



HM Fire Service Inspectorate

Risk-based operational decision-making in the Scottish Fire and Rescue Service

Training and support for incident commanders



Integrity, Objectivity, and Fairness.

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Contents

1_ Introduction	02
2_ About the inspection	06
3_ Our findings	08
3.1_ Training – quality and availability	08
3.2_ Risk-based operational decision-making – policies and philosophy of the Service	14
3.3_ Guidance and support available to incident commanders	18
3.4_ Systems in place to promote organisational learning	20
4_ Conclusions and recommendations	22
Appendix	23
Glossary and abbreviations	24

1 Introduction

This report is about operational command decision-making. It looks at the quality and availability of training which is provided to Scottish Fire and Rescue Service incident commanders; the policies and philosophy of the Service; the guidance that is available to operational commanders, and the systems which are in place to promote organisational learning about good command decision-making.

In preparing this report, we have been thinking in particular about incident commanders dealing with unusual and hard-to-define events, the Service's approach to such events and the support which is offered through training and guidance.

Our stated purpose was to consider the way in which the Scottish Fire and Rescue Service has adopted, promotes and supports risk-based operational decision-making, particularly in relation to incident command training, relevant Service doctrine and provision of operational guidance.

Scottish Fire and Rescue Service staff will occasionally be required to attend unusual incidents that cannot easily be identified as fitting into a defined category, or incidents where the circumstances do not match the expected pre-planned scenario. Training and policies need to reflect this potential so that staff are prepared and willing to make difficult operational decisions – something which the public would expect of them.

The background context of the investigation of serious incidents, civil actions and criminal prosecution also adds complexity to the work of operational commanders. A key assumption for us as we have been writing this report is that clarity in Service policy and good training can counteract these pressures and provide direction and support for incident commanders.

We believe that there is a set of characteristics which helps to define good policy and practice in relation to operational command. These are:

- **Good use of knowledge and information:** The decision on whether or not to commit to a particular incident and in what way (such as adopting a defensive or offensive mode, or whether or not to ventilate a building) needs to be an intelligent and informed one. So pre-incident planning should be designed, amongst other things, to ensure that staff are as well informed as possible on the resources and skills available to them, and are able to assess to the best of their ability, the risks which might be associated with an incident, and balance those risks against the potential benefits of taking action.
- **Operational discretion:** It is perfectly acceptable to improvise and adapt the skills and equipment available to staff at an unusual incident so long as the same intelligent and informed decision-making approach is taken. Improvisation can be based on a modification of standard procedures – those procedures should not be seen as restricting intelligent adaptation.

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- ***Explaining decisions and learning from experience:*** It should be a matter of routine that staff who have made difficult command decisions record those as soon as possible, and are taken through their thought processes as part of a structured debrief and that the outcomes of the debrief contribute to organisational learning – through training and communication. Incident commanders should be able to describe the balance of risks and benefits that they assessed and the way in which they reached a judgement. A clear pathway for debriefing, and incorporating lessons learned in future practice is essential for organisational learning.

Key findings

Quality and availability of training

- SFRS curricula for incident command training are aligned with the UK national Fire Professional Framework and accordingly meet the consensus standard in the UK for training incident commanders. We have noted that development work is taking place on the various curricula – initially with ICL 4 and Incident Command Initial Responder with development on the other courses due to follow.
- The large majority of feedback from students we spoke to who have been on incident command courses is positive or very positive. Training staff we have met, particularly those who are dedicated mostly to incident command (IC) training, appear to have expertise and are committed to and enthusiastic about their work.
- Consistent teaching of courses in line with Service policy should be aimed for in all areas of the country, and, at all levels. Whilst the course curricula are standardised across the country, we found evidence that moderation of teaching and assessment was not standardised.
- Risk management is a prominent element of incident command courses. Some SFRS staff feel that the assessment element of those courses can, however, be formulaic and can fail to offer candidates a genuine opportunity to take operational decisions based on their independent risk assessment as opposed to a perceived ‘correct’ course of action.
- Current IC training curricula and course delivery do not appear to focus particular attention on the principles of operational discretion and professional judgement. This may in part be because the SFRS does not have a clear national position on these issues. We suggest that the SFRS works to build appropriate learning into incident command development courses.
- The SFRS faces an ongoing challenge in making command training readily available to RDS and volunteer staff in remote locations. Issues such as the length of time required to travel to courses (not fully remunerated in some cases) and the ability to take long periods away from home and work continue to face these staff. We welcome initiatives, such as a proposed development of training facilities in Stornoway, that may help alleviate these problems.
- The SFRS does not yet have in place a fully functioning national system for identifying staff in need of incident command competency or refresher training. The SFRS has been unable to demonstrate to us that it has the capacity to meet its self-imposed target of providing refresher training to incident command officers at least every two years. We recommend that SFRS implements a comprehensive national framework for IC training and skills maintenance as soon as is reasonably practicable.

Policies and philosophy of the Service

- The concept of risk management being relevant to decision-making in FRS operations is deeply embedded within SFRS, both in command and front-line operational staff thinking. In our view this is strongly to be commended, and demonstrates the way in which tactical thinking has successfully evolved over the past two decades.
- The fire and rescue sector across the UK has engaged in significant thinking and research about incident command and the factors involved in the successful management of emergency incidents. This is an important development and we expect that the SFRS will wish to embed the findings of this research in its future policies.
- There is no consistent understanding across SFRS staff as to how to apply risk assessment in unusual and difficult cases, and there is a widespread feeling that the SFRS might not support managers who make decisions, based on their risk assessment, which may fall outwith written standard operating procedures. We recommend that SFRS develops an 'operational philosophy' to clarify for its staff where the Service stands on matters such as operational discretion.

Guidance available to operational commanders

- The SFRS still lacks comprehensive operational risk information provision to crews and oncoming commanders. Although significant strides have been made in filling this gap, and we have been advised that this work is actively ongoing, this will remain an important vulnerability for the Service until comprehensive, up-to-date operational guidance is available to all operational crews and incident commanders.

Systems in place to promote organisational learning

- SFRS has debriefing procedures in place and communication channels exist for distributing safety-critical lessons from incidents. There is still work to be done by the SFRS to establish a clear pathway for embedding lessons learned in training and practice. While the concept of 'hot' debriefing is well-understood in the SFRS, and the procedures for structured debriefing previously in place within some areas are now being put in place nationally, there is still a gap to be filled in terms of embedding lessons identified in debriefing activities.
- An operational assurance system based on the concepts previously applied in Strathclyde Fire and Rescue is being implemented across the SFRS. We welcome developments in operational assurance, and again draw attention to the importance of lessons that are picked up through processes of this nature being embedded across the Service.

2 About the inspection

Her Majesty's Fire Service Inspectorate in Scotland (HMFSI) is a body that operates within, but independently of, the Scottish Government. Inspectors have the scrutiny powers specified in section 43B of the 2005 Act. These include inquiring into the state and efficiency of SFRS, its compliance with Best Value, and the manner in which it is carrying out its functions.

Rationale for the inspection

Risk-based decision-making, and access to specialist advice and support for those decisions, is essential to emergency operations where frequently, complete information about the incident is not available and the imperative is to make the best decision possible in a timely fashion. The ability to react to unique or unusual circumstances by following an accepted methodology ensures maximum opportunity for success. Fire service incident commanders are trained to apply a framework which allows for robust decision-making processes to develop the tactics to be deployed.

However, it has previously been identified that the processes used, and the support available to inform these processes, have been disparately employed/available at incidents. HM Chief Inspector of Fire and Rescue Authorities' report 'A Report to Scottish Ministers – The 2008 Galston Mine Incident', published in 2012, recommended that:

The Scottish Fire and Rescue Service should carry out an audit of operational command training examining, in particular, risk-critical decision-making in unusual and hard to define circumstances. As part of the reform agenda, the Service should review operational command roles and implement the simplest possible structure for operational command.

HM Chief Inspector of the Scottish Fire and Rescue Service's report 'An overview of the Scottish Fire and Rescue Service', published in 2013 recommended that:


Operational Risk Information available to firefighters has not yet reached a satisfactory standard across the Service. Provision of operational risk information needs to be addressed. The use of a recognised template should be encouraged and sufficient resources made available, particularly in the North SDA, to ensure that this work is carried out.

The Fire and Rescue Framework for Scotland 2013 requires that:

The SFRS must plan its operational response in a way which reflects national and local risk across Scotland and the UK and in doing so ensure that its arrangements for operational command are designed in the simplest possible form.

and we wanted to establish whether the SFRS had sufficiently addressed these matters, or had developed plans to do so. Accordingly we decided to further investigate developments since the publication of the Galston Mine report, the plans for further development and the processes being employed by the Service to monitor the provision of incident command training.

Previous inspections have concluded that one of the challenges faced by the SFRS is the extensive network and geographic disposition of fire stations across a large area, where access to specialist advice, or risk information, may not be immediately forthcoming. Of



particular interest to us was the support provided to incident commanders in remote and rural areas, versus those within predominantly urban environments, as well as those within areas with particular risks.

Methodology

An inquiry by the Inspectorate can be self-directed or can be subject to direction by Scottish Ministers. This inquiry into the Scottish Fire and Rescue Service is self-directed by the Chief Inspector.

A substantial amount of the work involved in this inspection was carried out on a 'desk-top' basis. The existence of up-to-date training materials, policies and procedures forms a vital part of the Service's support to incident commanders and it was necessary for us to review these in order to take a view on their adequacy.

We also requested information and statistics about the numbers of incident commanders being trained and skills-maintained, and to view training needs analyses carried out by the Service, in order to arrive at a preliminary view on whether the Service had an appreciation of the scale of the issue and was devoting adequate resources to address it.

A central part of this inspection was to visit service delivery locations and speak to incident commanders responsible for delivering SFRS front-line services, in order to arrive at a judgement about whether the Service's plans were being delivered in practice. We also spoke to Incident Command instructors, and current and past students, to get a feel for the detail of how incident command, and risk assessment, was being taught. Overall, we carried out 22 visits across a mix of wholetime and RDS stations, and SFRS training facilities; and spoke to around 100 wholetime and RDS members of staff and flexi-duty managers, with a broad range of incident command experience between them.

The Fire and Rescue Framework for Scotland 2013 requires that:

The SFRS shall behave as a learning organisation. It will ensure: effective knowledge management arrangements are in place to learn from opportunities, enabling all employees to contribute, with the aim of improving standards of service delivery and across other areas of the SFRS (including learning points and innovation from operational incidents); and that these arrangements are sufficiently robust to ensure that, where appropriate, they challenge or affect existing policies or procedures, as well as feeding future policy development, thus ensuring an organisation that is fit- for- purpose and continuously improving.

To further analyse this area we spoke to those working on numerous aspects of incident command within the UK, as well as those within the SFRS responsible for development of training and risk information, and we consulted with academic specialists within the field of risk-critical decision-making. All of this allowed us to form a view on the strategic development and/or intent of the SFRS within these areas.

3 Our findings

3.1 Training – quality and availability

Curriculum – benchmarking against the UK Fire Professional Framework

The starting point of our inquiry was to obtain and review training materials for SFRS incident command courses.

We compared these courses with the learning content outlined in the Skills for Justice Qualifications Handbook Incident Command in Fire and Rescue Services. This prescribes four incident command courses, initial, intermediate, advanced, and strategic. We found that the content of the SFRS courses was closely aligned to the Skills for Justice assessment criteria, providing a degree of assurance beyond the Service's internal systems.


The SFRS currently delivers five incident command courses – level 1A, level 1B, level 2, level 3, and level 4. Additionally, a number of foundation level courses, aimed at those likely to act as officers in charge of appliances, have been inherited by the Service. These include 'Safe To Manage' and 'Ticket To Ride'. The Service has now developed a national replacement for these foundation courses (Incident Command Initial Responder – ICIR), which is currently being piloted within the East Service Delivery Area (SDA) with plans to embed this within the learning pathway (see Appendix).

Beyond internal courses, the Scottish Government, through the Scottish Resilience Development Service (ScoRDS), supports the resilience community by providing learning and development to enhance the knowledge, skills and behaviours required for effective multi-agency emergency planning, response and recovery. As well as an involvement in national exercises it contributes to single and joint emergency services training including the SFRS Gold Command course.

In the course of our field visits we asked staff who had attended SFRS incident command training for their views on the value of these courses – on the basis that their usefulness to users, and the perceived quality of the training available, was an important measure of their quality. There was a general consensus among recent students that the courses were of good quality – descriptors such as 'ample', 'good' and 'excellent' were used.

We occasionally encountered a feeling that courses were pitched above the needs of users – this came more often from officers working in remote areas, where multi-pump incidents would be uncommon, and the range of hazards encountered would perhaps be narrower than in the urban environment. Having said that, and given the work being done to fine-tune the development pathway for incident commanders described above, we understand the necessity for courses to be standardised and do not think that the fact of a course exceeding a candidate's needs necessarily stands as a serious criticism.

We had consistent feedback to the effect that the ICL 1 level course should not be split into ICL 1A and ICL 1B courses. The distinction between the two courses is between officers being trained to command smaller incidents (ICL 1A), and being trained to form part of the management structure at, but not command, larger incidents (ICL 1B). The skills required are similar, and in content the ICL 1B course does not build significantly on the ICL 1A curriculum. Some officers who had attended the ICL 1A course, particularly from remote areas where course attendance can pose significant logistical challenges, regretted that the 1A course did not extend to encompass the additional content in 1B.



We have been advised by the SFRS that it has reached the same conclusion about these courses, and in the future they will be combined into an ICL 1 qualification that will allow successful candidates both to command small incidents, and take lesser management roles at larger ones. We consider that this is a sensible initiative that will help to streamline the incident command training pathway for SFRS officers.

Curriculum – treatment of risk management

During our site visits, we asked the staff members we spoke to about the extent to which risk management had been discussed during incident command training. This is a fundamental issue. It has been one of the significant advances of fire service doctrine over the past 20 years that the concept of risk versus benefit has been built into the fire service's decision-making processes. We were therefore particularly interested to assess to what extent 'on the ground' staff felt that risk assessment was part of their day-to-day operations.

We were pleased to discover that there was a very good penetration of concepts of risk in decision-making not only across incident command staff, but also among those firefighters we spoke to. We had already identified that the written course curricula dealt with these concepts, and the feedback we got from SFRS staff who had attended these courses confirmed that risk management received significant emphasis – comments were received such as 'definitely was included', 'reasonably heavy emphasis', 'quite a lot' and 'seems to be increasing throughout the Service'.

As we discuss in the section below, this comes with its own challenges – but our view is that contemporary approaches to risk management are thoroughly, and appropriately, embedded within SFRS training curricula.

Curriculum – professional judgement and operational discretion

Early on in this inspection we formed the opinion that the written training materials, and the ideas expressed in them, were set out in general terms such that the interpretation put on them by individuals could vary. This is not necessarily a criticism, as some of the concepts involved – indeed the concept of 'risk' itself – are open to interpretation and debate. It was important to us, however, to reach a conclusion about whether a consistent view on the approach to taking operational decisions in unusual and hard to define circumstances prevailed throughout the Service.

New guidance is in the course of development by the UK National Operational Guidance Programme, to which SFRS members have contributed. This guidance deals in some detail with the concepts of operational discretion (by which we mean the ability to depart from written Service guidance in some cases) and professional judgement (by which we mean applying risk-based decision-making to deal with novel situations for which no guidance exists).

We are very encouraged by the approach that the UK project is taking and by the fact that SFRS has been involved in it. HM Chief Inspector of Fire and Rescue Authorities' report 'A Report to Scottish Ministers – The 2008 Galston Mine Incident', published in 2012, identified the challenges of risk-critical decision-making in unusual and hard-to-define circumstances – and we welcome the focus that has been brought to bear by the sector on this very important aspect of incident command.

What became apparent to us in speaking with incident commanders across the country is that the training they received did not deal in any great detail with the specific challenges of operational discretion and professional judgement. That is not to suggest that the need here is completely unmet. The majority of people we spoke to told us that a lot of emphasis was put on risk assessment during incident command training – so that their initial reaction to any situation would be to view it in terms of risk versus benefit, and whether the objectives sought to be achieved were properly balanced against the risks involved in the proposed course of action (particularly, risks to firefighters).


We think that is a sound foundation but there remains a specific issue around departing from Service guidance in appropriate circumstances. In our discussion below of SFRS policy and people’s willingness to depart from it, we note the considerable reticence expressed by many incident commanders about doing so. In our view that is closely linked to the absence of any module or subject heading in incident command training curricula dealing with the issue of when, if at all, to depart from written Service policy and procedure.

In turn, we suspect that this stems from the absence of any written SFRS guidance on that subject (in other words – guidance about how to depart from a policy). In our view, written guidance of that nature is needed and we recommend below that work should be undertaken to develop it. It follows that we also consider that incident command training needs to grapple head on with the question of when incident commanders can and should depart from Service policy and procedure in order to meet the overarching expectations of the SFRS and the public.

Delivery and assessment of courses

We deal above with the content of curricula for incident command training – it is also important to appreciate that the way in which curricula are delivered and assessed is important to the way in which the course content becomes embedded in the Service and reflected in practical outcomes on the incident ground. We invited comment from interviewees on the way in which courses were delivered and assessed. It is important to note that the responses we received were in the context of general satisfaction with courses and positive feelings from students about the experience. We noted however the following comments in particular:

- some people felt that the courses were delivered somewhat stringently as a ‘pass/fail’ process with little room to discuss differences of approach;
- some individuals felt that the training could appear to be ‘aimed at passing the assessment’ and not at developing skills for use in the real world;
- some were of the opinion that the assessment processes themselves could be inconsistent including some examples of very rigid approaches to assessment (such as insisting on a specific form of words to describe a process, when the description given by the candidate, although correct, was put in terms different from those used in the training materials);
- we had reports of varying quality of feedback to candidates following assessment (including when they were successful).



None of these comments in themselves suggested serious defects in the process and interviewees often volunteered to us the view that the courses were of high value despite idiosyncrasies in their delivery and assessment. The range of comments we received did, however, suggest an absence, as yet, of a national framework for the moderation of training and assessment, to include clear national direction to instructors on how they were to present and assess courses.

As the SFRS continues the rollout of new national structures for its training and development function we would expect variances around the country to diminish. We do however consider that a consistent approach to the moderation of training and assessment is a goal to which the SFRS should be aiming in the short, not the medium term; and now that some 18 months has passed since the establishment of the SFRS, we would hope it is not too long before a clear national direction is established in this regard.

Availability

When we asked staff how straightforward it was for those who wanted command training to receive it, we received a range of responses. Some staff reported a feeling of inequity in the way opportunities to attend these courses were distributed. On the other hand, at many stations the feeling was that training was made available to all who wanted it. It appears that the allocation of courses is being dealt with through legacy systems inherited from the predecessor fire and rescue services' training departments and is inconsistent in its application.

We also encountered apparent inconsistency of course allocation at middle manager (particularly Station Manager and Group Manager 'A') level. In some areas we were advised that this level of manager was being trained to ICL 2 level whilst in other areas they were being sent on the ICL 3 level course. This included staff in temporary roles, and on occasion those in Watch Manager roles not currently acting as a flexi-duty officer (and so who on the face of it would not need training at this advanced level). There does not appear to be any logical explanation to this and some staff reported a feeling of disquiet that there was inconsistency of training compared with their peers.

Significantly, we also heard anecdotal suggestions that there will be insufficient refresher courses available for current incident commanders to maintain currency in the role.

We requested information from the SFRS about the demand for incident command training courses, available places, and figures for applicants whose request to attend courses were rejected. The SFRS needs to be able to assure itself that it has sufficient incident commanders at all levels to cover its expected operational commitments and provide a measure of resilience; that all those commanders are in receipt of up-to-date training; that they all can access refresher training at the prescribed intervals; and that succession planning has been carried out to ensure that the next generation of commanders is being trained.

As well as providing that numerical analysis, the SFRS needs to be able to identify where the necessary training will be carried out and when; whether it has sufficient instructors for the task; how it will support remote and rural staff to obtain required training; and finally but not least, what budget allocation will be required to support all of this. The Service will need to assure itself that this budget will be, and continue to remain, available.

The SFRS provided us with a training needs analysis based on returns from the three SDAs which identified the numbers of incident commanders at supervisory (front line) and flexi-duty (middle management) level. It contained a gap analysis of recorded competencies, and identified that there were numbers of managers who did not have a current incident command competency recorded in their training records. The document discussed interim arrangements for ensuring all managers had a current incident command competency, and also noted the numbers of training courses for incident commanders requested by the SDAs together with details of courses planned for the financial year 2014-15.

We recognise the work that has been done to date by the SFRS in forming an understanding of current and future requirements for incident command training. We make the following comments about the current state of this analysis:

- it is based on requests from the SDAs for incident command courses, and does not independently calculate how many courses the SFRS should need to deliver based on its current and future needs to develop incident commanders. Whereas this work may have been done in the SDAs it has not been provided to us;
- the gaps identified in recorded competencies are planned to be filled by delivering ‘ticket to ride’ foundation level courses. While this is a reasonable approach to the immediate issue facing the SFRS, we would expect that at the least, substantive Watch Managers should be receiving training to ICL 1 level because that is our understanding of the intention of the various command course levels. The analysis was not specific as to how this would be delivered;
- the analysis is silent about how skills maintenance is to be provided. This is a significant point in the light of the suggestion recorded above that there may be insufficient capacity to deliver the required numbers of refresher courses. With over 2,000 front line incident commanders and a two-yearly cycle identified for skills maintenance, this implies in excess of 1,000 places per annum being required for ICL 1 skills maintenance. We have not seen any evidence to demonstrate how this will be achieved.

The SFRS has started to address the need for a comprehensive analysis of training needs but this is in our view still a work in progress. Further steps need to be taken by the SFRS to gain a service-wide understanding of the need for substantive and refresher incident command courses, to plan training for all incident commanders who are likely to be in charge of an incident beyond its initial stages to ICL 1 level, and to identify with clarity how the number of refresher courses required will be delivered and resourced.

We think that the proposed introduction and trialling within the East SDA of the two-day ICIR course provides opportunities for standardisation of the formal incident command training to be provided to Firefighters who may be called on to act in the role of Crew Manager and potentially command incidents as a result. We consider that it is important that any member of SFRS who commands an incident should have had formal training in that function, and that it is standardised across all areas as the other level courses are. We accordingly endorse the concept of the ICIR course as meeting that need.

However, we consider that it is important that courses at ICL 1 should continue to be made available in sufficient numbers to meet demand – ICIR should not be seen as a substitute for the more in-depth training that the ICL 1 courses provide. As the new training pathways bed down, we would expect to see all staff who intend to move beyond the Firefighter role receiving ICIR training, followed by ICL 1 training for all those who move into substantive manager roles.

Continuous Professional Development of Flexi-Duty Managers

Tayside Fire and Rescue previously identified a gap in officers' ability to maintain and practice their incident command skills in a realistic manner (outwith live incidents), between formal assessment processes.

It developed a process which complemented the Scottish incident command pathway by utilising a series of realistic scenarios, which were designed to escalate and become more complex as they unfolded. The aims of the process were:

- To afford officers from Supervisory (level 1) up to Strategic (level 3), within a command group, to develop a better working relationship within a controlled environment.
- To expose officers to realistic scenarios relative to their areas.
- To allow peer review and learning to take place.
- To provide a platform for a continuous process of learning confirmation, between the two-yearly formative reassessments.

We have highlighted this example as we think that further development of this (or a similar process) across the SFRS would be a significant step in the development of a continuous learning and development environment and would assist the Service to standardise approaches when having to deploy resources across the country.

In the course of our inspection we interviewed a number of retained duty system (RDS) staff working in regional and remote areas. Some of these locations were in mainland Scotland, and notably we also visited Orkney, where 12 RDS stations service a population centred on Mainland Orkney, but also distributed over 20 inhabited islands.

In these locations we found dedicated and enthusiastic staff who made significant efforts to overcome the barriers that their distance from SFRS training locations might put in their way. It was clear, however, that staff from these stations did find it more difficult to attend courses than their colleagues in less remote areas. For example, it is at least a day's travel each way from Orkney to the closest training facility in mainland Scotland, and staff are not fully remunerated for this travelling time. In addition, adding at least a day (dependent on ferry and air schedules) to each end of what might already be a four-day course made it more difficult for remotely based staff to obtain time off from their primary employment, and the comment was made to us that the extended travel was unhelpful in preparing students physically and mentally to undertake potentially arduous courses.

Arguably it is the staff in these remote locations who stand to benefit the most from regular command training, as they may have to operate autonomously for extended periods before management support can reach them, and they may have a lower workload to maintain their skills through practical application. For this reason we welcome the SFRS's recognition of these challenges, and initiatives such as the proposed development of a training facility for the Western Isles in Stornoway. We hope that these initiatives bear fruit, and can be extended to cover more of remote and rural Scotland to support SFRS staff there.

3.2_Risk-based operational decision-making – policies and philosophy of the Service

The Skills for Justice qualifications, and the SFRS course curricula, include requirements in relation to management of risk at operational incidents. This includes a requirement to be able to define the categories of risk assessment utilised within the fire and rescue service, state the UK FRS risk philosophy applied to the management of risk at operational incidents, and detail risk assessment methodologies employed at operational incidents.

Significantly for the purposes of this inspection, the Skills for Justice learning outcomes do not enter into detail about the specifics of risk management. This is left to be fleshed out in the training materials developed in accordance with the learning outcomes.

The training materials we have reviewed do go into a greater level of detail than the Skills for Justice Qualifications Handbook, but still leave considerable room for interpretation. A good illustration is the commentary in the training materials on risk philosophy – an issue central to this inspection, and to the way in which the SFRS does business. Current SFRS course materials from ICIR level onwards state:

FRS Operational Risk Philosophy¹

The benefits of proceeding with a task must be weighed carefully against the risks; it is important to ‘think before you act rather than act before you think’.

The following statements embrace the philosophy of the service’s approach to managing risk at an incident.

In a highly calculated way, firefighters:

- *Will take some risk to save saveable lives*
- *May take some risk to save saveable property*
- *Will not take any risk at all to try to save lives or properties that are already lost.*

Therefore, if after implementing all available control measures, the cost (in terms of risk to life) of proceeding with a task still outweighs the benefit, the IC must not permit operations to proceed but consider viable alternative courses of action. This is a critical and defining aspect of operational command responsibility. To discharge this competently

¹ At the time of writing, a revised draft UK Incident Command Guidance is being consulted on. This draft takes a different approach to the description of risk philosophy although it still draws a clear link between acceptability of risk and potential reward.

requires a detailed knowledge of the principles and regulations surrounding risk assessment and a sound understanding of the factors influencing safety within the fire and rescue domain of the present situation.

The significant point in our view is that the way in which this philosophy is presented to and discussed with course candidates is likely to influence their subsequent application of the 'philosophy' on the incident ground. Two different students who have been competently taught and demonstrate their understanding of the 'philosophy' could still act in very different ways at the same incident, depending on their personal interpretation of the risk philosophy. We therefore recognised the need to examine how the risk philosophy was being taught and applied across the SFRS.

In the course of our station visits we discussed with interviewees in some detail their understanding of the SFRS's risk philosophy, and how this interacted with the concepts of operational discretion and professional judgement (whether or not the interviewees used these terms). Interviewees at all levels expressed familiarity with the risk philosophy, although particularly those who had only completed basic (foundation level) incident command training were sometimes less confident in its articulation. The risk philosophy appeared to us to have significant 'brand awareness' and to be recognised by staff as a useful way of thinking, sometimes subconsciously rather than a process driven checklist.

We were given a range of responses about operational discretion, and there was no direct relationship between experience and the attitude to operational discretion. We asked people how comfortable they would feel departing from a SOP if their risk assessment indicated that this was an appropriate course of action, and we also asked if staff would anticipate being supported by the SFRS if they did so.

There were few staff who expressed that they would never depart from a SOP, although we found a marked reluctance among many staff to contemplate such a course of action. In saying that, we acknowledge the comments made to us that it can be very difficult to discuss these principles hypothetically without a detailed factual scenario, and without taking into account the ability of the incident commander to seek further information before making a decision.

Even among those staff who said they would be willing to diverge from written procedures in their decision-making, we encountered a significant degree of uncertainty as to whether the SFRS would back them if they made a decision in good faith which led to an unfavourable outcome. While this was not a unanimous concern, it was repeated to us by numbers of staff at different levels in the command structure and across geographic locations.

We have discussed above our view that incident commanders should be trained to understand that there is always a residual discretion to depart from a SOP if the unique circumstances of an incident demand it. While SOPs and other policy documents represent the considered view of the Service and the accumulated experience of its managers, and so should never be dismissed lightly, SOPs or policies should not be written in such a way that implies there could never be exceptions to their operation.

For the avoidance of doubt when we discuss ‘SOPs’ and ‘policy documents’ here we are talking about specific guidance on the tactics to be used at given types of incident. Fundamental statements such as ‘firefighters should not be placed unnecessarily at risk’ or ‘risks taken must be justified by the potential benefits to be achieved’ provide an underpinning to all operational decision-making and should not be departed from in any circumstances.

It follows that there is both an obligation on the SFRS for its doctrine to be written in such a way as to allow for appropriate operational discretion to be applied, and also for its incident commanders to be trained to understand what operational discretion is, and what are the factors that could lead to its being exercised.

Our impression, from reviewing SFRS documentation and speaking with incident commanders, is that this state of affairs is not yet embedded across the Service. Specifically, a Service instruction explaining what operational discretion and professional judgement are, and when incident commanders might consider applying them, would go a long way to setting an expected standard in this area, and making clear how the concept of discretion relates to the imperatives of firefighter and public safety. This would have the added benefit of providing clarity to staff as to the expectations of the Service and by extension, when they could expect backing for their decisions from the Service hierarchy regardless of the outcome achieved.

We appreciate that a document of this nature would need to go through a development and consultation process to make sure that it appropriately took into account the SFRS’s legal obligations under health and safety law, as well as providing guidance that staff can follow confidently without exposing themselves to any personal liability. We recommend that the SFRS should commence work on the development of an appropriate policy so that it can be issued without undue delay.

Given the crucial importance of the concept of accepting risk² in making command decisions, it may also be appropriate for the SFRS to review its teaching of acceptance of risk at command level, for example to include a discussion of the distinction between acceptable risk, tolerable risk, and intolerable risk.

² Where an incident commander understands that risk has not been eliminated from a proposed course of action, but proceeds with the action anyway because of the benefits expected to be achieved.

Operational Risk Principles – West Yorkshire Fire and Rescue Service

WYFRS has set out six principles which are intended as a guide to personnel making risk decisions at operational incidents. They are:

1. The willingness to make decisions in conditions of uncertainty (i.e. risk taking) is a core professional requirement of all members of the FRS when making operational decisions.
2. Maintaining or achieving the safety, security and well-being of personnel, other agencies and members of the public is a primary consideration in risk decision making.
3. Risk taking involves judgement and balance, with decision makers required to consider the value and likelihood of the possible benefits of a particular decision against the seriousness and likelihood of the possible harms.
4. Harm can never be totally prevented. Risk decisions should, therefore, be judged by the quality of the decision making, not the outcome.
5. To reduce risk aversion and improve decision making, a culture is required that learns from successes as well as failures. Good risk taking should be identified, celebrated and shared, preferably through the operational learning outcomes and debrief processes.
6. Members of the FRS who make decisions consistent with these principles will receive the encouragement, approval and support of their organisation.

We have cited the above example because we think that it does particularly well in (1) explicitly recognising the need to make difficult decisions, (2) that such decisions, by their nature, will not always result in a successful outcome, and (3) that the support of the FRS is explicitly offered.

3.3 Guidance and support available to incident commanders

In addition to training and skills maintenance in incident command, prospective incident commanders require technical knowledge and skills to enable them to make accurate assessments of an incident's risks and potential development, and as a result to make appropriate decisions about risk mitigation on the incident ground.

Some of this knowledge comes from training received as a firefighter, for example in relation to fire behaviour and building construction. In order, however, to have up-to-date and detailed information available to incident commanders, operational guidance is provided by the SFRS in a number of forms including:


- Standard Operating Procedures
- Generic Risk Assessments
- Premises/Hazard-specific operational risk information
- Remote flexi-duty manager support
- Specialist advice.

As part of this inspection we considered the general availability of these resources and the level of knowledge among incident commanders about their existence and how to access them. In doing so we recognised a continuing theme from our previous report, 'An Overview of the Scottish Fire and Rescue Service', in which we noted variances in the availability of operational risk information (ORI) and suggested that resolution of this should be a priority for the SFRS.

The predecessor fire and rescue services all issued Standard Operating Procedures (SOPs) to their staff to provide guidance and direction for various different sets of circumstances and types of incident. This is recognised practice across fire and rescue services worldwide. Following the coming into being of the Scottish Fire and Rescue Service there was recognised to be a need to harmonise SOPs and so it was a priority for the new Service to issue national guidance of this type.

In speaking with staff at fire stations we received feedback to the effect that there had been a large volume of this kind of material issued in the early months of the SFRS which was on occasion difficult to keep up with – particularly for RDS staff who have limited training time. Staff we spoke to did however report having been able to manage this challenge and it was felt that the pace of issue of new material had declined recently.

The general picture we formed was that staff were well familiar with the existence of SOPs and did their best to make time within their training schedules to keep abreast of them. We have of course discussed above the related issue of staff having confidence to depart from SOPs where appropriate – but the starting point is to have a set of SOPs with which staff are familiar and which address a good range of potential risks. Our observations, and feedback we received from staff, suggest that this is the case.



For some years now the UK Department for Communities and Local Government (and its predecessors) and the Chief Fire and Rescue Adviser for England have published Generic Risk Assessments (GRA) for the use of the fire and rescue service. These documents are pitched at a higher level of generality than SOPs, and discuss the broad range of risks posed by typical fire and rescue service operations and potential approaches to controlling those risks.

Again, staff reported to us a reasonable level of familiarity with these documents and an understanding of how they might assist in operational decision-making processes – albeit GRAs are possibly more relevant to the pre-incident learning and development environment than for use at an actual incident.

As noted above, we have previously commented on the availability of ORI within the SFRS. When we made inquiries during our station visits, we found that the picture was still not consistent across Scotland. Certain areas benefited from comprehensive and up-to-date ORI carried electronically on mobile data terminals in appliances. Other areas did not have comprehensive ORI, or carried it in paper form (whereas the main point is that the ORI should exist, not the format in which it is carried, consistency is desirable).

We spoke to crews in diverse locations who reported that comprehensive ORI was not available in their location and work was in progress to remedy this. It is encouraging that the necessity for remediation has been recognised, but we do not wish to underplay the importance of having up-to-date ORI available to all operational crews. On a number of occasions in the recent history of the UK fire and rescue service, lack of ORI has been associated with incidents involving firefighter deaths and injuries. So, the lack of ORI across the SFRS is something that the Service must continue to address to ensure firefighter safety and to underpin good quality decision-making by incident commanders.

Support from flexi-duty managers in remote areas

In more remote areas of the country, relatively junior officers might find themselves in command of an incident for a lengthy period before a flexi-duty manager could arrive on scene – in many cases, the critical decisions at an incident would all have to be taken before a more senior officer could reasonably be expected to arrive. In these locations, support for incident commanders on scene is made available by communicating with a flexi-duty manager either by radio or mobile telephone. We heard positive reports from staff in remote areas about the level of support provided to them in this way, and our assessment was that these challenges are well-understood by SFRS staff who work in these areas and appropriate measures are in place to mitigate their effects.

Specialist advice

The availability of specialist advice to incident commanders is recognised to be an important aspect of supporting good decision-making – incident commanders can be expected to demonstrate a high level of competence in dealing with standard incidents, but it is unreasonable to expect them to carry detailed knowledge on matters such as hazardous materials, which may require complex scientific expertise to deal with safely.

Generally speaking, incident commanders we interviewed were complimentary about the availability of any specialist advice they needed and reported that it could be easily accessed through Fire Control Rooms. In some remote areas it was recognised that it was not straightforward to arrange for the attendance on scene of specialists – but nonetheless, arrangements could be made for them to assist remotely by radio or telephone links.

We did receive some feedback from isolated areas to the effect that challenges had been experienced in arranging for timely specialist advice. In one location, we encountered evidence that staff would consider bypassing Control and obtaining specialist advice through separate channels. That is not a procedure to be recommended as it circumvents the incident command system and potentially limits the information available to other managers within the SFRS who might be called on to take over command of an incident. It is important for the SFRS to reinforce the message to managers that they should place all requests for specialist advice through Control Rooms, and at the same time ensure that all Control Rooms are aware of the importance of prioritising requests for advice and arranging for it to be provided by telecommunications where necessary.

3.4 Systems in place to promote organisational learning


As part of our inspection we considered the ability of the SFRS to learn from its operational successes and setbacks in the context of command decision-making, and to make sure that this learning is fed back to staff.

This requires the following steps:

- An existing body of knowledge which is approved and taught within the Service. Although training materials will reflect this knowledge, they should not be its only record: there needs to be an underpinning reference for training materials such as a policy or standard operating procedure.
- A consistent procedure for reviewing operations to identify what went well, what did not go well, and in each case, why.
- A procedure for taking those ‘lessons learned’ and using them as a basis for changing either the existing knowledge base of the Service, or the way it is taught (depending on the weakness identified in the review process).
- A procedure for monitoring changes made as a result of lessons learned and verifying that the feedback loop is complete.

Like all fire and rescue services in the UK, the SFRS has a doctrinal basis which includes:

- The UK national Fire Professional Framework.
- Standard Operating Procedures, Control Operating Procedures, and other statements of policy issued by the SFRS.
- Generic Risk Assessments and Operational Guidance produced by the UK Department for Communities and Local Government and endorsed for use in Scotland by the Scottish Operational Guidance Board.
- Fire Service Manuals including the Incident Command Manual.



In our view there is accordingly a suitable body of knowledge available to the SFRS that provides an appropriate basis for organisational learning. That is not to say that the existing body of knowledge is perfect – almost by definition, knowledge of this kind can be improved and refined – but the Service does in our view recognise the need to be able to refer to a formal record of its operating principles.

We have noted a disparate system of debriefing procedures being in place based on inherited legacy processes. There is still work to be done to establish a clear pathway for embedding lessons learned in training and practices. While the concept of informal debriefing is well-embedded, we found evidence that formal, structured debriefs are not routinely taking place after more complex or protracted incidents.

While we recognise the challenges involved in arranging for structured debriefing sessions where multiple crews, possibly from geographically diverse locations, have been involved in an incident, we nonetheless consider that formal structured debriefs are an important part of organisational learning, and we encourage the Service to endeavour to arrange such debriefing sessions in all appropriate cases.

We have been advised that a new SFRS policy on debriefing and operational assurance is in force from September 2014, which will standardise the approach and ability of the Service to capture issues to inform policies and procedures. We have been provided with a copy of the relevant policy, which on the face of it appears to be appropriately designed to provide a consistent debriefing and operational assurance regime across the country.

We will follow the implementation of this policy with interest. We have received feedback that ‘lessons learned’ from debriefing activities do not presently go on to be disseminated widely: and recognising as we do some of the challenges (and the resource-intensive nature) of that task, in our view it is important that the SFRS brings consideration to bear on the way in which the outcomes of debriefs are codified and made accessible to staff and policy makers, and fed into training delivery.

4 Conclusions and recommendations

The 2005 Act requires that the SFRS must have regard to this report and, having done so, must take such measures (if any) as it thinks fit in relation to the report. In our view there are some issues arising from this report that are significant enough to warrant our making specific recommendations about them. These recommendations are as follows:

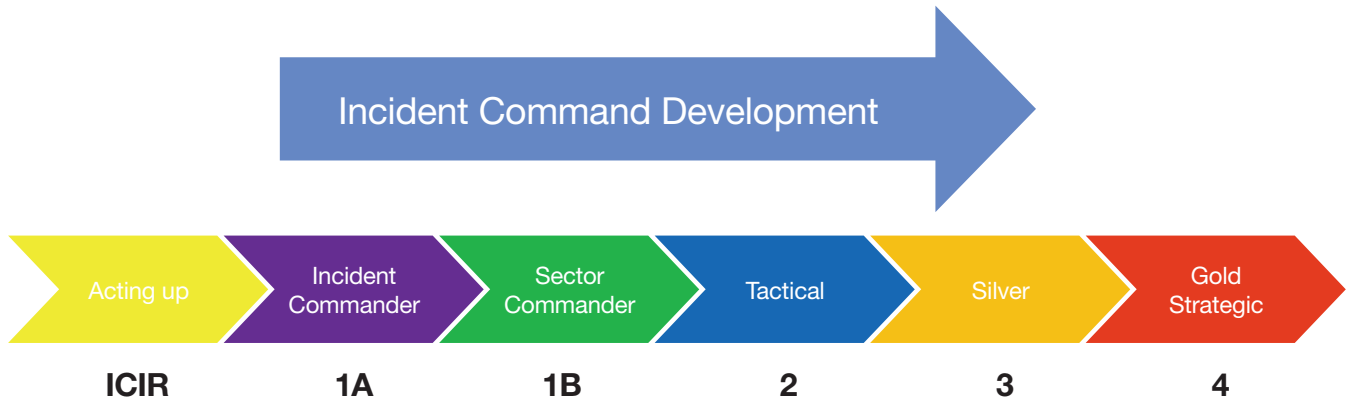
1. The SFRS should develop written guidance on the circumstances in which its staff can decide to depart from a Service policy or SOP, and the steps to be taken (such as record-keeping) when this occurs.
2. The SFRS should pursue to an early conclusion its efforts to provide standard and comprehensive site-specific operational risk information to all crews.
3. The SFRS should continue to develop a national training needs analysis and national systems to allocate training and skills maintenance, with specific emphasis on training all front-line incident commanders to ICL 1 level, and identifying how skills maintenance will be provided to incident commanders at all levels.

We have gathered together below some comments on issues raised in this report that we do not consider warrant a recommendation, but nonetheless the SFRS may wish to take into account in its forward planning.

- a. Current IC training curricula and course delivery do not appear to focus particular attention on the principles of operational discretion and professional judgement. This may in part be because the SFRS does not have a clear national position on these issues. We suggest that the SFRS builds appropriate learning into incident command development courses.
- b. The SFRS faces an ongoing challenge in making command training readily available to RDS and volunteer staff in remote locations. Issues such as the length of time required to travel to courses (not fully remunerated in some cases) and the ability to take long periods away from home and work continue to face these staff. We welcome initiatives, such as a proposed development of training facilities in Stornoway, that may help alleviate these problems.
- c. A consistent approach to the moderation of training and assessment is a goal to which the SFRS should be aiming in the short, not the medium term; and now that some 18 months has passed since the establishment of the SFRS we hope that it is not too long before a clear national direction is established in this regard.
- d. We consider that courses at ICL 1 should continue to be made available in sufficient numbers to meet demand – ICIR should not be seen as a substitute for the more in-depth training that the ICL 1 courses provide. As the new training pathways bed down, we would expect to see all staff who intend to move beyond the Firefighter role receiving ICIR training, followed by ICL 1 training for all those who move into substantive manager roles.
- e. It is important for the SFRS to reinforce the message to managers that they should place all requests for specialist advice through Control Rooms, and at the same time ensure that all Control Rooms are aware of the importance of prioritising requests for advice and arranging for it to be provided by telecommunications where necessary.
- f. The SFRS should bring consideration to bear on the way in which the outcomes of debriefs are codified and made accessible to staff and policy makers, and fed into training delivery.

Appendix

SFRS Incident Command Pathway



ICIR

Personnel who are required to act up to the role of Incident commander where one pumping appliance would be required. They will direct and co-ordinate the deployment of the attending crews. At this level they will be able to recognise when an incident requires greater control and will initiate the deployment of resources and other agencies when required.

ICL 1A

Personnel who are required to perform the role of Incident commander where more than one pumping appliance would be required. They will direct and co-ordinate the deployment of the attending crews and resources and/or command a more complex or escalating incident in the early stages until relieved by a more senior officer.

ICL 1B

Personnel who are competent Initial Incident commanders and are required to perform the role of Sector Commanders including within a multi-agency environment.

ICL 2

Middle Managers who are likely to assume incident command responsibilities supporting the Initial Incident commander (flexi – duty).

ICL 3

Multi – Agency Silver Commander who will be required to co-ordinate Fire Service resources within a multi-agency response to a major incident.

ICL 4

The highest level of command where decisions will be made in line with national and local strategies to achieve the resumption of normality.

Glossary and abbreviations

Throughout this report, at the risk of some repetition, we have minimised the use of abbreviations in the interests of readability. There are some exceptions, particularly where an abbreviation is used so widely within or outside the Scottish Fire and Rescue Service that spelling it out on each occasion would look unnatural, such as ‘SFRS’ for Scottish Fire and Rescue Service. An explanation of abbreviations used can be found below.

FRS	Fire and Rescue Service.
GRA	Generic Risk Assessment: a document that details generic risks and hazards that are likely to be present at generic incident types which fire and rescue service personnel may attend. The GRA would be the ‘starting point’ for the detailed assessment of risk carried out at the actual incident by the incident commander.
IC	Incident Command.
Operational guidance	The term we use to cover operational risk information, standard operating procedures, technical information notes and any other material which is available to operational staff to support and inform their decision-making at incidents.
Mobile data terminal	A tablet-type computer provided on fire appliances to carry operational guidance and provide a communications function.
ORI	Operational risk information: this usually relates to a particular building or location and will give detail of any specific risks or safety information relevant to responding to an incident there.
RDS	Retained duty system: firefighters live and work away from their fire station and are alerted to attend emergency calls by means of a pager.
SDA	Service Delivery Area: SFRS is organised into three geographical areas for service delivery.
SFRS	Scottish Fire and Rescue Service.
SOP	Standard Operating Procedure: a document designed to help the incident commander formulate and design a safe system of work to be used at an incident.
2005 Act	The Fire (Scotland) Act 2005.



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