Tertiary course for Forensic Science

THE AFP has 'gone back to school' to raise the level of knowledge of its members in a field that has become essential to police forces around the world — Forensic Science.

The Forensic Services Division of the Training and Standards Branch has helped develop a tertiary training course for an Associate Diploma in Applied Science (Forensic Science) at the ACT Institute of Technical and Further Education (TAFE).

The course will be the only one of its kind presently available in Australia.

Forensic science training at tertiary level for police officers in this country

Mr John Horswell

is virtually non-existent, according to the designers of the new course, John Horswell, officer-in-charge of Training and Standards Branch, and Constable Craig Petterd, currently attached to the Crime Scene Branch.

Some States adopt in-house training courses and others have different levels of tertiary training as a basis for carrying out crime scene duties.

Courses similar to the new AFP one were formerly conducted by the South Australian and Northern Territory forces but were discontinued because of cost and the lack of students.

Tertiary training need

The new course represents an aggressive approach by the AFP in its plans to raise the level of scientific knowledge of crime scene and physical evidence among its members.

Horswell and Petterd, in a report prepared on their new course, point out that traditionally in Australia crime scene examination has been carried out by police members appointed to a scientific or forensic area. Regardless of educational background, these specialist police have had no consistent ongoing training at tertiary level to equip them with the necessary skills and attributes desirable in a crime scene examiner.

While other disciplines like chemistry, biology and pathology have had tertiary courses in place for their operators for some time, little has been done to maintain tertiary training for the Crime Scene/Physical Evidence Examiner, they say in their report "Education in Scenes of Crime/Forensic Science".

Both Horswell and Petterd are experienced in the Police Scientific field. Horswell, before joining the AFP, was the longest-serving member of the Northern Territory Police's Forensic Science Section, with 14 years' experience, and was Senior Crime Scene Investigator for the Territory. He is a Churchill Fellow and graduated with a Master of Science degree at Strathclyde University, Scotland.

Petterd, who has been with the AFP for seven years, gained his Bachelor of Science Degree at the Australian National University and, soon after, transferred from General Duties to the Scientific Investigation Branch. In 1988 he participated in the Resident Research Program with the National Police Research Unit and is currently attached to the Crime Scene Branch of the Forensic Services Division.

Two areas of duty

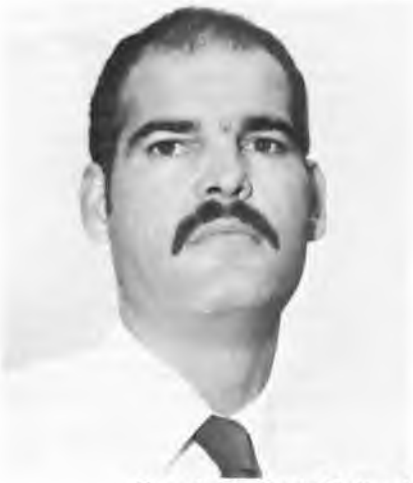
In formulating the course, they realised they needed to identify the duties of Crime Scene/Physical Evidence Examiners within the AFP, bearing in mind that they are, on many occasions, expected to have knowledge of the capabilities of a number of disciplines in the interpretation of complex crime scenes.

These duties fall into two categories — those at the scene and those in the laboratory.

At the scene they are required to study evidence gathered by photography, sketch drawing, or notes of observations; identify and search for latent and trace evidence; collect macroscopic and microscopic exhibits; apply special collection and packaging techniques; and interpret and reconstruct crime scenes.

At the laboratory their work includes collation of exhibits; preliminary material examination for potential evidence; examination for fingerprints using chemical and optical enhancement; recognising the type of examination needed for exhibits; physical matching of elements such as particular markings; and specialist laboratory photography.

Horswell and Petterd reasoned there



Constable Craig Petterd

was a minimum desired level of expertise required in carrying out these duties which they identified as knowledge of physical evidence; understanding its significance, what information can be obtained from it, and the sequence in which it is to be examined; knowledge of the correct scientific discipline to obtain the most appropriate information from physical evidence; crime scene interpretation, reconstruction and management; and the processes involved in crime scene searching and recording.

Finally, and importantly, crime scene examiners needed to be competent court illustrators with the ability to give expert evidence when required.

They decided that achieving this level of expertise required the adoption of a program encompassing study leading to an Associate Diploma, and at the same time, comprehensive on-the-job

training and assessment.

On completion of the course, Horswell and Petterd believe, students could be expected to have a thorough knowledge of and expertise in the process of crime scene interpretation, reconstruction, searching and recording. They should be able to determine which scientific discipline to employ to obtain the most appropriate information from physical evidence and be competent in presenting forensic evidence to courts of law.

Improved quality

In their report, they point out that at present the AFP has limited in-house resources and capability to carry out its own scientific examinations with the exception of the more traditional police science subjects of ballistics, documents and fingerprints.

"It is important that the physical evidence technician can determine the presence and nature of material of potential evidential value in order that the exhibit or recovered material is forwarded to the most appropriate specialist scientist," they say.

"Establishing an Associate Diploma should not be seen as a backdoor mechanism to create second-class scientists or pseudo scientists as the purpose is to improve the quality and professional status of the key person in forensic investigation, the collector of items.

"A better knowledge of the analysis to follow must lead to an enhanced capability to make the correct decisions in the initial identification and processing of exhibits," they say.

The course will be available to members of the Forensic Services Division of the AFP, or those in a similar position with other police forces, and who have Matriculation, ACT Year 12 Certificate, or equivalent.

Each course will accommodate 15 students and involve 1278 hours of study, both full-time and part-time, over a four-year period.

"Crime scene examiners are at the sharp end of forensic science," Horswell and Petterd argue. "They are in a prime position to provide a communication bridge between the investigator and scientist and, once trained, have a broader perspective of all of the sciences involved in their work.

"We are acutely aware that if a scene examination is not properly undertaken, all the laboratory examiners in the world are not going to repair the damage caused or replace the evidence overlooked during any scene examination."

Undergraduates visit Canberra

IN December 1989 and January 1990, 15 young Victorians who had successfully completed Year 12 studies, or Higher School Certificate in Victoria, undertook entrance examinations for the AFP.

Although the examinations and tests were of the same level as those which all applicants for the AFP are expected to pass, in this case success allowed entrance to the AFP only after completion of tertiary studies at either of two Melbourne Centres of Advanced Education.

Eleven of the 15 applicants completed all tests successfully, and of these, three are now studying for Bachelor of Arts (Criminal Justice Administration) at Philip Institute of Technology, and the other eight are attending Chisholm Institute of Technology where they are studying for an Associate Diploma (Police Studies) or a Bachelor of Arts.

The 11 comprise a pilot group in the AFP's Undergraduate Sponsorship Program, which is expected to get under way fully next year. They recently paid their own way to Canberra where they spent nearly two weeks on work experience with the AFP.

Study at both institutes is full-time, however the Associate Diploma takes two years to complete compared with three years for the Bachelor of Arts course.

The Associate Diploma also is capable of being upgraded to Bachelor of Arts level after a further year's study.

Students' progress

The scheme will be of considerable benefit to the AFP in providing the opportunity to recruit new members with an education discipline that is relevant to work expectations and knowledge base.

AFP supervisors will have the chance to watch the students' progress to determine their suitability before they actually begin employment.

Eventually, it is hoped consideration will be given to determining which aspects of the tertiary study are duplicated at the AFP training level, so the overall time span for current AFP training may be reduced.

The main benefit in the scheme for applicants is that after successful completion of tertiary study they are guaranteed a job in the AFP, provided medical and fitness criteria have been met.

Other direct benefits to the student are an undertaking by the AFP that it will provide work experience during semester breaks and an opportunity to take part in an investigative study in the AFP work environment, with the completion of study units oversighted by an AFP member.

Summer school

The possibility also exists that some form of AFP training will be provided in Summer Schools jointly by the AFP and the Tertiary institutes concerned.

It is a decided advantage for entrants to see at first hand, the workings of the organisation before actually commencing employment.

The AFP studies co-ordinator in Southern Region and the AFP Librarian will be available to the students to assist with material and information concerning units of study they elect to undertake.

Participants in the tertiary scheme are expected to remain in the State in which they undertook their studies before joining the AFP.

They may, however, transfer if they wish and if they are deemed suitable for an advertised vacancy.

The AFP currently has a representative on the Course Advisory Committee of both institutes and although not intending to directly influence either academic body, it does ensure that the material presented reflects the interests of the organisation. The representative in Southern Region is Superintendent John Silver.

Ultimately the scheme is expected to extend to other regions and involve other tertiary institutions.

Story by Keith Livingston.