

# FPST 1373 ITM Outline

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- I. Inspection, testing, and maintenance
  - a. Inspection: A visual observation of conditions
  - b. Test: The physical manipulation of a component to determine if it is operational
  - c. Maintenance: Fixing problems found as a result of inspection and testing
  - d. Purpose
    - i. Make sure that the system works when needed
- II. Reliability
  - a. Design
    - i. Wrong components used will result in system not working properly
  - b. Installation
    - i. Components not installed correctly will result in system not working properly
  - c. Equipment
    - i. All components fail at some point which will result in system not working properly
    - ii. Failures most common at beginning and end of expected life
  - d. Maintenance
    - i. Identifies problems
    - ii. Can cause additional wear and tear
  - e. Have a plan in place
    - i. Need to identify problems before system fails in a real event
- III. Tests
  - a. Acceptance
    - i. All restorable devices tested to make sure that they are working immediately after being installed
    - ii. Make sure that all inputs lead to correct outputs from fire alarm matrix
  - b. Reacceptance
    - i. Testing done after work done on system to make sure that things are still operating correctly
    - ii. Anything directly impacted
    - iii. 10 % of all components
  - c. Functionality Test: A test to make sure that the detector responds to the correct type of stimulus when installed in its normal environment
  - d. Sensitivity Test: A test to make sure that the detector activates at the proper quantity of the correct type of stimulus
  - e. Different tests and testing methods required each type of component
- IV. Maintenance
  - a. Identify typical failure modes of all components
- V. Stakeholder roles
  - a. Coordinate when possible
  - b. Avoid unnecessary downtime
  - c. Owner's responsibilities
    - i. Follow manufacturer's recommendation
      - 1. Have a contract with someone knowledgeable and designated them to know requirements

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2. Provide inspectors with all information related to the system
  3. Keep records
- ii. Inspector's responsibilities
  1. Conduct work that they are qualified for using the correct tools