Australian Government

PUAFIR610A Manage imaging and electronic data

Release 2

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

PUAFIR610A Manage imaging and electronic data

Modification History

Release	TP Version	Comments
2	PUA12 V2	Layout adjusted. No changes to content
1	PUA00 V8.1	Primary release on TGA

Unit Descriptor

This unit covers the competency required to electronically record evidence at a fire investigation scene. It includes the use, collection and selection of media, and the analysis and management of associated data.
No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Application of the Unit

Application of this unit is relevant to specialist fire investigators who are required to determine the origin and cause of fires.
It focuses on the skills and knowledge required to develop and apply a systematic approach to electronically recording physical evidence at a fire investigation using a range of media.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.	Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Evaluate scene to determine data to be captured electronically	1.1 Occupational health and safety (OHS) procedures appropriate to the incident are followed 1.2 Scene is assessed to identify and confirm data to be captured electronically 1.3 Process for data capture is determined in accordance with agency guidelines and legislative requirements
2. Select and prepare equipment	2.1 Appropriate equipment and ***accessories*** are selected according to the specific requirements of the incident 2.2 Personnel are briefed on capture process, and required quality and quantity of evidence
3. Capture evidence electronically	3.1 ***Electronic equipment*** is used to capture ***physical evidence*** in accordance with agency procedures 3.2 ***Selected techniques*** for capture of data are tested and modified where necessary 3.3 Electronic record of physical evidence is documented and ***labelled*** in accordance with agency and legal requirements to ensure continuity, authenticity and integrity of evidence 3.4 Evidence captured is protected from ***data corruption*** 3.5 ***Data evidence log*** is completed and maintained
4. Analyse data to support conclusions	4.1 Data is assessed to support findings 4.2 Data is collated and selected 4.3 Selected evidence is prepared for use in reports and/or presentations
5. Manage electronic evidence	5.1 Process for capturing evidence is maintained and audited 5.2 Primary and working copies of data collected are ***created, stored and used*** where required 5.3 Data is disseminated according to agency and legislative requirements 5.4 Data identified for disposal is eliminated in line with agency, legal and environmental requirements 5.5 Data to be retained is documented, ***stored/archived*** to ensure continuity and non-contamination/degradation of evidence in line with agency and legal requirements

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required Skills

- apply resource and time management skills
- interpret electronic data
- interview witnesses
- manage electronic data
- present electronic data evidence
- use and maintain digital cameras, video/audio/data recording devices
- use computer systems
- write and communicate in clear, unambiguous language

Required Knowledge

- equipment maintenance
- integrity of data in networked environments
- local/state/territory court requirements for investigations and recording of findings
- methods, techniques and equipment for handling and storing evidence to preserve and avoid damage or contamination
- OHS practices and procedures
- principles of investigation based on scientific method
- protocols for recording data files
- roles and functions for the recording, collecting, preserving and continuity of data
- rules of evidence
- safe work practices relating to the use and operation of digital and computer hardware

Evidence Guide

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessment must confirm the ability to:

- maximise the potential evidentiary value of physical evidence collected
- capture data relative to specific incident
- interpret data in regard to incident origin and cause.

Consistency in performance

Competency should be demonstrated over time and across a range of workplace and/or simulated situations.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in the workplace and in a simulated workplace environment.

Specific resources for assessment

Access is required to:

- range of current electronic media
- computer-generated graphic software
- legislation, policy, procedures and protocols relating to gathering and managing data.

Guidance information for assessment

Assessment methods suitable for valid and reliable assessment of this unit may include a combination of:

- case studies
- demonstration
- observation
- questioning
- scenarios
- authenticated evidence from the workplace.

Range Statement

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.	
Accessories may include:	• Batteries • Caps • Covers • Discs • Filters • Lenses • Lighting • Recording devices • Tripods
Electronic equipment may include:	• Audio recording • Closed circuit television (CCTV) or other media images • Computer generated data • Detection equipment • Digital images • Digital recording note takers • Digital versatile discs (DVD) • Digital video camera • Electronic visual information • Global positioning system • Long-term media (compact discs [CDs]) • Multimedia recording devices • Portable hard drives/servers • Short-term media (compact flash cards) • Video recording
Physical evidence may include:	• Any and all objects, gross or microscopic in size • Biological tissue • Blood stain • Clothing • Containers • Documents • Fibres • Fire debris • Living, inanimate, solid objects • New evidence which results in the reopening of an investigation • Paint • Photography (digital, multimedia, CCTV, other media

	images) • Real, oral, computer data or documentary • Tyre marks, shoe marks, tool marks, fingerprints • Vehicle examinations
Selected techniques may include:	• Current photo imaging industry practice • Data enhancement • Digital imaging processes • Exposure meter techniques • Perspective
Labelling of evidence may include:	• Date • Details of person/s giving the evidence • Electronic file naming protocols • Location • Person/s collecting the evidence • Time
Data corruption may include:	• Chemicals e.g. cleaning agents • Computer virus • Dust and physical damage e.g. crushing and severe shocks • Extreme temperatures • Magnetic fields • Moisture
Data evidence log may include:	• Details of devices/equipment used to capture digital evidence • Handling processes of each digital capture • Names and experience of personnel recording digital images and audio recordings • Protocol for saving digital capture e.g. NEF, TIFF, JPEG • Relationship between digital capture and incident scene
Creating, storing and using primary and working copies of data may include:	• Database recording/linking digital data to physical evidence and specific incident • Enhancing, reformatting, recycling data • Labelling and storing primary image data to a secured electronic storage device for archiving and copying data for ongoing data review and interpretation • Statutory requirements for retention of evidence
Storing/archiving data to be retained may include consideration of:	• Exhibit labels • Packaging medium • Physical nature of exhibit • Storage temperature

Unit Sector(s)

Not applicable.