System Elements:

Hand Controller
Features:
- Fixed wing and VTOL
- Untethered Operations
- Secure digital data link
- Windows 10 Panasonic Toughpad

Specifications:
- Weather resistant: IP55
- Weight: 1,406 g (3.1 lbs)
- Run time: 4 hours
- Operating System: Windows
- Ethernet and USB

GEM
Features:
- Converts AC power to high voltage Tethered power (DC)
- RF over-the-air transmission
- Contains backup battery for emergency power

Specifications:
- Weight: 10,659 g (23.5 lbs)
- 3X Ethernet
- 110 V AC or 220 V AC

Indago 3T
Tethered Unmanned Aircraft Systems:
Persistent Mission Operations

Lockheed Martin. Your Mission is Ours.
Powered and controlled by a tethered-sub-system, Indago 3T delivers continuous 360-degree communications, intelligence, surveillance, and reconnaissance support for diverse mission sets. The Indago 3T maintains all the features of the non-tethered Indago 3 including whisper quiet operation, small footprint, tactical mobility, rapid setup/stowing, and high-quality imagery.

Indago 3T Applications:
- Persistent intelligence, surveillance, and reconnaissance
- Border protection
- Airborne communication relay
- Situational awareness
- Force protection
- Disaster response and crisis monitoring
- Critical infrastructure protection
- Damage assessment

Features:
- Whisper quiet
- Man-portable
- Operable via Windows-based hand controller or laptop
- Zero radio frequency [RF] emissions
- Hot-swappable payload options
- Image stabilization with vision tracking
- Configurable failsafe behaviors
- Ruggedized for use in extreme weather conditions

Specifications:
- Payload: EO, Comms, and Noctis IR
- Dimensions: 32 x 32 x 7 in [12 x 9 x 7 folded]
- Weight: 1,995 g [4.4 lbs]
- Tether Length: 50 meter or 75 meter [165 ft or 246 ft]
- GCS: Touch screen hand controller with Virtual Cockpit Touch
- Communicates with ATAK systems

Noctis Dual IR Features:
- Optical zoom from 32° to 8° FOV; Digital zoom to 2°
- Laser pointing for high accuracy targeting
- Vision processing provides feature tracking of objects
- Real time geo-location and geo-pointing
- MISB compliant video stream with KLV metadata
- Cursor on target [COT streaming to ATAK servers]
- Human: detection range is 2.4 km [1.5 miles], with recognition at 2,200 ft
- Vehicle: detection range is 11 km [6.8 miles], with recognition at 2.5 km [1.5 miles]

Specifications:
- Image Capture: 32° Wide HFOV lens; 8° Narrow HFOV Lens [16x zoom]
- Video: IR: 640 x 512
- Stabilization: 3-Axis gyro and software stabilization
- Weight: 570 grams [1.25 lbs]
- Laser Pointer: 150 mW low power; 650 mW high power

Silvus SC4400 Features:
- A Mobile ad hoc network radio at 50m [165 ft] provides an advantaged node in the network.

Specifications:
- Frequency: 225 MHz – 450 MHz
- Supports: all waveforms for all combat net radios operated in the specified UHF Band.
- Technology: RF-Over Fiber – keeps the CCI [Co-Channel Interference] on the ground, provides a lightweight antenna at altitude
- Weight: 620 g [1.4 lbs]
- RF EIRP: 9.2 dBW

Payloads:

ION 33X Features:
- Vision processing provides feature tracking of objects
- Real time geo-location and geo-pointing
- Continuous optical zoom
- MISB compliant video stream with KLV metadata
- Cursor on target [COT streaming to ATAK servers]
- Human: detection range is 17 km [11 miles], with recognition at 4 km [3 miles]
- Vehicle: detection range is 78 km [49 miles], with recognition at 16 km [10 miles]

Specifications:
- Video: 720 P Global Shutter
- Optical Zoom: Level 33X [2° fully zoomed FOV]
- Stabilization: 3-Axis gyro and software stabilization
- Weight: 471 g [1.04 lbs]

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- Laser pointing for high accuracy targeting
- Vision processing provides feature tracking of objects
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UHF Features:
- High Antennas for Radio Communications [HARC] for Tethered Drone
- Indago becomes a 50m [165 ft] antenna tower topped with a broadband UHF Antenna.
- Eliminates heavy lossy coaxial cables, extends comms range out to as much as 25 km [15.5 miles].
- Used with any UHF Radio – Department of Defense [DoD], Civilian Amateur - in digital or analog modes.
- Communications range extension when/where you need it

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- Supports: all waveforms for all combat net radios operated in the specified UHF Band.
- Technology: RF-Over Fiber – keeps the CCI [Co-Channel Interference] on the ground, provides a lightweight antenna at altitude
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