**Problem Title**
Multiple Coordinated Unmanned Autonomous Vehicles (UAVs) for Search and Rescue

**Background**
Drones are becoming an important tool for Search and Rescue (SAR). The value of the drones for SAR teams are in three areas: 1) quick response at a low cost, 2) ability for various sensor packages, e.g. GPS, low-power RF receivers/transmitters, and thermal imaging and zoom cameras, 3) automated search coverage with a precise grid. The current capability allows for searching large areas quickly both effectively and efficiently, identifying and assessing with sensors, and providing real time coordination. The success of today's SAR with drone rely on specialized pilot training and selection of the best combination of aircraft, payload, technology and tactics. Are there other techniques, e.g. multiple automated coordinated drones, AI imaging techniques that can be applied to dramatically improve the success of a SAR mission?

**Challenge**
NSA personnel need alternative techniques to use UAVs to improve time and success rate of SAR mission.

**Operational Constraints**
- Utilize current drone and payload load technology, with investigation of other possible supporting sensors
- Relevant technologies and skills include (but are not limited to) Algorithms for cooperative operations, Data Science, Machine Learning, and RF signals.

**Do not exceed one page**