Advanced Phased Array for Weld Inspection, Scan Planning and Technique Development

The following outlines the material to be discussed:

- ***Advanced Phased Array Theory Uses and Application***
- ***Codes and Standards: UT in Lieu of RT***
- ***PA Probe set ups using the grouping feature***
  - ***Combined Linear and Sectorial Scanning***
- ***Phased Array Ultrasonic Data Evaluation***
- ***Phased Array Transducer Applications for Weld Inspection***
- ***Advanced Calibration of a Phased Array System (OmniScan) using the Grouping Feature***
- ***Phased Array Scan Planning Methods and Techniques***
  - ***Cross Sectional Plotting Views***
  - ***Multiple Beam Angle Projections***
  - ***Weld and HAZ Volume Coverage per Codes and Standards***
- ***Advanced Weld Examinations***
  - ***Flaw Detection***
  - ***Flaw Characterization***
- ***Encoded Phased Array Scanning and Weld Examination Applications***
- ***Advanced Phased Array Data Analysis***
  - ***Evaluation of A, B C, S Scans for Flaw Characterization***
  - ***Sectorial Scans***
  - ***Linear Scans***
- ***Electronic Report Preparation within the OmniScan***
- ***Hands-on Phased Array Examination Laboratory Exercises***
  - ***Weld Flaw Examination***

This program is ideally suited for UT Level II and Level III UT Personnel for hands-on Phased Array Examinations.

At the conclusion of the Advanced PA Class, a Performance Demonstration Examination will be given for Basic PDQ Qualification.

Prerequisite is 40 Hours of Phased Array-Week 1