

The New Corvette CLA For Armed Recon / Light Attack



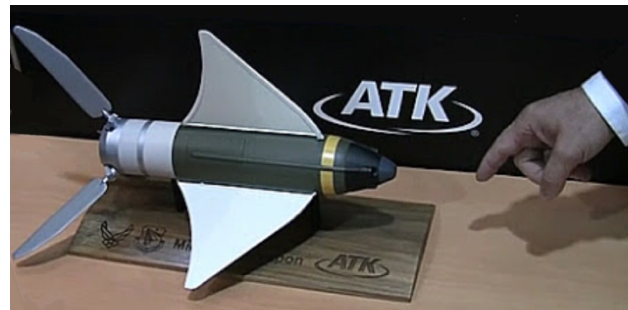
**+370 Knots Max Cruise / 10,000 FPM Climb Rate / Up to 3,000 Lbs Useful Load
All-Carbon Construction & Numerous Engine Options – Yield Best-In-Class Performance at Half The Cost**

Corvette CLA (Carbon Light Attack) is derived from the Turbine Legend, a racing airplane developed in the USA under FAA Certification 14 CFR 21.91. When powered by the 1,070 SHP Garrett TPE-331 or P&W PT-6 of similar power – the airplane rightly claims to be the fastest propeller driven aircraft in the world – and restores the strategies and advantages of Light Attack for counter insurgency missions and armed reconnaissance – at acquisition and operating costs that are HALF the costs of outdated designs and over-weight metal aircraft.

- 200-gallon fuel capacity (without external tanks) / Combat Range +1,500 NM / Up to 3,000 lbs useful load
- Standard Features: Trailing-link land gear, ballistic safety chute, fittings for Standard NATO BRU-14 pylon**
- Single or Tandem Seat / Fully Aerobatic / 15-G one-piece Carbon Wing
- 3, 4, or 5-blade Propeller Options – Provide Quieter Options / Engine HP Range: 750 to 1,200
- Empty Weight: 2,050 Lbs / MTOW: 5,100* Lbs / Up to 10,000* FPM Climb Rate
- P&W PT-6; Honeywell-Garret; GE-Walter; Ivchenko-Progress
- Popular Options: Pressurization; air-conditioning; ballistic matting; “pilot-optional” navigation**
- Open architecture Integration; sensors; avionics; and data link to customer specs
- For Armed Recon: MX-15/or equivalent; SAR; data link options
- Precision/Conventional Arms can Include: 6 lbs precision glide bombs; light machine guns; 70 mm rockets
- Ample electrical power; anti-ice
- Engine Options: P&W PT-6; Honeywell-Garrett; GE-Walter; Ivchenko-Progress



Corvette CLA is based on the Aerodynamics of the Famous P-51 – Long-range fighter



A new generation of small precision weapons enable the lethality of larger conventional weapons with less collateral damage and much lower cost. Pictured: ATK “Hatchet”

See Flying Demo: <http://corvetteaerospace.com>

*Depending on engine, propeller, and systems ** Engineering in Progress



Corvette CLA Snap-Shot / Light Attack

Performance*	
Max Cruise*	+/- 370 Knots (426 mph)
Loiter Speed	120 to 160 knots / 140 to 184 MPH
Stall Speed* (Landing Configuration/4,100 lbs MTOW)	68 knots (78 mph)
Max Fuel Efficiency @ Cruise*	28 gph @ 270 knots (311 mph) at 25,000 ft
Service ceiling*	35,000 ft (10,668 m)
G Limits	+15/-9
Max Rate of Climb*	10,000 ft/min (3,048 m/min)
Take Off Distance	<1,500 ft
Landing Distance	<1,500 ft
Combat Range / Ferry Range	1,500 NM / +2,000 NM (200-gallon optional inboard tanks/Walter Engine)

Basic Configuration	
Crew	1 or 2 / Tandem Seat / Pilot Optional**
Sensor Operator	Sensor Operator Can Be Ground-based**
Empty Weight	2,250 lb (1,020 kg)
Max Takeoff Weight (varies according to engine & prop)	4,100 (1,860 kg) up to 5,100 lbs* (2,313 kg)
Length	25 ft 9 in (7.84 m)
Wingspan	28 ft 6 in (8.69 m)
Height	9 ft 5 in (2.86 m)
Wing area	101.0 sq ft (9.38 m ²)
Aspect ratio	8
Powerplants	Pratt & Whitney – PT-6 (750 to 1,200 HP) ** Walter/GE H Series – 850 hp (634 kW) Honeywell/Garrett – TPE-331-10; 1,070 HP (770 kW) Ivchenko-Progress Motor – 650 HP (485 kW)
Propellers	3- 4- and 5-blade options

* Note: Corvette CLA performance varies according to engine type, propeller combination, and fuel load

** Sophisticated options are for discussion



Corvette CLA – Features and Performance Data / Light Attack

Corvette CLA ISR Aircraft	2021 Specification
Configuration	2 place Tandem, Center Sticks, Bubble Canopy
Empty Weight (Standard A/C)	2,250 lbs
MTOW	4,100 to 5,100 lbs (varies according to engine & prop)
Std. Fuel / Optional Fuel Capacity	120 US Gallons / 200 US Gallons
Max. Crew Wt. (Each)	220 #'s W/ Parachutes
Stall Speed (Vso)	< 68 KIAS
Rate of Climb (650 HP/1,000)	6,200 to 10,000 FPM (varies according to engine & prop)
Takeoff Distance (50' obst, Sea Level @ MGW)	<1,500 FT
Landing Distance (50' obst, Sea Level @MGW)	<1,500 FT
Max Cruise Speed (1,000 HP)	370 KTAS
Ferry Range / Combat Range	> 2,000 NM / 1,500 (200-gallon tankage)
Maximum Ceiling	35,000 FT / 10,668 m
Wing Configuration	Low Wing – One Piece / All Carbon
Landing Gear Configuration	Retractable Trailing-Link Tricycle
Primary Construction	All Carbon (Pre-Preg)
Load Factors	+15 / -9 G's (Infinite Life Rated)
Flaps	2/3 span Fowler Style Electric Actuation/40degrees deflection
Trim Tabs	3 axis, Roll, Pitch & Yaw Electric Servo on Center Stick Grip
Power Plants -- Standard / Options	P&W PT-6 / Honeywell-Garrett / GE-Walter
Power loading (1,000 HP)	4.1
Wing loading	40 (4,100 lb MTOW)
Fuel System & Type	Pressurized / Dual Pumps
Propeller (Standard / Optional)	3 Blade Constant Speed Aluminum / Composite
Certified Operational	Day / Night / VFR / IFR as equipped / Known Icing**
Restraints	4- or 5-point harness
Standard Equipment Options	Adjustable Rear Seat / Adjustable Rudder Pedals
Panel & Avionics	Defined by Customer (Garmin G1000 suite is Standard)
Special Safety Features	Airframe Ballistic Parachute / Ballistic Matting for Pilot Protection
Special Airframe Features	Stability Strakes on Empennage / Over-sized flaps
Popular Optional Features*	Pressurization / Air Conditioning
Armed Reconnaissance Features**	Hard Points / Precision and Conventional Weapons Systems
	Integration Pre-Wired // With or Without Sensor Systems
Optional Features*	Data Link / Special Communications gear
	24" Wing Extensions (+ fuel tankage / - wing loading)

* Engineering Complete

** Engineering In Process



Corvette CLA – Detailed Features / Light Attack

<p>Airframe:</p> <p>All Carbon Components Assembled/Flight Tested in US or In-Country One Piece all carbon +15-G / -9 Wing Assembled Canopy, Inflatable Canopy Seal Firewall Insulation Blanket & Engine Mount Complete Landing Gear and Retract Systems Trailing Link Landing Gear Suspension System Wheels, Brakes, and Tires Pilot/Co-Pilot Braking Systems Aileron, Elevator, Control Stick Systems Flap Control System / 40 degrees deflection Flap System on Roller Bearing Extension Tracks Elevator, Aileron & Rudder Electric Trim Systems Fuel System -- W/Selector, Probes, Locking Caps Seat Belts and Shoulder Harnesses Pitot Static Hardware Lights, Antennas, Eyeball Vents, Cabin Heat Boost Pump, Voltage Regulator, Battery, Battery Box, Necessary Airframe Hardware, Tubing and Hoses</p> <p>Firewall Forward:</p> <p>Honeywell-Garrett 1,070 HP; Pratt & Whitney PT-6 750 to 1,200 HP; or GE-Walter 850 HP Hartzell Propeller, 3-blade / 4-Blade option All Controls, Accessories, and engine systems complete</p> <p>Full Glass Panel, Electronics & Avionics:</p> <p>Garmin G-1000 is Standard Engine Information System SAM Instrument back up gauges GSU 25 Dual ADAHRS Landing Gear Indication Compass Power Distribution Grids, Single Alt / Single Battery Infinity Stick Grips Kannad Integra ELT Comm and Data Link Antennae Plug & Play Airframe & Engine Harness Co-Pilot EFIS + Emergency gauges Pencil Cameras – Forward-looking</p>	<p>Air Frame & Wing:</p> <p>BRS 3 Chute System – Airframe Ballistic Safety Chute Winglets & Stall Strips Adjustable Rudder Controls - Pilot / Co-Pilot Adjustable Co-Pilot Seat Canopy Cover Ballistic Matting (pilot protection) Specialty Paint and Coatings Mission Data/Performance Recorder</p> <p>Weapons Systems/Options:</p> <p>Customized to Customer Preferences Mounted to Standard NATO BRU-14 Pylon Corvette Engineering Research / Concepts:</p> <ul style="list-style-type: none"> >> Northrop/ATK Hatchet Precision Glide Bomb >> Dillon Minigun / Standard 762 NATO round >> 70 mm rockets (various) >> Fire Control, Aiming Systems according to customer preferences – mechanical, electro-mechanical or precision GPS or laser designated <p>Integration, ISR Sensors and Data Link:</p> <p>Open-Source Integration Architecture Templated wiring harness, screens, computer systems</p> <ul style="list-style-type: none"> >> Installed in USA >> Installed in-country according to customer needs <p>EOIR as large as MX-15 w/laser designator, best-tech sensor platforms – high-resolution digital video/still, LiDAR, and hyper-spectral SAR – both flat-panel or tube Advanced technology amplification, antenna systems, encryption tools are available Advanced on-board computer and multiple petabyte data storage systems are available</p> <p>Additional Services:</p> <p>Execution of all FAA Paperwork Completion of Customized (translated) Customer POH Ferry / Shipment & Assembly In-Country Quality Assurance Pilot Training: Traditional / New Virtual Reality (VR) Tools Maintenance Modules Public Affairs Services</p>
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