



School of Aviation

# Airline Accident Investigation Short Course

20 November to 1 December 2017

## Course Summary

This short course is intended to provide an introduction to aviation accident investigation. It is intended for those who already have professional expertise in one or more of the three areas of pilot, maintenance engineer or safety professional. The scope is to provide an overview of relevant areas which need to be considered in a major aircraft investigation, and successful completion is intended to provide a background for an individual to contribute to a team effort in a major investigation, perhaps representing one of the many groups or organizations having an interest. It is also intended to provide a suitable background for an individual to conduct minor safety investigations. The course is not suitable to equip you as a fully qualified air safety investigator, but should serve as a foundation for future participation in such a course.

The governing legal framework is described in ICAO Annex 13, and under the ICAO umbrella, individual states who are signatory to ICAO (effectively all major nations) are required to implement legislation within the guidance of Annex 13. In this course we emphasise the Australian legislation, and participants from other nations will need to find the parallel legislation in their own countries. In Australia the ATSB (Australian Transport Safety Bureau) is the official investigating body, while that role is held by the NTSB (National Transportation Safety Board) in the US, the AAIB (Air Accidents Investigation Branch) of the UK, and the TSBC (Transportation Safety Board of Canada). Each of these agencies has slightly different published techniques and methodologies, while maintaining consistency with ICAO.

This course is accredited by IFALPA AAP and by Aus ALPA. The notes provided give a baseline of information which can be used for future reference, and the notes are supplemented by presentations given by experts during the course. Successful completion of the course, as well as successful completion of an additional assessment module will lead to advanced standing for UNSW academic Course AVIA5022 Aircraft Accident Investigation Techniques, which can be counted toward one of the Schools postgraduate programs offered.

The postgraduate programs which are all delivered by distance are described at

<http://www.aviation.unsw.edu.au/future/futurepgrad.html>

Subject topics in this short course include legal issues, human factors, aeromedical issues, technical background, weather forecasting, investigation methods and analyses, data acquisition, report writing and interviewing. Minor case studies of existing accidents will be evaluated. Two major cases studies of fictitious cases will be used to build participant skills.

Intended participants are expected to have a professional knowledge of aircraft operations and aircraft systems, as would be obtained with professional flying or aircraft maintenance qualifications.

### **Dates**

Course dates are 0930 Monday 20th November to noon Friday 1<sup>st</sup> December, 2017 inclusive, with the middle weekend free.

### **Location**

School of Aviation, the University of New South Wales main campus in Sydney NSW.

<http://www.aviation.unsw.edu.au/about/where.html>

### **Local Hotels**

There are many local hotels in the Sydney and UNSW local areas, and we suggest that you use common hotel comparative websites.

The closest beach to UNSW is Coogee Beach and this has several options

- The Crowne Plaza Coogee Beach
- Coogee Sands Motel
- Adina Apartments Coogee Beach

### **Weather**

Late November is early summer with day time temperatures well into the 20s, and sea surface temperatures usually 22-24C.

### **Transport in Sydney**

Buses are common and service the campus from the city as well as from Coogee area. Users purchase an “Opal” card which via tap-on and tap-off provide cashless access to buses and trains. No trains service the campus.

Taxis and Uber services are common.

The campus is about 20 min drive from the Sydney international terminal, and 15 minutes from Sydney domestic terminal

## **Payment**

The Course fee is \$4500 inclusive of Australian GST.

Payment details will be advised. Please express interest to

[aviationshortcourse@unsw.edu.au](mailto:aviationshortcourse@unsw.edu.au)

School of Aviation  
UNSW, Sydney  
[www.aviation.unsw.edu.au](http://www.aviation.unsw.edu.au)

CRICOS Code 00098G



Australia's  
Global  
University

School of Aviation

# Airline Accident Investigation Short Course

20 November to 1 December 2017

DRAFT				
WEEK 1				
Monday 20th	Tuesday 21st	Wednesday 22nd	Thursday 23rd	Friday 24th
0920-0930 Welcome Gabriel Lodewijks	0845-0945 Human Psychology and Safety Ann Williamson	0845-0945 Human factors Peter Murphy	0845-0945 Aeromedical Issues Jo Duflou	0845-0945 Human factors-Noise Brett Molesworth
0930-1030 Introduction Jason Middleton/ Sasha Robinson/ AUSALPA	1000-1100 Human Psychology and Safety Ann Williamson	1000-1100 Human factors Peter Murphy	1000-1100 Aeromedical Issues Jo Duflou	1000-1100 Meteorology Forecasting Jason Middleton/David Wilson
1100-1200 Legislation 1 David Chitty	1115-1215 Human Psychology and Safety Ann Williamson	1115-1215 Human factors Peter Murphy	1115-1215 Aeromedical Issues Jo Duflou	1115-1215 Meteorology Forecasting Jason Middleton/David Wilson
Lunch				
1245-1345 Legislation 2 David Chitty	1245-1345 Crash Forensics Raph Grzebieta	1245-1345 Human factors Peter Murphy	1245-1345 Security Trevor Jones	1245-1345 Flight deck Automation Norman Fitzpatrick
1400-1500 Legislation 3 David Chitty	1400-1500 Crash Forensics Raph Grzebieta	1400-1500 Human factors - Fatigue Ann Williamson	1400-1500 Airworthiness John Vincent	1400-1500 Flight deck Automation Norman Fitzpatrick
1515-1615 Legislation 4 David Chitty	1515-1615 Emergency Planning at Syd Airport Michael Harris	1515-1615 Human factors - Fatigue Ann Williamson	1515-1615 Airworthiness John Vincent	

WEEK 2				
Monday 27th	Tuesday 28th	Wednesday 29 <sup>th</sup>	Thursday 30 <sup>th</sup>	Friday 1st
0845-0945 Conceptual models of error: Reason etc ????	0845-0945 Interviewing, Report Writing and Handling the Media Joe Hattley	0845-0945 Major Case Study 1 Joe Hattley	0845-0945 Major Case Study 2 Peter Wiggins	0930-1030 Wrap up Peter Wiggins/ Sasha Robinson
1000-1100 Conceptual models of error: Reason etc ????	1000-1100 Safety Management Systems Peter Wiggins	1000-1100 Major Case Study 1 Joe Hattley	1000-1100 Major Case Study 2 Peter Wiggins	1100-1200 Course Review Sasha Robinson
1115-1215 ATSB Methodologies Joe Hattley	1115-1215 Safety Management Systems Peter Wiggins	1115-1215 Major Case Study 1 Joe Hattley	1115-1215 Major Case Study 2 Peter Wiggins	
Lunch				
1245-1345 ATSB Methodologies Joe Hattley	1245-1345 Safety Management Systems Peter Wiggins	1245-1345 Major Case Study 1 Joe Hattley	1245-1345 Major Case Study 2 Peter Wiggins	
1400-1500 ATSB Methodologies Joe Hattley	1400-1500 Historical Case Studies 1 Joe Hattley	1400-1500 Major Case Study 1 Joe Hattley	1400-1500 Major Case Study 2 Peter Wiggins	
1515-1615 ATSB Methodologies Joe Hattley	1515-1615 Historical Case Studies 1 Peter Wiggins	1515-1615 Major Case Study 1 Joe Hattley	1515-1615 Major Case Study 2 Peter Wiggins	
		1700-2100 Course Dinner		