

▼ Expeditionary Tactical Automated Security System

Rapid detection, assessment, persistent surveillance

Northrop Grumman has partnered with US Towers to develop the ExTASS trailer systems. ExTASS is a tactical, light-weight, rapidly deployable, all-weather force protection asset designed to provide perimeter security in both expeditionary and fixed-site scenarios.

A fully outfitted ExTASS trailer can be deployed in under 30 minutes, allowing mobile forces to quickly secure a perimeter. The trailer can be configured with an installation specific selection of equipment from over 150 commercial and military electro-optical/infrared cameras, ground based radars and sensors. Situational awareness is provided by a state-of-the-art software integration solution. The on board server and wireless communication link allow the ExTASS to operate as a stand alone system or as a larger security network capable of simultaneously transmitting video, targets, radar detections and assessment information back to a centralized operations center.

ExTASS is C-130 transport compatible and may be towed by a HMMWV, truck, or Mine Resistant Ambush Protected vehicle. Once in position, ExTASS operates continuously for up to seven days via the on board diesel generator and re-chargeable battery bank.

Features

- Short, Medium, Long, and Ultra-Long Range Camera Capabilities
- Multi-Range Ground Surveillance Radars
- Seismic, Beam-Break, Fence-Shake, and Acoustic Sensors
- Light-Weight, Rugged Trailer w/ Steel Frame
- Auto-Leveling 30' Mast
- 3kW Diesel Generator with Battery Bank
- Local Wi-Fi Network Radio and High Bandwidth Point-to-Point Radio
- Map Client and Digital Video Panel for Situational Awareness and Camera Viewing/Control
- All-Weather Environmental Enclosure
- Storage for Sensors, Cameras, Tools

Benefits

- Networked Situational Awareness with Alarm Management
- Standalone or Multi-Trailer, Networked Operation
- Flexible System Architecture: Easily Integrate Additional Cameras and Sensors
- Environmentally Hardened
- Low Maintenance & Easy to Use
- Integrated with Higher Echelon Systems
- Remote User Interfaces
- Easily Transported and Deployed
- Flexible Power Solution

Cameras

Cameras provide 360° pan-tilt-zoom, slew-to-cue-, and infrared video operation for superior situational awareness.

Communication

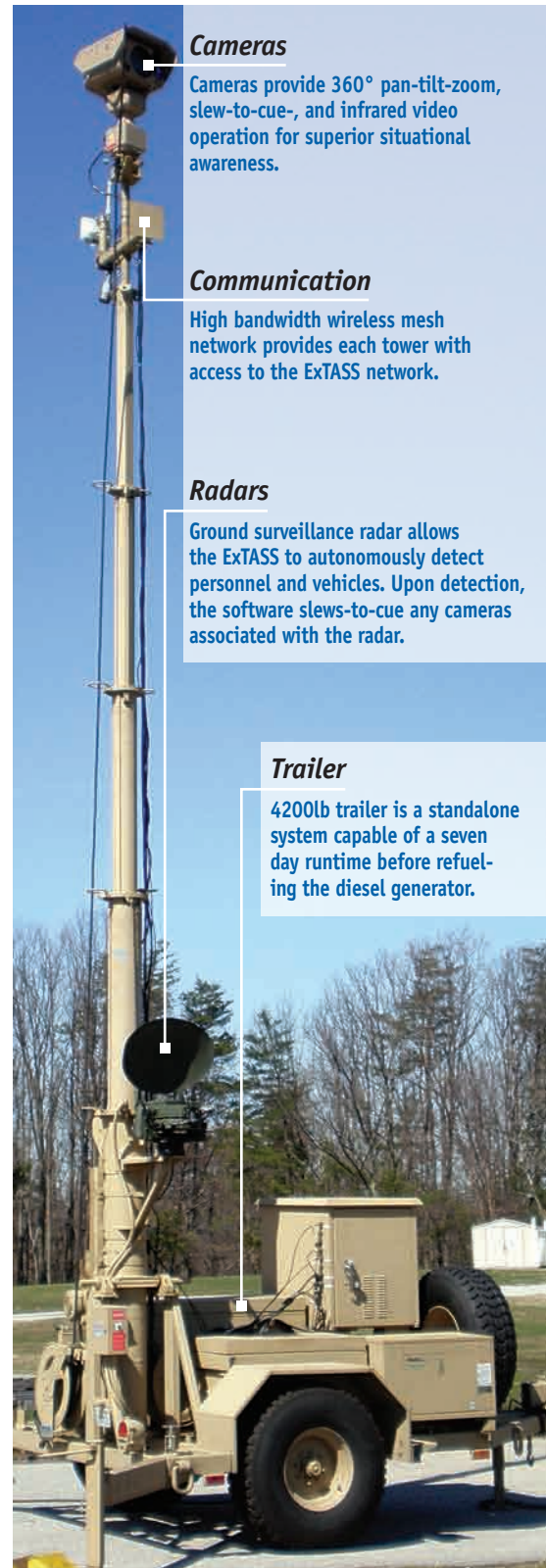
High bandwidth wireless mesh network provides each tower with access to the ExTASS network.

Radars

Ground surveillance radar allows the ExTASS to autonomously detect personnel and vehicles. Upon detection, the software slews-to-cue any cameras associated with the radar.

Trailer

4200lb trailer is a standalone system capable of a seven day runtime before refueling the diesel generator.



Command & Control Features

- Camera and sensor control from local tower, any networked tower or a remote operation center.
- Automatic target generation based on detection by radars, sensors, LRF enabled cameras or other C2 systems
- Slew-to-cue camera control for immediate target assessment.
- Simultaneous target updates on all networked clients
- Assess targets and update locations in real time based on geography or cameras equipped with laser range finders.
- Video forensics tools to search and export all video based on time and geographical area. Can also retrieve camera video associated with a particular target.
- Highly optimized user interface allows operator to assess video and targets from multiple towers

Integrated Systems

- **Cameras:** T-3000, T-2000, Star SAFIRE, LRTI, ULRTI, WSTI, Pelco, Bosch
- **Radars:** MSTAR, PSRS, RDTS, ARSS, STS-1400
- **Unmanned Ground Sensors:** REMBASS II BAIS, Qual-Tron MIDS/EMIDS Sensors, Xetron Scorpoin (Video Capable), Terrain Commander II (Video Capable), UTAMS, BAWS, TASS Sensors
- **Weapon Threat Sensors:** Boomerang, WeaponWatch, UTAMS, HALO
- **Chemical Sensors:** Biological Aerosol Warning System (BAWS), IPICS SPM, Smart Marker
- **UAVs:** Desert Hawk –FPASS, Scan Eagle, Little Bird, Shadow

Integrated C2 Systems

- AMDWS
- WAVES
- FBCB2
- IBDSoS
- C2PC
- Black Wolf
- BETSS-C RAID
- G-BOSS
- AFATDS
- Access Control
- BETSS-C SGS
- BETSS-C FP Suite

ExTASS Specifications

Trailer/Tower

Transport Dimensions	8' x 12' x 7'
Deployed Footprint	15' x 13.5'
Deployed Mast Height	30'
Mast Deployment Mechanism	Manual/Motorized
Mast Erection Time	< 1 minute
Maximum Mast Payload	350 lbs
Weight	< 4200 lbs
Deployment Time	< 30 minutes

Power

Source(s)	Shore, Generator, Battery
Onboard Generator	3kW, 60Hz, 110VAC
Unattended Runtime	7 days
Shore Power Input	110/220 VAC
Battery Backup	200W

Electronics

Annunciator Server	Rugged Server (on trailer)
Video Archiving Server	Mobile Laptop (for operator)
	Rugged Server
	4 Day Video Archive Loop
Max Cameras Per Tower	2 ¹
Max Sensors Per Tower	3 ¹
Radars Per Tower	1 ¹
Video Motion Detection	Optional

Wireless Network

Backhaul Radio Frequency	2.4GHz, 4.9GHz, or 5.8GHz
Backhaul Bandwidth	22Mbps
Localized 802.11 Mesh	a/b/g
Wireless Encryption	WEP, WPA, 128 AES-CCM

User Interface

Display	Local or Remote Laptop
Camera/Sensor Control	Mouse/MS Xbox Controller

Environmental

Operating Temperature	-10°C to 65°C
Humidity	10% to 90%

For more information, please contact:

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