National Aeronautics and Space Administration



# **MICHOUD** ASSEMBLY FACILITY

### Laboratories

The laboratories at MAF are uniquely equipped with the latest advanced equipment and skills for testing large structures, components, and full-scale hardware. These key technology laboratories offer a variety of support services from analytical chemistry, materialsand process testing, metallurgy, metrology and research and development.

## Full Service Materials and Process Laboratory

- AS9100 C Quality System
- ISO 17025 Compliant

#### **Analytical Chemistry**

- Material fingerprinting
- Failure analysis
- Material identification
- Receiving Acceptance testing

#### **Materials and Process Testing**

- Receiving Acceptance testing
- Physical testing
- Wet Chemistry
- Organic/inorganic process analysis
- Contamination identification
- Non-destructive evaluation

#### Metallurgy

- Failure analysis
- Microstructure evaluation
- Plating type and thickness
- Full Service Metrology Laboratory
- AS9100 C Quality System
- Compliant to ANSI Z540.1

#### **Calibration Capabilities:**

- Alternating and Direct Current
  - Low frequency to 1000v
  - Resistance from 0.001 ohm to 1 Tohm
- Dimensional
  - Angular, Basic hands tools
  - ID and OD length to 10 millionths up to 80 in.
  - Steel Tapes (unlimited circumference and linear) with laser measurement accuracy
- Mass, Force, Torque
  - Mass: micrograms up to 2000 lbs.
  - Force: up to 300,000 lbs. (load cells, dynamometers)
  - Torque: 2 in. lbs. up to 1000 ft. lbs.
- Pressure
  - Absolute through 20k PSI
- Thermodynamic
- Optical Tooling
  - Transits, levels, theodolites
- Gas Flow
  - Automated calibrations from 2 sccm to 80 cfm



National Aeronautics and Space Administration

Michoud Assembly Facility 13800 Old Gentilly Rd. New Orleans, LA 70129 http://maf.msfc.nasa.gov

www.nasa.gov



