

SOPs or Ops Discretion?

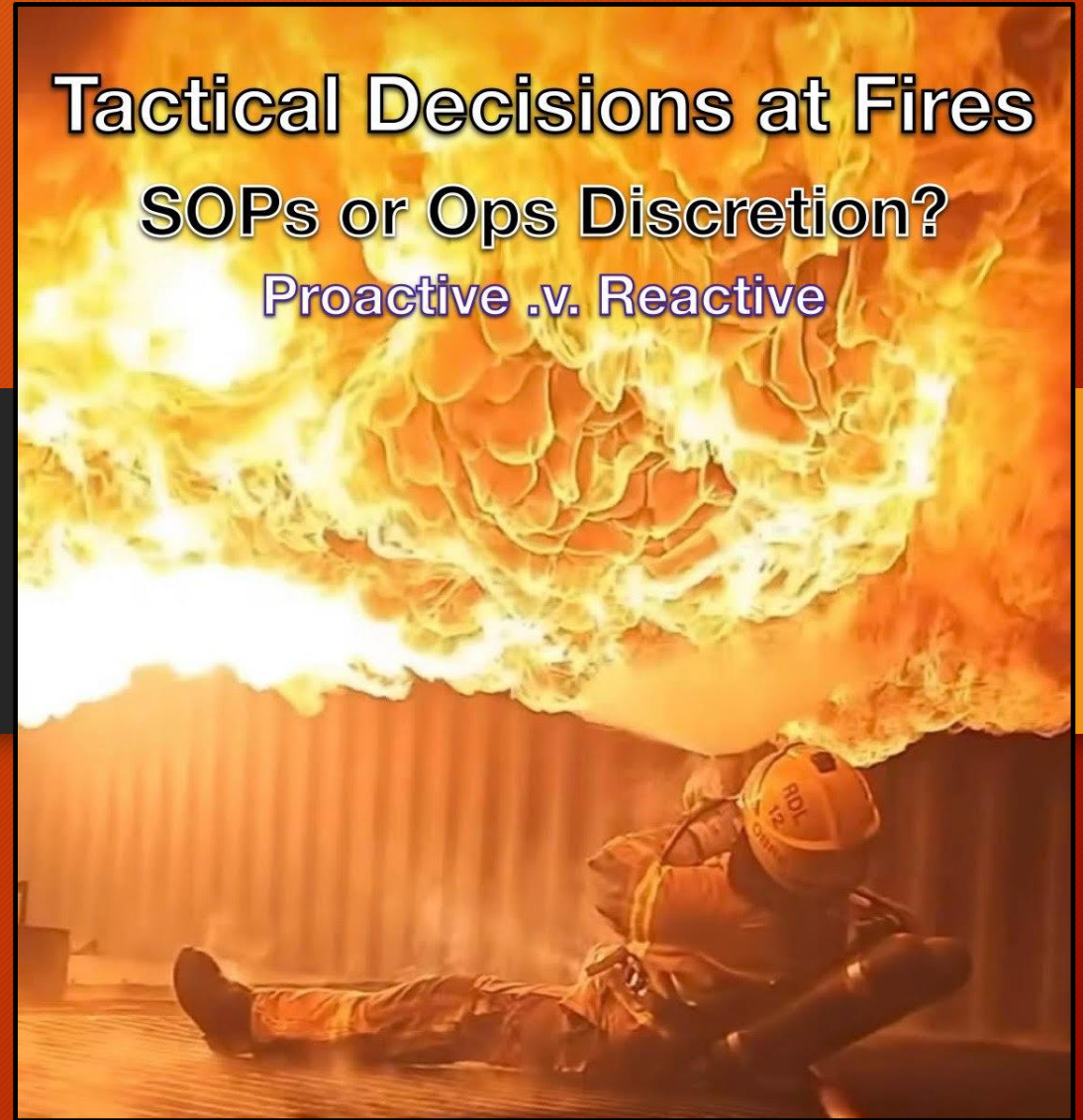
A Discussion Paper for 2024

EuroFirefighter.com

Tactical Decisions at Fires

SOPs or Ops Discretion?

Proactive .v. Reactive



Standard Operational Procedures (SOPs)

PROACTIVE COMMAND

- Fire Services should write procedures for every foreseeable event and range of circumstances, and not leave 'grey areas' for primary response commanders to struggle with by expecting them to apply *operational discretion* in circumstances where no directives exist.
- If we are considering deploying firefighters above the fire floor for example without written guidance, there may be a lack of structure and hazard controls applied, leading to unsafe working practices.
- If we are expecting firefighters to monitor and control vertical egress routes for the safety of residents, some who may be vulnerable, we must effectively equip, train and prepare them in how to protect, monitor and maintain a safe environment. Such an objective is to prevent harm and ensure nothing more than minor discomfort is experienced by those self-evacuating

Operational Discretion (OD)

REACTIVE COMMAND

Operational Discretion relies on the use of previous operational experience and knowledge **(where it exists)**, utilising professional judgement to make decisions in relation to **rare or exceptional circumstances** where strictly following an operational procedure would be a barrier to resolving an incident, **or where there is no reasonably foreseeable procedure** that adequately deals with the incident or circumstances arising. Importantly, where any situation such as external wall fires, fire spread beyond the flat of origin, smoke spread beyond the floor of origin, residents known or reported trapped by fire/smoke or self-evacuating in stairwells, or failure of building protection systems, **should all be planned for and written into procedure.**

'Foreseeable Events' require an SOP

The emphasis on creating procedure/s for what are foreseeable events or circumstances at fires and emergency incidents is important here, if command stress is to be decreased.

Too many fire services are using operational discretion incorrectly where for example, foreseeable situations such as persons are 'confirmed' as trapped by fire, or persons are self-evacuating into a stairwell in a tall residential building. Such events are foreseeable and an SOP should be in place to provide some detail in expected actions, whilst remaining flexible enough to meet alternative options.

Recent (2023) UK Research into SOPs and OD

- SOPs and OD were not used in the manner prescribed by current operational guidance in simulated emergency incidents.
- The use of OD clearly created acute stress levels whilst faced with decision-making, when compared with structured SOPs.
- This research suggests that firefighter training in SOPs and OD should be augmented alongside personal resilience training, given the impact of stress on health and wellbeing, but also to improve the deployment of SOPs and OD under stress.
- There were clear grounds in the training given to UK fire commanders to address and mitigate the effects of acute stress.
- The questions were posed, 'why were commanders using OD when entirely appropriate SOPs were available' and, 'when OD was relevant why was it not used'.

Decision Making Within and Outside Standard Operating Procedures: Paradoxical Use of Operational Discretion in Firefighters (HUMAN FACTORS; Sage Journals; 2023; Vol. 65(7) 1422–1434)

Philip C. Butler, Cardiff University, UK, Andy Bowers, University of Portsmouth, Hampshire, UK, Andrew P. Smith, Sabrina R. Cohen- Hatton, and Robert C. Honey, Cardiff University, UK

- **Objective:** To understand how firefighters' use of rules (i.e., standard operating procedures [SOPs]) and deliberative decision making (i.e., operational discretion [OD]) interacts with acute stress.
- **Background:** Current operational guidance for UK firefighters combines the provision of SOPs, for routine incidents, with the use of OD, under prescribed conditions (e.g., when there is a risk to human life). However, our understanding of the use of SOPs and OD is limited.
- **Methods:** Incident commanders (ICs; $n = 43$) responded to simulated emergency incidents, which either licensed the use of OD or required use of a SOP. Video footage of IC behavior was used to code their response as involving a SOP or OD, while levels of acute stress were assessed using a blood- based measure and self-report.

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- **Results:** ICs were *less* likely to use OD selectively in the simulated emergency incident that licensed its use than in the one for which use of an SOP was appropriate; IC command level did not affect this pattern of results; and the incident that licensed OD resulted in more acute stress than the incident that required use of a SOP.
- **Conclusion:** SOPs and OD were not used in the manner prescribed by current operational guidance in simulated emergency incidents.
- **Application:** These results suggest that firefighter training in SOPs and OD should be augmented alongside personal resilience training, given the impact of stress on health and wellbeing, but also to improve the deployment of SOPs and OD under stress.

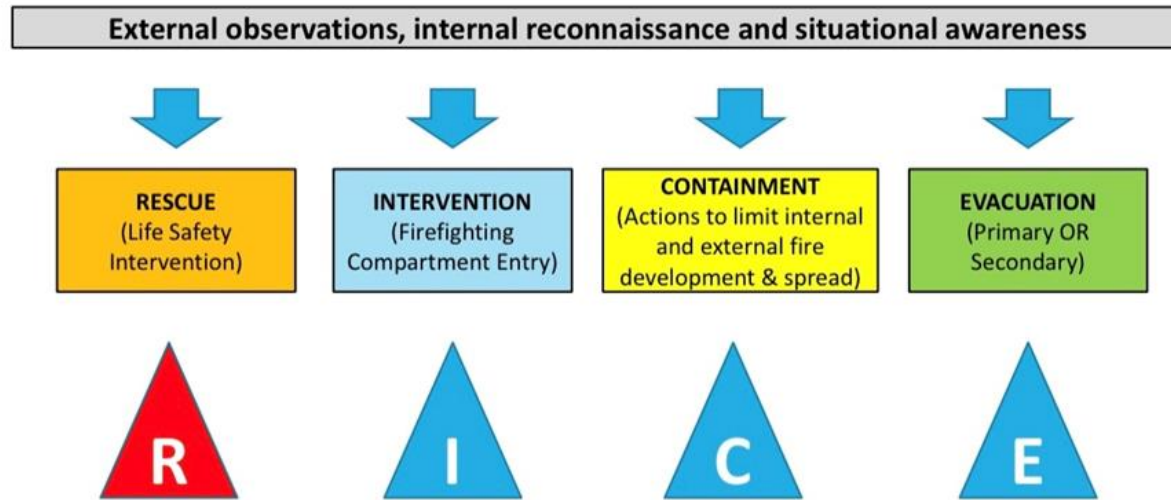
High-rise Fires

The initial tactical decision-making by the first response of firefighters to a fire high-up in a multi-storey residential building is driven by documented procedure, reconnaissance, building and system status, human behaviour, situational awareness, available resources, environmental conditions and what the fire is doing on arrival. The available *information overload (or lack of information)* immediately places the first on-scene commander under tremendous stress. This stress level is increased where experience in high-rise command amongst individuals is limited. Whilst there are *decision control* processes engrained in training to assist, there are *decision traps* that may be still encountered by inexperienced or incompetent commanders. A decision trap can be described as an errant thought process that can lead to an incorrect decision being made; this may result in a situation worsening.

Command Mnemonics and Acronyms

- [EuroFirefighter 2](#) explored the benefits of command mnemonics and acronyms, that serve to prompt a speedy on-scene analysis of tactical options. It was here I compared US and UK acronyms and noted a commonality in particular elements always being included, these being **rescue, extinguishing (intervention), fire containment, and evacuation**. This then formed the four elements of the UK command mnemonic **R.I.C.E.** where the **key principle** is seen in the context that fighting the fire may not always be considered the primary action. The overriding objective of RICE is to **protect those residents who may be at most risk** at any point in time, where they are confirmed as, in the fire compartment or at/on a window or balcony, immediately above the fire, the adjacent corridor, an evacuation refuge or lobby, a stairwell, or trapped in a lift.

Acronyms (Primary Response)



The primary objective of RICE is to simplify initial decision making but also to make **EVACUATION** and **CONTAINMENT** part of the critical decision making process, and not just an afterthought.

1.9 RECEO-REVAS-RICE AND SLICERS

There have been several acronyms used over many years previous that provided aid-memoires for firefighters, particularly in the USA, guiding those first on-scene as to what critical tasks required prioritization. In Eurofirefighter there was a chapter on 'guiding principles and managing risk at fires' that discussed some of these acronyms in more detail. Some key principles were emphasised as '10 fire-ground golden rules' to follow, and these remain as primary considerations.

1. Remove those victims in the greatest danger first (visible at windows and balconies) (Don't hesitate)!
2. Always complete an initial 360) walk around, or get a view of as much of the fire building as possible.
3. If staffing is unable to achieve a coordinated fire intervention and interior search and rescue, place the first hose-line between possible victims and the fire, as this may save more lives.
4. Consider also the benefits of an immediate exterior attack off tank water to slow fire spread.

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5. When adequate staffing is on-scene implement both firefighting and search and rescue in a coordinated attack.
6. Any ventilation should be delayed unless pre-documented SOP or direct on-scene communication from the incident commander (IC) permits this.
7. When there is no threat to occupants, the lives of firefighters should not be unduly endangered.
8. When making entry, consider the wind conditions and direction and any impact this may have on selecting the best point of entry.
9. Stabilise the fire conditions by isolating (confining) the fire. This one critical action can save both occupant and firefighter lives. If you pass or see an open door close it!
10. Identify and anticipate the ventilation flow-paths and their impact on fire spread and smoke (fire gases) transport.

USA Acronym	USA Acronym	UK (origin Kent FRS) Acronym
R – Rescue	R – Rescue	R – Rescue
E – Exposures	E – Evacuate	I – Intervention (Fire)
C – Confinement	V – Ventilation	C – Confinement
E – Extinguish	A – Attack	E – Evacuation
O – Overhaul	S – Salvage	
V – Ventilation		
S – Salvage		

Grenfell Tower Inquiry

- The Grenfell Tower Inquiry published an expert witness firefighting report in 2021, where Steve McGuirk CBE, QFSM, DL, MA, BA(Hons), BSc, FIFireE informed –
- *'It [RICE] is a bespoke system for high-rise buildings, to reflect the circumstances and operational challenges that make fires in these buildings different to fires in other buildings, and the primary objective seeks to simplify the initial decision making of incident commanders.'*

Grenfell Tower Inquiry

*'Kent [Fire and Rescue Service] uses the mnemonic RICE (Rescue, Intervention, Containment, and Evacuation) to assist incident commanders to remember the component elements of what it refers to as a 'command decision making tool'. **Importantly, the RICE model makes evacuation and containment part of the critical decision-making process from the outset, and not just an afterthought'***

EuroFirefighter 2 (2017)

Pre-Grenfell Fire Publication



R.I.C.E is a Tactical Command Mnemonic that is used to reduce incident stress caused by **information overload** and assist primary response commanders in following an **analytical** decision making process at High-rise Fires

What does this mean to the Firefighter?

Fires in apartment blocks should be considered high-risk, even though life losses and injury have reduced over the past three decades. However, the buildings are generally designed to remain occupied whilst firefighters deal with any outbreak of fire and occupant safety relies on the building meeting its design standard and firefighters being effective in preventing the fire spreading.

Tactical options should follow the RICE strategy –

- Rescue
- Intervention (fire)
- Containment
- Evacuation

Which of these tactical options comes first depends on fire conditions, floor layout, the building evacuation plan, viable reports of missing or trapped occupants and environmental factors such as wind velocity and direction. An effective pre-plan should also cover water requirements, flow-testing the nearest three hydrants and anticipating the potential for aerial access used for rescue or as a water tower.

Importantly, the functioning and status of any smoke control system should be determined and considerations around its likely impact on the firefighting operation should be made. As a benchmark, no such system should be deactivated or overridden unless it is having a negative impact on firefighting.

It is worth noting that residential sprinkler systems may only have 10 or 30-minutes water supply, depending on the age and type of building. Therefore, compartment access should be within these time-scales where possible.

Another important consideration should be for occupants adjacent to the fire and particularly in the apartment/s immediately above or on the fire floor itself. Human behaviour has shown that occupants may self-evacuate at any point during the firefighting operation, if not pre-evacuated before firefighting occurs.

R.I.C.E. Command Mnemonic within an SOP

Rescue	Intervention	Containment	Evacuation
1 Hose-line Pre Bridgehead	2 Hose-lines Post Bridgehead	No fire compartment entry; External Firefighting where viable	Stairwell Protection
Based only on confirmed viable life-risk in fire compartment , takes place using reconnaissance team prior to Bridgehead being established	Stairwell Protection to confirm stairwell occupants not at risk	Stairwell Protection to confirm stairwell occupants not at risk	Stairwell Protection to confirm stairwell occupants not at risk, and fully supporting evacuation, including providing assistance in evacuating to those who may need it.

Grenfell Tower Inquiry

'Dr Grimwood then introduced the concept to Kent officers as part of an extensive, high-rise command training programme in 2010. The [RICE] concept was used because the vast majority of commanders were failing to achieve satisfactory strategic outcomes on an assessment that was part of the training programme; specifically, the assessment showed that participants were directing the majority of on-scene resources to control and extinguish an external wall fire, spreading over five floors of the building, rather than diverting staffing to prioritising an evacuation'.

Grenfell Tower Inquiry

'Dr Grimwood records that the introduction of the [RICE] mnemonic led to "outstanding improvements in the commanders' ability to identify the appropriate strategic decisions at the right time". The concept is based on the need to recognise a 'failing building', in the sense that fire growth has progressed beyond the capability of the internal firefighting facilities provided, or the available resources on scene; or the associated building systems are showing signs of failure; in which case evacuation is required' the integrity of the means of escape should be maintained at all times and that doors from staircases to lobbies should be kept closed wherever possible, and before giving the order to open up the affected compartment the IC must fully risk assess the situation. Consideration must be given to the potential adverse effects on any evacuation strategy and the safety of occupants above the fire floor'.

Stairwell Operations in Tall Building Fires

An SOP exists in National Operational Guidance for implementing **proactive** stairwell operations, where self-evacuating resident egress movements are monitored and protected.

However, there are many Fire Services who prefer to implement a **reactive** approach, responding first to Fire Survival calls and/or resorting to operational discretion prior to deploying firefighters into the stairwell. This is one area where structured SOPs should exist for what are obviously foreseeable events.

Acronyms used to guide and relieve stress

- The use of command acronyms, such as **RICE**, may serve to simplify the most common tactical options in high-rise firefighting.
- The primary approach of a firefighting intervention may not always be the best option and RICE offers guidance in the **most common tactical options that intend to protect those residents who are most at risk**, at any point in time, whilst maximising the availability on on-scene resources.
- Where an event, or circumstances, are **reasonably foreseeable** an SOP should provide guidance and OD should not be relied on where command stress can be mitigated by such guidance.