Surveillance System Network and Technologies
138 feet high
630 feet wide between footings
Channel 300 feet wide
Channel 45 feet deep
Port Cargo

Petroleum
Frozen Beef & Chicken
Fresh Fruit & Melons
Bulk - Petcoke and Coal
Ortiz Center
Essential to the Military

Instrumental in supporting operations in Afghanistan and Iraq
Jetty Channel

JETTY CHANNEL
47 Feet Deep
600/700 Feet Wide

NORTH JETTY

SOUTH JETTY

Red Fish Bay

PORT ARANSAS

Gulf Of Mexico

San Jose Island

Mustang Island

JETTY CHANNEL

Gulf Of Mexico
Physical Security Elements

- Fences
- Lights
- Closed Circuit TV (CCTV)
- Police Officers
- Security Guards
- Port Employees
Problems to Address

Need to see...
Port activity without staring at CCTV monitors

Need to Secure...
The Perimeter of the Port without building fences

Need to Alert...
When a restricted zone has been breached

Need to Identify...
Is it a real threat or not?

Need to Interrogate...
To investigate a received alert

Recordkeeping...
Video data and textual data
Answer to the Problems

...for the Port of Corpus Christi is the use of VistaScape’s SiteIQ Technology.
No more starting at CCTV monitors.

STOP THE VISUAL CONFUSION!
Watch Room

Peaceful  Organized  Professional
Quiet

Detect  Classify  Locate  ID  Respond

Automation
Secure perimeters without physical fences.
Fence on Land
Fence on Water
Breached Region
Security Zones

Region

Camera FOV's

Breached Region
Interrogation

Can be used for interrogation purposes

PTZ Camera View
**Customized Regions**

Various Alerts Include
Email, Audible, Visual, Flashing Screen

**Alarm Criteria and Action Administrations (Update)**

**Alarm Region ID:** 4  **ArealID:** 1

<table>
<thead>
<tr>
<th>Description:</th>
<th>Region 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Range Check:</td>
<td>☐</td>
</tr>
<tr>
<td>Start Time:</td>
<td>1/1/2002 12:00:00 PM</td>
</tr>
<tr>
<td>End Time:</td>
<td>12/31/2100 12:00:00 PM</td>
</tr>
<tr>
<td>Alert Level Range Check:</td>
<td>☐</td>
</tr>
<tr>
<td>Minimum Alert Level:</td>
<td>Low</td>
</tr>
<tr>
<td>Maximum Alert Level:</td>
<td>Severe</td>
</tr>
<tr>
<td>Speed Range Check:</td>
<td>☐</td>
</tr>
<tr>
<td>Speed Min:</td>
<td>0.1</td>
</tr>
<tr>
<td>Speed Max:</td>
<td>50</td>
</tr>
<tr>
<td>Width Range Check:</td>
<td>☐</td>
</tr>
<tr>
<td>Width Min:</td>
<td>0.1</td>
</tr>
<tr>
<td>Width Max:</td>
<td>10</td>
</tr>
<tr>
<td>Height Range Check:</td>
<td>☐</td>
</tr>
<tr>
<td>Height Min:</td>
<td>0.1</td>
</tr>
<tr>
<td>Height Max:</td>
<td>10</td>
</tr>
<tr>
<td>Exclude Types Check:</td>
<td>☐</td>
</tr>
<tr>
<td>Exclude Types:</td>
<td>0</td>
</tr>
</tbody>
</table>

**Display Confirmation Dialog before taking any actions** ☐
**Flash the window** ☐
**Check and generate alarm on friendly type Objects** ☐
**Check Object Moving Direction:**
- **Direction:** North
- **Sound File:** c:\test2.wav

**View subject with the live camera** ☐
**View subject with the virtual(3D) camera** ☐

**Alarm Region Active Color:** Red
**Alarm Region Inactive Color:** Green
New Features... in SiteIQ 3.1

- Manage Schedules
- Improved Spurious Motion Filter
- Smoothing Filter
- And More.....
**What to detect?**
- Object type
- Speed
- Object left behind
- Object stopped, lingering
- Exclusions

**How to respond?**
- Live video
- Audible alarm
- Page

---

### Alarm Criteria and Actions Administration Insert

**Description:** Region 27

<table>
<thead>
<tr>
<th>Time Range Check</th>
<th>Start Time</th>
<th>End Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/1/2002 12:00:00</td>
<td>12/31/2002</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alert Level Range Check</th>
<th>Minimum Alert Level</th>
<th>Maximum Alert Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speed Range Check</th>
<th>Speed Min</th>
<th>Speed Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Width Range Check</th>
<th>Width Min</th>
<th>Width Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Height Range Check</th>
<th>Height Min</th>
<th>Height Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1</td>
<td>10</td>
</tr>
</tbody>
</table>

Exclusions

- Display Confirmation Dialog before taking any actions
- Flash the window

Check and generate alarm on friendly type objects

- Check Object Moving Direction: North
- Play a sound: Zone One Activated

View subject with the live camera

Alarm Region Active Color: Yellow
Alarm Region Inactive Color: Green

**Alarm Action Settings**

- Send EMail: Mail Server: guard@securitycenter.org
- Mail Message: Zone One Barrier Crossed
- Mail Recipient(s): 
- Dial Phone: 
- Phone Message: 
- Phone Recipient(s): 

---

Create-Policies-on-the-Fly

The user defines the area, then decides...
Identification

Lime - vehicle
Red - Pedestrian
Yellow - default base frame color
White - sky
Black - ignore/noise
Blue - plane
Put cameras in 'detection' mode to alert on particular objects in pre-defined restricted areas.
Cohu cameras are used outside throughout the harbor.

QuickSet Pan/Tilt mechanism that gives each Cohu camera its PTZ capabilities.

Two different models of Panasonic cameras used for detection in and outside of the Port Police Department Building.

Flir Sentry Thermal Cameras to view the harbor at night.
Area Detection
Building Perimeter Security
- Evaluate your area’s security needs
- Create a philosophy of your security measures
- Write a mission statement to keep facility and all involved focused on a consistent path forward
- Understand when you make a change, what other security measures are impacted and determine if it’s worth the risk
- In-house drills and what-if scenarios
Thank You!

www.portofcorpuschristi.com

If you require more information About VistaScape’s SiteIQ, Visit www.vistascape.com