

Presentation to the Interagency Arctic Research Policy Committee February 1, 2021

Presenters

Michael "Mac" McHale Chief Revenue Officer



General Charles Jacoby, Jr. (Ret.) Senior Strategic Advisor





The Quintillion Network

Strategically located in the Northwest and North Slope Arctic Region

- 1,182 miles of fiber optic cable
- **505 miles of terrestrial** fiber running parallel to the Dalton Highway
- Connects thousands of rural Alaskans to high-speed internet
- Serves North America's largest oil and gas fields at Prudhoe Bay





System Highlights

- 3 Pair System initial design capacity 100 Gbps x 100 per fiber pair = 30 terabit per second capacity
- Resilient network design, with burial up to 12' below seabed
- Trunk and branch configuration provides redundancy and reduces latency

- 6 cable landings installed 60- 80' deep in steel conduit up to a mile offshore
- Robust feeds and redundant equipment at each Cable Landing Station (CLS) with 24/7 monitoring and response



Planned Expansion

PHASE 2

- Extends from Washington State to Japan
- Connects Alaska to Washington State

Achieves **route diversity**, **reduces latency**, and establishes Asian network

PHASE 3

- Connects Alaska to Canada
- **Extends** through the Canadian arctic to London, with landing stations at Thule AFB and Iceland

Establishes Canadian and European Network





Northernmost Satellite Ground Station on US Soil

- Located in Utqiaġvik at 72 degrees latitude, 320 miles north of the Arctic Circle
- Connected to major internet exchanges in the lower 48 via fiber
- Operates on S and X bands with Kband in planning
- Closes critical space security gaps and reliance on foreign-owned stations







National Security Gaps in the Artic

To secure our northern border, we must close gaps in:

- Arctic Communications
- Domain Awareness
- Enabling Infrastructure
- General Presence



Network as an Economic Driver

We have connected thousands of **rural Alaskans to high-speed internet**, unlocking economic and social opportunity.

Our network enables

- Schools
- Hospitals
- Libraries
- Telehealth
- Remote Learning

- Teleworking
- Ecommerce
- Search and Rescue
- Research







Partnerships

Trusted partner of major national organizations and the Arctic research community:

- Sandia Labs
- llisaģvik college
- ASRC
 - ATLAS Space Operations
- BSNC
- ASTAC

- NOAA
- Internet2
- GCI
- TelAlaska
- Alaska Communications
- DRS









MICHAEL "MAC" MCHALE Chief Revenue Officer



GENERAL (RET.) JOHN F. CAMPBELL Special Counselor to the Board



GENERAL (RET.) CHARLES H. JACOBY, JR. Senior Strategic Advisor



Please get in touch

Address 201 East 56th Avenue, Suite 300 Anchorage, AK 99518

Phone 1-800-673-4394

Follow us online
@QuintillionNet
@Quintillionfiber
Quintillion Subsea Operations