Are You Prepared to Fight in DDIL?

“Every orbit and satellite network has its place. While many others are going bigger and faster, we’re focused on doing what we do best by providing small, low cost, critical connectivity with maximum mobility” – Iridium CEO Matt Desch

iridium®

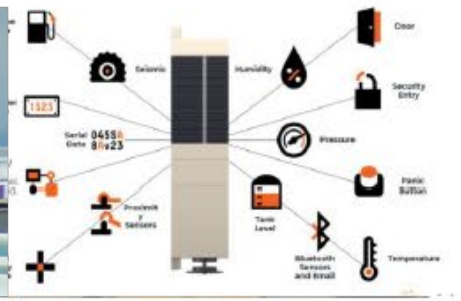
Mar 2026

Tactical Radios

Convoy operations

Air to Ground

Sensor Systems Ground/Surface Sensors



Contested Logistics

Weather Monitoring

Disaster Relief

Coalition interoperability

PLI and Common Tactical Picture

Arctic COMMS

Search and Rescue

12 IRIDIUM PROPRIETARY BUSINESS INFORMATION

PACE – The Basics (sequential)

- **Primary** – The preferred method.
- **Alternate** – A backup method that's almost as good as the Primary.
- **Contingency** – A less ideal but still workable method.
- **Emergency** – Guaranteed method when other methods fail.

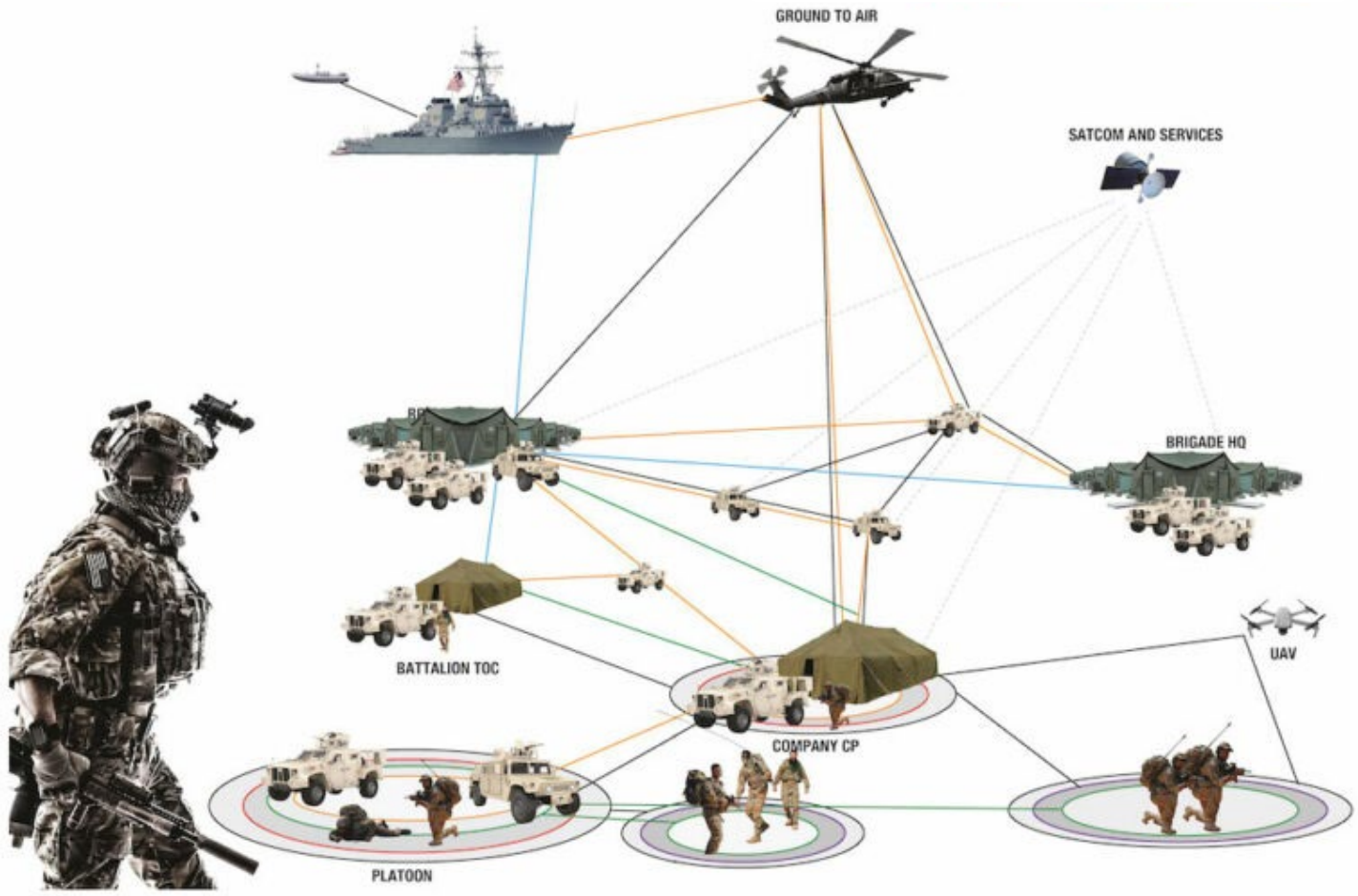
- As a Sigo - there's not just one PACE!
  - Transport: LOS radio / BLOS satcom / wire / runner
  - BLOS satcom: PLEO1 (K), GEO1 (K), MEO (K), PLEO2(L)
  - Network: SIPRNet / JWICS / NIPRNet / SBU-E
  - PNT: GPS / GNSS1 / GNSS2 / GNSS3

- But in reality…
  - Signature/footprint (ECAP?)
  - Cost / affordability
  - Security features
  - Interoperability with coalition partners

"E" does not mean "worst". It must be the most reliable!

Smart Routing

- Simultaneous PACE
- Multiple resilient transport
- Automated (AI/ML)
- Efficient path algorithms
- Requires data packet metering (pipe size)

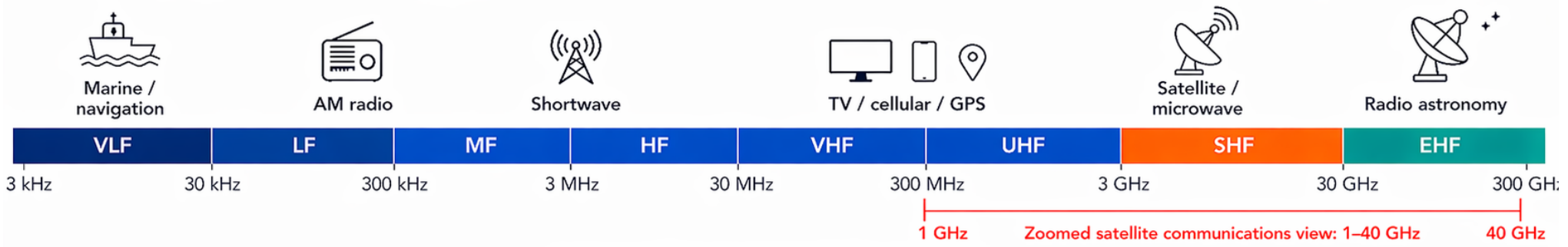


DDIL Defined

- **Denied:** Complete lack of connectivity due to infrastructure absence or intentional interference.
- **Disrupted:** Temporary interruptions caused by environmental factors, cyberattacks, EW, or equipment failure.
- **Intermittent:** Sporadic connectivity with frequent drops or unstable links.
- **Limited:** Restricted bandwidth or high latency that constrains data transfer and real-time communication.

Factors contributing to DDIL include:
adversarial actions, environmental challenges, and systemic issues that disrupt connectivity.

Multi-Spectrum / Multi-Orbit



Iridium
L-band MSS

- Frequency band: L-band (1616–1626.5 MHz user links)
- **Primary service:** Narrowband voice, messaging, tracking, and low-rate data
- **Coverage / architecture:** Global LEO coverage, including polar regions
- **Terminal profile:** Small antennas and low-SWaP mobile / handheld devices
- **Propagation / weather:** Lower rain-fade susceptibility due to L-band operation

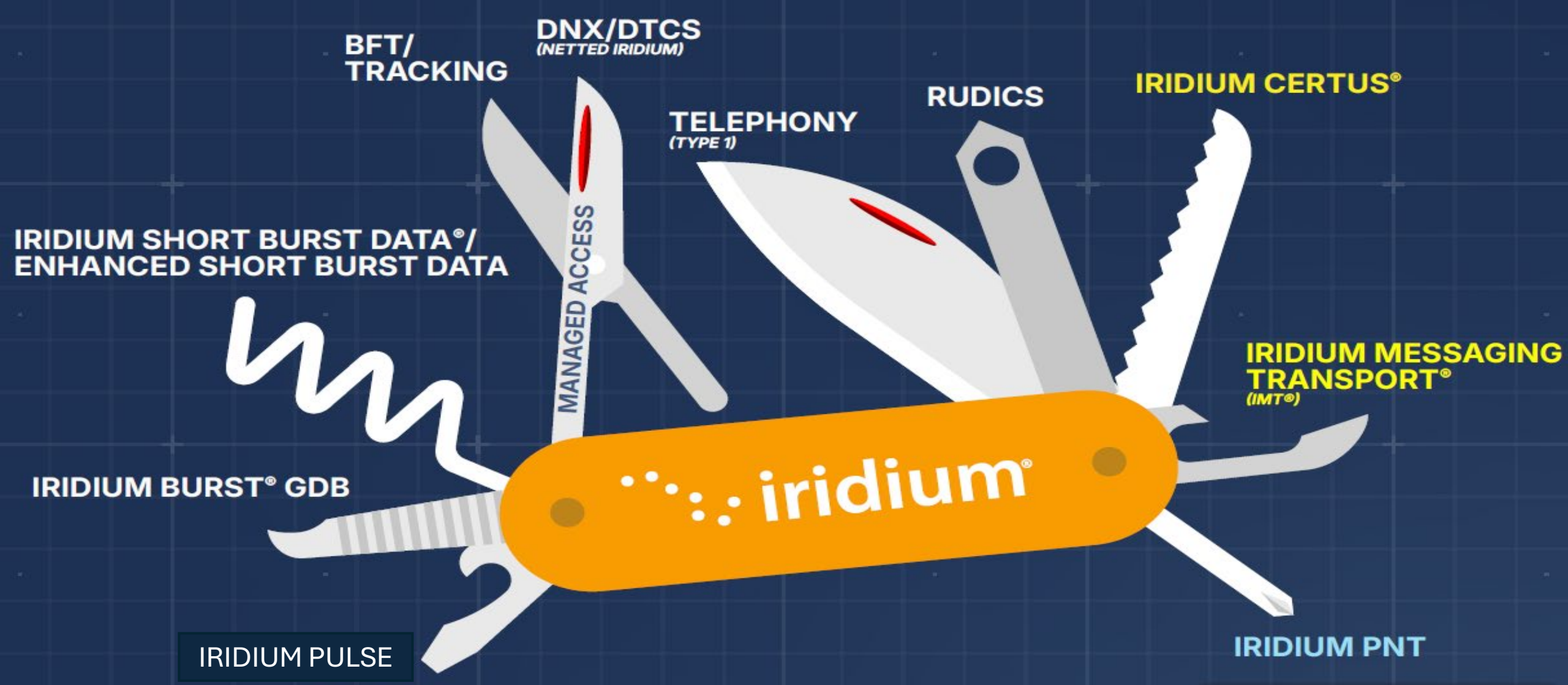
Starlink / Starshield
LEO broadband

- Frequency bands: Ku-band user/service links; Ka-band feeder/gateway links
- **Primary service:** Broadband transport, access, and backhaul
- **Coverage / architecture:** LEO broadband constellation; availability depends on deployment and authorization
- **Terminal profile:** Electronically steered user terminals, typically larger and higher power than handheld satcom devices
- **Propagation / weather:** More affected by rain fade than L-band systems

Amazon LEO
LEO broadband

- Frequency bands: Ku- and Ka-band broadband architecture
- **Primary service:** Broadband access for enterprise and consumer use
- **Coverage / architecture:** LEO broadband constellation; availability depends on deployment and authorization
- **Terminal profile:** Electronically steered user terminals
- **Propagation / weather:** More affected by rain fade than L-band systems

Broadband Moves Data. MSS Moves Missions.



IRIDIUM YOUR MULTI-TOOL SATCOM SOLUTION

Command and Control, Out-of-Band Management, Data Backhaul, Unattended Sensors, Autonomous Solutions, Trackers, GPS Denied, Personal Communications

- EMSS Unlimited Airtime
- PLEO Broadband
- GPS Alternative
  (U.S. Army Program of Record)

IRIDIUM AND IRIDIUM CONNECTED® SOLUTIONS

Honeywell Aspire 350

Iridium 9575

McQ Ranger

McQ Owl

Somewear Labs Satellite Hotspot

Everywhere Secure In-Reach Mini

Everywhere Solar Satellite Tracker

ICOM SAT-100

NAL Research Shout Family

Thales MissionLINK

4k Solutions Global Satellite Communications Kit (GSCK)

SD Gov "Jump Kit"

NAL Research Quicksilver

Blue Sky Network TOC Box

AssetLink AssetPack

McQ Connect

If you think we're just a phone company, then you're not asking us to help you solve ALL of your problems

EMSS Overview

The EMSS unlimited airtime contract offers a variety of end-to-end Iridium narrow band services through the ground infrastructure owned by the EMSS Program Office and operated by the EMSS Capabilities Office (ECO). Several new services being introduced are covered in the existing airtime contract.

Services Offered during OIF/OEF


Secure Voice


Short Burst Data (SBD)


Paging (Pulse)

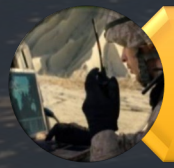

RUDICS

DTCS

Additional Services Offered Today


Enhanced SBD (ESBD)

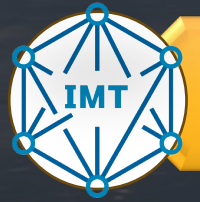
DTCS Global Services (DTCS-GS)


Managed Access DNX


Burst (EMSS GDB)

In discussion…


NTN Direct (3GPP Standards Based)



Iridium Messaging Transport


Iridium Certus

Iridium Commercial Gateway Access

Iridium STL and GPS

Iridium Satellites

25x closer than GPS

GPS

Medium Earth Orbit (MEO)

20,200 km / 12,550 miles

Continuous Wave

Not Directional

Iridium STL

Low Earth Orbit (LEO)

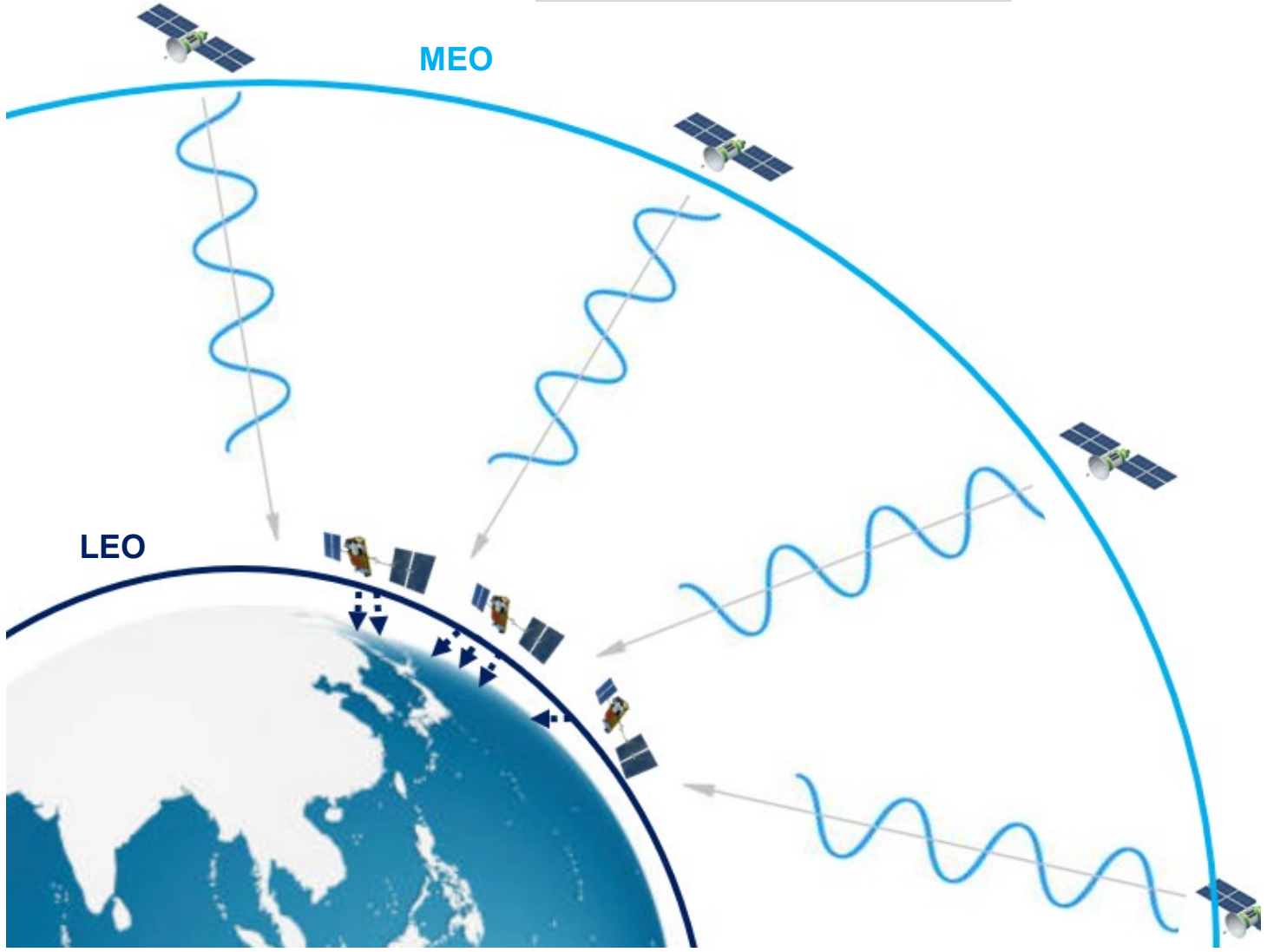
780 km / 485 miles

Burst Messages

Directional Spot Beams

Higher Received Power

30 dB (1000x) Stronger than GPS



* Orbits not to scale

TRUSTED CONNECTIONS FOR AUTONOMOUS SYSTEMS

THE IRIDIUM ADVANTAGE

Resilient L-Band Connectivity

L-band signals penetrate rain, fog, and interference where high-frequency networks can degrade.

Pole-to-Pole Coverage

A crosslinked LEO constellation eliminates network boundaries, even over the Arctic and open oceans.

Low SWaP-C Integration

Optimized to fit the smallest uncrewed platforms.

MISSION-CRITICAL CAPABILITIES

Beyond Visual Line of Sight (BVLOS)

Enables uncrewed operations by maintaining constant command and telemetry links.

Simplex Data Services

RF-silent, high-power comms deliver critical mission updates to one or many receive-only platforms — even in degraded, denied, intermittent, and limited environments.

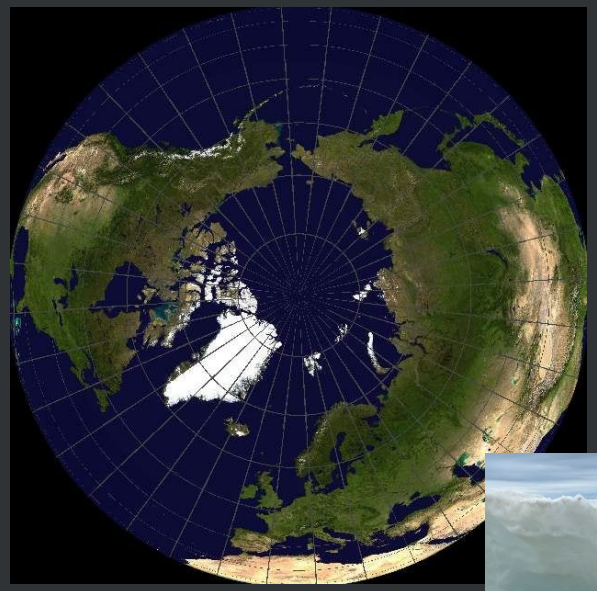
Optimized Bandwidth Utilization

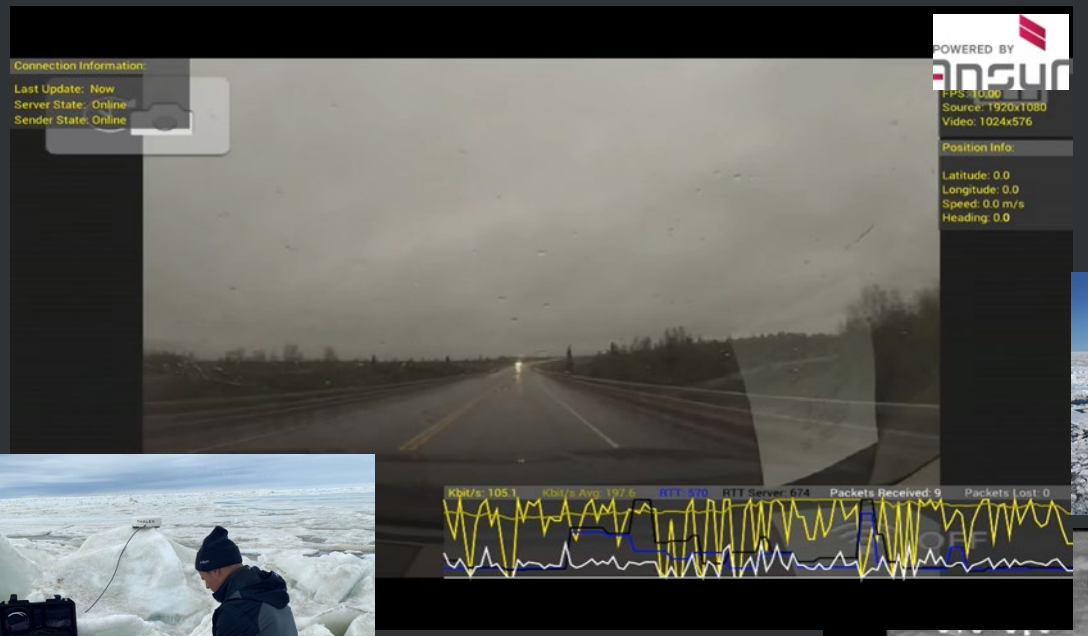
Power-efficient narrowband and midband provide the resiliency and reliability layer in a system's comms stack.

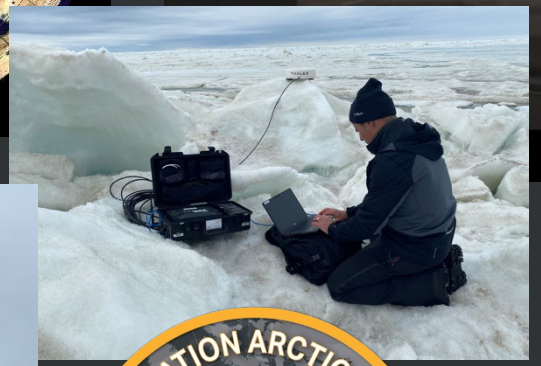
ENABLING SERVICES

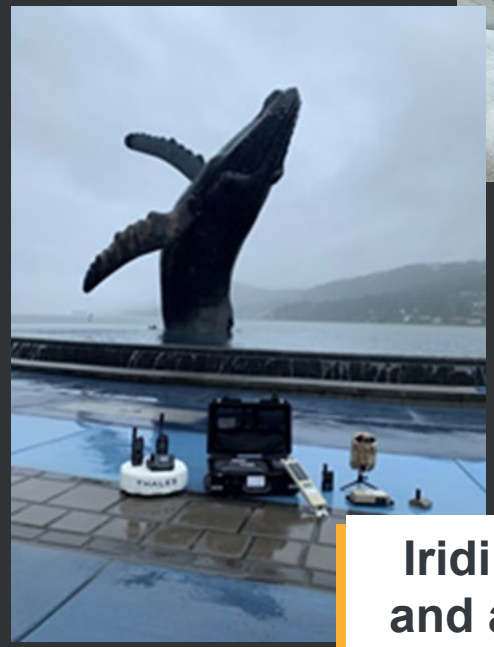
IRIDIUM SHORT BURST DATA® | IRIDIUM BURST® | IRIDIUM PULSE™ | IRIDIUM CERTUS® | IRIDIUM PNT | IRIDIUM NTN DIRECT™

iridium®









OPERATION ARCTIC LYNX
iridium
June 11 - 26, 2021

OPERATION PACIFIC WAVES
iridium
Reliable • Trusted • Essential

Iridium provides unparalleled connectivity solutions for deployed teams and assets operating anywhere on the planet, including the polar regions

EMSS Academy: Enabling Operational Readiness

In contested, austere and DDIL environments, communication failure is not an option. The EMSS Academy ensures personnel can confidently employ their Iridium-enabled equipment when mission success depends on it.

The Challenges:

- Capability alone does not equal operational readiness
- Units often receive equipment without mission-relevant training
- Gaps in operator proficiency reduces operational effectiveness
- Commands need a repeatable way to build proficiency amongst users before these capabilities are needed in real-world operations

The Solution:

- EMSS Academy delivers standardized, hands-on training for EMSS devices, services and mission workflows
- Connects classroom instruction to operational use cases, not just device familiarization
- Increases user confidence, improves employment of devices and supports command readiness goals
- Helps the force fully realize the value of the EMSS program

Iridium-enabled equipment for DSCA, GWOT and LSCO!

EMSS Academy: From Fielded Capability to Trusted Operational Use

Module 1: Iridium® & EMSS Overview	**Module 7:** Incident Management & Support
Module 2: Secure Telephony (Voice & Data)	**Module 8:** Use Cases & Future Capabilities
Module 3: Iridium Short Burst Data® (SBD®)	**Module 9:** Knowledge Repository & Resources
Module 4: Simplex Services (Iridium Burst® & Pulse℠)	**Knowledge Check:** Jeopardy Game
Module 5: DTCS Familiarization & Setup	**Practical Application Exercises**
Module 6: Procuring Devices & Services through EMSS	**Q&A / Closing Remarks**

No cost training – packaged for your unit's requirements

Aireon: Recognized Global Leader in Aircraft Surveillance

- Iridium LEO Constellation
- 99.9% Ao
- 66 Operational Payloads
- 14 On-orbit spares
- 1090MHZ SDRs optimized for ADS-B

- Tracks ~200k+ flight movements per day
- Easy API delivery
- Full data catalog to 2019

Headquarters
McLean, Virginia
USA

Customers
Over 50% of world's airspace leverage its services for safety-quality ATM data

Employees
150+

Aireon: Alaska National Security Applications

- ***Alaska RCC***

  (Search and Rescue)

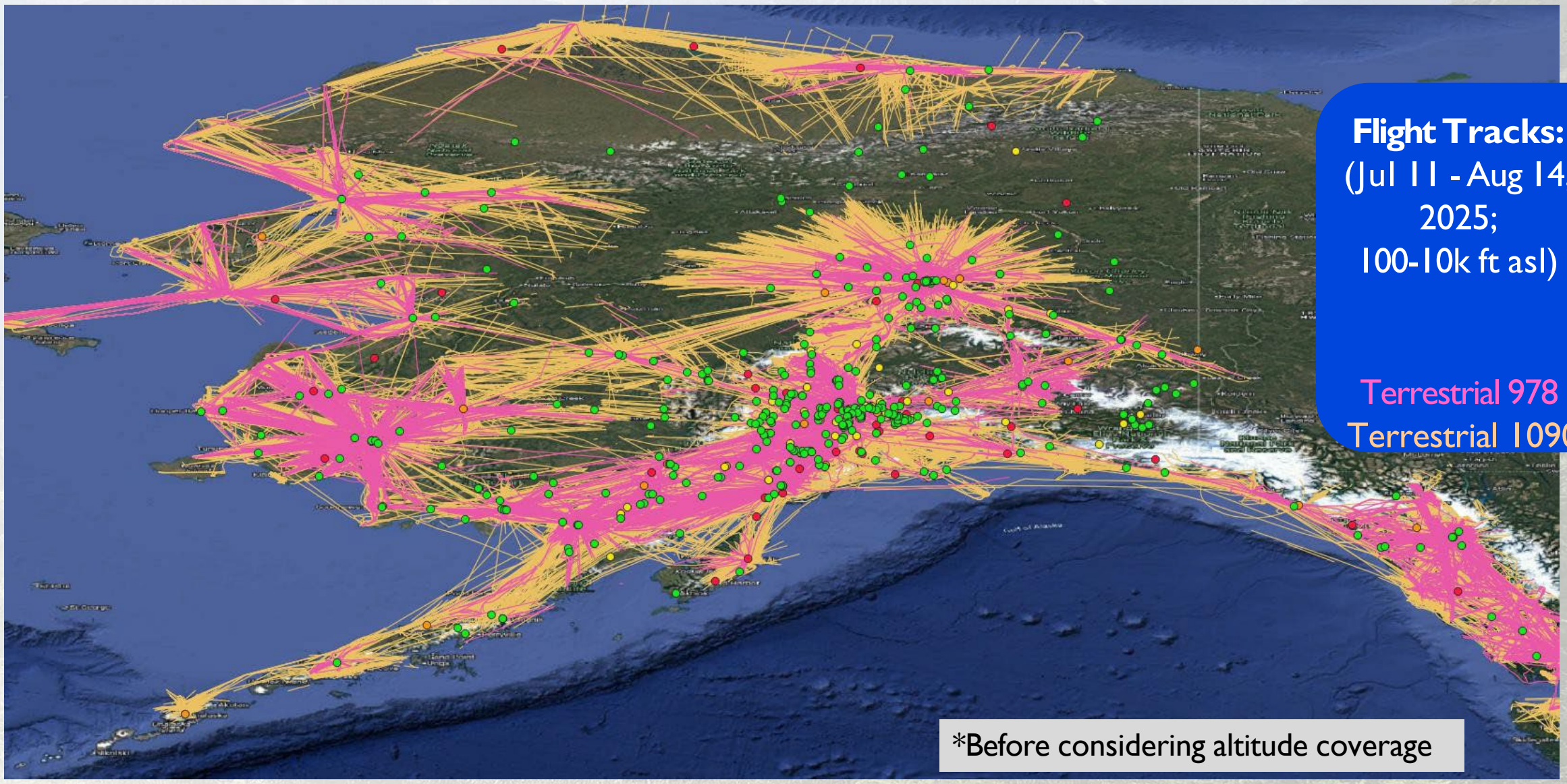
- Global Situational Awareness Tool

  (Domain Awareness)

- Long-range radar development

  (Sensor Test & Validation)

Ground-based ADS-B sensor coverage WITHOUT Aireon

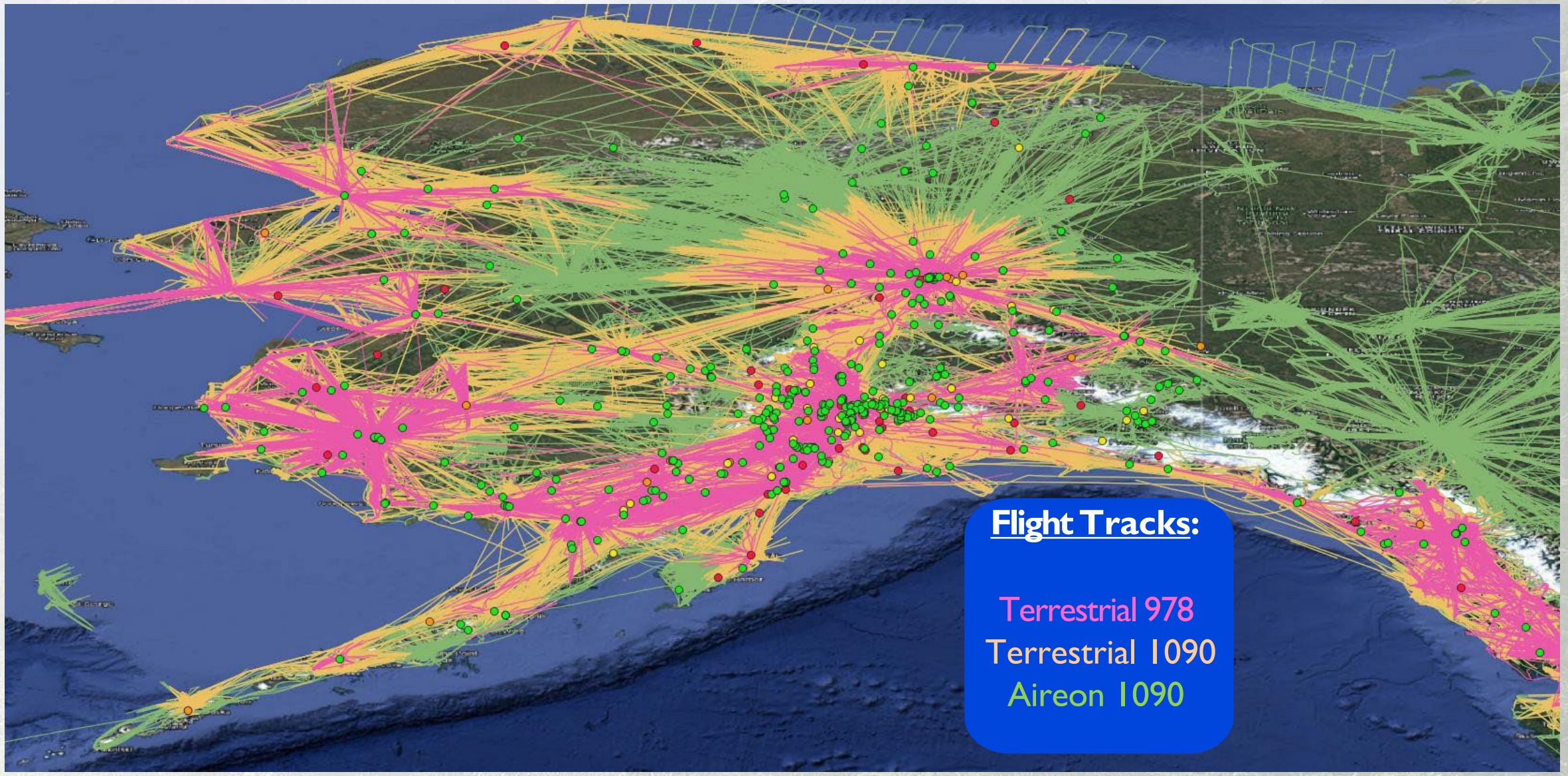


Flight Tracks:
(Jul 11 - Aug 14, 2025;
100-10k ft asl)

Terrestrial 978
Terrestrial 1090

*Before considering altitude coverage

Combined ADS-B coverage WITH Aireon Space-Based Sensors



Single Data Source To Support a Range of Use Cases & Missions

Extended Sensor Horizon to Enhance Situational Awareness

WHAT GAPS CAN WE HELP YOU MITIGATE?

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(571) 355-3710

We are ready to exercise (proof of concept) with you!

If you think we're just a phone company, then you're not asking us to help you solve ALL of your problems

iridium