

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

CAI-824-MC-XL 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-XL Aircraft Specifications and Performance:

- Empty weight: 350,000 lbs; Payload 220,000 lbs.; Fuel load: 350,000 lbs
- Max takeoff weight: 920,000 lbs;
- Cargo 18' wide x 12'6" high x 140' ; 2-3-2 : 280 passengers
- length: 220', wingspan: 158', height: 35' twin vertical stabilizers
- Wing area: 9,800 sq. ft.; Wing Load: ----- lb/sq.ft.
- cranked delta: 70' W x 140' L ;
- Maximum range: est 4,500 nm, 7,400 km
- Max. Speed: Mach 2.0 , Cruise: _____ 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 : 50,000 lbs/thrust : 300,000 lbs thrust
- 2 taxi runway turbofan thrusters to be determined
- wide body blended fuselage – stealth design

CAI-824-MC-XL 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