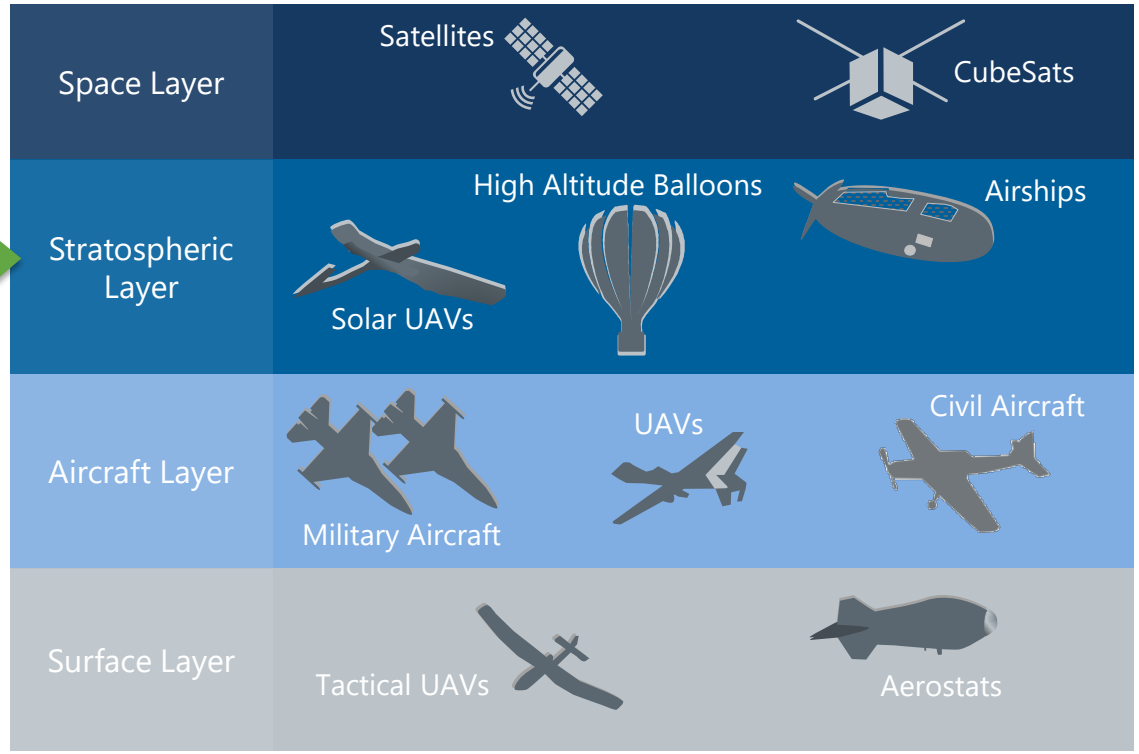
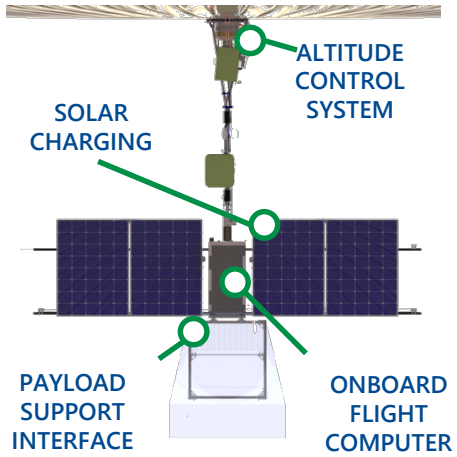
HIGH ALTITUDE PLATFORMS

WILDLAND FIRE SUPPORT

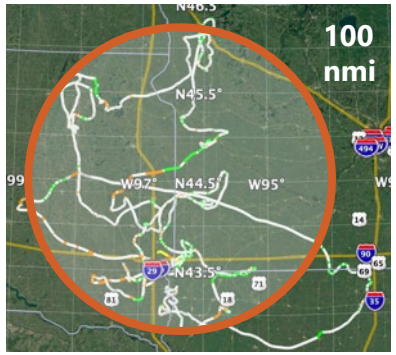
- **HAPS Layer Can Provide:**
  - Long Dwell Targeted Flight over Wildfire Events
  - Unique, High-Altitude Vantage Point for Observation and Communications
  - Persistence Coverage via Teamed Assets
- **High Altitude Balloons (HABs) Offer:**
  - Relative Low Cost
  - Responsive Deployment
  - High Technical Readiness



THUNDERHEAD BALLOON



FLIGHT PATH



ALTITUDE PROFILE

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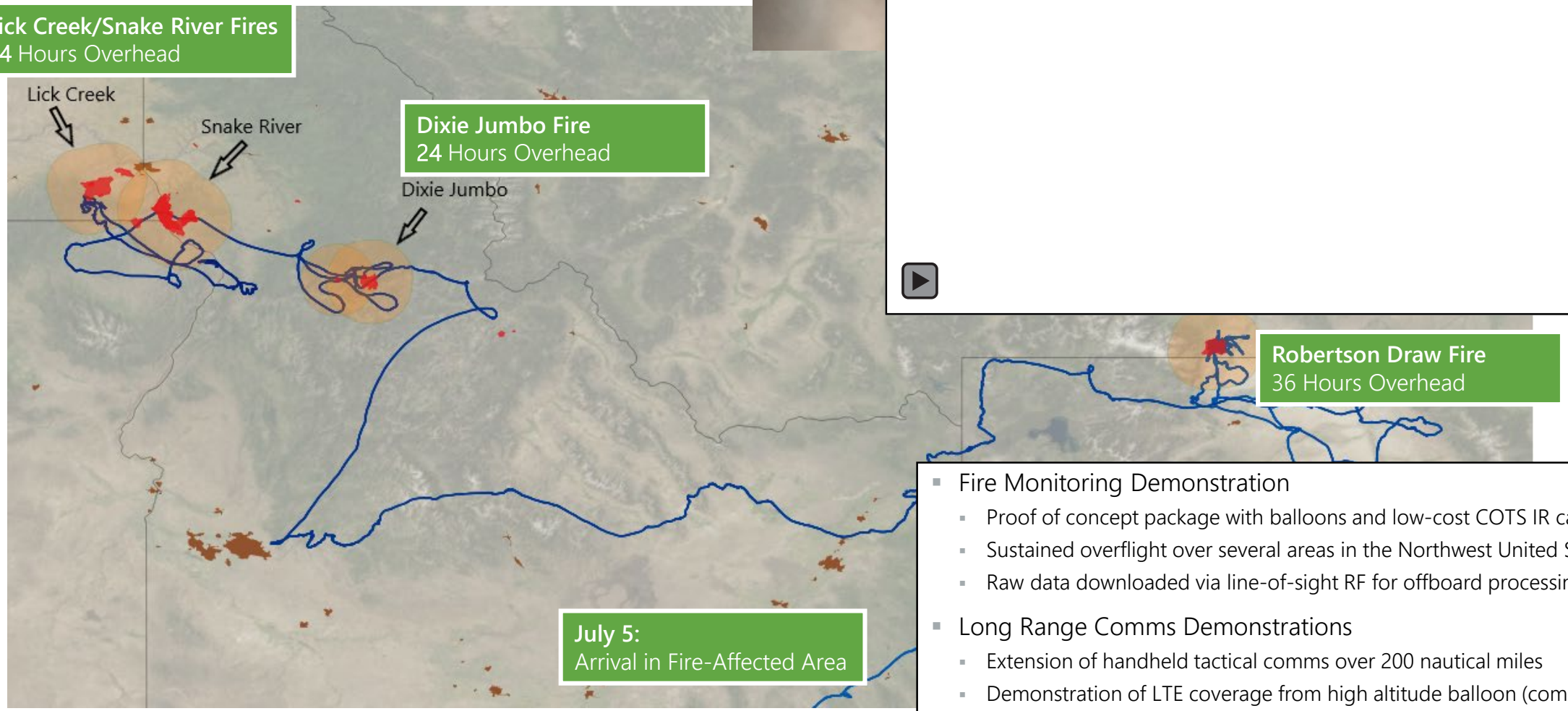
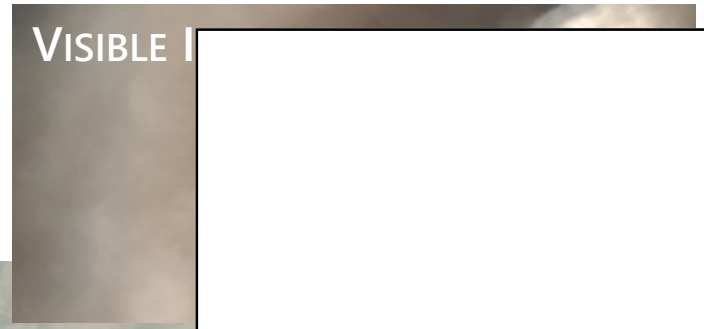
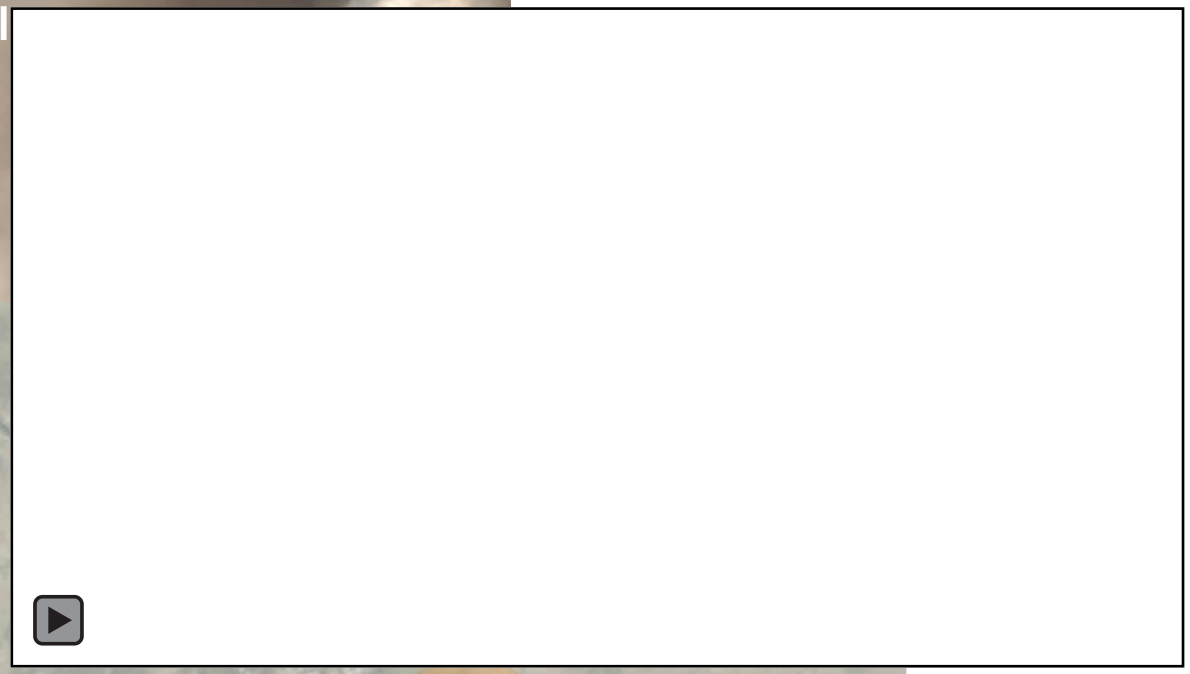
RECENT PROGRESS

WILDFIRE SUPPORT







- Fire Monitoring Demonstration
  - Proof of concept package with balloons and low-cost COTS IR cameras
  - Sustained overflight over several areas in the Northwest United States
  - Raw data downloaded via line-of-sight RF for offboard processing and analysis
- Long Range Comms Demonstrations
  - Extension of handheld tactical comms over 200 nautical miles
  - Demonstration of LTE coverage from high altitude balloon (coming in December)

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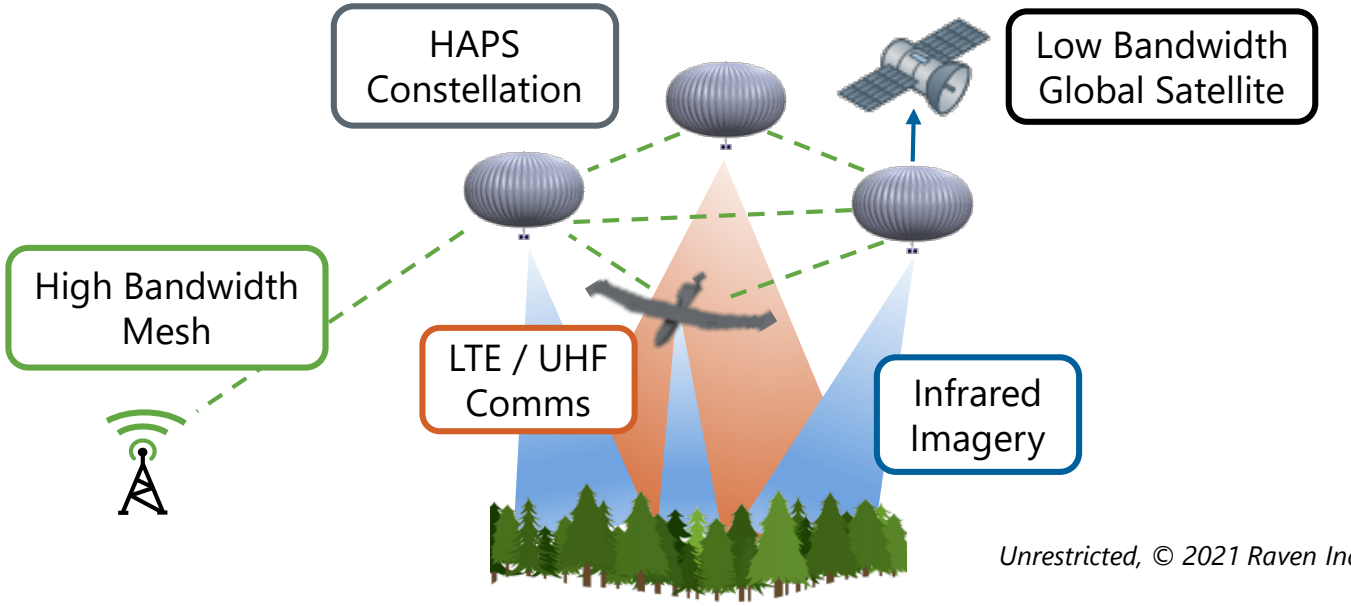
FUTURE PLANS

DESIRED END STATE

- Partnerships with government and other commercial companies
- Mesh links and shared wind/navigation data with high altitude aircraft
- Onboard processing enabling low-bandwidth global satcomm offload of actionable data: fire starts, burn perimeters, etc. in points and shapefiles
- Integrated payload providing imagery and comms payload



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