

PORT OPERATIONS

IN THE MIDDLE
(some say MUDDLE)
OF EVERYTHING

OPERATIONS INVOLVES

- ◆ Operation of Facilities
- ◆ Marketing
- ◆ Transportation
- ◆ Accounting & Finance
- ◆ Governmental Relationships
- ◆ Tennant Relationships

Operations is Every Ones Best Friend

MARKETING

"You told them we could do that?"

ENGINEERING

"How do we make that work?"

ACCOUNTING

"No, we couldn't get three quotes at 3 am Sunday."

HUMAN RESOURCES

"We won't need the people a month from now. The job will be over."

SECURITY

"Do you have any idea how many badges that is?"

COMMUNICATIONS WITH OTHER DEPARTMENTS IS
ESSENTIAL

TRANSPORTATION

- ◆ Shiplines
- ◆ Vessel Scheduling
- ◆ Rail Roads
- ◆ Rail Operations
- ◆ Trucking

Governmental Relationships

USCG – MTSA (Security Plans)

Vessel Boardings

CBP - Vessel Clearance

FTZ Regulations

Quarantine Issues

USDA – Quarantine Issues

Inspection Procedures

Warehouse Examinations

FDA - Potable Water

EPA - Air Quality

Water Quality

Security Impacts

- ◆ Background Checks
- ◆ Access Control
- ◆ Cargo Movement

Improving Port Efficiency

Examples

- HMO and Billing System
- VTIS
- Railroad Switching & Interchange

Harbormaster Traffic System



Traffic System Provides

- ◆ History of Vessel Activities
- ◆ Cargo Activities

Vessel Activities

- ◆ Inbound Times
- ◆ Docking Times
- ◆ Shifting Times
- ◆ Cargo operation Times
- ◆ Standby

Cargo Operations

- ◆ Specific Cargoes
- ◆ Loading
- ◆ Unloading
- ◆ Shed Use

JERRY PORT OF CORPUS CHRISTI 6/06/98
 Traffic Board Flag Sequence

Berth	Activity	Vessel	Flag	Remark	UnderWay	Secured Tm
K3	DOCK	UN FOUR ETOILES	BHS	GASOIL C	06 04 0620	06 05 2100
004	DOCK	UN RICH DUCHESS	BHS	CRUDE CB *	06 06 0420	06 06 0745
004	E.T.A.	UN FARANDOLE	BHS	7 NAPHTH		06 07 1800
REN	E.T.A.	LO FEDERAL BAFFIN	BRB	ALUMINA		06 06 1215
CT3	E.T.A.	UN PATROKLOS	CYP	CRUDE		06 10 1600
OCC	E.T.A.	LO LAURITS KOSAN	DIS	VCM	06 06 0810	06 05 2300
CT1	E.T.A.	LO KRITI RIVER	GRC	GASOIL		06 10 1800
IE	E.T.A.	LO EUGENIE C	GRC	WHEAT		06 08 2100
K3	E.T.A.	UN FRAMURA	ITA	&KIN CRU		06 08 1500
BT1	DOCK	UN CHINA JOY	LBR	COAL	06 05 1820	06 05 2240
OCC	E.T.A.	LO FORMOSA NINE	LBR	EDC CB		06 08 1000
V2	E.T.A.	LO TROITSK	LBR	ALKALATE	06 06 0900	06 06 0800
REN	E.T.A.	UN ARCTIC VOYAGER	MLT	BAUXITE		06 07 1300 +


F3=Exit F4=Time F5=Dock F6=Type F7=DueIn F8=Sail F9=EnRoute F10=Flag F11=Tug
 F2=Vessel



Billing System

Background

- ◆ Provides integrated & enhanced capabilities to the following:
 - ✓ Dockage
 - ✓ Wharfage
 - ✓ Building & Land Rental
 - ✓ Bulk Terminal
 - ✓ Cold Storage Facility
 - ✓ Salomon P. Ortiz International Center

- 
- ◆ Allows for simultaneous reporting & processing of tonnage and revenue
 - ◆ Provides on-line inquiry capabilities

Vessel Traffic Information System Background

- Operational Harbormaster Office (HMO) since 1932
- All personnel are Port employees
- HMO monitors vessel traffic on a 24/7 basis
- HMO monitors all inbound and outbound vessels, as well as vessels shifting within the Port
- Vessel monitoring was initially done utilizing a Card System and VHF Radio communication
- Participation in system is voluntary; however, Port has 100% participation
- Predominate traffic is tank ship and tank barges
- Card based traffic system was converted to Computerized system in early 1990's
- Mid 1990's Voice Recording was added
- Late 1990's added CCTV monitoring of Inner Harbor

Evaluation of Adding VTIS Began in 1995

- ◆ Necessary to Improve Vessel Traffic Management and Safety
- ◆ Reviewed state of the art technologies
- ◆ Reviewed Capabilities Being Developed by USCG for Their VTS. (radar, closed circuit television systems & vessel transponder technology)
- ◆ Project Budget was Developed

- ◆ 1999 the USCG Developed a Port Assessment Process Utilizing a Port Risk Model to Identify the Level of Vessel Traffic Services (VTS) Needed
- ◆ Results showed Federally Manned USCG VTS Not Needed, but a VTIS Would Provide the Needed Benefits

9-11-2001 Aftermath

- ◆ Caused a Shift in Focus to Security and the Pursuit of Security Grants
- ◆ Elements of VTIS Have a Strong Security Component
- ◆ Pursuit of Funding Moved to a New Level
- ◆ August of 2003, Port Received a Special Appropriation of \$3.6M for the VTIS

VTIS Project Funding

- ◆ Administered through the USCG
- ◆ Port as a Designated Sole Source Contractor will Provide VTIS Services to the Local USCG Office for (3) Years
- ◆ VTIS is the First Port Owned and Operated Service in the Nation

Technical Aspects

- ◆ (2) shore based radars
- ◆ Daylight and night vision (infrared) TV cameras
- ◆ Automated Identification System (AIS)
- ◆ Enhanced VHF-FM radio communications
- ◆ All signals are received at the HMO.
- ◆ Radar coverage reach is (12) miles offshore
- ◆ Covers all of Corpus Christi Bay encompassing the Corpus Christi and La Quinta Ships Channels
- ◆ Gulf Intracoastal Waterway (GIWW) is also monitored.

VTIS SYSTEM MAP

NEGOTIATED SYSTEM CONFIGURATION
MICROWAVE SYSTEM DUAL USE WITH SECURITY CAMERAS



FILE: \\ms0110\c00000\proj\02-44101-v1\system\VTIS_System\Project_Management\CorpusChristi-VTIS-2-2-06.dwg
 PLOT: 0000 201 4/11/2006 11:40:43 AM
 TMAPS 12148



PORT OF CORPUS CHRISTI AUTHORITY
VESSEL TRAFFIC INFORMATION SYSTEM
 DESIGN: ASL METHOD
 DATE: 05/11/06

Integration

- ◆ Harbormaster's office equipped with computerized charts receive all of the Radar and AIS feeds and is integrated via software with the current traffic information system.

Camera Feeds

- ◆ Feeds go to the HMO
- ◆ Equipped with alert notification and automatic slewing to the target upon detection
- ◆ Feeds are sent to the USCG and to the Port's Security Center
- ◆ HMO is able to receive camera feeds from the Port's Security cameras that go to the Security Center

Bid / Award Process

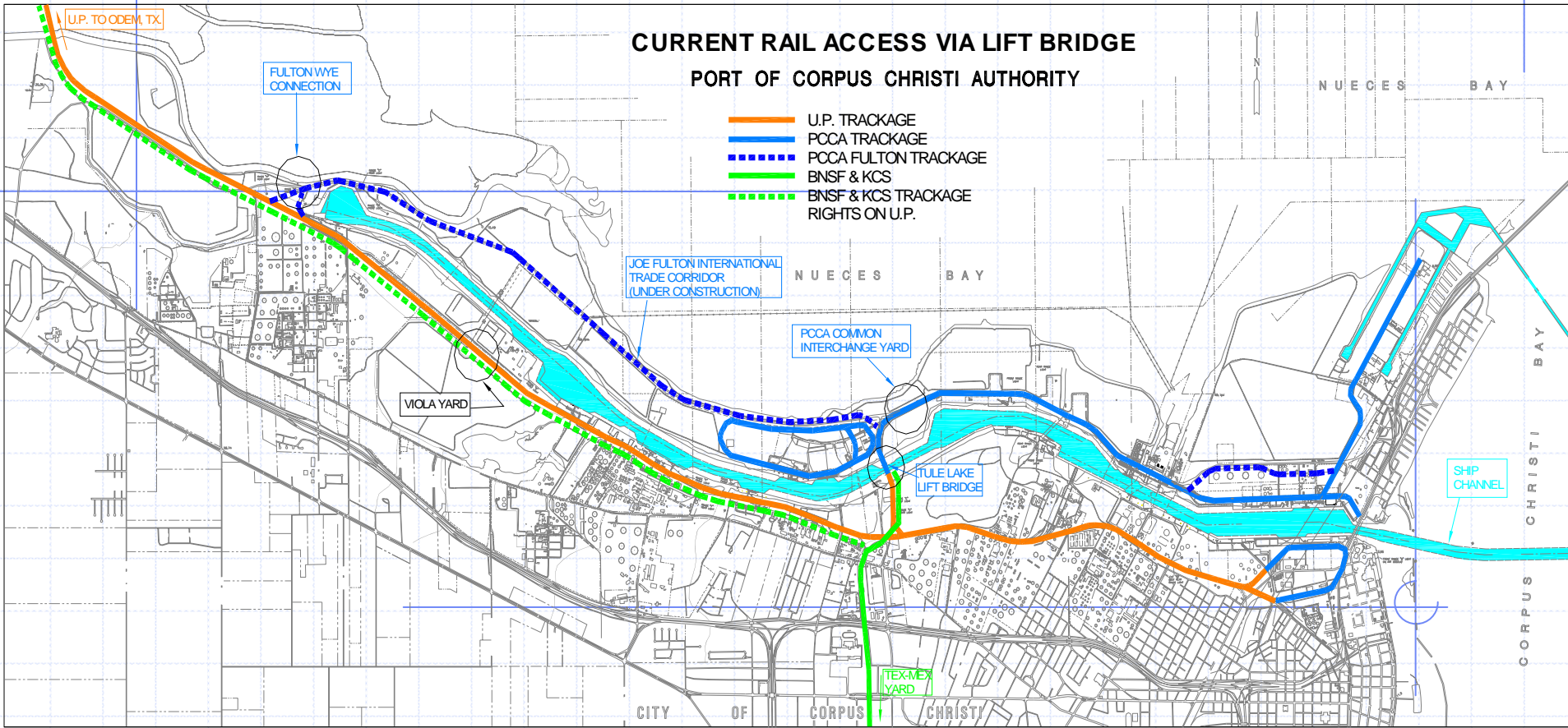
- ◆ Placed on competitive bid and was awarded in April 2004
- ◆ Tideland Signal Corporation, in conjunction with Norcontrol, was successful bidder
- ◆ Became operational April 2006



Railroad Switching and Interchange

CURRENT RAIL ACCESS VIA LIFT BRIDGE PORT OF CORPUS CHRISTI AUTHORITY

- U.P. TRACKAGE
- PCCA TRACKAGE
- - - PCCA FULTON TRACKAGE
- BNSF & KCS
- - - BNSF & KCS TRACKAGE RIGHTS ON U.P.





Thank You