EXTRICATION



ts been two decades now since it first appeared, so is one of the foundation stones of modern road traffic collision (RTC) rescue, the Team Approach, still fit for purpose? Or, as rescue tools have evolved significantly since the concept first made its debut, has it too evolved into something very different?

For those unfamiliar with it, the concept is a pretty much universally adopted RTC management tool which I first encountered in the book Advanced Vehicle Entrapment Rescue way back in 1997, by arguably the father of modern extrication, Len Watson. Given that the concept is probably in its twentieth anniversary year, now would seem as good a time as any to review it. But before we do, let me say that the point of this article is not to convert anyone to a new Team Approach, but for you to re-familiarise yourself with one of the fundamentals of extrication rescue – a valuable exercise in itself -

and then perhaps to reevaluate your own practices and teaching in that light.

CONTEXT

This article assumes an initial and minimum five person fire service attendance –common in the UK but not necessarily so in the world in general and parts of north and south America specifically, where three and even two person crew single attendances are not uncommon. A well trained five-person crew can divide into three efficient

component parts capable of the simultaneous activity that will safely decrease rescue time: an Officer in Charge, a supporting crew of two and a tool crew of two. It further assumes that in order to work fully towards the holy grail of an RTC – a casualty centred rescue that the same fire crew will also have a basic knowledge of medical rescue. This is vital if they arrive before the medical attendance - one of the two person supporting crew mentioned above would

ww.trescue.co

TECHNICALRESCUE ISSUE 69

Traditional Team Approach Model

.	
Aim	Outcomes
1. Safety & Scene Assessment	Creation and maintenance of a safe identified and manged with c
2. Initial Access and Stabilizations	Access gained to the casualty and stab the vehicle(s)
3. Glass Management and Tool Preparation	Glass is removed and/or isolated and to of likely extrication
4. Space Creation	The creation of enough space to facilit full space option for 'stable' casualty), minimum functional space option if
5. Full Access	The casualty has remained 'stable' and created for a Casualty Centred Rescue - no movement which could worsen t
6. Immobilization and Extrication	The casualty's injuries are now fully removed from the v

initially care for the casualty - and is equally important afterwards when they liaise with and support the medics in the extrication of that casualty.

THE ORIGINAL TEAM

There are a number of interpretations of the Team Approach, but needing a point of reference for this article, I'll be using the general version shown in the

table above (Fig1.):

taken place.

CASUALTY?

This is not a rigidly prescriptive sequence by the way, areas will overlap – but NEVER at the expense of rescuer safety - and may need to be temporarily taken out of

sequence. For example accessing the

need, before formal stabilisation has

casualty via purely manual vehicle stabilisation because of medical

A 'STABLE' TRAUMA

However before we can look at

have evolved over the last two

the six stages above in more detail

and also how their application may

decades, it is important that we first

define what we mean by a 'stable'

trauma casualty. Arguably a person

with such injuries must be seen as

these has been gained in hospital.

however, 'stable' can be taken

unstable until full surgical control of

In the context of the Team Approach

APPROACH



A world leader in Heavy Rescue training established 12 years ago in Sweden.

Delivering the highest quality courses covering every aspect of heavy rescue from extrica-tion to advanced lifting techniques.

Courses range from basic through to advanced in all disciplines (heavy extrication, lifting, bus extrication and chain cable techniques) We are also one of the few providers of an Advanced Heavy Rescue Instructor course which is a certified course by the International Association of Heavy Rescue

ISSUE 69 TECHNICALRESCUE

working area. hazards ontrol measures.

ilisation of both them and

ool staging area set up out paths.

tate both the A Plan (main , but first the B Plan (rapid casualty deteriorates).

significant space has been - on a long-board and with the casualty's condition.

stabilized and they are ehicle.

EXTRICATION

to mean that their rate of deterioration is likely to be sufficiently slow and uniform (as defined by the medical attendance), that there will likely be enough time to make the significant space required for a fully casualty centred rescue. But while of course being prepared for an 'Out NOW !' call from the same medic at any time ... And this last point of course raises the question of just where 'Extrication' should be introduced into a new team approach.

The International **Association of Heavy Rescue**

Training has been developed over the years, cutting up 150 new trucks and carrying out over 4000 lifts to further develop the high quality training being delivered by the association, along with this is the vast experience from attending many heavy rescue incidents in

Courses can be designed to cover all topics of heavy rescue or we can create special courses for diverse subject areas.

www.heavyrescue.se

EXTRICATION

EXTRICATE? WHEN

The first aim, Safety (and Scene Assessment), will always come first as it must do. But once this is addressed then arguably 'Extrication?' should be flagged up straight after, because this is the earliest point at which rescuers can recognise and act on the needs of the casualty for immediate extrication. This is a 'Situation' and not a 'Casualty'-centred rescue, because it is the situation that determines our response and not the casualty's overall medical needs. This doesn't mean that we no longer work to prevent the worsening of existing injuries during the extrication, but the priority becomes eliminating the immediate threat to the casualty's life, which will almost inevitably require rapid and full 360 degree access to them.

The potential problem here, and it's a big one, is that the casualty may be physically trapped and so they are unavailable for immediate extrication! If so this is a dire circumstance. It happens, and will test the ingenuity of the crew and the capacity of their tool inventory as they move straight into a very rapid stage 4.





THE B & A PLANS, REDUNDANT TERMINOLOGY? We now get to the original stages 4 and 5, Space Creation and Full Access respectively :

In our original model on the previous page, the aim of 4). Space *Creation* is to create enough space to allow the safe extrication of the casualty – effectively the B (emergency) plan - and that of 5). Full Access is the A-plan, (maximum space) the casualty centred rescue we all aim for.

> As a trainer and when teaching this part of the Team Approach, although students would ultimately get the concept :

stating that there were two stages...

....and that at the same time there were also A and B plans...

 and then finally what this meant in practice, particularly why B came before A... would initially confuse many students. However, just stating the obvious :

- Stage 4 Emergency Space Creation
- Stage 5 Full Space Creation

... and without any B and A Plan subtext (it was no longer needed) was understood without issue and

was just an easier way of getting the information across.

CASUALTY IMMOBILIZATION

Moving now to stage 6, taking the word Immobilization from the aim and putting it in the outcome would be logical on the grounds that that process is a part of simultaneous activity from the very first contact with the casualty and does not just occur at this stage, although it may conclude then.

THE 7[™] STAGE ...

The original Team Approach that I remember had only the six stages above, but there is - there must be - a seventh: the need to Evaluate. To formalise what's been learnt and to share this knowledge. And of course having a framework like the Team Approach to work with gives you a methodical tool with

TECHNICALRESCUE ISSUE 69

holmatro.com/en/greenlineEVO





Because of this, trapped casualties notwithstanding, one aim of the two alternative stage 2s (see Fig2. 'A New Team Approach?') could read 'Initial Access and Extrication?' This flags up that straight after the scene is surveyed and made safe, that

However, if the casualty is 'stable' then the other alternative aim for stage 2 is Initial Access and Vehicle and Casualty stabilisation. This is a consolidation point and will likely overlap with the following stage 3, Glass management and Tool Preparation. Nothing has changed here, these stages are part of necessary preparation for any successful casualty centred rescue.

extricating the casualty can now be attempted if necessary.

mastering power

EXTRICATION



which to conduct consistent and valuable evaluations, gaining insights worth sharing. This works well as a part of training activities, but perhaps not so well after an operational incident, although some watches and stations do this and do it very well. The fact that evaluation was missing from the original *Team Approach* but was needed even then can be illustrated by the early days of extrication challenges, when fire depts/brigades would send a Watch or a group of keen individuals to compete. Although this was good for those individuals and the Watches they were associated with, there was a minimal wider benefit to the operational side of their service or more importantly to the public that that the fire dept/service served. Today most teams have 'Trainers' attached to them as coaches or are entirely made up of such Trainers, so that all the lessons learned from the idea's hothouse of practice and competing can

be formalised and fed back

into the their service's RTC

training program. A formal

dept-wide basis to harvest

operational incidents would

the experience gained at

be of even more value ...

way of doing this on a service/

ng. **THIS CHANGE THINGS?** If we incorporate all of the changes above, a new *Team Approach* would look like Fig 2 on the right. As with the original version, this is not a rigidly prescriptive sequence and areas will overlap as

SO HOW COULD ALL

before. The difference here is not content – it's essentially the same approach – it's the visible acknowledgement that an extrication may need to be called very early on and also that it's a more literal rendering of events. To borrow a phrase from advertising : "it does exactly what it says on the tin".

CONCLUSION

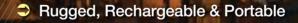
So there you have it. Is the original Team Approach still fit for purpose? Of course it is. Would there be a benefit in using the alternative model above? It may well make the thrust of the Team Approach a little easier to teach, understand and implement. But what undoubtedly is important is that we don't ever lose sight of these basics, however they might evolve, but that we return to them on a regular basis. As with the physical stabilisation of a car, having a current grasp of the fundamental concepts helps provide the necessary foundation of a successful RTC rescue and we ignore them not so much at our own peril, but at the expense of those that it is our duty to protect ...

Fig2 A New Team Approach?		
Aim	Outcomes	
L. SAFETY & SCENE ASSESSMENT	Creation and maintenance of a safe working area, hazards identified and manged with control measures.	
2 ? INITIAL ACCESS AND EXTRICATE?	Casualty unresponsive, or with an immediately life threatening condition (compromised airway, major bleed, cardiac arrest, etc) – manual stabilisation of vehicle, rapid access and assessment – decision made whether to rapidly extricate (through initial access point door, hatch or window) or not.	
2 ? INITIAL ACCESS AND STABILISATION	Access to and stabilisation of a 'stable' casualty and their vehicle.	
3. GLASS MANAGEMENT AND TOOL PREPARATION	Glass is removed and/or isolated and tool staging area set up out of likely extrication paths.	
4. EMERGENCY SPACE CREATION	Creation of a minimum safe space extrication path out of the vehicle (a Situation Centred Rescue), for when a previously 'stable' casualty deteriorates to point where 'Out NOW' is called by the medic.	
5. FULL SPACE CREATION	Creation of a maximum safe space extrication path out of the vehicle (a Casualty Centred Rescue), where a 'stable' casualty is extricated in-line and with little or no movement of the cervical spine or the hips.	
5. EXTRICATION	The casualty's injuries are now partially or more likely fully immobilized and they are removed from the vehicle.	
7. EVALUATION	Formal evaluation of what has been learnt and sharing this knowledge with a much wider audience.	

About the author: Richard Denham is a 35 year veteran of the London Fire Brigade in the UK. He is currently working in Mexico as Director of Technical Rescue for GANNON EMERGENCY SOLUTIONS

TECHNICALRESCUE ISSUE 69

SCENE LIGHT



- Easy and quick to set up
- Battery can be swapped to extend light duration
- Mast extends above 1.8 metres
- Intelligent control to programme light up to 24 hours
- Self-contained system



NEW PRODUCTS





Red rear light (constant or flashing)

Waterproof to 1 metre

Downcast LED technology

Battery status indication

Pivoting head for directional beam

PELIProducts.co.uk