Errors in Maintenance

Recognizing and Avoiding Maintenance Human Error

Introduction

The majority of maintenance failures and mishaps are caused by human factors. This applies to industries like aviation as well as industries like chemicals, energy, oil & gas, and transportation. Based on investigation, maintenance factors account for around 12% of all aircraft accidents. 56% of forced outages at coal-fired power plants occur within a week following a scheduled or maintenance closure. According to a power distribution firm, maintenance errors account for between 50 and 60 percent of all breakdowns on average.

We have experienced terrible and significant mishaps in a number of branches in the past. All of the significant accidents listed above were caused, at the very least, by maintenance faults. Due to our heavy reliance on sophisticated, high-speed, large-power, and volume modern technology, maintenance mistakes can have detrimental effects on costs, downtime, safety, and the environment. Given the figures and ramifications, maintenance mistakes ought to be viewed as a risk to the firm. The possibility of maintenance errors cannot entirely be eliminated, but it can be better managed.

The skills and knowledge area of maintenance mistakes is introduced to learners in this Course N Carry Maintenance mistakes training course. It shows why errors are made not just when doing maintenance tasks but also when organizing and preparing them, creating maintenance manuals, and designing the asset. It demonstrates how doing a methodical analysis of technological malfunctions and events may help us discover maintenance faults. Additionally, this Course N Carry training course shows us how to control maintenance errors by establishing a safety culture, managing the individual, the job, and the team; and managing the environment and the organization.

This training session on Course N Carry Errors in Maintenance will emphasize:

- What is the significance of the human error in maintenance phenomenon?
- The Foundations of Human Performance: Engineering and Maintenance meets Psychology
- Various Human Error Types
- Contributing Factors
- Fundamental Techniques for Examining Technical Errors and Mishaps

- The Fundamentals of Maintenance Error Management: individual, task, group, workplace, organization, and method of application
- Establishing a Culture of Safety

Objectives

After completing this Course N Carry training program, you can:

- Recognize the importance of the human element in maintenance.
- Describe the human aspects that might lead to mistakes in maintenance.
- Utilize a methodical approach to identify the underlying cause of technical issues and occurrences.
- Recognize the fundamentals of maintenance error management
- Describe the relationship between establishing a safety culture and controlling maintenance faults and how they complement one another.
- Create a plan of action to handle maintenance mistakes in your own domain of accountability.

Training Methodology

The interactive workshop approach will be used to deliver this Course N Carry Errors in Maintenance training session. A variety of presentations and hands-on activities are planned. Diverse experiences will be talked about. There will be lots of chances to talk and exchange experiences.

Organizational impacts

The company will:

- Gain a thorough grasp of how maintenance errors affect the company's financial line, workers, workplace, and organization (risk).
- Find out quickly how other businesses are recognizing and comprehending the role that humans play in maintenance errors.
- Understand how to handle maintenance errors more skilfully
- Learn about typical dangers and important success criteria.
- Possess the tools necessary to perform maintenance error management across the long and short terms.

Personal Imapct

Attending will allow the participants to:

- Learn about the fundamentals of human factors in maintenance errors, their effects on the workplace, the organization, and the worker, as well as practical strategies for managing them.
- Boost their degree of self-knowledge
- Increase their own worth
- Possess the ability to plan and grow a future career

Who should attend?

A wide range of professions can benefit from this Course N Carry Errors in Maintenance training course, however the following will be especially helpful:

- All personnel involved in Maintenance, Engineering, Production and Safety
- Anyone who wants to stay current on the role that humans play in maintenance and discover how to apply maintenance error management to their business' advantage

Course Outline

Day 1

Overview of Maintenance Errors by Humans

- We'd prefer not to discuss it, however...
- Human Error's Importance in Maintenance
- Connection to Risk and Risk Management
- The Danger to Humans
- Human Error's Psychological Aspects
- Human Focus
- Human Performance Levels: Knowledge-based, Rule-based, and Skill-based

Day 2

What exactly is a human error?

- Various Human Error Types in Maintenance
- How can I recognize them?
- Contributing Elements and Situations
- The Repercussions of Maintenance Mistakes

- Case Study

Day 3

How to Take Advice from Maintenance Mistakes

- Fundamental Techniques for Examining Technical Errors and Mishaps
- Different Realities
- Personal Opinions
- Solving Problems Effectively
- Relationships between Cause and Effect
- RCA Techniques: Application RCA Apollo
- Tripod
- Case Study

Day 4

Error Management for Maintenance

- Maintenance Error Management Fundamentals
- Potential actions to do:
- Individual & Group
- Task & Workplace
- Structure
- Establishing a Culture of Safety

Day 5

Workshop for Implementation

- Implementation Details

- Performance Management: Changing Individual Behavior for Improved Outcomes
- Plan of Action
- Case Study

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