



Fire & Rescue Services ITO

Assessor Assessment Guide Unit Standard 3293 Lead ground support for air operations at vegetation fires (Level 4, Credit 4, Version 3)

In order to achieve competency in this unit standard a candidate must display an understanding of the knowledge components by completing an oral or written assessment and practically demonstrate the performances required to demonstrate basic knowledge of aircraft performance in relation to vegetation fire fighting; choose landing sites for fixed and rotary wing aircraft; and lead ground support operations at vegetation fires.

This assessment may take place at a real fire where defensive control is employed or at a simulated practical event.

The assessor may elect to question candidates during completion of the practical assessment to ensure theoretical knowledge can be applied during practice. This technique also provides the assessor with reinforcement that knowledge has been retained.

Where a candidate is being assessed on the basis of a RCC process evidence must be produced that indicates a candidate has successfully directed operations at a defensively controlled fire at both structure and vehicle fires in a safe manner without causing avoidable environmental or equipment damage.

Assessors may use this guide to record evidence of a candidates overall performance but should be aware that this may not, on its own be an adequate record for moderation purposes without appropriate notes or appendices. Notes should include a summary of the process used and a statement about the quality of the candidate's performance.

ASSESSORS SHOULD ALWAYS REVIEW THE REQUIREMENTS CONTAINED IN THE UNIT STANDARD DOCUMENT PRIOR TO CONDUCTING ASSESSMENTS

For this unit the following resources are available to assist Learners, Instructors and Assessors:

- "Air Operations Information and Checklist" – from NRFA
- A student booklet "Aircraft Safety, Fire Management – Working with the Aviation Sector"

Assessors General Notes:

Candidates must hold prerequisites: Unit 20388, *Work safely with aircraft at emergency incidents*, or demonstrate equivalent knowledge and skills.

People seeking credit for this unit standard must have prior competence in supervisory management skills.

Assessor Name	_____	Assessor No.	_____
Candidate Name	_____	NZQA No.	_____
Date of Assessment	_____	Final Result	_____

Level Descriptor

Level	Process	Employing	Responsibility
4	Carrying out processes that: <ul style="list-style-type: none"> Require a wide range of scholastic skills Offer a considerable choice of procedures Are employed in a variety of familiar and unfamiliar contexts 	Employing: <ul style="list-style-type: none"> A broad knowledge base incorporating some theoretical concepts Analytical interpretation of information Informed judgement A range of sometimes innovative responses to concrete but often unfamiliar problems 	Applied: <ul style="list-style-type: none"> In directed activity Under broad guidance and evaluation With complete responsibility for the quantity and quality of output With possible responsibility for the quantity and quality of the output of others

	Information or actions that may provide support for competency	
General	Has the candidate: <ul style="list-style-type: none"> <input type="checkbox"/> Satisfactorily completed a pre course self test? <input type="checkbox"/> Completed Unit Standard 20388? <input type="checkbox"/> Satisfactorily completed an oral or written on course or post knowledge assessment? <input type="checkbox"/> Satisfactorily completed simulation exercises? <input type="checkbox"/> Attend a course covering the Unit Standard subject matter? <input type="checkbox"/> Provided proof of experience through records? <input type="checkbox"/> Practically demonstrated in a practical scenario? <input type="checkbox"/> Other (please list)? <hr/> <hr/>	Assessor Notes:

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
1	Demonstrate basic knowledge of aircraft requirements in relation to vegetation fire fighting.		
1.1	<p>Candidate must consult the pilots to ascertain performance characteristics and fire fighting capabilities of fixed wing aircraft and/or helicopters being used at the fire or simulation.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> passenger capacity <input type="checkbox"/> cargo capacity <input type="checkbox"/> load capacity <input type="checkbox"/> fuel type and consumption rate <input type="checkbox"/> landing and take off requirements <p>Pilots will give directions regarding their aircraft that are specific to the conditions on the day and the nature of the work.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Consult pilots to identify performance characteristics and capabilities of all aircraft being used? <p>Assessor notes:</p>	<p>Performance characteristics identified.</p> <p>Fire fighting capabilities correctly identified.</p>	
1.2	<p>Candidate must identify logistics requirements (in consultation with pilots or their ground crews) for all aircraft being used at a vegetation fire or simulation.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> site delivery times <input type="checkbox"/> ground based support <input type="checkbox"/> aviation fuel (and if pilots are providing own ground support complete with fuel) <input type="checkbox"/> water and additives <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify logistics needs of all aircraft being used? <p>Assessor notes:</p>	<p>Logistics needs correctly identified.</p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
1.3	<p>Candidate must explain radio communications techniques and protocols to be used at the fire. This should be in accordance with the Fire Plan and the communications plan for the incident or simulation.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> air to ground <input type="checkbox"/> incident management <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Explain the communications plan? <input type="checkbox"/> Explain air to ground and command communications for the fire or simulation? <p>Assessor notes:</p>	<p>Methods and protocols for communications within air operations explained.</p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
2	Choose landing sites for fixed and rotary wing aircraft.		
2.1	<p>Candidate must identify existing airstrips and helipads that allow the safe operation and servicing of aircraft. These should be listed in the Fire Plan and should be realistic options for the fire or simulation.</p> <p>Range: must identify the following for each existing airstrip or helipad to be used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> aircraft capabilities <input type="checkbox"/> safety of personnel <input type="checkbox"/> delivery of water and additives <input type="checkbox"/> access for support personnel and vehicles <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify existing airstrips or helipads that are safe for operations and servicing of aircraft? <input type="checkbox"/> Determine suitability against criteria above? <p>Assessor notes:</p>	<p>Suitable existing airstrips and helipads identified.</p> <p>All criteria for suitability correctly identified.</p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
2.2	<p>Candidate must identify suitable roads for use as airstrips realistic for the fire or simulation.</p> <p>Range: must identify the following for each temporary airstrip:</p> <ul style="list-style-type: none"> <input type="checkbox"/> length <input type="checkbox"/> side clearance <input type="checkbox"/> end clearance <input type="checkbox"/> visibility <input type="checkbox"/> hazards to aircraft <input type="checkbox"/> surrounding terrain <input type="checkbox"/> road traffic control <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify suitable roads that are safe for use as temporary airstrips? <input type="checkbox"/> Determine suitability against criteria above? <p>Assessor notes:</p>	<p>Suitable roads identified for use as temporary airstrips.</p> <p>All criteria met for each location.</p>	
2.3	<p>Candidate must select suitable temporary helipads for the safe operation and servicing of aircraft realistic for the fire or simulation.</p> <p>Range: must identify the following for each helipad to be used:</p> <ul style="list-style-type: none"> <input type="checkbox"/> terrain influence <input type="checkbox"/> weather influence <input type="checkbox"/> flight hazards <input type="checkbox"/> aircraft capabilities <input type="checkbox"/> safety of personnel <input type="checkbox"/> delivery of water and additives <input type="checkbox"/> access for support personnel and vehicles <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify suitable sites for temporary helipads? <input type="checkbox"/> Determine suitability against criteria above? <p>Assessor notes:</p>	<p>Suitable sites identified for use as temporary helipads.</p> <p>All criteria met for each location.</p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
3	Lead ground support operations at vegetation fires.		
3.1	<p>Candidate must maintain safety and welfare of ground support personnel.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Meeting personnel safety and welfare needs (water, food, PPE) <input type="checkbox"/> Allocating tasks <input type="checkbox"/> Conducting crew safety briefing <input type="checkbox"/> Monitoring crew performance <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Maintain safety and welfare of all crew allocated to ground support for air operations? <p>Assessor notes:</p>	<p>Safety maintained.</p> <p>Crew tasks allocated and crew briefed.</p>	
3.2	<p>Candidate must establish and maintain communications with pilots and ground crew personnel and with incident management for the duration of the operation. Should be in accordance with Fire Plan and communications plan within IAP for fire or simulation.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish communications as required in plan? <input type="checkbox"/> Maintain communications throughout? <p>Assessor notes:</p>	<p>Air to ground communications established and maintained.</p> <p>Ground crew and incident management communications established and maintained.</p>	
3.3	<p>Candidate must monitor fire behaviour in relation to aircraft and ground support crew safety.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> current situation <input type="checkbox"/> predicted situation <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Monitor its effects on safety, now and in future? <p>Assessor notes:</p>	<p>Fire behaviour monitored.</p> <p>Aircraft and ground crew safety Maintained.</p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
3.4	<p>Candidate must continually assess resources required to achieve the incident objectives throughout the operation.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> current situation <input type="checkbox"/> predicted situation <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assess required resources, now and in future? <p>Assessor notes:</p>	<p>Resources sufficient to meet incident objectives throughout operation.</p> <p>Resources increased or decreased as determined by operational requirements.</p>	
3.5	<p>Candidate must ensure the use of resources is recorded in accordance with organisation's requirements.</p> <p>Consider the following:</p> <ul style="list-style-type: none"> • Using a log keeper at the airbase, airstrip or helipad. • National aircraft management forms may also be used for evidence. <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ensure recording requirements were met? <p>Assessor notes:</p>	<p>Use of resources is logged as required by organisation.</p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
3.6	<p>Candidate must identify situations requiring additional support and communicate these to incident management in accordance with the incident action plan.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> aircraft operations (fuel, extra people, catering, radios etc.) <input type="checkbox"/> heavy machinery (clearing landing sites, airstrips, water points etc.) <input type="checkbox"/> water carriers (tankers) <p>Consider the following: Where no requirement exists at the fire or simulation, the candidate may be asked questions about situations where such additional support may be needed.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify situations requiring additional support for air operations? <input type="checkbox"/> Communicate these to the IMT? <p>Assessor notes:</p>	<p>Additional support needs identified.</p> <p>Role of additional support explained.</p> <p>Needs communicated to incident management team.</p>	
3.7	<p>Candidate must ensure that control of the public prevents interference with operations and maintains operational safety.</p> <p>Consider the following: May be by physical cordons or delegated staff.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ensure aircraft work areas are secured from public access? <p>Assessor notes:</p>	<p>Restriction on public access established and maintained.</p>	