

eXpeditionary HF (X_{HF}™)

Patent Pending
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Tactically Relevant HF with Combined VHF and UHF Capabilities

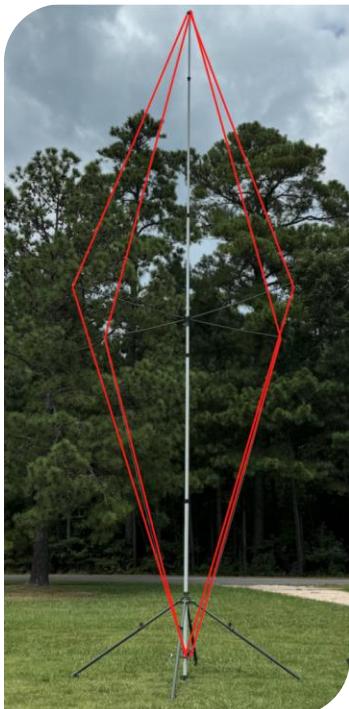
Multi-Band (XMBTM)



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

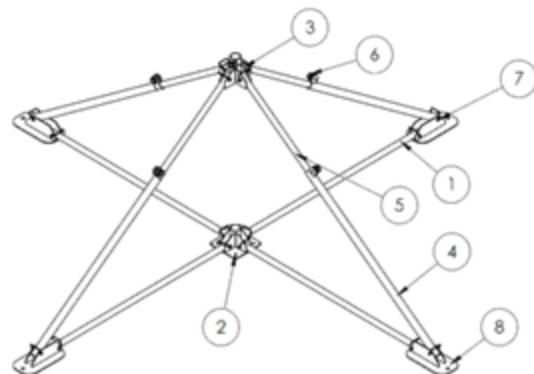
Three X_{HF} System Components

(shown below and to the left)

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



X_{HF} Transport Case



X_{HF} Quick Setup Quad-leg Base

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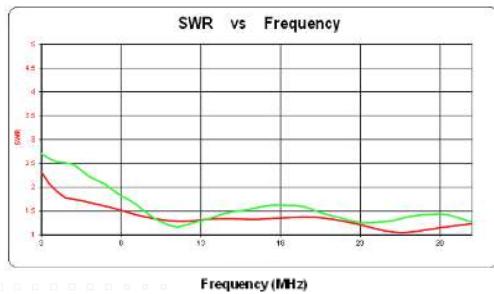


**The Revolutionary HF Antenna
Multi-Band (XMBTM)**
Vertical Diamond Antenna

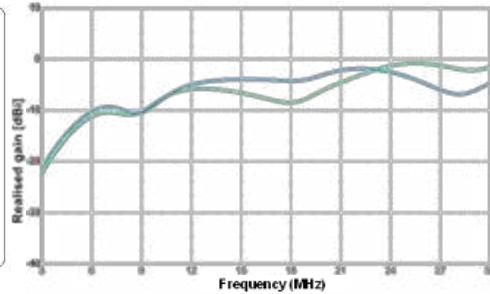


Expeditionary HF – Providing unprecedented reliable HF performance at transmit powers of over 1 kW

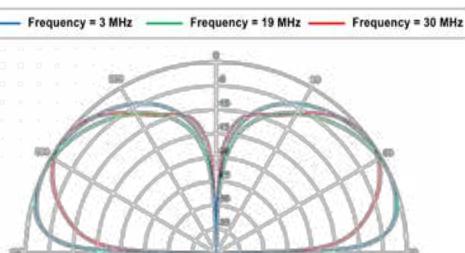
Consistent performance over frequency and takeoff angle means that HF users experience more consistent, reliable performance



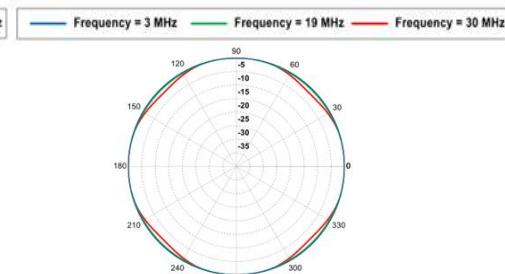
XHF Vertical Diamond Antenna – VSWR versus Frequency – Modeled (Green), Measured (Red)



XHF Vertical Diamond – Gain versus Frequency – Takeoff Angle = 20 Deg (Blue), 45 Deg (Green)



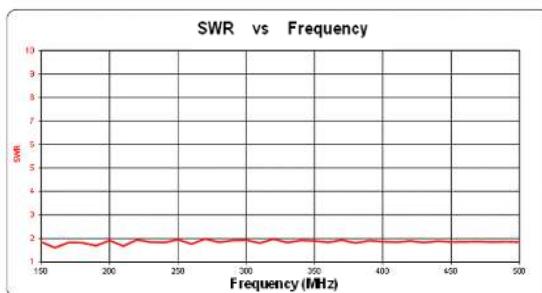
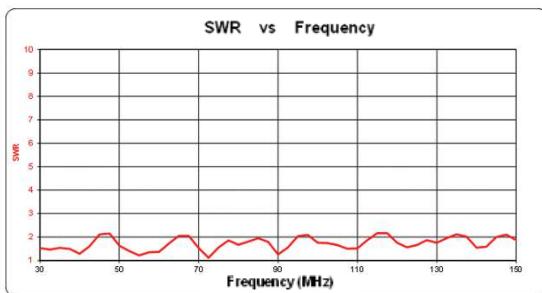
XHF Vertical Diamond – Elevation Plot



XHF Vertical Diamond – Azimuth Plot – Takeoff Angle = 20 Deg

**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**



Contact Sabre Systems for more information...

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