

# Specifications and Summary

## Challenger 300



**June - 2006 Challenger 300**  
**S/N - 20097**





PRELIMINARY SPECIFICATION

# June - 2006 Challenger 300

## S/N 20097

**TOTAL TIME:**

<b>TTAF:</b>	New		
<b>LANDINGS:</b>	New		
<b>ENGINES:</b>	Honeywell AS907	<b>#1</b>	<b>#2</b>
<b>SNEW:</b>		New	New
<b>CYCLES:</b>		New	New
<b>SERIAL NUMBER:</b>		TBD	TBD
<b>APU:</b>	AlliedSignal GTCP-36-150BD		
<b>SNEW:</b>		New	
<b>SERIAL NUMBER:</b>		TBD	

**AVIONICS:** *(Collins Pro Line 21 4-Tube EFIS)*

<u>COMMUNICATIONS &amp; NAVIGATION</u>	<u>STANDARD QUANTITY</u>
VHF Communications Radio	2
Mode S Transponder	2
Cockpit Audio Control Panel	2
Cockpit Audio Jack Panel	3
Cabin/Ground/Crew Audio Jack Panel	2
Cockpit Speakers	2
VOR/ILS/Marker Navigation	2
DME Transceiver	1
ADF Transceiver	1
GPS Receiver	1
Radio Interface Unit	2
<u>DISPLAYS / CORE ELEMENTS</u>	<u>STANDARD QUANTITY</u>
Integrated Avionics Processing Cabinet	1
Cockpit Display Unit	4
Clock	1
Integrated Standby Instrument	1
Display Selection Panel	2
Reversion Control Panel	1
<u>EICAS</u>	<u>STANDARD QUANTITY</u>
Data Concentrator Unit	1
Remote Data Concentrator	1
EICAS Control Panel	1
<u>FLIGHT CONTROL</u>	<u>STANDARD QUANTITY</u>
Automatic Flight Control Function	2
Flight Guidance Panel	1
Servos	3



**AVIONICS:** (Cont'd)

<u>FLIGHT MANAGEMENT</u>		<u>STANDARD QUANTITY</u>
FMS Function		1
<u>MAINTENANCE SYSTEM</u>		<u>STANDARD QUANTITY</u>
Maintenance Function		1
<u>RADIO ALTIMETER</u>		<u>STANDARD QUANTITY</u>
Radio Altimeter		1
Radio Altimeter Antenna		2
<u>RECORDING SYSTEMS</u>		<u>STANDARD QUANTITY</u>
Cockpit Voice Recorder		1
<u>SENSORS</u>		<u>STANDARD QUANTITY</u>
Air Data Computers		2
Pitot Probe		1
Pitot Static Probes		2
Attitude Heading Reference Units		2
Flux Detectors		2
Standby Compass		1
Enhanced GPWS		1
Static Ports		2
<u>TCAS</u>		<u>STANDARD QUANTITY</u>
TCAS II (Change 7.0) Receiver / Transmitter		1
<u>WEATHER RADAR</u>		<u>STANDARD QUANTITY</u>
14" Weather Radar Transmitter / Receiver with Dual Scan		1
<u>OTHERS</u>		<u>STANDARD QUANTITY</u>
Stall Computer		1
Stick Shaker		2
Stick Pusher		1
AOA Vanes		2
Emergency Locator Transmitter (ELT)		1

**AVIALABLE OPTIONS:**

- |  |   |
|--|---|
| 4 Floor Plans to choose from                     | Data Link with Weather Maps             |
| Third VHF  | Third Audio System                      |
| Dual HF Communications with SELCAL               | Metric Refuel / Defuel System           |
| Flight Data Recorder                             | Digital Voice Checklist (DVC)           |
| Second Automatic Direction Finder (ADF)          | Lightning Detection System              |
| Second Global Positioning System (GPS)           | Second Flight Management System (FMS)   |
| Second Distance Measuring Equipment (DME)        | Enhanced Weather Radar (exchange)       |
| Single FMS V-Speed                               | Dual FMS V-Speed                        |
| 3-D Flight Map Plan                              | Lower TCAS Directional Antenna          |
| Foreign Certification                            | Hydraulic Motor-driven Generator (HMDG) |
| Over-water Flight Kit                            | Rechargeable Crew Flashlights – Dual    |
| Lighted Control Wheel Chart Holders (2 each)     | Smoking Aircraft Configuration          |
| Enhanced Ground Proximity Warning System (EGPWS) | Standby Instruments                     |



**AVAILABLE OPTIONS (Cont'd):**

- |  |  |
|--|--|
| Cockpit Writing Tables                       | Rain Canopy (loose equipment)                    |
| In-flight Mapping System Additional Software | Airshow 4000 Next-Generation In-flight Mapping   |
| Airshow 4000 Next-Generation w/ Multi-Media  | Airshow 4000 Next-Generation w/ Network          |
| Cabin Business Solution                      | Ladder Installation                              |
| Exterior Door Locking Package                | Floor Accent Lighting                            |
| 18-inch Flat Screen Monitor Upgrade (2 each) | Second DVD/CD Player                             |
| Coffee Maker (consumer product)              | Coffee Maker (aircraft-certified)                |
| Espresso Machine (consumer product)          | Espresso Machine (aircraft-certified)            |
| 3 Crystal Patterns to choose from            | 3 China Patterns to choose from                  |
| 3 Flatware Patterns to choose from           | Espresso Cups and Saucers                        |
| Split Base Paint                             | Inner Gear Doors Base Paint                      |
| Country Flag                                 | Service Panel Lighting                           |
| Logo Lighting                                | Wing Tip Strobe Lights                           |
| Pulsating Main Landing Lights                | Signature Series Trim Package (3 to choose from) |
| Premium Carpet Package                       | Premium Plating Package                          |
| Real Wood Vaneer                             | 16-G Belted Toilet Seat                          |
| Recliner Leg Rests on Cabin Seat             | Loose Equipment 16-G Divan                       |
| Loose Equipment Passenger Seats              | Mid-Cabin Curtain                                |
| Partition with Sliding Door                  | Deluxe Right-hand Forward Galley                 |
| Right-hand Aft Pyramid Cabinet               | Deluxe Right-hand Forward Galley w/ Sink         |
| Dado Storage Boxes                           | Additional Baggage Shelf                         |
| Deluxe Baggage                               | Seat Welting                                     |

**WEIGHTS:**

<b>MAX RAMP WEIGHT:</b> 39,000 lbs.	<b>MAX TAKEOFF:</b> 38,850 lbs.	<b>MAX LANDING:</b> 33,750 lbs.
<b>MAX ZERO FUEL:</b> 27,000 lbs.	<b>B.O.W. WEIGHT:</b> 23,500 lbs.	

**MAINTENANCE:**

- MSG-3

**DELIVERY / WARRANTY:**

Estimated "Green" Delivery / Certification Date	<b>DECEMBER 2005</b>
Estimated Completed Aircraft Delivery Date	<b>JUNE 2006</b>

<i>Description</i>	<i>Duration</i>	<i>Expiration Date</i>
Primary/Secondary Structures	10 Years / 10,000 Hours	
Airframe	5 Years / 5,000 Hours	
Standard Avionics	5 Years / 5,000 Hours	
Engines	5 Years / 3,000 Hours	
APU	5 Years / 3,000 Hours	
Paint & Interior	2 Years / 2,000 Hours	



**INTERIOR:**

Buyer must specify interior options by June 15, 2005.

**EXTERIOR:**

Buyer can specify and select 1 base color and 2 stripe colors.

**NOTES:**

- ◆ Options and Interior selections must be made no later than June 15, 2005.

**ASKING PRICE:**

**\$ Make Offer**

*This aircraft is being brokered by Guardian Jet, LLC. Prospective purchasers are encouraged to conduct their own independent pre-purchase inspection as Guardian Jet, LLC makes no representations as to the airworthiness of the aircraft or the accuracy of the above information. Specifications subject to verification upon inspection. Aircraft subject to prior sale.*

**05232005/MM**

# Challenger 300

## **EXECUTIVE SUMMARY**

The Challenger 300 was announced at the 1998 NBAA Convention as a completely new aircraft, filling the gap in Bombardier's line between the Lear 60 and the Challenger 604. Designed from the ground up with ease of maintenance in mind, the aircraft has been designed as a Maintenance Steering Group 3 (MSG-3) aircraft. MSG-3's goal is to eliminate calendar based inspections resulting in task based "On-condition" inspections of maintenance activities and components. Bombardier projects maintenance costs to be in the neighborhood of a Hawker 800XP, albeit with super-midsize jet amenities. The Challenger 300 features a large "heavy-iron" cabin cross-section that can fly eight passengers 3,100 nautical miles at .80 mach with NBAA IFR reserves.

## **FLIGHT DECK TECHNOLOGY**

The Challenger 300 features the Rockwell Collins Pro Line 21 avionics suite. The instrument panel contains 4 12-by-10 inch LCD's making them the largest Pro Line 21 display screens yet installed in any business aircraft. The standard avionics package includes dual digital Pro Line 21 VHF com and nav radios, dual transponders, dual attitude heading reference system (AHRS), RVSM-compliant digital air data computers, a single FMS-5000 flight management system, a solid state weather radar, GPS receiver, DME transceiver, ADF radio, and a radio altimeter. Also standard is a Collins TCAS II traffic avoidance system, a Honeywell Mk VIII EGPWS, and a cockpit voice recorder.

Options include Aero-I Satcom, single or dual HF radios, turbulence detection weather radar, lightning sensor, second ADF, DME, GPS and FMS-5000, and FMS airport and cruise performance computations.

## **POWER**

The Challenger 300 is powered by two Honeywell AS907 medium-bypass turbofans flat rated at 6,826 lbs. of thrust each at ISA +15C. Inspection interval on the engines is "on condition". The AS907 has been designed for "on-wing" maintenance. A major periodic inspection is conducted every 7,000 hours on-wing and a core zone is completed by boroscope on-wing every 8,000 hours.

## **PASSENGER ENVIRONMENT**

The Challenger 300 is typically configured with fore and aft, four seat club sections. Three of the four pairs of facing chairs are fully berthable. The aft right seat has limited motion to provide for unrestricted access to the over-wing emergency exit door. A three-place divan is offered in place of any of the three fully berthable chair pairs. Cabin overhead panels feature 10,000 hour design life LED lights. Each pair of chairs has a folding worktable with AC outlet, overhead passenger service units with reading lights, air outlets, and emergency oxygen masks. The aft cabin has a fully enclosed lavatory with extra storage for carry-on baggage. A 106 cu. Ft. external access baggage compartment is fully accessible in flight through an aft door in the lavatory.



# Challenger 300

## GENERAL SPECIFICATIONS – PERFORMANCE – DIMENSIONS

### GENERAL

#### Capacity

Crew 2  
Typical Seating 8 to 9 (Double Club Configuration)

#### Engines

Manufacturer / Model Honeywell AS907 Turbofans  
Thrust 6,826 pounds (30.4 kN)  
Flat-Rating ISA +15° C (86° F)

#### Avionics

+ Collins Pro Line 21 System with four LCD displays  
+ EICAS  
+ Maintenance Diagnostics  
+ EGPWS / TCAS II

### PERFORMANCE

Maximum Range 3,100 nm / 3,567 sm / 5,741 km  
(8 passengers, 2 crew, ISA, maximum fuel and NBAA IFR reserves)  
High-speed Cruise Mach 0.82 / 470 ktas / 541 mph / 870 km/h  
Typical Cruise Speed Mach 0.80 / 459 ktas / 528 mph / 850 km/h  
Mmo (Maximum Operating Mach Number) Mach 0.83  
Balanced Field Length (SL, ISA, MGTOW) 4,750 ft / 1,448 m  
Takeoff Distance (SL, ISA) 4,720 ft  
Landing Distance (SL, MLW) 2,600 ft / 793 m  
Initial Cruise Altitude 41,000 ft / 12,497 m  
Maximum Cruise Altitude 45,000 ft / 13,716 m

### WEIGHTS

A. Maximum Ramp Weight 39,000 lb / 17,690 kg  
B. Maximum Takeoff Weight 38,850 lb / 17,622 kg  
C. Maximum Landing Weight 33,750 lb / 15,309 kg  
D. Maximum Zero Fuel Weight 27,000 lb / 12,247 kg  
E. Basic Operating Weight 23,500 lb / 10,659 kg  
F. Maximum Fuel Weight 14,150 lb / 6,418 kg  
Maximum Payload (D – E) 2,750 lb / 1,247 kg  
Payload with Full Fuel (A – E – F) 1,200 lb / 544 kg  
Fuel with Maximum Payload 12,550 lb / 5,693 kg

# Challenger 300

## GENERAL SPECIFICATIONS – PERFORMANCE – DIMENSIONS

**NOISE LEVELS**

Takeoff Noise (EPNdB)	75.5*
Sideline Noise (EPNdB)	87.6*
Approach Noise (EPNdb)	89.6*

\*Meets FAR Part 36 Stage 3

**INTERIOR**

Cabin Length	28.6 ft / 8.72 m
Cabin Height	6.08 ft / 1.85 m
Cabin Width (Centerline)	7.17 ft / 2.19 m
Cabin Width (Floorline)	5.08 ft / 1.55 m
Floor Area (Excluding Cockpit)	146 cu ft / 13.56 cu m
Cabin Volume	860 cu ft / 24.35 cu m
Baggage Compartment Volume	169 cu ft / 4.8 cu m

**EXTERIOR**

Length	68.63 ft / 20.92 m
Height	20.33 ft / 6.20 m
Wingspan	63.84 ft / 19.46 m
Wingspan Area (Basic)	522 cu ft / 48.50 m

**VARIABLE COSTS (Hourly)**

Fuel Expense	\$931.09
Fuel Consumption (gal/hr)	262
Maintenance Labor Expense	\$72.30
Parts Expense	\$78.00
Misc. Trip Expense	\$289.51
Total Variable Costs	\$1,370.90

**FIXED COSTS (Annual)**

Hull Insurance	\$60,690
Liability Insurance (200)	\$42,600
Hull Insurance per \$100	\$0.34
Liability Insurance per \$M	\$213
Maintenance Software Programs	\$7,500
Misc. Services	\$9,865

(SOURCE: COMPAIR – ARG/US Report)

# Aircraft Photographs





# Aircraft Layouts