

A white robotic arm is shown holding a head of green lettuce. The background is a blurred greenhouse with rows of plants. A large white diagonal line runs across the image from the top left to the bottom right.

WTA Associate Member Committee Panel

Cassidy Hjelmstad
Dr. William Aderholdt
V. Chornodolsky

NOKIA

Smart Agriculture in Rural America

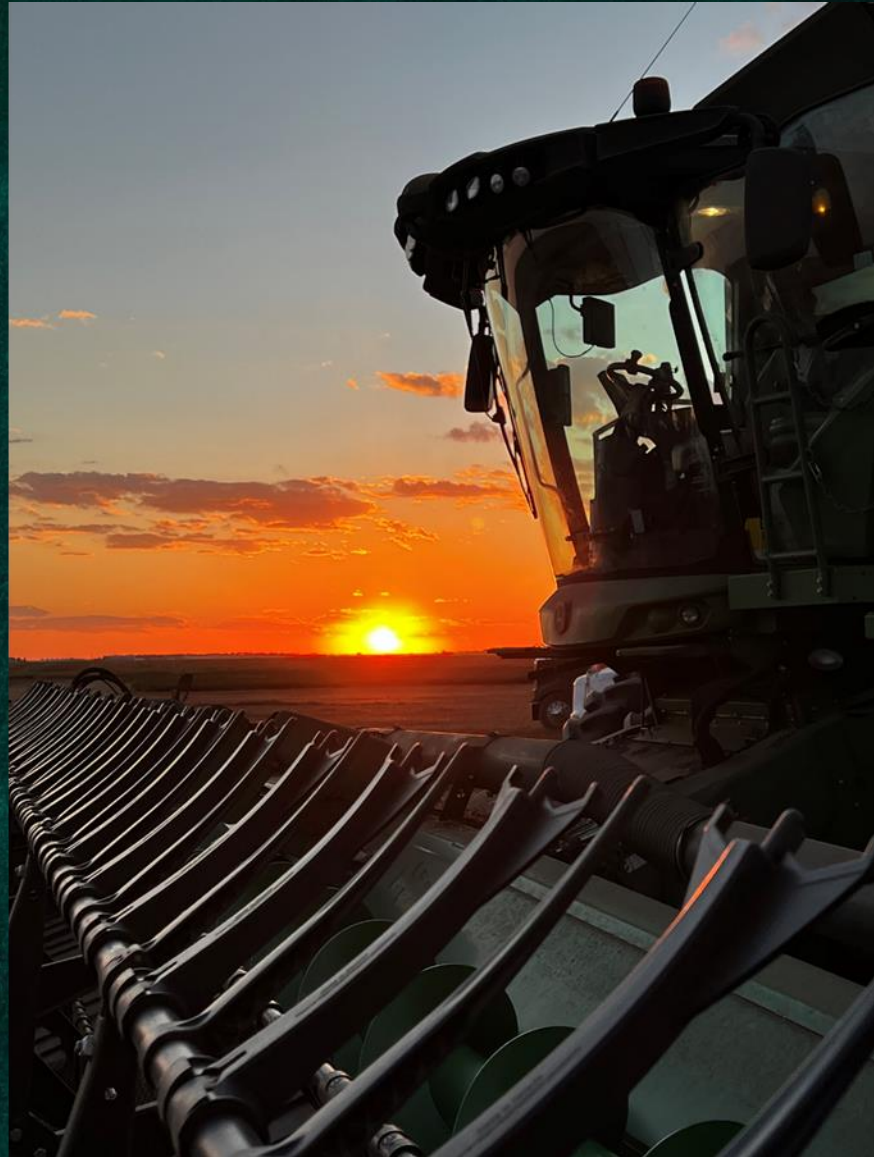
Cultivating Opportunities and Growth

- The role of broadband and connectivity on the farm
- Precision agriculture, food security cyber-threats and how broadband providers play a critical role in these areas
- The work Grand Farm has done to research and drive technology adoption on the farm
- How does SRT support it's farming community and lessons learned in those endeavors









Grand Farm Innovation Shop



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Grand Farm Autonomous Nation



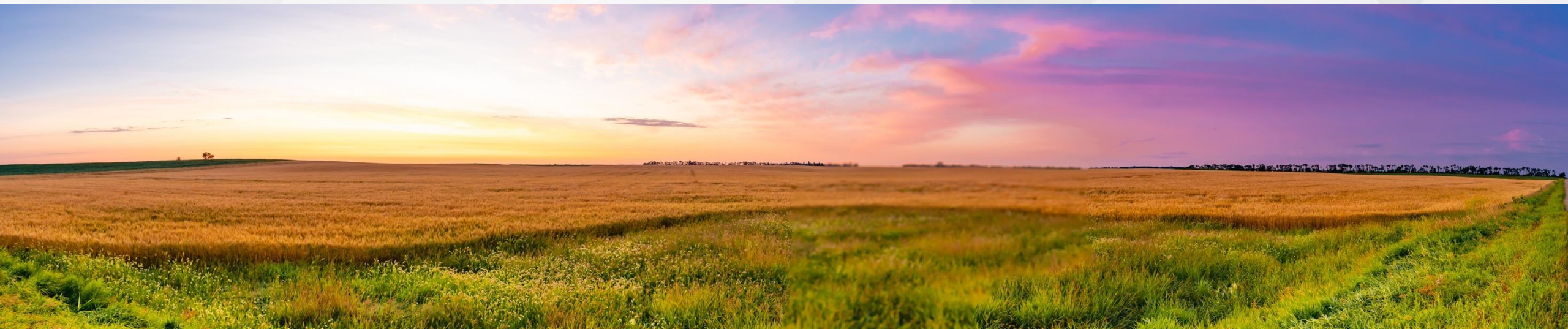
An Introduction to SRT

- Incorporated in 1951 to serve north-central North Dakota
- Multi Gig-Capable Internet and Wi-Fi, Metro Ethernet, business phone systems, security and surveillance, voice services, and data networking
- By the numbers:
 - 8,000 square-mile service area
 - 176 employees
 - 32 Gigabit Communities
 - \$116,000,000 internet infrastructure investment
 - 8,500+ miles of fiber
 - 24,000 customers



Impact and Mission

- SRT service area includes the city of Minot, a U.S. Air Force Base, rural towns, and remote farms – all marked by distance, weather, and sparsely populated stretches in between
- Imperative to bring fiber to every community, no matter the size
 - Levels access to information, services, and choice across geography
 - Brings new opportunity to the state and region while preserving all the reasons people love living and working here



Broadband Strategy

- Backbone and transport services up to 100 Gbps through four Ethernet rings
 - Ensures high availability, reliability, sub-50 ms recovery.
- Three independent 100-Gig paths through geographically diverse and redundant routes to the global Internet
- Latest switching, routing, compute, and premise architecture
 - Delivers up to 10 Gbps services throughout service area



Impact on Communities

- Agriculture
- Telehealth
- Education
- Business
- Amenities
- Tourism
- Relocation
- *Quality of Life*



Scaling for the Future

Minot Air Force Base

- Nokia 100-Gig ring upgrades
- Housing/network capacity needs



Trinity Regional Healthcare Campus

- \$500 million medical facility opened in 2023



Data Centers

- Capacity needed to scale
- Reliable, 24/7 Connectivity

SRT's Place in the World

PROTECT



Military

POWER



Mixed Energy

PROVIDE FOR



Precision Ag