Gulfstream G280
Executive Product Overview
The New Super Midsize Gulfstream G280

Most comfortable cabin in class
• Longer and more spacious cabin
• In-flight access to baggage compartment
• Best overall cabin environment
• First in class vacuum lavatory

Best performance in class
• 3,600 nm (6,667 km) at Mach 0.80
• Maximum cruise at Mach 0.85
• 4,750 ft (1,448 m) takeoff distance
• Initial cruise altitude 43,000 ft (13,106 m)
The New Super Midsize Gulfstream G280

State of the art technology and systems with the most advanced flight deck available today

Most advanced cockpit and systems
- PlaneView280™ flight deck
- Optional EVS II, HUD II and SV-PFD
- Standard auto-throttles
- New brake-by-wire system with auto-braking

Outstanding value
- Enhancements to improve dispatch reliability, maintainability and availability
- Excellent fuel efficiency for low operating costs
- Backed by Gulfstream’s product support network
**G280 Design Features**

- System enhancements for improved reliability and maintainability
- Wing bleed air anti-ice
- New T-tail
- Fly-by-wire spoilers & rudder
- Honeywell HTF7250G enhanced engines
- In flight access to baggage compartment
- Brake-by-wire with auto-braking
- New advanced high speed wing
- PlaneView280™ advanced flight deck
- 19 large cabin windows
- Simple high lift system
- Increased cabin length with larger lavatory and storage areas
- Lower cabin altitude
- Wing bleed air

**Best in class cabin, performance and flight deck**
G280 EIS Status

- Multiple Customer Aircraft in Service
  - 10,000+ Hours and 5,900+ Cycles on fleet*
  - Operators extremely pleased with the aircraft
  - Multiple city pair records already achieved

* As of March 2014
Meeting and Exceeding Customer Expectations

- Demonstrated 3,600 nm range at M0.80 with 4 passengers
  - 200 nm (5.9%) more range that originally announced
  - Additional range obtained through better fuel efficiency
  - Enables non-stop flight from London to New York

- Certified 4,750 ft balanced field length at maximum takeoff weight
  - 210 ft (4.2%) shorter than originally announced
  - Enables longer range from shorter airfields

- Demonstrated time to climb to FL430 from maximum takeoff weight

- Exceeds environmental requirements
  - 15.8 dB quieter than stage 4
  - Nox is 25% below CAEP/6

- Meeting empty weight specifications

NBAA IFR theoretical range. Actual performance will be affected by ATC routing, operating speed, weather, outfitting options and other factors. Field performance at sea level, ISA day, dry runway conditions.
Gulfstream G280 Cabin Highlights

- Large comfortable cabin
  - Large cabin volume with 935 ft\(^3\) (26.5 m\(^3\))
  - Long cabin length at 25 ft 10 in (7.87 m)
  - Longest seating area in its class
- Large baggage compartment
  - In-flight access
- Excellent cabin environment
  - Industry leading cabin noise levels
  - Low cabin altitude with 100% fresh air
  - 19 large windows
- New interior design and controls
- Gulfstream designed cabin management system and audio / video distribution system
  - High Definition (HD) content
  - Advanced cabin systems reliability

The G280 provides a large cabin for domestic or international executive travel.
G280 Floor Plan Benefits

- Large galley with more storage
- Long cabin seating area with additional storage
- Large lavatory and improved storage area
- In-Flight Access to baggage compartment
G280 Select Interiors

The Executive
- Seating for 8
- Berthing for 4

The Universal
- Seating for 9
- Berthing for 4

The Hallmark
- Seating for 10
- Berthing for 4
G280 Cross Section Dimensions

Unfinished

- 6’ 3” (1.90 m)
- 5’ 8” (1.72 m)
- 7’ 2” (2.18 m)

Finished

- 6’ 1” (1.85 m)
- 5’ 5” (1.65 m)
- 21” (0.53 m)
- 6’ 11” (2.10 m)
Clean, Modern Personal Service Units (PSU)

- Up-wash and Down-wash Lighting with temperature gradient control
- Controls hidden from view when standing
- Cabin service modules
  - Air vent
  - Reading light
- Capacitive touch controls for:
  - Reading light
  - Table light
  - Attendant call
New Seats and VIP Controls

• Seats
  – Modern styling details
  – 25” (63 cm) Overall width, 21” (53 cm) between arms
  – Telescoping headrest with optional flexible wings
  – Articulating seat pan for full flat berthing
  – Optional recliner style leg rest

• VIP controls
  – Passenger control unit
  – Iridium handset
  – Headphone port and controls
  – USB charging port
  – HDMI Port for Media Input
  – 115V Electric power outlet
  – Miscellaneous storage
New Three-place Divan

• Designed for better comfort
• 6 ft 8 in (2 m) long between armrests
• 4 position base cushion for occupant sitting comfort
  – Locks every inch for the first 3 inches, then extends to full berthing position
  – 31” (79 cm) width for full berth position
  – No filler cushions required
• Life raft storage under divan
• Large end cabinets for storage
Largest Vanity and Lavatory with Enhanced Styling

- Over 8 ft\(^2\) (0.74 m\(^2\)) of actual floor space
- Vacuum toilet with overboard venting system
- Large contemporary sink with hot and cold water
- Lighted vanity mirror mounted to an articulating arm on the aft bulkhead
- Two windows
- Full length closet
- 10 gallon (38 L) conformal water tank
## Vacuum Lavatory Advantage

<table>
<thead>
<tr>
<th>Vacuum Lavatory</th>
<th>Chemical Lavatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses fresh water rinse</td>
<td>Flush water is re-circulated, contaminated blue water, from the waste tank</td>
</tr>
<tr>
<td>Removes waste to an external tank</td>
<td>Waste is stored in the lavatory</td>
</tr>
<tr>
<td>Service only required on an “as needed” basis”</td>
<td>Blue water is staining, corrosive and requires frequent servicing</td>
</tr>
<tr>
<td>Bowl area is independently vented to expel odors outside aircraft</td>
<td>Constant blue water smell, regardless of usage, throughout cabin</td>
</tr>
<tr>
<td>Significantly increases waste carrying capability</td>
<td>Limited waste storage</td>
</tr>
</tbody>
</table>
G280 Best in Class Storage

- Total storage of 154 ft³ (4.36 m³)
- Large and spacious baggage compartment
  - Usable baggage volume 120 ft³ (3.40 m³)
- Additional internal storage areas 34 ft³ (0.96 m³)
  - Forward cabin closet
  - Lavatory closet
  - Divan end cabinets

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Excellent Cabin Environment

- Low cabin altitude and 100% fresh air
  - 7,000 ft (2,130 m) cabin altitude at FL450
  - 6,000 ft (1,828 m) cabin altitude at FL410
  - Reduces fatigue, increase mental alertness and enhances productivity

- Industry leading cabin sound levels
  - Provides a more comfortable environment for conversation or relaxing
  - Quieter engine and system noise

- Advanced environmental control system
  - 100% fresh air
  - Quieter air distribution
  - Improved air flow control to enhance comfort
Gulfstream’s Cabin Management System (GCMS)

- Gulfstream designed and controlled hardware and software
  - Intelligent power controllers and maintenance data server
- Digitally controlled cabin system network
  - Cabin systems
  - Cabin audio and video components
- Passenger Control Units loaded on an iPod Touch
  - Floor plan activated on the aircraft
  - Intuitive controls for lighting, temperature, entertainment equipment, attendant call, etc.
Gulfstream’s Audio / Video Distribution System

- Cabin entertainment
  - Dual Blu-ray / DVD / CD player with USB ports and dual 160 GB media servers
  - Single media input panel allows input to AVDS
    • Selected as an input source on the Passenger Control Unit and galley touch-screen
    • Option for additional input panels
- Standard High Definition (HD) monitors in the cabin
  - 19” (48 cm) HD LCD forward bulkhead monitor
  - Optional 12.1” (31 cm) HD or 9” (23 cm) HD-compatible LCD personal monitors (side ledge plug-in)
- Fiber optic cabling with no data compression or signal latency
- Gulfstream designed CabinView Passenger Flight Information System
Gulfstream PlaneView280™ Flight Deck

- Most advanced flight deck in its class, based on Rockwell Collins ProLine Fusion
- Designed for improved situational awareness and safety
- Common vision for Cockpit Resource Management (CRM) across the Gulfstream product line
Gulfstream PlaneView280™ Flight Deck

- Three large 15 inch (38 cm) adaptive LCD displays
- Highly interactive controls and interfaces
- Uses advanced graphics and synoptics for better situational awareness
- Designed for growth and future technologies

Maintains Gulfstream leadership in advanced flight deck technology
Standard PlaneView280™ Features

- New Standby Multifunction Controller (SMC)
- Dual Gulfstream signature Cursor Control Devices (CCD)
- Two PlaneBook subscriptions
- Dual auto-throttle system
- Automatic Descent Mode (ADM)
- WAAS / LPV approaches
- FANS 1/A, CPDLC
- Electronic charts on cockpit displays

Most technologically advanced flight deck with new levels of safety and situational awareness
Optional G280 Advanced Vision Systems

- Enhanced Vision System II (EVSII) / LCD Head-up Display (HUD II)
  - Significantly improves situational awareness and enhances safety in reduced visibility conditions (fog, haze, smoke, night time)
    - Provides independent verification of aircraft navigation systems
    - Allows earlier identification of runway and airport environment
    - Helps prevent Controlled Flight into Terrain (CFIT)
  - Enables approaches in reduced visibility to continue down to 100 ft above ground
  - Fully integrated with flight deck and LCD head up display (HUD II)
  - Builds on the experience of over 900 EVS installations in customer service

First OEM to receive both FAA and EASA approval for operational credit
Honeywell HTF7250G Engine

- High thrust fuel efficient engine
  - 7,624 lb (33.9 kN) to ISA+16.7°C with Auto Power Reserve (APR)
- 15.8 EPN dB below Stage 4 noise
- Reduced Emissions
  - NOx emissions 25% below CAEP 6 requirements
- Air turbine starter
- Full Authority Digital Engine Control (FADEC)
- Designed for ease of maintenance
  - Integral engine trend monitoring
  - On-condition MSG-3
- Based on a proven reliable engine
  - More than 1.5 million fleet hours

More thrust, reliable, maintainable and improved efficiency
G280 Performance Summary

- Longest range at the fastest cruise speed
  - 3,600 nm (6,667 km) at Mach 0.80
  - Best in class Mmo Mach 0.85
- Best-in-class fuel efficiency
  - 7 to 12% lower for a 2,500 nm / M0.80 mission
- High cruise altitudes
  - 43,000 ft (13,107 m) initial cruise altitude (ISA + 10°C)
  - 45,000 ft (13,716 m) maximum altitude
  - Fly above adverse weather and airline traffic
- Excellent climb performance
  - Time to climb to FL430 in 20 minutes
- Excellent takeoff and landing performance
  - 4,750 ft (1,448 m) balanced field length at maximum takeoff weight
  - 3,050 ft (930 m) landing distance at maximum landing weight

Theoretical performance based on the noted assumptions. Actual performance will be affected by ATC routing, operating speed, weather, outfitting options and other factors.
Longest Range at the Fastest Speeds

Range with 4 Passengers

Cruise Mach Number

NBAA IFR Range (nm)

NBAA IFR Range (km)

3,600 nm (6,667 km)

3,470 nm (6,426 km)

3,000 nm (5,556 km)

ISA Day, Typical BOW, 225 lb (102 kg) per Passenger
Theoretical performance based on the noted assumptions. Actual performance will be affected by ATC routing, operating speed, weather, outfitting options and other factors.
G280 Maximum Range Departing New York

Theoretical performance based on the noted assumptions. Actual performance will be affected by ATC routing, operating speed, weather, outfitting options and other factors.
G280 Maximum Range Departing London

**Assumptions**
- 4 Passengers and 2 Crew
- Cruise Speed as Indicated
- NBAA IFR Fuel Reserves
- 85% Annual Winds
- Great Circle Distance
- ISA Conditions

Theoretical performance based on the noted assumptions. Actual performance will be affected by ATC routing, operating speed, weather, outfitting options and other factors.

G280 is the only aircraft in its class that can reliably fly from London to New York.
## Excellent G280 Warranty

<table>
<thead>
<tr>
<th>Warranty Item</th>
<th>G280</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary and Secondary Structures</strong></td>
<td></td>
</tr>
<tr>
<td>(Doors, fairings, flight control surfaces, nacelles, etc.)</td>
<td>10 years / 10,000 hours</td>
</tr>
<tr>
<td></td>
<td>Labor 5 years / 3,000 hours</td>
</tr>
<tr>
<td><strong>Engine &amp; Engine Spares</strong></td>
<td></td>
</tr>
<tr>
<td>(Honeywell Warranty)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 years / 3,000 hrs</td>
</tr>
<tr>
<td><strong>Avionics and All Other Production Aircraft Components</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 years Parts and labor</td>
</tr>
<tr>
<td><strong>Completion</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 years Parts &amp; Labor</td>
</tr>
</tbody>
</table>

**Note:**
All warranties begin at outfitted delivery. Labor included if performed at Gulfstream or at a Gulfstream Authorized Warranty Repair Facility. See the G280 Product Specification for the terms and conditions of the G280 warranty.
## G280 Low Direct Operating Costs

<table>
<thead>
<tr>
<th>Preliminary Estimate</th>
<th>10 Year Avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel (at $6.00 per gallon)</td>
<td>$1,290</td>
</tr>
<tr>
<td>Maintenance Parts and Labor (at $90 per hour)</td>
<td>$231</td>
</tr>
<tr>
<td>Engine Maintenance (Honeywell MSP)</td>
<td>$511</td>
</tr>
<tr>
<td>APU (Honeywell MSP)</td>
<td>$45</td>
</tr>
<tr>
<td>Miscellaneous Flight Expenses</td>
<td>$496</td>
</tr>
<tr>
<td><strong>Total Cost Per Flight Hour</strong></td>
<td><strong>$2,573</strong></td>
</tr>
</tbody>
</table>

- Fuel burn calculated for a 1,000 nm stage length with NBAA IFR fuel reserves (no fuel tankering) at a typical BOW with 4 passenger
- G280 Maintenance labor and parts are from Gulfstream analysis
- Honeywell engine cost data is based on 2014 MSP rates
- APU maintenance costs are based on the 2014 Honeywell MSP rates
- Miscellaneous flight expenses are from Conklin & deDecker, Spring 2014 edition
- Fuel price is based on a nominal value, Spring 2014
- All costs are theoretical estimates based on assumptions noted
- Actual costs will vary by aircraft depending on operations, maintenance practices, environmental conditions and other factors.

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Large cabin, excellent performance, advanced systems, low operating cost
Gulfstream Service and Support Solutions

- 11 Company-owned service centers
- 4 Company-owned component repair facilities
- Worldwide support network
  - North and South America, Europe, Russia, India, Middle East, Africa, Asia and Australia
- Over $1.4B parts located worldwide
- 24-hour technical support
  - Over 150 Technical and Parts Sales Team Members
  - Over 60 worldwide Field Service Team Members
- Field and Airborne Service teams (FAST)
- Top Rated Product Support Network
  - #1 in 2013 Aviation International News Product Support Survey for 11 years
  - #1 in 2013 Professional Pilot Product Support Survey 13 out of the last 16 years
Benefits of Choosing Gulfstream

• Large product line to meet your specific transportation requirements
  – G280 is the premier aircraft in its class

• Best worldwide product support network

• Leader in advanced technology for enhanced safety

• Financially strong to continually invest in new products and services

• Over 55 years of experience

Gulfstream has the products, services and commitment to meet your transportation needs - Today
**Gulfstream G280 Summary**

- Longest, most comfortable cabin
- Most advanced flight deck and systems
- Longest range at fastest speeds
- Short takeoff distance
- Best-in-class fuel economy
- Environmentally efficient