

Comeau Aerospace Inc.
Ultimate Flying Machine - Design Engineering Projects

CAI-230 – Evolution – Regional Jet

- double cranked delta high wing aircraft* (see *DCD-notes) - chevron “A” or “Λ” design;
 - inner higher sweepback and outer lower sweepback for less drag and low speed;
 - long root chord and short wing span strategic and operational advantage over a swept wing;
 - supreme structural strength and higher wing loading, less flex, fatigue, major life extension;
 - increased internal capacity for fuel and storage, more range and auxiliary options;
 - high lift aerodynamic design amplifies load characteristics;
 - enhanced load balancing, speed range, stability and maneuverability;
 - excellent low speed, stall and landing speed and short distance;
 - high speed flight and high angles of attack throughout speed range;
 - shorter takeoff with higher load, reduced pitch up in landing or takeoff;
 - tail less delta wing loading limitations eliminated, and optimised operational range;
 - twin movable V tails – increase mobility, stability, lower profile and smaller turning radius
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- Options:
 - strategic, tactical, operational and commercial environments;
 - Vision: advanced materials, propulsion and mission tasking;
 - low signature stealth characteristics and compact high performance design;
 - Commercial, cargo and container modules, aft ramp door, side entry and cargo doors
 - Extremely robust and adaptable: multi-role, multi-task and dedicated all weather logistics;
 - optimizing high wing integrated design for custom mission operations;

CAI 230 Evolution Regional Jet

- Empty weight: 40,000 lbs ● Fuel: 16,000 lbs ● useful load: 24,000 lbs
 - Max takeoff : 80,000 pounds ● 80 passenger @ 225 lbs; 18,000 lbs Cargo: 6,000 lbs
 - Range: 1500 n-mile ● Climb: 4,000 fpm; ● 550 kts cruise & 600 kts max ● Ceiling: 50,000 ft
 - Takeoff (MTOW): 4,000 ft ● Landing distance: 3,000'
 - Engines: 4-NTPI-Agility - axial flow turbojet 10,000 lbf thrust [vectored thrust & reversing]
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- length: 95', wingspan: 60' DCD design Wingspan: 60' & 36'
 - Cabin/Cargo: 10'-6" wide ● 9'6" high ● 45' long ● with ramp 55' long ● 12' wide exterior;
 - Wing area: 1500 sq/ft. ● Wing Load: lb/sq.ft.
 - cranked delta: front - 12' W x 25' L (300 sq.ft.); rear – 24' W x 50' L(1200 sq.ft)

Jetstream Vision - Advanced Projects

- *Pricetag*: est. \$60 million Cdn
- *Production Vision*: start - 5, 10+ within 5 years, 50+ within 5 – 10 years
- *Job Creation Vision*: 2,500 long term jobs, high value added, premium compensation.
- *Investment & Acquisition Vision*: totally more awesome...than most portfolios
- *Pilot Vision*: awesome, a super customized advanced experimental and applied research vehicle for ultimate logistical, strategic, tactical advantage, agility, scalability and long term development and optimized service life. The focus on maximum fuselage and propulsion development and integration of operational design elements, for all aspects offers an incredible range of options that will completely redefine the ultimate flying machine.

the ultimate flying machine adventure

ACI 230 Evolution Regional Jet