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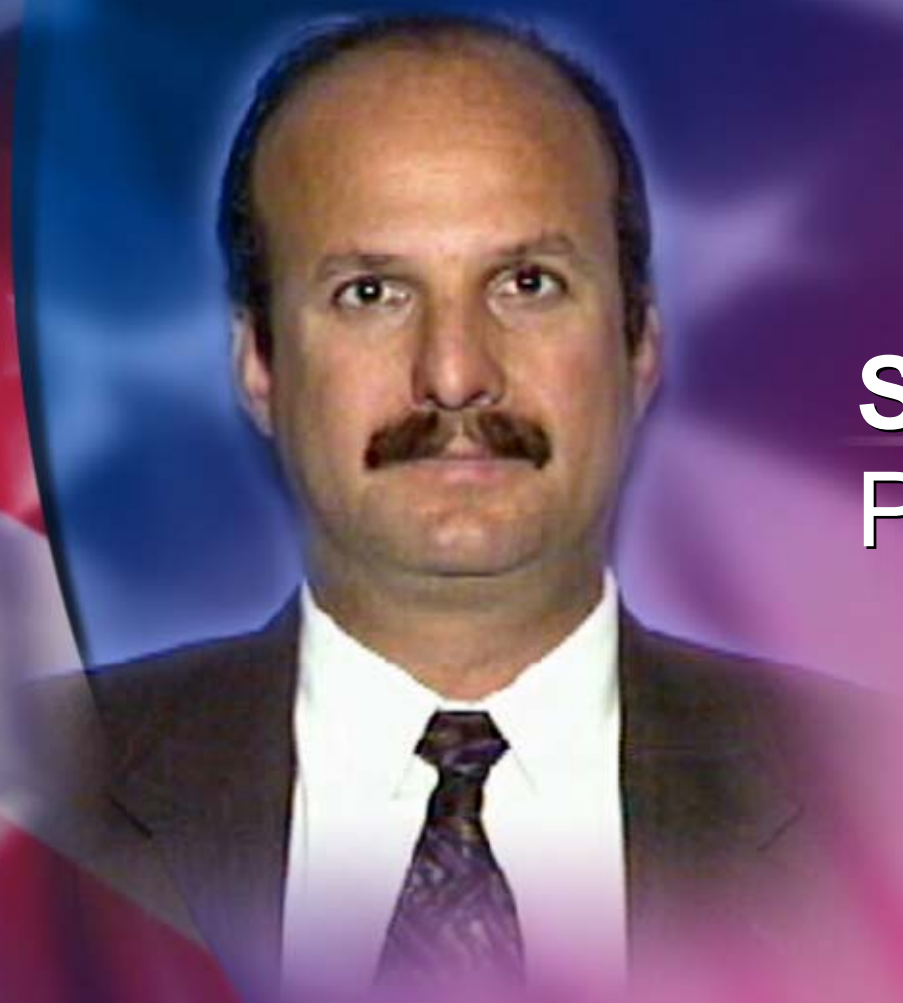

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Steve Buchsbaum

Program Manager

Transforming Fantasy

The Counter Underground Facility Program (CUGF)

Dr. Steve Buchsbaum
Dr. Daniel Cress

Program Managers

Special Projects Office

UGF THREAT TYPES

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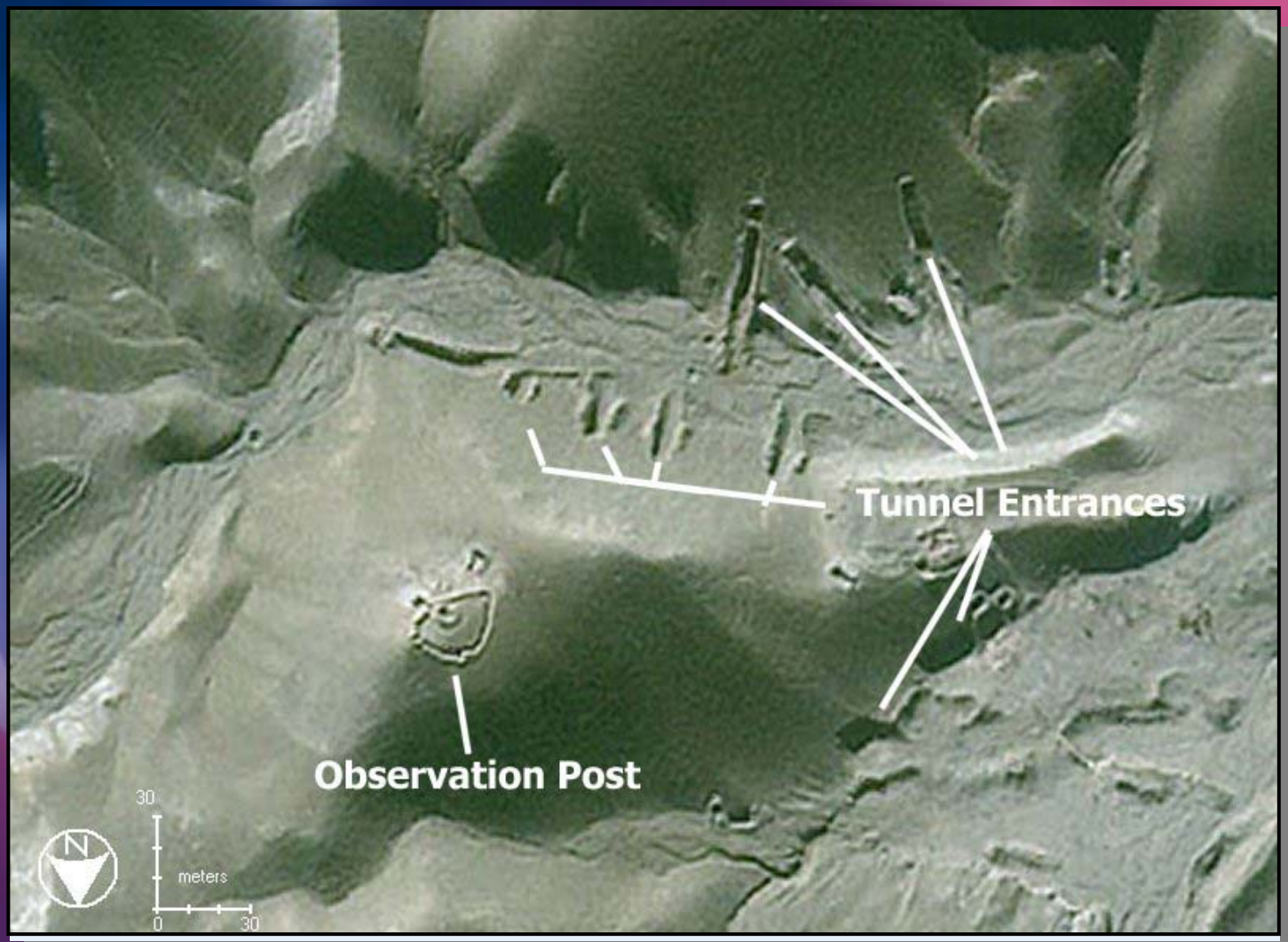
UGF THREAT TYPES



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UGF THREAT TYPES

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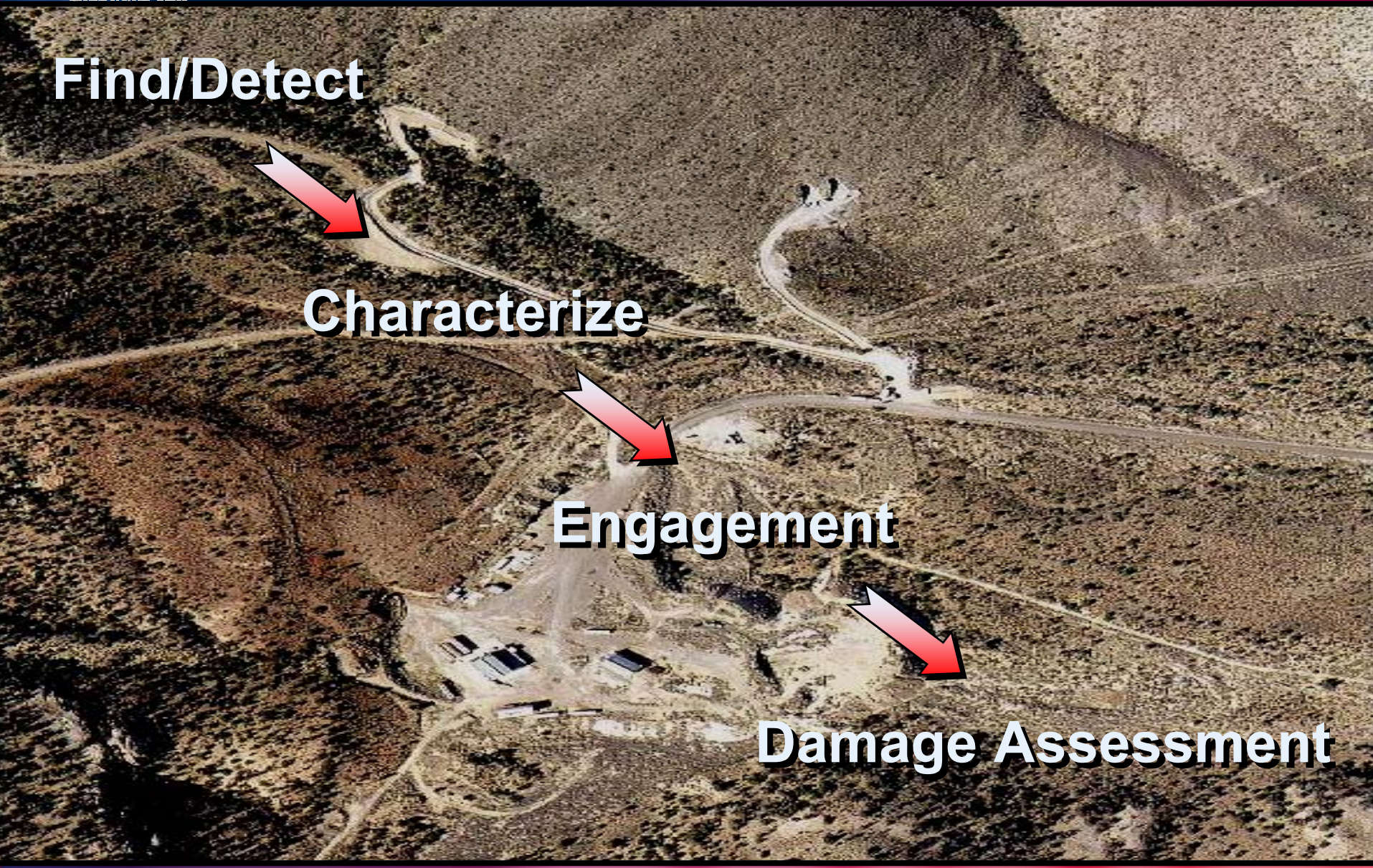

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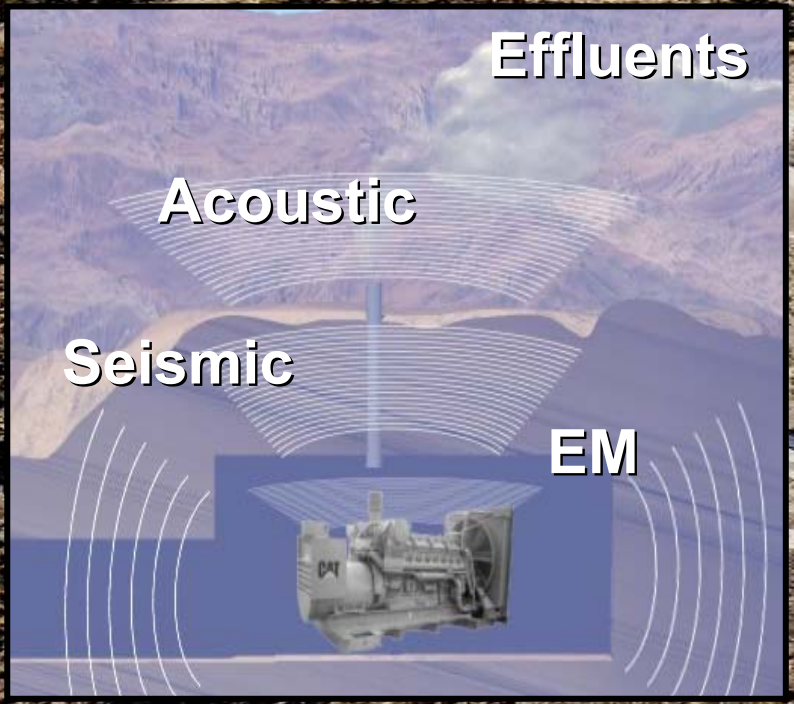
- Function identification
- Occupancy and pace of activity
- Detailed characterization
- Damage Assessment



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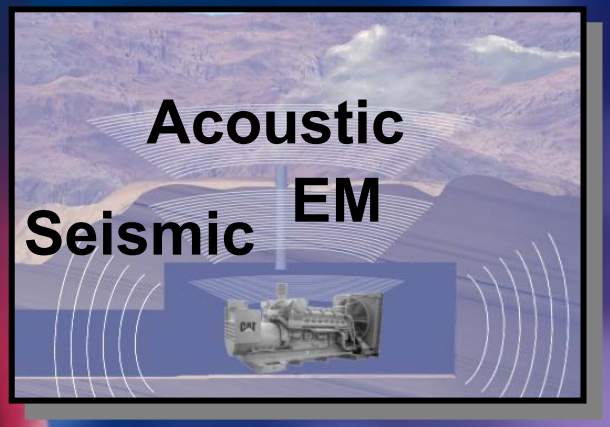
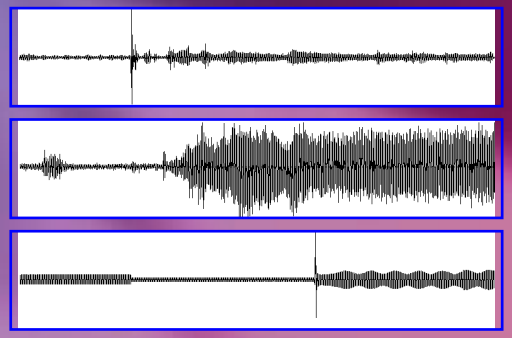
PASEM* Exploitation

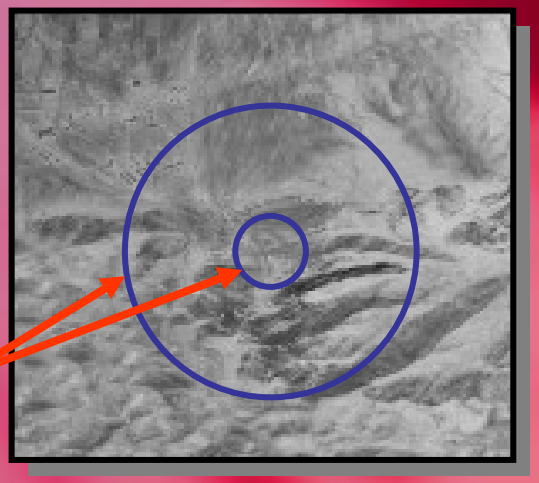
*Passive Acoustic, Seismic, EM



UGF Source Signatures



Extract weak signals via cross-mode correlation



Increased Detection Range

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Effluents

Program Element Goals

- Exploit plume to detect and localize facility vents
- Monitor facility power status, operational tempo and battle damage via effluents

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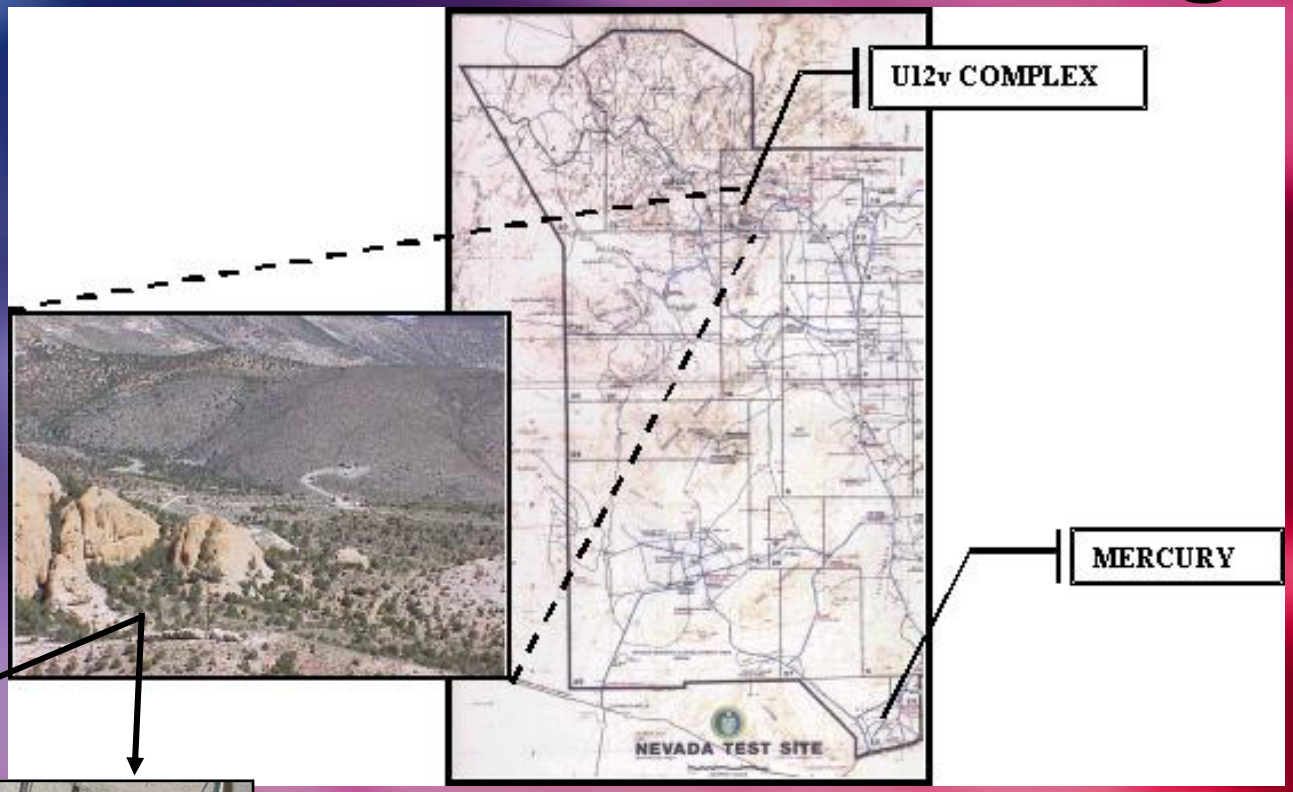
DARPA Validation Testing



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Follow-on Program – BAA 02-04

Counter Underground Facilities (CUGF) Unattended Ground Sensor System and Innovative Technology Initiatives

Program focus

- Designs for detection and exploitation of UGF-related observables
- Areas of interest: novel sensors, planning, deployment, communications, modeling, exploitation algorithms and signal processing.

http://www.darpa.mil/spo/solicitations.htm

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Follow-on Program – BAA 02-04

Counter Underground Facilities (CUGF) Unattended Ground Sensor System and Innovative Technology Initiatives

Work Area 1

- Development and demonstrations of a prototype ground sensor system

Work Area 2

- Innovative methods and technologies

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