

# DAiR Radar Narrative Exhibit

## Scope and Product Description

**Scope:**

- Develop a multi mode radar capable of protecting our borders from ground/air/maritime intrusions simultaneously. This radar shall also be able to provide the tools necessary to support Air Domain Awareness (ADA)

**Product Description:**

- X-Band AESA Radar
- 90° Azimuth coverage
- $\pm 40^\circ$  Elevation coverage
- 12 km human detection
- 21 km small vehicle det
- 4 km sUAS detection

## Specific Objectives to be accomplished

The specific objectives to be accomplished include:

1. Test, modify, and prove out simultaneous Air, ground. Ans sea mode performance
2. Test and verify clutter mitigation algorithms
3. Test and verify multi-target tracking algorithms with desperate target characteristics
4. Test, verify, characterize novel target interrogation beam

## Contribution to Development

Since this radar employs several new and novel techniques, the ability to prove, modify, and/or improve these techniques through experimental testing will be extremely valuable.