



Gulfstream G-III Airborne Testbed



Calspan Gulfstream G-III



Flight Deck

Calspan has responded to the growing need for large scale testing of avionics systems by developing a testbed based on a Gulfstream G-III aircraft. This system is specifically designed to handle large Fire Control Radars, EO/IR sensors and heavy external stores. With more than 65 years of experience in airborne Research, Development, Test & Evaluation (RDT&E), Calspan has specifically modified and configured the airframe to support cost-effective flight testing of new airborne sensors and/or systems for manned and unmanned aircraft alike. Calspan's staff of experienced test pilots, engineers, technicians, and mechanics are ready to assist customers with the safe and efficient design, installation, and flight test of prototype airborne installations in the latest addition to the Calspan fleet of test aircraft.

Basic Airframe Equipment:

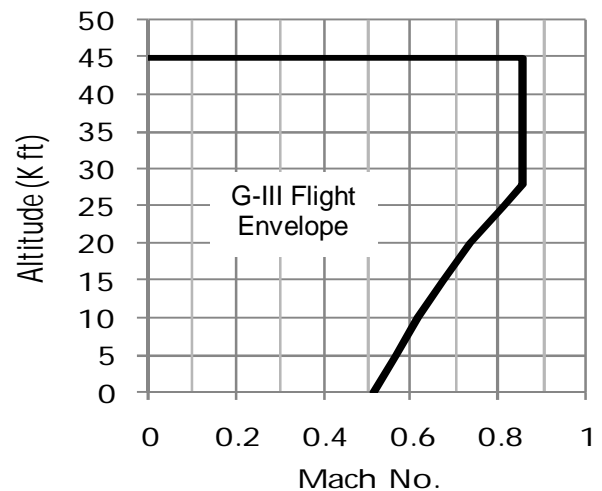
- Bendix EFS-10 Electronic Flight Instrumentation System (EFIS)
- Triple Collins VHF-22C Comm Radios w/ 8.33 MHz spacing
- Dual Bendix VNS-41 Nav Radios with FM Immunity
- Triple Honeywell Laser Inertial Reference System (IRS)
- Dual Global GNS-XLS Flight Management System (FMS)/Global Positioning System (GPS)
- Dual Sperry Air Data Computers
- Honeywell Traffic Collision Avoidance System (TCAS) II

Experimental Provisions:

- External stores
 - ⇒ Nominal 48 inch ground clearance from bottom of fuselage (38 inch minimum)
 - ⇒ 2,000 lb load carrying capability on centerline pylon
 - ⇒ Pylon wired and compatible with BRU-32, MAU-12, or MAU-40 ejector racks
- Universal radar mount in nose
 - ⇒ Accepts up to 40 inch diameter antenna
 - ⇒ Unique radome fabrication
- Electrical Power
 - ⇒ 65 KVA below 20,000 ft, 35 KVA above 20,000 ft
 - ⇒ 400 Hz and 60 Hz AC, 28 VDC
- Networking
 - ⇒ ARINC 429, ARINC 573, Mil-Std-1553, RS-232, Ethernet, USB, Serial
- Digital data recording
- Telemetry
 - ⇒ L-Band (including Freewave Data Link), S-band
- Cooling
 - ⇒ Up to 6,800 BTU/min
- Programmable Autopilot
- Available volume
 - ⇒ 1,345 ft³ in main cabin, 157 ft³ in aft equipment bay

Specifications:

- Engines: Rolls Royce Spey MK511-8 (11,400 lb thrust each)
- Weights:
 - Max Takeoff 69,700 lb
 - Max Zero Fuel 44,000 lb
 - Useful Load 30,700 lb
 - Fuel Capacity 28,300 lb
- Max Range: 3,400 NM
- Endurance: 7 hours



MAU-12 Ejector Rack

