Kennedy Space Center's Coatings Management Program

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KSC Overview

- Kennedy Space Center is located on the east coast of Central Florida with much of its infrastructure in close proximity to the ocean
  - Launch pads are located approximately ¼ mile from the ocean
- Extremely corrosive environment
  - Salt Spray
  - Humidity
  - Acid residue from Solid Rocket Boosters
KSC Overview

- **Started to use Coating Management software in 2000**
  - Pilot project consisted of Launch Complex 39B
  - By 2001, all major structures were baselined
    - Baseline included:
      - Area calculations
      - Dry Film Thickness Readings
      - Condition Photos
      - Coating evaluations
  - In 2012, 1.3 million square feet of surface area was inspected

- **By the end of 2012, over 100,000 photos and data readings have been taken**
Start Up Issues and Concerns

◆ Initial start up cost and time
  • Purchase software, servers, inspection equipment
  • Customize program to KSC’s needs and requirements
  • Develop inspection plans and ratings
  • Baseline all systems

◆ Lack of corrosion control awareness
  • Corrosion training for system engineers

◆ End user support
  • Road shows to demonstrate benefits of program
Benefits

- Prioritization
- Centralized corrosion control program
  - Inspections are done by single independent group eliminating system bias
- Better budget planning
  - Systems prioritized
  - Accurate square footage readings
- Lower costs in future
  - Reactive vs Proactive
Benefits Continued

◆ Less downtime
  • Better plan outages and shutdown periods

◆ Trending and product evaluation

◆ Photo evaluations