



Understanding the MTN Solution: The High Level Overview

Presented by:
Brent Horwitz
Vice President of Sales

September 27, 2006

MTN Overview

Maritime Telecommunications Network

- First to Offer a Stabilized VSAT Solution for Vessels at Sea
- 240+ Stabilized VSAT Systems Currently in Service
- 90+ Vessels under contract for Cellular
- 160+ Experienced, Full-time Staff
- 5 Teleports
- 11 Satellites
- 9 Global Points of Presence
- 10,000 Miles of Fiber
- Global and Multi-Regional Satellite Coverage
- Worldwide Technical Service
- 24/7 Network Operations Support
- Fully-Managed Turnkey Solutions

Market Segments



- Cruise and Ferry
- Offshore Oil & Gas
- Government Systems
- Private Yachts
- Casino Boats
- Shipping/Merchant Fleets
- Land-Based Applications:
 - Fixed and Mobile



Discovering the Benefits

- Fixed Fee for Unlimited “Always On” Communications
- Turnkey Integrated Solution includes:
 - Shipboard and Shoreside Equipment
 - Assembly, Integration and Testing (AIT)
 - Technical Service and Maintenance
 - Network and Telephony Integration
 - Worldwide Satellite Coverage
 - Global Terrestrial Network
 - Worldwide Teleport Services
 - High-Speed Internet Backbone Access
 - PSTN Call Termination with US or Europe Dial Tone
 - 24x7 Monitor and Control and Remote Diagnostics
 - Web-Based Customer Portal

Value for Crew Members

- **Stored Value Calling Cards**
 - Allows crew members to call home at rates significantly lower than Inmarsat
- **Internet Café and Wi-Fi Applications**
 - 115 ships in service today
- **OceanNews**
 - 300+ International newspapers are available daily and can be printed onboard on A3 paper
- **MPEG4 Television Programming**
 - News, Sports, Entertainment Content
- **GSM Mobile Phone Services**
 - Allows shipboard users to make calls and be billed by their home carriers

MTN's Technical Services

- Expert Installation, Service and Maintenance
 - 50+ Traveling RF and Data Technicians
 - "Certified" Service Partners in Europe and Asia
- Network Operations Center Available 24x7
 - Experienced Technical Troubleshooting
- Global Spare Parts Depots
- Web-based Customer Portal
 - Provides Real-Time Monitoring of System Availability
 - Bandwidth Utilization
 - Circuit Availability



Satellites Simplified

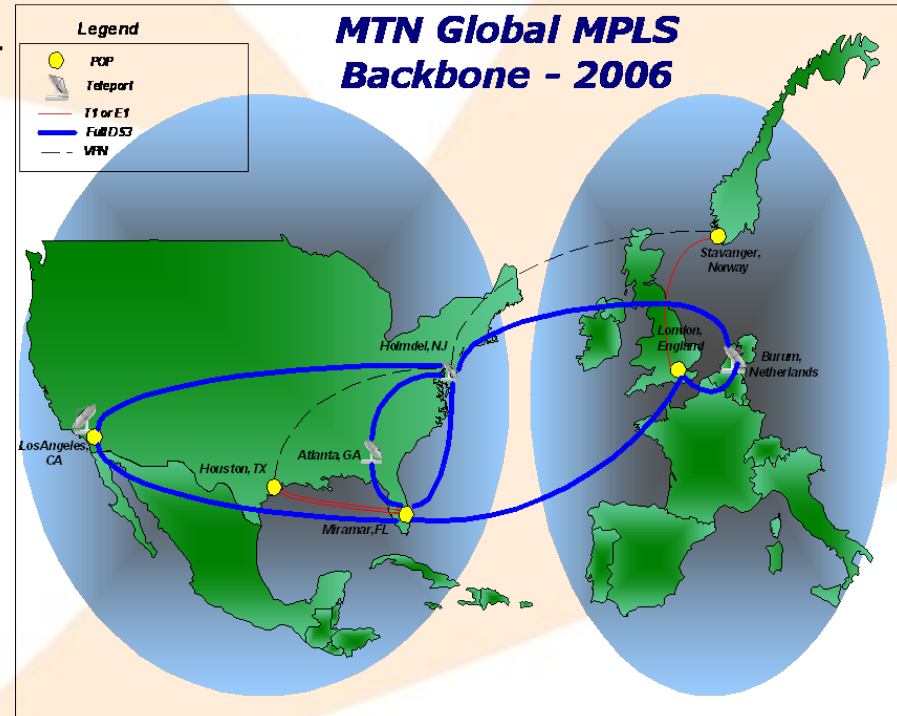
- Geostationary Satellites Located 22,300 Miles Above the Earth's Equator
- "Latency" Due to Round Trip Distance to Satellite
 - Approximately 600 Millisecond Roundtrip
- C-Band: Global Beam, Wide Coverage Area
 - Requires 2.4-meter antenna minimum
 - Frequency: 6 GHz transmit/ 4 GHz receive
- Ku-Band: Regional Beam, Limited Coverage
 - Requires 1.0-meter antenna minimum
 - Susceptible to atmospheric "rain fade"
 - Effects can be mitigated by higher power amplifiers from ship and more satellite power
 - Frequency: 14 GHz transmit/ 11 GHz receive
- Coverage Area Is Described As a "Footprint"
 - AOR, POR, IOR
 - Regional, Spot, Hemi or Global Beams

Factors Affecting Performance

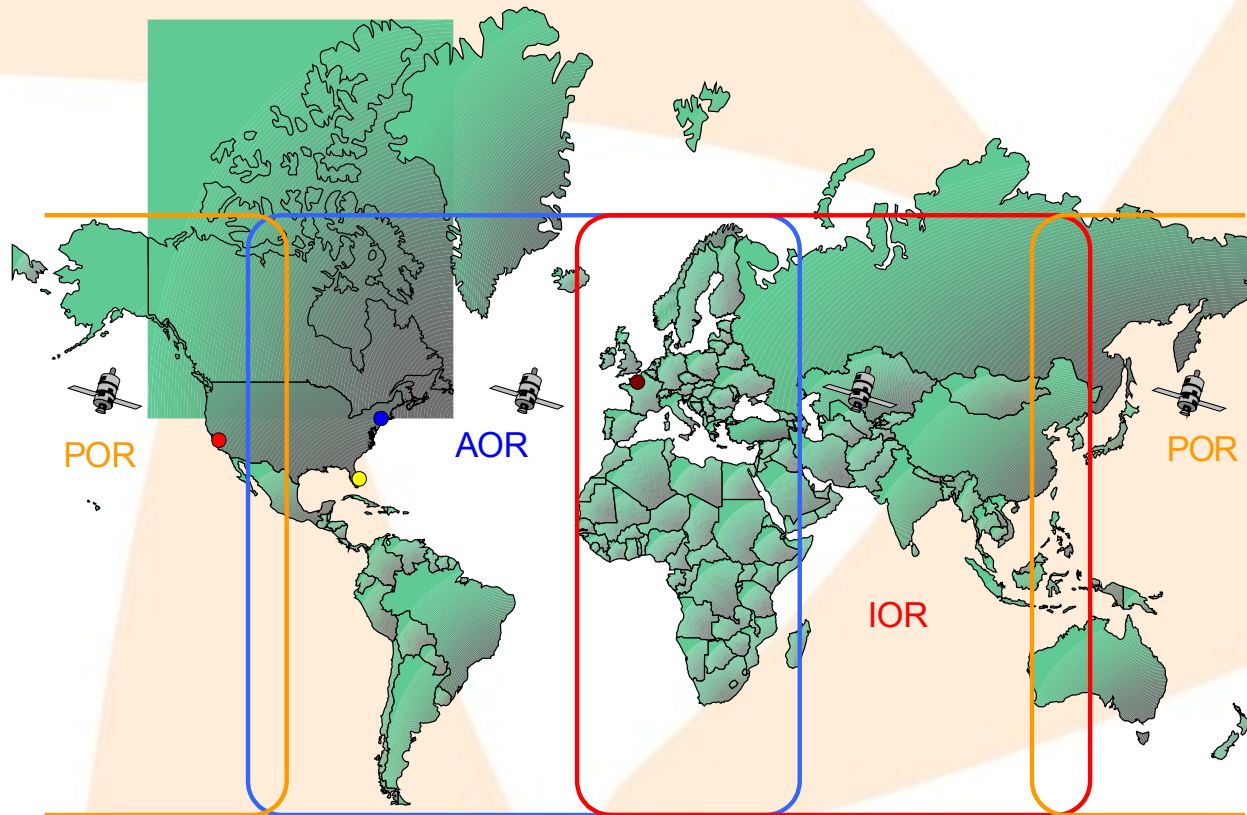
- Local Electronic or Terrestrial Microwave Interference (C-Band)
- Atmospheric Interference (Ku-Band)
- Commercial or Military RF Interference
- Physical Blockage
 - Buildings, Fjords or Ship Superstructure
- Ocean Currents are not a Major Factor Due to Stabilized Antenna Design
- Technical Failure on Ship or at Teleport
- Terrestrial Issues Shoreside
- Satellite Issues
 - Sun Outages or Spacecraft Malfunction

Global Terrestrial Network

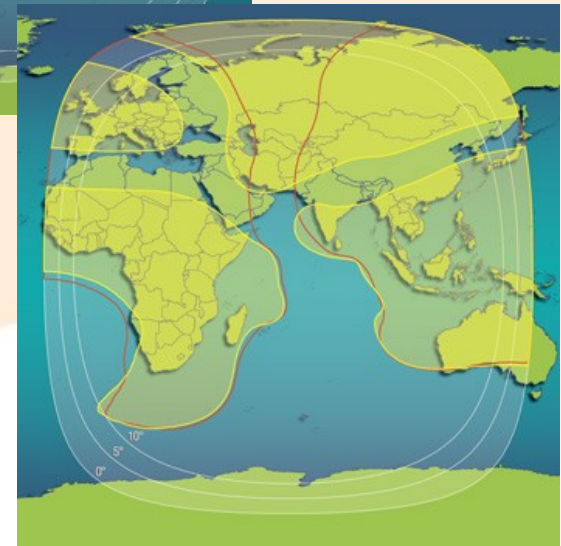
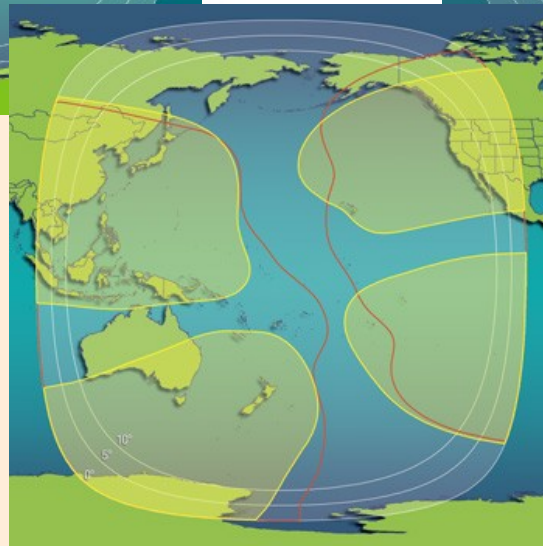
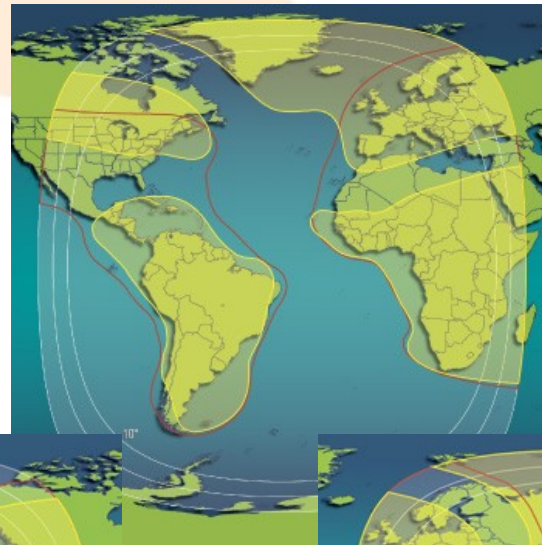
- Points of Presence_
 - Steel Valley, California
 - Burum, Netherlands
 - Holmdel, New Jersey
 - Houston, Texas
 - London, England
 - Miramar, Florida
 - Stavanger, Norway
 - Dallas, Texas
 - Atlanta, Georgia



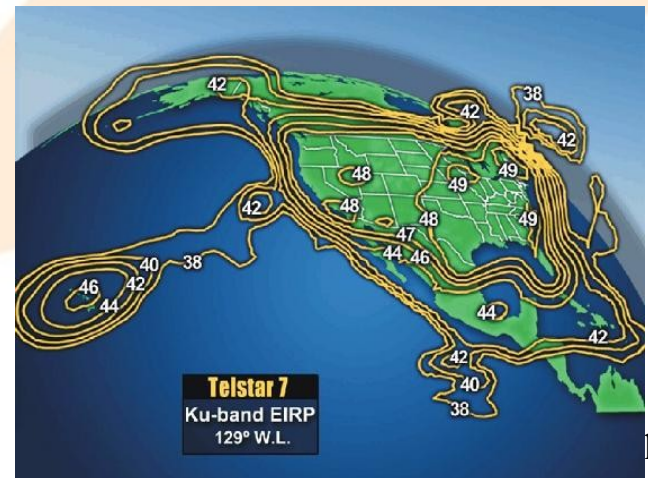
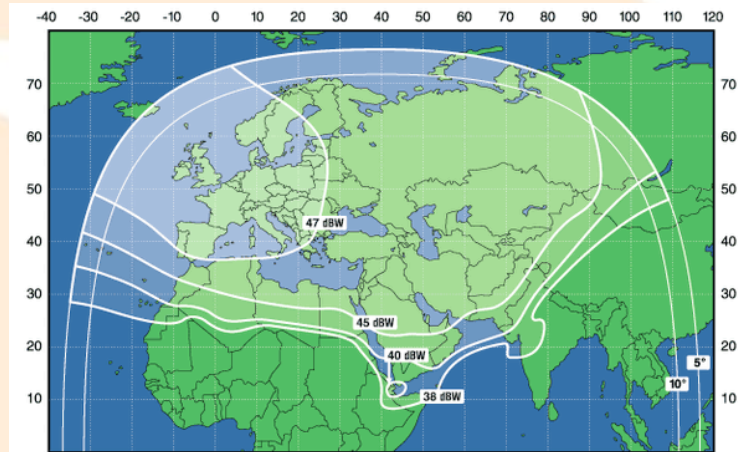
Global C-Band Network



Global C-Band Coverage

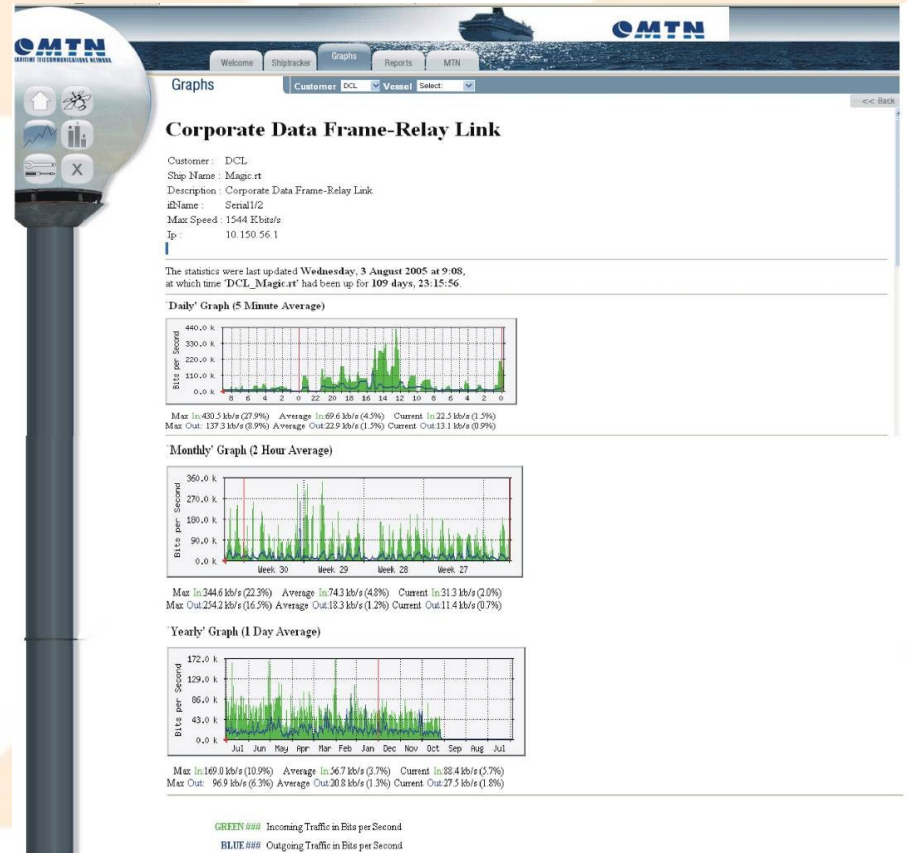


Ku-Band Coverage



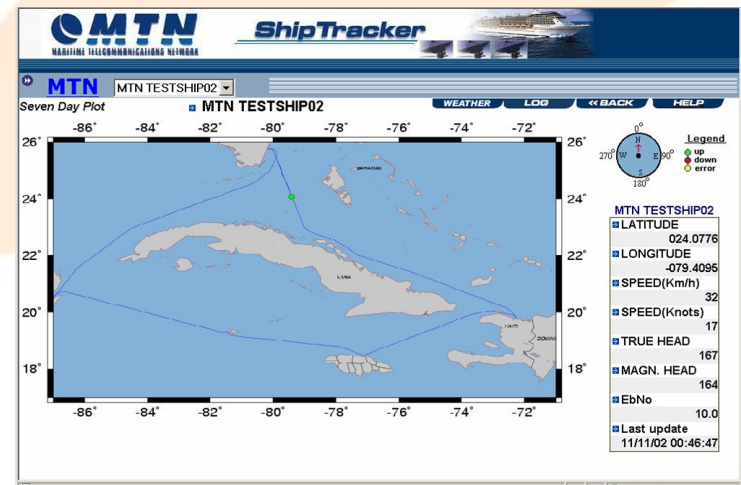
Bandwidth Utilization Graphs

- Every MTN Customer has access to their Facility's performance
- Graphs provide daily, weekly and yearly performance



ShipTracker

- Ship's Position (Latitude/Longitude)
- Speed
- Heading
- Graphical Location of Ship
- Graphical Track of Ship's Course
- Satellite Signal Strength
- Satellite Footprint Overlays
- Data is Derived from GPS Attached to MTN System
- Updated Weather Maps from NOAA
- Updates Approximately Every Fifteen Minutes



How are VSAT Solutions Priced?

- Satellite services: what are you buying?
 - Best efforts vs. Committed Information Rate
- Determining the price
 - Contract term
 - Number of vessels
 - Bandwidth requirements
 - Satellite frequency (C-band or Ku-band)
 - Itinerary or coverage requirements
 - Purchase or lease
 - Other revenue opportunities