Range surveillance is a primary focus of launch range safety and often a cost and schedule driver. Launch delays, due to the difficulty of verifying a cleared range, are common and will increase as spaceports are developed in new areas. Proposals are sought for sensors and communications technologies that expedite range clearance such as sonobuoys; high altitude airships (HAAs) and related developments for thermal and gas pressure management, power systems, propulsion systems, and flight control; UAVs; use of commercial communication satellites for data transfer over the horizon; imaging through atmosphere and self learning/neural networks for pattern recognition.