Aviation and space insurance

Purpose
At the end of this unit, candidates should be able to demonstrate an understanding of aviation and space insurance and related issues.

Assumed knowledge
It is assumed that the candidate already has knowledge of the fundamental principles of insurance as covered in IF1 Insurance, legal and regulatory or equivalent examinations.

Summary of learning outcomes

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* The test specification has an in-built element of flexibility. It is designed to be used as a guide for study and is not a statement of actual number of questions that will appear in every exam. However, the number of questions testing each learning outcome will generally be within the range plus or minus 2 of the number indicated.

Important notes

- Method of assessment:
  Mixed assessment consisting of two components, both of which must be passed. One component is a coursework assignment and one is a multiple choice question (MCQ) examination. The details are:
  1. an online coursework assignment using RevisionMate consisting of 10 questions which sequentially follow the learning outcomes. This must be successfully completed within 6 months of enrolment; and
  2. an MCQ exam consisting of 50 MCQs. 1 hour is allowed for this exam. This exam must be successfully passed within 18 months of enrolment.
- This syllabus will be examined from 1 May 2020 until 30 April 2021.
- Candidates will be examined on the basis of English law and practice unless otherwise stated.
- Candidates should refer to the CII website for the latest information on changes to law and practice and when they will be examined:
  1. Visit www.cii.co.uk/qualifications
  2. Select the appropriate qualification
  3. Select your unit from the list provided
  4. Select qualification update on the right hand side of the page
1. **Know the main elements of aviation risk**

1.1 Describe the key principles concerning how an aircraft flies.

1.2 Explain the types of aviation risk – human failure, mechanical failure, communication and navigation failure, hijacking, terrorism and war risks and cyber risks – including their frequency and severity.

1.3 Describe the measures taken to prevent and reduce accidents – Ground Proximity Warning System (GPWS), Enhanced Ground Proximity Warning System (EGPWS), Aircraft Collision Avoidance Systems (ACAS), Aeronautical Operational Control (AOC), Aircraft operating manual, pilot classification, Crew Resource Management, use of Simulators.

1.4 Describe key developments in global air navigation.

2. **Understand the main international and national measures impacting on aviation risk**


2.2 Describe the purpose and main features of Montreal Agreement 1966, Montreal Additional Protocols 1-4, Guadalajara Convention 1991.

2.3 Describe the purpose and features of the Chicago Convention.

2.4 Describe the purpose and role of the International Civil Aviation Organisation (ICAO) and International Air Transport Association (IATA).

2.5 Explain the International conventions for dealing with offences on board aircraft.

2.6 Describe the main functions of the Civil Aviation Authority (CAA) and European Aviation Safety Agency (EASA).

2.7 Describe the minimum levels of insurance; EU directive 785/2004 and 285/2010.

2.8 Explain the UK/European legal system and the calculation of damages.

2.9 Describe the Civil Aviation Act 1982 and Air Navigation Order 2005.

2.10 Explain the main features of the US legal system, jurisdiction and the litigation process and examine their application in aviation situations.

2.11 Examine the award of compensatory and punitive damages.

2.12 Describe the main provisions of the General Aviation Revitalization Act (GARA).

2.13 Describe the purpose and main functions of the Federal Aviation Administration (FAA).

3. **Understand the scope of cover under the main and related classes of aviation insurance**

3.1 Analyse the coverage, exclusions, conditions and definitions for aircraft hull and liability insurance with particular reference to AVN 1D.

3.2 Analyse the coverage, exclusions, conditions and definitions for aviation products liability insurance with particular reference to AVN 98.

3.3 Analyse airport liability including premises, hangar keepers, products, coverage, conditions and exclusions.

3.4 Analyse hull war, war liability and excess war liability coverage, conditions and exclusions.

3.5 Analyse airline insurance requirements and typical coverage.

3.6 Explain personal accident coverage and exclusions.

3.7 Explain loss of use and consequential loss policy coverage and exclusions.

3.8 Explain loss of licence policy coverage and exclusions.

3.9 Explain cargo liability and all risks cover and exclusions.

3.10 Explain hull deductible insurance coverage and exclusions.

3.11 Explain spares all risks insurance coverage and exclusions.

4. **Understand the market practices of aviation insurance**

4.1 Examine the use and application of endorsements and clauses.

4.2 Describe typical deductible amounts.

4.3 Analyse how the insurance market responds to bank/leasing agreements and contractual requirements.

4.4 Analyse how aviation insurance responds to airline and service provider agreements, contractual arrangements including ground handling, code sharing and interline agreements.

4.5 Explain the use of global providers of aviation insurance, the subscription market and the verticalisation of the placing.

5. **Understand risk assessment and underwriting of aviation insurance**

5.1 Examine the factors to be considered by an aviation underwriter when selecting which risks to underwrite.

5.2 Examine different rating factors and methods of rating for the main classes of aviation insurance and their application.

5.3 Explain the application of warranties, excesses, deductibles and franchises.

5.4 Explain the use of profit commission and no claims bonuses.

5.5 Examine key account management considerations for the underwriter.

5.6 Describe the various types of captive insurance arrangements available to the aviation industry.

5.7 Explain the alternative forms of reinsurance that can be used by an aviation underwriter.
6. Understand claims investigation, handling and settlement procedures in aviation insurance

6.1 Examine the settlement process of hull and spares claims, including investigation, the role and responsibilities of surveyors, application of the insurance policy.

6.2 Examine the investigation of liability claims including information required, prosecution of claim, passenger claims, settlements in the UK, USA/Canada and other jurisdictions.

6.3 Examine the methods of investigating and settling cargo, third party and product liability claims.

6.4 Describe the role and responsibility of the UK Air Accidents Investigation Branch (AAIB) and the US National Transportation Safety Board (NTSB).

6.5 Describe the Air Accidents Investigation: EU Regulation 996/2010.

7. Understand key aspects of space insurance

7.1 Explain satellite technology and its uses.

7.2 Examine types of cover available.

7.3 Examine the factors affecting the underwriting of space and satellite insurances, including any relevant legislation.

7.4 Examine claims handling and procedures for space insurance.

Reading list

The following list provides details of further reading which may assist you with your studies.

Note: The examination will test the syllabus alone.

The reading list is provided for guidance only and is not in itself the subject of the examination.

The resources listed here will help you keep up-to-date with developments and provide a wider coverage of syllabus topics.

CII/PFS members can access most of the additional study materials below via the Knowledge Services webpage at https://www.cii.co.uk/knowledge-services/.

New resources are added frequently - for information about obtaining a copy of an article or book chapter, book loans, or help finding resources, please go to https://www.cii.co.uk/knowledge-services/ or email knowledge@cii.co.uk.

CII study texts

Aviation and space insurance. London: CII. Study text: M91

Insurance, legal and regulatory. London: CII. Study text IF1

Books (and eBooks)


* Also available as an ebook through Discovery via www.cii.co.uk/discovery (CII/PFS members only).

**eBooks**
The following ebooks are available through Discovery via [www.cii.co.uk/discovery](http://www.cii.co.uk/discovery) (CII/PFS members only):
- Insuring the air transport industry against aviation war and terrorism risks and allied perils. YOM Nyampong. Heidelberg: Springer-Verlag, 2013.

**Journals and magazines**
The Journal. London: CII. Six issues a year. Archive available online at [https://www.thepfs.org/search-results/?q=the+journal](https://www.thepfs.org/search-results/?q=the+journal) (CII/PFS members only).
Access to further periodical publications is available from the Knowledge website at [www.cii.co.uk/journalsmagazines](http://www.cii.co.uk/journalsmagazines) (CII/PFS members only).

**Reference materials**