



BELL 360 INVICTUS

AFFORDABLE. LETHAL. SUSTAINABLE.

Combining impressive agility and lethality with a modular open systems approach and sustainability innate to its design, the Bell 360 Invictus provides a low-risk path to fulfill the U.S. Army's requirements for a Future Attack Reconnaissance Aircraft (FARA), providing security and battlefield situational awareness until the fight is finished.

HOW IT GOES ABOVE AND BEYOND:

With an emphasis on a design that provides impressive capability with reduced complexity for improved affordability and manufacturability, Bell combined mature technologies with innovative processes to achieve next-generation performance in a highly sustainable aircraft.

FEATURES

- Proven, articulated rotor head design delivers greater speeds, and high-speed rotor blade design mitigates retreating blade stall, providing agility in reconnaissance missions from hover to high speed.
- Lift-sharing wing reduces rotor lift demand in forward flight, enabling superb high-speed maneuverability without the need for a complex propulsor and drive system.
- Improved lethality with internal and external weapons stores, including a 20 mm cannon, integrated munitions launcher, and support for air-launched effects integration.
- Supplemental power unit serves dual functions: providing auxiliary power for ground maintenance and systems checks, and contributing additional horsepower in flight to boost cruise speed, dash speed and hover capability.
- A proven digital flight control system harmonizes mature technologies for advanced performance while offering a path to autonomous flight and continuous capability upgrades.
- Digital thread allows real-time collaboration among fabrication, supply chain and maintenance to facilitate smoother manufacturing, better sustainability, reduced downstream costs and mitigated schedule risks.
- 3D digital twin provides a common data source throughout the life cycle of the aircraft, monitoring survivability and enabling test scenarios to be modeled as battlefield technology evolves.
- Design efficiency is achieved by reduced manufacturing, assembly, cost and rework time from Bell's program approach and investment in technologies for high-rate manufacturing.

OVERVIEW

The U.S. Army asked. We delivered. The Bell 360 Invictus is designed to be first to the fight and stay in it until the finish. Its high cruise speeds and long-range capability combined with exceptional agility from hover to high speed make it versatile, survivable and lethal. By meeting or exceeding the U.S. Army’s requirements, the Bell 360 Invictus will exploit terrain, employ lethal effects and develop information to keep soldiers on the ground informed-shaping the tactical environment to outmaneuver our adversaries.

Backed by a designed-as-built manufacturing model and digital thread-enabled tools to enhance design collaboration, the Bell 360 Invictus is as practical as it is lethal. Bell’s program-based approach and digital toolkit make adapting and scaling aircraft faster and more streamlined than ever before. The Bell 360 Invictus continues Bell’s decades-long legacy as the innovator behind U.S. Army’s reconnaissance aircraft, with renewed emphasis not only on capability, but also on low technical risk, affordability, survivability and lethality.

TECHNICAL SPECIFICATIONS

PERFORMANCE OBJECTIVES

The Bell 360 Invictus is designed to meet or exceed the U.S. Army’s FARA requirements.

Performance

Cruise Speed	>180 KTAS at mission gross weight/configuration
Hover	Level 1 Handling Qualities at 4K/95°
Flight Characteristics	Fly-by-wire flight control system enables optimal crew/autonomy Reduced pilot workload, superb agility in all flight modes

Range

Combat Radius	135 nm with > 90 minutes of time on station
Payload	1,400 lbs.

Weapons

20 mm cannon	
Integrated munitions launcher	
Air-launched effects integration	

Affordability/Sustainability

Proprietary tools connect all aspects of design, supply chain and maintenance to allow real-time collaboration and reduce life cycle costs while increasing readiness.

Upgradeable/Adaptable

Modular Open Systems Approach (MOSA)/digital backbone, Future Airborne Capability Environment (FACE) compliant, digital fly-by-wire flight control system-upgradeable throughout the life cycle and adaptable to emerging requirements.