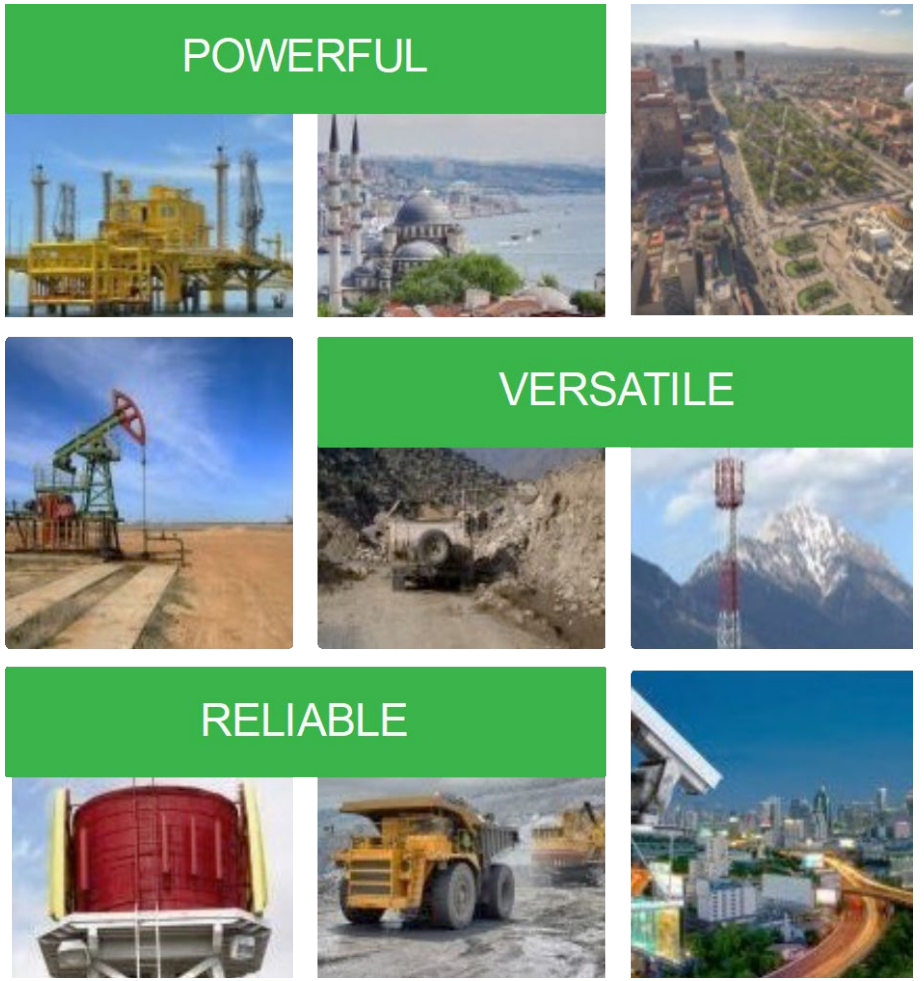
Aviat Networks
Wireless Access Solutions

August 2022

Aviat Networks



Aviat provides the most powerful, rugged and reliable wireless networks using leading-edge technology to deliver the lowest total cost of ownership to organizations building private wide-area networks

Aviat Wireless Access Applications

TELECOM

- Digital Divide
- Rural Connectivity
- B2B Access Services
- Backhaul

GOVERNMENT

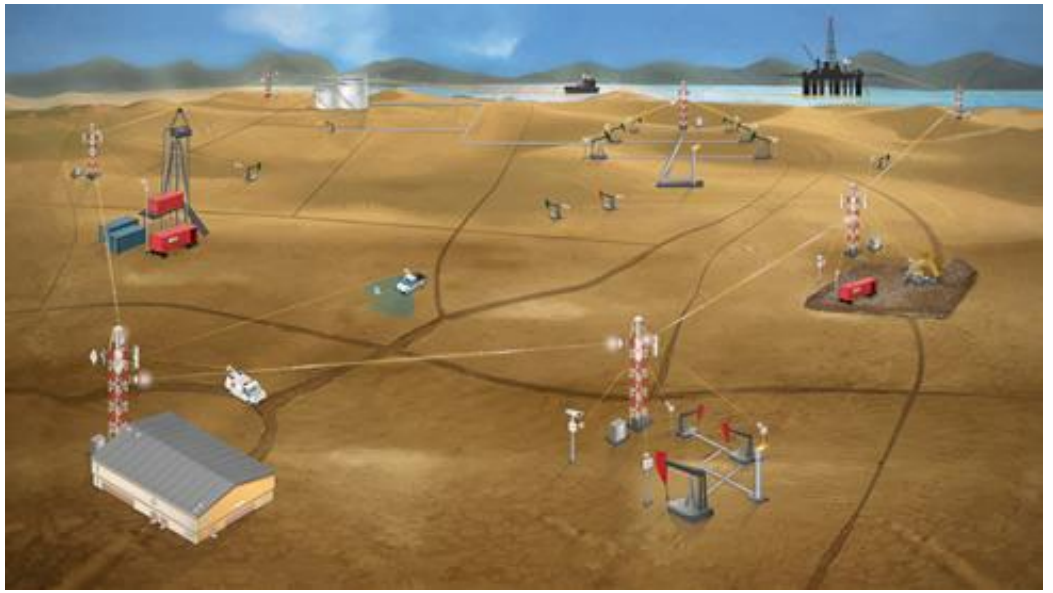
- Smart Cities
- Defense
- Surveillance
- Intelligent Transportation Systems

ENERGY- MINING

- Digital Oilfield
- Digital Mine
- Digital Grid
- Autonomous
- IoT & Industry 4.0 enablement

Enabling Digital Oilfield Transformation

Digital Oilfield

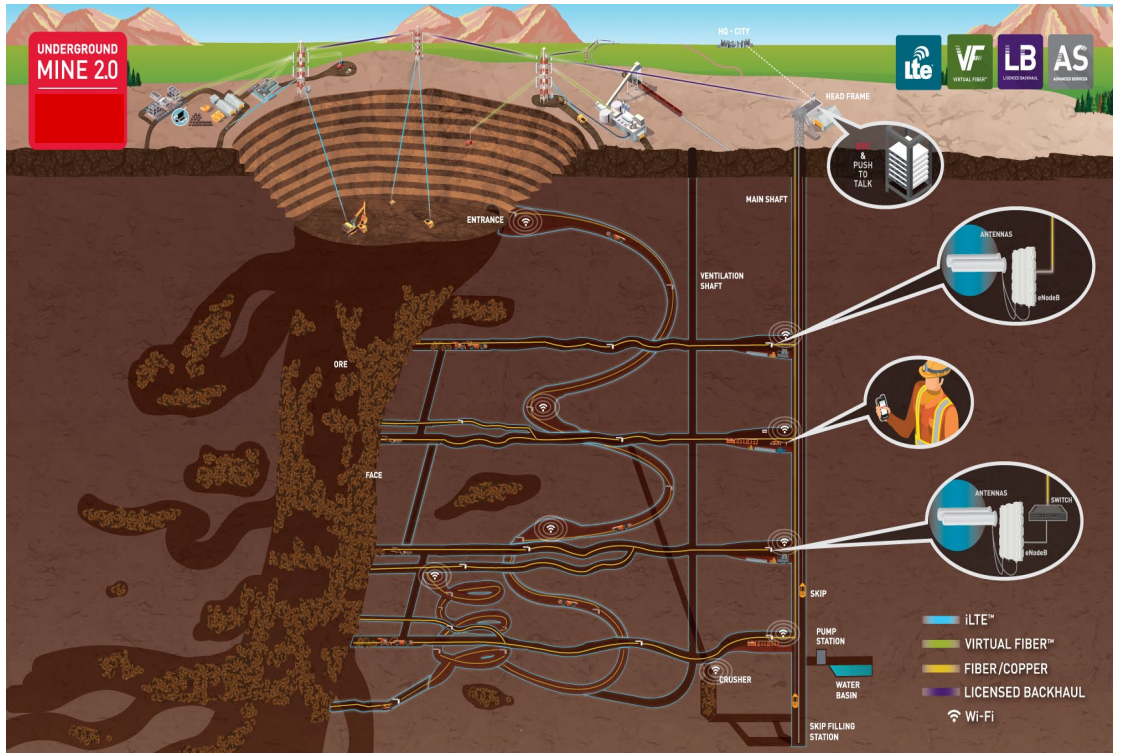


- Onshore & Offshore specific solutions
- Single, secure infrastructure for IT & OT
- Increased productivity via connected people & machines
- Remote Drilling, Operations, Inspection
- Real time process optimization and asset reliability
- Lower CAPEX/OPEX VS Legacy systems
- Simplified network operations & Connections

- At $100/B it was all about Drilling
- At $50/B it is about EOR & Automation & Control
  - From Proprietary to Standards
  - From Narrow-Band to Broadband
  - Form Fixed only to Mobility
  - From LMR only to Voice, Video, Data
  - From buying fixed products to Solutions

Enabling Digital Mine Transformation

Digital Mine



- Surface, Underground, site-to-port
- Always “on- grid” people & Machines
- Adding Voice, Video & Data to “Air & Water”
- All mine assets and site are “connected”
- Autonomous Processes& vehicles backed by Autonomous fault recovery & redundancy
- Push-To-Talk migration & integration

- Mining is the #1 market for Private LTE*
- Underground Spectrum not regulated*
- Leading Dispatch S/W vendors demand LTE
- Mining requires more mobility than O&G
- Autonomous Process and Vehicles require LTE
- Deployment of Smart Mining apps assume LTE

* *Source: Aviat internal research*

Enabling Utility Digital Transformation

Electrical Utilities

- Distribution segment forced to make change by regulators
- Many have telecom infrastructure dated 20y
- Migration to IP is an immediate requirement
- Grid Architecture changes demand better networks
- AMI Collectors and surveillance

- Digital Grid Transformation is a global phenomenon
- Large consulting form all recommending Private LTE
- Solution architecture and design similar to O&G
- CBRS in USA is a new spectrum opportunity

Enabling Smart Cities Digital Transformation

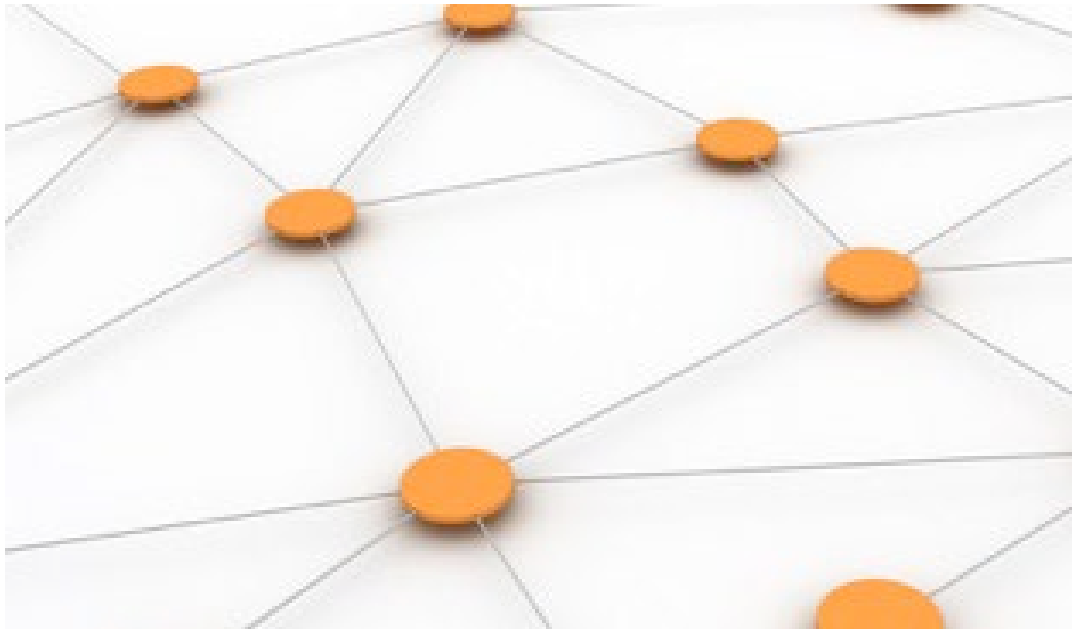
Smart Cities

- Water-Wastewater
- Intelligent Transit Systems (ITS)
- Surveillance
- Connecting the field worker to know their location and improve safety
- Eliminating expensive Satellite and subscription fees to reduce OPEX

- Enable broader video coverage for increased safety
- Connected transportation systems reduce congestion
- Bringing First Responders reliable private LTE
- Enabling the Wi-Fi city
- CBRS in USA is a new spectrum opportunity

Enabling the Digital Network Transformation

Service Providers



- Digital Divide for rural connectivity
- Microsoft Airband Initiative
- B2B for SME in urban & sub-urban Centre

- Industrial reliability translates to lower OPEX
- Creative Subscription Fee to lower entry price
- A great market of savvy, early adopters
- CBRS in USA is a new spectrum opportunity

Bridging the Digital Divide

Reach the unreachable and change lives

Give children in rural areas a great education through remote learning

Connect a community and raise their quality of life

Improve patient care with connected hospitals and ambulances

Provide instant communications in emergency situations

Aviat's Value Proposition

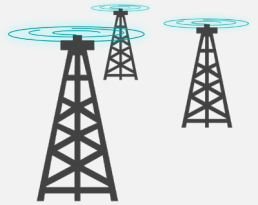
- Low CAPEX
  - Fewer Base Stations = Lower rollout cost
- Connects hard to reach assets
  - Direct line-of-sight not required
- Low OPEX
  - 99.999% uptime eliminates maintenance expenses and ensures visible operations
- Best application performance
  - Applications perform as though they were wired
- Absolute Security
  - State-of-the-Art, cyber-security

TELECOM – WISPs
Best Performing PMP System
Highest Revenue per MHz
Reliable in unlicensed spectrum

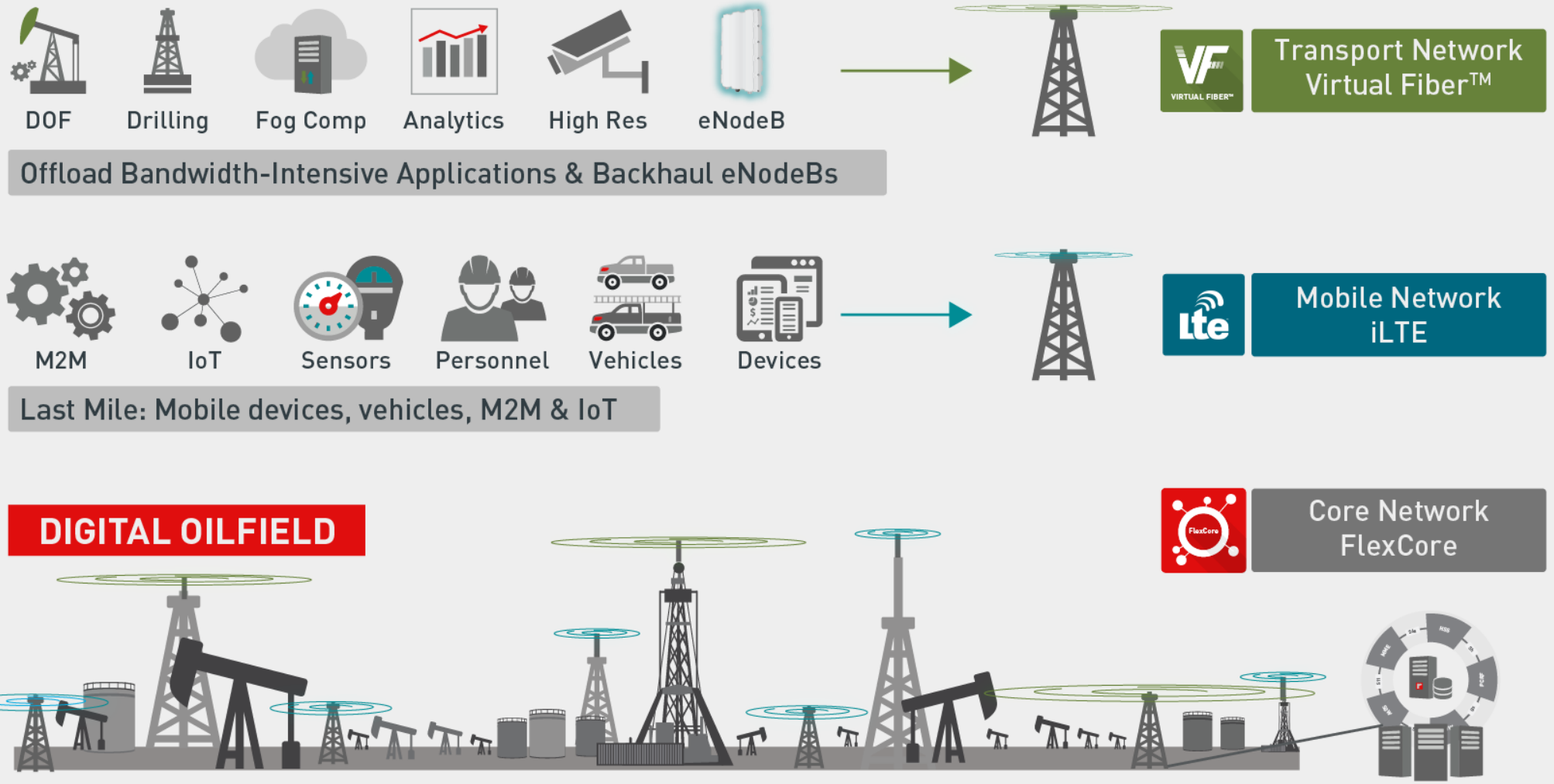
GOVERNMENT/DEFENSE
Large Area Coverage
Complete LTE Network
Handhelds, Vehicles & PTT

ENERGY - MINING
Low-cost roll-out – low OPEX
Stable & Reliable
Large Capacity for M2M & IoT

LTE – 3GPP Complete Private Mobile Solution

Core Network	Transport Network	Mobile Network	User Devices
			
FlexCore **EPC/PTT/IMS/NMS** ▪ LTE Evolved Packet Core (EPC) ▪ A complete stand-alone system ▪ Centralized, Distributed, Synced HSS, Cloud, Imbedded	**Virtual Fiber Backhaul** ▪ Point to point or multipoint ▪ Nomadic backhaul ▪ Industrial – deploy anywhere	**Cell Site Radios** ▪ LTE eNB Cell Sites ▪ Tx power options ▪ Long Range ▪ Compact ▪ Low power consumption ▪ Industrial – deploy anywhere	**Mobile Devices** ▪ Standard LTE units focused on s customer market segments

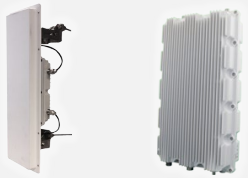
Aviat Solution Architecture



Product Portfolio

Industrial

Base Stations



Fixed Wireless Access

Nomadic

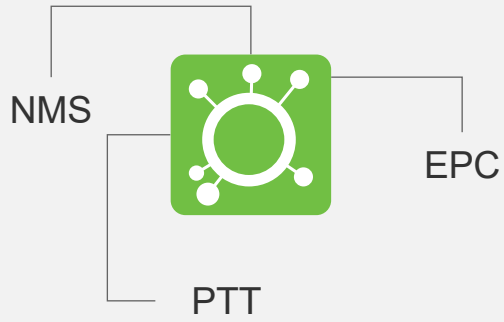
Mobile

Commercial

Base Stations

Fixed Wireless Access

Software



Accessories

Antennas

Cables

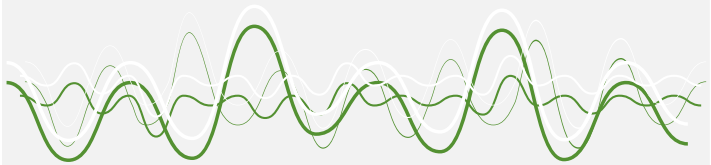
Mounting Kits

PoEs

Surge Protectors

Frequencies

Virtual Fiber™: 470 to 5875 MHz
LTE: 3GPP Band Classes



Wireless Access Solutions

Aviat iLTE - 3GPP & Mobility

- 3GPP - Standard Based LTE
  - 3GPP TRUE MOBIITY ACCESS standard … not transport standard
  - However, it can be used for transport in some cases
- Access:
  - Standard Based: multiple choices of Handsets/Mobile Routers/Fixed Remote
  - Clearly defined Bands: so the Ecosystem of UE can exist
  - If you get spectrum: make sure it is 3GPP Spectrum & there is an ecosystem
- Transport:
  - It can be done, and it is being done
  - There are some compromise when used for transport
- Asymmetrical PMP connectivity for Fixed or MOBILITY/Handoff
- CBRS Upgrade: S/W Defined

Aviat's iLTE Solution

- Cost Effective LTE
- Macro base station coverage in a compact platform
- Provides best in class range for customers with limited number of devices
- Lower total cost of ownership VS macro cell
- Ruggedized Industrial design (fit-for-purpose)
- FlexCore is industry's lowest entry-cost EPC, with pay-as-you-grow scalability

RDL-6000 L1
Ellipse 4G

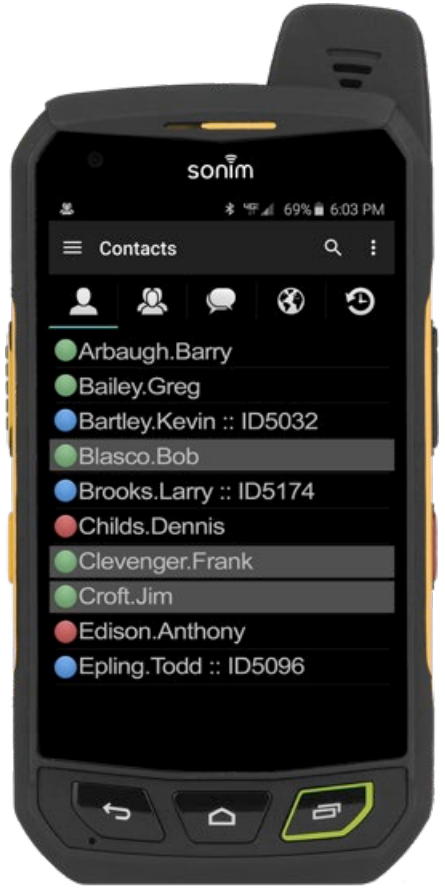
RDL-6000 L1
Ellipse 4G HP

FlexCore
LTE-EPC

A compact, complete LTE system that can be rapidly deployed anywhere

Aviat FlexTalk

- Encrypted PTT Voice (AES-256)
- Secure Group Multimedia Messaging
- Live Location Tracking/Mapping
- Historical (bread crumb) Location Tracking/Mapping
- P25 Integration via ISSI
- DMR Integration via AIS



Available for Android at Google play

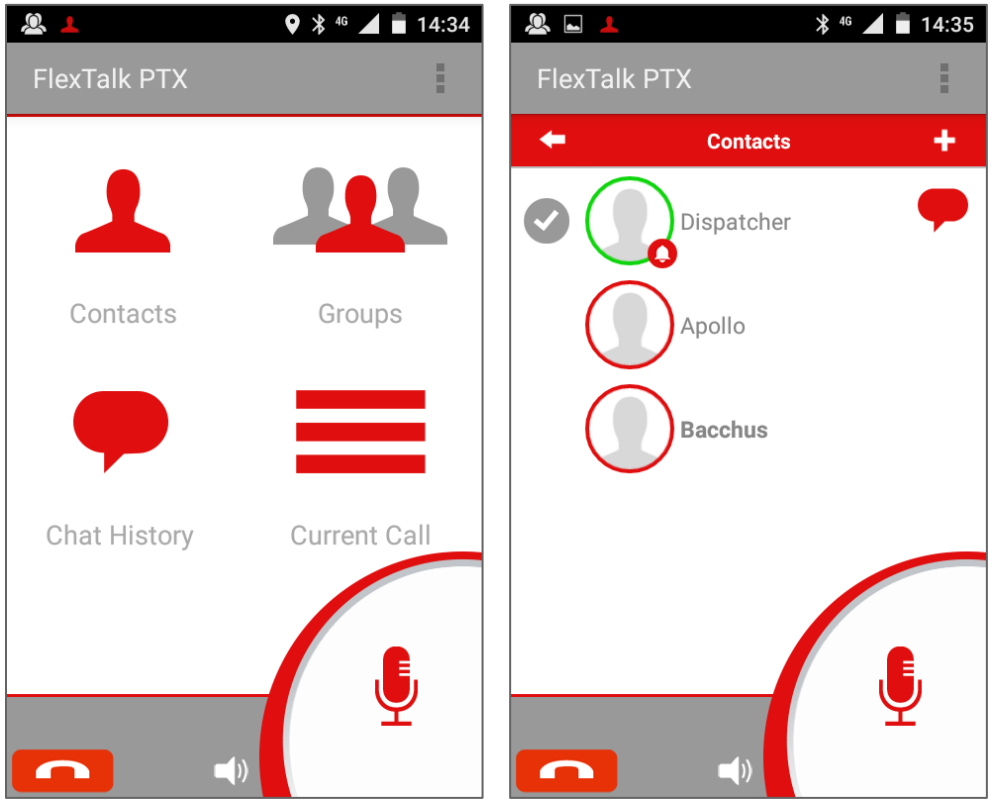
Available on the iPhone App Store

FlexTalk Service Differentiators

- Our focus is: Government, Public Safety and Industrial applications
- Carrier Agnostic
- Supports Over the Top, Carrier Integration, Wi-Fi, and Private LTE networks
- Flexible Server Options
  - Amazon AWS Commercial Cloud or GovCloud
  - Hosted by Partner in Own data center or Cloud facility
  - Hosted by End Customer in Public or Private Environment

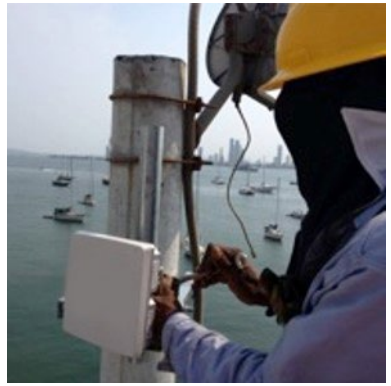
FlexTalk Features Overview

- Presence for Individuals and Groups
- Eight Group Types, plus user created ‘Custom Group Types’
- Multi-Way Talk Groups support 255 users per call
- Broadcast Groups support 60,000 users per call
- Priority and Call Preemption
  - In-Call Preemption
  - User over Group
  - Group over Group
- Most Comprehensive LMR Interoperability platform available
  - P25 Interoperability via ISSI
  - DMR Interoperability via AIS
  - All other Analog and Digital formats via conventional RoIP
- Forward compatibility with 3GPP Mission Critical PTT (MCPTT)



Aviat Virtual Fiber™

- A New Paradigm in Backhaul
- Extreme synchronous data speeds
- Non Line-of-Sight (NLOS) Operation
- Point-Multipoint
- Small remote antenna (8” / 20cm)
- World’s First self-aligned Nomadic Backhaul remote
- Industrialized radio for extreme environments
- Any spectrum licensed & unlicensed from 450 MHz – 6 GHz



Virtual Fiber delivers extreme data performance to multiple remote sites, over very wide areas and rugged terrain

Wireless Transport Technology

- Wireless Transport Technology
  - PTP or PMP (S/W defined)
- High-capacity uplink and downlink even at range!
  - Symmetrical throughput when needed
  - Very low latency in the 10mSec
  - Very high PPS in the areas of 220,000
- Multiple remote device types
  - Fixed IP
  - Fixed IP + Serial
  - Nomadic On-shore & Off-Shore
- What it is: Transparent L2 LAN Service with low latency
- What it is not: 3GPP or Mobility
- Where best fit: Fixed PTP & PMP connectivity when Symmetrical is needed
- CBRS Upgrade: S/W Defined

Aviat's Unique Capabilities

Virtual Fiber™	
Range & Coverage:	Cover more area with more data, into hard-to-reach areas where fiber or microwave cannot reach.
Reliable & Consistent:	Dependable connectivity like fiber or microwave in a wireless solution.
Quick & Low CAPEX:	Deploys much faster and at a much lower cost than Fiber & Microwave.
Tuned for IoT:	Wire-speed processing enables massive quantities of IoT data traffic.
Extreme Data Speeds:	Enables high resolution video surveillance and analytics at the network edge.
State-of-the-art cryptography:	Provides excellent cyber security without the expense of firewalls at the network edge.

iLTE	
Size/Performance:	Macro Base Station transmit power in a small, light, low power form factor.
Industrial Solution:	Wider temperature range, better water/dust protection, no fans/heaters required.
Low Power:	Half the power consumption of similar high power eNodeB's (37dBm/5W Tx or greater category).
Hazardous Location:	Our HAZLOC model is unique in LTE industry.
Small/Medium LTE Deployments:	Combination of LTE Core, eNb, and devices provide complete solution for small/medium LTE deployments.

WWW.AVIATNETWORKS.COM