



# AVRO RJ85 AIRTANKER

THE FUTURE GENERATION IN AERIAL FIREFIGHTING





# THE FUTURE GENERATION

## PERFORMANCE & SAFETY THROUGH ADVANCED TECHNOLOGY

### ENGINES

Advanced, fuel efficient Textron Lycoming LF507-IF engines producing 7,000 lbs of thrust each.

### AIRCRAFT SYSTEMS

- Electronic Flight Instrument System (EFIS)
- Electronic Primary Engine Displays (PED)
- Full Authority Digital Electronic Control (FADEC) for optimum engine performance, power and fuel efficiency
- Enhanced Ground Proximity Warning System (EGPWS)
- Traffic and Collision Avoidance System (TCAS II)
- Auto-pilot and Flight Director with dual fully integrated Flight Management System (FMS)

### MISSION PROFILE

The RJ85 Airtanker provides increased zero fuel weight (ZFW) and Maximum Gross Takeoff weight (MGTO) capability to ensure payload capacity up to 12,253 litres and a customer preferred fuel endurance requirement of 3.5 hours are achieved.

### RETARDANT DELIVERY SYSTEM

The Conair RJ85 Airtanker employs a computer-controlled system that offers unlimited flow rate combinations selected by the flight crew. Its 3,100 US gallon capacity provides flexibility in retardant line lengths and coverage levels. Designed for

performance and delivering retardant, foam or water, the constant flow system produces excellent drop results - including a continuous and uniform drop pattern with no overlapping or gaps.

- Meets U.S. Forest Service Inter-Agency Airtanker Board (IAB) delivery system requirements
- Excellent drop pattern characteristics and canopy penetration
- Constant flow, computer controlled tank design with single point reloading
- Flight deck tank quantity indicator
- Simple flight deck selector for tank arming and drop selection
- Independent emergency drop selector within easy reach of either pilot

## EXCELLENT AIRTANKER PERFORMANCE

Four engine reliability providing excellent short field performance along with multiple system redundancy. The RJ85 provides excellent low speed and high speed performance making this aircraft an ideal airtanker in any terrain. To the airtanker operator, this means fire fighting excellence.

- True airspeeds up to 425 knots
- Quick response on initial dispatches and turn arounds (single point refueling and retardant loading)
- Strong performance at the fire with its excellent manoeuvrability, high rate of climb and turning performance
- Excellent slow speed flight characteristics





Conair and Field Air introduce the BAe Systems Avro RJ85 Airtanker to Australia, the latest development in aerial suppression products and services. The Avro RJ85 is the pinnacle of aerial firefighting tools today and Conair's unique design has put the Avro RJ85 Airtanker in a class of its own.

### GO ANYWHERE

- Certified for use on unimproved (unpaved) airports
- On-board APU - self sufficient for field operations
- All weather capable for positioning flights

### STRONG AND DEPENDABLE

With its rugged design and proven dependability in a variety of operational environments, the RJ85 makes an ideal airtanker. Developed from BAe's decades of experience with the 146 Series, the RJ85 Airtanker is strong and dependable.

- Numerous system redundancies for dispatch dependability
- Maintenance and Diagnostic System to aid in quick troubleshooting
- A fully OEM supported airtanker

### OPERATIONAL SERVICE LIFE

The airframe life of the RJ85 Airtanker is qualified via damage tolerance analysis which includes flight loads monitoring. As with all Conair's airtanker certifications, the fatigue impact of the special mission is qualified by data acquisition and approved analysis methodologies compatible with OEM Certification.

Built between 1992 and 2002, significant modern improvements have been made to the Avro RJ85 over earlier models. Conair's next generation airtanker program is highlighted through their modern RJ85 airframe, Conair's in-house designed and certified retardant delivery system, significant aircraft weight reduction, SgS advisory system, avionics upgrades and operational loads monitoring and certification.

### MAXIMIZED SAFETY

The RJ85's 4 engine redundancy delivering excellent performance capabilities ensure that safe performance is always achievable, even in demanding conditions of high altitude and hot temperatures.

### UNPRECEDENTED TRAINING POSSIBILITIES

Another unique, key safety feature for RJ85 Airtanker operators is that Class C and D simulators are available throughout the world for optimal pilot training. All aircraft type training, including all emergency procedures, can be conducted in the RJ85 simulator.

### OTHER SAFETY FEATURES

- Fully air conditioned for pilot comfort and fatigue minimization
- Excellent visibility with wrap-around cockpit windows
- EGPWS and TCAS adapted for visual firefighting operations
- Cockpit Voice Recorder (CVR) and Flight Data Recorder (FDR)
- Weather radar
- Flight loads monitoring via state-of-art OLM system
- Flight simulator enables post-mission operations assessment and safety debriefings using OLM



Protecting Life and Property



## SPECIFICATIONS

### AIRCRAFT SPECIFICATIONS

Maximum Take-off Weight:	97,000 lbs (43,998 kg)
Maximum Zero Fuel Weight:	79,000 lbs (35,833 kg)
Maximum Landing Weight:	85,000 lbs (38,555 kg)
Wingspan:	86 feet 5 inches (26.34 metres)
Overall Length:	93 feet 10 inches (28.6 metres)
Tail Height:	28 feet 2 inches (8.59 metres)

### AIRCRAFT PERFORMANCE

Cruise Speed Loaded:	380 knots (703 kph) @ 18,000 ASL*
Loaded:	355 knots (657 kph) @ 12,500 ASL*
Drop Speed:	125 knots (231 kph)

\*ASL = Above Sea Level

### DELIVERY SYSTEM SPECIFICATIONS

Retardant/Water Payload:	27,000 lbs (12,246 kg)
Tank Capacity (Retardant):	3,000 US gallons (11,355 litres)
(Water):	3,237 US gallons (12,253 litres)



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