



PRODUCTS & CAPABILITIES

PRESENTED BY BRUNO HAINEAULT

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Datron World Communications



Capabilities

- 40 Years of R&D, Manufacturing and Distribution Excellence
- Privately Owned
- US Domestic and International Operations
- ISO 9001 Certified
- Systems Engineering
- Advanced Technology Group



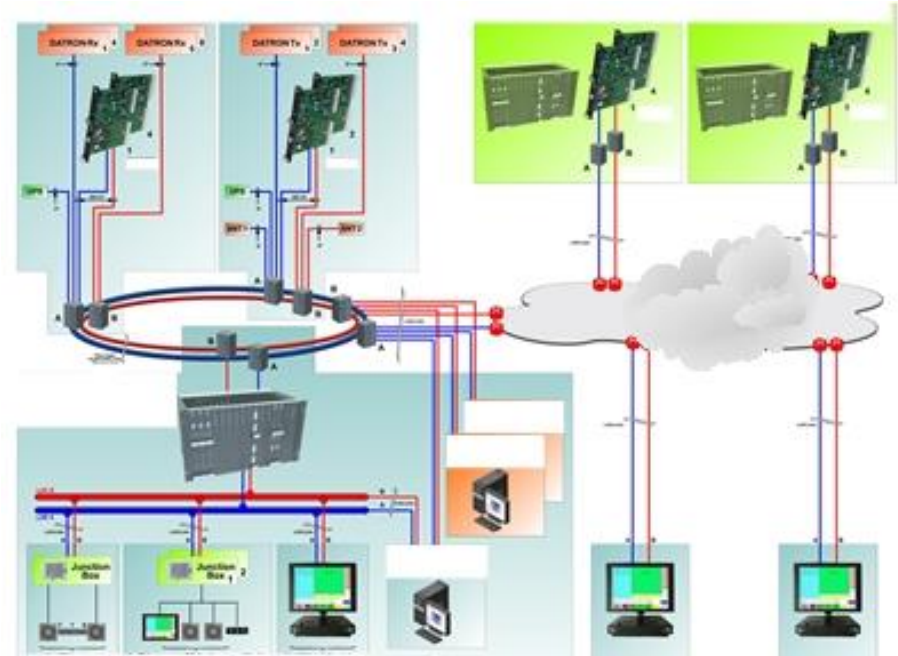
Our Capabilities

- HF & VHF Tactical and Strategic Voice and Data Networks
- High Power HF Systems (500 W, 1 kW, 5 kW and 10 kW+)
- Integration into C4I, ICS and VCS Solutions
- Integrated Tactical Wireless Networking Solutions
- Complete Program Management
- Uniquely Positioned to Deliver Turn-Key Strategic HF System

System Engineering

- Multiple 10kW Split Site Systems
- Full IP Based Remote Control, Management and Operation
- Integrated Into a Nationwide C&C System
- Flexible Pairing of Transmitters and Receivers
- Microwave and Fiber Optic Links
- Full Remote Fault Monitoring
- Secure Data and Voice

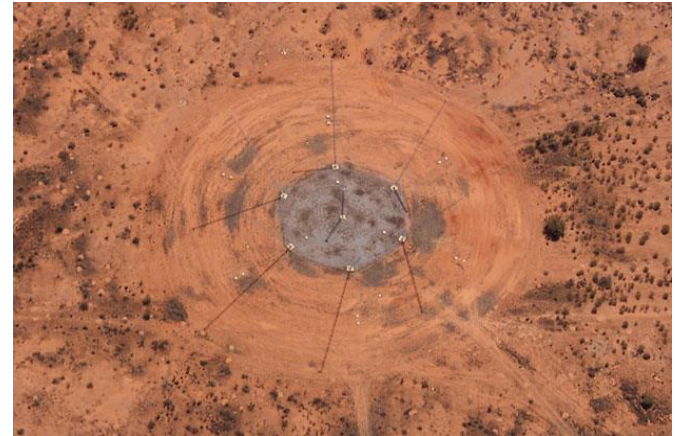
Nationwide HF Network



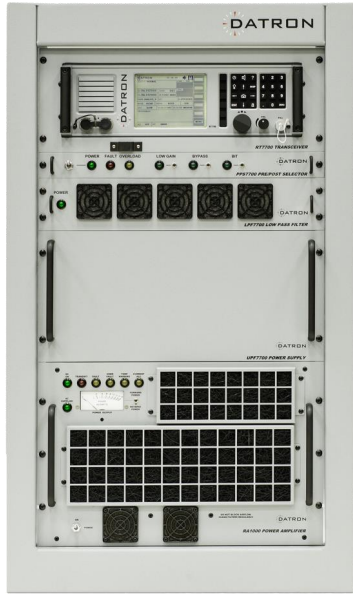
System Engineering

- Propagation Studies
- Civil Engineering
- Multiple Sites
- Large High Gain HF Antennas
- Directional and Omnidirectional
- Remote Selectable Patterns

Nationwide HF Network



Areas of Expertise



**STRATEGIC HF
NETWORKS**



**NETWORKING
SOLUTIONS**



**SECURE TACTICAL
COMMUNICATIONS**

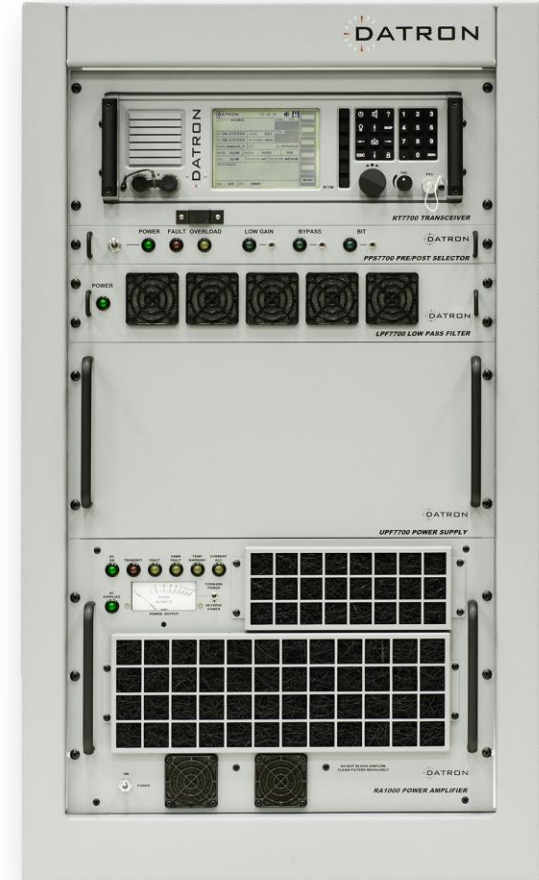


**UNMANNED
SOLUTIONS**

7700-Series Strategic HF Radios



- Software Defined Radios (JITC Certified)
- IP Based Transceivers
- NET CENTRIC
- Pre/Post-selector
- 16kW Low Pass Filter
- 500W to 10kW+ Amplifier Solutions



7700-Series Strategic HF Radios



Simple and User Friendly Interface

- Front Panel Display & Controls
- Built-In Help Screens
- Front Panel “Fill Port” (COMSEC/TRANSEC)
- Standard MIL Handset Connectors
- Alternate Languages (Option)



7700-Series Strategic HF Radios



- IP Connectivity
- Split-Site Operation
- Integrated GPS Receiver
- Split Frequency Operation
- Phase-Lockable Master Clock
- 10^{-8} PPM Option
- ± 10 kHz Receiver Incremental Tuning (RIT)
- 1 Hz Tuning Increments
- Syllabic Squelch
- Support for External Pre/Post-Selectors



7700-Series Strategic HF Radios



Modulation Modes:

- **USB (J3E)**
- **LSB (J3E)**
- **AM (A3E)**
- **AME-USB (R3E)**
- **AME-LSB (R3E)**
- **CW (J2A)**
- **ISB Independent Sideband (B7D, B8E)**



7700-Series Strategic HF Radios



- Support for External Link-11 Modem
 - Field Tested and Qualified with the RT7700
 - CLEW & SLEW Modes
- Support for External Link-22 Modem
- Digital Modulation
 - MELPe

High Level Voice and Data Encryption

- 256-bit AES Algorithm
- Key Generation & Management Software
- Front Panel Fill Port
- Front Panel “Zeroize” Function

7700-Series Strategic HF Radios



MIL-STD-461E

- Conducted & Radiated Emissions
 - CS101, CE102
- Conducted & Radiated Susceptibility
 - RE102, RS103

Maintainability

- MTTR 15 minutes or less (MIL-HDBK-472, procedure V, part B)
- Power-On Self Test
- Continuous Background Monitoring
- Onboard Diagnostics – to the LRU

7700-Series Strategic HF Radios



Full Function Virtual Remote Control Unit

- Microsoft Windows Based Application
- Touch Screen Friendly
- Computer Control via Ethernet Link
- Control of All Radio Functions
- Remote Voice and PTT
- Status Monitoring



Support for Integrated Communication Systems (ICS)

- Full Support to ICS providers (C&C)
- Full Documentation
- Available Executable (Windows Based Software Tool)

- **Datron's Current Engineering Efforts**
 - MIL-STD-110C (Wideband Data) and MIL-STD-141C
 - STANAG 5066 Added to DatronLINK-2 HF E-mail Software

Secure Tactical Communications

Spectre™ Tactical Radios

- Recognized for ease-of-use
- Software-defined, advanced features set
- Fixed station, mobile, and portable configurations
- Suitable for building retransmission networks



PRC2100V
VHF Manpack
Radio



HH2100V
VHF Handheld
Radio



PRC7700H
HF Manpack
Radio



Unmanned Aerial Systems

Capabilities

- VTOL small unmanned aircraft systems for tactical situational awareness
- Individual-carried design for dismounted missions
- Customizable payloads allow special operators to engage on unique missions
- Point-and-click navigation and camera control



Aeryon SkyRanger™ & Scout™



	SCOUT	SKYRANGER
Endurance	25 minutes	50 minutes
Optics	EO 5MP stills / SD video EO SD video w Zoom IR	Stabilized Dual EO/IR HD video & 15MP stills 640x480 FLIR
Wind Performance	50km/h 80km/h	65kmh 90 km/h
Assembly/Launch	Snap-together assembly	Immediate pre-assembled deployment

Networking Solutions

Capabilities

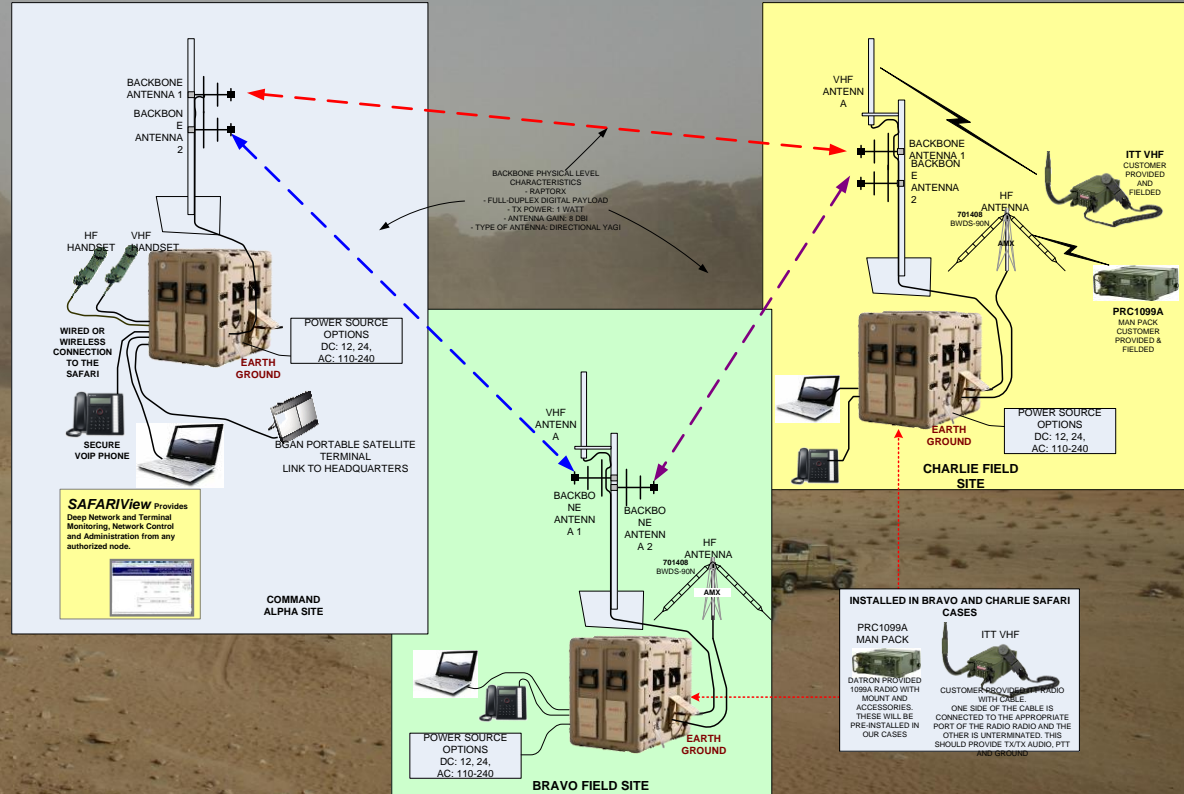
- Frequency Agile 150-800 MHz
- Up to 20Mbps
- Point-to-Point & Multipoint
- Self-healing Mesh Network
- 10W transmit power
- Supports HD video, VoIP
- FIPS-140 Encrypted

RAPTOR[®]

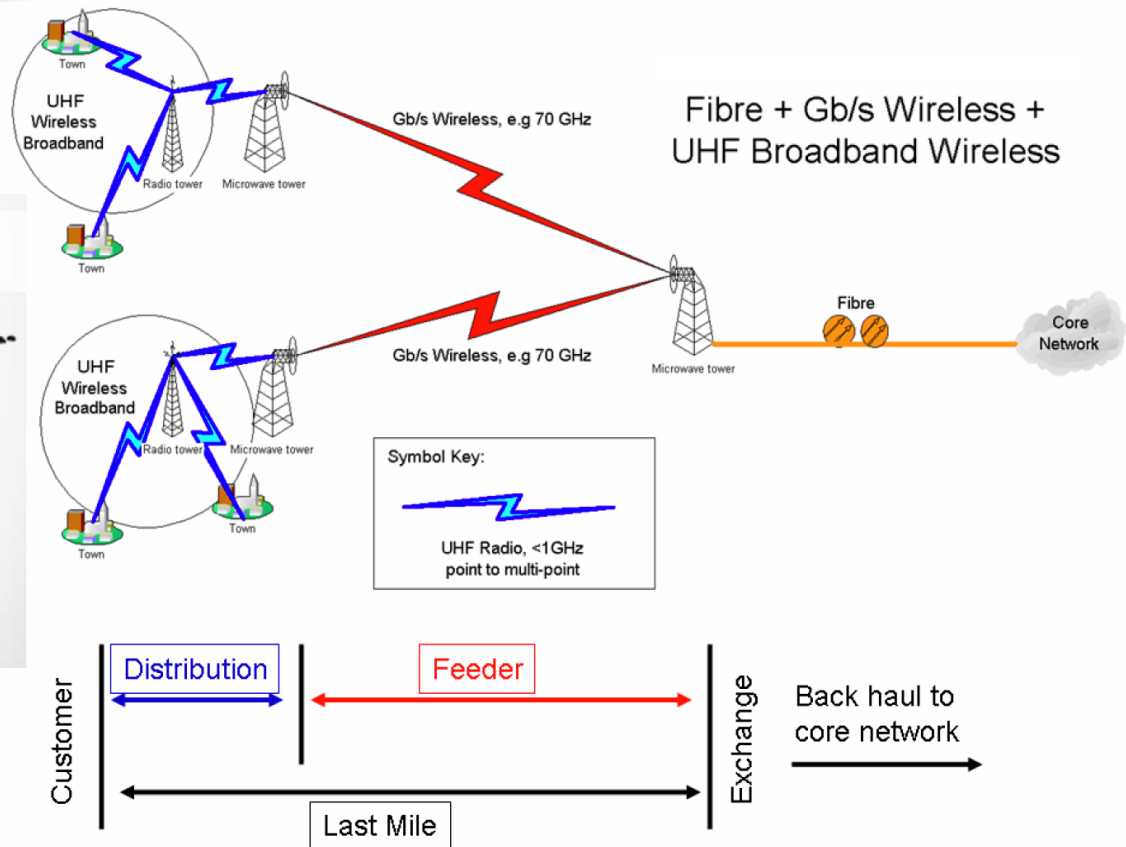
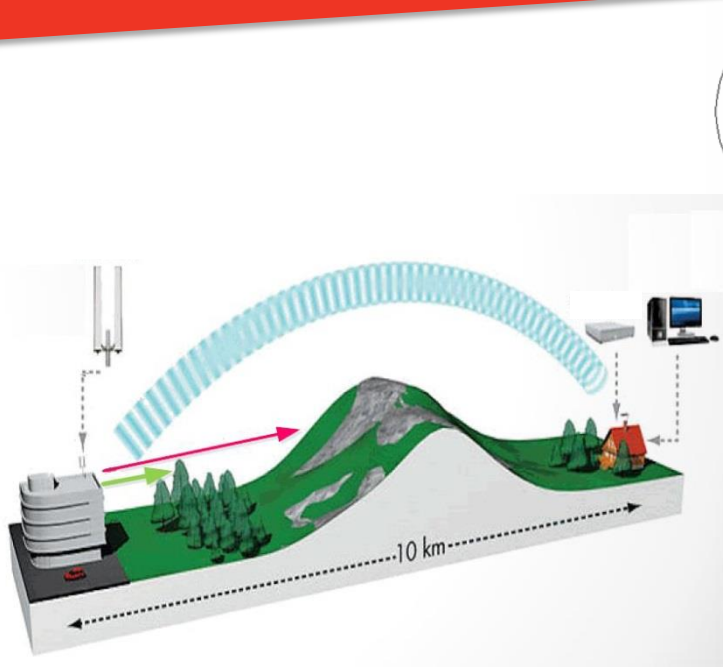
**WIDE-AREA BROADBAND VHF/UHF
NETWORKING SYSTEM
150-800 MHz**



Rapid Deployable Networks



Broadband Long-haul Links



Datron's Advantage

- Over 40 Years of Experience
 - Committed to High Speed and Wideband HF
 - Broad Range of Products & Solutions
 - Well Positioned to Support Your Vision
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