

**31st National Aerospace
FOD Prevention Conference
August 16-18, 2011**

**Human Factors
In
FOD Prevention**

**Presented By:
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Overview

- **What is Human Factors?**
- **What's the purpose of human factors in in FoD prevention?**
- **The Dirty Dozen**
- **Technician Characteristics**



What is Human Factors?

Human factors is the science whose goals are to identify, then describe, predict and control, the performance of a human operator in a system.

Human factors is concerned with optimizing the relationship between people and their activities by the systematic application of human sciences, integrated within the framework of systems engineering.

Aviation maintenance human factors is the study of the relationship of people and machines in the aviation environment.



The Dirty Dozen

- The dirty dozen are the twelve most common causes of a person making an error in judgment, resulting in a flawed FOD process. When errors are made, they are usually caused by one or more of the following:
 - Lack of communication
 - Complacency
 - Lack of knowledge
 - Distractions
 - Lack of teamwork
 - Fatigue
 - Lack of resources
 - Pressure
 - Lack of assertiveness
 - Stress
 - Lack of awareness
 - Norms



What's the Purpose of Human Factors in Aviation?

- **Improve aviation safety by reducing all types of maintenance induced errors**
- **Provide the aviation organization the benefits of a common sense interface of maintenance personnel, environment, technology, training, and management support.**



Technician Characteristics

- **Dependable**
- **Loyal**
- **Possess integrity**
- **Modest**
- **Follow written instructions**
- **Independent**
- **Possess reasoning capabilities**



Culture

- **Housekeeping**
- **Clean As You Go**
- **Adherence to Procedures**
- **Management of Consumables**
- **Training; initial & recurring**
- **Positive Tool Control - Enforcement**
- **Awareness**
- **Buy In – By All – Top to Bottom**
- **Set the Example.....**

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