



INTERNATIONAL TECHNICAL
RESCUE ASSOCIATION

Technical Rescue Qualifications

2024
Version 8



Swiftwater Rescue

Rope Rescue

Confined Space Rescue

Urban Search & Rescue

Tactical Rescue

itra.international





About the International Technical Rescue Association

Purpose: Why ITRA

- To promote international best practices and standards for technical rescue.
- To improve the global portability and recognition of professional rescue qualifications.
- To provide local flexibility in delivering technical rescue training curriculum.

Vision: Our hope

- A collaborative and professional global technical rescue industry.

Mission: What we do

- Recognize and document locally delivered training according to global best practices.
- Provide Independent competency-based assessments for instructor and technical rescuers.
- Maintain a global central database of training records for members.
- Share safety-related lessons learned from technical rescue activities to prevent harm.

Values: How we do it

Accountability:

- Training and assessment systems developed by industry for industry.
- A non-profit entity that is driven by and accountable to its membership.
- Instructors and Practitioners maintain their currency through robust re-certification process.
- Members conducting themselves professionally and held accountable under a Code of Conduct.

Transparency:

- Meaningful and genuine consultation with members on our work.
- Active use of social media to engage and keep members informed.
- Annual disclosure of our activities and finances to our members.
- Public register of qualified practitioners, instructors and assessors.

Working together:

- Share knowledge, skills, and experiences across all disciplines of technical rescue.
- Establish an international reporting system to highlight safety concerns within the industry.



About us: The International Technical Rescue Association (ITRA) was officially incorporated in Pennsylvania, USA in May 2018 by well-respected technical rescue instructors from around the world. The mandate was simple: to create a non-profit global body that would allow the delivery of local training standards through a network of internationally recognized technical rescue instructors.

We promote international best practices and standards for technical rescue, improve the global portability and recognition of professional rescue qualifications and provide local flexibility in delivering technical rescue training curriculum.

Our Instructors have to undergo a rigorous assessment and re-certification process, ensuring in-house (agency) and commercial (independent) instructors are subject to external validation, incident reporting and as with all our members, a code of professional conduct.

Student achievement of learning objectives are recorded by our instructors on a global database which students can access as student members. This means students who work for different organizations or are taught by different instructors have a central database to track their rescue training.

Our secure global database allows members to validate their training record online in real time, allowing incident commanders to make better task allocation decisions and for clients to verify instructor credentials.

We also offer formal practitioner qualifications that have globally set learning objectives that practitioners can be evaluated against using competency-based assessment. These qualifications have three levels and will be available for a range of technical rescue disciplines to provide a globally recognized qualification that is set by the industry, for the industry using a not-for-profit model.

With over 300 teaching points, ITRA instructors can teach short or long courses to meet local needs, including a cluster of teaching points that can align to local, state or national standards (i.e., NFPA, DEFRA, PUA, NZQA, etc.). Most training across the world is attendance-based, so instructors can record all training given within their scope of approval onto the ITRA database. No more cookie cutter courses -- instructors can select what teaching points are needed and later recorded in the global database, which may work toward or align with local or national standards as well as ITRA qualifications.

Students can access their online learning record (transcript), so the flexible teaching delivery can be centrally recorded at no extra cost as the instructor enters teaching point completions into the global database. This makes it ideal for capturing internal training, as such learning objectives can be easily recorded on the global database. Students can access their transcript online easily to validate what training they have undertaken through any ITRA Instructor.

Members will also be able to see what learning objectives they have not completed in preparation for assessment against global ITRA qualifications. Once a member has attended training for all the learning objectives in an ITRA qualification, they are then eligible for an introductory certificate (i.e., ITRA Introduction to Swiftwater Technician) which confirms attendance of all related learning objectives, but not necessarily competence. Where members want to seek a competency-based qualification, every learning objective is then rigorously assessed for competence by an independent ITRA Assessor (i.e., the assessor cannot be from the same organization, family etc.).

Upon the completion of achieving competence across the prescribed learning objectives for the respective ITRA qualification, the member is awarded an ITRA Qualification such as Rope Rescue Level 1, which becomes the first multi-standard and globally recognized technical rescue professional qualification. Naturally, ITRA qualifications are subject to three-year re-evaluation and those holding a full ITRA qualification are also listed on the public register of ITRA qualified practitioners.

For instructors there are no mandatory student packets to purchase unless your company produces/supplies/requires them as part of their own administrative processes.



Qualification Graduate Profiles

Swiftwater

Level 1 (Responder)

Practitioners at this level are able to provide initial response to swiftwater and flood incidents, effect shore-based or shallow water wading rescues, and be able to effect self-rescue.

Level 2 (Technician)

Practitioners at this level are able to provide a technical response to non-complex swiftwater and flood incidents, including using boat on tether rescues and effecting in-water contact rescues.

Level 3A (Advanced)

Practitioners at this level are able to carry out complex swiftwater and flood rescues or body recoveries including the use of non-motorized craft up to Class III environments and other high hazard environments such as low head dams and flood channels.

Level 3B (Boat)

Practitioners at this level are able to carry out motorized boat rescue operations up and including Class III environments.

Level 3V (Vehicle)

Practitioners at this level are able to carry out contact rescues from vehicles in flood/swiftwater.

Rope

Level 1 (Responder)

Practitioners at this level are able to, as part of a team but with minimal supervision, to respond to a rope rescue incident, apply low angle stretcher maneuvers, and perform basic rope access and ascent techniques to access and stabilize patients.

Level 2 (Technician)

Practitioners at this level are able to, as part of a team, respond and lead rope rescue incidents in both the low and high angle environment.

Level 3 (Advanced)

Practitioners at this level are able carry out complex high angle rescues and provide specialist advice.



Qualification Graduate Profiles

Confined Space

Level 1(Responder)

Practitioners at this level will be able to define a confined space, identify common hazards and apply appropriate control measures. Practitioners will be able to respond to a confined space incident and conduct non-entry or simple entry rescues.

Level 2 (Technician)

Practitioners at this level will be able to further identify hazards, apply control measures, and manage entry into a confined space which is not immediately dangerous to life and health. Practitioners will be able to respond to a confined space incident and conduct entry rescues including the use of rope systems and packaging to extract a patient.

Level 3 (Advanced)

Practitioners at this level will be able to apply a wide range of control measures to manage entry into confined spaces which are immediately dangerous to life and health. Practitioners will be able to respond to a confined space incident and conduct rescues using self-contained and supplied air breathing apparatus. They will be able to carry out complex and extended confined space rescues.



Qualification Graduate Profiles

Urban Search & Rescue

Level 1 Technician—*Light*

Practitioners at this level are able to, as part of a team but with minimal supervision, respond to a structural collapse incident, carry out a risk assessment, undertake basic surface search and rescue, construct emergency shoring, use ladders and improvised low height rescue methods, and access light structures (wood, bamboo etc.); or, in the case of medium and heavy structures, prepare the incident scene for medium- or heavy-level capability response.

Tactical

Level 1 (Responder)

Practitioners at this level will be able to operate as part of small tactical team, rig their own team-based anchors, manage edge problems, and be capable of rappelling and climbing single rope while wearing full duty gear/weapons in a rapid, efficient, and safe manner. Able to pass knots, change lines, and negotiate difficult transitions/edges in both directions, as well as perform inverted rappels. Ability to perform window/balcony entries, even in low light/no light conditions. Able to conduct rapid harness inspections (Prerequisite for rappel master or helicopter endorsement).

Level 2 Technician—*Medium*

Practitioners at this level are able, as part of a team, to respond to light- and medium-type structural collapse incidents. As they require rope and confined space qualifications as a pre-requisite, they are able to effect basic rope rescues from heights and confined spaces. They are able to carry out intermediate level shoring as well as gain access to reinforced and unreinforced masonry using a variety of cutting and breaching methods to locate and rescue entrapped victims.

Level 2 (Technician)

Practitioners at this level will be able to lead a small team on tactical vertical missions. Full tactical mobility on SRT...can go anywhere there is a rope or nylon product capable of human load, day or night. Able to utilize body weight to effect small weight transfers. Able to travel horizontal lines, off-sets, guidelines. Able to conduct rapid system inspections. Conduct mid-line rescues or interventions for conscious/cooperative subjects in a tactical environment (stuck operator, hostage extrication, etc.). Handle two person loads on rope. Traveling hauls and simple counterweight rescue concepts.



Qualification Graduate Profiles

Level 3 Technician—*Heavy*

Practitioners at this level are able carry out complex and extended structural collapse incidents involving heavy structures such as tilt-slab and reinforced concrete and steel. They also are able to construct advanced vertical and horizontal shoring systems and carry out advanced urban search and rescue tasks to rescue victims from all types of structures.

Level 3 (Advanced)

Practitioners at this level will be able to conduct Level 2 skills with minimal gear, with a patient in tow, or in compromised atmospheres. Ability to improvise rigging solutions in response to suspect actions. Ability to rig mid-pitch deviations, horizontal lines, guidelines, etc. All manner of pick-offs where raising full body weight of subject is required. Climbing with improvised or partially disabled SRT system. System analysis of suspect rigging that may be rigged to fail or cause injury (common vertical protester tactics). Ability to conduct & advise of vertical mission planning. Urban climbing, including use of aide anchors, bolts, etc. Required to advance to tactical rope instructor.

Special Note: INSARAG/IFRC First Responder Course

Where delivered by an ITRA USAR Instructor, students who the INSARAG/IFRC First Responder Program may be awarded the Learning Objectives as marked with **UN blue** from the Level 1 USAR (Responder) syllabus. Further information on this package is available from www.insarag.org

Key:

K: Knowledge/Theory

S: Skills/Practical

O: Optional – if required by agency shown in brackets (S) (K)

Swiftwater Rescue 1

Swiftwater Responder

| ITRA Ref # | Discipline | Learning Objective Title | Key* |
|------------|------------|---|-------|
| 100 | General | Introduction to ITRA | K |
| 101 | General | Introduction to local incident command system | K |
| 102 | General | Introduction to local rescue and safety laws | K |
| 103 | General | Introduction to local response frameworks and protocols | K |
| 104 | Animal | Management of animals during emergencies | K |
| 105 | Water | Rescue communications (whistles and hand signals) on river | K |
| 107 | General | Basic command tactics and zoning for technical rescue | K |
| 108 | General | Knowledge of managing night/poor visibility operations for technical rescue | K |
| 110 | Rope | Basic knots for rescue | S |
| 111 | Rope | Basic equipment for rope rescue | K |
| 114 | Water | Introduction to river and flood hydrology | K |
| 115 | Water | Environmental care and biosecurity precautions | K |
| 116 | Water | Swiftwater and flood hazard management | K |
| 117 | Water | Medical considerations for swiftwater and flood | K |
| 118 | Water | Vehicle drowning prevention and escape methods | K |
| 119 | Water | Basic equipment for water rescue | K |
| 120 | Water | Contamination and decontamination for flooding | K |
| 121 | Water | Watercraft types and applications for rescue | K |
| 122 | Water | River Swimming (defensive and aggressive) for self-rescue | S |
| 124 | Water | Use of water rescue throw-bags (receive and throw) | S |
| 125 | Water | Shallow water crossing methods | S |
| 126 | Water | Entrapment drills and cinch techniques (shore based) | S |
| 127 | Water | Shore based vehicle-in-water stabilization | S |
| 138 | Water | Inflatable fire hoses | O (K) |
| 147 | Water | Culvert and storm drain hazards and rescue | K |
| 149 | Water | River and flood search strategies | K |
| 154 | Water | Reach-based rescue (improvised or proprietary reach system) | K |
| 158 | Recovery | Water Body Recovery: Determining mode (Rescue vs. Recovery) | K |
| 259 | Rope | Selection and construction of single point anchors | S |

Optional Learning Objectives are not required to be assessed but may be taught by an Instructor for this qualification.

Pre-Required Qualifications:
Swiftwater 1

Swiftwater Technician

| | | | |
|-----|---------|--|-------|
| 106 | General | Basic safety around aircraft | K |
| 113 | Rope | Simple mechanical advantage rigging | S |
| 123 | Water | In-water spinal rolls | S |
| 128 | Water | Tensioned diagonal/Zip line evacuation (self) | S |
| 129 | Water | Tensioned diagonal/Zip line attended (with casualty) | S |
| 130 | Water | Strainer wrap and negotiation | S |
| 131 | Boat | Boat on tether (2 point) | S |
| 132 | Boat | Boat on tether (4 point) | S |
| 133 | Water | Combat and towed swim | S |
| 134 | Water | Throw bagged rescue swimmer | S |
| 135 | Water | Live bait (tethered) swimmer rescue | S |
| 136 | Water | V lower rescue swimmer and include quick release | S |
| 137 | Water | Capture device (Snag Plate) applications | K |
| 138 | Water | Inflatable fire hoses | O (S) |
| 139 | Water | Boat on basic highline | K |
| 141 | Boat | Knowledge of boat unwrapping/un-pinning | K |
| 143 | Water | Knowledge of canals and aqueduct rescue hazards and rescue | K |
| 145 | Water | Knowledge of Low head dam rescue hazards and techniques | K |
| 148 | Water | Rescue PFD quick release | S |
| 150 | Water | Carry out river and flood rescue search | S |
| 151 | Water | Vehicle in water: wading access rescue | S |
| 155 | Water | Full face snorkel operation | O (K) |
| 156 | Water | Diving mask and snorkel operation | K |
| 174 | General | Rescue communications (radios) | K |
| 176 | Water | Boat based parbuckling | S |
| 177 | Water | Rescues from ice, mud, and other unstable surfaces | K |
| 178 | Water | Rescues from canal locks and sluices | K |
| 179 | Boat | Power boat types | K |
| 213 | Water | Knowledge of Line (rope) crossing methods | K |
| 220 | Rope | Independent belay/safety systems for rescue loads | S |
| 225 | Water | Vehicle behavior in static and flowing water | K |
| 344 | Water | Vector lines by hand/with additional line (still releasable) | K |

Pre-Required Qualifications:
Swiftwater 2

Swiftwater Advanced

| | | | |
|-----|----------|--|-------|
| 140 | Water | Boat on reeving highline | S |
| 142 | Boat | Carry out unwrapping or un-pinning of boats | O (S) |
| 144 | Water | Canal and aqueduct rescue methods | K |
| 146 | Water | Perform technical rescues at low head dams | K |
| 152 | Water | Hiking pack float | O(K) |
| 153 | Water | Wader float/safety drill (swept away SELF/TEAM rescue) | S |
| 157 | Water | River fins operation in high flow situations | O (S) |
| 159 | Recovery | Water Body Recovery: Local legal authority and roles | K |
| 160 | Recovery | Water Body Recovery: Disaster victim identification | K |
| 161 | Recovery | Water Body Recovery: Recovery management/ICS | K |
| 162 | Recovery | Water Body Recovery: Decomposition factors and forensic considerations | K |
| 163 | Recovery | Water Body Recovery: Infectious disease control and personal safety | K |
| 164 | Recovery | Water Body Recovery: Psychological considerations | K |
| 165 | Recovery | Water Body Recovery: Management of family and media | K |
| 166 | Recovery | Water Body Recovery: Recording and presenting evidence for law enforcement | K |
| 167 | Recovery | Water Body Recovery: Body recovery equipment and techniques | K |
| 168 | Recovery | Water Body Recovery: Recovery methods from highline | K |
| 169 | Recovery | Water Body Recovery: Recovery methods using advanced throw bag techniques | K |
| 170 | Recovery | Water Body Recovery: Recovery methods from boat or board | K |
| 171 | Recovery | Water Body Recovery: Specialist body recovery equipment used by the team | O (K) |
| 172 | Boat | Basic paddle boat handling Class III | S |
| 173 | Water | Advanced swimming Class III | S |
| 175 | Rope | Rescue communications (whistles and hand signals) on rope | S |
| 211 | Boat | Inflatable boat repair (PVC/Hypalon patching) | K |
| 212 | Boat | Basic paddle boat handling Class I-II | S |
| 214 | Water | Perform line (rope) crossing methods | S |
| 219 | Water | River board or floating adjunct operation | O (K) |
| 221 | Water | Knowledge of SCUBA operations and limitations | O (K) |
| 222 | Water | In water victim release/escape tactics | S |
| 223 | Water | In water victim towed swim using adjunct | O(S) |
| 235 | Water | Night Rescue Exercise - Water | S |
| 310 | Water | Fitting and operation of hybrid rescue swimmer vests | O (K) |
| 317 | General | Lockout/Tag Out Systems (including for elevated structures) | K |
| 345 | Water | Throw bag hand tensioned pendulum line | S |
| 346 | Water | Boat on tension diagonal | S |

Pre-Required Qualifications:
Swiftwater 3

Swiftwater Rescue Boat Operator

| | | | |
|---|-------|---|-------|
| 172 | Boat | Basic paddle boat handling Class III | S |
| 173 | Water | Advanced swimming Class III | S |
| 180 | Boat | Power boat pre-launch checks | S |
| 181 | Boat | Power boat engine fault finding/solving | S |
| 182 | Boat | Power boat flood hydrology considerations | K |
| 183 | Boat | Power boat launching and trailering | S |
| 184 | Boat | Power boat trip planning | K |
| 185 | Boat | Power boat maritime rules and river laws/by-laws | K |
| 186 | Boat | Power boat marine radio operation and distress procedure | K |
| 187 | Boat | Power boat engine start up procedure | S |
| 188 | Boat | Power boat basic low speed maneuvering | S |
| 189 | Boat | Power boat advanced high-speed maneuvering | S |
| 190 | Boat | Power boat weight and balance/team coordination/calls | S |
| 191 | Boat | Power boat holding station | S |
| 192 | Boat | Power boat J turns with and without paddles – (high risk activity: use caution) | S |
| 193 | Boat | Power boat eddy glide | S |
| 194 | Boat | Power boat man overboard drill | S |
| 195 | Boat | Power boat rescue swimmer drop off and pick up | S |
| 196 | Boat | Power boat casualty pick up/tiller/engine procedures | S |
| 197 | Boat | Power boat towing another craft | S |
| 198 | Boat | Power boat pacing with another craft – (high risk activity: use caution) | O (S) |
| 199 | Boat | Power boat flips and righting | S |
| 200 | Boat | Power boat search patterns | S |
| 201 | Boat | Power boat night operations | S |
| 202 | Boat | Power boat ladder access | K |
| 203 | Boat | Power boat vehicle access | S |
| 204 | Boat | Power boat fast landing | S |
| 205 | Boat | Power boat mid-stream object touch | S |
| 206 | Boat | Power boat emergency procedures (fire, flip, loss of engine) | K |
| 207 | Boat | Power boat recommissioning after use | S |
| 208 | Boat | Power boat handling Class 1 | S |
| 209 | Boat | Power boat handling Class 2 | S |
| 210 | Boat | Power boat handling Class 3 | S |
| 211 | Boat | Inflatable boat repair (PVC/Hypalon patching) | K |
| 341 | Boat | Power boat handling Class 0/Flat water | S |
| 342 | Boat | Power boat handling - docking approach and departure | S |
| 343 | Boat | Power boat - boat assembly and motor mounting | S |
| **note: Kill cards MUST be used at all times when engine is in use | | | |

Swiftwater Rescue

3V

Pre-Required Qualifications:
Swiftwater 3

Swiftwater Vehicle

| | | | |
|-----|-------|--|---------|
| 227 | Water | Vehicle anatomy for rescue | K |
| 228 | Water | Hazards of vehicles in water | K |
| 230 | Water | Anchoring of vehicles in water | S |
| 231 | Water | Glass management during vehicle extrication/rescue | K |
| 232 | Water | Vehicle in water size up | K |
| 233 | Water | Safety considerations for working around vehicles in water | K |
| 800 | Water | Vehicle behavior in water | K |
| 801 | Water | Initial access to vehicles in water | S |
| 802 | Water | Space creation (non-tools) | S |
| 803 | Water | Space creation with tools/cutting/spreading | O (S/K) |
| 804 | Water | Full access and casualty handling | S |
| 805 | Water | Extrication – main plan (with time) Emergency plan (something changes) | S |

Key:

K: Knowledge/Theory

S: Skills/Practical

O: Optional – if required by agency

Rope Rescue

1**Rope Rescue Responder**

| | | | |
|-----|---------|--|---|
| 100 | General | Introduction to ITRA | K |
| 101 | General | Introduction to local incident command system | K |
| 102 | General | Introduction to local rescue and safety laws | K |
| 103 | General | Introduction to local response frameworks and protocols | K |
| 107 | General | Basic command tactics and zoning for technical rescue | K |
| 108 | General | Knowledge of managing night/poor visibility operations for technical rescue | K |
| 110 | Rope | Knots for rescue | S |
| 111 | Rope | Basic equipment for rope rescue | K |
| 113 | Rope | Mechanical advantage rigging | S |
| 174 | General | Rescue communications (radios) | K |
| 175 | Rope | Rescue communications (whistles and hand signals) on rope | K |
| 220 | Rope | Independent belay/safety systems for rescue loads | S |
| 254 | Rope | Rope rescue hazard identification and management | K |
| 255 | General | Introducing Standard Operating Procedures or Best Practice Guidelines | K |
| 256 | General | Technical equipment inventories and maintenance procedures | K |
| 257 | Rope | Safety systems and protocols for rope rescue (safety officer, checking options) | S |
| 258 | Rope | Protection of rope systems (edge protection, hazard avoidance) | S |
| 259 | Rope | Selection and construction of single point anchors | S |
| 260 | Rope | Selection and construction of multi point anchors | S |
| 261 | Rope | Edge lines and/or work positioning systems | S |
| 262 | Rope | Personal ascending | S |
| 263 | Rope | Personal descending | S |
| 264 | Rope | On-rope self-rescue | S |
| 265 | Rope | Select, construct, and operate lowering system - low angle | S |
| 266 | Rope | Select, construct, and operate raising system (mechanical advantage) - low angle | S |
| 269 | Rope | Patient packaging into litter/stretchers | S |
| 270 | Rope | Preparing litter/stretchers for low angle evacuation | S |
| 272 | Rope | Change over on-rope descend to ascend | S |
| 273 | Rope | Change over on-rope ascend to descend | S |
| 284 | Rope | Litter attendant rigging and operation - low angle | S |
| 294 | Rope | Rope rescue medical considerations (suspension trauma, vertigo etc.) | K |

Pre-Requisite Qualifications:
Rope Rescue 1

Rope Rescue Technician

| | | | |
|-----|---------|---|---|
| 106 | General | Basic safety around aircraft | K |
| 267 | Rope | Select, construct, and operate lowering system - high angle | S |
| 268 | Rope | Select, construct, and operate raising system (mechanical advantage) - high angle | S |
| 271 | Rope | Preparing litter/stretchers for high angle evacuation | S |
| 274 | Rope | Knot pass on-rope ascend | S |
| 275 | Rope | Knot pass on-rope descend | S |
| 276 | Rope | Knot pass on belay | S |
| 277 | Rope | Knot pass on hauling system/mechanical advantage | S |
| 278 | Rope | Knot pass on lowering system | S |
| 281 | Rope | Basic artificial high directional | S |
| 285 | Rope | Litter attendant rigging and operation - high angle | S |
| 286 | Rope | System changeover - lower to raise | S |
| 287 | Rope | System changeover - raise to lower | S |
| 289 | Rope | Rope rescue physics - vector forces, fall factors, slope loading, T method | K |
| 290 | Rope | Rope rescue - system analysis (whiteboard analysis, critical point, safety factors) | K |
| 291 | Rope | Pick off rescue - unsuspended/unsecured victim (i.e., from ledge) | S |
| 300 | Rope | Negotiating litter over edge | S |
| 311 | Rope | Vehicle anchors | S |
| 313 | Rope | Knowledge of dead man anchors | K |
| 315 | Rope | Load Releasing Hitches (mariners, radium etc.) | S |
| 316 | Rope | Improvised harnesses | S |
| 317 | General | Lockout/Tag Out Systems (including for elevated structures) | K |
| 501 | Rope | Knowledge of picket/ground anchor systems | K |

Rope Rescue

3

*Pre-Requisite Qualifications:
Rope Rescue 2*

Rope Rescue Advanced

| | | | |
|-----|------|---|---|
| 282 | Rope | Horizontal highline without reeve | S |
| 283 | Rope | Horizontal highline with reeve | S |
| 288 | Rope | Advanced knowledge of technical rope equipment | K |
| 292 | Rope | Pick off rescue - suspended victim (including, from fall arrest or ascenders) | S |
| 295 | Rope | Retrievable rappel | S |
| 296 | Rope | On-rope self-belay | S |
| 297 | Rope | On-rope bottom belay | S |
| 298 | Rope | On-rope back up device | S |
| 299 | Rope | Releasable/Contingency Anchors | S |
| 304 | Rope | Vertical fall arrest systems | S |
| 305 | Rope | On-rope: Line transfer | S |
| 308 | Rope | Applications and operation of micro-haul systems (Jiggers, Aztek etc.) | S |
| 339 | Rope | Guiding Line off-set (lower) | S |
| 368 | Rope | Advanced artificial high directionals | S |

Optional Learning Objectives are not required to be assessed but may be taught by an Instructor for this qualification.

Key:

K: Knowledge/Theory

S: Skills/Practical

O: Optional – if required by agency

Confined Space Rescue

1**Confined Space Rescue Responder**

| | | | |
|-----|----------------|--|---|
| 100 | General | Introduction to ITRA | K |
| 400 | Confined Space | Define a confined space and use common terminology for the region | K |
| 401 | Confined Space | Understand and explain Confined Space law, legislation and/or regulation for the region | K |
| 402 | Confined Space | Understand and describe the required roles and responsibilities | K |
| 403 | Confined Space | Identify the required documents for entering and rescuing from a confined space | K |
| 404 | Confined Space | Understand and define common confined space hazards | K |
| 405 | Confined Space | Understand and implement common hazard controls for entering and working in a confined space | K |
| 406 | Confined Space | Understand and interpret atmosphere hazards based on monitoring | K |
| 407 | Confined Space | Understand the different types of rescues (self, non-entry, entry) | K |
| 408 | Confined Space | Recognize limitations and further resource requirements | K |
| 409 | Confined Space | Demonstrate bump testing and use of a multi-gas monitor | S |
| 410 | Confined Space | Prepare and use ventilation and exhaust systems based on atmosphere and space | S |
| 411 | Confined Space | Select and erect a tripod, davit, or AHD | S |
| 412 | Confined Space | Demonstrate the use of a winch or pre-assembled rescue system | S |
| 413 | Confined Space | Demonstrate how to set up for a non-entry rescue system | S |
| 414 | Confined Space | Extract an entrant from a confined space using non-entry methods utilizing their harness | S |
| 415 | Confined Space | Demonstrate how to set up and enter a confined space | S |
| 416 | Confined Space | Extract an entrant from a confined space using entry methods utilizing their harness | S |
| 417 | Confined Space | Prepare and use personal emergency escape breathing apparatus (general worker) | S |

Confined Space

2

*Pre-Requisite Qualifications:
Confined Space 1*

Confined Space Technician

| | | | |
|-----|----------------|--|---|
| 430 | Confined Space | Describe and demonstrate a size up of a confined space rescue incident requiring entry | K |
| 431 | Confined Space | Read and understand a confined space rescue plan | K |
| 432 | Confined Space | Describe filter and air purifying respiratory protection options | K |
| 433 | Confined Space | Describe free flowing solid/engulfment rescue techniques | K |
| 434 | Confined Space | Describe communications options | K |
| 435 | Confined Space | Select, prepare, and use appropriate PPE | S |
| 436 | Confined Space | Identify, construct, and evaluate single point anchors | S |
| 437 | Confined Space | Select and implement appropriate fall protection systems | S |
| 438 | Confined Space | Construct and evaluate rope-based systems to raise and lower a person | S |
| 440 | Confined Space | Demonstrate how to enter as a rescuer | S |
| 441 | Confined Space | Explain and demonstrate search procedures | S |
| 442 | Confined Space | Navigate confined space obstacles | S |
| 443 | Confined Space | Prepare and use patient harnesses, spreader bars and/or wristlets | S |
| 444 | Confined Space | Select, prepare, and use confined space stretchers | S |
| 445 | Confined Space | Demonstrate patient packaging based on patient condition and needs | S |
| 446 | Confined Space | Demonstrate a horizontal extraction within line of sight | S |
| 447 | Confined Space | Demonstrate a vertical extraction within line of sight | S |

Confined Space

3

*Pre-Requisite Qualifications:
Confined Space 2*

Confined Space Advanced

| | | | |
|-----|----------------|--|---|
| 460 | Confined Space | Implement an initial command system | K |
| 461 | Confined Space | Organize a rescue team | K |
| 462 | Confined Space | Describe considerations of working in inert or pressurized spaces | K |
| 463 | Confined Space | Describe personnel and equipment decontamination considerations | K |
| 464 | Confined Space | Prepare and use self-contained breathing apparatus | S |
| 465 | Confined Space | Select, prepare, and use supplied air breathing apparatus | S |
| 466 | Confined Space | Demonstrate movement and position in restricted entries | S |
| 467 | Confined Space | Demonstrate horizontal and vertical extractions while using breathing apparatus | S |
| 468 | Confined Space | Demonstrate internal rigging | S |
| 469 | Confined Space | Identify, construct, and evaluate multi-point anchors | S |
| 470 | Confined Space | Demonstrate entry and rescue beyond line of sight for horizontal and vertical spaces | S |

Key:

K: Knowledge/Theory

S: Skills/Practical

O: Optional – if required by agency

Urban Search & Rescue

1

USAR Technician (Light)

| LO Ref | Subject | Learning Objective | K/S |
|--------|------------|---|-----|
| 100 | General | Introduction to ITRA | K |
| 101 | General | Introduction to local incident command system | K |
| 102 | General | Introduction to local rescue and safety laws | K |
| 103 | General | Introduction to local response frameworks and protocols | K |
| 104 | Animal | Management of animals during emergencies | K |
| 107 | General | Basic command tactics and zoning for technical rescue | K |
| 108 | General | Knowledge of managing night/poor visibility operations for technical rescue | K |
| 110 | Rope | Basic knots for rescue | S |
| 177 | Water | Rescues from ice, mud, and other unstable surfaces | K |
| 318 | General | Basic ladder operation | S |
| 329 | Structural | USAR scene management/initial actions | K |
| 330 | Structural | USAR response system and team typing | K |
| 331 | Structural | USAR phases of rescue (REPEAT) | K |
| 332 | Structural | USAR hazard identification and risk management, including PPE and collapse safety zones | K |
| 333 | Structural | Building construction methods | K |
| 334 | Structural | Structural collapse patterns, void spaces, and secondary collapse risks | K |
| 335 | Structural | Surface search and rescue procedures and techniques (visual/verbal; line and hail; circle and hail) | S |
| 336 | Structural | Search/victim marking systems: FEMA | K |
| 337 | Structural | Search/victim marking systems: INSARAG/UN | K |
| 347 | Structural | Stretcher passing over rubble | S |
| 350 | Structural | Building search methods | K |
| 351 | Structural | Carry out non-technical improved stretcher lowers from low height structures | S |
| 354 | Structural | Disaster reconnaissance/impact assessment information reporting/mobile apps (i.e., INSARAG Kobo) | K |
| 355 | Structural | Emergency isolation of utilities (electricity, water, gas etc.) | K |
| 356 | Structural | Identification of hazardous materials incidents (including use of Emergency Response Guides) | K |
| 357 | General | Establishment of casualty collection points | S |
| 358 | General | Apply mass casualty triage (i.e., START) | S |
| 359 | Structural | Knowledge of UN On Scene Operations Coordination Centre (OSOCC) | K |
| 360 | Structural | Knowledge of INSARAG guidelines, methodology and key terms/abbreviations | K |
| 361 | Structural | Knowledge of national, regional, and international teams and support mechanisms | K |
| 362 | Structural | Load lifting, moving and stabilization techniques using levers, rollers and cribbing for light structures | S |
| 371 | Structural | Coordination and management of spontaneous volunteers at a disaster site | K |
| 399 | Confined | Identification, types, and definition of confined space | K |
| 400 | Confined | knowledge of confined space hazards | K |
| 457 | Structural | Understand search marking systems and low damage marking options | K |
| 463 | Animal | Demonstrate knowledge of ITRA animal search and rescue marking system | K |
| 484 | Structural | Rescue communications for USAR (INSARAG signals) | K |
| 485 | Structural | Immobilize and extricate patients from damaged structures | S |
| 486 | Structural | Participate in mock urban search and rescue exercise involving rescue from persons from light structures | S |
| 487 | Structural | Knowledge of medical considerations for urban search and rescue | K |

Continued next page....

| | | | |
|-----|------------|--|---|
| 537 | Structural | Perform breaching of timber —light structures (50mm thick) | S |
| 538 | Structural | Perform breaching of metal —light structures (26 gauge/0.55mm) | S |
| 671 | Structural | Operate 1 Tonne hand operated winches for light USAR operations | S |
| 672 | Structural | Delayer structure using 1 Tonne pneumatic or hydraulic equipment | S |
| 673 | General | Demonstrate knowledge of field safety and security for operating in developing countries | K |
| 674 | General | Demonstrate knowledge of culture and gender issues affecting international response | K |

Pre-Requisite Qualifications:
ITRA USAR Level 1
ITRA Rope Level 1
ITRA Confined Space Level 1

Urban Search & Rescue

2

USAR Technician (Medium)

| LO Ref | Subject | Learning Objective | K/S |
|--------|------------|---|-----|
| 106 | General | Basic safety around aircraft | K |
| 539 | Structural | Knowledge of structural triage systems | K |
| 540 | Structural | Knowledge of structures, materials and damage types | K |
| 541 | Structural | Knowledge of USAR rescue strategy and techniques | K |
| 542 | Structural | Construct window and door shoring systems (FEMA Class 2) | S |
| 543 | Structural | Construct vertical shoring system for damaged medium structures (FEMA Class 2) | S |
| 544 | Structural | Perform breaching of concrete—medium structures (300mm thick) | S |
| 545 | Structural | Perform breaching of timber—medium structures (300mm thick) | S |
| 546 | Structural | Operate cutting equipment—medium (metal debris up to 10mm thick) | S |
| 547 | Structural | Lift, crib, roll and stabilize debris—medium structures (concrete blocks >1,000kg) | S |
| 548 | Structural | Knowledge of technical search system operational advantages and disadvantages | K |
| 549 | Structural | Knowledge of canine search system operational advantages and disadvantages | K |
| 550 | Structural | Participate in mock urban search and rescue exercise involving rescue from persons from medium structures | S |
| 551 | General | Knowledge of field safety and security in international disaster response | K |
| 552 | Structural | Building debris weight estimation and calculations | K |
| 364 | Structural | Emergency shoring for damaged light structures (FEMA Class 1: T Pot etc.) | S |
| 675 | Structural | Rig and interact with 5 Tonne crane operations | S |
| 676 | Structural | Delayer medium structure using 1 Tonne hydraulic equipment | S |
| 677 | Structural | Delayer medium structure using 1 Tonne pneumatic equipment | S |
| 678 | Structural | Breach steel reinforced concrete 200mm – vertically above | S |
| 679 | Structural | Breach steel reinforced concrete 200mm – laterally | S |
| 680 | Structural | Breach steel reinforced concrete 200mm – vertical below using clean breach | S |
| 681 | Structural | Breach steel reinforced concrete 200mm – vertical below using dirty breach | S |

Pre-Requisite Qualifications:
ITRA USAR Level 2
ITRA Rope Level 2
ITRA Confined Space Level 2

Urban Search & Rescue

3

USAR Technician (Heavy)

| LO Ref | Subject | Learning Objective | K/S |
|--------|------------|--|-----|
| 553 | Structural | Construct vertical shoring system for damaged heavy structures (FEMA Class 3: raker, laced post, sloped) | S |
| 554 | Structural | Construct horizontal shoring system for damaged heavy structures (FEMA Class 3) | S |
| 555 | Structural | Perform breaching of concrete—heavy structures (450mm thick) | S |
| 556 | Structural | Operate cutting equipment—heavy (metal debris up to 20mm thick) | S |
| 557 | Structural | Lift, crib, roll and stabilize debris— heavy structures (concrete blocks or other debris >2,000kg) | S |
| 558 | Structural | Participate in mock urban search and rescue exercise involving rescue from persons from heavy structures | S |
| 682 | Structural | Delayer heavy structure using 2.5 Tonne hydraulic equipment | S |
| 683 | Structural | Delayer heavy structure using 2.5 Tonne pneumatic equipment | S |
| 684 | Structural | Operate 5 Tonne hand operated winches for light USAR operations | S |

Key:

K: Knowledge/Theory

S: Skills/Practical

O: Optional – if required by agency

Tactical Rescue

1**Tactical Rope Responder**

| | | | |
|-----|----------|---|-----|
| 110 | Rope | Basic knots for rescue (regional basis) | S |
| 111 | Rope | Basic equipment for rope rescue | K |
| 113 | Rope | Simple mechanical advantage rigging | S |
| 258 | Rope | Protection of rope systems (edge protection, hazard identification & mitigation) | S |
| 259 | Rope | Selection and construction of single point anchors | S |
| 260 | Rope | Selection and construction of multi point anchors | S |
| 261 | Rope | Edge lines, restraint, and/or work positioning systems | S |
| 264 | Rope | On-rope self-rescue (jammed descender, foot lock, malfunctioning climbing system, etc.) | S |
| 267 | Rope | Rig and operate a lowering system (one- and two-person load) | S |
| 268 | Rope | Rig and operate a raising system (one- and two-person load) | S |
| 289 | Rope | Rope rescue physics – vector forces, fall factors, slope loading, T method | K |
| 299 | Rope | Releasable/Contingency Anchors | S |
| 311 | Rope | Vehicle anchors | S |
| 348 | Generic | Single person: lifts, drags and carries (casualty handling) | S |
| 701 | Tactical | Concepts for building side & window numbering reference systems for planning | K |
| 702 | Tactical | Roof top anchors / anchor assessments / hazards (electric, microwave, episodic heat emissions, etc.) | K |
| 703 | Tactical | Changeover (both directions) | S |
| 704 | Tactical | Knot pass on ascend / descent | S |
| 705 | Tactical | Inverted rappel | S |
| 706 | Tactical | Perform weapon management on rope | TBS |
| 707 | Tactical | Operate self-belay and ground-belay in tactical rappel activities | S |
| 708 | Tactical | Perform tactical window and balcony entries on rappel with tactical PPE | S |
| 709 | Tactical | Carry out tactical rappel operations in limited visibility (red light or NVG) and with noise distractions / | TBS |
| 710 | Tactical | Prepare, rig, and deploy ropes for tactical activities (Leg bags / rope bags, daisy chains, etc.) | S |
| 711 | Tactical | Buddy Check (of vertical kit and compatibility with assault kit) | S |
| 712 | Tactical | Rig & operate bail out kits | S |
| 713 | Tactical | Don, inspect, and check tactical and rope protective equipment to ensure compatibility | S |
| 714 | Tactical | Escape a rappel where the line below has been loaded by a suspect | S |
| 715 | Tactical | Personal ascending (includes down climbing) | S |
| 716 | Tactical | Personal descending (includes proving descenders after install) | S |

*Pre-Requisite Qualifications:
Tactical Rope Level 1*

Tactical Rope Technician

| | | | |
|-----|----------|--|-----|
| 220 | Rope | Independent belay/safety systems for rescue loads | S |
| 289 | Rope | Rope rescue physics – vector forces, fall factors, slope loading, T-method | K |
| 294 | Rope | Rope rescue medical considerations (suspension trauma, vertigo, etc.) | K |
| 295 | Rope | Retrievable rappel | S |
| 305 | Rope | On Rope line transfer | S |
| 316 | Rope | Improvised harnesses | S |
| 349 | Generic | Team based: lifts, drag and carries (including log rolls) | TBS |
| 721 | Tactical | Advanced anchors (Tree anchors, stemples / knot jam anchors, etc.) | S |
| 722 | Tactical | Remote rigging / throw line operations / remote installation of edge protection / hooks | TBS |
| 723 | Tactical | Human anchors, deviations, and edge mitigations | S |
| 724 | Tactical | Mechanical Advantage systems (compound) | S |
| 725 | Tactical | Negotiate a guideline rappel and ascent | S |
| 726 | Tactical | Pass a stuck / immobilized person on rope in both directions | S |
| 727 | Tactical | Perform loaded changeover of rescue system (raise to lower, lower to raise) | S |
| 728 | Tactical | Pass knot through rescue system in both directions | S |
| 730 | Tactical | Demonstrate an SRT pick off technique of a conscious / cooperative subject on rope | S |
| 731 | Tactical | Evacuation of unarmed civilians—high angle / operator descent | S |
| 732 | Tactical | Rig and operate a bottom operated traveling haul | S |
| 734 | Tactical | Tandem / Trandem team rope climbing | TBS |
| 735 | Tactical | Rig and operate retrievable gap crossing lines | TBS |
| 736 | Tactical | Inspect a rope rescue system for critical fails and proper operation (4 to 7 deficiencies) | S |
| 737 | Tactical | Negotiate deviation in both directions | S |
| 738 | Tactical | Negotiate a re-anchor/rebelay in both directions (ascent and rappel) | S |
| 739 | Tactical | Negotiate a long rebelay/J-hang | S |
| 757 | Tactical | Rig and negotiate a cable ladder | S |

Endorsement

Rappelmaster (RM) Endorsement for Level 1 Qualification:

- Must assess ALL Tactical level 1 LO's (Level 1 pre-req)
- Additionally must assess from Level 2:
 - ITRA-721: Advanced anchors
 - ITRA-295: Retrievable rappel
 - ITRA-305: On Rope line transfer
 - ITRA-316: Improvised Harness
 - ITRA-730: Pick off of a conscious cooperative subject on rope
 - ITRA-736: Inspect a rope rescue system for critical fails and proper operation (4 to 7 deficiencies)

*Pre-Requisite Qualifications:
Tactical Rope Level 2*

Tactical Rope Advanced

| | | | |
|-----|----------------|--|-----|
| 281 | Rope | Select and erect an artificial high directional (monopod, bipod, or tripod) | S |
| 289 | Rope | Rope rescue physics – vector forces, fall factors, slope loading, T method | K |
| 339 | Rope | Guiding line off-set (lower) | S |
| 399 | Confined Space | Identification, types, and definition of confined space | K |
| 400 | Confined Space | knowledge of confined space hazards | K |
| 501 | Rope | Knowledge of picket/ground anchor systems | K |
| 733 | Tactical | Conduct a diminishing loop ascent and changeover to rappel with a conscious person | S |
| 740 | Tactical | Pick off rescue – unsuspended/unsecured victim (i.e., from ledge) | S |
| 741 | Tactical | Pick off rescue – suspended victim (unconscious) (single rope technique) | S |
| 751 | Tactical | Perform tactical at-height restraint techniques for law enforcement | S |
| 752 | Tactical | Highline—rapid techniques | S |
| 754 | Tactical | Urban climbing (grappling hooks, container climbing, use of rock pro for aide progression) | S |
| 759 | Tactical | Break into a loaded line and convert to raise / lower with and without a 2nd rope | S |
| 760 | Tactical | Piggyback closed loop intervention system onto existing protester line / system / cut away | S |
| 762 | Tactical | Counterweight haul systems (climbing, rappelling, stacked systems) | S |
| 763 | Tactical | Rigging and accessing an up and over obstacle with human anchors both sides (aircraft, monument, etc.) | TBS |
| 764 | Tactical | Perform tactical at-height suicide intervention | TBS |

Endorsement

Helicopter (HO) Operations Endorsement:

Must complete:

- ▷ All ITRA Tactical level 1 LO's
- ▷ *Either* the Rappel Master endorsement for Level 1 or Level 2
- ▷ Additional designators 106, 791, 792 & 793

Tactical Rescue

AD

Additional Designators

| | | | |
|-----|---------------------|--|-----|
| 729 | Tactical | Tactical stretcher Operations (Prepare, rig, and handle stretcher in Tactical environment) | TBS |
| 742 | Tactical | Establish deadman anchors | S |
| 743 | Tactical | Tree climbing techniques (basic) | S |
| 756 | Tactical | Demonstrate lead climbing techniques on natural and / or man-made surfaces | S |
| 758 | Tactical | Escape / reset a fall arrest device (ASAP, Goblin, etc.) without top side assistance | S |
| 761 | Tactical | Inspecting / defusing protestor decoy rigging safely | S |
| 780 | Tactical | Perform tactical rope operations in compromised atmosphere with SCBA / APR's | S |
| 781 | Tactical | Tree Canopy rescue operations (para-rescue) | S |
| 782 | Tactical | Use of cutting tools to effect vertical rescue (chainsaw / handsaw in trees, cutters, etc.) | S |
| 783 | Tactical | Tree Canopy intervention operations (protester intervention) | TBS |
| 784 | Tactical | Aerial blockade interventions (monopods, bipods, cantilevers, etc.) | S |
| 785 | Tactical | Use of micro-systems for ascent / remote venue operations | S |
| 786 | Tactical | Setting a bolt with impact drill in rock or concrete | S |
| 787 | 110Tactical | Skylight entry with / without AHD | TBS |
| 788 | Tactical | Prepare canine for tactical entry in high angle environment | S |
| 790 | Tactical Instructor | Plan, resource, and deliver a field-based / psycho-motor block of instruction on a tactical rope topic, that involves the use of munitions, role players, non-lethal training ammunition, etc. | S |
| 791 | Tactical | Demonstrate the ability to tactically insert onto a flat (non-technical) surface from a hovering helicopter using a single or double rope rappel. | S |
| 792 | Tactical | Demonstrate the ability to tactically extract from a flat (non-technical) surface using a single rope anchored to a hovering helicopter. | S |
| 793 | Tactical | Demonstrate the ability to deal with personal non-routine situations while rappelling (single or double rope) from a hovering helicopter. | S |

Additional Designations

AD

Additional Learning Objectives Available

Additional Designations are learning objectives that can be taught by approved instructors to provide further flexibility with course design and delivery. They are not available to be assessed as they are not part of a formal ITRA qualification, but can be added to attendance-based courses to maximize customized learning. Instructors need an ITRA Instructor qualification in the subject area and provide additional evidence that they are competent to instruct the respective learning objective. ITRA Instructors can apply for additional designations at <https://itraforms.wufoo.com/forms/additional-designations/>

| ITRA Ref # | Subject | Learning Objective | K/S |
|------------|-------------|---|-----|
| 106 | Generic | Basic safety around aircraft | K |
| 174 | Generic | Rescue communications (radio) | S |
| 215 | Generic | Knowledge of DEFRA concept of flood operations | K |
| 216 | Generic | Knowledge of NFPA standards 1670 and 1006 | K |
| 217 | Generic | Knowledge of NZQA unit standards for public safety | K |
| 218 | Generic | Knowledge of Australian Public Safety training packages (PUA) | K |
| 255 | Generic | Introduction to SOPs, SOGs, and best practice guidelines | K |
| 256 | Generic | Technical rescue equipment inventory and maintenance systems | K |
| 302 | Rope | Rigging cross-haul | S |
| 303 | Rope | Rigging re-anchor | S |
| 306 | Rope | Negotiate deviation | S |
| 307 | Rope | Negotiate re-anchor | S |
| 317 | Generic | Tag Out/Lock Out Systems | K |
| 318 | Generic | Basic ladder operation | S |
| 348 | Generic | Single person: lift, drag and carries (casualty handling) | S |
| 349 | Generic | Team based: lift, drag and carries (casualty handling) | S |
| 352 | Generic | Improvised low height/disaster rescue—two point lower | S |
| 353 | Generic | Improvised low height/disaster rescue—four point lower | S |
| 368 | Rope | Advanced artificial high directionals | S |
| 370 | Generic | Knowledge of distress beacons/EPIRBs/PLBs and satellite safety devices | K |
| 385 | Water | Perform curtain capture on tensioned diagonal | S |
| 452 | Water | Perform tactical in-water restraint techniques for law enforcement | S |
| 487 | Water | Perform hiking pack float | S |
| 488 | Water | Perform self-rescue while wearing waders | S |
| 490 | Boat | Perform transfer of victim or equipment between boats | S |
| 491 | Water | Perform kayak assist rescues (Hook Rescue, T Rescue, Assisted Ferry, Barrel Roll) | S |
| 492 | Water | Perform bow/stern carry of swimming using kayak | S |
| 493 | Water | Perform self-unassisted re-entry into kayak | S |
| 494 | Water | Perform kayak deep water rescue | S |
| 495 | Water | Perform rescue of unconscious paddler from kayak | S |
| 496 | Water | Perform tow based rescues and assists while kayaking | S |
| 497 | Water | Perform curl capsize recovery of canoe | S |
| 498 | Water | Perform canoe-over-canoe (X-method) capsize recovery of canoe | S |
| 499 | Water | Perform tow based rescues and assists while canoeing | S |
| 500 | Generic | Improvised (non-mechanical) rappelling and ascending | S |
| 502 | Rope | Perform invert while rappelling | S |
| 509 | Rope | Rig and operate micro descenders and bail out kits using thin rope systems | S |
| 518 | Body Recov. | Rig and manage body recovery bag systems for high angle evacuation | S |