ITRA

INTERNATIONAL TECHNICAL
RESCUE ASSOCIATION

Technical Rescue

Qualifications

2022

Version 6

| 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 aligned 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	Rope
Level 1 (Responder)	**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.	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)	**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.	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 3A (Advanced)	**Level 3 (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.	Practitioners at this level are able carry out complex high angle rescues and provide specialist advice.
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.	

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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	Tactical
Level 1 Technician—*Light*	**Level 1 (Responder)**
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.	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*	**Level 2 (Technician)**
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.	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*	Level 3 (Advanced)

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.

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

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	Outline the 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)	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
131	Boat	Boat on tether (2 point)	S
132	Boat	Boat on tether (4 point)	O
138	Water	Inflatable fire hoses	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
345	Water	Throw bag hand tensioned pendulum line	K

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

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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
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	S
137	Water	Capture device (Snag Plate) applications	K
139	Water	Boat on basic highline	S
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
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	Using additional line to deflect zip lines	K
384	Water	Knowledge of curtain capture on tensioned diagonal	K

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140	Water	Boat on reeving highline	S
142	Boat	Carry out unwrapping or un-pinning of boats	S
144	Water	Canal and aqueduct rescue methods	S
146	Water	Perform technical rescues at low head dams	S
152	Water	Hiking pack float	K
153	Water	Wader float/safety drill	K
157	Water	River fins operation in high flow situations	K
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	K
172	Boat	Basic paddle boat handing 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	K
221	Water	Knowledge of SCUBA operations and limitations	K
222	Water	In water victim release/escape tactics	S
223	Water	In water victim towed swim using adjunct	S
224	Water	Below surface drowned victim recovery (non-SCUBA)	K
235	Water	Night Rescue Exercise - Water	S
310	Water	Fitting and operation of hybrid rescue swimmer vests	K
316	Rope	Improvised harnesses	K
317	General	Lockout/Tag Out Systems (including for elevated structures)	K
346	Water	Throw bag hand tensioned pendulum line	S
386	Water	Cargo net on tensioned diagonal	K
500	Rope	Improvised (non-mechanical) rappelling and ascending	K

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172	Boat	Basic paddle boat handing 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	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	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

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Swiftwater Vehicle

226	Water	Vehicle sinking behavior	K
227	Water	Vehicle anatomy for rescue	K
228	Water	Hazards of vehicles in water	K
229	Water	Rescue tactics for vehicles in water	K
230	Water	Anchoring of vehicles in water	K
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
234	Water	Contact rescues of victims from vehicle in water	S

Rope Rescue | 1

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/stretcher	S
270	Rope	Preparing litter/stretcher 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

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/stretcher 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

Pre-Requisite Qualifications:
Rope Rescue 2

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.

Confined Space Rescue

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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 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

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

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
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
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
361	Structural	Knowledge of national, regional, and international teams and support mechanisms	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
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
485	Structural	Immobilize and extricate patients from damaged structures	S
354	Structural	Disaster reconnaissance/impact assessment information reporting/mobile apps (i.e., INSARAG Kobo)	K
362	Structural	Load lifting, moving and stabilization techniques using levers, rollers and cribbing for light structures	S
364	Structural	Emergency shorting for damaged light structures (FEMA Class 1: T Pot etc.)	S
484	Structural	Rescue communications for USAR (INSARAG signals)	K
351	Structural	Carry out non-technical improved stretcher lowers from low height 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
371	Structural	Coordination and management of spontaneous volunteers at a disaster site	K
537	Structural	Perform breaching of timber—light structures (50mm thick)	S
538	Structural	Perform breaching of metal—light structures (26 gauge/0.55mm)	S

These learning objectives align to the INSARAG/IFRC First Responder Training Package

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

ITRA

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

ITRA

Tactical Rescue   1

Tactical Rope Responder

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
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
715	Tactical	Personal ascending (includes down climbing)	S
716	Tactical	Personal descending (includes proving descenders after install)	S
264	Rope	On-rope self-rescue (jammed descender, foot lock, malfunctioning climbing system, etc.)	S
714	Tactical	Escape a rappel where the line below has been loaded by a suspect	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
703	Tactical	Changeover (both directions)	S
704	Tactical	Knot pass on ascend / descent	S
289	Rope	Rope rescue physics 1 (fall factors, anchor angles, shock loads, etc.)	K
299	Rope	Releasable/Contingency Anchors	S
311	Rope	Vehicle anchors	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
348	Generic	Single person: lift, drag and carries (casualty handling)	S

ITRA

Pre-Requisite Qualifications:
Tactical Rope Level 1

Tactical Rope Technician

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
220	Rope	Independent belay/safety systems for rescue loads	S
289	Rope	Rope rescue physics 2 (T-method, closed loop rigging, torque on tree branches, etc.)	K
295	Rope	Retrievable rappel	S
306	Rope	Negotiate deviation	S
307	Rope	Negotiate re-anchor	S
725	Tactical	Negotiate a guideline rappel and ascent	S
305	Rope	On Rope line transfer	S
726	Tactical	Pass a stuck / immobilized person on rope in both directions	S
316	Rope	Improvised harnesses	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
349	Generic	Team based: lift, drag and carries (casualty handling)	TBS
736	Tactical	Inspect a rope rescue system for critical fails and proper operation (4 to 7 deficiencies)	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:

    Þ ITRA-721: Advanced anchors
    Þ ITRA-295: Retrievable rappel
    Þ ITRA-305: On Rope line transfer
    Þ ITRA-316: Improvised Harness
    Þ ITRA-730: Pick off of a conscious cooperative subject on rope
    Þ ITRA-736: Inspect a rope rescue system for critical fails and proper operation (4 to 7 deficiencies)

ITRA

Pre-Requisite Qualifications:
Tactical Rope Level 2

Tactical Rope Advanced

289	Rope	Rope rescue physics 3 (highline forces, deviation anchor forces,)	K
291	Rope	Pick off rescue - unsuspended/unsecured victim (i.e. from ledge)	S
292	Rope	Pick off rescue - suspended victim (unconscious) (single rope technique)	S
281	Rope	Select and erect an artificial high directional (monopod, bipod, **or** tripod)	S
314	Rope	Establish dead-man anchor	S
338	Rope	Compound and complex mechanical advantage systems	S
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
733	Tactical	Conduct a diminishing loop ascent and changeover to rappel with a conscious person	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
312	Rope	Knowledge of picket/ground anchor systems	K
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:

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

ITRA

729	Tactical	Tactical stretcher Operations (Prepare, rig, and handle stretcher in Tactical environment)	TBS
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
279	Rope	Tower climbing technique	S
280	Rope	Tree climbing techniques (basic)	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)	S
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
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
294	Rope	Rope rescue medical considerations (suspension trauma, vertigo etc.)	K
787	Tactical	Skylight entry with / without AHD	TBS
788	Tactical	Prepare canine for tactical entry in high angle environment	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
106	General	Basic safety Around Aircraft	K

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Additional Designations | AD

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

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