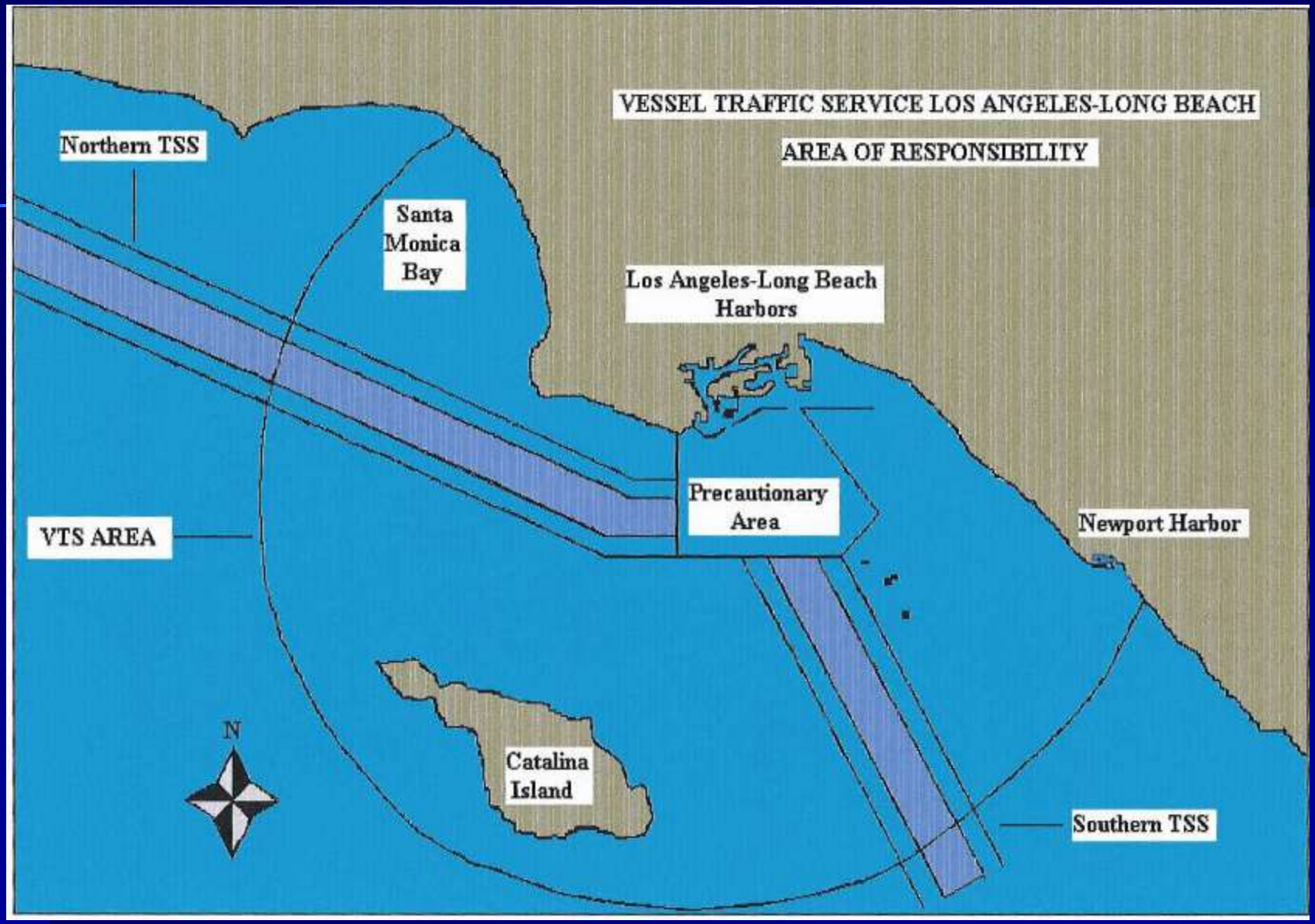
AIS In Port Operations

Captain Dick McKenna
Executive Director
Marine Exchange of Southern California

Port of Los Angeles-Long Beach

VTS LA/LB


VESSEL TRAFFIC SERVICE LOS ANGELES-LONG BEACH
AREA OF RESPONSIBILITY
Northern TSS
Santa Monica Bay
Los Angeles-Long Beach Harbors
Precautionary Area
Newport Harbor
VTS AREA
N
Catalina Island
Southern TSS

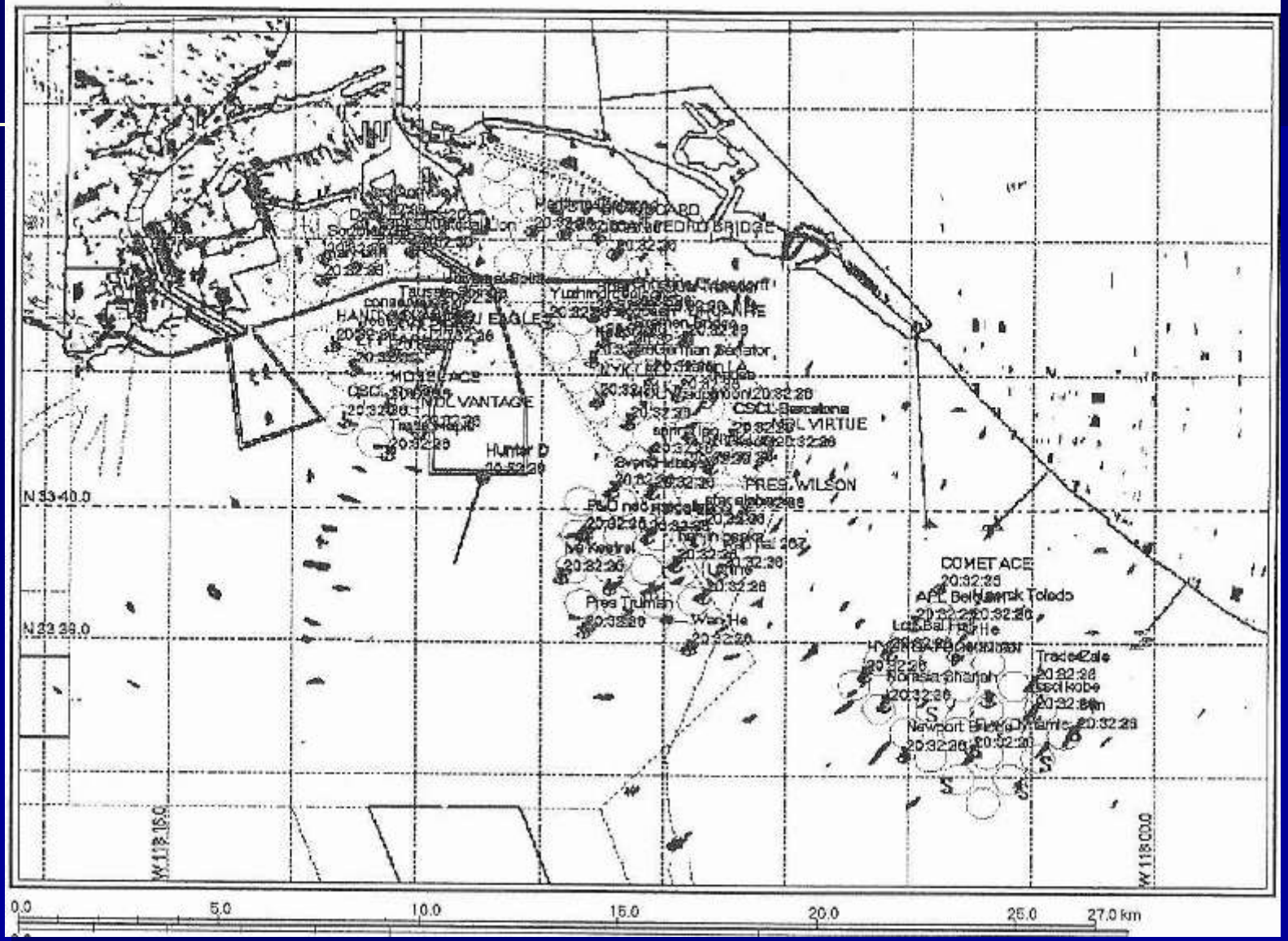
mote Desktop
Arrival / Shift / Departure List
Pending Vessels (135)
Chkd In | Source | TAG | Name | Berth | From | Flag | Type | CallSign | LOA | Activity | EDA(1)
Agent | 20:00 | APL QUETZAL | 303 | Pt. Quetzal, GTM | ATG | UCC | V2HA5 | 132.48 | D/L | 04/20/2004
LAP | 23:00 | VILLE D' ORION | 139 | Pusan, KOR | DEU | UCC | DABL | 259.00 | D/L | 04/20/2004
LAP | 23:30 | BRILLIANT ACE | 197 | Fraser River, | PAN | MVE | 3EQZ5 | 180.02 | Disc | 04/20/2004
Agent | 01:00 | CSL TRAILBLAZER | D46 | San Marcos Island, | BHS | BOR | C6FQ9 | 177.98 | Disc | 04/21/2004
Agent | 04:00 | PARUDO | F209 | Balboa, PAN | HKG | TCR | VRZQ7 | 235.01 | Disc | 04/21/2004
Agent | 04:00 | TRADE BRAVERY | T138 | Pusan, KOR-Oakland, | ATG | UCC | V2AC9 | 208.30 | D/L | 04/21/2004
Agent | 05:00 | PRESIDENT POLK | 302 | Vancouver, CAN | USA | UCC | WRYD | 275.14 | D/L | 04/21/2004
Agent | 09:00 | MSC ATLANTIC | A94 | Yantian, CHN | PAN | UCC | HPMQ | 237.00 | D/L | 04/21/2004
Agent | 12:00 | QUINAULT (T. SALISHAN) | T122 | Aberdeen, USA | USA | OBA | 564261 | 82.90 | Disc | 04/21/2004
Agent | 12:00 | NESTUCCA (T. SALISHAN) | Anc IS | Aberdeen, USA | USA | OBA | 569658 | 92.27 | AswTow | 04/21/2004
Vessels Due To Sail (143)
Under Way | Info Source | TDG | Name | Berth | For | Flag | Type | CallSign | LOA | EDD(1)
Agent | 20:00 | GROTON | Anc-B6 | Richmond, USA | USA | ITB | KMJL | 210.61 | 04/20/2004
JP | 21:30 | TOMSK | Anc-B4 | Balboa, PAN | LBR | TCO | ELTI7 | 181.00 | 04/20/2004
Agent | 02:00 | TUNDRA TRADER | F206 | Valparaiso, CHL | LBR | GRF | ELIU3 | 158.53 | 04/21/2004
M | 03:00 | BLUE PRINCESS | Anc-F15 | Oakland, USA | LBR | BOB | ELED8 | 168.63 | 04/21/2004
Agent | 03:00 | APL CHINA | 302 | Oakland, USA | USA | UCC | WDB3161 | 276.30 | 04/21/2004
Sched | 04:00 | EWA | C62 | Honolulu, USA | USA | UCC | WEZM | 240.09 | 04/21/2004
Agent | 05:00 | APL ALMANDINE | 305 | Oakland, USA | SGP | UCC | 9VBS | 288.31 | 04/21/2004
Agent | 05:00 | MAERSK TOKYO | 402 | Kaohsiung, TWN | GRC | UCC | SVWG | 269.78 | 04/21/2004
Agent | 05:00 | MERCURY | 92 | Catalina Island, USA | BHS | MPR | C6SQ6 | 243.00 | 04/21/2004
Sched | 05:30 | LING YUN HE | J245 | Shanghai, CHN | CHN | UCC | BOTT | 179.70 | 04/21/2004
Vessels Due To Shift (14)
Under Way | Info Source | TSG | Name | From Berth | To Berth | Flag | Type | CallSign | LOA | EDS(1)
Agent | 17:00 | ANASAZI | Anc-D1 | B77 | USA | TCO | KAOK | 207.26 | 04/20/2004
Agent | 23:30 | BRITISH PIONEER | T121 | Anc IS | IOM | TCR | MZBN2 | 334.00 | 04/20/2004
MSC NERISSA | Anc-F17 | A94 | PAN | UCC | H3LP | 294.05 | 04/20/2004
Sched | 02:00 | DENALI | Anc-B7 | T121 | USA | TCR | WSVR | 290.38 | 04/21/2004
Agent | 06:30 | NEWMARKET | Anc-D8 | 120 | BHS | LPG | C6QO8 | 117.09 | 04/21/2004
Automatic refresh will occur in 59 seconds!
Refresh
Close Form
MARIS
4/20/2004
21:08
21:08

Marine Exchange VTS

VTIS Plot, 08.10.2002

NORCONTROLIT VTS5060
AOR - 16.9 x 13.0 Nm

Marine Exchange VTS: All areas - Operator99

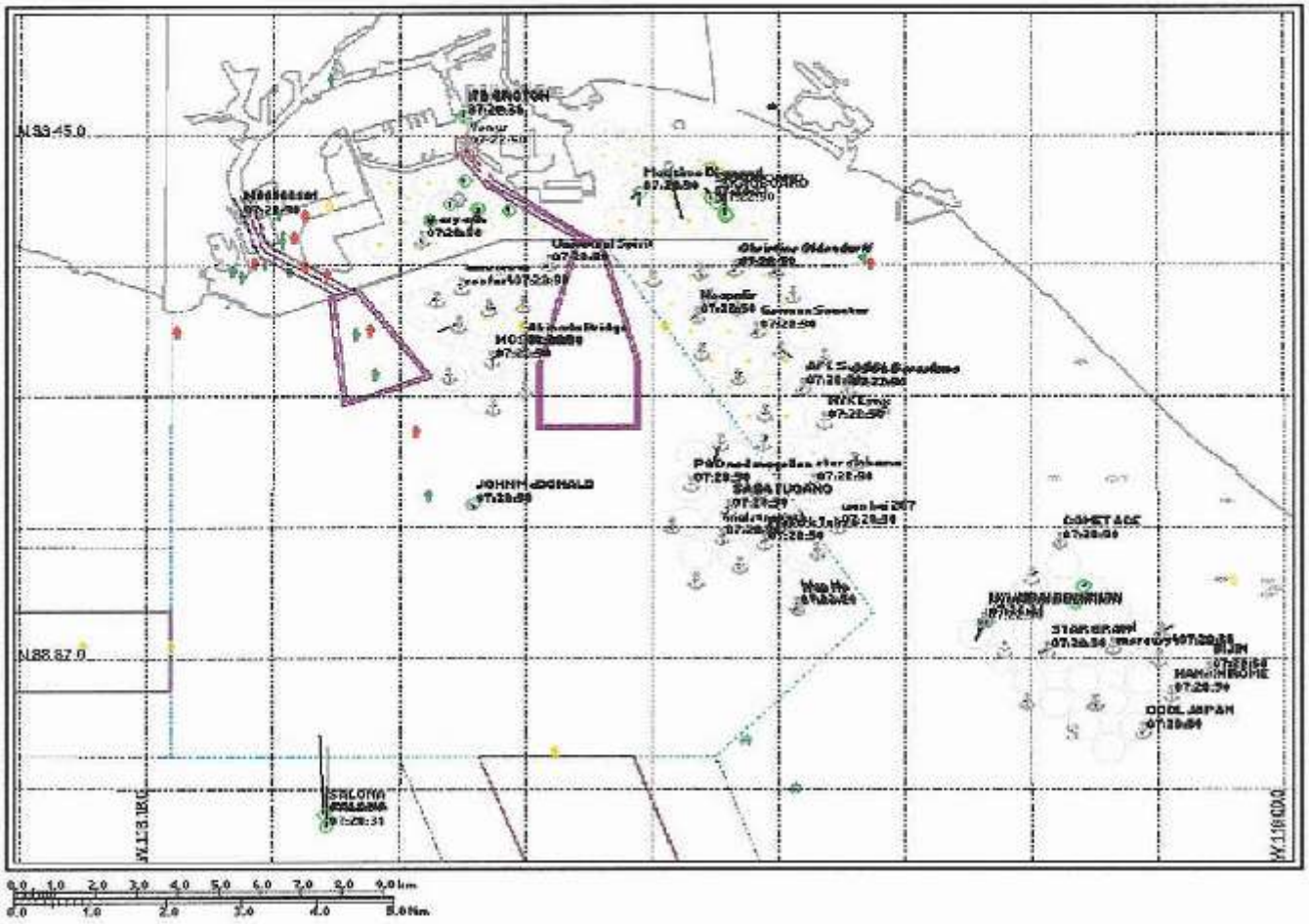


Marine Exchange VTS

VTIS Plot, 9.10.2002

NORCONTROLIT VTS6060
AOR - 7.9 x 6.0 Nm

Marine Exchange VTS: All areas - Operator99

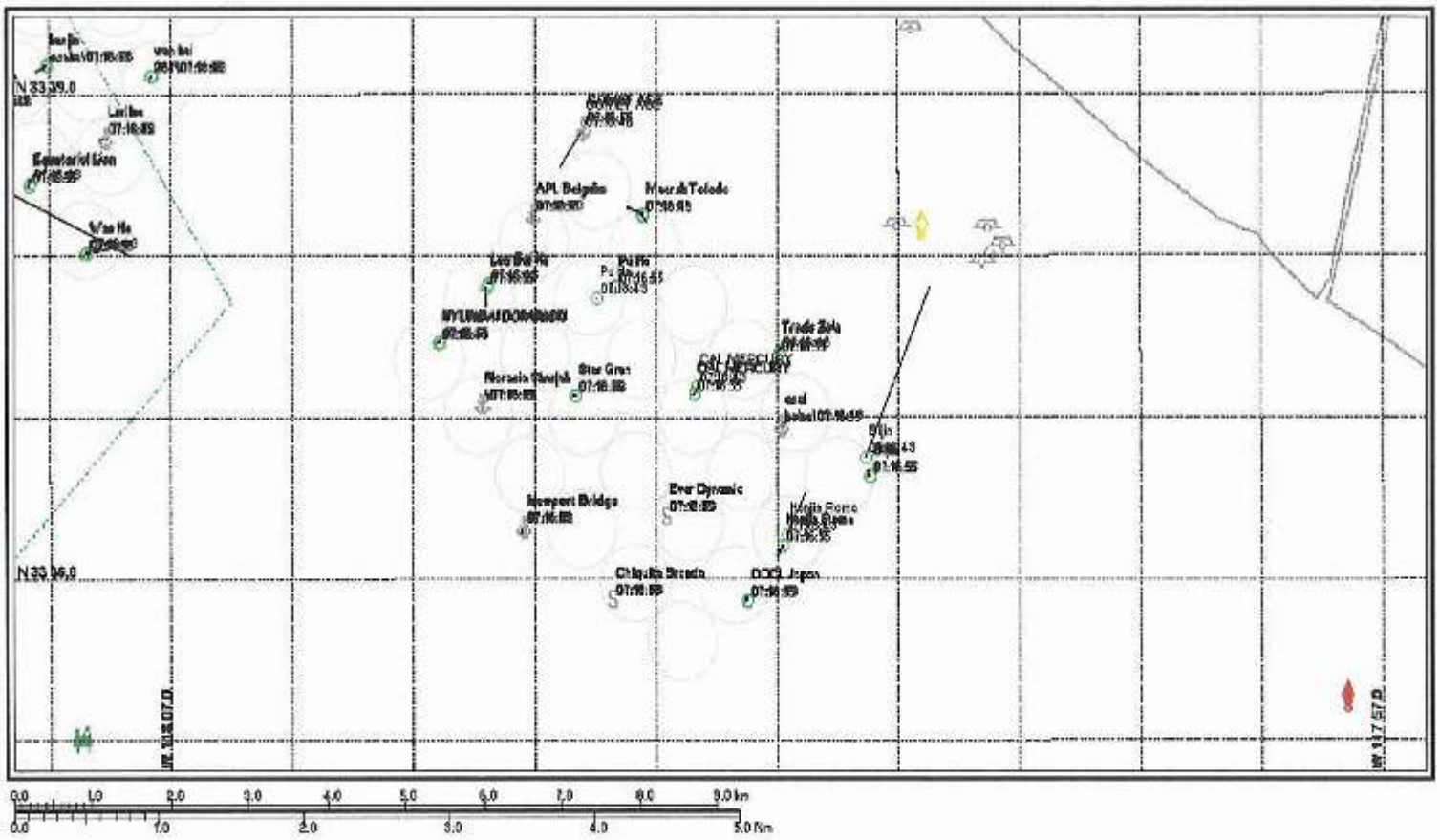


Marine Exchange VTS

VTIS Plot, 8.10.2002

NORCONTROLIT VTS5060
AOR - 9.7 x 4.7 Nm

Marine Exchange VTS: All areas - Operator



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

MARINE DATA
SYSTEMS
Innovation for Life
AIMS

MARINE DATA
SYSTEMS
Innovation for life
AIMS

ADVANTAGES

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

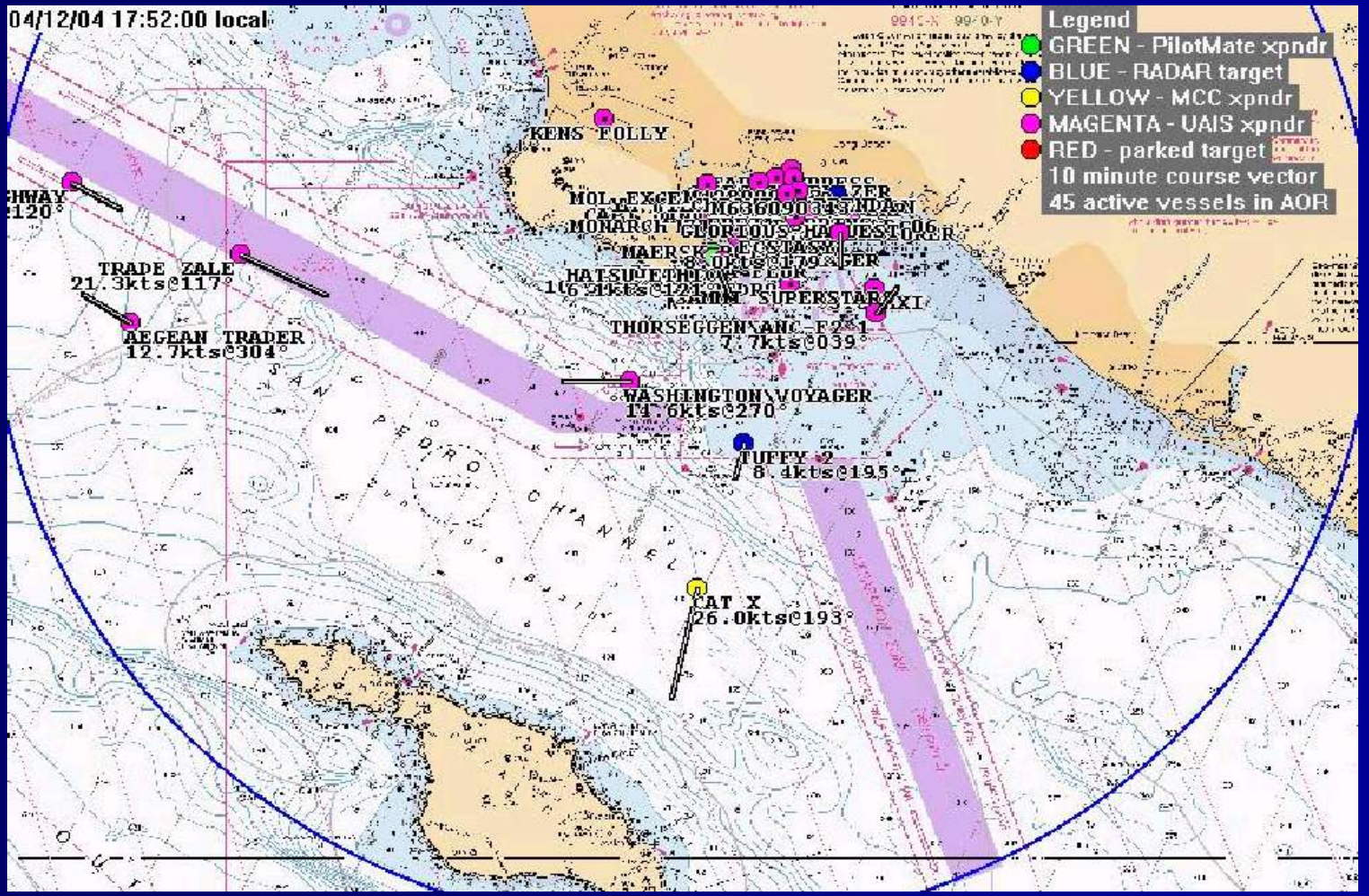
M338613000
HANJIN PRETORIA
CARIBE ALLIANCE
ALPINE STEALTH
MARINE RETRIEVER
KELLIE CHOUEST
LARCONA
EL VATO
CATALINA JET

IVER EXAMPLE
COTOPAXI
THORSEGGEN
MOL WOOD
GRACE GENOA
M WILMINGTON
CALIFORNIA MERCURY
ISABE OLDENDOR
STARSHIP
PELLADEJA SPRING
CAT X
TRADE ZALE
ODYSSEY
GLORIOUS HARVEST
SAGA BEIJA-FLOR
SAMMI SUPERSTAR
NAVIHE
DORCH MAERSK
ANASAZI

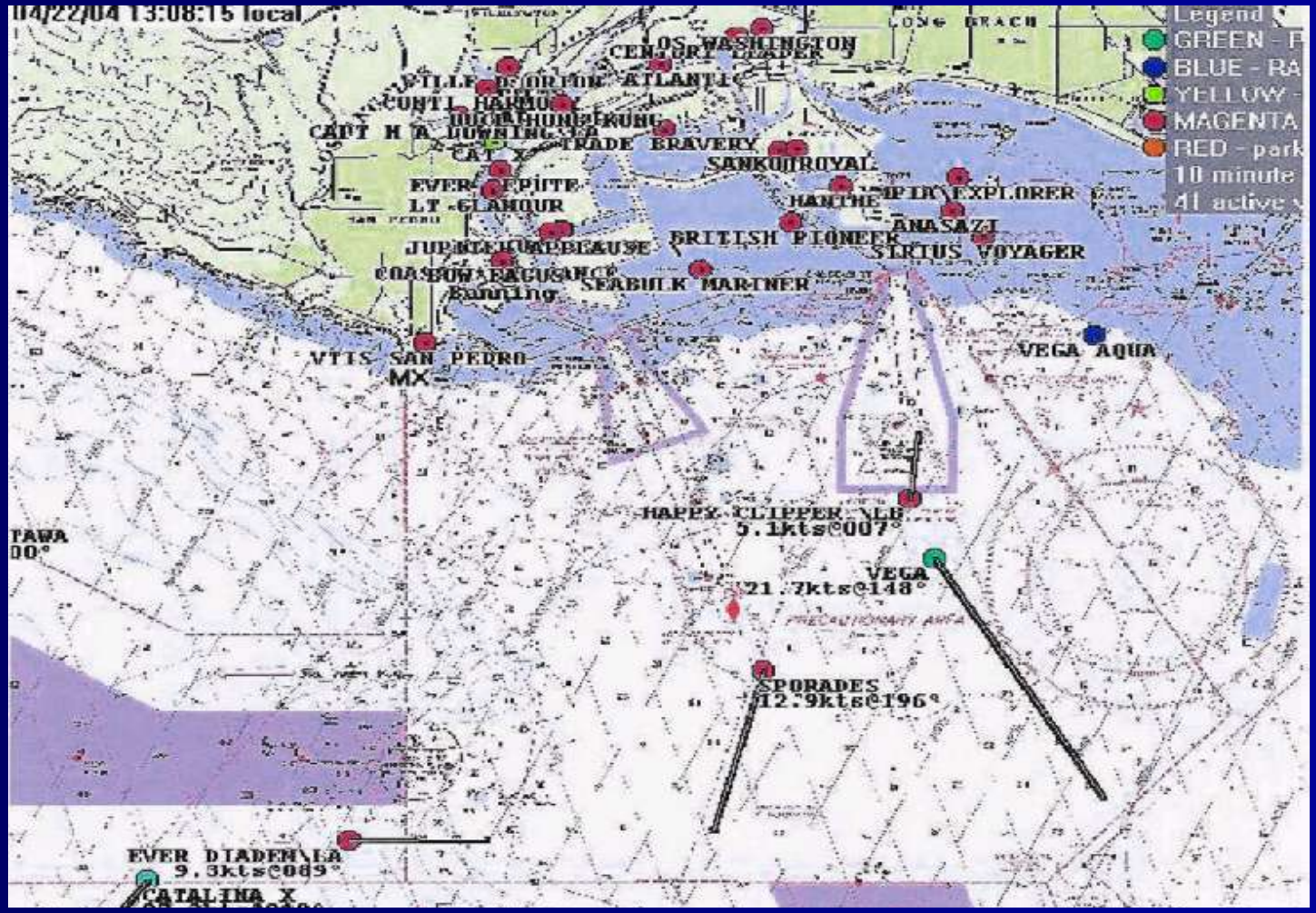
Target Mapping

- Supported By Norcontrol 5060 System/ARINC
- Real Time
- Website Based
- Improves Port Operations
- Improves Port Security

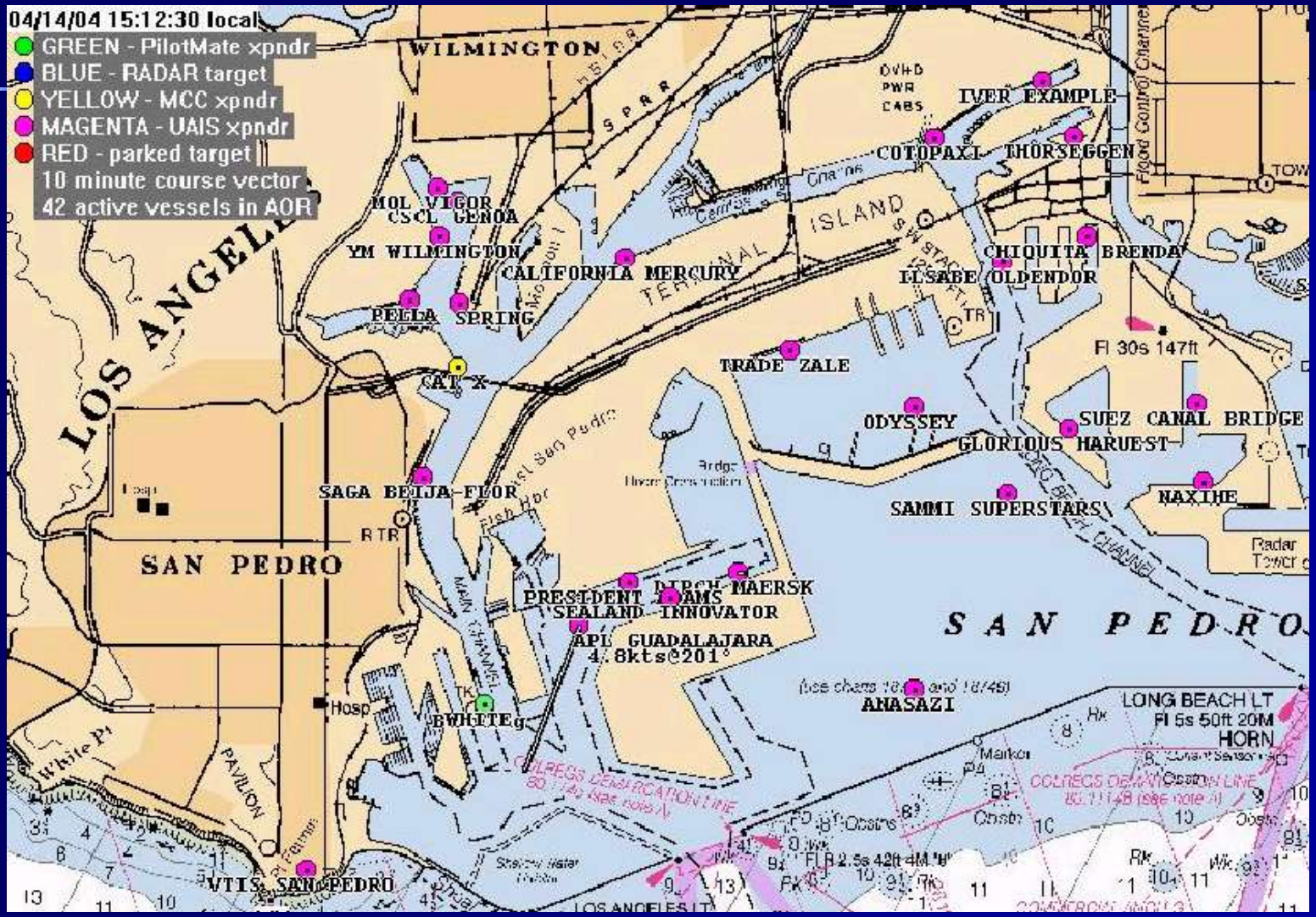
AOR


04/12/04 17:52:00 local
Legend
GREEN - PilotMate xpndr
BLUE - RADAR target
YELLOW - MCC xpndr
MAGENTA - UAIS xpndr
RED - parked target
10 minute course vector
45 active vessels in AOR
KENS FOLLY
TRADE ZALE
21.3kts@117°
AEGEAN TRADER
12.7kts@304°
THORSEGGEN
7.7kts@039°
WASHINGTON VOYAGER
14.6kts@270°
TUFFY 2
8.4kts@195°
CAT X
26.0kts@193°

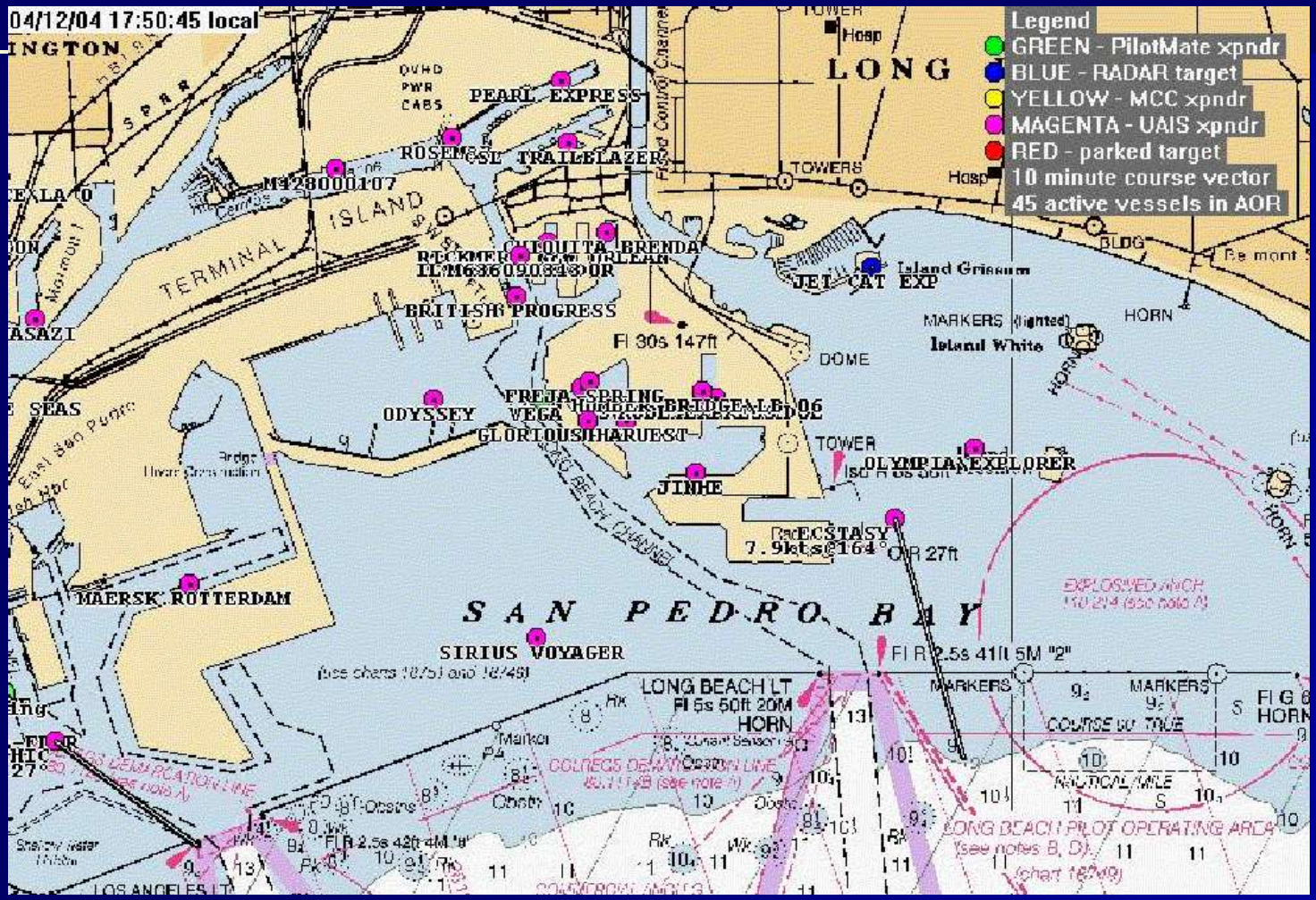
Precautionary Area



Los Angeles


04/14/04 15:12:30 local
GREEN - PilotMate xpndr
BLUE - RADAR target
YELLOW - MCC xpndr
MAGENTA - UAIS xpndr
RED - parked target
10 minute course vector
42 active vessels in AOR
WILMINGTON
LOS ANGELES
SAN PEDRO
MOL VIGOR
CSCL GENOA
YM WILMINGTON
CALIFORNIA MERCURY
PELLA
SPRING
CAT X
SAGA BEIJA-FLOR
PRESIDENT ADAMS
DIRCH MAERSK
SEALAND INNOVATOR
APL GUADALAJARA
4.8kts@201°
BWHITEg
VTIS SAN PEDRO
IVER EXAMPLE
COTOPAXI
THORSEGGEN
CHIQUITA BRENDA
ILSABE OLDENDOR
TRADE ZALE
ODYSSEY
SUEZ CANAL BRIDGE
GLORIOUS HARUEST
SAMMI SUPERSTARS
NAXIHE
ANASAZI
LONG BEACH LT
Fl 5s 50ft 20M
HORN
Fl 30s 147ft
TERMINAL ISLAND
SAN PEDRO
Hosp
Radar Tower
PAVILION
White Pt
LOS ANGELES LT

Long Beach



04/12/04 17:50:45 local
Legend
GREEN - PilotMate xpndr
BLUE - RADAR target
YELLOW - MCC xpndr
MAGENTA - UAIS xpndr
RED - parked target
10 minute course vector
45 active vessels in AOR
LONG
PEARL EXPRESS
ROSEMOSL
TRAILBLAZER
M428000107
TERMINAL ISLAND
CHIQUITA BRENDA
BRITISH PROGRESS
JET CAT EXP
Island Grissom
MARKERS (lighted)
Island White
HORN
DOME
Fl 30s 147ft
ODYSSEY
FREJA SPRING
VEGA
GLORIOUS HARVEST
BRIDGE LB 06
TOWER
OLYMPIA EXPLORER
JINHE
ECSTASY
7.9kts@164°
O R 27ft
MAERSK ROTTERDAM
SAN PEDRO BAY
SIRIUS VOYAGER
LONG BEACH LT
Fl 5s 50ft 20M
HORN
Fl R 2.5s 41ft 5M "2"
MARKERS
COURSE 90° TRUE
NAUTICAL MILE
LONG BEACH PILOT OPERATING AREA
(see notes B, D)
(chart 18749)
LOS ANGELES LT

CHALLENGES

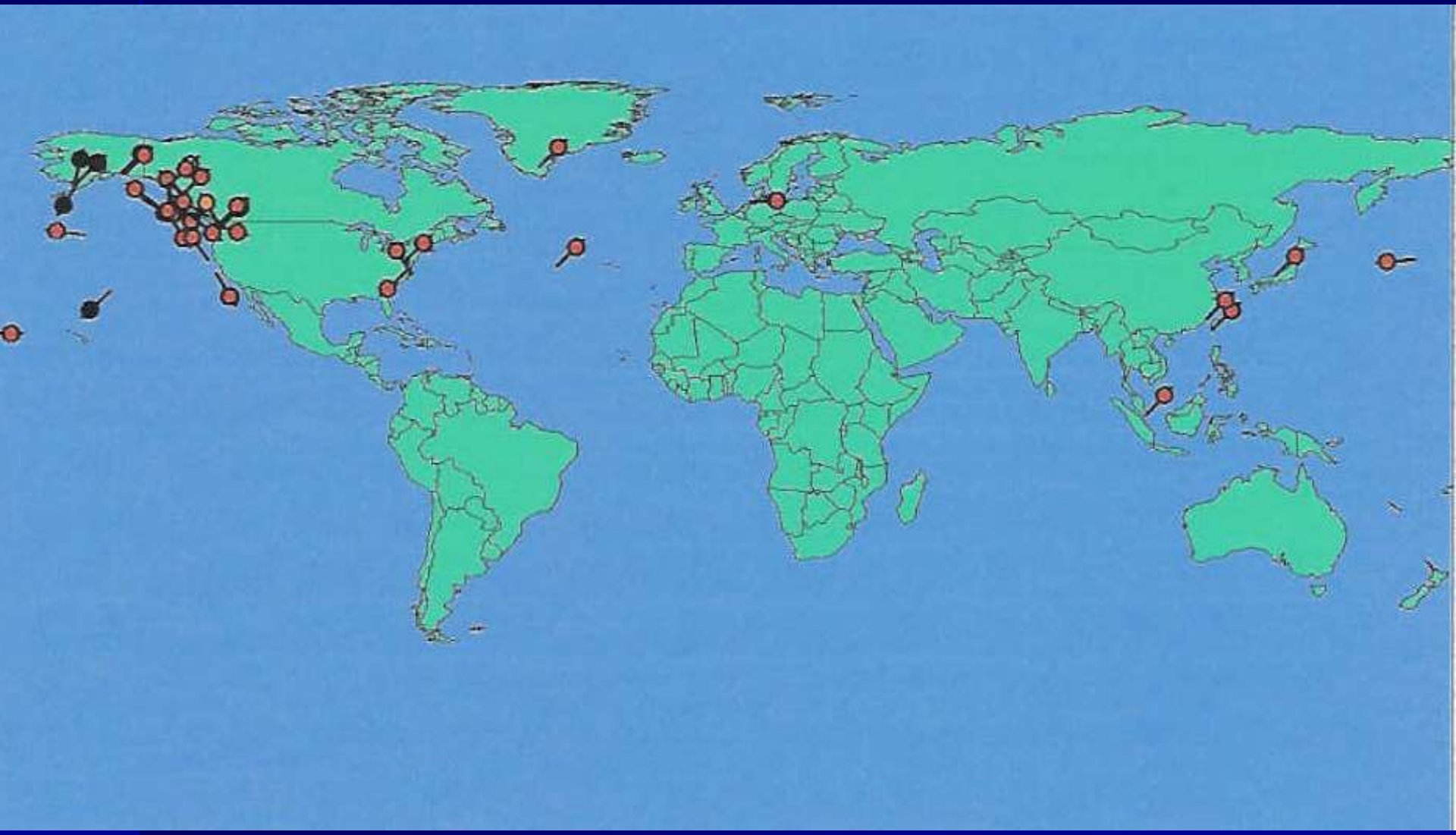
- Resolution of USCG/Maritel Issue
- Innovative Utilization of Text Messaging
- Assimilation of “Class B” AIS Platforms
- Integration With Longer Range Tracking Devices

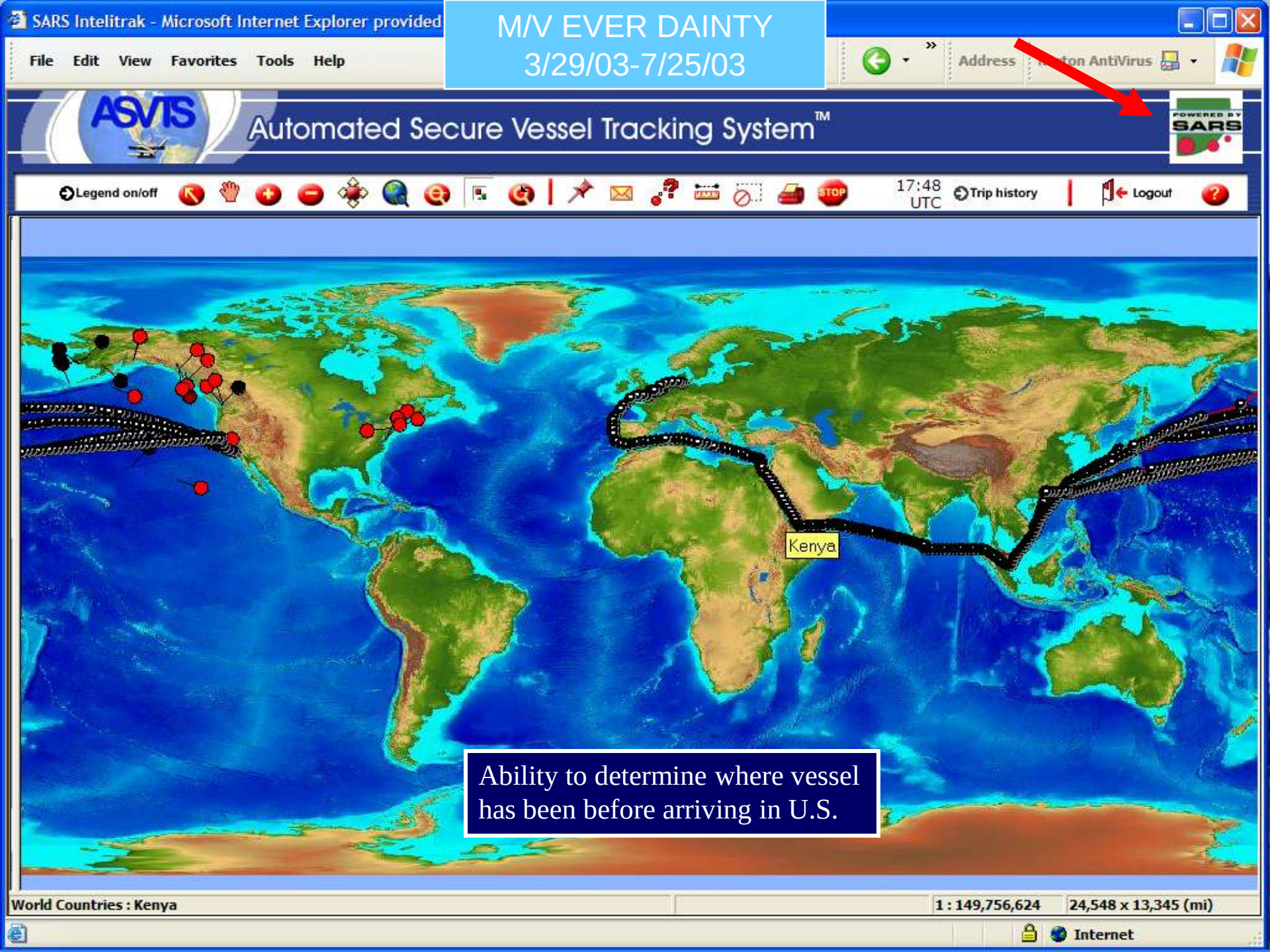
Going Forward

- 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




SARS Intelitrak - Microsoft Internet Explorer provided
M/V EVER DAINTY
3/29/03-7/25/03
File Edit View Favorites Tools Help
Address
ASVTS
Automated Secure Vessel Tracking System™
POWERED BY SARS
Legend on/off
17:48 UTC
Trip history
Logout
Kenya
Ability to determine where vessel has been before arriving in U.S.
World Countries : Kenya
1 : 149,756,624
24,548 x 13,345 (mi)
Internet