

Supporting Space Superiority

For over seven decades, BAE Systems has perfected the art of building spacecraft, delivering adaptable and affordable solutions that meet the unique needs of each mission. Our Elevation™ line provides a range of standardized, high-performing spacecraft products. Specifically, our Ascent™ spacecraft is designed to support the needs of space superiority, with capabilities such as refuelling, high-thrust propulsion, dynamic space operations and rideshare payloads. The rideshare payload capability allows for the efficient deployment of multiple smaller satellites or payloads on a single launch vehicle, enhancing flexibility and mission effectiveness. These features enable sustained maneuver, orbit raising and mobility, logistics, and exploration missions to Medium Earth Orbit, Geostationary Orbit, and beyond. With our commitment to staying at the forefront of technology, we're poised to deliver the first spacecraft to support space superiority, on contract with delivery in 2027.

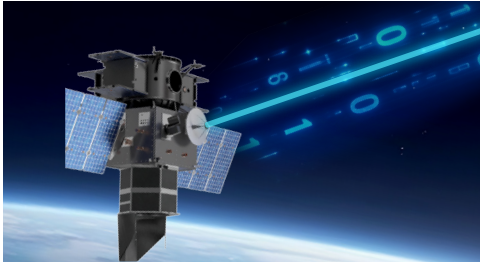


ESPA Ports support additional mission payloads or deployable rideshare opportunities.

BAE SYSTEMS

Threats of today require novel CONOPS to ensure space superiority into the future. Our Ascent™ spacecraft is a highly configurable platform addressing threats in MEO, GEO and beyond.

Assured



Robust Communications

- Our interconnected optical/ radio frequency mesh network enables constant communication over commercial terrestrial communications and multiple space-based optical mesh networks

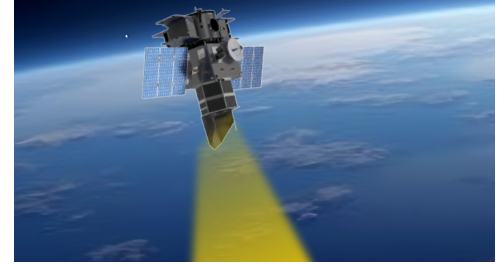
Extensible



Battle Management

- Interoperable data dissemination across IC and DoW
- Automated data fusion and track generation for threat engagement
- Low latency, near real-time processing for continuous custody

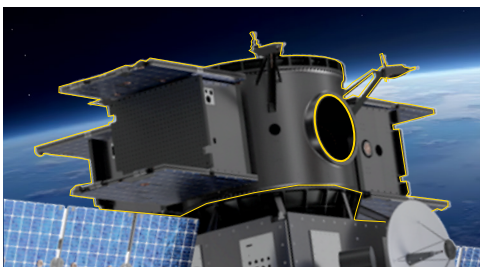
Actionable



Plug & Play Sensor Selection

- Domain awareness for tactical decision making
- Proliferated missile warning missile track enables global detection
- Tactical edge processing for automated orchestration

Flexible



Optional ESPA Ring

- Ability to host additional spacecraft as secondary payloads – up to 12 payloads on two attachable ESPA rings
- Supports mixes of deployable secondary spacecraft and hosted payloads

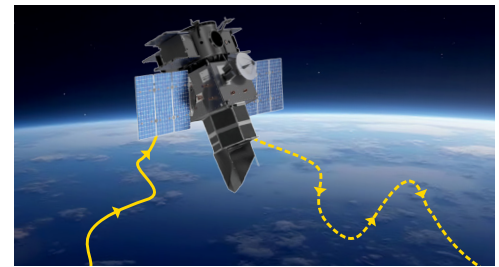
Upgradeable



Advanced Software Solutions

- On-board software solutions for autonomy, cooperative operations and capability upgrades

Maneuverable



Dynamic Operations

- High delta-V and refuellability to maneuver without regret to protect critical assets, enabling more cost-effective launches and flexibility in mission design
- Rendezvous, proximity operations capable
- High thrust maneuvering for responsive operations

Parameter	Capability
Payload mass	Up to 2700 kg, includes capability for ESPA hosted payloads
Payload power	Up to 2700W (28 VDC)
Payload volume	1.7 x 1.8 x 3m with ports for ESPA-G (shown) or ESPA sized secondary payloads
Launch service compatibility	Dedicated, up to 2 space vehicles per launch in standard fairing
Orbits	LEO, MEO, GEO, Cislunar
Propulsion	Chemical propulsion with bi-direction fuel transfer for refueling as client and/or fuel tanker Up to 1500 m/s ΔV, 6DOF control
Comm	S/L-band for TT&C X-band, Ka-band, and Optical mission comms options NSA Type-1 and AES-256 Crypto options
Pointing Performance (1σ)	Accuracy: <20 arcsec Knowledge: <10 arcsec Stability: 1 arcsec/sec
Advertised mission life	5 years
Redundancy	Single fault tolerant to disposal, selective redundancy on additional components
Specialty Engineering	Modular packages to support increased ΔV and secondary payload or rideshare