





Dual Polarization Update

October 21, 2004 Greg Cate

10/21/04

Key Issues

- What are effects of reduced sensitivity on legacy algorithms and meteorological utility
- How best to perform calibration, particularly Z_{DR}
- Which antenna becomes the production prototype
- Appropriate Contract structure
 - Extensive GFE/GFI
 - Discrete phases

10/21/04

Reduced Sensitivity

- Evaluation of sensitivity loss is a concern
 - Current KOUN configuration not appropriate for evaluation
 - Evaluation needs to occur early
 - Offline test with Level II data
 - Online KTLX test with reduced sensitivity
 - Operational test with production prototype
 - Criteria for acceptability need to be specified

Calibration

- TAC raised concern on Zdr field calibration
 - OS&T will request joint NCAR/NSSL proposal on design and evaluation of techniques
 - Proposal will build off of previous work and include recommendation

Antenna Utilization

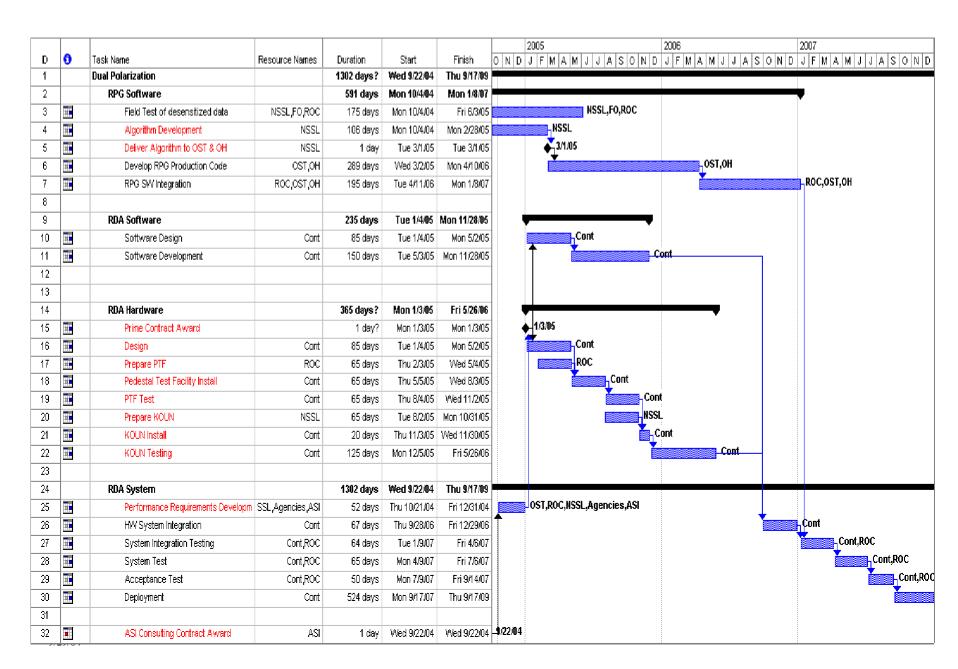
- Establish production prototype as early as possible
- Use ROC Pedestal Test Facility for preliminary design effort
- Install production prototype on KOUN

10/21/04

Contracting

- Utilize Performance-based Contract
- Contracting Challenges
 - Extensive use of GFE/GFI
 - Discrete phases
 - Each phase followed by evaluation
 - Outcomes of phase may require adjusting subsequent phases
 - Utilize Contract consultant for Contract construction

Draft Timeline – Major Dual Polarization Technical Activities



Proposed Schedule

Schedule

- Operational Development FY04 FY07
 - Phase 1 FY04
 - Define Requirements
 - Complete Program Plan/Acquisition Plan
 - Develop Statement of Objectives for Contract
 - Phase 2 FY05-07
 - Design/Development
 - Test
- Deploy, Maintain & Assess FY07-09
 - Production
 - Deployment
- Obtain NPMC approval-to-proceed at key Program milestones

Next Steps

- Dual Polarization Stakeholders Meeting November 18 in Norman
- Assemble Technical Team
 - Produce Statement of Objectives
 - Support Evaluation
- Contract development with consultant