



SMF – Arizona

Satellite Manufacturing Facility in Gilbert, AZ



Orbital's SMF in Gilbert, AZ

Orbital's Satellite Manufacturing Facility (SMF) in Gilbert, Arizona is one of the largest spacecraft Assembly, Integration and Test (AI&T) facilities in the United States. The 135,000 square foot facility is one of the most advanced of its kind, able to simultaneously accommodate multiple spacecraft from board-level manufacturing through full system integration and test, all under one roof and on the ground floor.

Completed in 2004, the facility is designed for efficient AI&T of highly reliable, but affordable spacecraft to 62 feet in length. To date, six spacecraft have been produced in this facility and successfully launched in support of missions for commercial imaging, space science, and military technology demonstration missions. A seventh spacecraft is in-process, and the company is also under contract for AI&T of the 81 next-generation satellites for the Iridium® personal communications constellation (Iridium NEXT) at the Arizona SMF.

Satellites Produced in the Arizona SMF:

- STREAK for the Defense Advanced Research Projects Agency, launched 9/22/05
- NFIRE for the Missile Defense Agency, launched 4/24/07
- C/NOFS for the U.S. Air Force, launched 4/16/08
- Fermi (formerly GLAST) for NASA, launched 6/11/08
- GeoEye-1 for GeoEye Inc, launched 9/6/08
- STSS-ATRR for the Missile Defense Agency, launched 5/5/09

Satellites Currently In-Process in the Arizona SMF:

- Landsat Data Continuity Mission for NASA and the U.S. Geological Service

Satellites Under Contract for Production in the Arizona SMF:

- Iridium NEXT (81 satellites) for Thales Alenia

QUICK FACTS:

Arizona SMF Features:

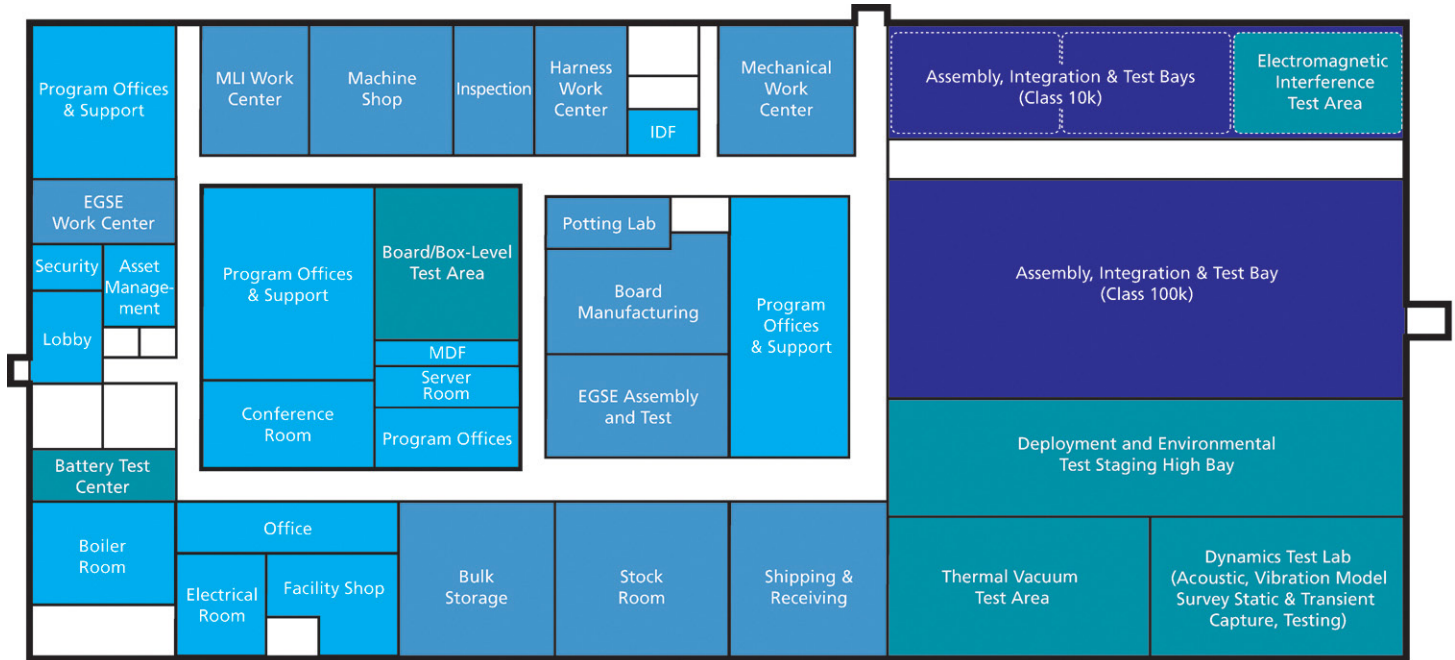
- Satellite Assembly, Integration, and Test Areas (25,600 sq ft)
 - Low-Bay, Class 100K (13,600 sq ft)
 - High-Bay, Class 100K (7200 sq ft)
 - Two Class 10K Clean Rooms (2400 sq ft each)
- Thermal Vacuum Test Facility with 20' x 15' Diameter Test Chamber
- Dynamics/Structural Test Lab
 - Dynamic Testing: Acoustics, Modal Survey, Vibration, and Static
 - Transient Capture: Shock, Separation, and Deployment
- Electromagnetic Interference/Compatibility (EMI/EMC) Test Anechoic Chamber: 17,101 cu ft
- Board and Subsystem-Level Manufacturing
- Multi-Layer Insulation Fabrication
- Wire Harness Assembly
- Manufacturing Machine Shop
- Multiple Program Office and Engineering Support Areas
- Security to TS/SCI
- Extensive Personnel Protection and Security Alarms



The GeoEye-1 commercial imaging satellite in Orbital's Arizona SMF in 2008

SMF – Arizona

Facility Layout



Assembly, Integration and Test Areas



Thermal Vacuum Test Chamber



AI&T Low-Bay (25 ft hook height)



Dynamics Test Lab (57 ft hook height)



High-Bay for Deployment and Environmental Test Staging (62 ft hook height)



27 x 30 x 21 ft EMI/EMC Test Chamber