

SPEAKING OF FIRE

FIRE PROTECTION PUBLICATIONS • OKLAHOMA STATE UNIVERSITY

A quarterly newsletter of Fire Protection Publications (Headquarters for IFSTA) Spring 2006 Vol. 6 Number 1

IFSTA Update

Fire and Emergency Services Instructor

7th Edition

by Fred Stowell

An essential function of all fire and emergency service organizations is training the organization's membership. High-quality training and instruction are critical components for successfully meeting the mission of fire and emergency services organizations: Protecting the community from hazards that create risks to life and property. Personnel must be proficient in all the skills required to meet this vital mission. The fire and emergency services instructor's duty is to prepare personnel to provide the services required and expected by citizens of the community or service area.

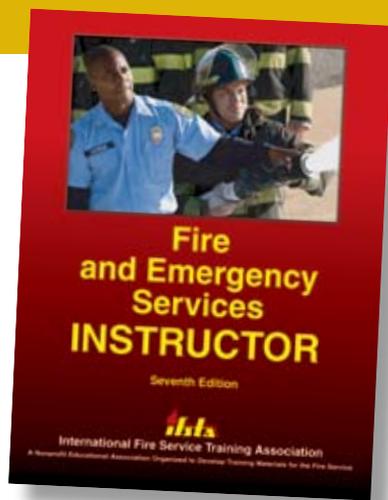
Fire and emergency services instructors have traditionally provided vocational-type training for their organizations. Training subjects include basic skills taught to entry-level personnel as well as specialist-level and in-service training for current personnel.

The authority having jurisdiction (AHJ), which may be local, state/provincial, or national, usually mandates the level and type of skills-based training that is required. Fire and emergency services organizations have acquired additional duties and responsibilities, and educational requirements for personnel have increased.

Instructors have become increasingly responsible for providing academic knowledge. Instructors today provide both vocational skills training and adult education for personnel of their organizations as well as a larger audience that may include personnel from other organizations and citizens from the community.

Equally important is ensuring that all training is conducted in as safe an environment as possible. While every attempt is made to replicate training situations that mirror the situations that exist in the field, every increase in realism creates an increased risk to participants. It is the fire and emergency instructor's responsibility to ensure the safety of all participants.

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From the Director

I watched this year's Super Bowl with special interest as one of my favorites, Jerome Bettis, bid farewell to his profession in his hometown of Detroit, the same town in which this year's game was played. He handled the announcement like he played – with class and optimism. In good times and bad, Bettis always recognized others above himself, never gave up, always led by example, and in the end was wise enough to know when to “hang it up.” Besides, anyone who can do what he did with a body built like his nickname -- “the bus” -- has my respect! Sports have always been a great representation of life in that way, with heroes who went out on top, including many of my favorites like Sanders, Wynn, Bird, Ripken, and so many others. No doubt you have your own list, those who made the weekends fun and whose memories we treasure. Unfortunately, we can also remember those athletes who hung on too long, and our lasting reminders are of frustrated “has-beens,” rather than the stellar athletes that they were in their prime.

And business, including the fire service, is no different. We all have our heroes-- those before us who knew when it was time to pass command to a new leadership team, all in a selfless interest of those they served. At FPP, one of my all-time heroes, Harold Mace, built an organization unmatched in the world. Then while at the peak of his influence and impact, he retired, much to the chagrin of all of us who wished he would stay. But he was (and is) one of the wisest men I've ever known, and he continues to be highly respected by so many in our service. It is rare that we get to benefit from such leadership, and while we treasure those experiences, it is also essential that we take time to honor their contributions. Recently the stars have lined up!

Over the past few months, three giants in the fire service announced their retirements -- Carroll Herring, Director of the Louisiana State University (LSU) Fire and Emergency Training Institute; Bill Peterson, Fire Chief of the Plano (TX) Fire Department; and Alan Brunacini, Fire Chief of the Phoenix (AZ) Fire Department. I cannot remember in my career a time when such greats as these have all left the service so closely together. Each has made enormous contributions that will impact the fire service for decades to come. For each we could dedicate an entire issue and still not cover the programs developed or people positively impacted, not only in

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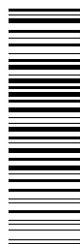


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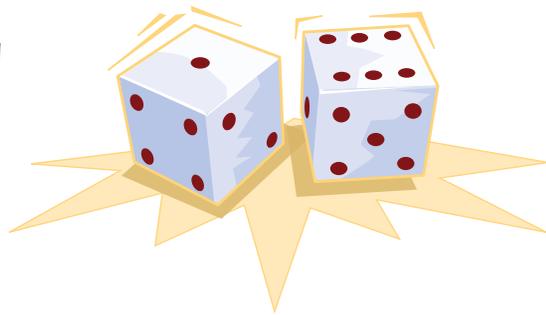
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Stop Rolling the Safety Dice

by Bill Manning



While it's true that every firefighter

who dies in the line of duty rightfully receives a hero's funeral service, it's also true that the vast majority of line-of-duty deaths (LODDs) are so obviously preventable as to evoke well-founded outrage. This is especially true of our completely preventable and completely senseless roadway/vehicle response tragedies.

There's no LODD circumstance or cause that defines personal and organizational irresponsibility like "to-and-from" injuries do. Such incidents show complacency, "invincibility syndrome," and the "business-as-usual" mentality at their very worst. Without a basic cultural change in this area, it's hard to imagine how we can tackle the rest

By the very nature of their controllability, reduction of "to-and-from" incidents overall must and will be the first manifestation of our willingness to become safer and help ensure that *everyone goes home*. To do this, we must break the "business-as-usual" mentality that grips many organizations. This requires cultural changes within the organization. At the core, breaking down the thick walls of resistance built up over years requires a concerted, focused effort to engrain attitude and behavior shifts into the very fabric of the organization, thus breaking the chain—and crushing the unspoken acceptability—of unsafe acts festering for years. If left to fester, very predictable human reactions to responses (the unchecked adrenaline rush during response comes readily to mind) will continue to bring about untimely funerals and incapacitated firefighters.

LODDs and serious injuries are the visible products of the safety volcano. Deep below the surface, thousands and thousands of near misses and "harmless" unsafe acts heat up, ready to erupt. The behavioral safety community has long supported and evidenced the theory that for every workplace catastrophe, there are hundreds of unsafe acts preceding it. Basically, those that ignore unsafe behaviors are rolling the safety dice.

In his article "Psychology of Behavioral Safety," published at www.behavioral-safety.com, Dr. Dominic Cooper writes, "People often behave unsafely because they have never been hurt before while doing their job in an unsafe way: 'I've always done the job this way being a familiar comment.... Over an extended period of time, therefore, the lack of any injuries for those who are consistently unsafe is actually reinforcing the very behaviors that in all probability

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From the Director

their own communities and our service, but literally around the world. It's hard not to appear to overexaggerate their individual and collective contributions, but at the same time we would be negligent if we did not take the time to recognize them for the incredible impact they have made on our service.

Change is inevitable and, in the end, exceptionally constructive when the future is based on the work of individuals such as these. So, to Carroll, Bill, and Alan – thank you for what you have done for us and your consistent willingness to "walk the walk." We look forward to those who will follow in your footsteps and to their own milestones and contributions. To our brothers and sisters at LSU, Plano, and Phoenix -- thanks for supporting your leaders who in turn gave us so much -- you did it right!

Be safe!

Chris Neal

Editorial

The Leader's Role in Driving Safety – Responding to the Scene

by Ed Kirtley, MA

OSU/FST Officer/Instructor Coordinator

Each year it occurs numerous times in this country: an emergency responder is killed in a traffic crash while responding to a fire alarm. It happened earlier this year in Oklahoma when a young volunteer firefighter died in a single vehicle traffic crash. The firefighter did not die during a daring rescue or an all-or-nothing fire attack -- the young man was killed while responding in his private vehicle to a smoke call. The investigation of the crash indicated that excessive speed was likely a contributing factor. These kinds of deaths are a tragic waste of life, especially when the deaths could be prevented. It is time to look at this issue from the perspective of the leader's ability to successfully address the problem.

The first question to ask is why does this same scenario occur repeatedly? I don't know that there is any one specific reason, but rather the problem has many roots. A key element is the culture of the fire service and individual departments. In many departments the culture promotes speed in every response. I once heard a veteran driver/operator describe this mind-set as an addictive adrenalin rush: weaving in and out of traffic, blowing through red lights, and making the siren scream. Once it gets into a driver's blood he or she can't seem to get enough. This mind-set believes that if a little speed is good, more speed must be better. In these cases the culture accepts the behavior or chooses to ignore it. The dangerous result is the same in either case.

This same cultural issue also applies to volunteer fire departments. Some departments actually contribute to the problem by issuing and/or allowing emergency lights for private vehicles. Generally the firefighters with these lights believe they now have the legal authority to demand the right-of-way, drive through controlled intersections, honk at drivers, and speed to the scene or fire station. The fact is that the traffic laws in most states do not give volunteers operating private vehicles these privileges.

Another element in the problem is the lack of supervision of driver/operators during the emergency response. I have known several driver/operators that resisted following the orders of the officer concerning driving practices. The officers finally had to exert their authority to force the drivers to follow the rules. Fortunately, in each case the department had specific policies addressing the operation of vehicles.

This is even a greater challenge in volunteer departments. The fire chief and other officers have a limited opportunity to observe the driving habits of every

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National statistics on fire and emergency services fatalities indicate that in 2004 close to 10 percent of all line-of-duty deaths occurred during training evolutions. This number, along with the total of 117 deaths, is unacceptable. This manual provides the instructor with the knowledge and skills that will help reduce, and perhaps eliminate, those unnecessary casualties.

Not everyone can be a good teacher or instructor. Being an effective instructor, like being a competent fire officer, requires a number of qualities — some that are learned, some that come with experience, and some that are innate. Some of the qualities or characteristics that effective instructors possess include the following:

| | |
|-----------------------------------|--|
| Leadership abilities | Preparation and organization |
| Strong interpersonal skills | Ingenuity, creativity, and flexibility |
| Subject and teaching competencies | Empathy |
| Desire to teach | Conflict-resolution skills |
| Enthusiasm | Fairness |
| Motivation | Personal integrity |

The professional nature of a fire and emergency services instructor's function has been established not only by tradition but also by the development of a National Fire Protection Association (NFPA) professional qualifications standard, NFPA 1041, *Standard for Fire Service Instructor Professional Qualifications* (2002). This standard establishes the job performance requirements (JPRs) for all personnel of the fire service who are assigned to the training function. It also supports the company-level training requirements of Fire Officer Level I in NFPA 1021, *Standard for Fire Officer Professional Qualifications* (2003).

The 7th edition of the IFSTA **Fire and Emergency Services Instructor** manual contains learning objectives for each chapter that are related to the JPRs in NFPA 1041. A correlation between the learning objectives and the JPRs is contained in Appendix A, which also includes the page in the manual that contains the information required to meet the JPR.

This edition of the IFSTA **Fire and Emergency Services Instructor** manual is organized into the following four parts that will enhance the learning and teaching experiences:

- Part A contains information that is basic to all three NFPA Instructor Levels.
- Part B is Level I specific.
- Part C contains Level II information.
- Part D is directed toward Level III requirements.

By providing information for all three levels in one manual, the Instructor course developer can select the material that is appropriate to local certification requirements. At the same time, the manual can be used as a desktop reference for current instructors of all levels. Topics that are covered in the manual are arranged in the following manner:

Chapter Topics List:

Part A: General Knowledge and Skills

- 1 Challenges of Fire and Emergency Services Instruction
- 2 Safety and the Training Function
- 3 Legal and Ethical Considerations
- 4 Effective Interpersonal Communication
- 5 Instructional Facilities and Props
- 6 Report Writing and Record Keeping
- 7 Principles of Learning
- 8 Student Attributes and Behaviors

Part B: Instructor I Requirements

- 9 Preparation for Instruction
- 10 Instructional Delivery
- 11 Audiovisual Technology
- 12 Structured Exercises, Demonstrations, and Practical Training Evolutions
- 13 Student Progress Evaluation and Testing

Part C: Instructor II Requirements

- 14 Lesson Plan Development
- 15 Instructor and Course Evaluations
- 16 Student Testing Instruments
- 17 Course and Evolution Management
- 18 Administrative Duties
- 19 Supervision and Management

Part D: Instructor III Requirements

- 20 Administration: Records, Policies, and Personnel
- 21 Analysis and Evaluation
- 22 Program and Curriculum Development

A glossary, suggested reading list, index, and appendices containing numerous samples and examples complete the manual.

This validation committee worked long and hard to create a manual that will meet the needs of all training functions, agencies, and situations. We hope that we have succeeded in that effort and that the manual will meet the needs of the fire and emergency services for years to come.

The **Fire and Emergency Services Instructor** manual 7th edition is \$45.00 (Item 36693).

Support products include:

Fire and Emergency Services Instructor Study Guide (print)...\$18.00 (Item 36694)

Fire and Emergency Services Instructor Study Guide (CD-ROM)...\$25.00 (Item 37170)

Fire and Emergency Services Instructor Curriculum on CD-ROM...\$50.00 (Item 36699)

Fire and Emergency Services Instructor Curriculum (print)...\$250.00 (Item 36959)



Fred Stowell is a Senior Technical Editor at Fire Protection Publications.



member of the department. When the chief does learn about a volunteer who is driving in a dangerous manner it is from a complaint by a citizen or a law enforcement officer. This second-hand report makes it more difficult to address than if the chief or other officer directly observed the driving.

I do believe that some of the lack of supervision is because company and chief officers are not aware of the extent of the problem or the specifics of the standards and laws. While ignorance is no excuse, some departments have not dedicated time to train supervisors about driving rules and the need for reasonable speed with fire apparatus and private vehicles.

This brings us to the solutions to the problem. I believe that there are three areas that must be addressed to reduce the crashes involving excessive speed:

1. Adoption of department policies that address safe operation of vehicles
2. Training of personnel
3. Holding personnel accountable for their driving *before* a crash has a chance to occur

These three solutions must be addressed as a whole rather than just implementing one or two.

Adopting Department Policies

Adoption of appropriate department policies regarding the safe operation of a department apparatus or private vehicle is the first place to start. Even the smallest rural department can and should adopt and enforce policies on the operation of vehicles. An excellent place to start is NFPA 1500. Chapter 6 addresses fire apparatus operation. Here are some highlights of the requirements listed in Chapter 6 that should be included in local policies.

- Anyone who operates a fire apparatus must be properly trained before operating that apparatus. While not specifically stated in the standard, this same policy requiring training on traffic laws and safe operation should apply to volunteers and their private vehicles that are used to respond to emergencies.
- All vehicles must be operated in compliance with department policy and traffic laws.
- The operator of the apparatus, or private vehicle, is directly responsible for the safe operation of the vehicle. Let me emphasize this point. The person behind the wheel is the person directly responsible for the safe operation of the vehicle. Not the firefighter in the back seat. Not the fire chief, though he or she may have indirect responsibility. Not the local police officer. The driver is responsible – period, end of story.

- If the driver is under the direct supervision of an officer, the officer is responsible for the actions of the driver. This should be self-explanatory. If the officer is in the right-hand seat, he or she is in command of the vehicle. If the driver is speeding or taking chances, that officer should take command and have the driver get control of the apparatus. No, let me change that last statement. The officer **MUST** take charge as a supervisor and correct the problem. NFPA, in the appendix, recommends a process called “challenge and response” that can be used when an officer encounters such a situation.
- The fire department shall adopt policies regarding the safe operation of apparatus and private vehicles. Some would argue that the department can not adopt a policy regarding the use of private vehicles. However, remember that the person responding in his or her private vehicle is acting as a representative of that department when responding to a department operation. In short, yes the department can adopt and enforce policies addressing the safe operation of private vehicles when responding to emergencies.
- Drivers shall come to a complete stop in certain situations including red lights and stop signs. It is interesting that the standard doesn't say slow down or sneak or “drift through” red lights and stop signs. The standard says “come to a complete stop.”

Since there are many misconceptions about how traffic laws really apply to emergency responders, it is critical that you review the traffic laws that apply to your department. In some states a private vehicle, i.e., a volunteer firefighter's car, is not and cannot be a recognized emergency vehicle. It doesn't matter if it has red lights and siren, a fire department tag on the front, and emergency flashers flashing, etc. In these states laws simply do not allow those vehicles to be an emergency vehicle. Consequently, a private vehicle responding to a scene must obey traffic laws including stopping at red lights and stop signs, driving within the speed limit, and not passing against a yellow line.

In other states traffic laws have been established which give some recognition to volunteers with emergency warning devices such as lights and sirens. This is especially true in the northeastern United States. However, even in these states the rules are specific and do not give a firefighter the right to drive in unsafe manner responding to an incident. Again, it is up to you to know AND follow the law that applies to your department.

At this point you may be thinking that your local police department allows you to break traffic laws in your private vehicles and has never made an issue of it. But, even if they are looking the other way, you are still breaking the law. It may not become an issue in your community UNTIL there is a crash involving one

of your firefighters who was responsible for the crash because he or she disobeyed a traffic law. At that point insurance companies, the state police, attorneys, risk managers, and a whole lot of other people will get involved and the *law will be enforced*. This group of people will go out of their way to ensure that people are held responsible including the leadership in the fire department who allowed those driving practices.

Another reality is that if a crash does occur as a result of violating a traffic law in this situation, the volunteer's insurance may not cover the damages. Also, the city's liability insurance may not cover the damages when there has been a direct violation of city policy and/or state traffic laws. In short, the volunteer may shoulder some or all of the responsibility for the damages in the crash.

Training Personnel

Adoption of local policies is an essential first step, but simply adopting policies is not enough. Personnel must receive training on the policies and procedures and then those same personnel must be held accountable. Let's look at the training part of the solution.

There are two training needs that must be addressed: initial training of personnel and ongoing training for all other personnel. Initial training must be provided for every new firefighter or staff member who is going to be operating an apparatus or department vehicle that may respond to emergencies. As mentioned before, this also includes the use of private vehicles by volunteers. The training should address at least the following issues.

- Department policies and procedures regarding the operation of vehicles and apparatus
- Apparatus maintenance and inspection
- State and local laws pertaining to the use of vehicles and apparatus
- Road conditions and their hazards
- Handling characteristics of emergency vehicles
- Backing and parking apparatus
- Spotting and parking apparatus at emergency scenes
- Competency driving course

There are several courses and training programs available that address operation of emergency vehicles. One such program is *Emergency Vehicle Driver Training (EVDT)*. This is a 16-hour, nationally recognized program, developed by Volunteer Fireman's Insurance Services (VFIS). As part of the course, participants must actually demonstrate proficiency operating an emergency vehicle. Another VFIS course is *Emergency Vehicle Response Safety*. The 3-hour course addresses the effective administration of a local driver training program. It is the next logical step in training for a department following completion of the EVDT course.

Another option for training is the Fire Protection Publications curriculum for IFSTA's **Pumping Apparatus Driver Operator Handbook**. Videos that support the program are also available. This curriculum follows the text and can be used effectively by most fire service instructors. Some departments have used this program to develop a "driver academy" for anyone who operates an apparatus.

The next training area is that of ongoing training. Some departments have chosen to use the EVDT course as a required refresher on an annual basis. Others use part of the course as a refresher. The important point is that ongoing training on safe operation of apparatus is provided on a regular schedule and that ALL personnel who may operate an apparatus are required to attend the training. This ongoing training keeps everyone up-to-date on laws pertaining to operation of apparatus, safe-driving techniques, and sharp on skills such as backing and parking.

Holding Personnel Accountable

The last area in the solution is perhaps the most difficult for most leaders—holding others accountable for their driving. Yet, accountability is the piece that brings all the others together. I do believe that most drivers will obey the rules willingly. However, there are always a few that will push the rules to the very edge and, at times, past the edge. It is these people that you must hold strictly accountable for their driving. Your department probably already has a disciplinary process in place and provides a process for addressing violations of the driving policies. If not, one should be developed and adopted.

There are a couple of things to keep in mind about accountability. Any alleged violation of the driving policy must be investigated as you would any other rule violation. But it must be done promptly. If needed, the driver under investigation should be relieved from driving duties until the investigation is complete. If there was wrong doing, take action according to your disciplinary process.

Also, don't look the other way if there is an allegation, even if it is a star performer. You must act promptly, fairly, and decisively regardless of the situation or the person involved. If you look the other way, or ever fail to take action, you have given informal permission for personnel to violate the driving policy. Once you let this tiger out of the cage it is a challenge to regain control.

One other thought about accountability. You should be just as quick to recognize safe driving practices. I always remember the cliché: "If you want a behavior repeated reward it." Take time to catch personnel driving safely and thank them for their commitment to safety. If a crash is avoided due to safe driving practices, make a big deal of it.

Culture Change

The 2004 Firefighter Life Safety Summit sponsored by the National Fallen Fire Fighter Memorial Foundation identified several of the solutions described above as being critical to reducing injuries and deaths to firefighters including those caused by traffic crashes. This Summit of national leaders and organizations identified the most fundamental issue to reducing the number of firefighter injuries and deaths as a change in the fire service's culture. This culture change includes accepting personal and organizational accountability for health and safety, of which driving safety is an essential part.

This concept was clearly stated in the initial report from the Summit.

"The essential cultural change has to begin with accepting personal and organizational accountability for health and safety. Every individual within the fire service has to accept a personal responsibility for health, wellness, fitness for duty, skills development, basic competencies, and adherence to safety practices. The leaders and members of every fire department and every fire service organization must be accountable for the safety of their members, collectively and individually. In addition, the members must be accountable to each other."

The role of the organizational leader in creating this needed cultural change is also strongly emphasized.

"Irresponsible behavior cannot be tolerated at any level and no external influence can overpower a failure to accept personal responsibility. The managers, supervisors, and leaders within the fire service must instill and reinforce these values until they become an integral component of the culture."

The members of the Summit also found a specific need to address response policies and the belief system regarding the urgency of emergency response.

"Many of the emergency response deaths result from excessive speed and unsafe driving, which can be related to the perception that the urgency of the mission justifies an elevated level of risk to the emergency responders and everyone else on the streets. In too many cases the risks that are created en route are greater than the dangers of the situation itself. The cultural change must be based on recognizing that firefighters cannot save lives or property at the scene of an emergency incident unless they arrive safely and there is no justification for causing more harm en route than they can prevent when they arrive."

Again, the report emphasized the importance of accountability and enforcement of organizational policies dealing with emergency response.

"This cultural change has to begin with the enforcement of existing safe driving protocols by leaders and supervisors, as well as the mandatory use of seatbelts by all firefighters. The delegates noted that in many cases firefighters do not use seatbelts that are provided in their vehicles, in spite of NFPA standards, departmental regulations and state laws. The failure to enforce and to follow these existing and basic safety procedures was highlighted as evidence of the urgent need for cultural change."

A final thought about the Firefighter Life Safety Summit. An outcome of the Summit was the identification of 16 initiatives that are key to reducing firefighter injuries and deaths. Every fire service organization should philosophically embrace and operationally implement these initiatives. More information on the initiatives is available at www.firehero.org.

In conclusion, crashes responding to emergency scenes are almost always avoidable. It is the leader's responsibility to ensure that all steps are taken to prevent the crashes. These steps include adoption of policies addressing the safe operation of apparatus and private vehicles; training personnel, including supervisors, on safe driving practices; and then holding all personnel accountable for their driving. By aggressively implementing these steps you will greatly reduce the likelihood you will ever have to deal with an avoidable crash. 🔥

“Tactical Mode”: An example of shared US/UK Learning in Incident Command

by Kevin Arbuthnot

Risk assessment is an essential component of the Incident Command System used by the UK’s fire and rescue services. It is a continuous process of identifying hazards, assessing risks presented by those hazards, taking action to eliminate or reduce that risk, and then monitoring and reviewing in the rapidly changing circumstances of an operational incident.

The *tactical mode* has become a valuable part of the process, and the story of its development is a case study in UK/US cooperation. The development of the tactical mode stems from the early 1990s, when a number of significant incidents in which UK firefighters lost their lives resulted in fire brigades for the first time being subject to Health and Safety Executive (HSE) enforcement action.

This acted as a wake-up call for us all and signaled that the operational systems of UK brigades had gaps which urgently needed addressing. West

Yorkshire Fire and Rescue Service (WYFRS) implemented a project to identify a safe system of work for the emergency incident environment that would embrace the concept of risk assessment. Of particular interest was the assessment done at the point of arrival at an incident -- the *dynamic risk assessment*.

Of course, risk assessment in other guises was not new to the fire service. The brigade had risk-assessed all elements of its work and procedures in a formal and auditable way and had a good safety record, receiving awards from national bodies along the way.

A range of safe systems of work were in place: officers routinely did safety training and became qualified, and generic risk assessments were in place in the form of manuals, technical bulletins, and a raft of standard operating procedures. We had in place a training regime that sought, with all its imperfections, to prepare the workforce to operate safely in a demanding, and sometimes dangerous, operational environment.

Nevertheless, when crews arrived at an incident, it was the task of the first-arriving officer to make a rapid decision about deployment. The decision would either effectively consolidate all of the prior risk assessment work or alternatively could compromise the preparation and training that had taken place. This decision was invariably based on the commander’s judgment and experience.

The trigger for the development of a new approach was that the HSE pointed out quite forcefully that regulations required a formal risk assessment to be performed and that the fire service was not exempt from any part of the provision. The fire service was of the view that a risk assessment was always carried out, but naturally, it had to be done quickly and informally. We believed that it was not possible to undertake a bureaucratic process when arriving, for example, at a burning building with

people awaiting rescue. Common sense suggested that this reality would be accepted by all. However, there was an insistence by the HSE that the gap between what was formally required – that is, a suitable and sufficient assessment of the risk, which had to be recorded – and where the service then found itself, with no visible, auditable system, had to be bridged. Professor Rhona Flin¹ introduced the UK fire service to the concepts of naturalistic decision-making and the realization that many other professions share the challenges of having to make safety and other high-stakes decisions under time constraints, in unstructured circumstances, and under stress.

Risk assessment specialists were keen to provide models and flowcharts describing the classical deci-

sion-making processes involved, including identification of hazards, assessment of the likelihood of these causing harm, a balancing of risks and benefits, selection of a system of work, use of control measures, and provision for review of the effectiveness of any measures put in place. In reality, however, any process like this would be analytical, take time to complete, and require more information than was immediately obvious and available. It was felt that if the IC rigidly adhered to the principle of not committing crews until a full risk assessment had been completed, the public and crews would be put at greater risk.

WYFRS consequently developed an approach to dynamic risk assessment based on a model of naturalistic decision making as described by the USA’s Gary Klein². It took the following shape.

The Incident Commander would be expected to perform the risk assessment rapidly on arrival. It would be an intuitive process, based on the commander’s personal competence derived from training and experience. To the outside observer, this may easily appear that no process was being followed. This lack of apparent structure was new to the UK fire service and was initially greeted with a degree of skepticism. Nevertheless, the research models gave sufficient scientific underpinning to the approach for WYFRS to recommend it to the Safe Person Concept Working Group chaired by HM Fire Service Inspectorate in England and Wales during the revision of the first edition of the Fire Service Manual which took place in 2001/2 and which resulted in its ultimate adoption as a nationwide model³.

To meet the requirements of the HSE, the outcome of the dynamic risk assessment needed to be recorded in some way. This proved to be a problem initially. Once again, a requirement to complete a form prior to or even during an emergency rescue or

other deployment would simply not be met, exposing the employer and staff.

Therefore, it was determined that the outcome of the risk assessment would be transmitted over the brigade’s main scheme radio at the earliest opportunity and thereby be “time-stamped” in the voice recorder. Altogether, this process would satisfy the requirement for the assessment to be suitable, sufficient, and recorded. The HSE accepted this as an appropriate methodology for the early “dynamic” stages of the emergency incident. It would, of course, have to be backed up by a more analytical assessment of the risk, using forms, flowcharts, etc., as soon as the incident and resources permitted.

Tactical Mode

It was essential that operational personnel understand the system of dynamic risk assessment, as well as stand up to the demands of the operational environment and the HSE. Therefore, the procedure known as tactical mode was developed. This is the

point at which US thinking influenced us. I was well aware from visits to the Phoenix FD (PFD) of the use of “strategic modes” and wondered if this easily understood model could be adapted for our use.

First of all, the language had to change, as the UK emergency services have a different application of the terms *strategic* and *tactical* to almost everyone else for some reason! We therefore decided to adapt PFD’s terminology for the announcement of the outcome of the risk assessment in the following ways:

- If the commander on the ground announces an *offensive* mode, this indicates that there is an identified risk but that after a risk/benefit analysis, a decision has been made to deploy. This is by far the most common mode of operation.
- A *defensive* mode is declared when the risk is considered too great and tactics are being employed which separate the firefighters from the hazards.
- A third mode called *transitional* mode is also available for certain exceptional circumstances which are explained in more detail in the manual. (Or visit the ICS pages of our website at: <http://www.westyorkshire.gov.uk/ics>)

Interestingly, because fire and rescue services operate in offensive mode most of the time, there was a swell of opinion that suggested that it should be taken for granted that an operation was offensive, only declaring it to be defensive in exceptional cases. This would clearly have defeated the object, with no evidence being available that a risk assessment had been considered at all.

Consequently, in West Yorkshire and increasingly throughout the UK, all initial messages from the incident ground have to include a declaration of which tactical mode is in use.

The integrity of this approach to risk assessment hinges, to a very great extent, on the Incident Commander’s competence and experience. Understanding exactly what these competencies entailed was, and to a large extent remains, far from complete.

Consequently, a sub-project to define the competencies of the IC commenced in 1995-96. Some use was made of draft competencies that were emerging from the role-mapping work that was under way in a national project.

Building on this, WYFRS devised its own full raft of IC competences at all levels. These are still currently used by the senior officer ranks in WYFRS. Each officer maintains a portfolio of evidence of their relevant experience and training. This is a continuing professional development program, as well as being an effective experiential log. The outcome of the portfolio-based approach to competence for commanders in WYFRS has been positive; with the additional benefit that better information is available to those conducting the training needs analysis of operational staff.

Effective command, especially the effective and safe assessment of operational risk, cannot be taught by rote. It is a skill ideally communicated to students by those who are themselves practically experienced and competent. Such teachers are rare commodities, particularly when the higher levels of command and control are being addressed. Similarly, experience has shown that as issues of credibility come into play, mentoring and guidance to senior ranks are best provided by more senior and experienced officers.

A final key point is that the tactical mode method of dynamic risk assessment recognizes that everyone's experience, ability, and training are different. This naturally places a limit on the ability of

the decision maker to intuitively assess every situation that may be encountered. As a safeguard, it was agreed that the default would be defensive mode, meaning that there should be no circumstance where an IC is unable to immediately declare a mode; either it is clear and obvious that the operation can proceed in offensive mode, otherwise it is defensive and appropriate measures have been taken. This has taken some time to instill in an action-orientated workforce, but it is possibly the single most critical safety factor in the UK's Incident Command system.

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¹ Professor Rhona Flin BSc, PhD, CPsychol, School of Psychology, University of Aberdeen.

² Klein, G., "Sources of Power—How People Make Decisions", MIT Press, Cambridge, Mass., 1996.

³ Fire Service Manual, Volume 2: Operations, Incident Command, HMSO 2002.

⁴ In the UK, the strategic level (in multi-agency incidents this is termed *Gold*) is the most senior level of command, but almost never operates from the incident site. The on-scene incident commander is the tactical commander (*Silver*), and the sectors are run by operational commanders (*Bronze*), with up to five crew commanders in each sector.



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LODD Update



will eventually lead them to be seriously injured. The principle being illustrated here is that the consequences of behaving unsafely will nearly always determine future unsafe behavior, simply because reinforced behavior tends to be repeated.”

So the challenge for us is to recognize and prevent the many unsafe behaviors engrained in our cultures that lead to tragic eruptions—behaviors that may not have overt consequences but which degrade the safety culture to the point that the organization becomes ripe for a big tragedy. For example, the fire department without strict, enforceable driving and seat belt policies is paying a toll yet to be collected. This applies to driver training, highway safety protocols, physical fitness, operational and training, protocols, and every other aspect of the job that presents a potential danger.

But it's not a simple fix. Policies are only the start. Cultural change is about mind-switch. It's about getting people motivated to buy into *living* the policies, about following through. It's about creating a culture that continually replenishes itself and moves forward through effective positive and negative reinforcement. You have to make it popular and fashionable to do the right thing-- rewarding good behavior and punishing bad behavior. Cultural change happens company by company, championed by internal safety advocates. It's about reciprocal accountability, reciprocal leadership. It's a planet that, as it gets larger and stronger, pulls more people into its gravity. It's about infusing greater responsibility into the organizational fabric, demanding that the individual is duty-bound to do what's right for the organization. The culture must support what's good for the organization as a whole so each individual can be served.

By not attacking the culture of repeated bad behaviors deep below the surface of our safety volcanoes, by not addressing our “business-as-usual” mentality, and by falling into the complacency trap, the organization is rolling the safety dice, doomed to repeating the mistakes of the past—mistakes we live and relive year after year. It's time to start correcting these behaviors, beginning with our “to-and-from” response policies.

Bill Manning is the Vice President of Business Development at AndersonManning Media Group. He is an award-winning editor, writer, speaker, and producer. He has 23 years of experience in the publishing business. For 15 years he served as editor in chief of *Fire Engineering* magazine. Upon the acquisition of the Fire Department Instructors Conference (FDIC), he assumed the role of conference director, building that conference into the world's largest fire training event. Among numerous accomplishments, he is a three-time Jesse H. Neal Award winner and the first Grand Neal Award winner for editorial excellence from American Business Media among others.

FPP On The Road*

National Association of Hispanic Firefighters

San Jose, CA
May 2-6, 2006

North Carolina State Instructor's Conference

Atlantic Beach, NC
May 17-20, 2006

Penn Fire Expo

Harrisburg, PA
May 19-21, 2006

Quebec Fire Chiefs

Rimouski, Quebec, Canada
June 3-6, 2006

New York Fire Chiefs

Lake George, NY
June 15-17, 2006

Canadian Training Directors Meeting

Quebec City, Quebec, Canada
June 2006

New England Fire Rescue

West Springfield, MA
June 23-25, 2006

Pittsburg Fire/Rescue EMS

July 7-9, 2006
Monroeville, PA

IFSTA Conference

Tulsa, OK
July 8-12, 2006

*Please note that show dates may be subject to change.

Fire Prevention Training DVD

by Jason Takara

Great projects often start from whims. While some are products of a grand plan that has been brewing for a long time, some are products of a flash of inspiration. Such was the case with Honolulu Fire Department (HFD) Fire Captain Jason Takara's idea to streamline the mundane and personnel intensive training for the Fire Prevention Bureau's (FPB) Company Inspection Program. The training was mandatory, the inspection manual was being updated, all firefighters needed to be versed in the new procedures, and the traditional methodology of training was cumbersome to implement. A creative solution was needed.

The previous training consisted of sending a trainer from the FPB to the fire stations with hefty manuals in hand. These sessions were often interrupted when the firefighters were called out to alarms, leaving the trainer to wait for their return. If the wait was too long, he or she would have to leave and return on another day. This was not an efficient way to conduct training. After much discussion, the FPB decided to offer training via video technology, specifically a DVD.

Video technology has the ability to conceptualize, shoot, edit, and create high-quality projects for the consumer. Additionally, this technology can produce high-quality DVDs without the expensive equipment that was required in years past. The DVD was the perfect solution to ensure that important training could be covered and controlled by the student, not the trainer. DVD technology would allow the HFD to capture quality training that could be formatted in chapters, allowing the firefighters to view the material in several sections, if necessary. If an alarm came in, they could press pause on the DVD player, respond to the call, return, and continue viewing the DVD where they left off. Individuals could also view the information in chapters instead of one complete module. A mixture of still and video images, narration, and a soundtrack would be added to motivate and move the viewer. Overall, it seemed like this format could provide a more engaging and efficient means of conducting training.

However, there was a problem. Although the concept of creating its own video training curriculum was on the horizon, HFD did not have the equipment necessary to produce such a product. There were plans to invest in this type of technology; however, justifying and actually purchasing equipment through the federal grant process takes a considerable amount of time. A quote for similar projects came in at \$10,000 by a professional production company. Lacking the budget and equipment resources, an out-of-the-box solution was needed. This was an opportunity to test the capabilities and concept of video technology and prove if this was a viable solution for all of their training needs. Captain Takara recalled that his former classmate, Mark Miyamoto, taught video production to his students. The challenge was that the students were seventh and eighth graders. Could such a young group of videographers from Washington Middle School in Honolulu produce such a product? With that question in mind, he called Mark.

After an initial brainstorm, they agreed that the project was not only feasible, but that it would be an incredible project for the students. It would challenge their

planning skills, technical knowledge, and ability to communicate with each other and adults. The Hawaii State Department of Education's goals of educational relevance, rigor, and relationships were clearly represented in this project.

The planners decided that firefighters would gather some of the field video, as it would be difficult for the students to get out of class to shoot on school days. Washington Middle School would lend video equipment to the firefighters, and the students would do the editing in class. They set internal timelines for the project and awaited final approval from the fire chief. Once this was secured, Assistant Chief Kenneth Silva and Battalion Chief Lloyd Rogers gave the "green light" to begin production.

The project involved weeks of gathering information, writing scripts, and storyboarding before the actual DVD production could start. Firefighter II Jennifer Davis provided the narration, and fire captains Matthew Zane and William Mellemai III assisted with videotaping.

When the videotaping was finished, the production team began editing. The team consisted of seventh graders Alyssa Buote and Ruby Ching and their team leader, eighth grader Rosaleen Nguyen. They imported footage, worked with still images, extracted audio, trimmed and edited, requested footage to be reshot, created titles for each chapter, and selected the soundtrack for the project.

The students dedicated months of production time, which included recesses, lunches, and after-school sessions. All of this was done voluntarily and even involved asking their teacher to open the classroom on Saturdays for them to work. They worked closely with Captain Takara and asked for feedback and clarification on certain chapters. The content that was totally foreign to them, so they often had to make critical decisions based on information they gathered from the firefighters. Communication, collaboration, and compromise were the key concepts they followed to create the final copy.

After the editing was done, they created the DVD. They chose a theme and indexed the chapters so that in the final form the firefighters could watch the entire presentation or choose individual chapters to view. It was the ability to choose that made this DVD the perfect solution to interrupted training. The project's final outcome was titled the "Company Inspection Program Manual Training DVD."

The process included some challenges, such as lost footage and a computer crash during the DVD writing process, but the students learned invaluable lessons in perseverance and resilience. In addition to the technological knowledge that they gained, these self-directed learners learned how to problem-solve on a project. They learned to work as a team, communicate and collaborate effectively, think creatively, and produce a quality product.

The project reflects their great skill and fortitude and their fantastic partnership with a public service organization that is always called upon for help. When the HFD sought their assistance, the team of students from Washington Middle School only said "how, when, and where"—just like a firefighter responding to an alarm.

Jason Takara is a captain with the Fire Prevention Bureau in the Honolulu Fire Department. Takara has been in the Fire Safety and Education, Support (fire protection equipment testing), Code Enforcement, and the Administrative sections of the Bureau. 🔥



Research Symposium (RS06)

Research Symposium (RS06) will be held July 8, 2006, at the Renaissance Hotel in Tulsa, Oklahoma. This event is held

each year on the Saturday before the beginning of the International Fire Service Training Association (IFSTA) Validation Conference. The Research Symposium supports the refereed scholarly journal entitled *International Fire Service Journal of Leadership and Management (IFSJLM)*. Oklahoma State University (OSU), the International Fire Service Training Association (IFSTA), and Fire Protection Publications (FPP) publish the journal.

Reducing Firefighter Line of Duty Deaths and Injuries (LODD & I: The Role of Leadership and Management) is the theme of RS06. A number of original research papers will be presented at the

conference. In the morning session, paper presenters will have approximately 20-30 minutes to summarize their research to members of the audience. After lunch, a panel of experts will offer comments on the research in relation to the national effort currently underway to reduce firefighter line of duty deaths and injuries.

The keynote speaker for the event will be Chief Ronald J. Siarnicki, Executive Director, National Fallen Firefighters Foundation. To date, confirmed panel participants include Chief Chris Neal (ret.), Director, Fire Protection Publications, Oklahoma State University; Dr. John Granito, Professor and Vice President Emeritus, State University of New York, Binghamton; Chief Dennis Compton, International Fire Service Training Association; Mike Wieder, Assistant Director, Fire Protection Publications;

Chief Bill Pessemier (ret.), International Association of Fire Chiefs; Kevin Roche, Assistant to the Fire Chief, Phoenix Fire Department; and Mark Jones, Deputy Chief Fire Officer, Essex County Fire and Rescue Service, United Kingdom.

Following the research symposium, all papers will be posted on the *IFSJLM* website. In addition, all papers will be submitted for peer review, and a symposium issue of the *International Fire Service Journal of Leadership and Management* will be devoted to the topic.

No registration fee is required to attend the research event. Questions about the conference can be directed to:

Dr. Robert England at englanr@okstate.edu or 405-744-5590. Also visit us on the web at www.ifsjlm.org.