



## The New Corvette CLA For Pilot Training



*"Broad Spectrum" Flight Training*

*Supported by Virtual Reality & Artificial Intelligence Syllabus*

*320 Knots max cruise / 60 Knot landing speed / Low Operating Costs / Remarkable Versatility*

*Corvette CLA Trainer is a tandem seat, turbine-powered, all-carbon airframe derived from the Turbine Legend -- a racing airplane certified under FAA Rules 14 CFR 21.91 and re-engineered for "Broad-Spectrum" Flight Training -- new pilots thru advanced tactical. The computer optimized P-51-derivative aerodynamics, and ability to accept engines with power ranging from 350 SHP to 850 SHP (or more) enables new pilots to handle the Corvette CLA Trainer like a Cessna 182 (same empty weight), but for advanced pilots -- provides max cruise at 320 knots, performs long-range ISR missions, full aerobatics, and advanced tactical training. Key features:*

- Empty Weight: 2,050 Lbs -- MTOW for Training 3,400 lbs (MTOW for ISR/Light Attack missions: 5,100\* Lbs)
- Std. Features: Trailing-link landing gear, ballistic safety chute, winglets, fully aerobatic, 15-G one-piece wing
- Popular Options: Air Conditioning, Pressurization, ballistic protection, ISR capability
- 3, 4, or 5-blade Propeller Options -- Provide Quieter Options / Engine HP Range: 350 to 850 (or more)
- New Engineering Yields: 60 Knot Stall Speed, +2,000 NM range, "pilot-optional" navigation
- Options To Expand Missions: Hard Points, Integration & ISR sensors, additional electrical power, anti-ice



*Corvette ISR is based on the Aerodynamics of the Famous P-51 -- Long-range Fighter*

### **Engine Options For Training**

**P&W PT-6: 500-750 HP**

**GE-Walter: 850 HP**

**Ivchenko-Progress: 450-650 HP**

**Rolls Royce/Allison : 350-400 HP**

*Flying Video: [corvetteaerospace.com](http://corvetteaerospace.com)*



*All Glass Avionics and integrated sensors are designed to customer preferences*

\*Depending on engine, tankage, propeller, and systems



## Corvette CLA Snap-Shot / Training Configuration

<b>Performance*</b>	
<b>Maximum Speed /Training Configuration</b>	320 Knots (426 mph)
<b>Stall Speed/Training Configuration</b>	60 knots (69 mph)
<b>Never exceed speed</b>	435 knots / 500 mph
<b>Max (Proven) Fuel Efficiency @ Cruise</b>	28 gph @ 270 knots (311 mph) at 25,000 ft
<b>Service ceiling</b>	32,000 ft (9,750 m)
<b>G limits</b>	+15/-9
<b>Max Rate of climb/Training Configuration</b>	6,050 ft/min
<b>Take Off Distance</b>	<1,500 ft
<b>Landing Distance</b>	<1,500 ft
<b>Max Range</b>	+2,000 NM (200 gallon optional inboard tanks/Walter Engine)

<b>Basic Configuration</b>	
<b>Crew</b>	2 / Tandem Seat
<b>Empty weight</b>	2,050 lb (930 kg)
<b>Max takeoff weight / Training Missions</b>	3,400 lb (1,452 kg)
<b>Max takeoff weight / ISR Missions</b>	4,100 lb (1,860 kg)
<b>Length</b>	25 ft 9 in (7.84 m)
<b>Wingspan</b>	28 ft 6 in (8.69 m)
<b>Height</b>	9 ft 5 in (2.86 m)
<b>Wing area</b>	101.0 sq ft (9.38 m2)
<b>Aspect ratio</b>	8
<b>Powerplants</b>	Pratt & Whitney – PT-6 (550 to 1,200 HP) <u>Walter M601/GE H Series</u> – 720 hp (540 kW) Honeywell/Garrett – TPE-331-10; 1,000 HP (740 kW) <u>Ilvchenko-Progress Motor</u> – 650 HP (485 kW) Rolls Royce/Allison 250 -- 350 HP (261 kW)
<b>Propellers</b>	3- 4- and 5-blade options

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



## Corvette CLA – Features and Performance Data / Training Configuration

Corvette CLA Training Aircraft	2021 Specification
Configuration	2 place Tandem, Center Sticks, Bubble Canopy
Empty Weight (Standard A/C)	2,100 lbs / #'s
MTOW	3,400 #'s
Maximum Std Fuel	120 US Gallons
Max. Crew Wt. (Each)	220 #'s W/ Parachutes
Stall Speed (Vso)	< 60 KIAS
Rate of Climb (Sea Level MGW / 650 HP)	> 6,200 FPM
Takeoff Distance (50' obst, Sea Level @ MGW)	< 1,500 FT
Landing Distance (50' obst, Sea Level @MGW)	< 1,500 FT
Max Cruise Speed	320 KTAS
Max Range	> 2,000 NM (200-gallon tankage)
Maximum Ceiling	32,000 FT / 9,750 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 (650 HP)	5.3
Wing loading	34
Fuel System & Type	Pressurized / Dual Pumps
Propeller (Standard / Optional)	3 Blade Constant Speed Aluminum / Composite
Certified Operational	Day / Night / VFR / IFR as equipped
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
Special Airframe Features	Stability Strakes on Empennage / Winglets / Over-sized flaps
Popular Optional Features*	Pressurization / Air Conditioning
Special Optional Features**	Hard Points / Weapons Systems / Ballistic matting
	Integration Pre-Wired & Sensor Systems
	Data Link /Special Communications gear
	24" Wing Extensions

\* Engineering Completed

\*\* Engineering In Process



## Corvette CLA – Detailed Features / Training Configuration

### **Airframe:**

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

### **Firewall Forward:**

Pratt & Whitney PT-6A 135\* 750 HP or GE-Walter (Std.)  
Hartzell Propeller, 3-blade  
All Controls, Accessories and engine systems complete

### **Full Glass Instrument Panel, Electronics & Avionics:**

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 Batt  
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

### **Air Frame & Wing:**

BRS – 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

### **Additional Services:**

Execution of all FAA Paperwork  
Completion of Customer POH  
Ferry / Shipment & Assembly  
In-Country Quality Assurance  
Pilot Training – Traditional  
Pilot Training – New Virtual Reality (VR) Tools  
Maintenance Modules  
Public Affairs Services