OSU Guidance Document Development

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• Background
• Methodology
• Next Steps
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Background

• Easier to create an industry guidance document than to revise the Fire Test Handbook
• Document intended for new and existing labs to provide commonality on previously unaddressed and misunderstood issues with the hope of improving variation between test labs
• Wish list provided by Mike Burns
• Additional topics added by Boeing and MarlinEngineering
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Methodology

• Joint meeting held to evaluate the list
• List broken down into three distinct areas and responsibilities assigned
  • Manufacturing - MarlinEngineering
  • Installation – MarlinEngineering/Boeing
  • Operations/Maintenance – Boeing/MarlinEngineering
• Some cross responsibilities
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Methodology
- Manufacturing
  - Thermopile
    - Configuration including images and schematic
  - Radiant Heat Source
    - Globar manufacturers
    - Installation, mechanical and electrical
    - Power monitoring
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Methodology

• Manufacturing
  • Air Distribution
    • Orifice Meter specification including pipe sizes
    • Hole size definition throughout system
    • Temperature measurement location
  • Gas System
    • Pilot and Calibration Burner definition
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Methodology
• Installation
  • Air Inlet
    • Compressor/Blower size specifications
    • Air temperature control suggestions
    • Pipe sizes, lengths, joints
• Gas System
  • Pressure control
Methodology

• Installation
  • Exhaust
    • Hood configuration
    • Airflow
  • Electrical Power
    • Requirements
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Methodology

• Operations/Maintenance
  • Thermopile
    • Setting
    • Cleaning
  • Exhaust Stack
    • Cleaning
    • Setting baffle plate
Methodology

• Operations/Maintenance
  • Thermopile Calibration
    • Use of Wet Test Meter
    • Measuring barometric pressure
  • Procedure
  • Interval
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Methodology

- Operations/Maintenance
  - Heat Flux Calibration
    - Location of gauges
    - Cooling
    - Procedure for center and corner
    - Use of the Mask
    - Interval
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Methodology

• Operations/Maintenance
  • Sample Preparation
    • Wrapping
    • Identification
• Test Procedure
  • Monitoring air flow and temperature
  • Insertion times
  • Accuracy of test data
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Methodology

• Operations/Maintenance
  • Miscellaneous
    • Calibration intervals
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Next Steps

• Follow up Meetings
• Create Draft Document
• Industry suggestions

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Questions?