# Comeau Aerospace Inc. - Advanced Projects The Ultimate Flying Machine Design Engineering Projects

### CAI-824-MC-L Super Sonic Transport - SST:

In this project, we have the noble task of :

- super efficient SST advanced aircraft design and engines,
- aircraft and engine noise reduction and noise cancellation,
- aero-acoustics, aero-structural and fluid dynamics applied research,
- thermal signature reduction and detection counter measures,
- Orenda Engines Limited;
- turbojet development, production and performance characteristics
- electro-dynamic technology and advanced propulsion (pro CAI-825 HST)
- fuel production, fuel storage, fuel transfer, fuel systems and fuel research
- conventional and advanced materials and manufacturing
- augments single stage to orbit engine research and general logistics
- co-development, investment and acquisition, enterprise and commercial opportunities
- strategic and tactical mission tasking and operational resources

#### Main focus and long term vision:

- applied research and development towards reduced fuel and high thrust to weight
- · advanced aero-acoustics for reduction of shockwaves and sound
- reduced operating cost and longer life cycle (turbofan taxi thrusters)
- zero fuel advanced electro dynamic propulsion high speed logistics
- reduction of mass, thermal signature, acoustic signature and radar signature
- mission tasking, speed, range, ceiling and extended flight capabilities

#### ACI-824-MC-L Aircraft Specifications and Performance:

- Empty weight: 300,000 lbs; Payload 100,000 lbs.; Fuel load: 250,000 lbs
- Max takeoff weight: 650,000 lbs;
- Cargo 18' wide x 12'6" high x 140'; 2-3-2: 280 passengers
- length: 220', wingspan: 148', height: 35' twin vertical stabilizers
- Wing area: 8,450 sq. ft.; Wing Load: ----- lb/sq.ft.
- cranked delta: 65' W x 130' L;
- Maximum range: est 4,500 nm, 7,400 km
- Max. Speed: Mach 2.5, Cruise: 1,400 mph
- Max Climb Rate: 5,000'/min Service Ceiling: 60,000'+
- Takeoff run at MTOW: 7,000' Landing distance: 3,000 ft,
- Engines: 6 Orenda Engines Limited Magnum Opus 40,000 lbs thrust: 240,000 lbs thrust
- 2 taxi runway turbofan thrusters to be determined
- wide body blended fuselage stealth design

## **CAI-824-MC-L SST Super Sonic Transport**

It is time to redefine the leading edge of super sonic transport.

Go way beyond the wildest dreams...travel through time experience the pure exhilaration of fantastic speed, let the imagination fly free in a blue sky full of dreams, the opportunity of challenge and the reward of non-stop creativity.

Isn't it time you reserved your ticket to freedom, speed, passion and intensity? Envision something extra-ordinary, awesome, magnificent... see the world through someone else's eyes, and feel it in your heart and soul...

The Ultimate Flying Machine Adventure

## Comeau Aerospace Inc. - Advanced Projects

**Notes:** This Advanced Project envisioned is based on superb aerodynamic efficiencies, supreme aero-structural strength and a magnitude of design elements with "no boom" up to mach 1.2 that offers more performance, operational and commercial air superiority over anything else. Blended fuselage with stealth design elements, future engine applied and experimental development provisions, turbofan taxi thrusters to save fuel during pre-takeoff, and a greater degree of strength, luxury and performance.

This is dedicated towards strategic, tactical and operational aerospace, aero industry and commercial transport. Also to create, augment and amplify the independent strategic engineering and production capabilities that are required and the establishment of another extremely successful and powerful symbol that the SST program of a sovereign nation state, unrivaled anywhere.