

FORAX™-HARC

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

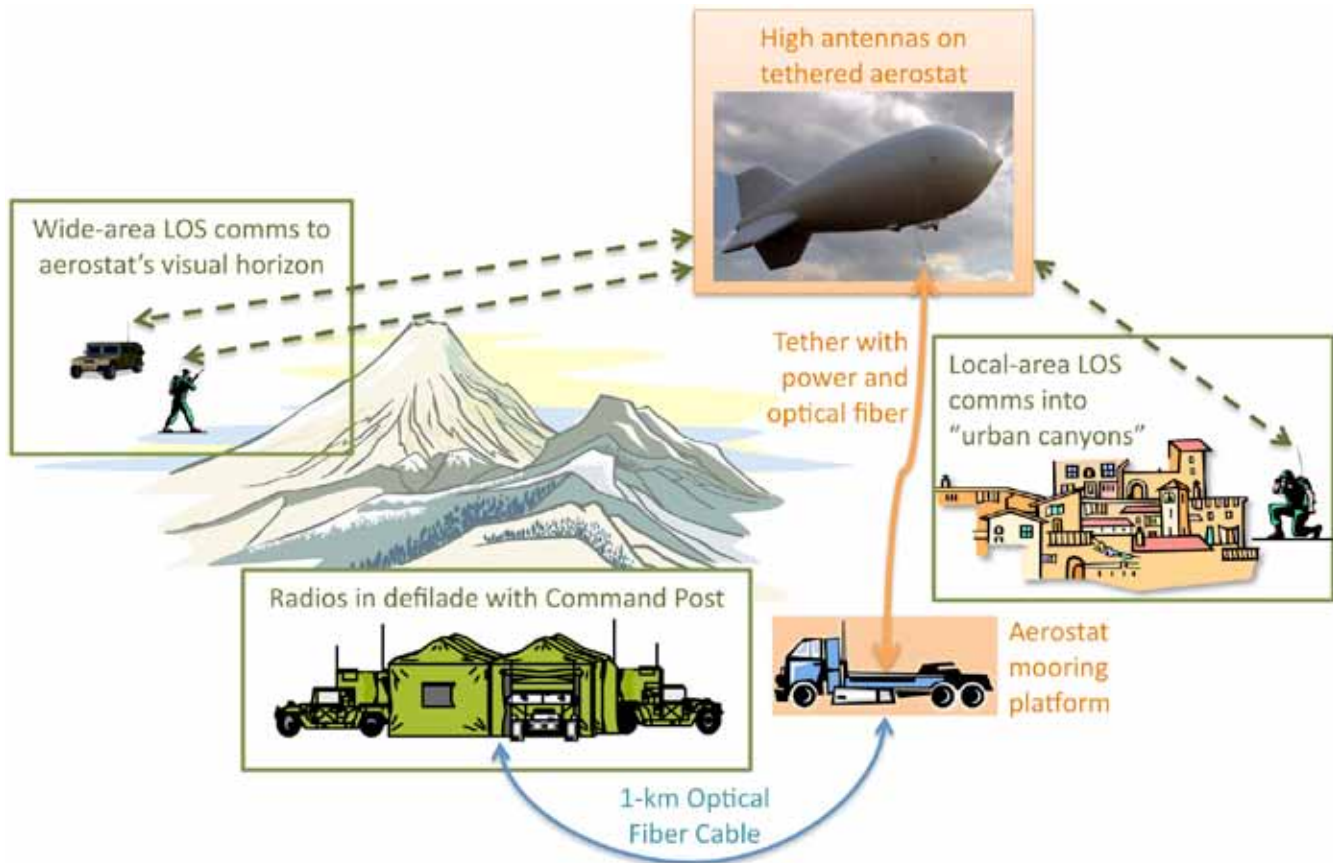
Extend Radio Range using Aerostats and Towers

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

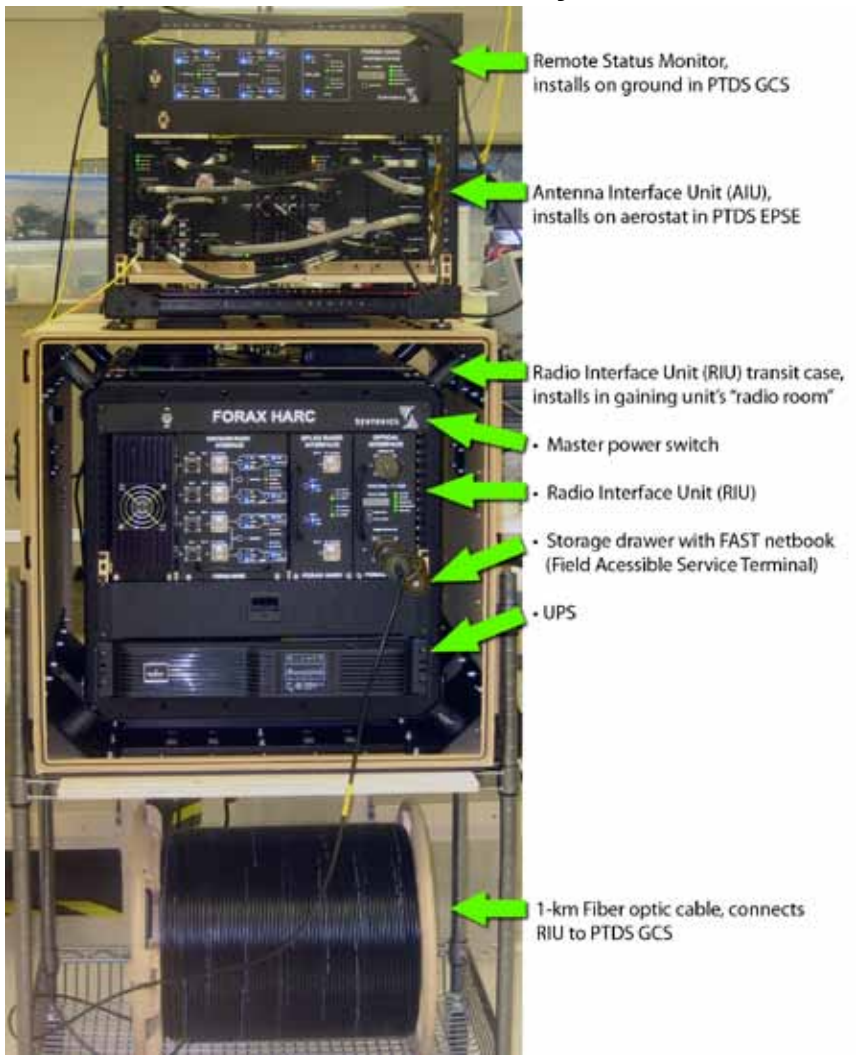
FORAX-HARC systems (electronics + aerostat-specific antennas) are now available for most tactical and many civilian radios and waveforms from 30-2000 MHz including SINCGARS, Low VHF Voice, EPLRS, UHF Voice, ANW2, SRW, WNW and 3GPP cellular. Both modular and lightweight form-factors are available for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



Current FORAX-HARC Configurations

	HARC-4S2E	HARC-2S1U	HARC-WNW
Radios supported	<ul style="list-style-type: none"> • 4-SINGGARS (SNAP interface included) • 2-EPLRS 	<ul style="list-style-type: none"> • 2-SINGGARS (SNAP interface included) • 1-UHF (e.g., ANW2, SRW, EPLRS, voice) 	<ul style="list-style-type: none"> • 1-WNW (RFCB connectivity included)
Airborne weight	~ 95-lb with antennas + cables	~ 35-lb with antennas + cables	~ 34-lb with antennas + cables
Packaging	Modular Form Factor	Lightweight Form Factor	Lightweight Form Factor
Waveforms supported	<ul style="list-style-type: none"> • SINGGARS, all modes, 30-88 MHz • VHF voice, 30-88 MHz • EPLRS, all modes, 420-450 MHz • UHF voice, 420-450 MHz 	<ul style="list-style-type: none"> • SINGGARS, all modes, 30-88 MHz • VHF voice, 30-88 MHz • EPLRS, all modes, 420-450 MHz • ANW2, all modes, 225-450 MHz • SRW, all modes, 225-450 MHz • UHF voice, 225-450 MHz 	<ul style="list-style-type: none"> • WNW, all modes, 1200-2000 MHz

Modular HARC-4S2E System



Lightweight HARC-2S1U Radio Interface Unit (RIU)



Antenna Interface Unit (AIU)



Lightweight HARC-WNW Radio Interface Unit (RIU)



Antenna Interface Unit (AIU)

