



Human Performance Center

Course Description

Managing Maintenance Error

Objective

Many high technology industries such as medical, nuclear power, airline, and the military have adopted human performance improvement strategies designed to reduce human error and strengthen their capabilities to perform at a higher level. This course addresses the application of these principles to maintenance error and its management. It is based on extensive scientific research gleaned from experiences in maintenance organizations. It describes what maintenance organizations can do to reduce the number of human errors and to mitigate the consequences. Participants will be provided steps maintenance personnel, supervision, and management can take to improve their safety, quality, and productivity.

Description

The program is planned in modules over a one-and-one-half day period. Day One provides a series of training modules, including group discussions and exercises. The second day (optional) is intended as a working session with facility personnel to develop an approach to implementing specific HP tools locally.

The optimal class size is 20 (15 - 25 max). The working session should include no more than half of the training session participants (6-10).

Target Audience

The course can accommodate a broad spectrum of participants from various organizational levels and technical specialties. Previous HP training is useful, but is not required. Course materials are designed for personnel in maintenance organizations, their supervisors, managers, and DOE counterparts. Training can be tailored somewhat for specific organizational needs.

Module 1

The Basics of Human Performance (2 Hours)

- Course objectives and overview
- Human Performance in Maintenance
- The Human Risks
- Fundamentals of Human Behavior
- The Varieties of Error

Module 2

Accidents & Error Prevention (2 Hours)

- System Failure & A Model of Organizational Accidents
- Error-Provoking Factors & The Workers' Toolbox
- Principles of Error Management

Module 3

Managing Error (2 Hours)

- Workplace and Supervisory Measures
- Organizational Measures

Module 4

Making "It" Happen (2 Hours)

- Safety Culture
- Managing Error Management
- Summary

Day 2 - Module 5 (optional)

Working Session (4 Hours)

- A working session with key maintenance personnel and management to discuss the selection of specific HP tools and approaches to implementing the tools in their organization.