




References

SIDS-CARIBBEAN ISCS/WAFS WORKSTATION REPLACEMENT

Customer: Virginia Department of Transportation (VDOT)	
Performance Period: 2005 – 2006	
Status: Successfully Completed	

The Virginia Department of Transportation required a remote video surveillance system for their ferries at the Jamestown wharf and at Scotland wharf (both in Virginia). The remote surveillance equipment had to comply with the following considerations:

- Establish Ethernet-based LAN at each landing.
- Implement a wireless connection between both landings to support video (cameras), data and other communications systems (Voice over IP).
- Install a server in the administrative office trailer on the Scotland wharf.
- Install a minimum of two fixed cameras and two PTZ cameras at each landing.
- Install no more than six cameras at each ferryboat.
- Install DVR's at both landings to preserve video record if wireless link is lost.
- Install components in such a manner that deteriorating effects of the environments will be minimized.
- Include additional H/W, S/W, staffing and training to incorporate four ferryboats into the wireless LAN.
- Operate on non-interference from other systems.
- Discuss the possible effects of interruptions to the wireless link by external influences including, but not limited to rain, fog, vegetation, waterborne vessel traffic, wind, etc.



The prime contractor on this project was M.C. Dean. They supplied all the cameras and security equipment. However to solve the challenge of transmitting all the video and other data from the ships over to the administrative office trailer they selected Morcom. Morcom International, Inc. was in charge of designing the wireless system, supplying it and installing it. This was no trivial task since the ferry ships are obviously moving to and from the landings at each of the shores of the Jamestown river. Morcom used a combination of mesh and fixed 4.9 GHz microwave radios from Proxim Wireless as can be seen in the diagram that follows.

NETWORK DIAGRAM

