

Human Factors and Error Management

CAAS Module 9



Developed by Gordon Dupont
Father of "The Dirty Dozen"

Course Description

The Human Factors & Error Management course is a comprehensive course designed for Aircraft Maintenance Engineers and Personnel in the MRO who intends to take the CAAS SAR-66 Module 9 examination. It is also beneficial for executives and managers involved in Human Factors policy implementation in the aerospace industry.

Human Factors & Error Management (Technicians & Operators)

This one day refresher course is an elementary course designed for Technicians and Operators working in the aerospace industry. The depth of the course is designed for easy understanding of the topics.

Admission Requirements

Ability to communicate in spoken and written English is essential.

Duration

Human Factors & Error Management (SAR-66 Module 9)

Full Time : 3 Days
Part Time : 6 Evenings
Time : 9.00am to 5.00pm (Full Time)
7.00pm to 10.00pm (Part Time)

Human Factors & Error Management (Technicians & Operators)

Full Time : 1 Day
Time : 9.00am to 5.00pm

Certification

Certificate of Attendance will be issued on completion

Student Agreement

A Standard Student Contract is to be signed upon acceptance to the course.

Course Fee

Human Factors & Error Management (SAR-66 Module 9)

Course Fee : S\$850 + 7% GST (S\$909.50)

Human Factors & Error Management (Technicians & Operators)

Course Fee : S\$300 + 7% GST (S\$321.00)

Payment Mode

Cash, NETS or Cheque in Singapore Dollars
3.5% surcharge if payment by Visa / MasterCard

For enquiries,

Please contact us to apply for this course,

Tel: (+65) 6603 6603 Email: sales@attc.edu.sg



Air Transport Training College

Professional Development Centre of the Singapore Institute of Aerospace Engineers

ERF Registration Number: 199901790H
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Cert. No. FS 99759
ISO 9001:2008

Maintenance Dirty Dozen

1. Lack of Communication
2. Complacency
3. Lack of Knowledge
4. Distraction
5. Lack of Teamwork
6. Fatigue
7. Lack of Resources
8. Pressure
9. Lack of Assertiveness
10. Stress
11. Lack of Awareness
12. Norms

The failure to ensure that the "Mental Pictures" match

Lack of Communication Safety Nets

14 Fatal

17 errors, corrected by the maintenance crew, were left all of the horizontal 140cm trailing edge by the wingtip ribs

Never assume anything

Discuss work done and what has to be completed

Check logbooks for signs of deferred items

Write to insure the person reading will understand what you do

What you write may save lives

Write to ensure the person reading will understand what you do

What you write may save lives

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A very experienced AIB case which he expected to see when he inspected the elevator down cabs, that was covered in brown preservation.

38 hours before the failure

Complacency Safety Nets

20 Fatal

Remember those cables

The ladder had been at least 1,000 times and never had anything wrong!

Train yourself to expect to find a fault by saying "I will find a fault!"

Play the "what if" game & mentally brief yourself

NEVER sign for anything you didn't do

Always use the checklist by reading & signing each line

Remember Y.E.T. If you're Incompetent, You're Eligible Too

Learn from the mistakes of others

Maintenance Dirty Dozen

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A restoration repair to a critical part failed to include a stress relieving fillet radius

3 Fatal

This is the 9th case to fail. What's going on?

Ensure manual used is up to date

Go over the procedure before starting

If anything is different than before, find out why

Take every training opportunity available

A professional becomes one by continuous study

Learn from someone who knows

Remember those cables

Remember Y.E.T. If you're Incompetent, You're Eligible Too

Learn from the mistakes of others



Course Contents

Introduction

The need to take Human Factors into account, incidents and accidents, attributable to Human Factors / Human Error, Murphy's Law

Human Performance and Limitations

Human Performance as part of the Maintenance Engineering System, Vision, Hearing, Information Processing, Claustrophobia, Physical Access and Fear of Heights.

Social Psychology

The Social Environment, Responsibility: Individual and Group, Motivation and De-motivation, Peer Pressure, Culture Issues, Team Working, Management, Supervision and Leadership, Maintenance Resource Management (MRM)

Factors Affecting Performance

Fitness and Health, Stress: Domestic and Work Related, Time Pressure and Deadlines, Workload - Overload and Underload, Sleep, Fatigue and Shift Work, Alcohol, Medication and Drug Abuse

Physical Environment

Noise, Fumes, Illumination, Climate and Temperature, Motion and Vibration, Confined Spaces, Working Environment

Task

Physical Work, Repetitive Task, Visual Inspection, Complex Systems

Communication

Within and between teams, Work Logging and Recording, Dissemination of Information, Currency, Keeping Up-to-date

Human Error

Error Models and Theories, Types of Error in Maintenance Tasks, Implications of Errors (i.e. Accidents), Avoiding and Managing Errors

Hazards in the Workplace

Recognising and avoiding Hazards

The information contained in this brochure is correct as of 04 October 2011 and is subject to change without notice. ATTC reserves the right to make changes to the course structure, admission requirements, course fee, examination rules and regulations, lecturers, dates and venue of lectures.