

HRODC Postgraduate Training Institute

A Postgraduate-Only Institution

263

**Advanced Aviation Maintenance Management ,
Incorporating Systems Theory, Value Engineering and
Life – Cycle Costing**

Course or Seminar

Leading To:

**DIPLOMA – POSTGRADUATE IN
Advanced Aviation Maintenance Management
(Double Credit)**

Accumulating to

**POSTGRADUATE DIPLOMA
Progressing To A Masters Degree –
*MBA – MSc - MA***

Course Co-ordinator:**Prof. Dr. R. B. Crawford – Director HRODC Postgraduate Training Institute**

- PhD (University of London);
- MEd. M. (University of Bath);
- Adv. Dip. Ed. (University of Bristol);
- PGCIS (Thames Valley University);
- ITC (UWI);
- Member of the Standing Council of Organisational Symbolism (MSCOS);
- Member of the Asian Academy of Management (MAAM);
- Member of the International Society of Gesture Studies (MISGS);
- Member of the Academy of Management (MAOM);
- LESAN;
- Professor, HRODC Postgraduate Training Institute;
- Visiting Professor, Polytechnic University of the Philippines (PUP).

For Whom This Course is designed**This Course is designed for:**

- Air Force Maintenance Crew;
- Aircraft 1st Officers;
- Aircraft Maintenance Managers;
- Aircraft Maintenance Technicians;
- Aircraft Manufacturers;
- Aircraft Operators;
- Aircraft Pilots;
- Aviation Base Maintenance managers;
- Aviation Engineers;
- Aviation Entrepreneurs;
- Aviation Fleet Planning Directors;
- Aviation Maintenance Business Development Managers;
- Aviation Maintenance Document Control Officers;
- Aviation Maintenance Planning and Scheduling Officials;
- Aviation Maintenance Service managers;
- Aviation Maintenance Specialists;

- Aviation Maintenance Stores and Logistics Managers;
- Aviation Maintenance Utility Service Managers;
- Aviation Regulators;
- Aviation Safety Officers;
- Avionics Engineers;
- Mechanical Engineers;
- Senior Aircraft Engineers;
- Senior Aircraft Fleet Managers;
- Senior Aircraft Mechanics;
- Senior Aircraft Technical Maintenance Officers;
- Senior Airports Authority Personnel;
- Senior Aviation Maintenance Compliant Officers;
- Senior Aviation Maintenance Readiness and Resource Analysts;
- Senior Aviation Maintenance Technical Officers;
- Senior Avionics Specialists;
- Senior Hangar Operatives;
- Thermodynamic Specialists;
- Aviation Line Maintenance Officers;
- Others with a genuine interest of acquiring knowledge and expertise of Aircraft Maintenance Management.

Duration: 10 Days

Cost: £10,000.00 Per Delegate

Please Note:

- V.A.T. (Government Tax) does not apply to Corporate Sponsored Individuals, taking Programmes or Courses in any location - within or outside the UK.
- It applies only to Individuals and Corporations based in the UK and to Non-UK Individual Residents taking courses in the UK.

Cost Include:

- Free Continuous snacks throughout the Event Days;
- Free Hot Lunch on Event Days;
- Free City Tour;
- Free Stationery;
- Free On-site Internet Access;

- Diploma – Postgraduate –in **Advanced Aviation Maintenance Management (Double Credit)**; or
- Certificate of Attendance and Participation – if unsuccessful on resit.

HRODC Postgraduate Training Institute's Complimentary Products include:

1. HRODC Postgraduate Training Institute's **Leather Conference Folder**;
2. HRODC Postgraduate Training Institute's **Leather Conference Ring Binder/ Writing Pad**;
3. HRODC Postgraduate Training Institute's **Key Ring/ Chain**;
4. HRODC Postgraduate Training Institute's **Leather Conference (Computer – Phone) Bag** – Black or Brown;
5. HRODC Postgraduate Training Institute's **8GB USB Flash Memory Drive**, with Course Material;
6. HRODC Postgraduate Training Institute's **Metal Pen**;
7. HRODC Postgraduate Training Institute's **Polo Shirt**.

Please see product images, as a separate file - Complimentary Products For Students and Delegates, from HRODC Postgraduate Training Institute.

Daily Schedule: 9:30 to 4:30 pm.

Location: Central London and International Locations

Advanced Aviation Maintenance Management, Incorporating Systems Theory, Value Engineering and Life-Cycle Costing, Course Leading to Diploma – Postgraduate – in Advanced Aviation Maintenance Management (Double Credit)

Course Contents, Concepts and Issues

Part 1: Systems and Value Engineering in Aircraft Maintenance Management

Systems Theory and Its Application to Aircraft and Aircraft Maintenance

- Matter and its Indestructibility;
- Matter and Inertia of Stability;
- Matter and Inertia of Motion;

Salient Aspects of Value Engineering

- Contextualising Value Engineering;
- Value Engineering History;
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Part 2: Contextualising Aircraft Maintenance Management

- Contract or In-House Maintenance;
- Contract Maintenance;
- In-House Maintenance;

Part 3: Developing and Managing Aircraft Maintenance Programmes

- Requirements for an Aircraft Maintenance Program;
- Aviation Maintenance Program Outlined;
- Summary of FAA Requirements;
- Additional Maintenance Program Requirements;

Part 4: Aircraft Maintenance Issues Associated With Equipment Failure, Redundancy and Serviceability

- Aircraft Failure Mode;
- Aircraft Failure Pattern;
- Aircraft Infant Mortality;

- Aircraft Failure Rate;
- Aircraft Ware-out Period;

Part 5: Component Modularization and its Function in Aircraft Maintenance

- The Importance of Line Replaceable Units (LRUs) Management in Aircraft maintenance;
- Configuration Conformity;
- Deviation;
- Component Redesign and Aircraft Maintenance;

Part 6: Maintenance of Line Replacement Units (LRUs)

- Number of Line Replacement Unit (LRU) at time;
- Number of Line Replacement Unit (LRU) at Any Given Time;
- Optimum Time to Stop the Maintenance of Line Replacement Unit (LRU);
- Discard rate of aircrafts in the fleet;

Part 7: Aircraft Maintenance Economics

Engine Maintenance Economics

- Performance Restoration
- Life Limited Part Replacements
- Cost Driver of Engine Shop Maintenance

Engine Module Maintenance Economics

- Minimum Level Work Scope;
- Performance Level Work Scope;
- Full Overhaul Work Scope.

Part 8: Aviation Industry Maintenance Documentation and Certification

Aviation Industry Certification Requirements

- Aircraft Certification;

- Delivery Inspection;

Documentation for Maintenance

- Manufacturer's Documentation;
- Regulatory Documentation;

Part 9: Aviation Maintenance Reserve Development and Contract Management

Aircraft Maintenance Reserve Development & Management

- Airframe Heavy Structural Inspections;
- Landing Gear Overhauls;

Maintenance Reserve Contract Management

- Definitions & Interpretations;
- Maintenance Reserve Notional Accounts – Development & Management;
- Maintenance Reserve Coverage and Exposure;

Part 10: Aircraft Maintenance Management and Materiel Support (1)

Aircraft Maintenance Management

- Aircraft Maintenance Management Structure;
- The Role of Management in Aviation;

Line Maintenance (on-Aircraft)

- Functions that Control Maintenance;
- Maintenance Control Center Responsibilities;
- Line Maintenance Operation – General;

Part 11: Aircraft Maintenance Management and Materiel Support (2)

Hangar Maintenance (On-Aircraft)

- Organization of Hangar Maintenance;
- Problem Areas in Hangar Maintenance;

- Hangar Maintenance Activity – A Typical “C” Check;
- Morning Meetings;
- Support and Overhaul Shops Organization;
- Types of Shops;

Material Support

- Organization and Function of Material;
- Material Management;

Part 12: Aircraft Maintenance Technical Services and Training Operation

Aircraft Maintenance Engineering

- Make-up Engineering;
- Mechanics and Engineers;
- Engineering Department Functions;
- Engineering Order Preparation.

Aircraft Maintenance Production Planning and Control

- Production Planning and Control Organization;
- The Production Planning and Control Department's Function;
- Forecasting;
- Production Planning;
- Production Control;
- Other Scheduled Work;
- Feedback for Planning.

Aircraft Maintenance Technical Training

- Training Organization;
- Airline Maintenance Training;
- Maintenance Resources Management;
- Airframe Manufacturer's Training Courses;
- Supplemental Training.

Part 13: Aircraft Maintenance Safety, Quality Assurance and Control (1)

Aircraft Maintenance Safety

- Industrial Safety;
- Safety Regulations;
- Maintenance Safety Program;
- General Responsibilities for Safety;
- General Safety Rules;
- Accident and Injury Reporting;
- Safety Programs;
- Hangar Safety;
- Safety Culture;
- Managing Safety;
- Safety Management Systems;
- Emergency Response Planning.

Part 14: Aircraft Maintenance Safety, Quality Assurance and Control (2)

Aircraft Maintenance Quality Assurance

- Requirement for Quality Assurance (QA);
- Quality Audits;
- ISO 9000 Quality Standard;
- Technical Records;
- Other Functions of QA.

Aircraft Maintenance Quality Control

- Quality Control Organization;
- FAA Aviation Quality Assurance Systems (Article FAA Aviation);
- FAA and JAA Differences;
- QC Inspector Qualifications;
- Basic Inspection Policies;
- Other QC Activities.

Part 15: Value Engineering Application to Aircraft Maintenance Management

Life-Cycle Costing in Aircraft Maintenance

- Contextualising Life-Cycle Costing;
- Benefits of Life-Cycle Costing;
- Estimating the Useful Life of the System or Component;
- Establishing Annual Maintenance Cost in Life-Cycle;
- Deciding on Best-Value Option;
- Module or Component Research and Development;
- Module or Component production or Acquisition;
- Module or Component Operation and Maintenance;
- Module or Component Residual Value.

Cost Estimates for Aircraft Maintenance in Life-Cycle Costing

- Module or Component's Initial Cost;
- Pipeline Spare Parts Cost;
- Replacement Spare Cost;
- On-Equipment Maintenance Cost;
- Off-Equipment Maintenance Cost;
- Inventory and Supply Management Cost;
- Support Equipment Cost;
- Training and Training Equipment Cost;
- Cost of Management and Technical Data.
- Cost Amortization in Life-Cycle Costing.

Service Contract, incorporating Terms and Conditions

[Click, or copy and paste the URL, below, into your Web Browser, to view our Service Contract, incorporating Terms and Conditions.](#)

https://www.hrodc.com/Service_Contract_Terms_and_Conditions_Service_Details_Delivery_Point_Period_Cancellations_Extenuating_Circumstances_Payment_Protocol_Location.htm

The submission of our application form or otherwise registration by of the submission of a course booking form or e-mail booking request is an attestation of the candidate's subscription to our Policy Terms and Conditions, which are legally binding.

Prof. Dr. R. B. Crawford - Director HRODC Postgraduate Training Institute