

TCOM Revolutionizes Surveillance Aerostats With Next-Generation Ultra-Durable Hull Material



TCOM's New Aerostat Fabric Helps Meet US Army's JLENS Program Most Critical Needs

August 28, 2013 – Columbia, MD – TCOM LP, the global leader in affordable persistent surveillance solutions, has announced today it has successfully deployed its revolutionary ultra-durable hull material which enables operations of surveillance aerostats in extreme weather conditions for long durations, meeting the most demanding requirements of US Army's Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) program.

Responding to its military client requirements, TCOM, LP has developed a revolutionary new aerostat hull material that offers increases in overall strength, strength to weight ratio, environmental resistance against temperature and humidity, and improved helium retention. Together, these attributes enable TCOM aerostats to fly longer at high altitudes, in greater wind and with heavier payloads than any previous generation.

TCOM has applied the new material to its new 71M high Block II altitude heavy lift aerostats in order to meet the demanding US Military requirements of the US Army's Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System. This next generation of laminated aerostat material is stronger and lighter than all previous designs, allowing the construction of aerostats capable of lifting over 7,000

lbs and surviving winds of 100 kts. The strength is provided by a unique structural layer and is coated with polyurethane adhesive which provides bonding to a laminated film system that includes DuPont Tedlar® film on the outside. The Tedlar® film layer provides excellent weather protection and reduced helium permeance, enabling longer, higher surveillance missions. TCOM's new hull enables aerostats to operate continuously in winds of up to 100 knots with blowing sand and snow and extreme temperatures of up to 130F.

"JLENS' 360-degree long-range surveillance capability expands the battle space because JLENS can simultaneously detect and engage threats like swarming boats and anti-ship cruise missiles from up to 340 miles away," said Dean Barten, the U.S. Army's JLENS program manager. As the tethered aerostat system supplier, TCOM ensured that the aerostats could remain aloft and operational for up to 30 days while meeting the JLENS altitude and payload weight requirements.

When discussing deployed 71M Block II aerostats, Ron Bendlin, TCOM President and CEO, explained "These aerostats have demonstrated the lowest lift loss of any large class aerostat while increasing strength by 30%. We are proud to support warfighters in the US and around the globe with increased mission endurance and greater availability through reduced maintenance."

To date, the 71M Block II systems equipped with the new hull material have accumulated over 100,000 hours of use during deployments which include the demanding JLENS System Design and Development (SDD) phase. JLENS operators stated that "the aerostats exceeded our requirements and expectations for helium retention and durability during the demanding SDD phase of our program and the aerostats have been key to making this phase of the program a success."

ABOUT TCOM:

TCOM is the global leader in persistent surveillance solutions. For over 40 years, the company's pioneering innovations have defined the persistent surveillance and Lighter-than-Air industries. By blending leading edge technology, manufacturing and field operation capabilities, TCOM has provided systems for United States and foreign governments with complete persistent surveillance capabilities. Our systems are in use around the globe including theaters of combat in Iraq and Afghanistan. TCOM's systems include fixed-site deployments, fully transportable systems and specialized sea-based deployments. TCOM's headquarters is based in Columbia, MD and the Manufacturing & Flight Test Facility is located near Elizabeth City, NC. TCOM is the only company in the world devoted to cost-effective LTA surveillance solutions with in-house aerostat and airship manufacture, assembly, flight test and training capabilities.