BA609 Tiltrotor
A New Way to FLY

Airside and Ground side Infrastructure Potential

Donald J. Barbour
Executive Director,
Bell/Agusta Aerospace Company

North Texas
Council of Governments
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An Innovative Aircraft

- FIRST Commercial Tiltrotor
- FIRST New Category to be certified since 1946
- FIRST Full-FBW GA aircraft to be certified
- FIRST pressurized civil rotorcraft to be certified

Rotors connected for OEI
Ice Protection (rotor, wing, engine duct)
Triplex full FBW FCS
Rudderless yaw control
Collins Proline 21 avionics
Carefree maneuvering
Level 1 Handling Qualities
Low noise / Smooth ride
The BA609 Tiltrotor Overview

Propulsion
2 x P&W PT6C-67A 1940 shp ea.

Weights
Max Gross Weight 16 800 lb
Empty weight 11 300 lb
Useful Load 5 500 lb

Performance
Maximum cruise speed 275 ktas
Maximum range 700 n.miles
Operational Ceiling 25 000 ft.

Sized to Fit existing Infrastructure
The BA609 Tiltrotor Certification

- Powered Lift Category, Tiltrotor Class Aircraft designed to Transport Standards
  - Dual pilot IFR/Flight into known icing/Flight >50nm over water.
  - Transport and Normal Category Performance

Concurrent FAA Type Certification & EASA Type Validation underway

Certification Basis: FAR25 + FAR29 + TILTROTOR
Many Applications …

Offshore

Corporate/VIP

Military

High Priority Air transport (Air Medical)
Available Tiltrotor Interiors

Standard Utility

Executive

Standard Club

Air Medical
The BA609 Tiltrotor Concept Advantage

- Example: North Sea Off-Shore mission
- 9 PAX / 250 nm range
- @ about 500 km/h

VTOL

Airplane Mode

STOL

9 PAX @ 220 lbs
ISA Day

250 nm radius

Reserves
30 min plus
30 nm

Example: 9 PAX interiors

Design Speed-Altitude Envelope

Pressure Altitude ft

True Airspeed kn

Example: 9 PAX interiors

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Corporate Market Segment
Total Trip Times

Office-to-Office time in hours

Tiltrotor travel provides:
Increased Security/Privacy
Convenience
Speed
Flexibility

No quicker way to travel between 50 and 500 miles

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Speed and Range allow unique Operational Flexibility

BA609 Saves Time; Increases Operational Flexibility
Modern Flight Deck - Allowing Integrated operations
BA609 Tiltrotor Testing
The Dual-site flight testing

- 5000 miles, 7 hour difference
- Challenges: coordination, data sharing, systems integration
- Opportunities: company experiences, joint effort, “double daytime” productivity

Arlington, USA
A/C 1

Cameri, Italy
A/C 2
AC1, Arlington TX, USA
170 flight hrs + 131 hrs ground run
25000 feet altitude
310 knots true airspeed
3+ g’s
Sideward/Rearward to 35 kts

AC2, Cameri AFB, Italy
34 flight hrs + 33 hrs ground run
12000 feet altitude
290 knots true airspeed
2 g’s
• Data says – “Quietest 10,000+ lb vertical lift A/C fly-by”

609 is 8 dB Quieter than S-76

609 is 10 dB Quieter than King Air

Human Ear Perceives 10 dB as “Twice as Loud”
BA609 Tiltrotor Development
Concluding Remarks

- The BA609 -world’s first commercial based tiltrotor- is flying well in USA and ITALY

- Customer focus is key to success
  - Unprecedented speed and range compared to rotorcraft
  - Smooth and quiet ride
  - Safe and easy to fly
  - Transport category performance

- Dual Site Partnership - Unique Regulatory Cert. Challenge

- BA609 development program is progressing toward certification

- Transportation Infrastructure will pace tiltrotor realizing its maximum potential for customers
BA609 Tiltrotor: World’s fastest civil VTOL aircraft

Ready to satisfy customers!
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BA609 Cockpit Vibration

Questions?