bandwidth at sea is limited, and will always be an order of magnitude more expensive than bandwidth on shore
  - Internet users do not adapt their online behavior when using mobile connections
  - Streaming audio, video, and file sharing needs to be managed to avoid large costs or degraded performance





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**Visit KVH at Digital Ship USA – Booth #5**

**Presentation on mini-VSAT Broadband – 12:25pm**