NEXRAD Product Improvement Dual Polarization Beta Test & Deployment Update

Office of Science and Technology
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Dual Polarization Team

**ROLES**

**RDA**

**RPG**

**USERS**

**Contractor**

RDA Requires hardware design, software modification, and system test, production and deployment.

**Government**

RPG and display Systems software development Are Gov't responsibility.
Contracts

• L3 Communications, Baron Services and Essco responsible for RDA portion of modification
  o Contract office in GSA

• December 2010 – Contractor did not pass Maintenance Demonstration
  o Technical Manuals not ready to support deployment
  o Contractor developed recovery plan
  o Delays start of Beta Test
    • Originally scheduled to deploy to Wichita January 2011
Recovery

• Production deployment begins in 4FY11
  o Government and L3 work with field sites to develop “flexible” schedule
    • Constraint: Desirable to have overlapping coverage available during deployment
    • Constraint: Avoid deployment during periods when probability of local severe weather is high
    • Number of deployment teams under discussion

• Risk reduction initiatives
  o Early configuration of Vance radar
    • Run radar uninterrupted for extended period to validate reliability and stability and obtain complementary data to KOUN prototype
    • Government develops unambiguous method to validate L3 calibration meets specification
  o Early reconfiguration of Pedestal radar
    • Provides resource to validate L3 meets maintenance specification
    • Frees KOUN for refining calibration techniques
• Delays Beta Test Readiness Review till May 24, 2011
<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Targeted Installation Date</th>
<th>Jan 2011</th>
<th>Feb 2011</th>
<th>Mar 2011</th>
<th>Apr 2011</th>
<th>May 2011</th>
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<tr>
<td>Vance (KVNX) Installation and Data Collection</td>
<td>Install – 2/11/- 3/4/11</td>
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<td>Data – On-going</td>
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<td>KOUN Data Collection</td>
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<tr>
<td>Update Technical Manual Illustrations and Engineering Drawings to document system</td>
<td>2/7 – 3/11/11</td>
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<td>Update Calibration Procedures</td>
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<td>Verification of Technical Manual Documentation updates at PTF (RF Flowcharts &amp; R&amp;R</td>
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<td>Validate Calibration Procedure updates at KOUN</td>
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<td>ROC Finalize and Print Technical Manuals</td>
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<td>M-Demo 2 (PTF + KOUN)</td>
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# NEXRAD Dual Polarization Beta Test Phase Schedule

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<thead>
<tr>
<th>NEXRAD DUAL POLARIZATION BETA SITE DEPLOYMENT SCHEDULE</th>
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<tr>
<td><strong>Targeted Installation Date</strong></td>
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<tr>
<td>BTRR – Single Thread</td>
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<tr>
<td>Vance (KVNX) Beta Test Start</td>
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<tr>
<td>Wichita (KICT)</td>
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<td>Phoenix (KIWA)</td>
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<td>Morehead City (KMHX)</td>
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<td>Chicago (KLOT)</td>
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<td>DRR – Single Thread</td>
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Considerations

• Schedules are proposed
• Vance replaces Ft Polk as DOD Beta Site
  o Require coordination with the Regions/Forecast Offices
• Extensive pre-installation will take place with all sites
• Coordinate Maintenance and Operations Training to ensure sites are ready for installation
NPI Science Improvement Activity

- DOC directed no NPI funding be spent on Program Management and Science Improvement in FY10 and FY11
  - All funding directed to Dual Polarization
- Impacts support by OS&T/SEC, OHD and NSSL among others
- NOAA/NWS management assessing alternatives
- Continues as a risk