

G500 and G600 Program Update

July, 2017



May 05, 2017 Third G600 Joining Flight Test Program

Gulfstream Proprietary Information

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G500 and G600 Transforming the Industry



Setting a benchmark in business aviation technology
Business and Commercial Aviation – October 2016

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The All-New G500 and G600

- Unmatched high-speed capability
- Exceptional efficiency
- Large, spacious cabin
- Industry-leading cabin environment
- Unrivaled safety enhancing technology



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G500 and G600 Programs Ahead of Schedule

- G500 Schedule

– Preliminary Design	4Q11	✓
– Critical Design Review	4Q12	✓
– Test Article 1 Build	2014	✓
– First Flight	2015	✓
– Certification	2017	
– Entry Into Service	2018	<i>Tracking to 4Q17</i>

- G600 Schedule

– Preliminary Design	4Q13	✓
– Critical Design Review	4Q14	✓
– Test Article 1 Build	2016	✓
– First Flight	2017 2016	✓ <i>Ahead of schedule</i>
– Certification	2018	
– Entry Into Service	2019	<i>Tracking to 4Q18</i>

Steady Progress Towards Entry-Into-Service

- G500 and G600 Pratt & Whitney Canada engines certified
- G500 flight test program progressing toward certification
 - Five aircraft currently flying
- G600 Flight test program has commenced ahead of schedule
 - Four aircraft currently flying
 - Fifth aircraft in Completions Center for outfitting of interior for flight test
- Extensive work accomplished to ensure a smooth entry into service
 - Training
 - Publications
 - Maintenance programs
 - Spare parts inventory

Leveraging the Success of the G650

- G650 systems serve as the baseline for the G500 and G600
 - Hydraulic, Electrical Power Generation, Secondary Power, Avionics, Auxiliary Power Unit, Air Data System, Satcom/VHF/NavCom, Cabin Management, Cabin Acoustic Treatment
- Common Architecture / Design
 - Fly-by-wire and Actuation
 - Cabin Pressurization & Control (same low cabin altitude as G650)
 - Landing Gear Control
 - Aircraft Health and Trend Monitoring System (AHTMS)
 - Aerodynamic and structural design philosophy
- G650 fleet experience has paved the way for the G500 and G600
 - Over 242 aircraft in-service
 - Over 185,000 fleet flying hours

G500 and G600 Commonality

- The G500 and G600 have significant commonality
 - 73% total parts commonality
 - Engines, flight deck, major systems, fuselage, doors, windows, vertical tail and cabin components

Commonality will accelerate aircraft system maturity

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Aviation Week's 60th Laureate Award

- Earned for Active Sidestick development and integration



“In BCA’s opinion, they provide a significant improvement in situational awareness from older passive sidesticks.”

Fred George, Business & Commercial Aviation

Dedicated G500/G600 Systems Test Labs

- Unprecedented lab testing of all aircraft systems to promote accelerated aircraft maturity
 - System labs began full-scale testing before flight testing started to eliminate potential issues
 - Labs continue to support flight testing to verify and correct issues found in flight
- Multiple lab environments are in use
 - Immersive Simulation Environment (ISE) for control law development
 - System Integration Bench (SIB) for pre-integration of the Data Concentration Network
 - Cockpit Integration Test Facility (ITF)
 - Major avionics systems, including flight deck, electrical power, FADEC, systems control and cabin systems
 - Cabin Integration Test Facility (ITF) Cabin Systems Integration
 - Iron Bird for major mechanical systems, flight controls, and hydraulics integration

Over 60,000+ Hours of Lab Testing Already Complete



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Structural Test Program

Structural test lab facilities used to ensure strength & long term robustness of airframe and components

- Three full-size structural test articles used in program
 - G500 static test article limit & ultimate load testing complete
 - G500 fatigue test article
 - Testing to three airframe lifetimes of operation underway
 - G600 static test article limit & ultimate load testing complete
- Testing of multiple structural / control components and assemblies in work



Structural test program is on track

G500 / G600 Added Focus on Cabin Reliability

Dedicated cabin Integration Test Facilities to validate cabin functions long before Entry-Into-Service

G500 Cabin Integration Test Facility

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G500 Cabin Interior Flight Testing

- First production aircraft has been outfitted with a full interior
- Dedicated flight test program to validate interior design
 - Focus on form, fit, function, noise, comfort and passenger interface
- Missions will include:
 - Long, cold-soak missions
 - Cold and hot weather testing
 - Overnight missions
 - Turbulence



Outfitted G500 Test Aircraft Will Accelerate Cabin Maturity



G500 Cabin Flight Test Aircraft

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G600 Cabin Showcase

A full-scale cabin mockup has generated numerous customer driven design changes that will be incorporated on first deliveries



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G500 Simulator at FlightSafety Savannah

- Next-generation state-of-the-art simulator operational at the Savannah learning center
- First time a full-motion simulator was operational prior to aircraft first flight



G500 Flight Test Program Surpasses 3,000 Hours

- Five aircraft have accumulated over 780 flights and 3,000 hours
- Flown up to 53,000 feet and Mach 0.995
- Reliability of test aircraft has surpassed expectations
- Outstanding handling qualities and performance



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Longest Duration G500 Flight – 10 hours, 6 minutes



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G600 Flight Test Activities Ahead of Schedule

- G600 first flight completed December 17, 2016
- In excess of 570 hours in less than six months
- Flown up to 52,000 feet and Mach 0.99
- Longest flight of over 13 hours



June 21, 2017 Fourth G600 Joining Flight Test Program

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G500 / G600 Tracking Ahead of Schedule:



G500

Certification 2017

Entry Into Service 2017

G600

Certification 2018

Entry Into Service 2018

December 17, 2016 First Flight of the G600 with G500 in chase

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