

# SILVUS<sup>(®)</sup>

TECHNOLOGIES

TACTICAL      DISMOUNT      SOLUTIONS



CONCEIVED IN THEORY ... TESTED IN THE BATTLEFIELD



# The Status Quo

Historically, tactical radios have been limited by legacy waveforms that provide secure push-to-talk voice or low-rate data transmission. Disparate voice and data networks create a greater demand for scarce spectrum resources and multi-channel hardware with higher SWAP costs. Waveforms developed under the Joint Tactical Radio System (JTRS) were burdened with complex, deliberate provisioning systems that failed to keep up with the rapidly changing environment on the battlefield. Modern day warfighters have a growing appetite for bandwidth intensive applications delivered to End User Devices at the tactical edge. This appetite can not be satisfied by traditional "Green" radios designed around 20-year-old technology and under-performing waveforms.

## The Evolution

Over the past decade, Mobile Ad Hoc Networking (MANET) radio systems have evolved to overcome some of the challenges associated with legacy radios. Namely, MANET systems enable peer-to-peer transmission of voice AND data, without the need for infrastructure. Furthermore, MANET systems support autonomous relay and routing, allowing them to support a variety of network topologies with no central point of failure. But these MANET systems have limitations of their own. Some so-called "tactical" MANET radios are actually based on an 802.11 (WiFi) waveform with routing algorithms overlaid. These systems tend to struggle with mobility, interference, and security. Meanwhile, other non-802.11 based MANET systems have been developed to address the shortcomings of WiFi, but those systems lack the data rates required to handle the growing demand for high resolution video and other sensor data.

## THE REVOLUTION

To solve these problems, Silvus Technologies is proud to introduce its Mobile Networked MIMO (MN-MIMO) technology to the SOF Community.

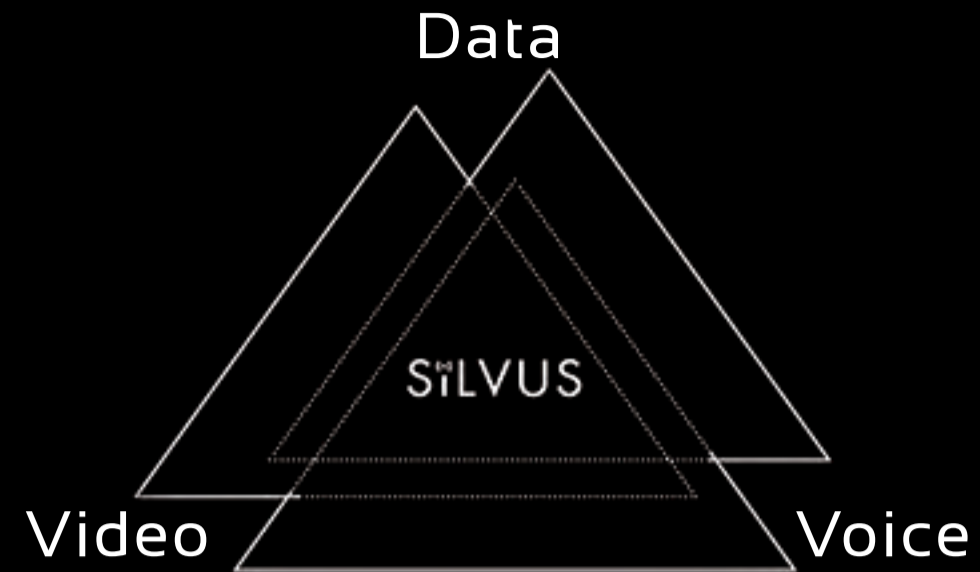
MN-MIMO is the result of more than 15 years and \$55M of Research and Development, funded by the US Government. MN-MIMO utilizes the latest advances in military technology to provide wireless video and data communications in the harshest environments where traditional systems fail. Touting COFDM modulation, up to 4x4 MIMO, and mesh networking capability, MN-MIMO has been proven to provide longer range, better reliability, and higher data rates than any commercial or military wireless standard available today.

Silvus' StreamCaster radios feature MN-MIMO technology at the core. 2 StreamCasters form a bi-directional link, to support video, data, and push-to-talk voice. When 3 or more StreamCasters are tuned to the same frequency, they join to form a fluid, self-healing, self-forming wireless mesh network which thrives in virtually any environment from air, to ground, to sea, to sub-T, and everywhere in between.



# JOIN THE REVOLUTION!

## STREAMCASTER LINKS EVERY PIECE OF THE PUZZLE



### Antennas

- Rugged omnidirectional antennas with spring base or gooseneck prevent snapped RF connectors
- Low profile bodyworn patch antennas attach to front/back of tactical vest for 360° coverage

### GPS

- View location of radios in StreamScape GUI
- Stream coordinates as CoT messages for ingesting into TAK and COP platforms

### Rugged dongle for WiFi

- Provides an 802.11 gateway for smartphones, tablets, and laptops to access the mesh network

### Multifunction switch

- Software defined switch
- Quickly select from 12 customizable configurations
- Zeroize crypto

### Obscura rugged bodyworn IP camera

- Supports 1080p with H.265 encoding
- Onboard recording
- IR illumination

### Push-to-Talk (PTT)

- Handsets with optional earbuds
- Headsets – over-ear, on-ear, in-ear, commercial, and covert models available to suit a variety of missions
- Bridge Silvus network with 3rd party radio network directly or via RoIP gateway

### Power options

- Standard 6.8Ah batteries last up to 12 hours on a single charge
- Battery eliminator cables can be used to connect to external power sources for extended operation

**SILVUS**  
TECHNOLOGIES



CONTACT US FOR A DEMO

[www.silvustechologies.com](http://www.silvustechologies.com)

[info@silvustechologies.com](mailto:info@silvustechologies.com)

+1 310 479 3333

# SILVUS

TECHNOLOGIES



THROUGHPUT



RANGE



ROBUSTNESS

Leading the MIMO Revolution