bai communications

Requirements for Working at Heights and Rigging

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CONTENTS

1 PURPOSE AND SCOPE

BAI Communications Australia (BAI) is committed to Work Health and Safety (WHS) in the workplace for all employees, contractors, and visitors. This procedure details the Requirements for Working at Heights & Rigging and forms part of that commitment by prescribing the minimum qualifications, certifications and other requirements that must be met for the undertaking of a Climbing or Rigging activity on BAI owned or managed structure and/or on behalf of BAI on a third party owned structure.

Working at Heights and Rigging are regarded as high-risk activities that require the completion of training and other qualifications as specified in this procedure.

Insert reference to the SWS Controls regarding fall from height.

2 DEFINITIONS

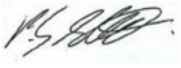
The following words, acronyms and abbreviations are referred to in this document:

Term	Definition
BAI	BAI Communications Australia
Working at heights	Working at heights is defined as anything that has a risk of falling associated with the task. In construction, any works conducted above two metres is considered high risk.
Rigging	Means the lifting, hoisting and/or fixing of equipment, plant or material onto a structure or removal thereof, including the installation and operation of plant necessary for such purpose. Further, this includes the exercising of direct control over the movement of equipment and associated gear necessary for the purpose of: (a) setting up or dismantling a crane or hoist, or similar plant configured for operation as a crane or hoist; or (b) placing or securing plant or a load relating to, and including the structural members of a structure; or (c) ensuring the stability of the structural members of a structure.
RTO	Registered Training Organisation through State or Federal Governments
Structure	Can be defined as any building, tower, mast, or pole
VET	Vocational Education and Training Accreditation Act 1990

3 DOCUMENT CONTROL

Approval

The following table lists personnel who are responsible for authorising the document:

	Title	Name	Signature	Date
Approver	Antenna and Structures Manager	Grant Shapcott		26/07/21
Approver	GM HSEW	Gerard Forrest		26/07/21

Document History

The following table lists the changes made to this document:

Version	Date	Amended by	Comments
2.1	30/06/2014	Janie Maude	BAI format / update of medical requirements <40 years of age
2.2	14/07/2014	Grant Shapcott	Hazard process owner procedure review (Working at Heights)
2.3	17/10/2014	Wesley Sparks Tony Ballantyne	Hazard process owner procedure review (Rigging)
2.4	5/03/2015	Grant Shapcott Chris Grant	Review
2.5	9/03/2015	Lily Wong	Legal Review
2.6	18/12/2019	Gabrielle Hall	Branding format update
3.0	01/07/2020	Paul Pyatt	Review and update
3.2	09/07/2020	Paul Pyatt	Add section 8.5 – Additional info and guides
3.3	28/06/2021	Paul Pyatt Lincoln O'Grady Grant Shapcott	Review | Updated Units of Competency codes and other wording changes
4.0	30/06/2021	Grant Shapcott Gerard Forrest	Release

4 REQUIREMENTS FOR WORKING AT HEIGHTS ONLY (NO RIGGING INVOLVED)

The requirements pertaining to Working at Heights on any structure, including but not limited to broadcast and telecommunications structures, towers, masts, poles, or buildings for carrying out inspection and/or measurement only (applies where there is no rigging involved and no plant or equipment is being moved up or down the structure except for portable inspection, testing or measurement equipment) are as follows:

4.1 Training Requirements Overview

The minimum requirement to be certified as competent to Work at heights with BAI includes the following:

Training Qualification	Qualification Requirement	Refresher Requirements
1. Working Safely at Heights	RIIWHS204E – Working Safely at Heights (or Equivalent)	N/A
2. Tower Rescue	PUASAR022 - Participate in a Rescue Operation (or Equivalent including ICTTCR203, PUASAR032, IRATA Level 1,2,3)	3 years
3. Height Workers Medical Assessment	Pass fit to climb	• <40 years – 3 years • 40 to 49 years – 2 years • 50 years and older – 1 year
4. RF EME Awareness Training	ACEBR accredited RF EME Awareness course	3 years

5.	Provide First Aid	HLTAID011 – Provide first aid HLTAID010 – Provide basic emergency life support HLTAID009 - Provide Cardiopulmonary Resuscitation	3 years
6.	Provide Cardiopulmonary Resuscitation (CPR)	HLTAID009 - Provide Cardiopulmonary Resuscitation	1 year*
7.	Construction White card	Details required for all states or relevant compliance	N/A

*Given the often remote as well as high-risk nature of working at heights, BAI follows best practice in aligning its CPR and first aid refresher requirements to the Model Code of Practice for First Aid in the workplace

Note: If RF Protection Suits are intended to be used on a BAI site, then suitable training in the use of such suits must be undertaken and a training certificate in the successful completion of such a course must be presented to BAI for approval prior to site access been granted.

4.2 Working Safely at Heights

The applicant has completed a working safely at height course; this course should include identifying the work requirements, work procedures and instructions for the task; use of safety harnesses, fall arrest and other height safety equipment and accessing and installing safety equipment to undertake Work at heights. The applicable National competency-training module RIIWHS204D - Working Safely at Heights should be referenced. Accredited Registered Training Organisations (RTOs) must deliver such a course or by a qualified Trainer with demonstrated training and Working at Height experience, that meets the approval of the BAI subject matter expert in Working at Heights.

4.3 Tower Rescue

The applicant has completed a tower rescue-training course suitable for a single person rescue on a broadcast structure. A tower rescue refresher training course must be undertaken every three (3) years. Such a course must be delivered by an accredited RTO or by a qualified Trainer with demonstrated training and Working at Height experience that meets the approval of the BAI subject matter expert in Working at Heights.

Note: In the intervening period between the three yearly training course regime, BAI recommends (in line with the AS/NZ Standard 1891.4) that reassessment (Verification of Competency – VOC) of tower rescue occurs annually to demonstrate an applicant's ongoing competency. Reassessments must be completed and documented by a competent person.

4.4 Height Workers Medical Assessment

All climbers must undergo and pass a medical assessment prior to undertaking any at height activity including Tower access, Tower rescue or Twin rope access training. This prescriptive medical examination will certify that the individual is fit to climb.

Medical examination age refresher requirement:
- every three (3) years for a climber less than 40 years of age;
- every two (2) years for a climber between the age of 40 and 49 years; and
- every twelve (12) months for a climber 50 years of age and above

Climbers that are pregnant are not permitted to access areas that exceed the public reference limits as defined in the ARPANSA Radiation Protection Series S-1 standard.

4.5 RF EME (Electromagnetic Emissions) Awareness Course

The applicant has completed an EME awareness course approved by BAI. BAI preferred suppliers of this training include:

- Kordia
- Radhaz consulting
- Total Radiation Solutions
- BAI (Internal BAI staff only)

EME refresher training must be undertaken every three (3) years. EME awareness training at a minimum must include EME theory, relevant standards, safe operating procedures, and the operation of Personal Monitoring Equipment. The undertaking of on-line EME induction training may be acceptable subject to satisfactory evidence being if the training has been undertaken by providing a certificate number or log number for audit purposes.

The preferred and ideal is that every member of the climbing party wear their own personal radiation monitor during structure works. A minimum of one personal radiation monitor must be available at all times during all climbing activities, the lead climber must check EME levels on the structure where the climbing or work is being undertaken before other climbers are permitted to climb, this personal radiation monitor must remain with the team on the structure to continually monitor EME levels in the area being worked in. Where climbing activity is being undertaken on different parts of the structure each separate climbing party must have their own personal radiation monitor to continually monitor EME levels.

4.6 First Aid and CPR

4.6.1 3 Year Refresher Requirement:

All climbers must have completed an approved First Aid Training Course or refresher within the last three years that covers:

- HLTAID009 – Provide cardiopulmonary resuscitation.
- HLTAID010 – Provide basic emergency life support.
- HLTAID011 – Provide first aid

4.6.2 1 Year Refresher Requirement:

All climbers must have completed an approved CPR refresher training within the last 12 months that covers:

- HLTAID009 – Provide cardiopulmonary resuscitation.

Note: CPR refresher training must be completed every 12 months by an accredited organisation or trainer to keep HLTAID009 current, given the often remote as well as high-risk nature of working at heights, BAI follows best practice in aligning its CPR and first aid refresher requirements to the Model Code of Practice for First Aid in the workplace

4.7 Construction White Card

The applicant must hold a Construction Induction Card (Working Across Borders) White Card.

This accreditation is now often referred to as a "General Construction Induction Card".

Note: A construction white card has no expiry though ceases to be current if the holder has not carried out construction work for a period of 2 or more years, in this circumstance the applicant is required to undergo retraining.

4.8 Industrial Rope Access

If Twin rope access is required to be undertaken on a BAI site, then appropriate twin rope access training must have been undertaken by all persons undertaking the work. This work must be highlighted in the site access application and applicable evidence of training and experience of all persons involved must be submitted to BAI.

5 SITE ACCESS REQUIREMENTS

5.1 Site Access Work Permit

A Site Access application must be submitted and approved by BAI prior to accessing site. Only works detailed on the site access application can be performed on site during the access dates. This approval can be applied for through the site access page on the BAI website. Site access & planned outages | BAI Communications

5.2 Method of Procedures / SWMS

Copies of all Method of Procedure (MOP) statements and Safe Work Method Statement (SWMS) documentation must be provided to BAI in accordance with BAI's site access application and approval procedures. A copy of the MOP and SWMS are to be available onsite during site works.

5.3 Minimum On-site Team Requirement

A minimum of two (2) BAI Working at Heights accredited personnel are always to be present on-site whilst working at heights activities are in progress; one of which is a competent site supervisor. The site supervisor is the primary point of contact and has responsibility for the coordination of the works and work health & safety requirements on site.

5.4 Tower Rescue Kit

A suitable Tower Rescue Kit that satisfies the access/rescue requirements of the team on site must be available on-site throughout the period of the climbing activity, this kit must be always visibly obvious and available during working at heights activities. This kit should include but is not limited to, suitable type and length of rope to perform Tower Rescue from and in most circumstances, this must reach the ground from the working height, suitable descenders for the rope used, mechanical advantage lifting device (Trac Haul), slings, karabiners and any other equipment that may be deemed necessary to perform a man on man rescue un-assisted.

5.5 Climbing Equipment

All working at heights equipment including equipment within the rescue kits must meet Australian or equivalent European Standards. Where no such standard exists then the equipment must carry the UIAA endorsement. All equipment must be designed for the type of work it is being used for.

As per AS1891, climbing equipment must be inspected and results documented every six (6) months at a minimum. SWMS for climbing works must also include daily pre-start inspections and post-work inspections of equipment to confirm its safe working condition.

5.6 First Aid Kits

A fully stocked and in date First Aid Kit must be on site during site works. This kit must satisfy relevant state WHS requirements and be visible and available for use in an emergency.

5.7 Communications

All personnel working at heights must have suitable communications equipment for the tasks been undertaken; this could include 2-way radios, whistles, or mobile phones. Communication arrangements should be agreed to between all personnel prior to works commencing and referenced in the SWMS / toolbox meeting for the work.

If the site does not have an accessible landline available, then a mobile phone must be available and usable in case of an emergency. If there is no mobile phone coverage available on site and no land line available, then a satellite phone should be taken to site and be available during all site works. Working at heights are not to commence without suitable communication arrangements in place.

5.8 WHS and Environment Issues

Any WHS or Environment issues that arise must be reported to BAI immediately.

6 REQUIREMENTS FOR RIGGING

In addition to all the above conditions that apply to Working at Heights only, the following additional requirements pertain to the undertaking of activities involving Rigging. A Rigger must have the experience, competency and hold the relevant high-risk licence (as outlined below) to carry out the task:

6.1 Rigging High Risk Work Licences

High Risk Work Licence	Definition	Licence Renewal period
Dogging (DG)	Consists of the application of slinging techniques to move a load (including the selection and inspection of lifting gear) and/or the directing of a crane/hoist operator in the movement of a load when the load is out of the view of the crane/hoist operator.	5 years
Basic Rigging (RB)	Rigging work involving any of the following: • structural steel erection • hoists • precast concrete members of a structure • safety nets and static lines • mast climbing work platforms • perimeter safety screens and shutters, and • cantilevered crane loading platforms	5 years
Intermediate Rigging (RI)	Rigging work involving any of the following: • hoists with jibs and self-climbing hoists • cranes, conveyors, dredges, and excavators • tilt slabs • demolition of structures or plant; and • dual lifts	5 years
Advanced Rigging (RA)	Rigging work involving any of the following: • gin poles and shear legs • flying foxes and cable ways • guyed derricks and structures, and • suspended scaffolds and fabricated hung scaffolds	5 years

6.2 Rigging Works

Any person undertaking rigging activities must be certified and hold a current High-Risk Work Licence. BAI Communications reserves the right to refuse any climbing or rigging activities and/or works on BAI structures at its sole discretion.

No rigging work is to be completed alone or without a competent supervisor on site (as per 4.3). When rigging work is being performed at height, all abovementioned working at height requirements must be followed.

Only those rigging activities defined under the specific licence can be performed on site by that individual i.e. a basic rigger can assist an advanced or intermediate rigger but only in the basic rigging elements of the activity. A mix of riggers (basic, intermediate, or advanced) can work on the same site at the same time however (as stated above) they can only be performing those rigging works in line with the restrictions of their licence.

A rigger can only perform higher-level (intermediate or advanced) rigging activities under supervision if enrolled with an RTO and performing the works as part of training in order to attain that higher-level licence.

7 ELEVATED WORK PLATFORM (EWP)

7.1 Elevated Work Platform General Requirements

EWPs are available in a wide variety of types and sizes. They include scissor lifts, cherry pickers, boom lifts and travel towers. There are battery powered and internal combustion engine types. Some are designed for hard flat surfaces only, while others are designed for operation on rough terrain. The below requirements will cover all the various types of EWPs.

7.1.1 Requirements to Operate any EWP Mobile Plant on a BAI Site

1. There must be at least two staff present on site when EWPs are operated (one of which is the nominated supervisor);
2. There must be at least two staff on site that hold a current Provide First Aid (or similar) certificate during EWP operation;
3. The supervisor must have a current RF Awareness Certificate;
4. Staff operating the EWP from the ground must have, either:
    a. current RF Awareness Certificate; or
    b. be under direct supervision of staff with a current RF Awareness Certificate;
5. All persons that enter the EWP (bucket/platform) are to be:
    a. Approved on the BAI Working at Heights database; or
    b. Show evidence of competency in the use of a full body harness and use of a suitable EDD (Emergency Descent Device). If it is a requirement to wear a full body harness during use of the EWP type, (see below) a High-Risk License in EWP operation would satisfy this requirement;
6. There must always be a suitable Emergency Decent Device (EDD) in the EWP where there is a requirement to wear a harness; and
7. All persons performing rigging works from a EWP must have the appropriate High Risk Work License in Rigging.

Operators working in travel towers or boom type elevating work platforms must wear an anchored safety harness in accordance with AS 2550.10. The harness system used must be able to arrest a fall before the user strikes the ground or any below object.

Persons operating EWPs must be properly trained in their operations and use. Where equipment is hired, the hire company should provide instructions initially and the employer as required, to ensure that persons operating the EWP are competent to do so.

People operating EWPs with boom lengths exceeding 11 metres must have a High-Risk Licence for class 'Boom Elevated Work Platform [licence coding work platform (WP)]. It is a requirement that the design of an EWP be registered with a state or territory WHS Authority.

7.2 EWP Training Requirements

Training Qualification	Refresher Requirements
1. Elevated Work Platform <11 metres Competency verification	5 years
2. Elevated Work Platform EWP > 11 metres High risk work licence coding WP	5 years

7.3 Elevated Work Platform <11 metres

Staff operating an EWP with a boom length less than 11m must show written verification of competency. Yellow card with appropriate endorsement would suffice.

7.4 Elevated Work Platform >11 metres (WP)

Staff operating an EWP with a boom length of 11m or longer must hold a current High-Risk License (HRL) in EWP use (coded as WP on the license).

8 NOTES TO REQUIREMENTS

8.1 Supply of certificates to the Site Access Group

All certificates must be supplied using the online application system, which is available at Site access & planned outages | BAI Communications Certificates to be attached as scanned copies. In relation to the expiry date of Tower rescue certificates, the Standard requires refresher training at appropriate intervals. BAI requires certificates of training with an RTO every 3 years.

8.2 Medical Certificates

A medical certificate certifying that the Working at Heights applicant is "Fit to Climb" should include:

- If there are any heart or other related conditions that may affect the applicant while working at heights;
- The applicant has appropriate physical fitness to climb and work at heights.
- If the applicant has any metal implants as this may cause an adverse EME effect on the applicant.

8.3 First Aid Kits

First aid kit requirements are to be assessed based on the risks of the site and works being undertaken and should comply with the Model Code of Practice for First Aid in the workplace

8.4 Australian/Other Applicable Standards

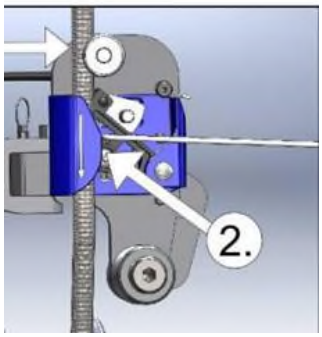
As a minimum, the following Australian/Other standards are to be complied with:

1. AS 1800 – Occupational Protective Helmets
2. AS1891.1 - Industrial fall-arrest systems and devices - Harnesses and ancillary equipment
3. AS 1891.4 – (2009) Industrial fall-arrest systems and devices - Selection, use and maintenance.
4. AS 2319 – (2001) Rigging Screws and Turnbuckles
5. AS 2626 - (1983) Industrial Safety Belts and Harness selection, use and maintenance.
6. AS 4488.2 – (1997) Industrial Rope Access Systems/ISO 22846 – Personal equipment for protection against falls-Rope Access systems

8.5 Additional Information / guides

8.5.1 Winch use:

1. Rigging and using a winch to be conducted by person with at least a minimum basic rigging licence (RB)
2. Winch is to have a secondary means of braking / holding the rope such as below.



3. Confirm prestart inspection requirements are checked before use onsite.
4. Confirmation of anchoring location – ground diversion sheave / top loading sheave to be used onsite.
5. If it is to be anchored using part of a structure, BAI Communications Structures Team must confirm that this method is acceptable.
6. Ensure the anchor point is not using fence panels or posts.
7. Confirm the anchoring method for the winch is suitable (sling / rope/ other)
8. If using a vehicle hitch, confirmation that the hitch is rated for the equipment attachment and for the load being imposed.
9. Ensure the diameter of capstan and type / diameter of rope being used match.

8.5.2 Mandatory RF Monitor Specifications:

- Device Calibration: Evidence of current calibration.
- Field Detectors: E & H.
- Exposure Standard: ICNIRP2020 Occupational (equivalent to ARPANSA RPS S-1).
- Frequency Dynamic Range E Field detector: 1MHz to 6GHz or better.
- Frequency Dynamic Range H Field detector: 27MHz to 1GHz or better.
- Frequency Response for Broadcast Service Frequencies (80MHz to 700MHz): +/-3dB.

9 APPENDIX 1

The Medical Certificate doc as seen below is available in the Templates section of the BAI Site Access System.

FIT TO CLIMB MEDICAL CERTIFICATE

bai communications

Applicant details	
Candidate name	
Candidate position	
Company	

Medical professional statement		
I,	*(insert medical professional name)*	
have assessed	*(insert Candidate name)*	
and have determined that he/she is		to climb broadcast/communication structures.

Medical examination details *(to be completed by the medical professional)*	
Does the candidate have any pre-existing heart condition?	
Does the candidate have any metallic implants in their body such as pacemaker or other electronic medical device; plates, screws, wires, rods etc? If yes, please specify which part of body and description of implant(s) including approximate dimensions in mm: _____	
Does the candidate have an appropriate level of fitness to climb Broadcast/Communications Structures up to or over 100m in height?	
Does the candidate have any condition that may cause blackouts or dizziness while climbing? *e.g. epilepsy*	
In your opinion, is the candidate fit to climb broadcast/communication structures overall?	
Based on age – Record the date that the next examination will be due. *Under 40 (36 months)* *40 to 50 (24 months)* *50+ (12 months)*	

Any additional comments regarding the health of the candidate that the employer need to be aware of?

Please provide your medical stamp / AHPRA registration number below

Medical professional	
Date	
Name	
Signature	

bai communications | Fit to climb medical certificate		