



eXpeditionary HF (X_{HF}^{TM})

Patent Pending

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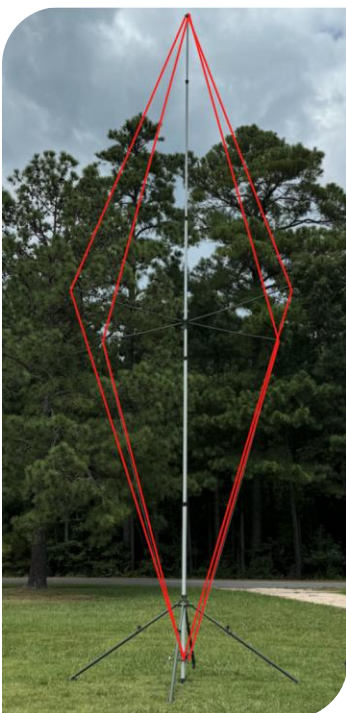
Tactically Relevant HF with Combined
VHF and UHF Capabilities

Multi-Band (XMB^{TM})

Expeditionary...without Sacrificing Performance

- + **Significantly smaller, simpler, and more user-friendly than other HF antennas**
- + **Easy transport:** packs into three cases transportable as checked luggage
- + **Easy setup:** 30 minutes or less
- + **Minimum personnel:** 1-2 persons required for setup
- + **Small footprint:** Fraction of required real-estate compared to other antennas

- + **Unmatched Performance - Global Communications Capability across entire HF band**
- + **Supports 3-500 MHz Frequency Band**
- + **Unprecedented performance in HF 3-30 MHz band, Near-full HF instantaneous bandwidth**
- + **Supports 30-500 MHz VHF and UHF Communications – performance comparable to band-dedicated VHF and UHF antennas**

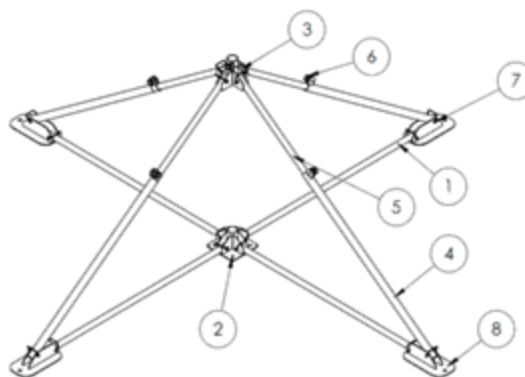


XHF Vertical Antenna
Shown in Picture

Three X_{HF} System Components

(shown below and to the left)

- 1 **Quick Setup Quad-leg Base**
- 2 **Telescoping Mast**
- 3 **Antenna Kit**



X_{HF} Quick Setup Quad-leg Base



X_{HF} Transport Case

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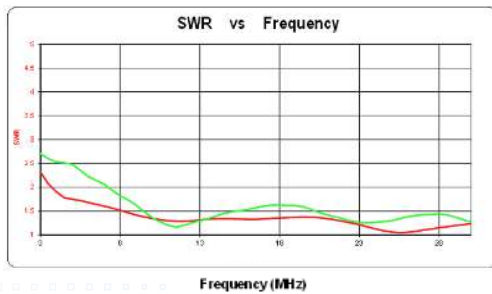


The Revolutionary HF Antenna
Multi-Band (XMB™)
Vertical Diamond Antenna

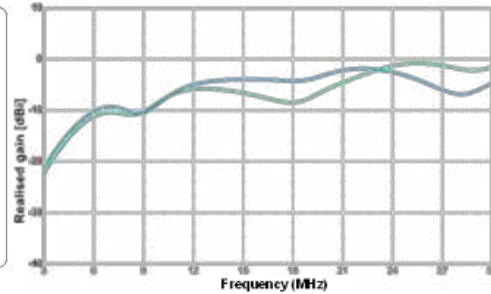


Expeditionary HF – Providing unprecedented reliable HF performance at transmit powers of over 1 kW

Consistent performance over frequency and takeoff angle means that HF users experience more consistent, reliable performance



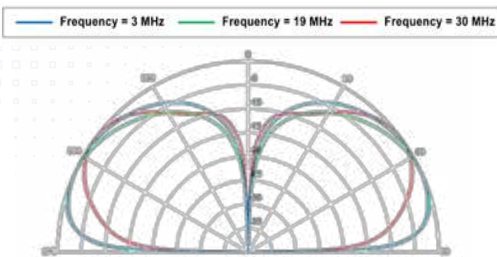
X_{HF} Vertical Diamond Antenna – VSWR versus Frequency – Modeled (Green), Measured (Red)



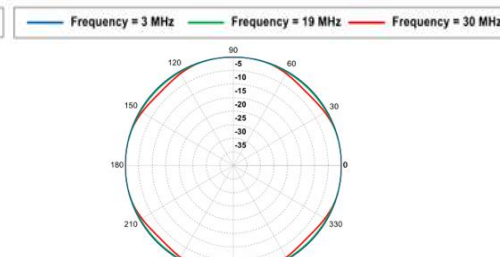
X_{HF} Vertical Diamond – Gain versus Frequency - Takeoff Angle = 20 Deg (Blue), 45 Deg (Green)

True Wideband HF...
Instantaneous Full HF Bandwidth supports advanced waveforms and enables wideband operations – *no external tuner required!*

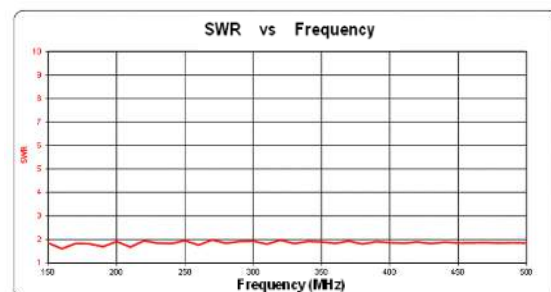
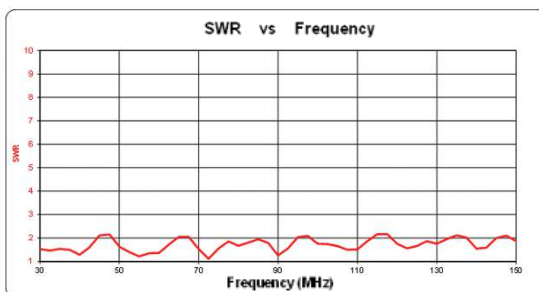
VHF and UHF Communications Support... Unprecedented HF performance, VHF and low UHF performance comparable with dedicated antennas



X_{HF} Vertical Diamond – Elevation Plot



X_{HF} Vertical Diamond – Azimuth Plot – Takeoff Angle = 20 Deg



Contact Sabre Systems for more information...

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