Australian Government

Department of Education, Employment and Workplace Relations

PUADEFEO810A Acquire data related to pressure

Revision Number: 1

PUADEFEO810A Acquire data related to pressure

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor	This unit covers the competency required to acquire data related to pressure in a proof and experimental environment.
	Explosive ordnance proof tests are conducted to ensure weapons systems or explosive ordnance in service with the Australian Defence Force meets the required standards. The acquisition of data related to pressure is a common component of proof tests and normally involves a number of personnel both in planning and implementation.
	This unit does not cover the planning for data acquisition. Normally a data acquisition plan would be a component of the testing plan. If planning is required then it is covered in PUADEFEO602C Plan explosive ordnance trials.

Application of the Unit

Application of the Unit	This unit applies in a physical science or engineering environment where product undergoes testing to establish that it meets established standards and/or specifications in respect to pressure.
	This unit was developed for data acquisition specialists working within proof and experimental organisations in Defence but is applicable to any individual in this field of work.
	Typically these individuals must demonstrate the ability to work as individuals and as part of a team under direct and/or indirect supervision, use discretion and judgement, and take responsibility for the quality of their output. All activities are carried out in accordance with relevant organisational policies and procedures.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability Skills	This unit contains employability skills.
Pre-requisite Unit/s	Nil

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 Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. **Prepare for data collection**	1.1 *Stakeholders* and test participants are briefed in accordance with *organisational policies and procedures*, and *test plan*
	1.2 Safety systems and procedures are checked and initiated in accordance with organisational policies and procedures, and test plan
	1.3 Key activities and timelines are scheduled with full consideration to the specification and available resources, and are described according to organisational policies and procedures
	1.4 *Administrative and legal requirements* for data collection are complied with and recorded
	1.5 *Relevant personnel* are informed about the project
	1.6 Designated staff responsibilities are communicated to staff to ensure clarity of understanding of the work and to provide a basis for ongoing assessment
	1.7 Data collection equipment is selected and installed in accordance with the data collection plan

ELEMENT	PERFORMANCE CRITERIA
2. **Gather data**	2.1 *Equipment* is operated according to *manufacturer's specification*, statutory and organisational policies and guidelines
	2.2 Data is collected using *methodologies* detailed in the data collection plan
	2.3 *Metadata* is documented according to accepted industry standards
	2.4 Any discrepancies between specification and actual activities are identified and planned for
	2.5 *Occupational health and safety* (*OH&S*) *requirements* are planned for and adhered to throughout the conduct of the project
3. **Finalise the collection process**	3.1 All *required documentation* is completed according to organisation's requirements
	3.2 All data and documentation is stored according to organisation's requirements
	3.3 Data integrity is checked in accordance with the validation plan

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required Skills

- analyse and evaluate information
- communicate effectively with stakeholders
- identify relevant information
- liaise effectively with stakeholders
- prepare and present reports
- provide and receive feedback in a constructive manner
- review literature
- solve problems
- use appropriate information technology and software
- use a variety of verbal and non-verbal communication techniques

Required Knowledge

- analysis process
- codes of practice
- data acquisition methodologies
- information sources
- licensing requirements
- regulatory requirements
- relevant legislation
- research techniques
- standards relevant to organisational operations

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	Assessment must confirm the ability to: • establish the data collection process • rectify collection faults • maintain the data and documentation. **Consistency in performance** Competency should be demonstrated over time in a variety of environments and tests/trials.
Context of and specific resources for assessment	**Context of assessment** Competency should be assessed in the workplace or in a simulated work environment, in accordance with all relevant legislation and organisational requirements. **Specific resources for assessment** Access is required to: • live fire range • data collection equipment.

EVIDENCE GUIDE

Method of assessment	This unit may be assessed with the following unit:
	• PUADEFEO101D Work safely with explosive ordnance.
	In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook.
	Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment.
	Assessment may occur in an operational environment or in an industry-approved simulated work environment. Forms of assessment that are typically used include:
	• direct observation
	• interviewing the candidate
	• journals and workplace documentation
	• third party reports from supervisors
	• written or oral questions.

Range Statement

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.

Stakeholders may include	Clients or customers (internal and external)
	End user/s
	General public
	Industry
	Landowner/s
	Organisation's senior management
	Other agencies
	Other functional areas within the organisation
	Project teams
	Relevant interest groups
	Sponsor/funding bodies
	Steering committee members
	Supplier/service provider
	Unions
Organisations may include	Defence
	Defence contractors and sub-contractors
	Defence Materiel Organisation
	Defence Science and Technology Organisation
	International test agencies
Policies and procedures may include	Government and organisational policy, guidelines and procedures relating to:
	• delegation approvals
	• industrial agreements
	• procurement guidelines
	• resourcing
	• risk management
	• security
	• strategic or operational plans
	• technical and regulatory framework
	• testing and evaluation

RANGE STATEMENT

	• training
	Relevant commonwealth, state/territory and local laws affecting organisation's administration such as:
	• financial management and accounting legislation and regulations
	• OH&S legislation
	• public sector management acts
Test plans may include	Data acquisition strategies
	Budget and financial management strategy
	Contract management
	Cost estimates
	Evaluation criteria
	Expected/measurable outcomes
	Facilities
	Functional performance specifications
	Governance strategy
	Implementation strategy
	Inclusions and exclusions
	Information/communication strategy
	Intellectual property strategies
	Milestones
	Objectives
	Occupational concept document
	People plan including human resource management and human resource development
	Performance criteria/indicators
	Purpose
	Quality assurance
	Quality control
	Quality standards
	Rationale
	Required resources
	Resource management

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RANGE STATEMENT

	Risk management
	Roles and responsibilities
	Safety criteria
	Schedule/timeline
	Specific equipment, instrumentation, and/or specialised facilities and required conditions
	Task/WBS
	Test and evaluation master plan (TEMP) criteria
	Test concept document
	Testing control mechanisms
	Testing deliverables and their acceptance criteria
Administrative and legal requirements may include	Access protocols and obligations
	Copyright
	Organisational protocols for accessing physical, financial and human resources
Relevant personnel may include	Administrative staff
	Contractors
	Management
	Proof testing staff
	Technicians
	Trials staff
Equipment may include	Data-recording equipment
	Electronic sensors
	Physical pressure measuring devices
	Pressure gauges
Manufacturer's specification may include	Calibration specifications
	Equipment specifications
	Leaflets, operator's manuals
	Printed instruction
	Warranty documents
Methodologies may include	Conversion or translation from existing information (hard copy or digital)

RANGE STATEMENT

	Direct or indirect
	Manual entry
	Remote sensing
Metadata	Is summarised information about a data set that describes its characteristics including source, availability, quality, date of acquisition, conditions of use, coordinate system, datum
Occupational health and safety (OH&S) requirements may include	Development of a site safety plan
	Identification of potential hazards
	Inspection of worksites
	Training of staff in OH&S requirements
	Use of safety equipment and/or special clothing
Required documentation may include	Accident and injury reports
	Authority/approval documentation
	Meeting reports
	Records and reports of communication
	Reimbursements

Unit Sector(s)

Not applicable.