

1. Title	Aviation legislation II (Avionics Repair and Maintenance)
2. Code	EMAMBX446A
3. Range	The knowledge is needed for a wide range of aircraft repair and maintenance works, especially in avionics, e.g. applicable to aircrafts, analysis, machineries, airworthiness, airframes, avionics, materials, tests, documentation, safety, health and tools etc.
4. Level	4
5. Credit	4
6. Competency	<u>Performance Requirement</u>
	<p>6.1 Knowledge</p> <ul style="list-style-type: none"> <li>◆ Able to understand the aircraft maintenance licences <ul style="list-style-type: none"> <li>• Air Navigation (Hong Kong) Order 1995 requirements.</li> <li>• Responsibilities: by statutory law and by the need to fly aircraft in a satisfactory condition, i.e. common / civil / constitutional law.</li> <li>• Penalties - under statutory law and resulting from civil law suits.</li> <li>• HKAR-66: Licensing of Maintenance Personnel</li> <li>• (Certifying Staff - Maintenance).</li> <li>• Categories - applicability.</li> <li>• Area and extent of limitations and privileges within</li> <li>• Categories.</li> <li>• Overlap of Category applicability.</li> <li>• Relevant Airworthiness Notices.</li> </ul> </li> <li>◆ Able to understand the certifications <ul style="list-style-type: none"> <li>• Air Navigation (Hong Kong) Order 1995 requirements. HKAR-1 Airworthiness Procedures.</li> </ul> </li> </ul>

- Certificates of : Release to Service. Maintenance
- Review. Fitness for Flight.
- Duplicate inspections.
- Contributory certifications and reliance on other documentation and persons.
- Certification - acceptance investigation and judgement procedures.
- ◆ Able to understand the aircraft, engine and VP propeller log books
  - Air Navigation (Hong Kong) Order 1995 requirements.
  - HKAR-1 Airworthiness Procedures.
  - CAD Approval: light aircraft, large aircraft.
  - Worksheets.
  - Data to be entered in log books.
  - Condition reports - e.g. heavy landing checks, defect investigations, NDT and other inspections, mandatory and non-mandatory.
  - Maintenance records.
  - Cross-reference to other files / records.
  - Preservation of documents: AN(HK)O 1995.
- ◆ Able to understand the technical log
  - Air Navigation (Hong Kong) Order 1995 requirements. HKAR-1 Airworthiness Procedures.
  - Technical Log - Air Operator's Certificates Requirements Document.
- ◆ Able to understand the aircraft documentation and requirements
  - Type Certification. Supplementary Type Certification.

- Weight schedule.
- External, and internal markings and signs, e.g. nationality and registration, no smoking and fasten seat belt, placards and requirements, doors and exits.
- Certificate of Airworthiness Categories, purposes of flight.
- Certificate of Registration.
- Noise Certificate.
- Air Operator's Certificate.
- Schedule 5 requirements for equipment.
- Radio station licence and approval.
- Change of ownership.
- Maintenance checks and inspections.
- Maintenance records. Maintenance documentation.
- Continuing airworthiness.
- Master Minimum Equipment Lists, Minimum
- Equipment Lists, Dispatch Deviation Lists.
- Service Bulletins, manufacturers service information.
- Modifications and repairs.
- Test flights.
- ETOPS: maintenance and dispatch requirements.
- All Weather Operation (AWO): CAT 2/3 operations and minimum equipment requirements.
- Reduced Vertical Separation Minima (RVSM) requirements.
- ◆ Able to understand the approvals
  - Design Organisations.
  - Maintenance Organisations.

- AOC interface.
- Maintenance Schedules and Programmes.
- Stores: systems. release of parts.
- ◆ Able to understand the defect reporting
  - Air Navigation (Hong Kong) Order 1995 requirements.
  - CAD382 The Mandatory Occurrence Reporting Scheme.
  - Defects which are to be reported.
  - Reportable accidents.
- ◆ Able to understand the Hong Kong Aviation Requirements
  - HKAR-1: Airworthiness Procedures.
  - Airworthiness Notices.
  - Airworthiness Directives.
  - Mandatory Modifications and Inspections:-
    - HK CAD
    - UK CAA
    - FAA
    - Authorities other than above: aircraft, engines, equipment.
  - HKAR-145: Approved Maintenance Organisations.
  - HKAR-147: Approved Maintenance Training/
    - Examinations
    - Air Operator's Certificates (AOC) Requirements Document.
- ◆ Able to understand the Joint Aviation Authorities Requirements
  - JAR-21. JAR-23. JAR-25. JAR-29

	<p>6.2 Theoretical and practical aspects</p> <p>6.3 Professional approach</p>	<ul style="list-style-type: none"> <li>◆ Able to apply the following knowledge in the aircraft maintenance. <ul style="list-style-type: none"> <li>• Aircraft maintenance licences</li> <li>• Certifications</li> <li>• Aircraft, Engine and VP propeller log books</li> <li>• Technical log</li> <li>• Aircraft documentation and requirements</li> <li>• Approvals</li> <li>• Defect reporting</li> <li>• Hong Kong aviation requirements</li> </ul> </li> <li>◆ Able to understand the principal elements of the subjects.</li> <li>◆ Able to understand the general knowledge of the theoretical and practical aspects of the following subjects. <ul style="list-style-type: none"> <li>• Aircraft maintenance licences</li> <li>• Certifications</li> <li>• Aircraft, Engine and VP propeller log books</li> <li>• Technical log</li> <li>• Aircraft documentation and requirements</li> <li>• Approvals</li> <li>• Defect reporting</li> <li>• Hong Kong aviation requirements</li> </ul> </li> <li>◆ Able to apply the knowledge in the aircraft maintenance task.</li> </ul>
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<p>7. Assessment Criteria</p>	<p>The integral outcomes requirement of this UoC are:</p> <ul style="list-style-type: none"> <li>(i) Able to understand the theoretical fundamentals of the subjects.</li> <li>(ii) Able to give a general description of the subjects using, as appropriate, typical examples.</li> <li>(iii) Able to use mathematical formulae in conjunction with physical laws describing the subjects.</li> <li>(iv) Able to read and understand sketches, drawings and schematics describing the subjects.</li> <li>(v) Able to apply the knowledge relating to avionics repair and maintenance in a practical manner using detailed procedures.</li> </ul>
<p>8. Remarks</p>	<p>Ref: HKAR-66 Module 10: Aviation legislation</p>