

## **ANZSASI Seminar (8 – 10 June 2007), Wellington**

### **Transport Safety Investigator base training and ongoing professional development methodologies – Colin McNamara**

*Colin was appointed the Australian Transport Safety Bureau's (ATSB) Manager Training and Development in November 2005. The purpose of this appointment was to consolidate and formalise the Bureau's operational training requirements, both at the base and advanced levels.*

*Colin was previously the Chief Instructor of the Royal Military College – Duntroon.*

This overview is designed to pre-empt the actual presentation of a proven transport safety investigator training and development model. The primary vehicle for this discussion will be the Diploma of Transport Safety Investigation. It is anticipated that through a greater understanding of this and other advanced training regimes, seminar participants will be better positioned to either further their own ongoing professional development or potentially generate formal programs within their specific organisations.

### **Transport Safety Investigator base training framework**

#### **The Diploma of Transport Safety Investigation**

In 2002 the ATSB was nationally accredited as a Registered Training Organisation (RTO). This status serves as the means to enable formalisation of the Bureau's minimum operational training requirements for all transport safety investigators. Tertiary accreditation also enhances the ATSB's external credibility through the recognition of a formal qualification. The Diploma of Transport Safety Investigation is based on the Vocational Education and Training (VET) model and is a tailor-made program purposely designed to produce 'an investigator in charge of a less complex transport safety investigation' (multi-modal). Trainees can expect to dedicate approximately 700 hours towards gaining the diploma, equating to approximately 12-18 months depending on certain variables.

These variables are best described through the following terminologies:

- **Recognised Current Competencies (RCC)/Recognised Prior Learning (RPL)** - the ATSB recruits experienced industry personnel (i.e. aircraft maintenance, flight/marine/rail operations, air traffic controllers, engineers and human factor specialists) and these individuals bring a multitude of formal qualifications and skills. Therefore, it is necessary to establish which of these are relevant in context of the Diploma, as this determines the workload in terms of the following category.
- **Core Training** - This training is managed internally and is geared towards the liabilities/shortfalls identified through the RCC/RPL process and to specifically target those skills and knowledge required by our investigators.

All core training courses are designed to support the following twelve TSI Diploma Competency Standards:

- Use interpersonal communication techniques effectively in the workplace<sup>1</sup>
  - Apply written communication techniques effectively in the workplace
  - Use information technology applications effectively in a professional work environment<sup>2</sup>
  - Manage own professional performance and development
  - Work in a professional team environment
  - Contribute to the development and revision of organisational policy and procedures<sup>3</sup>
  - Work safely within the workplace and at an accident/incident scene<sup>4</sup>
  - Conduct an accident site assessment as part of a transport safety investigation<sup>5</sup>
  - Collect and record evidence as part of a transport safety investigation
  - Conduct interviews as part of a transport safety investigation<sup>6</sup>
  - Analyse evidence as part of a transport safety investigation<sup>7</sup>
  - Manage a less complex transport safety investigation.<sup>8</sup>
- **On-the-Job Training and Experience (OJT/OJE)** – To facilitate a safe working environment, investigators-in-training initially attend job sites in the capacity as an understudy. There they are supported through a senior coach/mentor program, with all formalised training conducted by either experienced diploma-qualified personnel and/or trainers qualified in Certificate IV Training and Assessment. This training and experience represents a major element in finally determining the applicant's ability to satisfy all TSI diploma requirements.

## **Transport Safety Investigator ongoing professional development regime**

In acknowledging that the TSI Diploma, as a base tertiary qualification, is limited by design, it is therefore necessary that an ongoing professional development regime be established. Given the parameters of any learning continuum are boundless, the ATSB

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<sup>1</sup> Several core training courses in support including; Negotiation Skills (2 day externally provided), Media Awareness (1 day external), Cultural Intelligence (2 day external) and Coronial Witness (1 day external).

<sup>2</sup> Safety Information Management System (SIIMS) database training (3-5 days internal). Also a full range of information technology courses (available as required).

<sup>3</sup> Legal awareness/TSI Act 2003 (1 day internal) available to relevant external industry bodies.

<sup>4</sup> OH&S/Bloodborne Pathogen training (1 day internal) available to relevant external industry bodies and Critical Incident Stress (1 day external). Note all investigators must hold a current senior first aid certificate and maintain minimum inoculation requirements.

<sup>5</sup> Accident Fundamentals (5 day internal) has previously been facilitated through Cranfield University.

<sup>6</sup> Cognitive Interviewing (2 day internal) available to relevant external industry bodies.

<sup>7</sup> Investigation Analysis (4 day internal) available to relevant external industry bodies.

<sup>8</sup> Several core training course in support including; Human Factors (5 day internal) available to relevant external industry bodies, Media release (1 day external) and Public Service and Parliamentary Awareness (3-5 days internal).

has controlled its advanced curriculum through strict alliance to well defined senior work level standards.

- **ATSB senior investigator work level standards** – these standards articulate the work outputs required by senior staff and are geared towards the developing capacity to undertake the role of ‘an investigator-in-charge of major transport safety investigation’. Therefore, in preparation (given actual exposures will be limited), all senior investigators are encouraged to participate in any or all of the following professional development options:
  - Advanced core training courses – these are designed to build on the TSI Diploma platform including; coronial representation, media, representational duties, technical report writing, project management, mentoring, cross disciplinary awareness and the workings of government
  - Industry awareness – designed to maintain specialist skills through ongoing professional applications (flying, ground schools, technical conversion courses etc). Concurrently this participation ensures that professional and open channels of communication with related industry bodies are maintained
  - Advanced tertiary qualifications – (Advanced Diploma - Doctorate) through targeted subject areas including; aviation<sup>9</sup>, science, engineering, business and general management. Note: all associated costs are funded by the Bureau through the internal ‘study-bank’ policy and guidelines

I look forward to attending my first Asia-Pacific Regional Seminar and covering this subject matter in greater detail.

Regards

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<sup>9</sup> The Bachelor of Aviation Management through Griffith University (QLD) has recently proven the most relevant.