

# TECHNICAL RESCUE UNIT

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## INTRODUCTION

I'm Richard (Dinger) Bell, a Special Access Paramedic based at Hightown Ambulance Station in Southampton. When I'm not driving ambulances or tearing round the city in the RRV I'm a rescue-medic and Search Dog Handler with the Technical Rescue Unit. The Technical Rescue Unit or TRU is a very unusual outfit. They were originally contracted in the late eighties by Hampshire Fire & Rescue Service to provide rope rescue but for the past several years their remit has expanded to include all areas of difficult access rescue - this includes rope rescue, confined space rescue, trench rescue, structural collapse, heavy lift, tree & storm damage, aquatic rescue, and operational support which includes things like suicide intervention (jumpers), large vehicle stabilisation and animal rescue. The Unit also undertakes extensive RTA training and pioneers research into new equipment and techniques. For the past few years this has involved heavy stabilisation, self contained reciprocating saws and electric-hydraulic cutters and spreaders. RTA work is not part of our remit for HFRS but is utilised by our firefighters in their normal duties and by TRU overseas plus it improves general tool handling skills.

Most people think that the average fire appliance is able to deal with difficult access rescues so it is something of an eye-opener to learn that Hampshire is the only brigade in the country to utilise a full-time dedicated crewing Unit with the equipment and skills to deal with all of these special rescue disciplines. In the USA pretty much every major metropolitan fire department has a Technical Rescue Team/Unit employing specialists who's job is not to put out fires or get involved in community fire safety..... they just do rescue.

## TRAINING & OVERSEAS ATTACHMENTS

In the UK the number of technical jobs is very limited and it's difficult for fire services to justify either the cost of equipment or the training to address so few incidents. It's even more difficult to maintain skill levels if you're only carrying out such tasks very infrequently. There is a substantial difference between the amount of time allocated to specific skills training on the Unit as compared to that which can be carried out within the Fire Brigade and this illustrates the advantages of specialist, dedicated operators. As I've said, such incidents are relatively infrequent, on average we attend only one Technical incident a week [because the Unit does not respond to vehicle accidents for HFRS] so Unit personnel are expected to undertake operational attachments overseas in order to boost their skills. TRU undertakes 4 to 6 tours a year in South Africa and latterly the Gaza Strip and West Bank. A two week tour in such environments provides more operational experience than we'll get in the UK in the next ten years. Much of this is violent trauma work and our docs and rescue personnel gain extensive experience of gunshots, stabbings and working under extreme duress. These are therefore very valuable learning curves for Unit personnel. Firefighters on the Unit are expected to upgrade their training substantially from that expected in their normal duties - the latest regime implemented last year requires TRU personnel to undertake 7 times more extrication training, 30 times more shoring/stabilisation training and 70 times more rope rescue training than regular fire crews. Our two full-time senior





rescue technicians have over 44 years of rope access and technical rescue experience between them including a number of years working in Europe, Australia and the US.

### **ENTRY REQUIREMENTS**

TRU is comprised of two full-time rescue specialists, 14 firefighters from all around the county, three trauma doctors and yours truly. Each firefighter has to be an active climber, caver and diver and possess a useful additional skill before they will be accepted for training. This might be a construction industry trade, medical skills, tree surgery or some obscure military prowess! These skills provide the fundamental ability to deal with extreme heights, extremely confined spaces and tool handling. Once in, much of the training is undertaken in their own time though there is a commendable degree of Fire service cooperation in allowing training while on duty providing it does not adversely affect crewing levels. It takes two years to become fully qualified on the Unit and all personnel have to re-certify each year. The medical element of which I am a part provides difficult access advanced life support. In other words we have to be able to get to a casualty or our own colleagues no matter where they are, whether it be out on the end of a tower crane jib or 100 metres into a sewer tunnel. As medics our training differs in that we are only required to undertake Difficult Access training rather than the full rescue capabilities but whilst this may be the case initially some of us extend those skills to become full rescue technicians as well as medics. The Unit is at pains to stress that their advanced life support capabilities are not intended to replace either ambulance crews or BASICS Doctors, we are only used where access to the casualty may be hazardous and require Special Access skills. To this end we are trained to abseil and ascend ropes, wear breathing apparatus, enter fast moving water and identify safe

structural shoring and stabilisation before entering a hazardous area.

The Unit operates out of Lyndhurst Fire Station but because it covers the whole county all qualified personnel carry special access packs in their own vehicles and on their own station so that they can respond from wherever they happen to be. Similarly the dedicated

rescue vehicles (which are unusual in that they are white rather than fire service red) stay with their on-call drivers whether they are on station or at home (this is something the boss picked up from spending so much time with the Police Rescue Squad in Sydney), response times would be far too slow if the vehicles remained on station in the same way as retained fire appliances are crewed. Each vehicle carries in excess of £60,000 worth of equipment at any one time with further specialist pods and trailer available at Lyndhurst, Basingstoke and Southsea Fire Stations. The Unit is activated via Fire Service or ambulance Control though there is no statutory reason why it cannot be activated direct from Police Control.



### **NIL-COST to the TAX-PAYER**

The thing that most surprises people about the Technical Rescue Unit is that it is a full-time professional service and yet costs the tax-payer or indeed the fire service nothing at all. It was established with a five year sponsorship package from the Daily Mail Group (in much the same way as the Air Ambulances have been set up). This came to an end late last year (though Technical Rescue Magazine remains an important sponsor) and the Unit has since become a registered charity. The Unit therefore only exists thanks to commercial sponsorship, grants and charitable donations.



It costs them approximately 50k a year (excluding equipment sponsorship) to maintain the Technical Rescue Unit in its current form which sounds expensive until you consider that this entire 16-person, 5-vehicle Unit costs less per year than a couple of senior Fire Officers. This

would surprise most members of the public who are probably under the impression that their local fire station is trained and equipped to deal with incidents like the World Trade Centre bombing. Obviously that's an extreme example but you get my point - this Unit is currently one of very few agencies in the UK able to provide collapse, shoring, rigging, heavy lift, air monitoring and extreme duration breathing problems associated with such a major incident. And it costs the tax payer nothing!!

It takes almost two years to complete training on the Unit and the attrition rate is quite high though that is often due to promotion and transfers rather than an SAS style training regime! My particular specialisation has been to bring search dogs and aquatic rescue dog onto the



Unit as part of its new Aquatic and Search & Rescue functions. This operates in support of existing SAR and Police elements and includes a Remote Operated Aerial Vehicle with mounted optical telemetry. Such equipment is typical of the Units highly technical function and it's safe to say that if you have an access problem the Technical Rescue Unit will be able to deal with it.



Whilst the Unit has managed to keep a low profile in the past and shies away from the inevitable 'elitist' tag it is unquestionably something of a crack outfit with some very unusual equipment and operational tasks which require its personnel to 'push the envelope'. It is regularly featured in the regional press and on national TV though rarely under its true name, it is generally simply referred to (incorrectly) as the Fire Service. The unusual nature of the Unit's skills is most obviously seen in its Suicide Intervention role for which operators are trained to proactively 'take down' potential jumpers or block their route to jump. This is undertaken in cooperation with Police negotiators but is unquestionably one of the most dangerous types of incident we attend, during training there are very few occasions when someone on the Unit doesn't sustain an injury! The Technical Rescue Unit is a unique and valuable service and is unlikely to be replicated in any other county simply because it is so difficult to maintain these levels of skills and specialist equipment within a standard Fire Service environment. Without it, difficult access rescues are often carried out in an ad-hoc manner making best use of the limited equipment and training available to the responding service. With TRU, Hampshire residents can expect a state of the art rescue response with some of the best trained and most experienced operators in the UK. If you are interested in hearing more about the Unit or have the time, the Unit is always happy to visit your station.