L3HARRIS

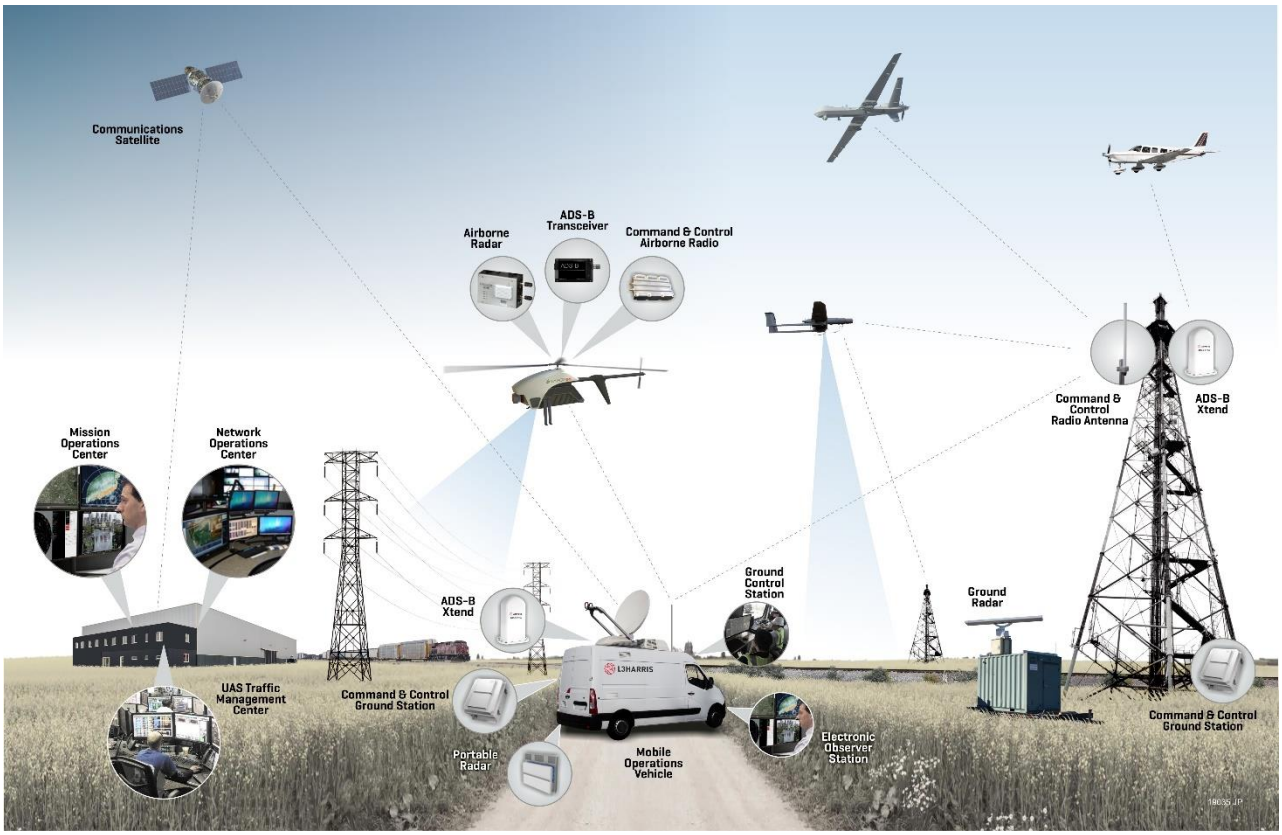
Case Study

An Unmanned Aircraft Systems (UAS) Network for North Dakota: Ushering in a New Era of Economic Development, Innovation and Aerospace Leadership

The global UAS economy is forecasted to be a $100B sector by 2026, generating 100,000 high-tech and high-paying jobs in research, manufacturing and services. Commercial unmanned aircraft that cover long distances will touch nearly every part of people's lives and will drive both industry and commerce for decades to come. North Dakota has a proud legacy in aviation and is leading today's UAS industry. A high-performance, aviation-grade UAS network, however, is required for the safe integration of UAS into the national airspace and for the UAS industry to truly take off.

How will a UAS network benefit North Dakota?

- Make the state's bedrock agriculture and energy industries more productive, profitable and globally competitive
- Enable safer, more efficient infrastructure inspection and management for railroads, utilities, mining and other sectors
- Attract the large and growing UAS industry, which is creating high-tech jobs sought by the 21st century workforce
- Enable North Dakota's UAS entrepreneurs, educators and industry to succeed
- Improve quality of life in North Dakota by modernizing government services, such as public safety, emergency response and environmental health monitoring
- Link remote communities with reliable delivery services
- Support science, research and education in high-tech fields like autonomy, robotics, information technology and big data
- Help develop the knowledge and workforce North Dakota's economy needs to prosper in global markets
- Quickly and efficiently enable the UAS industry by using the state's existing aviation and communications infrastructure
- Transform North Dakota airports into hubs of drone commerce, UAS cargo delivery, UAS human transportation and urban air mobility



What is a UAS network and what does it do?

- A UAS network is a system of aviation technologies that forms a complete solution for beyond visual line of sight (BVLOS) commercial drone operations. It is comprised of electronic sensors, radios, displays, communications equipment and the software that links and operates the whole system.

- UAS networks connect the remote pilot with the unmanned aircraft operating tens or hundreds of miles away — in real time. They transmit the pilot's command to UAS and provide them with complete situational awareness of the airspace.

- A UAS network is defined by exceptionally high levels of operational performance, reliability and resilience to adverse events. To achieve this level of performance, the UAS networks incorporate safety-certified, aviation-grade technologies.

- Only FAA-authorized, aviation-grade technologies like a UAS network can enable commercial UAS to operate beyond the line of sight of the remote pilot, unlocking the benefits of UAS technology for cities, states and their citizens.