



# ***TB-Air “Advanced Air-Conditioning”***

Introduction  
and  
Product Overview



***AURORA AVIATION, INC.***  
*A NEW DAWN OF EXCELLENCE*

# ***TB-Air “Advanced Air Conditioning”***



- “State of the art” air-conditioning system for the TB20 and TB21 (G1 and GT)
- Co-operative development between Aurora Aviation (Waco, TX) and Seamech (Houston, TX).
- Exclusive marketing channel
  - Aurora Aviation
    - 254-848-2345
- Fully STC’d system
  - Approval received October 2003





# Why a New A/C System?

- Existing STC'd system is:
  - Expensive
    - ~ \$23-25K installed as STC
  - Heavy
    - > 75lbs installed
  - Inconvenient
    - Sits in corner of baggage compartment, makes loading of large luggage difficult
  - Limited Capability
    - Limited cooling output
    - Poor (leaky) ducting system with only two ducts for pilot/co-pilot
    - Can't be used during take-off and landing
    - Not available on TB21 unless factory fitted by Socata





# *TB-Air*

- Low Cost
- Light
  - Max 40lbs installed
- Convenient
  - Located behind baggage compartment
    - actually enhances weight and balance!
- High Capacity
  - High cooling output (**28,000 BTU!**)
  - Sealed ducting system with multiple overhead outlets
- Approval planned for use during take-off and landing
- Models for all TB20 and TB21 models (G1 and GT)





# *TB-Air System Components*

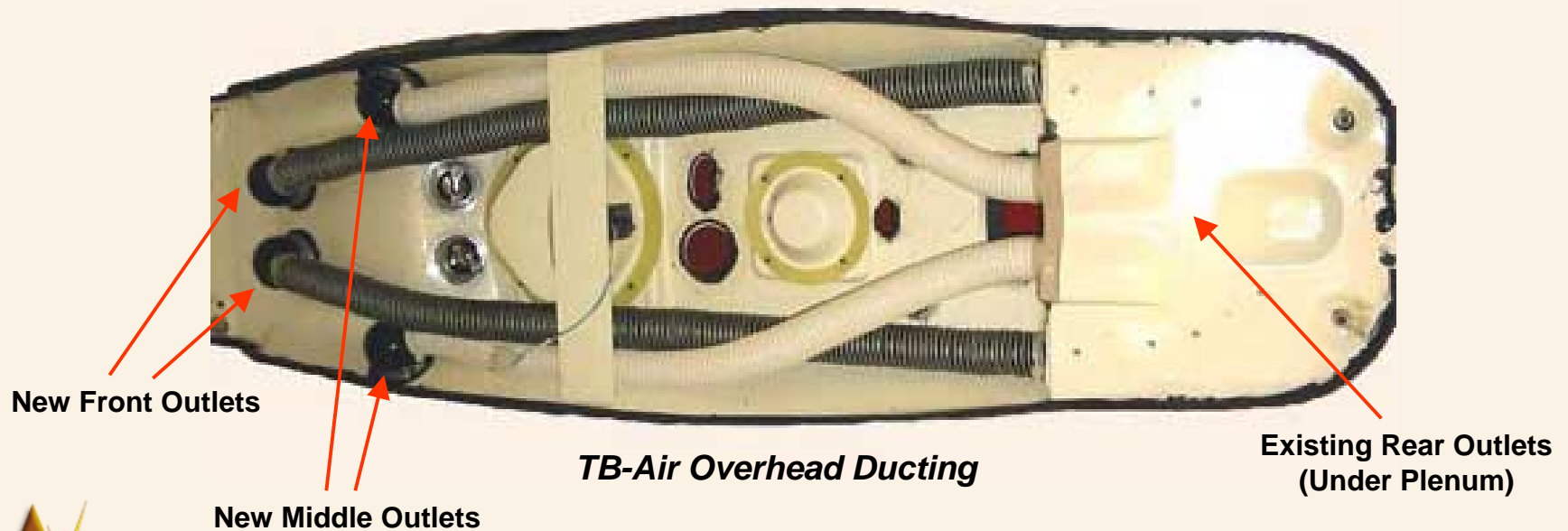
- Modified existing overhead console with additional air outlets
- Engine driven compressor
  - 14V and 28V aircraft supported
    - Restriction on simultaneous use of pitot heat and a/c on 14V aircraft
- Evaporator and fan unit
- A/C and Fan control unit





# Overhead Ducts

- Four new air outlets added to TB overhead console in addition to existing rear air outlets
- Fully sealed (max cooling where you want it)
- Overhead kits available for GT and all G1 Trinidads
  - Field modification to existing overhead console





# Overhead Console

- Total of 6 variable angle/variable flow outlets
  - 2 for each front passenger
  - 1 for each rear passenger



*TB-Air Front Passenger Air Outlets*





# *Engine Driven Compressor*

- Mounts to Engine Accessory Pad
- Electric clutch disengages pump when not in use



*TB-Air Compressor*







# *Lower Cowl Modification*

- Fiberglass molding added to cowling to accommodate compressor



*TB-Air Cowling Modification*





## ***TB-Air Fan Unit***

- High-capacity fan unit and evaporator mounted in tail (behind baggage compartment)
- Operated via panel mounted control unit



***TB-Air Fan Unit***





## ***TB-Air Inlet***

- Inlet Grills on airframe right rear
  - Air is exhausted though the tail cone area



***TB-Air Air Inlet***





# TB-Air Control Unit

- A/C On/Off plus 2 speed fan





# *Pricing*

- Installed Cost at Aurora Aviation
  - \$18,500
  - Approx 7 working days installation time
  - Availability - Now
- STC Kit
  - \$TBD
  - Labor Estimate 70-80hrs
  - Availability March 2004

