CYIENT
SOLUTIONS & SYSTEMS

A joint venture between CYIENT & BlueBird Aero Systems

FIELD-PROVEN UAV SYSTEMS THAT GIVE INDIAN DEFENCE AN UNMATCHED TACTICAL ADVANTAGE

SpyLite ready for launch at 5600m ASL and -20° C at a location in northern India, 2018

YOUR EYE IN THE SKY

Autonomous or unmanned aircraft systems have brought about a paradigm shift in the way defence and security forces operate. UAVs offer tremendous potential for the armed forces to conduct highly accurate intelligence gathering operations and address gaps in their surveillance capabilities. Given India's complex security challenges, UAV systems can be leveraged by security forces including law enforcement agencies (police and paramilitary), defence forces, urban surveillance teams, forestry and anti-poaching units, and for environmental studies, asset management, and roadways and railway corridor mapping.

Given the significant advantage that advanced UAV systems today offer to the military and armed forces, it is no surprize that the Ministry of Defence has identified several high-tech military goals to be fulfilled by 2020 and has announced an ambitious program to procure a wide range of UAV systems over the next decade.

CYIENT SOLUTIONS & SYSTEMS

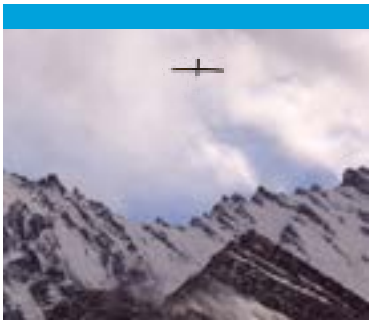
Cyient Solutions & Systems (CSS) is a joint venture between Cyient and Israel-based BlueBird Aero Systems that provides UAS-based intelligence gathering, surveillance, target acquisition, and reconnaissance (ISTAR) capabilities for defence, homeland security, and civilian applications. CSS leverages Cyient's engineering and manufacturing capabilities and BlueBird's globally-proven UAS technology to offer a range of solutions, carefully crafted to address the diverse needs of defence, paramilitary, homeland security, and civilian users.

Our unmanned aerial systems operate through a unified, intuitive, and advanced ground control station and are designed to overcome modern security challenges. They can be deployed for military and peacekeeping purposes, for controlling low-intensity conflicts, disaster management, and law enforcement, even operating in extreme weather conditions and harsh terrains.

BlueBird's 15+ yrs of experience in advanced UAS technology

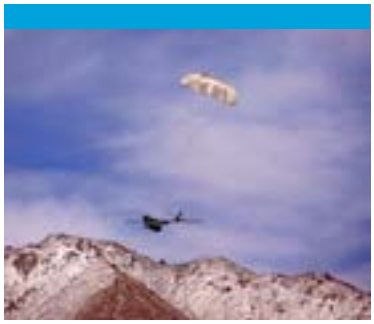
Cyient's 27+ yrs of engineering, avionics, and manufacturing experience

Fully autonomous platforms—from launch to recovery



SpyLite at 5500m ASL

Ground Data Terminal (10/80/150 km range)



Accurate Parachute Landing

OUR UAV SYSTEMS PORTFOLIO

9.5 Kg	4 Hr	80 Km
Takeoff weight	Endurance	Extended control range

SpyLite Mini UAV

An advanced, field-proven, electric, mini UAS, SpyLite is optimized to offer covert, extended range, and real-time visual intelligence. Fully autonomous, from launch to accurate parachute recovery, the system delivers enhanced reliability even in severe weather conditions, assuring high operational availability for up to four hours and a control range of up to 80 km.

Features

- 15,000+ operational sorties conducted
- Operational ceiling 36,000 ft AMSL
- Best operational altitude up to 1,000 m AGL
- Redundant communication links (3 links)
- Optional Full HD resolution transmission
- Optional high-resolution color, IR, or multi-spectral mapping payloads

2.2 Kg	2 Hr	10 Km
Takeoff weight	Endurance	Control range

MicroB UAV System

The MicroB offers features comparable to a mini UAV while maintaining an extremely competitive price tag. The system has fully autonomous operations and is easy to use and maintain. It is equipped with stabilized payloads and can be launched even in crowded areas or through a window to capture high-quality videos with GIS information. The MicroB is integrated with a field-proven avionics suite, electric brushless motor, rechargeable battery, and proprietary payloads making it an ideal resource for active ISR missions.

Features

- Fully autonomous from launch to recovery
- Rapid deployment anytime, anywhere
- Selectable single or dual EO/IR payloads
- Optional Full HD resolution transmission
- Best operational altitude up to 1,000 m AGL
- Redundant communication links

WanderB VTOL System

12.5 Kg	2.5 Hr	50 Km
Takeoff weight	Endurance	Extended control range

The WanderB VTOL is a mini UAV with vertical takeoff and landing capabilities. This feature facilitates easy launch during tactical missions in a controlled environment for surveillance across both urban areas as well as remote, dense forests. The system is fully autonomous and is equipped with stabilized payloads making it an ideal system for seamless and effective intelligence, surveillance, and reconnaissance (ISR) missions.

Features

- Vertical takeoff and landing
- Rapid deployment anytime, anywhere
- Selectable single or dual EO/IR payloads
- Optional Full HD resolution transmission
- Best operational altitude up to 1,000 m AGL
- Redundant communication links

ThunderB Small Tactical UAV

32 Kg	24 Hr	150 Km
Takeoff weight	Endurance	Extended control range

ThunderB is a mature, tactical UAV ideal for long-range, long-endurance ISTAR or tactical mapping on-demand missions across open areas, as well as urban scenarios for military, peacekeeping, low-intensity conflict resolution, law enforcement, disaster management, search and rescue, and commercial applications. The UAV can be deployed quickly from the field with no runway or infrastructure and is designed to deliver high-quality results for 24 hours with a range of up to 150 km.

Features

- Operational ceiling 21,000 ft AMSL
- Best operational altitude up to 2,000 m AGL
- Optional Full HD resolution transmission
- Optional high-resolution color, IR or multi-spectral mapping payloads
- Selectable single, dual, and triple sensor EO/IR/laser payloads

The ThunderB offers two additional variants: ThunderB with cargo delivery capability and ThunderB VTOL.

ThunderB with Cargo Delivery Capability

The system can carry small cargo units under each wing that can be released automatically or by a GCS command and delivered to the accurate location. The ThunderB with cargo delivery capability is especially helpful in scenarios such as search and rescue missions and disaster relief missions.

Additional Feature

- 12-hour endurance with cargo capsules

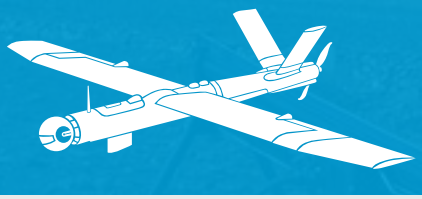
ThunderB VTOL

The dual-hybrid ThunderB VTOL, powered by quad vertical electrical motors, offers vertical takeoff and landing capabilities. The UAV can take off from a small ground clearing or marine vessel and requires a much smaller logistical footprint as compared to the standard launch and recovery systems.

Features

- Vertical takeoff and landing (VTOL) capabilities
- Minimal ground clearance to launch and land
- Up to 12 hours endurance

THE CSS ADVANTAGE



The Cyient-BlueBird partnership expertly combines globally proven UAS technology with indigenized local production, maintenance, and field support to match the aspirations of Indian defence, paramilitary, and homeland security for world-class UAS systems to support ISTAR applications.

Our range of unmanned aerial systems are designed to reduce life cycle costs, enhance safety of use, and deliver exceptional operational performance. Since 2006, these systems have accumulated tens of thousands of operational flight hours in the service of customers around the world.

Globally-Proven Technology

CSS is strongly committed to the "Make in India" initiative and has been actively investing in product design and development, manufacturing, system integration, and aftermarket capabilities to address critical and sensitive technology requirements of the Indian defence sector.

The Cyient-BlueBird joint venture ensures domestic manufacturing of a wide range of unmanned aerial systems backed by training, warranty, spares, maintenance, and support that are locally available to our customers across India.

About Cyient Solutions & Systems

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About BlueBird Aero Systems

Established in 2002, Bluebird Aero Systems is a dominant player in the Tactical Unmanned Aerial Systems (UAS) industry, specializing in design, development, and production of micro, mini, and tactical UAS and peripheral equipment—delivering exceptional, combat-proven solutions to the military, homeland security, and civilian UAS markets. BlueBird's advanced UAV systems present the ultimate solution for supporting open-area as well as urban scenarios for military, peace-keeping, low-intensity conflict, security, disaster management, law enforcement, search and rescue, and commercial applications.

About Cyient

Cyient (Estd: 1991, NSE: CYIENT) provides engineering, manufacturing, geospatial, networks, and operations management services to global industry leaders. As a Design, Build, Operate & Maintain partner, Cyient takes solution ownership across the value chain and leverages the power of digital technology and advanced analytics, along with domain knowledge and technical expertise, to solve complex business problems. With more than 15,000 employees in 22 countries, Cyient's industry focus includes aerospace and defence, medical, telecommunications, rail transportation, semiconductor, utilities, industrial, energy and natural resources.

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