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RAPID INTERVENTION TEAM CONCEPT

FOR

AUSTRALASIAN FIRE SERVICES

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Rapid Intervention Teams or **R.I.T.** are not a new idea. They have been used for some years in different Fire Services around the world. They have varying operational names such as:

- **F.A.S.T.** (FDNY – Firefighter Assist Team)
- **R.A.T.** (Rapid Assist Team) or
- **R.I.T.** (Rapid Intervention Team)

The Swedes have what they call the BA Team Leader. Although the equipment and training may vary they all have the same primary function:

‘THE WELFARE AND SAFETY OF FIREFIGHTERS OPERATING IN A HOSTILE ENVIRONMENT’

The Swedes train their Firefighters to:

- **read** Smoke and Fire Conditions
- **conduct** an ongoing Risk Assessment.
- **reduce** potential risk by applying appropriate measures

The BA Team Leader is usually positioned external to the structure and monitors the location of the crew. He/she has a charged hose line ready to go into action if the interior team gets into problems.

United States Firefighters employ a special "team" of Firefighters, which may comprise of 2 or more members to lay out tools and take such measures necessary to secure a plan of attack to rescue trapped/missing/distressed Firefighters.

Both methods are a great step forward in Firefighter safety, but like all operational procedures it could be improved upon. The first step in the process was to understand the Swedes learning in "**reading**" Fire and Smoke Conditions. I was very fortunate in that about 3 years ago I was introduced to fellow Firefighter Shan Raffel. Shan is a Station Officer with the Queensland Fire and Rescue Authority and as many people nationally and internationally are aware pioneered the live Fire Training in Australia. I trained under Shan and learned a great deal about what I had never really understood – that is how to "**read**" a "**fire**" and the conditions it presents.

Whilst undergoing the learning that Shan was providing, myself, and a fellow Firefighter from my crew (Senior Fire Fighter Michael Brown) developed a new Control System for QFRS. This system known as the **Phase 2 System** has been adopted as standard system of work for fire ground management by QFRS. In the development of the system the Swedes "**Risk Assessment**" methodology and the United States "**Rapid Intervention Team**" working crew procedures were combined to create a system of work that not only encompassed the hands on physical work required by **R.I.T.** but also the introduction of an ongoing "**Dynamic Risk Assessment**".

In broad terms the key feature of the "**Improved R.I.T. Concept**" is the ability of the **R.I.T.** to conduct an on going Risk Assessment of the incident, formulate a plan of action to access working crews and **Communicate to the Interior Crews Conditions and Assessed Risk** on a regular basis. The **R.I.T.** also requests information from the Interior Crews to build a 3 dimensional overview of the dynamics of the Risks to Firefighters. This assessing of Risk and Quality Information transfer is the next step in modern fire ground management where risk to gain ratio must be weighed at every incident.

This Australian **R.I.T.** concept has now been embedded into the operational framework of QFRS. with the following points becoming fire ground benchmarks for the **R.I.T.** to achieve:

- Monitoring the safety of Firefighters on the fire ground
- Accounting for all Firefighters
- Conducting Risk Assessment on the fire ground
- Deploying themselves and selected equipment in a strategic location as to Rapidly

Intervene into any situation and disrupt the chain of events which may lead to a Firefighter becoming lost, trapped, or otherwise endangered.

In this paper we will look at:

- What a **R.I.T.** is made up of
- How they are deployed?
- How they are activated?
- What is Dynamic Risk Assessment
- Equipment and Training Issues
- Incorporating a **R.I.T.** into areas which may not have sufficient resources.

WHAT A R.I.T. IS MADE UP OF:

A basic **R.I.T.** has to be a minimum of 2 Firefighters. They must be fully trained and properly equipped. Procedures have to be changed so that at each working fire extra resources are responded to provide for a **R.I.T.** This may be easy to accomplish in urban areas but harder in remote areas but the point is that it has to be planned for. *We must remember who rescues the rescuers?* If we don't look after ourselves, who will? The hardest job on the fire ground is searching for our own. *Think about it for a minute.* That is why this concept requires focus to task and proper structured training and planning.

Mr. Mike Hall, Commissioner of QFRS South East Region, did just that. He fully supported the development of the concept and changed the mobilization response to incidents to provide for a **R.I.T.** to be on site at a working incident. This support by Commissioner Hall has been the driving factor in the change for QFRS.

IT CAN BE DONE!

HOW IS A R.I.T. DEPLOYED?:

Firstly the **R.I.T.** has to have a Team Leader, a plan and equipment. The **R.I.T.** may have to provide

emergency air to a trapped Firefighter so provision needs to be made to take air into the incident. A hose line has to be made available for protection of victims and **R.I.T.** A tool assignment has to be allocated i.e. forcible entry tools, hydraulic equipment. For obvious reasons a 2 person **R.I.T.** will only be able to take a small amount of equipment if activated. You don't want to load up a 2 person **R.I.T.** with so much gear as to take the "**Rapid**" out of Rapid Intervention. Ideally the **R.I.T.** should be a full crew – 1 Officer and 3 Firefighters. This gives a greater amount of scope for operations.

Once the Team size has been allocated, Team Leader designated, radios and equipment selected and layed out, the **R.I.T.** must perform an accountability check of the location of all Firefighters operating on the fire ground and conduct a systematic size up/Risk Assessment of the area of operations. All focus being on those Firefighters operating inside structures or in potentially hazardous locations.

Once this Risk Assessment has been conducted the **R.I.T.** will stage at a location whereby they can be rapidly deployed to assist Firefighters in distress. This area can be at the control point or at a location where the **R.I.T.** Team Leader determines to be the most advantageous.

The **R.I.T.**'s involvement in the fire ground is not just limited to the initial size up and Risk Assessment. Fire grounds are dynamic - they are constantly changing, sometimes without warning, so the **R.I.T.** has to be dynamic. Regular re-sizing up of the fire ground is essential. That is why the term **Dynamic Risk Assessment** is used. The **R.I.T.** must keep abreast of the evolving conditions with a regular up dated plan derived from the ongoing Risk Assessment.

HOW IS THE R.I.T. ACTIVATED?:

Quite simply by any event which causes the **R.I.T.**, Officer in Charge or member of the crew on the fire ground to suspect that a Firefighter is lost, trapped, disorientated or otherwise in distress.

The **R.I.T.**, as part of their equipment assignment, carry portable radios which monitor the local radio channels being used. They primarily listen to the channel which is being used for BA Communication and if sufficient radios are available the tactical channel in use. Transmissions of distress, unusual transmissions, no replies to a transmission from the BA control to the BA team etc.. are all prompts to activate. They may only hear one transmission from a distressed Firefighter, so they must be vigilant. Any activation must be communicated to the Officer in Charge so more resources can be relocated to assist the **R.I.T.**

The **R.I.T.** can be activated to provide to "**Safe Zone**" – a retreat path for a crew. This may come as a request by the crew or by the evaluation of the conditions by the **R.I.T.** during its Risk Assessment.

The **R.I.T.** can be activated by a rapid change in events or conditions. This may be a sudden collapse, explosion, flashover or some other event which would indicate that Firefighters were in danger.

This self-activation capability by the **R.I.T.** by no means takes away the control of the incident from

the Officer in Charge. It actually enhances his/her ability to react to circumstances which would normally mean the redeployment of crews and resources. This takes time and planning. Time in this instance is critical and preplanning essential.

Should the **R.I.T.** self activate, then the OIC must be informed by the **R.I.T. Team Leader** of the situation they are responding to. This will be followed up by an accurate report of the situation by the Team Leader once on site.

DYNAMIC RISK ASSESSMENT:

Risk Assessment is taught by the Swedes to all Firefighters during their probationary training. Once they leave the training academy they **know how to read a fire**. They then (like all of us!!) have to gain that much sought after attribute that every Firefighter wants **EXPERIENCE**.

EXPERIENCE comes at a cost – to a few a great cost. Learning by our mistakes in our profession can be very painful. Basically we learn from the history of mistakes of others and from circumstances which forced fire services to learn why these events occurred.

The Swedes did exactly that. After several incidents where Firefighters were lost or injured they wanted to learn why fire behaves in certain ways. So began the process of **Risk Assessment**.

Firstly: Risk Assessment is having an attitude of safety.

Secondly: an understanding of fire behavior and building construction.

Thirdly: having the ability to apply techniques to a given situation to either neutralize the danger or remove our people to a safe environment.

Having an attitude of safety is a practiced skill. Having a sound knowledge of your department's procedural guidelines and fire ground tactics is essential. A pro-active approach instead of a reactive one makes the fire ground a safer place when all personnel are applying it. We are all Safety Officers with an obligation to each other. Not just the Officer in Charge.

Building Construction – know what's in your area and how it is made and how it comes apart. Know how to use your equipment to its potential. Wall breaching, emergency exit from an elevated position – these, and many other techniques can be easily learned and practiced.

Reading the fire is a skill that does very much have to be learned. A small amount of knowledge can be dangerous. That is why we have to learn from those who do know and teach fire behavior skills. As mentioned earlier, my colleague, Shan Raffel is the foremost individual in Australia with the in-depth knowledge base on fire behavior. His web site atand links,

are well worth the visit.

It is not possible in a paper to give an accurate understanding of fire behavior but understanding that the fire is going through its cycle from smoldering to freeburn, flashover and then decay is a start. Looking at the smoke conditions will tell us a lot about what the conditions are, and will shortly be like. The condition of the structure, is it losing its integrity, is the fire deteriorating or is stabilizing are all a part of the Risk Assessment process. This knowledge and understanding is so important as then we understand at what stage of the fire's growth we are attempting to intervene.

Time frame is also important. At each 20-minute mark the fire ground should be given an accountability check. The **R.I.T.** should re-size up the situation. Sectors report in on progress.

This will give the incident controller an updated picture of how the incident is progressing. It is important to realise that after the first 20-minute mark is accounted for the buildings integrity (especially if it is sustaining heavy fire involvement) must be looked at. The longer the fire is attacking the structural members the greater the likelihood of collapse. We can see that dynamic Risk Assessment encompasses a range of skills. These must be learned and practiced.

EQUIPMENT AND TRAINING:

Equipment used for **R.I.T.** operations will come basically from the inventory off a standard pumper. Firstly, a hose line for the **R.I.T.**'s protection and that of the victim, then small gear. Firefighters have developed some great ideas for carrying equipment, such as small portable tool slings specially developed for **R.I.T.** These carry shifters, sockets, knives etc.. and are secured in a pouch which is secured around a hooligan tool and the hooligan is used as the carry handle.

The **R.I.T.** must be able to take emergency air to the trapped Firefighter. The use of the air line fittings which marry straight into the RSM port is the fastest way of supplementing the victims air. But if this facility is not available then other methods have to be employed.

One of these methods is what we term REG to REG changeover where the **R.I.T.** brings a complete BA set to the victim and changes over the new regulator from the fresh set to the victims mask whilst the victim is in situ. This doesn't sound easy – well it's not – but with training and good team work it will work.

It can be seen that with a **R.I.T.** of 2 the amount of equipment that can be carried and the amount of crews the **R.I.T.** can monitor is minimal. A **R.I.T.** consisting of 4 (a full pump crew) is ideal, as each member has a specific task and equipment allocation. If there are a number of crews operating and sectors are being used then consideration should be given to assigning a **R.I.T.** to each sector.

Areas which do not have the resources to have an immediate **R.I.T.** on site still can employ an **Emergency R.I.T.** Basically this can be achieved by the OIC and the pump operator laying out equipment and fulfilling the role of the **R.I.T.** until sufficient resources arrive.

Training is one of the key issues to an effective **R.I.T.**. White board exercises followed by **walk throughs** are important first lessons. Developing the Team Leaders skills are important. Developing the team skill collectively is paramount as if the **R.I.T.** is activated it will be entering a hostile environment to look for our own and that is a task which requires a planned systematic response and thought process not an emotive response.

SUMMARY:

The **R.I.T.** concept is the way forward. *If we cannot look after ourselves then who will!!*

ABOUT THE AUTHOR:

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