

# Urban Search and Rescue



**UNITED  
KINGDOM  
RESCUE  
ORGANISATION**  
Advancing  
professional  
rescue

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# UKRO Challenges 2021

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Tyne and Wear Fire and Rescue Service,  
NewcastleGateshead



**NFCC**  
National Fire  
Chiefs Council



[www.ukro.org](http://www.ukro.org)

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# 1 Introduction

Welcome to the 2021 Urban Search and Rescue Challenge.

- 1.1 UK Fire and Rescue Services now have the additional responsibility to attend incidents involving the collapse of structures etc. The Act requires Fire and Rescue Services to be sufficiently trained and equipped not only to deal with incident but to sustain these operations over an extended period in collaboration with other Fire and Rescue Authorities.
- 1.2 The aim of the UKRO 'USAR Challenge' is to bring together teams of Technical Rescue personnel who are committed, not only to displaying their ability, but also to expanding their practical skills by learning from and teaching others involved in the same field.
- 1.3 The UK Challenge is open to all United Kingdom, local authority Fire and Rescue Services.
- 1.4 The skills that the teams have developed in training for the event and pick up during these days will go back with them. This experience, skill and knowledge will be used to great effect when they attend their next incident. The casualty will receive a far better service from firefighters who have attended a UKRO USAR Challenge.
- 1.5 The emphasis at a UKRO Challenge is on developing and promoting 'Best Safe Practice'. The ethos of the 'Challenge' is not merely to win the event. It is more about improving the skills of the UK Fire and Rescue Services in order that they better able to deliver a professional service to the public.
- 1.6 The Challenge is a learning platform, testing skills through strict assessment where participants are encouraged to make a hard and critical examination of their own rescue practices and techniques. Successful teams will need to study current extrication philosophy and search for new and innovative ideas.

## 2 The Objectives

- 2.1 The Challenge will provide an arena for rescue personnel from across the United Kingdom to come together, in order to stimulate and develop proficiency levels in all areas of rescue, but specifically in:
- Incident Command
  - Safety
  - Casualty Location and Safe Removal
  - Pre-Hospital Care
  - Expert Use of Equipment
  - National Concept of Operations
- 2.2 It will identify 'best practice' through review of the training techniques implemented by participating teams and transfer that knowledge back to the Fire and Rescue Service of participating teams.
- 2.3 Identified areas of operational and tactical improvement reported to the USAR National User Group for consideration within the national maintenance of competence.

## 3 The Benchmarks

- 3.1 The UKRO believes that the Challenge is a learning environment. We also believe that the teams that take part are better able to achieve the following benchmarks.
- 3.2 Adopt a 'Casualty Focused, Safety First' approach, which will be underpinned by dynamic incident command and control.
- 3.3 Possess high and very proficient levels of pre-hospital care attained through a casualty centred approach.
- 3.4 Consistently demonstrate their broader knowledge across the spectrum of USAR principles, techniques and scene safety.
- 3.5 Consistently demonstrate ingenuity and innovation in terms of technical / practical skill, through deployment of resources.
- 3.6 Teams attain a thorough understanding of the 'safe person' concept.
- 3.7 Through co-operation, teams disseminate an agreed code of best practice.

## 4 The Challenge

4.1 All teams will take part in challenge scenarios on Friday and Saturday. The team with the highest score will be awarded the “best team”.

For Assessment and scoring criteria see section 9.

4.2 Each team will be assessed, using common criteria, by a team of three assessors who will score the following areas:

- Incident command and control, (Command)
- Physical rescue and general techniques, (Technical)
- Pre-hospital care, (Medical)

4.3 The scenarios consist of one of the following ‘standard’ elements:

- Paratec/timber shoring
- Horizontal/Vertical Breaking and Breaching
- Casualty detection and Safe removal incorporating lifting and moving
- Technical Search

There may be other activities or ‘props’ in the vicinity in order that the scenario is more realistic.

4.4 Teams are allocated approximately 1.5 hours to complete as much of the task as is safely possible for them to do so.

4.5 Each team will be given a ‘hot’ debrief immediately following their scenario. It must be noted that the assessors’ decision is final and all participants are asked to respect that decision.

4.6 The UKRO uses live casualties. They are all medically aware and will have an input into the medical rescue assessment.

N.B. A copy of the scoring sheets which are used by the UKRO assessors will be available to every team via the web.

## 5 The Rules

- 5.1 No team will participate without the written authorisation from a senior manager of their Fire and Rescue Service.
- 5.2 Each team will consist of a crew of six; a reserve may be used in the event of an injury or any unforeseen circumstances affecting a participant.
- 5.3 Each team will have a dedicated Team Medic as one of the 6 competitors, and all teams should provide their own trauma packs.
- 5.4 A minimum of one, with a preference of two, qualified Hot Cutting team member(s) are required. Where a team only contains one Hot Cutting qualified member a second qualified person will be provided by the scenario director for the duration of the hot cut.
- 5.5 Only PPE approved by the crew's FRS will be permitted to be worn by participating team members. UKRO Assessors will have overall discretion on the suitability of the teams PPE.
- 5.6 All participants must wear head, eye, hand, and foot protection at all times.
- 5.7 Each team will be assessed in three primary areas during their scenario:
- Incident Command and Control
  - Technical Rescue and Tool Operation
  - Casualty Detection and Physical Rescue
- Plus, the urgency in which the whole scenario is undertaken will also be considered as part of the assessment.
- 5.8 Basic packaging of the patient will be evaluated using the CABC and S protocols, with care and safety being of prime importance.
- N.B. C= Catastrophic Haemorrhaging  
A = Airway Management  
B = Breathing and Resuscitation  
C = Circulation  
S = Spinal Care
- 5.9 Each scenario will have allocated to it three assessors, who will be working under the direction of the Head Assessor. All scoring information will remain the property of the UKRO and shall remain confidential.
- 5.10 The decision of the Head Assessor concerning any assessment or conduct will be deemed to be final.

- 5.11 A nominated assessor will be appointed as a Safety Officer who will supervise each evolution with authority to halt any action deemed to be in breach of safe working practice.
- 5.12 Teams may use radio communications - in the form of either hand-held radio or helmet attachment, as long as they do not interfere with the host Service's radio frequencies. It will be the team leader's responsibility to supply an assessor with a radio, on the same frequency, in order that instructions to the team can be monitored.
- 5.13 The UKRO and the Host Service will supply a comprehensive selection of equipment (see tool section). Teams may only bring a very limited selection of their own personal equipment with them. For those teams applying to the competition from organisations other than those in England and Wales, or for any clarification/familiarisation on kit requirements, please contact the UKRO USAR Lead for more information.
- 5.14 Teams may loan equipment to other teams ensuring any safety features are fully understood by the recipient, and any familiarisation input given as requested.
- 5.15 Teams will present themselves to the 'Team Registration' area thirty minutes prior to their designated run off time.  
N.B. Failure to do so may result in elimination of the Team.
- 5.16 There will be a briefing of all participants immediately following the Opening Ceremony on the Thursday evening prior to the event.  
NB. It is mandatory that all team leaders or their designated deputies attend this briefing
- 5.17 The Organisers and the host Fire and Rescue Service will not be responsible for any damage or loss of any equipment as a result of participating in this event.
- 5.18 Staff compensation, insurance etc. for the protection of the team members shall be sole responsibility of the participants in the event. The host organisation shall supply 3rd party liability insurance.

## 6 Code of Conduct

- 6.1 All participants are reminded that they are not only representatives of their own Service, but also the firefighting profession as a whole and are requested to conduct themselves accordingly.
- 6.2 Both the Opening and Closing Ceremonies are formal functions and teams are expected to present themselves in their Service's 'shirt sleeve order'. Caps are not to be worn.
- 6.3 Participants are expected to be smartly dressed whilst at the Challenge venue, it is preferred that working rig be worn to tour the site, however this can be relaxed to casual wear, so long as it is smart and approved by the team manager.
- 6.4 Full protective clothing will be worn in the USAR training ground, this maybe relaxed during 'make up' at the discretion of the senior assessor and when weather conditions demand.
- 6.5 It is accepted that the evenings events perform an important part of the socialising aspect of the Challenge, but participants are again reminded to behave in a manner befitting their Service and have due regard to non-service persons who may share the same facilities.



# 7 Tools and Equipment

This year teams may not provide their own equipment, other than personal small gear, i.e. hand tools, medical collar etc. Equipment requested will be provided at team isolation and only equipment that is approved by the assessors prior to commencement of the scenario will be allowed to be used.

## Equipment List

7.1 The following equipment will be standard and available at each scenario for the UKRO Challenge. All teams must use this equipment.

- A complete set of Paratech Shoring
- Search Camera and Snake Eye
- PS 20 Re-bar Detectors
- Corer DD 130
- Breaching and Breaking Tools
- Generators – Electrical & Hydraulic
- Small Tools
- Nail Gun, Palm Nailers, Anchors and Bolts
- Lever Bars, Wedges and Cribbing
- Timber
- Dewalt crosscut saw and table
- Casualty stretchers
- Selection of lines/ropes for lifting and moving
- Tirfor Winch
- Rollers
- Petrogen hot cutting equipment

7.2 Where necessary, backup equipment will be provided.

7.3 Please note that all of the above equipment will be available for use and familiarisation prior to commencement of each scenario.

7.4 Teams will provide their own dust mask, latex gloves, goggles and ear defenders as appropriate.

7.5 Specific equipment brought by individual teams may be considered by the Head Assessor only on provision of current equipment documents detailing that it is fit for use and tested, and is made available for use by all other teams following any necessary familiarisation training.

## 8 Health and Safety

- 8.1 A risk assessment will be conducted prior to each evolution by an assessor to ensure the safety of both participants and spectators. Dynamic risk assessment will occur throughout the evolution, not only by the team involved but also by the assessors.
- 8.2 Any unsafe or potentially unsafe practice will be stopped immediately and put right (see Rule 5.10).
- 8.3 All activities within the Challenge site fall under the control of designated staff who have been tasked by the UKRO to maintain high standards of health and safety principals. Teams must play their part in upholding those standards.
- 8.4 No team will be allowed to commence their task without direct approval of the Lead Assessor, subject in all cases, to the following:
- All team members are properly attired in approved personal protective equipment.
  - All non-proprietary equipment is accompanied by the relevant documentation.
  - The assessor has 'cleared' the scenario.
- 8.5 An official acting on behalf of the UKRO, who observes a potential or existing danger, will immediately halt the assessment by a long whistle blast. Any activity carried out after the blowing of the whistle, other than to ensure safety, will be penalised at the discretion of the Senior Assessor present.
- 8.6 A member of a participating team who notices an existing or potential danger must call a halt to any activity by shouting 'Still'. Any activity carried out after the calling of 'Still', except to make safe, will be penalised at the discretion of the Senior Assessor present.
- 8.7 If any item of the casualty's PPE is accidentally removed by a team member, it must be replaced before work can recommence. Failure to do so may result in loss of points or possible disqualification.
- 8.8 Testing of all tools will only be permitted in the designated training area.
- 8.9 No hydraulic power units are to be started without the feed and return lines being connected to a tool and the control valve shut.

## 9 Assessing and Scoring

- 9.1 All teams will be assessed on each of the scenarios they undertake, and awards presented accordingly.
- 9.2 Each team will be evaluated in the following areas by a panel of three assessors, these are:
- Incident Command and Control
  - Technical Rescue and Tool Operation
  - Casualty Detection and Physical Rescue
- 9.3 Copies of all the scoring sheets which are used by the UKRO Assessors are available on the UKRO website.
- 9.4 Points awarded per sub-section will be totalled and each sub-section added together to give an overall score for that particular criteria.
- 9.5 The total points awarded in each of the above three categories will be calculated as a placing. That is, the person who is awarded the highest score is awarded one. The person who comes second is awarded two and so on. The team's 'positional score' for each of the three categories are then added together and the team with the lowest score comes first.
- 9.5 In the event that two teams score identical points, under the placing criteria, a count back will be conducted. The team with the highest command score will be awarded first place. If this still produces a draw, the count back will then fall to the technical scores.

## 10 Awards

At each National UKRO Challenge, recognition is given for the performances of the team and team's members in the form of awards. The effort and dedication that has been put in by participants for this Challenge over many months culminates in a formal award ceremony at a prestigious venue, where the following achievements are acknowledged.

Best Team

Runner-up Team

Best Incident Commander

Best Medical Rescue

Best Technical Team

# 11 Documentation

11.1 Please refer to the UKRO web site for the following forms:

- Team Registration Form
- Authorisation To Compete and Insurance Indemnity

Registration will open on 1st July 2021 and close on 31 July 2021.

In order to register please complete and submit by e-mail the 2 following documents:

1. Team Registration Form

This is a new multi-team entry form and so each Service needs to co-ordinate its entries and submit them on a single form. In the event that additional entries are required after submission then the original should simply be updated and resubmitted.

[PRESS HERE FOR THE TEAM REGISTRATION FORM](#)

2. Authorisation to Compete and Indemnity Insurance Certificate

This should be signed by a Principal Officer (or other officer authorised by your CFO).

In submitting the documents you are agreeing to the terms and conditions set out below.

There are 2 methods of payment:

1. By BACS
2. By Cheque (made payable to "UKRO").

Please ensure you provide a Purchase Order Number on the Team Registration Form so we can raise an invoice.

Teams should visit the UKRO website for specific information regarding accommodation.

[PRESS HERE FOR THE AUTHORISATION TO COMPETE CERTIFICATE](#)

## Terms and Conditions of Registration

1. If for any reason a team is not accepted as a valid entrant to the competition all entry fees will be refunded in full.
2. All entry fees, once teams have been entered, are non-refundable unless the event is cancelled by UKRO.
3. In the event of cancellation the liability of UKRO shall not extend beyond the value of the entry fees paid.
4. Invoices must be paid with 14 days of being sent by UKRO by e mail