Project Overview

• Goal: Tune radios using Android based software.
• Radio-specific specs for broadcasting.
• Analyze radio spectra and generate broadcasting recommendations.
• Network communication
  ▪ Retrieve radio spectrum.
  ▪ Tune radios.
System Architecture
Choose Radio Policy

Radio Spectrum Analyzer

- New Poli
- MIPS radio
- High Num Bands
- MIPS Radio 2
- Create a New Policy
Edit and Create Radio Policies

Radio Spectrum Analyzer

**Updating Policy: MIPS radio**

**Policy Name:**

[MIPS radio]

Minimum Sampling Frequency (500 - 3000 MHz):

1750

Maximum Sampling Frequency (500 - 3000 MHz):

1850

Tuning Bandwidth (10 - 100 MHz):

20

Create/Update Policy

Discard Policy

Radio Spectrum Analyzer

**Updating Policy: MIPS radio**

**Number of Segments (1 - 12):**

6

**Power Level (1 - 50 dbm):**

20

**Segment Bandwidth (0.5-5.0):**

1.2

**Power Delta (0.01-0.99):**

0.2

**Base Power (-100.0-40):**

Create/Update Policy

Discard Policy
View Radio Recommendation
Choose Recommendation

Radio Spectrum Analyzer

Update Recommendations

- Recommendation 1850.75
- Recommendation 1870.75
- Recommendation 1880.75
- Recommendation 1890.75
- Recommendation 1720.75
What’s left to do?

• Finalize documentation for Raytheon
• Command line version of software
• Test software and fix any bugs
• Graph Enhancements