

**The University of New South Wales
School of Aviation**

AVIA5003 – Aviation & Security

2016 Course Outline

Course Staff

The course facilitator is Trevor Jones of the School of Aviation. Trevor can be contacted via e-mail at t.jones@unsw.edu.au

About the Author

Trevor Jones has over 30 years experience in the aviation industry and is currently the Qantas Manager Security Policy & Regulation, Group Security & Facilitation, which forms part of the Office of the CEO in Sydney; a position he has held for the past fifteen years. Prior to joining Qantas, Trevor was the Manager Policy and Compliance for the Federal Airports Corporation (FAC) with operational responsibilities for the then 22 Federal Airports. In the late 1980's he was the Security Manager for Sydney (Kingsford Smith) Airport. For five years Trevor was Australia's representative on the Airports Council International (ACI) World Operational Safety Task Force working closely with the International Air Transport Association (IATA). Trevor is a member of a number of Government security Working Groups and is the Chair of the Australian Board of Airline Representatives (BARA) Security & Facilitation Committee. In addition, Trevor holds a Commercial pilots licence with instrument and multi-engine endorsements.

Course Information

As the aviation industry grows so too does the potential for terrorist and criminal activities against the industry. Aviation is a complex set of procedures and activities that when brought together results in a secure and efficient transport system. Any interruption to that system, such as Pan Am flight 108 or 9/11 can and will have far reaching effects on public confidence and their expectations, government oversight, delays and costs to industry, and the potential for loss of life and suffering.

Aviation security is not just only about compliance with international and domestic legislative requirements, it is about the economic viability of an airline or an airport, the economic viability of a vital (some say critical) infrastructure, it is about creating an environment to allow for the safe departure of each and every passenger aircraft.

Naturally aviation security does not operate in isolation to the other many functions within the industry. Aviation security is one aspect of passenger facilitation that

requires careful consideration so as to enhance and make possible the aviation product rather than create obstacles in a time critical industry.

Aviation security as applied to airlines and airports must be risk based and outcomes focused. It must be tailored to the specifics of the airline or airport. Whilst it is conceded that approximately 80% of risks are known and common to all airports and airlines, the location, operating environment, brand and political stability will all provide unique challenges to the aviation security professional.

Aviation security takes a layered approach to protecting an aircraft, passengers and crew. There is no one single measure that can be applied to mitigate the risk to zero. All risks must be identified and mitigated to an acceptable level. The safest aircraft departure (in security terms) is an aircraft with no passengers, no baggage, no catering or stores and no cargo. Starting from this point, passengers, baggage, catering, stores and cargo are all loaded. Aviation security is about reducing the risk whilst adding these elements to the aircraft.

Past disasters, whilst appalling, have provided valuable lessons in strengthening the aviation security infrastructure and minimising the risk of future departures. Combating acts of unlawful interference is an ongoing activity using both human resources and specialised technology.

This course provides an insight to contemporary security issues, aviation security standards and recommended practices, aviation security principles and procedures. It will also develop your skills to ask “What is the desired security outcome and can it be achieved in different ways”.

Unless otherwise stated, the Australian examples used throughout the course are typical of international practice.

Aims

This 6 UoC course aims to help students to develop an advanced understanding of security within the aviation security industry, current issues and future challenges.

Learning Outcomes

- To understand the historical development of aviation security and the international framework underpinning the aviation security regulatory environment;
- To provide an introduction to a number of different regulatory approaches to dealing with aviation security;
- To provide an introduction to the principles of dealing with aviation security risks;
- To become familiar with current media and industry reporting, and

- To develop a skill in asking security questions and specifically in questioning “what is the desired security outcome”?

Location

This course runs for the duration of Semester 2.

The course is delivered electronically via UNSW Moodle, on a distance-learning basis. The core component of delivery is the course manual. Course manuals are written by experts from various backgrounds within the aviation industry and a cross section of disciplines at UNSW. Each manual has been designed to guide the learner in the most effective and efficient way. As new concepts are introduced, practical exercises are provided so you can develop skills, which can be applied immediately in your workplace. Students are able to study at their own pace, in accordance with their particular work schedules and locations. Academic review and feedback is delivered via e-mail or Moodle.

Learning and Teaching Philosophy

This course aims to provide an academic environment in which students are actively engaged in the learning process. The course aims to be interesting, challenging and enjoyable. Activities are linked to both research and scholarship, and the real world, and allow students to reflect on how system safety issues affect them and others in the aviation industry. Student diversity in terms of experiences and learning styles is valued. A supportive environment is provided but there is an expectation that students will take responsibility for their own learning and also learn co-operatively with their peers. Student assessment is designed to reflect the learning outcomes, and meaningful and timely feedback will be provided on coursework.

Internet

Online content and study materials can be accessed via UNSW Moodle;
<http://moodle.telt.unsw.edu.au/>

Assessment

The assessment for this course will consist of a number of assignments. All course assignments are to be uploaded to the UNSW web based Moodle by the due date. Correspondence can be sent to t.jones@unsw.edu.au

Criteria for Assessment

Unless otherwise specified, the following criteria will be applied in assessing your written work:

- evidence of understanding of the regulatory concepts, theories and ideas developed in the course;
- ability to apply these concepts to situations from your own experience;
- capacity to structure an assignment logically and limit it to the length required; and
- degree to which the material submitted for assessment addresses the specified or negotiated assignment requirements.

Final Course Results

All final course results are reviewed and scaled by the School and the Faculty. The final approved course results will be officially released via zMail and myUNSW in July (S1) and December (S2). Students should not assume their final official marks directly from each assessment task even after all the marks for each every assessment are received.

Course Schedule

The course comprises of 12 units to match the course duration of 12 weeks

Unit 1	An introduction to Aviation Security
Unit 2	The Chicago Convention (Annex 17)
Unit 3	The International Aviation Security Conventions
Unit 4	Airports
Unit 5	Airlines
Unit 6	Australian Transport Security Programs
Unit 7	Risk and Threat Management
Unit 8	Security Management Systems
Unit 9	The Australia Regulatory Environment
Unit 10	The International Regulatory Environment
Unit 11	Crime and the Aviation Industry (Wheeler and JCPAA)
Unit 12	Case Studies & Where Next?

Academic Honesty and Plagiarism

Plagiarism is the presentation of the thoughts or work of another as one's own¹. Examples include:

- direct duplication of the thoughts or work of another, including by copying work, or knowingly permitting it to be copied. This includes copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
- paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and,
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.²

Submitting an assessment item that has already been submitted for academic credit elsewhere may also be considered plagiarism.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does not amount to plagiarism.

Students are reminded of their Rights and Responsibilities in respect of plagiarism, as set out in the University Undergraduate and Postgraduate Handbooks, and are encouraged to seek advice from academic staff whenever necessary to ensure they avoid plagiarism in all its forms.

The *Learning Centre* website is the central University online resource for staff and student information on plagiarism and academic honesty. It can be located at:

<https://student.unsw.edu.au/plagiarism>

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

1. correct referencing practices;
2. paraphrasing, summarising, essay writing, and time management;
3. appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

¹ Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle.

² Adapted with kind permission from the University of Melbourne.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

Informal feedback

As well as the formal assessment procedure, every attempt will be made to give informal feedback during the instruction sessions. This might consist of students swapping exercises to comment on each others work, or it might consist of group discussion. It is essential that all the set exercises be attempted in order to achieve a satisfactory level of understanding of the basic concept of the course.

Resources for Students

Reference Texts

There is no prescribed text for this course; however you should be familiar with:

- *ICAO Annex 17 of the Chicago Convention;*
- *The Aviation Transport Security Act 2004;*
- *The Aviation Transport Security Regulations 2005,*
- *The Crimes Aircraft Act 1991;*

Current Australian legislation can be downloaded from www.comlaw.gov.au.

Continual Course Improvement

Periodically, student evaluative feedback on the course is gathered, using among other means, UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process. Student feedback is taken seriously, and continual improvements are made to the course based in part on such feedback. Significant changes to the course will be communicated to subsequent cohorts of students taking the course

Teaching Strategies

The MScTech (Aviation)/ MAvMgmt and its associated programs, the Graduate Certificate in Aviation Management and the Graduate Diploma in Aviation Management, are offered through distance education and have been specifically designed for students who are unable to attend weekly sessions at the university. The MScTech (Aviation)/MAvMgmt is targeted towards professionals and managers who work in aviation related environments.

The course consists of twelve units representing the major topics within aviation security. Each unit covers the topic with explanation of the issues and commentary and examples as required. Each unit has a number of self study questions. The course has three assignment tasks.

As with all course in this program, the method of teaching is by distance education. Email exchange and email question asking is encouraged. The course has significant reading and a number of large reports to review. Students to reflect and review the

statements in these reports and the recommendations and conclusion reached. Students to question the motivation behind some of these recommendations and statements – are they security politically commercially driven?

Administrative Matters

Students should be familiar with the information contained in <https://my.unsw.edu.au> regarding expectation of students, enrolment, fees and other policies that affect you. Also students must be familiar with the information provided in the Postgraduate Aviation Student Guide. This essential document can be obtained from the School of Aviation and is available on UNSW Moodle. Please contact Jamie Lim at aviam@unsw.edu.au for any administrative enquiries.