



Learner Assessment Guide
Unit Standard 3288
Load water and additives for aerial operations
(Level 3, Credit 2, Version 3)

Level Descriptor

Level	Process	Employing	Responsibility
3	Carrying out processes that: <ul style="list-style-type: none"> Require a range of well developed skills Offer a significant choice of procedures Are employed within a range of familiar contexts 	Employing: <ul style="list-style-type: none"> Some relevant theoretical knowledge Interpretation of available information Discretion and judgement A range of known responses to familiar problems 	Applied: <ul style="list-style-type: none"> In directed activity with some autonomy Under general supervision and quality checking With significant responsibility for the quantity and quality of output With possible responsibility for the output of others

Descriptors:

Credit 2 - will require approximately 20 - 24 hours of learning, practice or experience and assessment for a person with no previous knowledge or experience.

Version 3 - This document has been prepared based on version 3 of the Unit Standard.

Elements:

- Demonstrate knowledge of safe practices when loading aircraft with water, and water with additives.
- Select site and set up filling equipment.
- Fill buckets or hoppers with water and additives to safe load levels.

Prerequisites:

Unit 20388, *Work safely with aircraft at emergency incidents*, or demonstrate equivalent knowledge and skills.

Assessment Conditions:

Assessment against this unit standard may take place under real or practical simulated conditions.

Resources:

- Fixed wing aircraft fitted with water hopper and doors, or helicopter with bucket.
- Pump, fuel, and filling hose/s.
- Aircraft filling adaptor and gooseneck.
- Water supply.
- Foam and retardant (or simulated additives).

Special Notes: Compliance with the providers Health and Safety policy and procedures is mandatory.

Consult your trainer about subjects that may not be covered in the primary reference.

“Air Operations Information and Checklist” from NRFA
“Aircraft Safety: Fire management Working with the Aviation Sector”

This assessment must be conducted using operating aircraft or helicopter, i.e. aircraft running or helicopter hovering.

Assessment Brief Instructions:

The assessor may use pre-course, on course, post course or workplace written or oral assessments as evidence towards gaining the knowledge based components of this unit. The assessor will evaluate the relevance of the evidence against the unit standard. The lists below provide an outline of the assessment components a learner should expect to encounter in achieving this unit.

This unit may be assessed in two ways:

- As a theory test and a practical simulation; or
- A practical simulation / real incident with oral questions from the assessor to cover knowledge components.

This Learner Assessment Guide is simply a guide and does not determine the sufficiency or validity of evidence the assessor must evaluate using assessment best practice criteria.

LEARNERS SHOULD ALWAYS REVIEW THE REQUIREMENTS CONTAINED IN THE UNIT STANDARD DOCUMENT PRIOR TO REQUESTING ASSESSMENT.

Learners may need the support of an Officer or supervisor/manager to provide a suitable level of authority to set up and monitor a trail evacuation, and to endorse any formal reporting requirements.

Assessing Element 1: Demonstrate knowledge of safe practices when loading aircraft with water, and water with additives

Range: fixed wing, rotary wing.

Learner will:

Give a clear explanation of practices when creating:

- safe and efficient working zones for aircraft and helicopter operations
- locating equipment and consumables such as foam or retardant stocks
- parking of vehicles, and
- securing loose items

Explain requirements for personal protective equipment when loading aircraft or helicopters.

Factors –

- Water/cold protection
- Head/eye/ear protection
- Safety footwear

Explain methods of communicating within the crew during filling operations.

Explain the requirements for the safe handling of foam and retardants, PPE and dealing with spillages.

Explain the requirements of personal fitness and setting a work pace for operational safety.

Usually assessed using oral questions or a written assessment. May be assessed using oral questions at a simulation or real fire.

Assessing Element 2: Select site and set up filling equipment

Range: fixed wing operations, rotary wing operations.

This will be a practical assessment where learner will work as part of a crew and:

Select a suitable site with

- a water supply
- suitable for aircraft requirements
- access, and
- operational safety

Select and set up appropriate equipment in accordance with requirements.

Arrange supplies of consumables on site to meet requirements.

- Class A foam
- Fire retardant
- Other water additives
- Portable water supplies
- Fuel pump

Set up equipment ready to fill aircraft and helicopters as arranged with the assessor.

Learner may be asked oral questions to explain the different set-up requirements for aircraft and helicopters.

Assessing Element 3: Fill buckets or hoppers with water and additives to safe load levels

Range: helicopter buckets or fixed wing hoppers.

This will be a practical assessment where learner will work as part of a crew to:

Fill an aircraft hopper or heli-bucket bucket and demonstrate

- load requirements
- additive requirements
- safe practices

Demonstrate the use of communications during this operation between the crew personnel and also the helipad / airstrip supervisor using

- Hand signals
- Radio communications

Learner will:

Explain the requirements for adjustments on the heli-bucket drop pattern.

Will assist to re-commission gear after use.