Response times – making the first ten minutes count

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D espite all the advances in modern fire service technology and all the innovation in fire department management aimed at improving service delivery, the speed that fire departments respond to emergencies, is the single most important factor in determining the success or failure of the responding service.

There are various tools available currently to easily measure response times and these are usually central in the measuring of employee performance in fire department management positions. The public, who rely on a service in a particular location, furthermore expect a rapid response to their call if they are experiencing an emergency, to such an extent that it has become an accepted norm for the media to report on how much time it took for the fire services to arrive on-scene. Almost every fire or accident media report will include something about how quickly (or slowly) the fire service responded.

Unfortunately, all response times can't be measured equally. There are a number of factors that determine how effective a response time can be and they must be seen in context to properly understand the challenge of measuring response times properly and then considering strategies to address any shortcomings that may have been identified by these factors.

If we, for the purposes of this article, agree that the term 'response time' is the time that is measured from the moment the call taker receives the call until the appropriate units arrive on the scene of the incident we can then break that down into three distinct, measurable phases:

Call processing phase: The time
between when the emergency call

has been placed, up until when emergency units are notified that they have been assigned an emergency incident.

- Turnout phase: From when personnel receive the alert until they are out of the station building.
- Travel phase: Time taken to respond from their location to the incident scene.

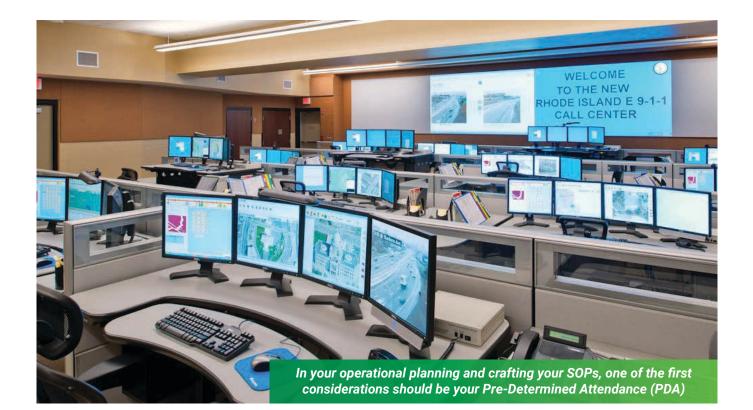
My intention in this article is not to try and school you, the reader, in all the aspects related to these phases (you obviously know them already) but rather to look at the current reality and ask what we can do to address this. After all, the reason for our existence is to save people's lives, save their property and make their world a litter safer and more tolerable.

Call processing phase

There are a number of systems in use that are aimed at easily identifying the location of the call taker and obtaining the pertinent information to enable a quick response. In many cases, however, such systems may not exist and it will be dependent on the experience and training of the call taker to ensure that an accurate location is established.

A clear understanding of all the services that are to be dispatched from the particular call centre is imperative. People will be calling the emergency services for a range of reasons and will be expecting an appropriate response to their dilemma.

In the not too distant past, fire department call centres were staffed by operational fire fighters



as part of their shifts. Although this was not a popular chore, it did have the advantage that the person taking the call usually had a thorough knowledge of the city/town and, more often than not, had some knowledge of the predicament that the caller was in. This enabled the call taker to dispatch the correct resources and ensure that the caller was well aware of what to expect.

With the advent of "specialist" call takers, this has changed. We often find that many of these people are junior personnel who have limited knowledge of the needs of affected people. To address this, staff must be trained to know what questions to ask in each specific situation and also have access to an experienced supervisor who can guide the response in the right direction.

Around 2011, I was approached by the legendary Dr Alan McMahon from the Western Cape Emergency Medical Services to establish a coordination centre in our Provincial Disaster Management Centre. The objective of this facility was to ensure that all emergency calls coming in was met with the best



A organised and managed coordination centre really show its value during major incidents

possible response and that the entire incident was managed from the emergency units leaving their bases right through to the delivery of the patient(s) to the definitive health care facility. The centre would be staffed by experienced EMS officials with years of experience working "on the road".

Soon after the centre was established, a horrific passenger bus accident took place In the Hex River Valley approximately 120 kilometres from Cape Town. Several children were on board the bus and many were tragically killed or seriously injured. In the initial response a variety of ambulances from Government and private ambulance services transported these patients to different facilities in the Breede Valley area causing significant confusion as to the whereabouts of the patients. The bus had wedged itself up against a solid rock wall, which trapped a number of the passengers on that side of the vehicle requiring heavy hydraulic and pneumatic rescue equipment to release them.

It is at this point where the coordination centre really showed its value.



Arrangements were made to move all patients to the Red Cross Children's Hospital in Cape Town and the Metro Heavy Rescue Unit was dispatched to the scene to assist in the extrication operation and the stabilisation of the vehicle. In a short period of time, the centre staff were able to locate all the patients and arrange for them to be moved to the helipad at Worcester Hospital where an Air Force Oryx helicopter, together with provincial helicopters, were able to airlift them to Cape Town.

A further advantage was that rescue personnel could provide photographs and video footage to the centre where the head of provincial EMS and other rescue specialists could provide advice on a very complex extrication operation.

The above example demonstrates the need to ensure that accurate information is garnered from the caller at the time of the first call.

With the saturation of cellular phones in our society, it is certain

that an incident taking place in a public area will result in several calls being made to the emergency services reporting the same incident.

The question here is: Does your call centre have a system to deal with multiple calls coming in from the same incident? It will be important to question more than one caller as this could allow your team to get as much information as possible. A final thought on call taking: Information is shared on many platforms and across a range of applications. Does your centre have the capability to enable the public to report incident s across these platforms?

Turnout phase

This should be a simple concept to understand. After the call taker has received the call and the appropriate resources are dispatched. How hard can that be?

I suppose the answer lies in the term "appropriate resources". In several of my previous articles in this publication, I have exhorted the value of a Two-plus-One response to structural fires; simply put: two engines and one ladder truck. This can only be achieved if it is department standard operating procedures (SOP) and understood by all levels of personnel from the chief operations officer, all the way down to the call-taker and dispatcher.

In your operational planning and crafting your SOPs, one of the first considerations should be your Pre-Determined Attendance (PDA). What are all the resources you will need for a major hazardous materials spillage on the freeway or a trench collapse on a construction site?

It is also important when developing your PDAs to place your specialised resources at the stations that are closest to the risk. I was recently told a story of a service that responded to a high number of swift water rescue incidents in an informal settlement. Their Swift Water Rescue Unit was, however, stationed at the department headquarters several kilometres away. The reason: "That is where our special operations unit is". It is of very little value to have a specialised resource if that resource is not able to respond as soon as possible to the emergency needing that expertise.

Expect for Rapid Intervention Teams (RITs) on the scene of a fire, there is no such thing as a reconnaissance vehicle. I have often heard about services employing a practice of sending an official to an incident to "evaluate" the situation before activating further resources. Other services employ the practice of "rapid intervention vehicles".

The amount of resources required for a large structural fire or major hazmat operation, will quickly overwhelm the capabilities of a rapid intervention vehicle and precious time will be lost waiting for the heavy artillery to arrive. Rather send your resources back to the station if they are not required than delaying them if you are not sure that they will be needed.

Finally, I am aware of a disturbing practice within many emergency services in this country to have their senior operational officers work office hours and then respond from their homes to incidents after office hours. In many cases these officers are not provided with official vehicles but are allowed to utilise the council's vehicle subsidy scheme. We have all been taught from our first years in the emergency services that the first ten minutes after arrival are the most critical. I don't believe that has changed in the meantime. Do the services employing this practice realise that they are leaving the most critical time of the incident in the hands of junior responders?

Fire stations and rescue bases are mostly designed to be placed in relatively close proximity to the highest risks. Why then have your incident commander be the last person to arrive? Are your first-in units able to do as comprehensive initial assessment as your incident commander? If so, how do you substantiate the time taken for this unit to do a handover when the IC does eventually arrive?

Travel phase

The travel phase should not only be seen as a means to transport your resources to the incident but also as a period of preparation.

There are a number of activities that can be done inside the crew cab such as donning breathing apparatus, preparing PASS devices and radios and observing weather conditions and any other possible challenges as you approach the scene. It is also a period where crews can mentally prepare themselves for the incident they are responding to. If the caller indicated many trauma victims it will be a mentally challenging incident. Prepare for it.

Arrival at a scene will have a few requirements. Firstly, are you the first arriving unit? If you are, your vehicle's safe and effective positioning will be your first consideration.

When approaching a hazmat scene, it would be required that responding units first stop and observe the incident from a safe distance. A toxic gas cloud or compressed gas container involved in a fire will require you to establish a significant safety zone around the incident. A vehicle accident requiring extrication will need you to park as close as possible to the vehicle wrecks so that you can deploy your heavy hydraulics without delay. You will still have to do this taking into account all the possible hazards that may prevail such as fuel spills, downed power lines, road conditions, etc.

If you are not the first arriving unit, you may be diverted to a secondary staging area. Make contact with the first-in incident commander enroute to confirm your initial position upon arrival.

In closing

There is a massive amount of training materials available on fire fighting and rescue practices, however, it seems the simple component of responding to incidents is somewhat neglected.

If we appreciate that most of our responder fatalities actually happen in this phase and that this phase is that one which will determine the ultimate success or failure of the responders, it is crucial that serious attention must be given to how your service goes about it.

Operational thinking is the most important principle in any emergency service. I often believe that we somehow get so caught up in the larger municipal, provincial or private company policies and then bend our emergency services to those policies that we lose focus on our actual mission. After all, isn't' that why we are there?



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