



Australian Government

Department of Education, Employment and Workplace Relations

CUFSFX402A Coordinate the logistics of special effects operations

Revision Number: 1

CUFSFX402A Coordinate the logistics of special effects operations

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to coordinate the logistics of physical special effects operations for productions in the screen, media and entertainment industries. The National Standard for Licensing Persons Performing High Risk Work applies to persons performing dogging and rigging work. Completion of the following units is required for certification at either basic, intermediate or advanced levels. CPCCLDG3001A Licence to perform dogging CPCCLRG3001A Licence to perform rigging basic level CPCCLRG3002A Licence to perform rigging intermediate level CPCCLRG4001A Licence to perform rigging advanced level. Sets and staging for some performances or events may fall within the definition of construction work. If so, people entering a construction site are required to complete the general induction training program specified by the National Code of Practice for Induction Training for Construction Work (Australian Safety Compensation Council, May 2007). Achievement of the unit 'CPCCOHS1001A Work safely in the construction industry' fulfils this requirement.
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Application of the Unit

Application of the unit	Coordinating physical special effects operations for productions is related to coordinating operations for props and other elements of sets. However, the scale and nature of special effects items can vary quite dramatically - from models and miniatures to electronic devices to animatronics and creatures. This means that transportation arrangements can be complex on occasions, as can the process of assembling and disassembling items. Teamwork is a key feature of this role and generally speaking people in this position are responsible for supervising a team, while reporting to a production manager.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Prepare for transportation of special effects items	1. Confirm facilities available at production locations in consultation with relevant personnel and with reference to production documentation 2. Inspect locations as required to identify most appropriate delivery, storage and assembly arrangements 3. Ensure that power supply and facilities at locations are adequate to meet production requirements for assembling and executing special effects 4. Conduct pre-departure checks on all equipment to be used at locations 5. Complete required stock orders and ensure availability in time for the assembly and execution of special effects 6. Develop an operational plan to transport, assemble and disassemble special effects items at production locations 7. Identify problems that might occur with the transportation and assembly of special effects items and make contingency plans as required
Coordinate the transportation of special effects items to locations	8. Organise the construction or acquisition of road cases, boxes or crates to enable the safe transportation of special effects items to production locations 9. Ensure that safe lifting and handling methods are used to pack and unpack special effects items, taking care to avoid damage to items 10. Ensure that transportation method allows access to locations and is suited to the nature and quantity of special effects items being transported 11. Provide clear, accurate and complete instructions to transport providers 12. Complete documentation in accordance with enterprise procedures
Receive special effects items at locations	13. Check and document condition of all special effects items and construction equipment transported to production locations 14. Complete any reports on shortages or damaged items in line with enterprise procedures 15. Coordinate deliveries of goods from specialist manufacturers and hirers 16. Check and document the quality and condition of hired or specially manufactured items on receipt, to ensure that production requirements can be met

ELEMENT	PERFORMANCE CRITERIA
Assemble and disassemble special effects items on location	17. Identify and implement solutions to any operational problems in consultation with relevant personnel 18. Oversee assembly of special effects items, ensuring that quality standards are adhered to, the most appropriate techniques are used and that work is undertaken within budget constraints 19. Ensure that OHS and public safety legislative requirements are met and production schedules are adhered to 20. During assembly, ensure safety of all personnel and any general public present 21. Secure special effects items and accessories throughout the assembly phase to minimise theft or damage 22. Coordinate safe disassembling, packing and return transportation of special effects items and equipment 23. Report and document any equipment that is damaged and requires maintenance in line with enterprise procedures 24. Leave locations in the original or improved condition, ensuring no adverse impact on the sites 25. Evaluate own role in special effects operations and note areas for improvement

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- communication, literacy and teamwork skills sufficient to:
 - interpret production documentation, special effects assembly specifications and instructions
 - provide verbal instructions to team members responsible for assembling and disassembling special effects items
 - work collaboratively as a member of a production team, including supervising team members
 - complete workplace documentation
- initiative and flexibility sufficient to devise the most efficient way to handle the logistics of transporting complex special effects items
- problem solving skills sufficient to make adjustments to special effects items to allow for transportation without compromising functionality
- planning and organising skills sufficient to:
 - plan and coordinate transportation of special effects items to and from locations in line with production requirements
 - manage stock control in relation to special effects operations
- technical skills sufficient to:
 - use hand and power tools to assemble special effects items
 - handle hazardous materials in a safe manner
- self-management skills sufficient to:
 - work under pressure and meet deadlines
 - follow manufacturer specifications and organisational policies and procedures
 - seek expert advice when problems arise
- numeracy skills sufficient to interpret budgets and monitor expenditure against budgets

Required knowledge

- industry knowledge, including:
 - roles and responsibilities of art and construction personnel
 - broad understanding of the artistic and technical elements of productions
 - issues and challenges that arise when coordinating the transportation and assembly of physical special effects for productions in the screen, media and entertainment industries
 - set etiquette and protocols
- principles of and techniques for assembling and disassembling physical special effects for screen productions

REQUIRED SKILLS AND KNOWLEDGE

- sound knowledge of:
 - properties, applications and durability of different types of materials that can be used for special effects construction
 - behaviour of various materials, finishes, painting techniques and colours under lighting
- detailed knowledge of sections of the Australian Recommended Safety Code for Film and Television related to special effects operations and other codes of practice relevant to specific special effects operations
- OHS procedures as they relate to the safe use of equipment and materials to construct physical special effects for productions

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, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

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

Evidence of the following is essential:

- efficient coordination of special effects operations that demonstrates an ability to:
 - interpret production documentation correctly
 - meet production requirements
 - coordinate transportation of special effects items to and from locations
 - take account of budgetary and resource constraints
 - communicate effectively with team members while supervising the assembly and disassembly of special effects items on location
- application of safe work practices.

Context of and specific resources for assessment

Assessment must ensure:

- practical demonstration of skills through coordinating the logistics of special effects operations for at least two productions
- access to productions that require special effects items
- access to appropriate learning and assessment support when required
- use of culturally appropriate processes and techniques appropriate to the language and literacy capacity of learners and the work being performed.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third-party workplace reports of on-the-job performance
- discussion with the candidate about procedures followed to coordinate the logistics of special effects operations, including problems that could arise and how they would be dealt with

EVIDENCE GUIDE	
	• inspection of plans prepared by the candidate for the transportation and assembly and disassembly of special effects items to determine if correct procedures have been followed • written or oral questioning to test knowledge as listed in the required skills and knowledge section of this unit.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • BSBOHS407A Monitor a safe workplace • BSBPMG408A Apply contract and procurement procedures • CUETEM06B Organise and monitor bump in/bump out.

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, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Locations may include:

- day and night
- on location - exterior
- on location - interior
- outside broadcast
- studio.

Relevant personnel may include:

- designer
- director
- director of photography
- fire and safety officer
- floor manager
- head of department
- medic
- performers
- personnel with specialist expertise in special effects productions and execution
- producer
- production designer
- production manager
- special effects department personnel
- special effects production personnel
- special effects supervisor and manager
- specialist equipment designer
- specialist manufacturer
- supervisor
- technical director
- transportation provider and crew
- other technical/specialist staff.

Documentation may include:

- budgets
- call and running sheets
- colour charts
- computer generated
- confirmation of receipt and dispatch notes

RANGE STATEMENT	
	• descriptive special effects checklists • fault reports • hire agreements • manually written • manufacture schedules • manufacturer specifications and instructions • measurement charts • memos of instruction • operational and project plans • paint colour formulas • production schedules • scripts • sketches • special effects breakdown lists • special effects construction schedules and plans • special effects design • specialist documents required for the transportation of dangerous goods • stock orders • stock reports • technical drawings.
<i>Productions</i> may include:	• animated productions • commercials • documentaries • feature films • filmed events or performances • live events and entertainment • live or pre-recorded television productions of any type • music videos • short films • theatre productions.
<i>Special effects</i> items may include:	• animatronics and creatures • automated and animatronic devices and controls • cables • computer controlled devices • electrical and mechanical winches • electro mechanical devices

RANGE STATEMENT	
	• electronic devices • electronic flashing and timing devices • electronic hardware • floor effects, including: • weather effects • fire and smoke • collapsing and destruction • water • crashes • motion control systems • models and miniatures: • demonstration type • real type • figures • landscapes • buildings • motion control electronics and systems • pneumatics • power packs • road cases, boxes, and crates for storage and transportation • sculpture - human, animal and inanimate.
Transportation may include:	• hired vehicles • specialist handling and packaging of dangerous goods, including explosives, chemicals and pyrotechnic items • use of boats, planes, helicopters and trains • use of special transport low loaders.
Techniques may include:	• fabrication • gluing and cementing • metalwork, including: • cutting • welding • brazing • moulding materials • painting and finishing • sculpting and other shaping methods • timber construction • woodworking.

RANGE STATEMENT	
<i>OHS and public safety legislative requirements</i> may include:	• commonwealth, state and territory OHS regulations • local government construction rules and regulations • national and international standards, guidelines and codes of practice, e.g. the Building Code of Australia.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Media and entertainment production - special effects
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Co-requisite units

Co-requisite units		