



## **General requirements**

for certification of personnel engaged in industrial rope access methods

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## FOREWORD

The Industrial Rope Access Trade Association (IRATA) is established as the world's leading authority on industrial rope access. The association's aim is the national and international promotion and development of the safe system that it has pioneered over the last decade. IRATA aims to support its member companies and trained technicians and to ensure that they work in a safe and effective manner.

IRATA member companies are subject to stringent entrance qualifications and audit to ensure that they meet IRATA's requirements for quality assurance, safety, training and working practices. The benefits of these procedures and requirements are reflected in the comparatively low level of accidents and incident rates of IRATA members.

IRATA produced the first edition of *General requirements for certification of personnel engaged in industrial rope access methods* (the IRATA *General requirements*) in 1992, as a scheme of training and qualifications focusing on safety. Since then, IRATA qualifications have become the international industry standard requirement for personnel engaged in industrial rope access methods. This revision results from the experience gained in operating the scheme for many years and reflects IRATA's commitment to continuous improvement.

IRATA's companion publication *Guidelines on the use of rope access methods for industrial purposes* (the IRATA *Guidelines*) has been used to establish safe national standards for rope access and is commended by influential organisations such as the United Kingdom's Health and Safety Executive (HSE). IRATA believes that the requirements and recommendations in the IRATA *Guidelines* and in this IRATA *General requirements* document set the standard for industrial rope access worldwide.

Although care has been taken to ensure, to the best of IRATA's knowledge, that the contents of this document are accurate to the extent that they relate to either matters of fact or accepted practice or matters of opinion at the time of publication, IRATA assumes no responsibility for any errors or misinterpretations of such contents or any loss or damage arising from or related to their use.

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## 0 INTRODUCTION

This document has been developed by IRATA to provide training and assessment criteria for personnel who will be engaged in rope access methods. It is recognised that the safety, application and effectiveness of industrial rope access methods depend upon both the capabilities of the personnel who perform them and the persons responsible for those personnel. The independent assessments are designed to test the candidate's knowledge and understanding of the operations performed, and to provide industry with an assured minimum standard of proficiency.

## 1 SCOPE

This document provides requirements, recommendations and guidance for the training and certification of industrial rope access personnel. It details appropriate levels of experience, training syllabi and criteria for independent IRATA approved assessments.

The IRATA training and qualification scheme detailed in this document applies to all industrial rope access work and rope access personnel whose specific job requires appropriate knowledge of the technical principles of rope access.

The document does not include the various non-rope access techniques used by operatives once they have reached the worksite.

## 2 TERMS AND DEFINITIONS

For the purposes of this document, the following terms and definitions apply:

**certification**

written testimony of qualification

**employer**

corporate, private or public entity, which employs personnel for wages, salary, fees, or other considerations

**experience**

work activities accomplished in industrial rope access methods under the direction of a qualified supervisor, and related activities

**qualification**

demonstrated skills and knowledge and documented training experience required for personnel to perform properly the duties of a specific job

**shall**

verb indicating that the statement is mandatory under IRATA rules

**should**

verb indicating that the statement is a recommendation

**training**

organised programme developed to impart the knowledge and skills necessary for qualification

**working hours**

hours worked using rope access techniques including rigging, equipment maintenance and inspection

**assessor**

appointed person who has been proved competent to assess the IRATA qualifications of rope access technicians

**logbook**

record of work experience

## 3 COMPANY-SPECIFIC REQUIREMENTS AND MEMBER OBLIGATIONS

### 3.1 Company-specific requirements

Company-specific training, inductions or examinations and the various non-rope access techniques for operatives once they have reached the worksite are additional to the IRATA syllabus.

### 3.2 Member obligations

All IRATA members shall to use the IRATA certification scheme.

## 4 LEVELS OF QUALIFICATION

There are three levels of qualification for rope access technicians as follows.

**Level 1.** A rope access technician who is able to perform a limited range of rope access tasks under the supervision of an IRATA level 3 rope access technician.

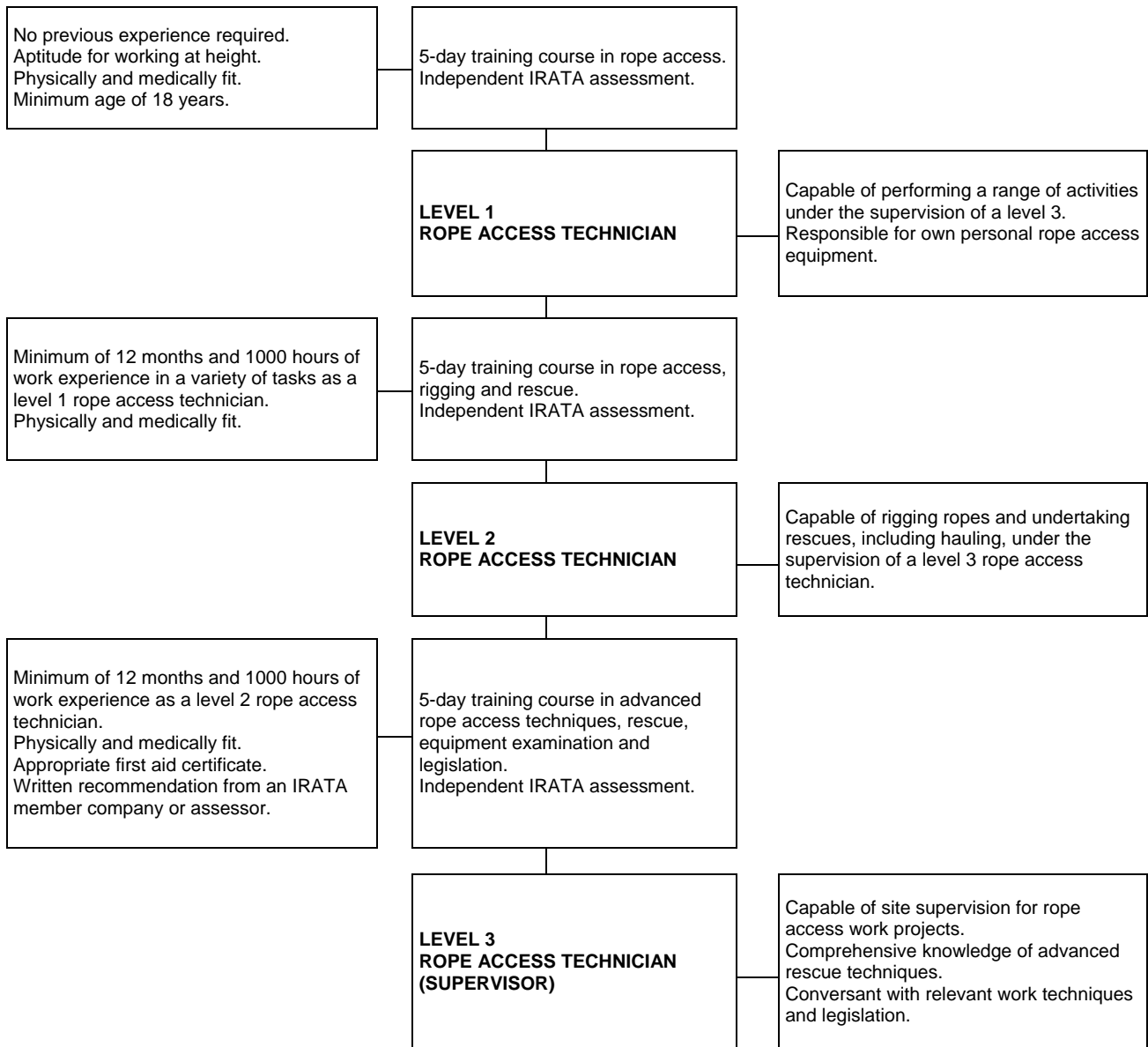
NOTE: While in the process of being trained to level 1, a person should be considered to be a trainee.

**Level 2.** A rope access technician who is capable of rigging working ropes, undertaking rescues and performing rope access tasks under the supervision of an IRATA level 3 safety supervisor.

**Level 3.** A rope access technician who is capable of site supervision for rope access work projects; is able to demonstrate the skills and knowledge required of levels 1, 2 and 3; is conversant with relevant work techniques and legislation; has a comprehensive knowledge of advanced rescue techniques; holds a current first aid certificate and has knowledge of the IRATA certification scheme.

## 5 OVERVIEW OF IRATA QUALIFICATIONS AND REQUIREMENTS

The following chart outlines the IRATA scheme:



Independent IRATA re-assessment every three years at all levels, following a minimum of two days of refresher training.

Technicians **not** engaged in rope access work for six months or more should attend refresher training.

\*Any level 2 or 3 rope access technician undertaking re-assessment after the expiry of the current assessment would require four days of training instead of the two days. Holders of expired level 2 or 3 certificates or others with questions should contact an IRATA training company for information on revalidation procedure. To ensure technicians are up to date with certification, re-assessment may be done up to 6 months before due expiry date without any time penalty.

Each IRATA member company should ensure employees hold valid assessments.

## **6 OPERATING PROCEDURES**

- 6.1 This document provides requirements, recommendations and guidance for the training of operatives involved in rope access work. The IRATA *Guidelines* shall be followed at all times by IRATA certified rope access technicians.
- 6.2 The employer shall establish an operating procedure sufficient to satisfy IRATA requirements for the control and administration of rope access work and equipment, including personnel training and certification.
- 6.3 The employer's written operating procedure shall describe the responsibility of each level of certification of rope access technician in accordance with the applicable codes of practice, guidelines, standards, statutory requirements, specifications and procedures.

## **7 SELECTION OF WORKERS**

- 7.1 To work safely at a height requires those engaged in the work to have an appropriate attitude and aptitude for such work. Therefore, some form of screening is required to assess properly all prospective employees.
- 7.2 Those who work at height need to be confident in exposed places, but not over confident or reckless. Rope access operatives frequently work in remote places: it is, therefore, especially important that operatives can be always relied upon to behave in a sensible and responsible manner.
- 7.3 Where candidates claim to have experience in rope access work, prospective employers should check their personal records and other references to verify claimed experience and levels of competence. (The IRATA *Guidelines* contains further details.)
- 7.4 Unless the employer has the expertise to assess the candidate's aptitude, assistance from an IRATA Training Company should be sought.

## **8 TRAINING PROGRAMMES**

### **8.1 General**

- 8.1.1 The course prospectus should provide potential candidates with details, requirements and applicability of the course and the IRATA scheme. The following should be included:
  - a) without medical contra-indications, or disabilities that may prevent them from working safely. The minimum requirements is a self certification statement (see Appendix 1)
  - b) As industrial rope access courses are mainly practical, a good level of physical fitness is necessary. During some exercises candidates need to be able to pull themselves up with their arms

Note The trainer has the right to exclude any candidate from training if they have concerns over the candidate's health and/or fitness or attitude to safety during training.

  - c) The IRATA scheme: an external assessor with a pass/fail assessment at the end, logged working hours between Levels 1 to 3, supervision requirements and revalidation every 3 years.
  - d) Types of equipment used during training and assessment.
- 8.1.2 It is essential that operatives are properly trained in all the methods of access they will use. Candidates should be told about different types of equipment available and variations between them. The prospectus should indicate which equipment will be included during training and assessment and this information should also be written on the assessment form.
- 8.1.3 Trainees shall be supervised by an IRATA level 3 rope access technicians throughout their training and shall be closely monitored to ensure all tasks as outlined in the syllabus are carried out in a safe manner.
- 8.1.4 Training organisations shall provide all trainees with a copy or electronic versions of the IRATA *Guidelines*, the IRATA *General Requirements*, and access to manufacturers' product information and appropriate relevant national documents. Appropriate course notes shall be supplied covering all parts of the syllabus.
- 8.1.5 The IRATA *General Requirements and Guidelines* shall be followed during training operations.
- 8.1.6 Training organisations shall provide the trainer with access to current references and amendments made to IRATA documentation, which are contained in the 'Trainer File' on the IRATA website. This information should be available at audit.

## 8.2 Provision of training

8.2.1 Personnel being considered for assessment shall have completed their training with a training company which is an IRATA Full or Probationary Trainer member (an IRATA *member training company* or *TMC*). This is so that the trainee becomes thoroughly familiar with the principles and practices of rope access related to the level of certification required. Training requirements are as follows.

**Level 1.** Training shall be a minimum of 4 days.

**Level 2.** Training shall be a minimum of 4 days.

**Level 3.** Training shall be a minimum of 4 days.

**Level 1 revalidation.** Training shall be a minimum of 2 days.

**Level 2 revalidation.** Training shall be a minimum of 2 days.

**Level 3 revalidation.** Training shall be a minimum of 2 days.

8.2.2 The trainer shall check that information imparted during the training has been understood by the trainee.

8.2.3 Only Full (Trainer) or Probationary (Trainer) members of IRATA may register operatives.

8.2.4 IRATA training shall be carried out by an IRATA level 3 technician, whose name and IRATA number shall be included on the assessment form. The trainer shall conform to any additional IRATA requirements for recognition as a trainer, as outlined in a separate guidance note available from IRATA. The trainer may have an assistant, who must be an IRATA qualified rope access technician.

8.2.5 The TMC must take total responsibility for any training carried out in its name.

8.2.6 A prospective Trainer member shall not undertake training and assessments until the notification of a successful membership ballot by the Executive Committee.

8.2.7 3<sup>rd</sup> Party Training Agreements: - It is the responsibility of the TMC to ensure the following; that any non-member offering IRATA training by way of an agreement with an IRATA member, must clearly identify the IRATA member company delivering the training including membership number. For example, if ABC Company has an agreement for a TMC to provide IRATA training, then their advertising and all related materials shall clearly state that the IRATA training offered by ABC is delivered by the named Full Member Company No. 1234/T.

8.2.8 Where a 3<sup>rd</sup> party training agreement exists, the trainer shall not be an employee or director of the third party company and all training records including details of venue, risk assessment and equipment shall be kept by the TMC for review as in IRATA audit requirements.

8.2.9 Where training is offered by a non-member company directly, a disciplinary action will be deemed to have been committed which may include the revocation of the IRATA registration of any person or persons involved.

## 8.3 Candidate/trainer ratios

8.3.1 The maximum candidate / trainer ratio shall be six to one.

## 8.4 Refresher training

8.4.1 Refresher training:

a) shall be carried out by an IRATA level 3 rope access technician;

b) should not be carried out during operational duties;

c) may involve the need to undergo a full training course.

8.4.2 If rope access technicians are not using rope access regularly, they should be evaluated for competence prior to the commencement of operational duties. Refresher training in particular techniques may be required and the amount of operational supervision necessary afterwards may need to be adjusted, depending on the outcome of the risk assessment.

8.4.3 If rope access technicians do not use rope access methods for a period of more than six months, they are required to undergo refresher training. The training should be appropriate for each individual and should be recorded in the logbook.

## **8.5 Training and assessment facilities**

- 8.5.1 Training shall only be delivered if appropriate training facilities, sites and structure are available. The training area shall be controlled to minimise risk to trainees. To assist in achieving this, trainers shall complete and document hazard identification and risk assessment for the training venue and shall explain this to candidates during the course induction. The training company shall ensure that this risk assessment is reviewed at appropriate intervals.
- 8.5.2 Sufficient appropriate equipment shall be available for all parts of the syllabus to be addressed properly.
- 8.5.3 Dummies or masses weighing at least 70 kg should be available for hauling and rescue exercises. Manual handling precautions shall apply. Where a live 'casualty' is to be used, this shall be included in the risk assessment prior to the commencement of training.
- 8.5.4 Provision for indoor theory/examination sessions should be made.
- 8.5.5 Normal welfare facilities should be available.
- 8.5.6 Provision to exclude third parties shall be made.
- 8.5.7 Provision for first aid and emergencies, e.g. fire-evacuation, shall be made.
- 8.5.8 Anchors, scaffolds, etc. shall have inspection/testing records available.
- 8.5.9 Training structures should display signage specific to their loading capacity (e.g. the number of persons).
- 8.5.10 Safety signage shall be present and clear demarcation of the training area established.

## **8.6 Assessment and training area**

- 8.6.1 An area to ascend and descend, pass obstructions such as re-belays, deviations, mid-rope protection and rope-to-rope transfers, normally with a height of at least 7 metres, is recommended.
- 8.6.2 Platforms and stances near the top of the training area, including an area to simulate top edge obstruction, such as a parapet wall, a flat roof edge or the top of a cliff, e.g. where the rope passes through 90 degrees between the anchor points and the ground, are strongly recommended.
- 8.6.3 An area that allows climbing using cow's-tails to be performed where both fixed and mobile anchors are used shall be provided. This shall include sections where the trainee is able to be fully and partially supported by the structure and where the use of foot loops (étriers) is required.
- 8.6.4 An area where climbing using Y-shaped twin tailed fall arrest lanyards can be performed using a structure such as a simulated pylon, tower or lattice frame is required.
- 8.6.5 Anchors shall be available to rig horizontal and diagonal tensioned ropes in positions that may be used for rescue.
- 8.6.6 Suitable anchors to allow three-dimensional exercises for level 3 rigging and rescue are required.

## **9 REQUIREMENTS, RECOMMENDATIONS AND GUIDANCE FOR IRATA ASSESSMENTS**

### **9.1 General**

- 9.1.1 The primary role of the assessor is to ensure that each candidate demonstrates performance of the required tasks in a safe manner, in accordance with the IRATA *General Requirements*.
- 9.1.2 IRATA assessments shall only be carried out by IRATA assessors who are currently independent of the candidate, the candidate's employer and the organisation providing training. The assessor shall be on the list of assessors valid to carry out assessments, as available on the IRATA website.
- 9.1.3 Assessors shall not register candidates they have assessed themselves.
- 9.1.4 It is the responsibility of the TMC, trainer and assessor to ensure that the quality of the assessment is not compromised by the number of candidates being assessed at any one time and extra time allowed as necessary. IRATA allow up to a maximum of eight (8) candidates to be assessed by any one assessor in a calendar day. An assessor shall only assess at one training venue in any one calendar day. Where there are communication difficulties or other

factors which may affect the quality of the assessment the TMC and the assessor shall liaise beforehand to agree an appropriate number up to a maximum of eight (8).

9.1.5 The assessor shall be fully conversant with the requirements of the level being assessed, including any differences for 'Direct Entry' candidates.

9.1.6 It is strongly recommended that the trainer is on site during the assessment. The IRATA member training company representative (normally the trainer) is required to sign the assessment form to show that the syllabus has been delivered in line with the requirements of this IRATA *General Requirements* document.

9.1.7 The IRATA member training company shall ensure adequate rescue provision during the assessment.

## **9.2 Assessment area**

9.2.1 The assessor shall satisfy him/herself that the assessment area and equipment are suitable, and shall ensure that the training company has completed a hazard identification and risk assessment for the facility. Where the assessor is not satisfied, an IRATA *Risk assessment check list for training areas* (see Appendix 1) shall be completed before proceeding with the assessment. Where the assessment/training area falls short of the guidance criteria, the assessment shall not take place and a report shall be submitted to the IRATA training committee with a copy of the completed check list.

9.2.2 The assessor shall establish that the training company displays appropriate insurance cover for the assessment area.

## **9.3 Pre-assessment requirements, checklist / records**

9.3.1 Candidates should consider their experience carefully before attempting to progress to a higher level. Candidates without appropriate experience, adequate pre-assessment training and knowledge of the syllabus are likely to fall short of the required standard, when assessed.

9.3.2 Trainees should be issued with a copy of the IRATA *General requirements* and the IRATA *Guidelines* before or during the training course.

9.3.3 It is the responsibility of the IRATA member training company to ensure that all relevant documentation relating to the candidate is appropriate, checked and available prior to assessment (e.g. adequate logged experience). If in doubt on any point, the assessor should be consulted in advance.

9.3.4 The training company representative (normally the trainer) shall sign the assessment form (see Appendix 2) to confirm he/she has delivered training covering all parts of the syllabus.

9.3.5 The documentation required is as follows.

1. For all candidates:

a) a Statement of medical condition (see Appendix 1);

b) one passport photograph, head and shoulder shot only with no hats, glasses etc against a plain background. The name of the applicant must be printed clearly on the back;

c) Official documentation such as national insurance number, passport number or national identity number shall be presented to confirm the identity of the candidate at the start of the course. Normally the Trainer, or the person checking this document, shall be the same person confirming that the photo above is a true likeness of the candidate.

d) an IRATA logbook, showing the required hours.

2. For level 3 candidates:

a) a current first aid certificate is required before any operational work is carried out, but no longer checked at assessment

b) ten written questions agreed with the assessor in advance of the assessment and given to the candidate to complete prior to the assessment day, with translation if necessary.

3. For failed earlier assessments:

the previous assessment form.

4. For direct entries:  
all the requirements of the direct entry procedure must be complete (see Appendix 1).

## 9.4 The assessment

- 9.4.1 The assessment is in two parts: written and practical.

NOTE The assessor may explore the candidate's abilities further by questioning, where appropriate.

- 9.4.2 All candidates shall be fully briefed by the assessor before and during the assessment.
- 9.4.3 All parts of the assessment form (see Appendix 2) shall be completed, be clearly legible, and should give the specific location of the assessment.
- 9.4.4 The IRATA level 3 rope access technician who has directed the training shall provide their name and IRATA serial number on the assessment form.
- 9.4.5 The Assessor shall check the Trainer's I.D. card to ensure it is current.
- 9.4.6 The IRATA Assessor shall confirm that the *awareness areas* (boxes marked with 'A' on the assessment form) have been included in the training programme.
- 9.4.7 At the end of the assessment, both the IRATA Assessor and Trainer shall check that all sections have been completed correctly, the Assessor shall sign the assessment form and note in the comment box which type of equipment have been used.
- 9.4.8 The IRATA Assessor shall then debrief each candidate and inform them of the result. The candidate shall sign the assessment form (see Appendix 2) to confirm he/she has received training covering all parts of the syllabus, acceptance of the result and debrief.

## 9.5 Assessment criteria / marking systems

- 9.5.1 The assessment marking system should be explained to the candidate before the assessment begins.
- 9.5.2 Each of the sections on the assessment form relevant for the level of assessment being undertaken shall be marked in the appropriate box as follows:
- P – if the assessment is completed to an acceptable standard (P = pass);
- MD – for minor discrepancies (see below);
- F – if the assessment is unacceptable, if there has been a major discrepancy, or if the assessment has not been completed to an acceptable standard (F = fail).
- 9.5.3 There are two possible overall results: pass or fail. Two ways of failing are by committing one major discrepancy or three minor discrepancies during the assessment.
- Major discrepancy.** A major discrepancy is a critical safety issue, where the candidate has put him/herself or others at risk. One major discrepancy constitutes a fail. This ends the assessment.
- Minor discrepancy.** A minor discrepancy is where a candidate has not committed a major discrepancy, but can still be seen to have compromised his/her safety or the safety of others. Three minor discrepancies constitute a fail.
- Discrepancies should be agreed and noted by the assessor and candidate each time they occur.
- 9.5.4 Where a candidate has a minor discrepancy, is very inefficient or confused, the assessor should explore the situation more thoroughly by questioning the candidate and, if necessary, by asking the candidate to repeat the demonstration. The assessor should make an entry in the comments box detailing the situation. As well as three minor discrepancies constituting a fail, so would a generally poor performance.
- 9.5.5 So far as is reasonably practicable, the assessor should be satisfied that the candidate has the aptitude to work safely at heights.

- 9.5.6 Overall performance shall be indicated by the assessor marking (ticking) one of the five *overall attainment* boxes on the assessment form. These are:
- 1 Unacceptable - This would constitute a fail.
  - 2 Satisfactory - This would constitute a pass.
  - 3 Good - This would constitute a pass.
  - 4 Very good - This would constitute a pass.
  - 5 Excellent - This would constitute a pass.

- 9.5.7 For candidates who fail, the reasons for failure shall be explained by the assessor. The assessor shall write an explanation on the assessment form in the comments box. The explanation should highlight any additional experience or training needed in relevant aspects of the syllabus and shall include any minimum time period before re-assessment be allowed to take place. Recommendations should be clear, directly relevant to the candidate and shall be fully explained to him or her.

## **9.6 Re-assessment**

Candidates failing to attain a pass grade are permitted to apply for a re-assessment. Candidates shall supply the date and the serial number of their previous assessment form at the time of re-application.

## **9.7 Administration, including registration and certification**

- 9.7.1 The assessor shall make a note of any missing documentation in the comments box of the assessment form.

- 9.7.2 The assessor shall pass the completed question papers and assessment forms, whether or not they are marked pass, fail or are spoiled, to the IRATA member training company without delay.

If the IRATA member Training Company does not utilise the online registration system the completed assessment form copies shall be distributed as follows:

white (top) copy to the IRATA secretariat;

pink copy to the sponsor;

blue copy to the assessor;

yellow copy to the candidate.

Where required documentation is missing, the candidate shall not receive the yellow copy of the assessment form from the IRATA member training company until the assessor is satisfied that the missing documentation has been provided.

- 9.7.3 The assessment form result is valid for a period of 60 days, until the IRATA secretariat formally registers and produces a certificate for the candidate at the level assessed. During this 60-day period, the completed assessment form showing a pass may be used in lieu of the certificate.

- 9.7.4 If a Training Company send their paperwork to the IRATA office to be processed:

The Following is required for each candidate:

- 1) a fully completed IRATA Application for Registration form (see Appendix 1)
- 2) assessment form
- 3) one passport sized photograph
- 4) the current registration fee should be sent for each candidate or a valid Purchase order number

NOTE The *Application for registration form* should be used for all new registrations, re-registrations or upgrades.

- 9.7.5 If the IRATA member company utilises the online registration system:

The 'assessment day form' (Form 042) shall be provided to the assessor to summarise the outcome of all candidates. Unused boxes should be crossed out.

The form should then be mailed to [registrations@irata.org](mailto:registrations@irata.org)

Note: Registration entered online, will not be approved and processed until this form has been received.

- 9.7.6 On receipt of the documentation by the IRATA secretariat, a certificate of competence, an identification card (ID card) and, for level 1, a logbook, is issued, stating the level and type of certificate awarded, and the expiry date. This documentation is issued direct to the candidate, unless directed otherwise by the IRATA member training company.
- 9.7.7 The cost of registration includes an ID card, which contains a photograph and states the current level attained, and an IRATA logbook. The cost also covers copies of the IRATA *Guidelines* and IRATA *General Requirements*. (These latter two documents shall be provided by the IRATA member training company before or during the training.)
- 9.7.8 Duplicate certificates to replace any that have been lost or destroyed are only issued after extensive enquiries. A fee will be charged for replacement ID Cards and Log Books.
- 9.7.9 Submission of documentation to the IRATA secretariat should be within 30 days after the assessment. Registration and the issue of certificates, logbooks and ID cards should be completed within a further 30 days. The period from the assessment date to the issue of a certificate is normally not more than 60 days.
- 9.7.9 Applications for registration submitted by the IRATA member training company later than 30 days after assessment should be accompanied by a letter of explanation. This may be subject to review by the IRATA training committee and appropriate action may be taken.
- 9.7.10 For the avoidance of doubt, it is reiterated that the training and registering of rope access technicians may only be carried out by the Full (Trainer) or Probationary (Trainer) members of IRATA which carried out the training.

## **10 RENEWAL / REVALIDATION PROCEDURE**

- 10.1 IRATA certificates shall be renewed within three years of the date of assessment. Revalidation consists of a full assessment at the level required following the appropriate training.
- 10.2 If re-training and successful assessment are completed in the six-month period prior to the expiry of a current certificate, a new certificate will be issued with an expiry date three years from the date of expiry on the previous certificate.
- 10.3 Candidates with expired certificates will be required to complete a minimum of four days training prior to assessment. However, any level 2 or 3 rope access technician undertaking re-assessment in excess of six months after the expiry of the previous certificate should contact an IRATA Training Company for further guidance. Further information can be found in the *Procedures for Registration and Direct Entry* publication (see Appendix 1)
- 10.4 Technicians wishing to re-validate or upgrade who anticipate expiry of their certification due to medical or personal reasons can, prior to expiry, contact an IRATA Member Training Company. The Training Company shall document the reasons for the planned expiry and ensure there are suitable grounds for in date certification to be delayed by liaising with an IRATA verifier.
- 10.5 To comply with the IRATA membership requirements, employers shall ensure that their employees' or sub-contractors' IRATA certificates are current.
- 10.6 Employers should maintain their employees' level of ability. Refresher training is appropriate for rope access technicians who are not regularly engaged in rope access work, with specific requirements for those who have not been engaged in rope access for six months or more. Refresher training may be either a refresher course or a full course at the appropriate level.

## **11 VALIDITY OF CERTIFICATES AT CHANGE OF EMPLOYER**

Certificates are issued in the name of the rope access technician, not the employer, irrespective of who has paid for the course. A change of employer for a rope access technician, therefore, is not a cause for re-assessment. However, new employers shall ensure that their employees' or sub-contractors' certificates are current.

Note: Registration will only take place when the training company has been paid and passed the assessment documents to IRATA; any dispute over payment of course fees is not regarded as IRATA business.

## 12 COMPLAINTS AND APPEALS

In the case of a complaint or dispute, an aggrieved party may write to the IRATA secretariat giving details of his/her complaint. Full details of the appeals and complaints procedure are given in the IRATA Bye Laws.

## 13 RECORDS

### 13.1 General

- 13.1.1 All candidate assessment records are maintained within the IRATA Technician database.
- 13.1.2 Each IRATA member company has access to the IRATA Technician database to verify details of named employees or prospective named employees with regard to their IRATA certification and record of training.
- 13.1.3 The assessor shall retain a copy of the assessment form for a period of three years.
- 13.1.4 The IRATA Training companies shall retain registration forms and question papers for candidates for a period of three years.

### 13.2 Logbooks

- 13.2.1 Logbooks are issued by IRATA and shall be maintained by the employee.
  - 13.2.2 The purpose of the logbook is not only to record the number of hours engaged in rope access activities, but also the type and variety of work undertaken. This is particularly important for rope access technicians wishing to take assessments for a higher level, i.e. 2 or 3, as it is likely to demonstrate the breadth of experience of its owner.
  - 13.2.3 It is recommended that under the heading *Type of work*, not only is the nature of the task noted, e.g. non-destructive testing (NDT), inspection, window cleaning or painting, but also a brief description of the access method employed, e.g. vertical rope work, traversing, fall arrest climbing, cow's-tailing, equipment maintenance.
  - 13.2.4 It is recommended that in the *Location* section of the logbook, operatives indicate the type of structure worked on, e.g. 'flare stack 30M, oil platform', 'high rise building, 100 m'.
  - 13.2.5 *Hours worked* should be an accurate reflection of the time spent carrying out rope access, including normal work requirements such as pre-work briefing (tool box talk) pre-work inspection of equipment, rigging and de-rigging the site as well as rope access training. Work using fall arrest methods is of relevance only if used in combination with rope access. Logged hours will usually be less than the length of time on site, or on time sheets, as they exclude non-rope access work, meal breaks, waiting for permits or down time because of weather. Periods of work should be in units of no more than two weeks, or one offshore trip and should specify how many days were worked during this period. IRATA form 42 allows daily entries of rope hours in two week blocks to be logged by a L3 to facilitate collection of IRATA three monthly work & safety statistics.
  - 13.2.6 Logbook entries should be made in ink at the end of each period of work, rather than retrospectively. These entries should always be confirmed by the site supervisor, who should log their name, signature and contact details for future verification purposes. If the site supervisor is the level 3 rope access technician in charge, which is the usual case, he/she should add their IRATA serial number to their signature.
  - 13.2.7 Level 3 rope access technicians shall countersign other technician's logbooks for relevant hours worked. They shall maintain their own logbooks, but where possible should ask the employer of client to counter sign.
  - 13.2.8 If any rope access technician loses their logbook, they should replace it immediately and, where possible, obtain references for the hours they have lost. Where lost hours are required to move up a level, e.g. level 1 to level 2, the candidate must obtain credible references to verify the hours they have lost.
  - 13.2.9 Proven fraudulent misuse or alteration of an IRATA log book will result in the suspension or withdrawal of IRATA registration.
- ## 14 FIRST AID
- 14.1 Level 3 rope access technicians must be holders of an appropriate first aid certificate. The type of certificate may vary between employing companies but should be appropriate to the type of work situation in which the level 3 operates.

- 14.2 Level 3 rope access technicians and employing companies are both responsible for ensuring that first aid certificates are appropriate and current during operational duties.

## 15 SYLLABUS FOR IRATA LEVEL 1 ROPE ACCESS TECHNICIAN

### SAFETY OVERRIDES ALL OTHER CONSIDERATIONS IN IRATA TRAINING AND ASSESSMENTS

#### 15.1 Summary of skills required by a level 1 rope access technician

A level 1 rope access technician shall be capable of performing a limited range of rope access tasks required by his or her employers, under the supervision of an IRATA level 3 rope access technician. He/she is:

- a) responsible for inspections of all his/her own personal rope access equipment;
- b) able to assist in rigging and non-standard operations, under the guidance of a higher grade;
- c) able to undertake a rescue involving descent by him/herself and have a knowledge of hauling systems.

NOTE A level 1 rope access technician is not allowed to supervise others.

#### 15.2 Pre-training requirements

15.2.1 The minimum age of candidates is 18 years.

15.2.2 Candidates shall be physically fit and free from any disability or medical condition that may prevent them from working safely. They shall ensure that they have an adequate level of fitness, are physically able to perform the tasks expected in terms of strength, agility and co-ordination, and are able to withstand the stresses of the working environment, such as heat, cold, and other inclement weather.

15.2.3 Ideally, all prospective employees should be in possession of an appropriate full industrial medical certificate before starting this kind of work and should be re-assessed at regular intervals thereafter. IRATA has produced *Guidance for medical requirements for work at height* (see Appendix 1).

15.2.4 In the absence of a full medical, trainees are required to sign the IRATA *Statement of medical condition*. (see Appendix 1)

#### 15.3 Level 1 syllabus content

NOTE See Clause 22, *Guidance notes for trainers and assessors*, for details.

##### 15.3.1 Theoretical knowledge

The content of the level 1 syllabus for theoretical knowledge covers:

- a) relevant legislation, guidelines and standards;
- b) awareness of risk assessment and safety method statement;
- c) awareness of permit to work systems;
- d) exclusion zones;
- e) working practices and worksite organisation;
- f) categories of personal protective equipment (PPE);
- g) selection, use and maintenance of equipment;
- h) equipment checks and inspection;
- i) hazardous substances;
- j) IRATA syllabus and certification scheme;
- k) logbooks and their completion;
- l) anchor types and systems;
- m) angle loading;
- n) awareness of fall factors;
- o) awareness of hauling systems;
- p) awareness of suspension trauma and casualty management.

### **15.3.2 Equipment and rigging**

The content of the level 1 syllabus for knowledge of equipment and rigging covers:

- a) assembly and fitting of personal equipment;
- b) checking of personal equipment;
- c) use of the back-up device;
- d) tying, dressing and setting of appropriate knots;
- e) rigging a basic anchor system;
- f) rigging a small Y hang;
- g) awareness of rope and sling protection in rigging.

### **15.3.3 Manoeuvres**

Manoeuvres to be carried out under the level 1 syllabus are:

- a) descent;
- b) ascent;
- c) changeovers;
- d) descent using ascenders;
- e) ascent using a descender;
- f) passing knots;
- g) passing deviations;
- h) passing a re-belay
- i) rope-to-rope transfer;
- j) passing an edge or obstruction at the top;
- k) the use of a work seat (comfort seat);
- l) passing mid-rope protection.

### **15.3.4 Climbing**

Climbing manoeuvres to be carried out under the level 1 syllabus are:

- a) horizontal aid climbing with cow's-tails using both fixed anchors and moveable anchors,
- b) climbing with a Y-shaped twin fall arrest lanyards.

### **15.3.5 Rescue / hauling**

Rescue and hauling covered by the level 1 syllabus consists of:

- a) a descent rescue;
- b) an awareness of a basic haul and lower.

## **15.4 Level 1 assessment**

### **15.4.1 General**

15.4.1.1 The candidate shall demonstrate an aptitude for the type of work.

15.4.1.2 The candidate shall demonstrate worksite and personal safety awareness in accordance with relevant national health and safety at work legislation.

15.4.1.3 The assessor will ask questions and ask for exercises to be completed to enable all required areas (boxes) to be completed on the assessment form (see Appendix 2).

### **15.4.2 Written examination**

Twenty level 1 theory questions shall be given. These shall include at least one question from each of a minimum of 10 subjects of the 16 theory subjects listed in 15.3.1.

### **15.4.3 Practical examination**

The practical examination shall cover the following topics:

- a) equipment and rigging;
- b) manoeuvres (on a pre-rigged course);
- c) climbing;
- d) rescue and hauling.

## 16 SYLLABUS FOR IRATA LEVEL 2 ROPE ACCESS TECHNICIAN

SAFETY OVERRIDES ALL OTHER CONSIDERATIONS  
IN IRATA TRAINING AND ASSESSMENTS

### 16.1 Summary of skills required by a level 2 rope access technician

A level 2 rope access technician shall be capable of rigging working ropes, undertaking rescues and performing rope access tasks (under the supervision of an IRATA level 3 rope access technician). He/she should have some knowledge of legislation, safety requirements and quality assurance procedures relating to rope access.

### 16.2 Pre-training requirements

- 16.2.1 The candidate shall be an IRATA qualified level 1 rope access technician with a minimum of 12 months and 1000 hours of work experience (hours to be verified by an IRATA logbook).
- 16.2.2 Candidates shall be physically fit and free from any disability or medical condition that may prevent them from working safely. They shall ensure that they have an adequate level of fitness, are physically able to perform the tasks expected in terms of strength, agility and co-ordination, and are able to withstand the stresses of the working environment, such as heat, cold, and other inclement weather.
- 16.2.3 Ideally, all prospective employees should be in possession of an appropriate full industrial medical certificate before starting this kind of work and should be re-assessed at regular intervals thereafter. IRATA has produced *Guidance for medical requirements for work at height* (see Appendix 1).
- 16.2.4 In the absence of a full medical, trainees are required to sign the IRATA *Statement of medical condition* (see Appendix 1).

### 16.3 Level 2 syllabus content

NOTE See Clause 22, *Guidance notes for trainers and assessors*, for details.

#### 16.3.1 Theoretical knowledge

This section shall include all 16 level 1 theory sections and, in addition, shall include the following:

- a) tensioned lines;
- b) work restraint;
- c) horizontal lifelines;
- d) anchorage selection;
- e) team work;
- f) communication.

#### 16.3.2 Equipment and rigging

This section shall include all the sections covering equipment and rigging at level 1 and, in addition, shall include the following:

- a) wide 'Y' hang;
- b) re-belay;
- c) deviations;
- d) rope and sling protection;
- e) pull-through;
- f) work restraint and horizontal lifelines;
- g) tensioned ropes.

#### 16.3.3 Manoeuvres

This section shall include all the sections covering manoeuvres at level 1.

#### **16.3.4 Climbing**

This section shall include all the sections covering climbing at level 1.

#### **16.3.5 Rescue / hauling**

This section shall include all the sections covering rescues/hauling at level 1 and, in addition, shall include the following:

- a) rescue from the ascent mode;
- b) rescue from an aid-climbing situation;
- c) rescue past a small re-belay;
- d) rescue past a deviation;
- e) rescue from rope-to-rope;
- f) haul and lower from a platform;
- g) hanging haul;
- h) cross haul.

### **16.4 Level 2 assessment**

#### **16.4.1 General**

16.4.1.1 The candidate shall demonstrate aptitude and experience.

16.4.1.2 The candidate shall demonstrate worksite and personal safety awareness in accordance with relevant national health and safety at work legislation.

16.4.1.3 The assessor will ask questions and ask for exercises to be completed to enable all required areas (boxes) to be completed on the assessment form.

#### **16.4.2 Written examination**

Thirty level 2 theory questions shall be given. These shall include questions from at least 15 of the 22 theory subjects listed in 15.3.1 and 16.3.1.

#### **16.4.3 Practical examination**

The practical examination shall cover the following topics:

- a) equipment and rigging;
- b) manoeuvres;
- c) climbing;
- d) rescue and hauling.

## 17 SYLLABUS FOR IRATA LEVEL 3 ROPE ACCESS TECHNICIAN

### SAFETY OVERRIDES ALL OTHER CONSIDERATIONS IN IRATA TRAINING AND ASSESSMENTS

#### 17.1 Summary of skills required by a level 3 rope access technician

A level 3 rope access technician shall:

- a) be capable of site supervision for rope access work projects;
- b) be conversant with relevant work techniques and legislation;
- c) be able to demonstrate all the skills and knowledge required of levels 1 and 2;
- d) have a comprehensive knowledge of advanced rescue techniques;
- e) hold an appropriate current first aid certificate, to show that suitable emergency first aid training has been undertaken;
- f) have knowledge of the IRATA certification scheme;
- g) have knowledge of the IRATA *General requirements*;
- h) be familiar with the contents of the IRATA *Guidelines*.

#### 17.2 Pre-training requirements

- 17.2.1 The candidate shall have a minimum of one year and 1000 hours of work experience as a level 2 rope access technician (hours to be verified by an IRATA logbook).
- 17.2.2 Candidates shall be physically fit and free from any disability or medical condition that may prevent them from working safely. They shall ensure that they have an adequate level of fitness, are physically able to perform the tasks expected in terms of strength, agility and co-ordination, and are able to withstand the stresses of the working environment, such as heat, cold, and other inclement weather.
- 17.2.3 Ideally, all prospective employees should be in possession of an appropriate full industrial medical certificate before starting this kind of work and should be re-assessed at regular intervals thereafter. IRATA has produced *Guidance for medical requirements for work at height* (see Appendix 1).
- 17.2.4 In the absence of a full medical, trainees are required to sign the IRATA *Statement of medical condition*. (see Appendix 1)

#### 17.3 Level 3 syllabus content

NOTE See clause 22, *Guidance notes for trainers and assessors*, for details.

##### 17.3.1 Theoretical knowledge

This section shall include all level 1 and 2 theory sections but to greater depth of understanding than at these levels and, in addition, shall include the following:

- a) risk assessment and method statements;
- b) equipment inspection, management and records;
- c) rescue management;
- d) assessment of alternatives to lead climbing and, where lead climbing is a valid safe option, be capable of writing a method statement for lead climbing in a particular situation.

##### 17.3.2 Equipment and rigging

This section shall include all the sections covering equipment and rigging at levels 1 and 2.

##### 17.3.3 Manoeuvres

This section shall include all the sections covering manoeuvres at levels 1 and 2.

##### 17.3.4 Climbing

This section shall include all the sections covering climbing at levels 1 and 2.

### **17.3.5 Rescues / hauling**

This section shall include all the sections covering rescues/hauling at levels 1 and 2 and, in addition, shall include the following:

- a) advanced rescue;
- b) tensioned ropes;
- c) short link;
- d) descent passing knot;
- e) break into tight rope;
- f) large re-belay.

## **17.4 Level 3 assessment**

### **17.4.1 General**

17.4.1.1 The candidate shall demonstrate aptitude and broad experience.

17.4.1.2 The candidate shall demonstrate worksite, personal and team safety awareness in accordance with relevant national health and safety at work legislation.

17.4.1.3 The assessor will ask questions and ask for exercises to be completed to enable all required areas (boxes) to be completed on the assessment form.

### **17.4.2 Written examination**

The written examination shall comprise of five elements as follows:

- a) twenty level 2 questions;
- b) ten level 3 questions;
- c) a risk assessment;
- d) a method statement;
- e) an equipment inspection report.

### **17.4.3 Practical examination**

The practical examination shall cover the following topics:

- a) equipment and rigging;
- b) manoeuvres;
- c) climbing;
- d) rescues and hauling;
- e) advanced rescues.

## **18 DIRECT ENTRY TO LEVELS 2 AND 3**

Direct entry requires full compliance with the IRATA Procedures for *IRATA Registration and Direct Entry* (see Appendix 1). This is available from IRATA and IRATA member training companies.

## **19 PROCEDURE TO BECOME AN IRATA TRAINER (T)**

Level 3 rope access technicians with both operations and training experience wishing to become an IRATA trainer can submit an application to IRATA. Where appropriate experience and commitment are evident, a level 3 trainer status will be awarded. This is indicated by a letter T at the end of their IRATA number, e.g. 3/0488/T. Guidance on trainer qualification criteria, *Requirements for qualification as level 3 trainer* and the *Application for level 3T status form* are available from IRATA (see Appendix 1).

## **20 PROCEDURE TO BECOME AN IRATA ASSESSOR**

Level 3T technicians with sufficient experience may apply to become an IRATA assessor. Guidance on the requirements for qualification as an IRATA assessor is given on the *Application for assessor form* (see Appendix 1) and is available from IRATA.

## **21 REQUIREMENTS FOR ASSESSORS**

For assessors to maintain their status, they are required to follow the requirements for maintaining IRATA assessor status, which is given on the *Assessor revalidation form* (see Appendix 1), available from IRATA.

## **22 GUIDANCE NOTES FOR TRAINERS AND ASSESSORS**

### **22.1 General**

22.1.1 Trainers and training companies shall ensure that training is only given in the use of appropriate techniques and equipment.

22.1.2 Candidates shall maintain two independent attachments when employing rope access techniques, unless the candidate is:

- a) in a safe area;
- b) using a work or travel restraint system;
- c) using a fall arrest system;
- d) using another type of fall protection system, (i.e. collective or passive)

**NOTE** It is important that a back-up protects any potential out-of-control swing (pendulum) or movement that may cause injury to personnel or damage to equipment or property. This has particular relevance to wide rope-to-rope transfers, re-belays, deviations and Y hangs, where failure of any one part of the safety system could lead to an out-of-control swing, even though the candidate has two other independent points of attachment. Depending on the exact circumstances, failure to provide a back-up shall be classed as a major discrepancy and, thus, the assessment would result in a failure.

22.1.3 Candidates may be asked to carry out an exercise or exercises that include more than one element of the assessment.

22.1.4 During the assessment, trainers shall not assist candidates in any way, unless instructed to do so by the assessor.

22.1.5 Assessors should make their instructions clear and remember they are there to assess the candidate, not to offer further training.

22.1.6 Trainers and assessors should refer to and have access to or hold copies of the following documents:

- a) IRATA *Guidelines*;
- b) IRATA *General requirements*;
- c) manufacturers' product information for the personal fall protection equipment in use;
- d) relevant national guidance or codes of practice. Examples are British Standard BS 7985, *Code of practice for the use of rope access methods for industrial purposes*.
- e) current references and amendments made to IRATA documentation, which are contained in the 'Trainer File' on the IRATA website.

## **22.2 Written examination / theoretical knowledge**

### **22.2.1 General**

22.2.1.1 The assessment of theoretical knowledge shall take place when appropriate during the assessment by reference to the written paper and verbally.

NOTE Examples of questions for all levels of assessment are available from IRATA.

22.2.1.2 At the end of the written examination, assessors shall debrief candidates on any incorrect answers. Where a candidate is unable to complete the written paper, a verbal examination may be undertaken instead. This shall be noted on the assessment form.

22.2.1.3 Assessors shall retain the written sections for a period of three years.

### **22.2.2 Level 1**

22.2.2.1 Level 1 candidates shall complete 20 questions.

22.2.2.2 Trainers should refer to the written level 1 sample questions and ensure they include instruction on the following list of topics:

- a) relevant legislation, guidelines and standards;
- b) equipment inspection and safe working loads as required by legislation;
- c) permit to work systems;
- d) selection, use and maintenance of equipment;
- e) categories of personal protective equipment (PPE);
- f) risk assessment and safety method statement;
- g) exclusion zones;
- h) working practices and worksite organisation;
- i) fall factors;
- j) angle loading;
- k) anchor types and systems;
- l) hauling systems;
- m) suspension trauma and casualty management;
- n) logbooks;
- o) IRATA syllabus and certification scheme;
- p) hazardous substances.

22.2.2.3 Assessors shall select 20 questions. The questions selected shall cover a range of topics from those listed below, with some items being verbally explored during the assessment:

- a) relevant legislation, guidelines and standards;
- b) equipment inspection and safe working loads as required by legislation;
- c) permit to work systems;
- d) selection, use and maintenance of equipment;
- e) categories of personal protective equipment (PPE);
- f) risk assessment and safety method statement;
- g) exclusion zones;
- h) working practices and worksite organisation;
- i) fall factors;
- j) angle loading;
- k) anchor types and systems;
- l) logbooks;
- m) IRATA syllabus and certification scheme;
- n) hazardous substances.

### **22.2.3 Level 2**

22.2.3.1 Level 2 candidates shall complete 30 level 2 theory questions.

22.2.3.2 Trainers shall ensure instruction on all theory subjects as for level 1 but to a greater depth of understanding. In addition, theory topics shall include:

- a) tensioned lines;
- b) work restraint;
- c) horizontal lifelines;
- d) anchorage selection;
- e) team work;
- f) communication.

22.2.3.3 Assessors shall select 30 level 2 questions. The questions shall cover the range of topics for levels 1 and 2.

### **22.2.4 Level 3**

22.2.4.1 Level 3 candidates shall demonstrate an in-depth knowledge of the theoretical parts of the syllabus for levels 1 and 2, and in addition shall show an in-depth knowledge of:

- a) permit-to-work systems;
- b) equipment management systems;
- c) logbooks;
- d) the IRATA syllabus and certification scheme;
- e) substances and ambient conditions hazardous to equipment.

22.2.4.2 Level 3 candidates shall complete:

- a) twenty level 2 theory questions;
- b) ten level 3 questions;
- c) a risk assessment for a work task scenario;
- d) a method statement for a work task scenario;
- e) an equipment inspection report.

22.2.4.3 Trainers should note that the written sections are very important parts of the level 3 assessment. Trainers shall ensure instruction on all theory subjects as for level 1 and 2 but to a greater depth of understanding.

22.2.4.4 Trainers shall teach a safe management system and use the standard risk assessment and method statement forms in conjunction with appropriate work-site scenarios. Legal requirements and inspection methods shall be included.

22.2.4.5 Ten level 3 questions shall be agreed with the assessor in advance of the assessment and shall be given to the candidate to complete prior to the assessment day.

22.2.4.6 The level 2 questions, risk assessment, method statement and equipment report elements shall normally be completed on the day of the assessment.

22.2.4.7 Assessors shall select 20 level 2 theory questions.

22.2.4.8 Assessors shall provide a scenario for the completion of the risk assessment and method statement forms. This scenario shall be the 'team rescue' (see 22.7 Advanced rescues).

22.2.4.9 Assessors shall provide items of equipment to enable the equipment inspection report to be completed.

## **22.3 Equipment and rigging**

### **22.3.1 Assembly of personal equipment**

22.3.1.1 All candidates shall be capable of fitting and assembling his/her personal rope access and fall arrest equipment. This includes the tying, dressing and setting of knots, e.g. those used for cow's-tails and terminations.

- 22.3.1.2 Level 2 and 3 candidates shall be capable of fitting and assembling personal rope access equipment, for themselves and others, from a variety of equipment provided and in a variety of different 'set-ups'.
- 22.3.1.3 Trainers shall emphasise the correct selection, fitting and adjustment of the harness, tying cow's-tails, connecting all components to the appropriate attachment points and the correct uses for the various categories of harnesses, in particular the appropriate use of all harness attachment points.
- 22.3.1.4 Assessors should start the assessment with the equipment separated into its component parts.
- 22.3.2 Checking of equipment**
- 22.3.2.1 All candidates shall demonstrate functional, visual and tactile pre-use checks of all personal equipment.
- 22.3.2.2 Level 2 and 3 candidates shall demonstrate functional, visual and tactile pre-use checks of all ropes and rigging equipment.
- 22.3.2.3 Level 3 candidates shall make out an inspection report on the condition of damaged or worn equipment provided.
- 22.3.2.4 Trainers shall emphasise the need to be able to identify failure, damage, and wear and tear to all rope access equipment. Trainers should offer visual aids or examples of rejected equipment.
- 22.3.2.5 Assessors should explore candidates' ability and knowledge of the checking of equipment. For level 3 candidates, assessors should present item/s from a selection of worn or damaged equipment to the candidates for correct identification of the faults.
- 22.3.3 Back-up devices**
- 22.3.3.1 All candidates shall demonstrate throughout the whole of the assessment the use of a back-up device in accordance with manufacturer's instructions and best practice. This includes checking the position of and testing the back-up device at all appropriate times.
- 22.3.3.2 Level 2 and 3 candidates shall demonstrate familiarity with a range of back-up devices.
- 22.3.3.3 Trainers shall emphasise the need for correct use and handling of the back-up device, i.e. to have it placed in a high position to minimise any potential fall; to avoid dropping the device; the avoidance of tangles with the back-up rope and avoidance of accidental release of the device. Trainers should stress the need to minimise shock loading when using a back-up device during rescue, hauling and lowering.
- 22.3.3.4 Assessors shall emphasise the importance of the back-up device and back-up throughout the assessment.
- 22.3.4 Knots and coiling and bagging of ropes**
- 22.3.4.1 All candidates shall demonstrate the coiling and bagging of ropes.
- 22.3.4.2 All candidates shall demonstrate tying, dressing and setting the following knots and have an awareness of their strengths, applications and limitations:
- a) overhand on a bight;
  - b) figure of eight on a bight;
  - c) double figure of eight on a bight (bunny knot);
  - d) alpine butterfly;
  - e) stopper knot.
- 22.3.4.3 Level 2 and 3 candidates shall demonstrate appropriate rope joining knots, choking of ropes and slings, and have an awareness of relevant strengths, applications and limitations.
- 22.3.4.4 Trainers should ensure that candidates are able to tie, dress and and set the knots correctly. Candidates should be able to identify the knots by name, understand their main applications and any limitations of use, and be capable of re-threading appropriate knots. Level 2 and 3 candidates shall be trained in a wider variety of knots.
- 22.3.4.5 Assessors may assess the tying of knots combined with other elements of the assessment, e.g. while rigging. Assessors shall allow level 2 and 3 candidates to use other appropriate knots not listed above.

### **22.3.5 Basic anchor system**

- 22.3.5.1 All candidates shall demonstrate the rigging of a basic anchor system.
- 22.3.5.2 Level 2 and 3 candidates shall be expected to demonstrate rigging at height.
- 22.3.5.3 Trainers shall include the basic principles of rigging and attachments in rope access work, e.g. each rope should have its own separate anchor. Both rope systems may be connected to each other for added security. Emphasis should be placed on checking that the ropes are correctly rigged so that, if one should fail, a shock load would not be passed on through the system. Knots should be dressed and set. Emphasis should also be placed on the use of different types of slings and rigging equipment, appropriate to the structure.
- 22.3.5.4 Assessors may observe demonstrations at ground level for level 1. A variety of knots and methods are acceptable.

### **22.3.6 Small Y hangs**

- 22.3.6.1 All candidates shall demonstrate the rigging of a 'Y' hang. This should be attached to two close, separate anchor points, using appropriate knots.
- 22.3.6.2 Level 2 and 3 candidates shall be expected to demonstrate rigging at height.
- 22.3.6.3 Trainers shall include instruction as per the basic anchor system. Anchors shall be equally loaded and positional adjustment demonstrated.
- 22.3.6.4 Assessors may observe demonstrations at ground level for level 1. A variety of knots and methods are acceptable.

### **22.3.7 Wide 'Y' hangs**

- 22.3.7.1 Level 2 and 3 candidates shall demonstrate the rigging of a wide 'Y' hang between distant anchor points.
- 22.3.7.2 Trainers shall emphasise the consequences of failure of any one item of equipment and the need for a double anchorage system. Inclusion of an extra rigging rope may be appropriate in some circumstances.
- 22.3.7.3 Assessors should note that a variety of knots and methods are acceptable.

### **22.3.8 Re-belays**

- 22.3.8.1 Level 2 and 3 candidates shall demonstrate the correct rigging of a re-belay at height, whose offset may be at any distance apart.
- 22.3.8.2 Trainers shall emphasise the consequences of failure of any one item of equipment.
- 22.3.8.3 Assessors should note that a variety of knots and methods are acceptable.

### **22.3.9 Deviations**

- 22.3.9.1 Level 2 and 3 candidates shall demonstrate the correct rigging of a deviation at any angle or offset.
- 22.3.9.2 Trainers shall emphasise the need for the candidates to have knowledge of the deviation anchor loading in relation to the angle of deflection of the rope and the consequences of failure of any one item of equipment.
- 22.3.9.3 Assessors should note that a variety of knots and methods are acceptable.

### **22.3.10 Rope and sling protection**

- 22.3.10.1 All candidates shall show awareness of the need to protect textile equipment used in rigging.
- 22.3.10.2 Level 2 and 3 candidates shall demonstrate how to place protection in order to shield textile equipment from any sharp or abrasive edges.
- 22.3.10.3 Trainers shall emphasise the avoidance of abrasion points through rigging methods and only to use protection where it cannot be avoided.
- 22.3.10.4 Assessors should look for appropriate protection of textile equipment used in rigging.

### **22.3.11 Pull-throughs**

- 22.3.11.1 Level 2 and 3 candidates shall demonstrate how to rig a pull-through for access and egress.
- 22.3.11.2 Trainers shall emphasise good rope management and techniques to prevent unseen abrasion. The need to use two completely independent ropes arranged so that, in the event of the failure

of one, an incident is prevented shall be explained, as shall be the need to avoid the cross loading of karabiners.

22.3.11.3 Assessors should note that a variety of knots and methods are acceptable.

### **22.3.12 Work restraint / horizontal lifelines**

22.3.12.1 Level 2 and 3 candidates shall demonstrate appropriate rigging of work restraint and horizontal lifelines. Restraint is a 'technique whereby a person is prevented by means of personal protective equipment from reaching zones where the risk of a fall from height exists'. Candidates shall ensure that the restraint method does indeed prevent them from entering a fall hazard zone and shall demonstrate knowledge of travel restraint equipment, including where and when it is appropriate to use it within rope access. When a flexible anchorage line system is used, allowance must also be made for the sag of the line between anchorages.

22.3.12.2 Trainers should note that lifelines can be fixed or adjustable. The use of one point of attachment or single ropes for work restraint may be appropriate.

22.3.12.3 Assessors shall verify candidates' awareness of rigging for work restraint and horizontal lifelines.

### **22.3.13 Tensioned ropes**

22.3.13.1 Level 2 and 3 candidates shall demonstrate rigging tensioned ropes at any positional angle.

22.3.13.2 Trainers should note that ropes shall be rigged with an appropriate tensioning system, which may be releasable. Any ropes rigged off the horizontal where uncontrolled movement may occur shall be used in conjunction with a working and back-up rope. Emphasis should be placed on the importance of understanding the potentially higher forces that may be placed on the anchors compared to those in vertical systems. Emphasis shall also be placed on the need during horizontal progression for load sharing by connecting to both ropes.

22.3.13.3 Assessors should note that a variety of knots and methods are acceptable.

## **22.4 Manoeuvres**

### **22.4.1 General**

For level 1 candidates, all manoeuvres should be completed on a pre-rigged course. Level 2 and 3 candidates may be required to rig ropes and perform manoeuvres on their own rigging.

### **22.4.2 Descent**

22.4.2.1 All candidates shall demonstrate approaching a set of pre-rigged ropes, attaching a descender and back-up device, checking the position of and testing the back-up device before descending and demonstrating control of the 'tail' rope. Candidates shall demonstrate stopping and locking off the descender device.

22.4.2.2 Trainers shall pay particular attention to:

- a) pre-descent safety checks;
- b) control of the descender and correct use of the back-up device;
- c) the effects of differing conditions (e.g. climatic) on the rope's properties and their effect on controlling the descent;
- d) awareness of obstructions and checking of anchorage points prior to attaching equipment;
- e) the correct threading of the descender and the security of connector gates;
- f) ropes and cow's-tails, which should not be tangled;
- g) access, which may be from a number of different positions, e.g. direct from a safe area, from an aid climb or from a work restraint system.

22.4.2.3 Assessors shall allow a variety of recognised techniques and equipment for the manoeuvre, the emphasis being on the correct attachment to ropes and a controlled descent.

### **22.4.3 Ascent**

22.4.3.1 All candidates shall demonstrate attaching ascenders and the back-up device to a set of pre-rigged ropes, ascending, and detaching from the ropes to another system or safe area.

22.4.3.2 Trainers shall place emphasis on the correct use of the back-up device, the correct attachment to the rope using ascenders, pre-ascent safety checks and the need to avoid shock loading of

ascending equipment. It is important to note that an ascender is only considered a point of attachment if it is loaded correctly.

- 22.4.3.3 Assessors shall place emphasis on the correct use of the back-up device and safe practice during ascents.

#### **22.4.4 Changeovers**

- 22.4.4.1 All candidates shall demonstrate changing from ascent to descent and vice-versa.
- 22.4.4.2 Trainers shall ensure that candidates practise close to the ground while initially learning this manoeuvre and emphasise the handling skills required for the personal rope access equipment. The correct position of the back up device shall be stressed.
- 22.4.4.3 Assessors shall look for cross loading of karabiners and ease of installation and removal of personal rope access equipment.

#### **22.4.5 Descent using ascenders**

- 22.4.5.1 All candidates shall demonstrate descending using ascenders without releasing the ascending device from the rope.
- 22.4.5.2 Trainers shall explain that this is a repositioning technique for use over short distances and that ascenders shall not be detached from the rope.
- 22.4.5.3 Assessors should check that the ascenders are not removed during this manoeuvre.

#### **22.4.6 Ascent using a descender**

- 22.4.6.1 All candidates shall demonstrate ascending using a descender and 'foot loop' ascender.
- 22.4.6.2 Trainers shall explain that this is a repositioning technique over very short distances while maintaining control of the 'tail' rope.
- 22.4.6.3 Assessors should look for appropriate control of the descent device.

#### **22.4.7 Passing knots**

- 22.4.7.1 All candidates shall demonstrate passing a pair of knotted obstructions (e.g. damaged or joined ropes) in both ascent and descent.
- 22.4.7.2 Trainers should ensure that candidates are capable of tying their own knots for the purpose of this exercise: these may be either level or offset, joining knots or alpine butterfly knots. Alpine butterfly knots may isolate damaged rope; therefore, the candidate may have to tie additional knots for safety attachments. Trainers shall emphasise that knots used to isolate damaged rope shall be considered an emergency temporary measure and that the rope should be replaced as soon as possible. The knot itself can be used as an appropriate means of locking off the descender.
- 22.4.7.3 Assessors should note that a variety of techniques are acceptable for this manoeuvre.

#### **22.4.8 Deviations**

- 22.4.8.1 All candidates shall demonstrate passing a simple deviation in both ascent and descent.
- 22.4.8.2 Trainers shall make the candidate aware of how the angle affects the loading of the anchor point. Normally, no equipment should be removed from the working or back-up rope in order to pass a deviation. Trainers shall stress the need to avoid out-of-control swings and shall place emphasis on the correct selection of appropriate anchor points.
- 22.4.8.3 Assessors should note that a small out-of-control swing shall be considered a minor discrepancy. However, a swing that could cause injury to personnel or damage to equipment or property shall be considered a major discrepancy.

#### **22.4.9 Re-belays**

- 22.4.9.1 All candidates shall demonstrate, in both ascent and descent modes, passing a re-belay, whose offset may be at any distance apart.
- 22.4.9.2 Trainers shall emphasise that a back-up must protect any potential out-of-control swing or movement that may cause injury to personnel or damage to equipment or property. Therefore, a wide re-belay (loop) may require techniques similar to a rope-to-rope transfer.
- 22.4.9.3 Assessors should note that a variety of techniques are acceptable for this manoeuvre.

22.4.9.4 Assessors should note that a small out-of-control swing shall be considered a minor discrepancy. However, a swing that could cause injury to personnel or damage to equipment or property shall be considered a major discrepancy.

#### **22.4.10 Rope-to-rope transfers**

22.4.10.1 All candidates shall demonstrate transferring from one set of ropes to another set of ropes, which may be at any distance apart.

22.4.10.2 Trainers should be aware that candidates may be required to approach a rope-to-rope transfer either from above or below. The manoeuvres should commence in descent mode. Trainers shall draw attention to the possibility of out-of-control swings. Candidates may use four points of attachment for all rope-to-rope transfers, regardless of distance, in order to avoid confusion. Candidates may use two back-up devices but must have the practical knowledge of using an appropriate knot as the secondary back-up.

22.4.10.3 Assessors should note that a variety of recognised techniques are acceptable, but failure to install or maintain appropriate back up on one side of a wide rope-to-rope transfer leaving the possibility of an out-of-control-swing shall be considered as a major discrepancy.

#### **22.4.11 Edge obstructions at the top**

22.4.11.1 All candidates shall demonstrate passing a top edge obstruction in both ascent and descent modes.

22.4.11.2 Trainers should ensure that candidates are able to pass an edge, where, typically, the anchor points are at right angles to the line of descent, e.g. over the edge of a roof, rock feature or parapet wall. Trainers shall draw attention to hazards associated with rope stretch and potential for shock loads.

22.4.11.3 Assessors should look for appropriate safe control during this manoeuvre and avoidance of shock loads.

#### **22.4.12 Use of work seats (comfort seats)**

22.4.12.1 All candidates shall demonstrate the correct use of the work seat and attachment to his/her personal system.

22.4.12.2 Trainers shall emphasise that the work seat is not part of the fall protection system, but is intended to provide comfort only.

22.4.12.3 Assessors should note that a variety of techniques are acceptable.

#### **22.4.13 Passing mid-rope protection**

22.4.13.1 All candidates shall demonstrate installing, passing and replacing mid-rope protection.

22.4.13.2 Trainers should ensure that candidates are able to secure protectors to either structure or rope, pass protectors and reinstate them in the appropriate place.

22.4.13.3 Assessors should look for safe and appropriate use of rope protectors and their correct installation.

### **22.5 Climbing**

#### **22.5.1 General**

All candidates shall require an understanding of climbing using work positioning techniques (using cow's-tails) and using fall arrest equipment, with particular reference to the type of equipment, attachment points and application.

#### **22.5.2 Climbing using cow's-tails**

22.5.2.1 All candidates shall demonstrate horizontal aid climbing, progressing primarily in suspension by moving from one fixed anchor to another. All candidates shall demonstrate horizontal aid climbing by progressing with the use of moveable anchors. All candidates shall demonstrate climbing a horizontal structure using cow's-tails, primarily in suspension, but at times with some or all of their weight on the structure. Level 2 and 3 candidates shall demonstrate upward progression using aid climbing techniques.

22.5.2.2 Trainers shall emphasise the use of three attachments or cow's-tails, keeping a minimum of two independent points attached at all times. Trainers shall emphasise the need to choose/use suitably positioned and sufficiently strong anchors and also the need to minimise slack in cow's-tails or anchor slings etc. Where progress is along fixed lines or where some weight is on the

structure, the minimising of potential fall distances, shock loads and stretch on fixed ropes or anchors should be emphasised.

- 22.5.2.3 Assessors should be aware that this exercise is intended to demonstrate the candidate's ability to move about the structure and change between being in full suspension, partial suspension and where the candidate's weight is fully supported by the structure. In order to establish the candidate's competency, it may be necessary to examine in depth their full understanding of these manoeuvres.

### **22.5.3 Climbing using fall arrest equipment**

- 22.5.3.1 All candidates shall climb a suitable structure using a twin lanyard system, maintaining appropriate attachments at all times. Candidates shall be able to demonstrate changing to and from work positioning during this exercise.
- 22.5.3.2 Level 2 and 3 candidates shall be able to identify when it is appropriate to use fall arrest techniques, as opposed to work positioning techniques.
- 22.5.3.3 Trainers shall emphasise that employing these techniques constitutes the use of a fall arrest system, i.e. a personal fall protection system for work at a height by which a fall is intended to be arrested to prevent the collision of the user with the ground or structure. Equipment must include a full body harness, an energy absorber and appropriate connectors which meet the requirements of recognised standards. In order for a fall arrest system to function correctly, users must be able to identify and connect to safe anchor points correctly and there must be adequate clearance distance below. Harness choice, fitting, adjustment and checking are dealt with under *Assembly of personal equipment* (see 22.3).
- 22.5.3.4 Assessors shall check candidates' understanding of fall arrest techniques and equipment limitations, their awareness of its position in the hierarchy and the safe use of fall arrest equipment.

## **22.6 Rescues / hauling**

### **22.6.1 General**

- 22.6.1.1 All candidates shall manage the rescue so as to cause the minimum of discomfort to the casualty. Care shall be taken in all rescues to maintain the back-up device in a high position, and to minimise tangled ropes and rope-against-rope abrasion.
- 22.6.1.2 Level 2 and 3 candidates shall demonstrate at least one hauling, one de-weighting and one passing obstruction type of rescue at assessment. Level 2 and 3 candidates shall also demonstrate teamwork, rescue management and communication abilities.
- 22.6.1.3 Trainers shall emphasise in all rescue scenarios the need for a prompt first aid response and the potential for suspension trauma including its effects on the casualty. Trainers should ensure that the casualty moves their limbs regularly, particularly the legs, to maintain blood flow (even when feigning unconsciousness or other immobility during exercises).
- 22.6.1.4 Assessors should be aware that tangles, a low position of the back-up device or excess slack in the back-up rope would constitute a discrepancy. This could be either minor, or major, when it would constitute a fail.
- 22.6.1.5 Assessors should satisfy themselves that the teamwork, rescue management, communication and safety issues have been adequately addressed by the candidate.

### **22.6.2 Descent rescue**

- 22.6.2.1 All candidates shall demonstrate the rescue in descent mode of an 'unconscious' casualty, i.e. feigning immobility, using both of the following methods:
- a) from a separate set of ropes;
  - b) using the casualty's own ropes.
- 22.6.2.2 Trainers shall emphasise that candidates may be required to approach the casualty from above or below. The trainer shall pay particular attention to:
- a) assessing the risk;
  - b) asking for assistance;
  - c) casualty management and first response aid;
  - d) knowledge of suspension trauma and related appropriate attachments and positioning of the casualty;

e) appropriate attachments, knowledge of increased loading of equipment and extra precautions required.

22.6.2.3 Assessors should note that level 1 candidates need only demonstrate one rescue at assessment, at the assessor's discretion.

### **22.6.3 Ascent rescue**

22.6.3.1 Level 2 and 3 candidates shall demonstrate a mid-rope rescue of an 'unconscious' casualty, i.e. feigning immobility, while suspended on ascenders. The rescuer should be able to ascend or descend to a casualty, de-weight the casualty and descend to the ground.

22.6.3.2 Trainers shall ensure that the rescuer is able to demonstrate the rescue in ascent mode of an 'unconscious' casualty, using both of the following methods:

- a) from a separate set of ropes;
- b) using the casualty's own ropes.

22.6.3.3 The trainer shall pay particular attention to:

- a) assessing the risk;
- b) calling assistance, casualty management and first response aid;
- c) knowledge of suspension trauma and related appropriate attachments and positioning of the casualty;
- d) appropriate attachments, knowledge of increased loading of equipment and extra precautions required.

22.6.3.4 Assessors should note that candidates need only demonstrate one rescue during assessment, at the assessor's discretion.

### **22.6.4 Aid climb rescue**

22.6.4.1 Level 2 and 3 candidates shall demonstrate the rescue of a casualty who is suspended either by cow's-tails, a set of strops or fall arrest equipment.

22.6.4.2 Trainers should note that the rescuer shall climb to the casualty with a set of rescue ropes. He/she may either remain on the aid climb and lower the casualty to safety, or rig ropes and descend with the casualty.

22.6.4.3 Assessors should note that candidates need only demonstrate one rescue during assessment, at the assessor's discretion.

### **22.6.5 Re-belay rescue (small)**

22.6.5.1 Level 2 and 3 candidates shall demonstrate descending with a casualty through a re-belay.

22.6.5.2 Trainers should emphasise the avoidance of tangles with the re-belay loop and loading of the casualty's cow's-tails.

22.6.5.3 Assessors should look for a lack of tangles and the avoidance of loading of the casualty's cow's-tails.

### **22.6.6 Deviation**

22.6.6.1 Level 2 and 3 candidates shall demonstrate descending with a casualty through a deviation.

22.6.6.2 Trainers should emphasise the avoidance of out-of-control swings and loading of the casualty's cow's-tails.

22.6.6.3 Assessors should look for the avoidance of loading of the casualty's cow's-tails.

### **22.6.7 Rope-to-rope transfer**

22.6.7.1 Level 2 and 3 candidates shall demonstrate descending with a casualty through a rope-to-rope transfer.

22.6.7.2 Trainers should emphasise:

- a) the use of the casualty's personal equipment;
- b) good casualty management;
- c) maintaining two appropriate points of attachment.

22.6.7.3 Assessors should look for a rope-to-rope transfer that avoids the potential for an out-of control swing, e.g. one caused by the failure of a single item of equipment, by the use of an appropriate back-up.

#### **22.6.8 Basic haul**

22.6.8.1 Level 2 and 3 candidates shall demonstrate basic hauling to and lowering from a platform or stance.

22.6.8.2 Trainers should ask the rescuer to haul the casualty to a platform stance and bring the casualty to rest on the platform. This may include moving the casualty over safety barriers and the use of a tag line. The casualty should then be lifted off the platform and lowered down to the ground or safe position. Trainers shall emphasise the use of a pulley system, the need for a suitable back-up and an understanding of mechanical advantages and forces on the equipment.

22.6.8.3 Assessors should be satisfied that the candidate has a general awareness of the potential difficulties that could be encountered and has an understanding of the mechanical advantages and forces on the equipment, in particular, those that could result in equipment failure.

#### **22.6.9 Hanging haul (extra rope)**

22.6.9.1 Level 2 and 3 candidates shall demonstrate a hanging haul rescue of a casualty from above, using an extra rope.

22.6.9.2 Trainers should ensure that for this exercise, the rescuer is free-hanging from anchors with the casualty suspended below out of reach. The rescuer should have a spare rope and extra equipment.

22.6.9.3 Assessors should look for efficient use of the spare rope and extra equipment carried.

#### **22.6.10 Cross haul**

22.6.10.1 Candidates shall demonstrate a cross haul of a casualty between two points.

22.6.10.2 Trainers should arrange for two haul/lower ropes and back-up systems to be set up and connected to the casualty. The casualty is transferred horizontally using the two systems.

22.6.10.3 Assessors should look for a cross haul that avoids the potential for an out-of-control swing, e.g. one caused by the failure of a single item of equipment, by the use of an appropriate back-up. Where two persons are involved in the cross haul rescue, assessors should be satisfied that appropriate communication is maintained.

### **22.7 Advanced rescues**

#### **22.7.1 General**

22.7.1.1 Level 3 candidates shall take account of the following.

a) **Teamwork.** Candidates shall make the most effective use of their given team, considering the varying skill level of each technician. Candidates shall position themselves so that they are in the most suitable place to co-ordinate the work task and likely rescue scenario.

b) **Rescue management.** Candidates shall consider managing the rescue element in terms of techniques and equipment used and the efficiency of the adopted systems. Managing the casualty's needs and the time taken to carry out the rescue should also be considered.

c) **Communication.** Candidates shall consider communicating their intentions within their team so that each technician is clear on his/her role. Consideration shall also be given to communicating with emergency services and other site personnel.

22.7.1.2 Trainers shall emphasise in all rescue scenarios the potential for suspension trauma and its effects. Trainers should ensure that the casualty moves their limbs regularly, particularly the legs, to maintain blood flow (even when feigning unconsciousness or other immobility during exercises).

22.7.1.3 Assessors should satisfy themselves that the teamwork, rescue management, communication and safety issues have been adequately addressed by the candidate.

#### **22.7.2 Team rescue**

22.7.2.1 Level 3 candidates shall demonstrate the rigging of a complex access set-up and carry out the associated team rescue. The execution of the team rescue should be organised to take between 45 and 60 minutes.

- 22.7.2.2 Trainers should note that this exercise is designed to test the candidate's ability to plan a job in terms of selecting equipment, positioning his/her team and making appropriate provision for rescue (together with other work site considerations).
- 22.7.2.3 Assessors should use this exercise to check for a satisfactory completion of the IRATA risk assessment and method statement forms, in terms of both practical and procedural aspects.
- 22.7.3 Tensioned ropes**
- 22.7.3.1 Level 3 candidates shall demonstrate the use of tensioned ropes for rescue purposes.
- 22.7.3.2 Trainers should ensure that during this manoeuvre candidates keep the casualty above the ground during a horizontal or diagonal transfer, while using a pair of tensioned ropes.
- 22.7.3.3 Assessors should note that tensioned ropes may be pre-rigged as part of a planned evacuation procedure. Anchors should be equalised and the load shared between the two ropes.
- 22.7.4 Short link**
- 22.7.4.1 Candidates shall demonstrate the rescue of an 'unconscious' casualty, i.e. feigning immobility, from an aid climb, where the casualty is directly attached by a 'short link' and where there are no higher anchors.
- 22.7.4.2 Trainers should note that the casualty shall be directly attached to the anchor point with a short link. This shall normally be a two-connector link into a bolt anchor or a one-connector link into a short wire-strop anchor. The rescuer shall not use any higher anchor points.
- 22.7.4.3 Assessors should take into account the difficulty in carrying out this type of rescue and concentrate their assessment on safety aspects of the exercise.
- 22.7.5 Descent passing knots**
- 22.7.5.1 Candidates shall demonstrate descending with a casualty past a set of knots.
- 22.7.5.2 Trainers should ensure that knots are pre-tied in the working and back-up ropes. These knots may be at the same level. The rescuer shall descend with the casualty past the knots, taking into account the stretch in the slack rope. The rescuer should take full advantage of the casualty's personal equipment.
- 22.7.5.3 Assessors should look for efficiency in the use of the additional equipment provided via the casualty and in the execution of the exercise.
- 22.7.6 Breaking into a tight rope (pitch head rescue)**
- 22.7.6.1 Level 3 candidates shall demonstrate the rescue of an 'unconscious' casualty, i.e. feigning immobility, who is suspended equally on both working and back-up rope, by breaking into the tight rope without the use of any extra rope.
- 22.7.6.2 Trainers should arrange for the casualty to be suspended with both the working and back-up ropes weighted. Without using any extra rope and using only personal equipment (pulley allowed), the rescuer shall break safely into the tight rope and raise the casualty until a normal hauling system can be employed. The rescuer may be free-hanging from anchors, mid-rope or on a platform with the casualty suspended out of reach below.
- 22.7.6.3 Assessors should look for efficiency in the use of the additional equipment provided via the casualty and in the execution of the exercise.
- 22.7.7 Large re-belay**
- 22.7.7.1 Candidates shall demonstrate the rescue of an 'unconscious' casualty, i.e. feigning immobility, who is suspended from the bottom of a wide re-belay loop with no extra equipment.
- 22.7.7.2 Trainers shall arrange for the casualty to have descended into the bottom of a large loop. The rescuer shall attend to the casualty, manoeuvre the casualty onto the descent rope and descend to the ground with the casualty attached. Trainers shall stress the consequences of failure of any one item of equipment when in the loop and the need to avoid this.
- 22.7.7.3 Assessors should look for a rescue from a large re-belay that avoids the potential for an out-of-control swing, e.g. one caused by the failure of a single item of equipment, by the use of an appropriate back-up.

## 23 ASSESSORS' GUIDE TO MARKING

### 23.1 General

This section offers guidance on marking the assessment. Further guidance is offered throughout the document. The overall scoring system of 1 to 5 shall be based upon comparison with a good technician at the relevant level.

### 23.2 Written paper

23.2.1 Assessors should mark the written paper in the following manner.

**Level 1.** Candidates shall achieve 15 or more correct answers from the possible maximum of 20 to gain an outright pass (P). Between 10 and 14 is a discrepancy (D) and less than 10 is a fail (F).

**Level 2.** Candidates shall achieve 22 or above correct answers from the possible maximum of 30 to gain an outright pass (P). Between 14 and 21 is a discrepancy (D) and less than 14 is a fail (F).

**Level 3.** Candidates shall pass each individual element at levels 1 and 2, when marked as above and, in addition, shall achieve 7 or above correct answers from the 10 level 3 questions to gain a pass (P) for the written questions. Between 5 and 6 is a discrepancy (D) and less than 5 is a fail (F).

**Risk assessment.** This shall identify all important risks associated with the work task, e.g. falls from height, danger to others, falling tools and equipment, unusual loads, anchor failure, equipment failure, emergency evacuation, rescue provision for stranded/injured technicians.

**Method statement.** This is based on the risk assessment. Candidates shall identify all major aspects of the work to be carried out, e.g. sequence of task, team structure/locations, essential equipment requirements, protection of third parties, emergency provision/rescue, and special considerations.

**Equipment inspection.** Candidates shall find any serious/dangerous fault in equipment with which they are familiar.

23.2.2 Assessors may only adjust the result if candidates have clearly misunderstood the question or more than one correct answer can be successfully argued to the assessor's satisfaction. Assessors shall not prompt or assist candidates in any way.

### 23.3 Practical

23.3.1 Each task shall be scored as pass (P), fail (F) or discrepancy (D): these shall be clearly marked on the assessment form in each of the appropriate boxes. Assessors should consider safety, technique, use of equipment, time taken, efficiency and overall competence to determine a candidate's score for each task.

23.3.2 In any exercise or manoeuvre, assessors should consider the time taken to complete each task. Even if candidates remain entirely safe throughout the task, an excessive time taken may place the candidate (and any rescue casualty) in danger. Excessive times taken should, therefore, be considered at least a minor discrepancy. In order to score excellent in the overall attainment box, the time taken for any manoeuvre should be at least as swift as that for the best rope access technicians.

### 23.4 Major discrepancies

The following is a non-exhaustive list of major discrepancies (Fail = F):

- a) one-point attachment;
- b) unable to complete the task;
- c) excessive time period;
- d) no back-up to protect against a potential out-of-control swing that may cause injury or damage in the event of failure of an item of equipment;
- e) harness unsecured;
- f) cow's-tails tied or attached dangerously;
- g) no helmet at height;
- h) critical harness connectors unfastened or unsecured, e.g. screwlinks (maillon rapides);

- i) misuse causing damage to equipment;
- j) uncontrolled descent during rescue;
- k) descender threaded incorrectly and used in that manner;
- l) back-up or other devices used upside down;
- m) no safety attachment close to an exposed edge;
- n) slack top/foot ascender used as a point of attachment;
- o) critical safety issues as defined by the assessor;
- p) a swing that could cause injury to personnel or damage to equipment or property.

### **23.5 Minor discrepancies**

The following is a non-exhaustive list of minor discrepancies (Discrepancy = D):

- a) descender not locked off or no control of the tail rope;
- b) attachment connectors not secured;
- c) critical personal fall protection equipment dropped;
- d) rope protection incorrectly placed;
- e) no braking karabiner used when required;
- f) harness incorrectly adjusted;
- g) helmet chinstrap unfastened;
- h) critical personal fall protection equipment missing from the harness set-up;
- i) tangles of ropes;
- j) back-up device trailing below main attachment to working rope (fail if too low);
- k) use of main cow's-tail in situation greater than fall factor 1;
- l) slack rope between chest ascender and anchor point;
- m) considerable time taken to perform the task;
- n) unconventional or untrained techniques used;
- o) a small out-of-control swing.

## **24 CODE OF ETHICS FOR ASSESSORS**

24.1 Assessors undertake to ensure professional behaviour and integrity in carrying out IRATA assessments, in accordance with the Requirements and Guidance for IRATA Assessors and assessment.

## APPENDIX 1 IRATA FORMS, GUIDANCE AND ANCILLARY DOCUMENTS

Appendix 1 lists relevant documents available from IRATA and IRATA member training companies.

IRATA reference number	Title of document
001R	Application for registration
002R	Application to become an assessor
003R	Application for Individual membership
004R	Application for membership
005R	Full membership extension
006R	Risk assessment check list for training areas
007R	Sample level 1 theory questions
008R	Sample level 2 theory questions
009R	Sample level 3 theory questions
010R	Sample scenarios – level 3
011R	Client reference form
013R	Application for level 3 assessment
014R	Statement of medical condition
015R	Application for level 3T status
016R	Audit report for membership
017R	Level 3 risk assessment
018R	Level 3 method statement
019R	Level 3 equipment report
020R	Accident returns: part 1: quarterly summary
021R	Accident returns: part 2: incident report
023R	Guidelines on the use of rope access methods for industrial purposes ( <i>the IRATA Guidelines</i> )
025R	IRATA rope access technician assessment form
027R	Assessor revalidation
028R	Membership requirements
029R	IRATA training scheme flowchart
030	Previous Words Record
031R	General requirements for certification of personnel engaged in industrial rope access methods ( <i>the IRATA General requirements</i> ) (This document)
032	Procedures for IRATA Registrations and Direct Entry
034	IRATA Document Comment Form
035	Assessors Appraisal Form
036	Membership Guidance
037	Audit Checklist Operator
038	Audit Checklist Trainer
039	Auditor Guidance for IRATA Company Audit
040 & 41	Fall Arrest Questions
042	Assessment day Form
043	Accelerated Entry Procedure
044	Requirements and Guidance for IRATA Assessors and assessments

## **APPENDIX 2      IRATA ROPE ACCESS TECHNICIAN ASSESSMENT FORM**

Appendix 2 provides an example of the IRATA rope access technician assessment form and gives guidance on its completion. It should be noted that the form shown is an example only and is subject to change. Interested persons should check with IRATA for the current version.



<b>IRATA ROPE ACCESS TECHNICIAN ASSESSMENT FORM</b>		Assessor		
		Assessor's IRATA number		
		Assessment date		
		Serial number	Logbook check	Assessed at Level

Surname	
First name	
Address	
Postcode	
Telephone number	
Email address	
Date of birth	d m y
N I/ passport number	

IRATA number		Current level	
Hours (2 & 3)		Medical condition	
Training company			
Training company number			
Training location			
Training dates		to	
Trainer name			
Trainer's IRATA number			
Height Trained to:			

I certify that I have delivered training in all aspects of the relevant syllabus and that I have provided both the IRATA Guidelines and General requirements documents to the candidate.

Trainer's signature: \_\_\_\_\_

All required areas are to be assessed and marked in the appropriate box. P = Pass; D = Minor Discrepancy; F = Fail (see General requirements); A = Awareness subjects.

Theoretical knowledge	L1	L2	L3
Level 1 questions			
Level 2 questions			
Level 3 questions			
Risk assessments	A	A	
Method statement	A	A	

Climbing	L1	L2	L3
Climbing with cow's-tails			
Climbing with fall arrest lanyards			

Equipment and rigging	L1	L2	L3
Assembly of personal equipment			
Checking of equipment (L3 - report)			
Back-up devices			
Knots and coiling and bagging of rope			
Basic anchor system			
Small Y hangs			
Wide Y hangs			
Re-belays			
Deviations			
Rope and sling protection	A		
Pull-throughs			
Work restraint/horizontal lifelines			
Tensioned ropes			

Rescues / hauling	L1	L2	L3
Descent rescue			
Ascent rescue			
Aid climb rescue			
Re-belay rescue (small for level 2, large for level 3)			
Deviation			
Rope-to-rope transfer			
Basic haul	A		
Hanging haul (extra rope)			
Cross haul			

Assess all white boxes and a minimum of any 2 grey

Advanced rescues (level 3)	L1	L2	L3
Team rescue			
Tensioned ropes			
Short link			
Descent passing knots			
Breaking into a tight rope (pitch head rescue)			
Large re-belay			

Assess all white boxes and a minimum of any 2 grey

Manoeuvres	L1	L2	L3
Descent			
Ascent			
Changeovers			
Descent using ascenders			
Ascent using descender			
Passing knots			
Deviations			
Re-belays			
Rope-to-rope transfer			
Edge obstruction at top			
Use of work seats (comfort seats)			
Passing mid-rope protection			

Assess all white boxes and a minimum of any 5 grey

Overall attainment	
1	Unacceptable - Fail
2	Satisfactory
3	Good
4	Very good
5	Excellent

Assessment result  
**Pass / Fail**

I certify that I have been trained in all aspects of the relevant syllabus, received the IRATA Guidelines and General requirements documents, and that I agree with the assessment result.

Candidate's signature: \_\_\_\_\_

Comments

Assessor's signature

This form is valid for a period of 60 days from date of issue. Application for registration should be made within 30 days via an IRATA (Trainer) Member.

The person named above has been certified as being fully competent to carry out aspects of work associated with rope access at the level indicated subject to appropriate supervision. (to be used in conjunction with IRATA logbook and General Requirements).

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Form 025R v5

## Notes for completion of the IRATA rope access technician assessment form

These notes are a brief outline of how the assessment form should be completed by IRATA assessors. Neither these notes nor the assessment form intend to explain the IRATA training system. For further detail on IRATA assessments, it is necessary to consult the IRATA *General requirements*.

<b>Assessor</b>	Name of the IRATA assessor carrying out the assessment.
<b>Assessor's IRATA No.</b>	IRATA number of the above named assessor, e.g. A/3/1234.
<b>Assessment date</b>	The date of the assessment. Where the assessment is carried out over more than one day, details should be included and if necessary details given in the comments box.
<b>Logbook check</b>	The assessor shall initial to confirm that he/she has checked the candidate's IRATA logbook and that the details contained are satisfactory, including the training section.
<b>Surname</b>	Candidate's family or second name.
<b>First name</b>	Candidate's Christian, given or first name.
<b>Address</b>	The address of the candidate, to which IRATA will send acknowledgements and other information. If certificates and logbooks are to be sent to a different address, the IRATA member training company should notify IRATA at the time of registration.
<b>Postcode</b>	Postcode, zip code or other national postal reference for the address provided.
<b>Telephone number</b>	Include UK national dialling prefix. If not a UK number, please include the international prefix.
<b>Email</b>	Candidate's contact email address.
<b>Date of birth</b>	Candidate's date of birth given in the following order: day/month/year.
<b>NI /passport number</b>	Candidate's national / social Insurance or passport number.
<b>IRATA number</b>	To be completed by revalidating level 1 candidates and level 2 and 3 candidates.
<b>Current level</b>	The IRATA level of the candidate prior to the current assessment.
<b>Hours</b>	This should reflect accurately the work hours involved in carrying out or supervising rope access operations following approved rope access guidelines and/or procedures, as indicated by the checked IRATA logbook.
<b>Medical condition</b>	The assessor shall check that the training company has a record of the medical fitness of the candidate. The minimum requirements are given in the IRATA <i>Statement of medical condition</i> .
<b>Training company</b>	The name of IRATA member training company or probationary IRATA member training company that has delivered the training.
<b>Training location</b>	Training venue. If not a regular facility, traceable details can be added to comments box.
<b>Training dates</b>	Dates (day/month/year) of training course(s) attended.
<b>Trainer name</b>	Name of the level 3 trainer who has delivered the training. If assistants have been used, details can be provided in the comments box.
<b>Trainer's IRATA number</b>	The IRATA number of the IRATA level 3 trainer.
<b>Assessment sections</b>	Theoretical knowledge, Equipment & rigging, Manoeuvres, Climbing, Rescue/hauling, Advanced rescues: The assessor shall mark in each box, P = Pass; MD = Minor Discrepancy; F = Fail (as detailed in <i>General requirements</i> ), appropriate to the level being assessed. Black boxes require no action by the assessor. Grey boxes require the assessor to mark the minimum for each section, as detailed below each section. Boxes marked 'A' require the assessor to confirm that the Awareness areas of the training syllabus have been included in the training programme.
<b>Overall attainment</b>	The assessor shall indicate only one of the five choices with a tick.
<b>Assessment result</b>	The assessor shall write Pass or Fail.
<b>Comments</b>	Assessors shall complete this box, where necessary. Other information specific to the assessment can also be included in this box. The trainer and candidate may also use this box to make comments specific to the assessment.
<b>Signatures</b>	Candidates, trainers and assessors are required to sign the form in the appropriate places.



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General requirements for certification of personnel engaged in industrial rope access methods

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