

STMPAS Payload Partners Wanted

Carolina Unmanned Vehicles (CUV), a small woman-owned company in Raleigh, NC, has developed several versions of a small mobile tethered blimp, the **Small Tactical Multi-Payload Aerostat System (STMPAS)**, carrying electronic payloads up to 35 kg. (Fig. 1) It is adaptable to communications relays, Electro-Optic / IR cameras, and COMINT / SIGINT payloads for persistent very long term missions. Previous customers' include the Army, USAF, Lockheed Martin and Sandia National Laboratory. CUV delivered several STMPAS to the Army Rapid Equipping Force for ISR capability for small tactical units in Afghanistan. Non-military applications include law enforcement, border security and research.

Operational Benefits Aerostats are an efficient means for persistent altitude coverage but traditional aerostats are large and their ground equipment has very limited mobility and lengthy set-up times, limiting their use. STMPAS uses a specially designed tethered blimp that combines helium and wind lift so even very small sizes operate easily in high wind, allowing it to be a fraction of the cost and manpower of traditional lighter-than-air designs. STMPAS is a mobile cost effective tactical aerostat system consisting of three major subsystems: The Helikite, Carrier, and Payloads. Carried by a single high mobility HMMWV trailer Carrier, STMPAS is operated by a two person crew. It is very cost-effective through use of unique designs to reduce the need for ground crews to handle the blimp during launch and recovery. STMPAS, with the Helikite launched directly from the trailer has improved launch timeline, reduced problems with muddy / rocky ground, and allows moving with the Helikite inflated.


Payload Types:

Gyro-Stabilized EO / IR Camera Systems / Turrets	Intelligence (ELINT, SIGINT, COMINT)
Communications Relay, Including Single-To-Single And Many-To-Many	Position, Navigation, and Timing (PNT), Particularly Pseudolites
Counter UAS (CUAS) Detection Sensors and Negation Systems	Surveillance / Air Defense Radars

Partner Options CUV has multiple customer inquiries for STMPAS and is seeking payload partners for development and marketing of develop specific payloads for Military, Border control and Law Enforcement missions. Options are:

- (1) CUV as prime contractor provides complete STMPAS with subcontractor Partner payloads; or
- (2) The partner can be the prime providing the payloads with CUV as a subcontractor for STMPAS.

The best arrangement depends on customer preferences, project scope and the payloads involved. The payloads may be off the shelf, or CUV will be work with you in adapting existing products to the STMPAS platform. For more information contact: Mike Rogers, (919) 851-9898, merogers@carolinaunmanned.com

<p>Fig 1</p> <p style="text-align: center;">Carrier Design</p> <p>HMMWV Compatible Trailer Electric Winches To Elevate Payloads up to 10,000 Feet Mil-Std or Rugged Commercial Diesel Generators Quick Inflation Helium Manifold Racks Up to 15 Helium Tanks, (One Inflation and Several Weeks of "Top-off") C-130 Roll On – Roll Off Capable</p>	<p>STMPAS Carrier</p>  <p>Resupply Reinflation Tanks Less Than One HMMWV Trailer Load</p>	<p style="text-align: center;">Minimum Manpower and Logistics</p> <p>Trailer Carries Everything For Deployment Weather Covers and Locking Storage For All Equipment Automotive Spares (Tires, Brakes, Lights) In Military Supply System Uses Standard Helium Tanks With Government NSN Two Techs Operate Entire System Including Payloads</p>
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