

# FORAX™-HARC

(Fiber Optic Remote Antenna eXtension — High Antennas for Radio Communications)

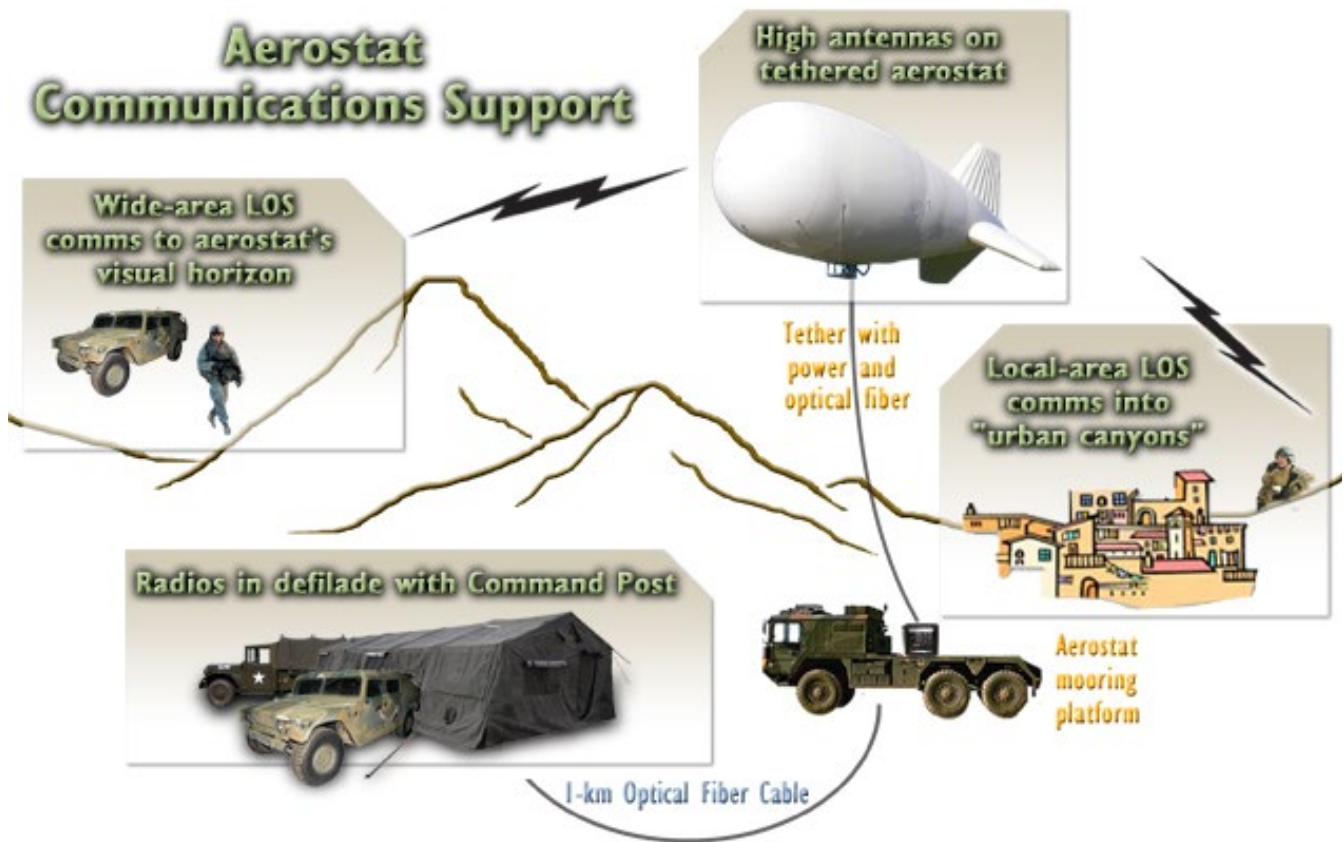
## Extend Radio Range using Aerostats and Towers

FORAX™-HARC enables any tethered aerostat or tall tower to become an antenna site, connecting radios on the ground — securely and conveniently located in your command post — to their antennas high overhead, using a single optical fiber and Sytonics’ field-proven FORAX™ RF-over-Fiber technology.

FORAX-HARC implements an “Aerial Layer” of networked tactical communications *without* flying your radios. As compared to locating radios on an aerostat, FORAX-HARC:

- ◆ Avoids a relay hop, sharply increasing network data throughput rates
- ◆ Secures the radios in the Command Post
- ◆ Extends communications coverage to the aerostat’s (or tower’s) visual horizon
- ◆ Reduces airborne or tower-top payload weight.

FORAX-HARC systems (electronics + aerostat-specific antennas) are now available for most civilian and military radios and waveforms from 30–2000 MHz including P25, Tetra, SINCGARS, VHF Voice, EPLRS, ANW2, SRW, WNW and 3GPP cellular. Both modular and lightweight form-factors are available for integration with any aerostat or tower.

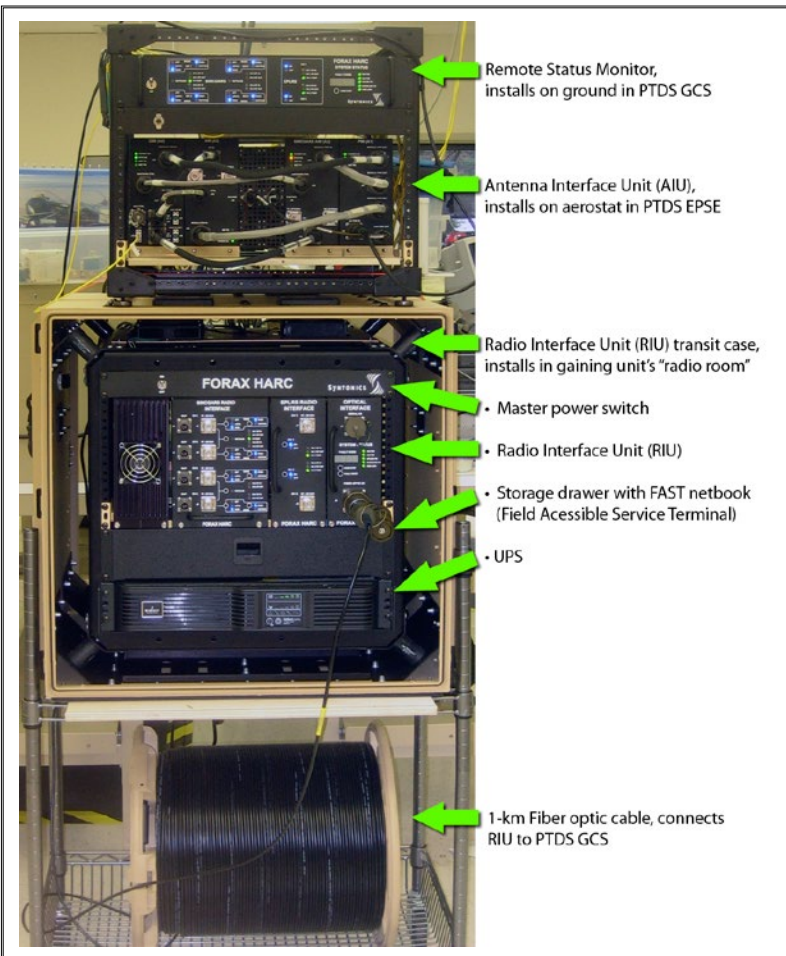


	HARC-4S2U	HARC-2S1U	HARC-WNW	HARC-Mini
Radios supported	<ul style="list-style-type: none"> <li>• 4 @ SINGGARS with SNAP interface</li> <li>• 2 @ UHF</li> </ul>	<ul style="list-style-type: none"> <li>• 2 @ SINGGARS with SNAP interface</li> <li>• 1 @ UHF</li> </ul>	<ul style="list-style-type: none"> <li>• 1 @ WNW</li> </ul>	<ul style="list-style-type: none"> <li>• 1 @ Land mobile radio (any manufacturer)</li> </ul>
Airborne weight	~ 95-lb with antennas + cables	~ 35-lb with antennas + cables	~ 34-lb with antennas + cables	~ 5-lb with batteries
Packaging	Modular	Lightweight, weathertight	Lightweight, weathertight	Ultra-lightweight, weathertight
Waveforms supported	<ul style="list-style-type: none"> <li>• SINGGARS, 30-88 MHz</li> <li>• VHF, 30-88 MHz</li> <li>• ANW2, 225-450 MHz</li> <li>• SRW, 225-450 MHz</li> <li>• EPLRS, 420-450 MHz</li> <li>• UHF, 225-450 MHz</li> <li>• TrellisWare, L-band</li> </ul>	<ul style="list-style-type: none"> <li>• SINGGARS, 30-88 MHz</li> <li>• VHF voice, 30-88 MHz</li> <li>• ANW2, 225-450 MHz</li> <li>• SRW, 225-450 MHz</li> <li>• EPLRS, 420-450 MHz</li> <li>• UHF voice, 225-450 MHz</li> </ul>	<ul style="list-style-type: none"> <li>• WNW, 1200-2000 MHz</li> </ul>	<ul style="list-style-type: none"> <li>• All public safety and military waveforms, 30-512 MHz</li> <li>• 800 MHz operation is imminent</li> </ul>

**Ultra-lightweight HARC-Mini**



**Modular HARC-4S2U System**



**Lightweight HARC-2S1U Radio Interface Unit (RIU)**



Antenna Interface Unit (AIU)



**Lightweight HARC-WNW Radio Interface Unit (RIU)**



Antenna Interface Unit (AIU)

