AIS In Port Operations

Captain Dick McKenna
Executive Director
Marine Exchange of Southern California
Port of Los Angeles-Long Beach

World's 5th largest container port
15.6 Million TEU's annually
44% of Nation's Container Cargo

1 + Million Cruise Ship passengers, ½ mil autos and 50% of California's oil

Largest port complex in the U.S.

Main Channel Approach Depths
LA - 81'
LB - 76'
VTS LA/LB
What Does AIS do?

- Broadcast and receive ship data between ships and shore stations.
- Uses an autonomous organisation method for the VHF transmissions. (cellular concept)
- It provides real time tracking and identification of AIS equipped ships.
  Awareness of vessels behind islands or river bends.
- Provides information for a VTS environment.
What does AIS tell you?

### Static
- MMSI number
- IMO Number
- Name of the ship
- Call sign
- Type of Ship
- Length and Beam
- Location of the GPS antenna

### Dynamic
- Position (latitude/longitude)
- Heading
- Course and speed over ground
- Rate of turn
- Position accuracy
- Navigational status
- Time stamp

### Voyage Related
- Ships draught
- Destination
- (Waypoints)
- (Number of persons on-board)
- Estimated time of arrival
- Voyage and static data are updated once every 6 minutes or on interrogation
- Type of Cargo
Tideland AIS

- AIMS S11 Base Station
- Installed November 2003
- Simple Installation
- Reception/Detection Solid to 40+ nm
- Frequent Reception/Detection to 120+ nm
- Message Feature Presently Unused
ADVANTAGES

- Second Detection Device
- Improved Benefit to USCG Functions
  - Safety
  - Security
- Better Customer Service
  - Tug, Linehandler Coordination
  - Service to Agents. Operators
Target Mapping

- Supported By Norcontrol 5060 System/ARINC
- Real Time
- Website Based
- Improves Port Operations
- Improves Port Security
Precautionary Area
Los Angeles
Long Beach
CHALLENGES

- Resolution of USCG/Maritel Issue
- Innovative Utilization of Text Messaging
- Assimilation of “Class B” AIS Platforms
- Integration With Longer Range Tracking Devices
Going Forward

- ASVTS
- Real Time, World Wide
- MX Alaska Initiative
- MISNA Supported
- Trials On West Coast 2005
Automated Secure Vessel Tracking System (ASVTS)

A Vessel Tracking System developed by the Maritime Information Services of North America that employs satellite and AIS transmissions as well as other information sources to track the locations of vessels to aid Maritime Security, Safety, Efficiency and Environmental Protection.
Ability to determine where vessel has been before arriving in U.S.