OSU Guidance Document Development

Presented by:
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OSU Guidance Document Development

- 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

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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

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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
  - Contacts:

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Questions?