

**RFI-KSC-NDE2012 Attachment 1:
NDE Laboratory Capabilities at Hangar N**

NDE Primary Lab Functions:

- Nondestructive Testing and Evaluation
- Non-intrusive / nondestructive testing of materials to determine integrity of structures, parts, components, and materials to include flight hardware and GSE
- Inspections aiding in the determination of types of material discontinuities and defects to include:
 - Service Induced - Introduced during operating cycle
 - Inherent - Introduced during the material processing
 - Processing - Introduced during the material production

Lab Equipment and NDE Functions:

- Radiographic Inspection
 - Film & Digital
 - Film Digitization
 - Computed Tomography
 - Computed Radiography
 - Laminography
 - X-ray fluorescence positive alloy identification
 - Robotic X-ray Test Cell
- Ultrasonic Inspection
 - A-scan
 - B-scan
 - P-scan
 - Phased Array
 - 3-D CAD Ultrasonic modeling
- Penetrant Inspection
 - Visible
 - Fluorescent
- Magnetic Particle Inspection
 - Visible
 - Fluorescent
- Eddy Current Testing
 - Single channel/frequency
 - Multi-channel/frequency (8 channel)
 - Meandering winding magnetometer (MWM)
 - Bolt hole

- Surface
- Custom coil designs
- Conformal MWM arrays

- Infrared Inspection
 - Flash thermography

- Terahertz Imaging Inspection

- Material Test Operations
 - 3,000kN (600,000 lbf) capacity
 - Tension or compression

- Visual Inspection
 - C.W.I.
 - Dimensional Inspections
 - UV Borescope