

Seat Belt Usage in the Fire Service

Robert A. Ariza

University of Cincinnati

32-FST-385 Political & Legal Foundations of Fire Protection

Abstract

The issue of seat belt use in the fire service has been pushed to the forefront of firefighter safety in recent years. Still, almost half of the nation's first responders are not buckling up. The fire service is in need of strategies to change this behavior. Through the implementation of guidelines, educational resources and safety objectives, each fire department can turn the seat belt dilemma into an opportunity to change firefighters' view on seat belt use, which could save their lives someday.

The first potential life or death decision that each firefighter faces occurs before the fire engine leaves the fire station. Kyle (*Firehouse.com*) as well as the United States Fire Administration (USFA) have indicated that over the past thirty years, motor vehicle collisions (MVC's) are the second leading cause of firefighter line-of-duty fatalities. In three-fourths of these fatalities it was found that the firefighters were not wearing their seat belts and that nearly one-fourth of all firefighters who died in MVC's were ejected from the vehicle (Comstock & Maxwell, *Fire Engineering* January 2004). Joseph L. Molis, an analyst with the National Fire Protection Agency (NFPA) has stated that this death rate for firefighters will not change until seat belts are utilized more often. "We can't stress seat belt use enough" (*Firehouse.com*).

To bring the seat belt issue to the forefront, the USFA, along with the International Association of Firefighters (IAFF) and NFPA have endorsed the International Firefighter Safety Stand Down. The purpose of the Stand Down is to call attention to the unacceptable numbers of line-of-duty injuries and deaths. In 2006, the emphasis of the Stand Down was put on emergency vehicle safety, with particular attention to the use of seat belts (USFA, "Fire Departments...").

Comstock and Maxwell (*Fire Engineering* January 2004) have asserted that although the fire service preaches safety, at times they act otherwise. Firefighters who drive without due regard and without wearing seat belts place their lives in jeopardy as well as the lives of the passengers, other motorists, fellow firefighters and civilians. All fire departments should strive to lead by example in their communities. After all, firefighters are the nation's first responders. Therefore, all firefighters need to work together to reduce the risks that they face everyday. One significant way of doing this is by buckling their seat belt each time they get on the fire truck and leave the station.

There are numerous excuses firefighters have given for not wearing their seat belts. A few examples are: “It slows us down,” “It’s a hassle,” “I can’t put on my SCBA en route to a fire and wear my seat belt,” and “I get so pumped when the ‘tones’ go off that I simply forget to put on my seat belt” (*Fire Engineering*, January 2005). The fire service responds daily to MVC’s where they witness first hand what can happen when people do not use their seat belts. Multiple injuries, ejections and death due to not wearing seat belts are routinely seen by firefighters, yet many continue not to utilize this life saving device 100% of the time.

Statistics over the past 4 years have indicated that there has been increased compliance with seat belt use among firefighters. Still, an alarming amount of firefighter fatalities in MVC’s have been shown not to be wearing seat belts. In 2003, 33 firefighters died in MVC’s, 8 of which were not wearing their seat belts (Wilbur, *Firehouse*, July 2004). In 2004 there were 17 firefighter deaths due to MVC’s, 9 were not wearing seat belts (NFPA, June 2005). In 2005, 25 firefighters lost their lives by MVC’s. Of the 13 cases studied, only 8 of them had been wearing their seatbelts (USFA, June 2006). 2006 had 19 firefighter deaths involved in MVC’s, 6 of which were not wearing their seat belts (NFPA, June 2007). The above numbers are staggering. Equally staggering is that these statistics are available to every firefighter, yet still there is not 100% compliance when it comes to seat belt usage. What needs to happen to change this behavior? How can the fire service cure the seat belt problem? Listed below are nine ideas that can go a long way in ensuring that firefighters get to the scene of every incident in a safe manner, which starts with one simple task: BUCKLE YOUR SEAT BELT!!

1. DEVELOP SOP/SOG ON SEAT BELTS

Although striving for 100% seat belt usage is a daunting challenge, each fire department

needs to ensure that all firefighters are wearing seat belts. It has to be a priority. Developing a policy or practice goes hand-in-hand with enforcing that policy. A policy or practice will be worthless if it is just words on paper. It has to be embraced and followed by the entire department to be of maximum value. Strict adherence to a seat belt policy will save firefighters lives. Any firefighter not following this policy should be given progressive discipline starting with a verbal reprimand, leading to and including termination.

Developing a seat belt policy can and should mirror the standards set forth by the NFPA. The four NFPA standards which address seat belt usage are: 1002, 1451, 1500 and 1901. Below is a review of each standard and how it pertains directly to seat belt use.

NFPA 1002 Standard on Fire Apparatus/Operator Professional Qualifications (2003 Edition). This standard identifies the minimum job performance requirements for firefighters who drive and operate fire apparatus in both emergency and non emergency situations. It stresses that the driver/operator of the fire department vehicle shall acquire the skill to operate passenger restraint devices.

NFPA 1451 Standard for a Fire Service Vehicle Operation Training Program (2007 Edition). This standard provides for the development of a written vehicle operations training program, including the organizational procedures for training, vehicle maintenance, and identifying equipment deficiencies. Its main objective is to help prevent crashes, injuries and fatalities involving fire service vehicles. To obtain this objective, the standard establishes procedures for safe driving emphasizing the safe arrival of fire department vehicles and occupants as its first priority.

Chapter 8 of Standard 1451 deals specifically with crash and injury prevention. It states that the driver/operator of the fire service vehicle is responsible for the safe operation of the vehicle

under all conditions. If the driver/operator is under direct supervision of an officer, that officer assumes all responsibility for the actions of the driver/operator. The standard goes on to state that the driver/operator should not move a fire department vehicle until all persons in the vehicle are seated and secured with seat belts.

Chapter 8 of Standard 1451 also covers the responsibility of persons riding in fire service vehicles. The main points discussed in this section maintains again that all persons riding in the fire service vehicle be secured to the vehicle by seat belts and remain seated and secured until the vehicle comes to a complete stop. Standing while the vehicle is in motion is specifically prohibited, as is the donning or doffing of equipment and personal protective clothing that requires removal of the seat belt while the vehicle is in motion.

NFPA 1500 Standard on Fire Department Occupational Safety and Health Program (2007 Edition). This standard identifies specific safety requirements for members involved in the fire service. It calls for the establishment of SOP's to meet the objectives of Standard 1500. This standard also requires maintaining a training and educational program with a goal of preventing occupational deaths and injuries. Standard 1500 also states (as does Standard 1451) that all drivers are not to move fire apparatus until all persons in the vehicle are seated and secured with seat belts. Standard 1500 goes on to address persons riding in the apparatus saying that they should be seated and secured any time the vehicle is in motion. It specifically states seat belts are not to be released or loosened for any purpose while the vehicle is in motion, including the donning of respiratory protection equipment or protective clothing.

NFPA 1901 Standard for Automotive Fire Apparatus (2003 Edition). This standard specifies the minimum requirements for new automotive fire apparatus. It stipulates that each riding position is provided with an approved seat belt and that the seat belt webbing be bright

red in color. The reason for this undoubtedly is so one can tell if a person riding in the vehicle is wearing their seat belt. Another important point noted in this standard are signs that read “Occupants must be seated and belted when apparatus is in motion,” and that they be visible from each seated position.

As one can see, there is plenty of redundancy within the NFPA Standards when addressing seat belt usage. This redundancy is needed to drive home the point that wearing seat belts is a serious issue in the fire service. Developing and implementing an SOP/SOG on seat belt use is an important rule or regulation that a fire department needs to have. But remember, as Lt. Michael Allora of the Clifton (NJ) Fire Department noted, “whether or not a policy exists is certainly no excuse for a firefighter to ride an apparatus without wearing a seat belt” (*Fire Engineering*, January 2005).

2. COMPLETE AN ANNUAL EMERGENCY VEHICLE OPERATIONS CLASS

By completing a mandatory annual EVOC class, it stresses the importance of safe driving procedures and refreshes the firefighter on how dangerous their jobs truly are. Through reviewing national statistics which claim that MVC’s are the second leading cause of death of firefighters, it drives home the point of how important seat belt usage is to the fire service. Showing picture slides of mangled fire trucks and firefighter funerals would perhaps change a few minds each year to do the right thing...seat belts should be worn at all times. For a seat belt policy to be effective and enforceable, everyone must comply. By completing an annual EVOC class, it emphasizes the importance of the seat belt issue.

3. ANNUAL “LEGAL LESSONS LEARNED” TRAINING FOR THE FIRE SERVICE

The entire fire service needs to be educated in the law and how it deals with various topics, ranging from vehicle operations to sexual harassment. All firefighters need to be aware of the different immunities that are available to them in regards to local, state and federal law. Another legal item that needs to be addressed through seminars specifically deals with seat belt usage and rules that govern the Bureau of Workers' Compensation (BWC).

In the State of Ohio, the BWC has devoted an entire chapter in its Ohio Administrative Codes (OAC) to Fire Fighting and has established safety requirements that each fire department is to follow. The OAC mentions in Chapter 4123: 1-21, Section 4 (5) (a) (b) that seat belts are to be provided and utilized by each apparatus occupant. The code also states that all employees are required to be seated and belted while the apparatus is in motion. In Ohio, if a firefighter is injured due to non-enforcement of the seat belt rule, he/she may file a Violation of Specific Safety Requirements (VSSR) with the BWC.

According to Attorney David C. Comstock Jr., Fire Chief of The Western Reserve Joint Fire District in Poland, Ohio, "Unfortunately, an overwhelming number of fire departments don't know that the rules in the OAC, which is governed by the BWC, exist" (personal communication, July 31, 2007). Comstock goes on to state that VSSR claims can be quite severe. Bill Garver, Supervisor for Ohio BWC's Safety Violations Investigations Unit, pointed out in his power point presentation on VSSR's, at the Ohio Fire Chiefs Conference in Eaton, Ohio on July 24, 2007, that an employer's potential liability can range from 15% to 50% of the maximum weekly compensation payable for that year in which the injury or death occurred. So far in 2007, the weekly amount is over \$700. Garver also mentioned that employers in group workers' compensation plans, who pay lower group rates, can be bounced from the group if they are found to be at fault.

Firefighters need to be made aware of workers' compensation rules and regulations and how they pertain to the respective state in which they work. This further validates how an annual seminar on legal issues for the fire service would be extremely beneficial. For example, Gary Seidel (*Fire Engineering*, January 2005), Fire Chief of the Hillsboro (Oregon) Fire Department, claimed that if one of his firefighters were involved in an accident which involves an injury or fatality, and they were not wearing their seat belt, his or her workers' compensation benefits could be in jeopardy. Florida has a similar policy that stresses the importance of wearing seat belts. "Failure to wear the appropriate restraint device may result in denial of disability leave benefits", according to Miami Dade Fire Rescue Battalion Chief Tom Cole (*Fire Engineering*, January 2005).

Another option that an injured worker has in addition to workers' compensation would be to file an intentional tort claim against the employer. This litigation is based on the fact that the fire department itself (or the officer in charge), does not enforce the policy of wearing seat belts. As Comstock stated, "If the fire service doesn't change itself, there will be lawyers looking to do it for them" (personal communication, July 31, 2007).

The following example was also discussed with Comstock: A civilian driver is at fault for an accident with a fire truck and a firefighter is injured. The firefighter wishes to sue the civilian driver at fault for the accident. Comstock (personal communication, July 31, 2007) claims that if a firefighter is hurt, but not at fault, and not wearing his/her seat belt, the civil defendant is able to use the fact that a seat belt was not worn as admissible evidence. The jury may be permitted, by the judge, to reduce the amount of damages to the plaintiff based on the aggravation of his/her injuries by failure to wear his/her seat belt. The burden would then shift to the injured firefighter to prove that the lack of a seatbelt had no effect on his or her injuries.

Another tactic that lawyers are now utilizing, according to Comstock, is to bring litigation for their client in the federal court system. The reason for this is twofold. First, since the state law fellow servant doctrine asserts that you cannot sue your fellow worker, the attorneys are now advising the injured worker to go after the townships, cities and other municipalities in federal court. Secondly, if a fire department has no seat belt policy in place and an unbelted firefighter decides to bring litigation, lawyers are now suing municipalities based on violation of civil rights. The main reason attorneys are now doing this is to get around the different types of state law immunities that protect fire departments. In Ohio, there is no immunity under state law for violating civil rights (personal communication, July 31, 2007).

Having a good working knowledge of local, state, and federal laws is very important to today's firefighter. They need to know what the legal ramifications are if they are not buckling their seat belts. By providing an annual "Legal Lessons Learned" seminar, firefighters can be kept up to date of different laws and how they deal with firefighter safety, most especially with the use of seat belts.

4. REDESIGN FIRE APPARATUS

A Texas firefighter has recently filed a lawsuit claiming that the repeated strain of putting on his seat belt caused him physical impairment. This suit states that the design and placement of the seat belt was defective on the fire truck and caused him to over reach, thus causing the injury (thesecretlist@firefighterclosecalls.com). At first one may think that this lawsuit is absolutely preposterous and typical of today's litigious society, but the Texas firefighter may have a valid point.

Recently, the National Fallen Firefighter's Foundation has requested that an anthropometry (the study of measuring people) company, Total Contact, Inc., of Germantown, OH, be

commissioned to study the body shape and size of firefighters. This study came about through statistics developed by the International Association of Fire Chiefs (IAFC), which stated that because of outdated manufacturing guidelines, the size and bulk of turnout gear and improper fire engine design, 25% of firefighters cannot buckle their seat belts while riding in a fire engine. The information used in this study will go to develop new industry guidelines to improve the fit and function of safety equipment, clothing and vehicles used by firefighters (Schutte, *Greene County News Service*, July 24, 2007).

An interesting point that the study makes is that fire apparatus and fire engine seats are manufactured to outdated human design standards developed in the 1970's. According to Jennifer Whitestone, president of Total Contact, humans have changed significantly since then. "Humans have increased an inch per decade in height and firefighters as a group are heavier than other non-military occupants by about 20 pounds" (Schutte, July 24, 2007). By designing more up to date fire trucks that are built around today's larger firefighter, buckling ones seat belt will become easier. This will also make one of the most commonly used excuses for not wearing a seat belt a thing of the past.

Other ways that fire departments can guarantee seat belt usage would be to have the apparatus designed to not operate unless seat belts are engaged. As Lance C. Peeples, of the St. Louis County (MO) Fire Academy suggests, "Let's require engineering controls that won't allow the parking brake to disengage until all riding positions in which a person's weight is present have buckled their seat belts" (*Fire Engineering*, January 2005). Another example of redesigning the fire apparatus that would work would be to place sensors on the truck which would tell the driver when seat belts are not being used, similar to the warning lights in the cab that inform the driver that a door is ajar or a compartment door is open.

With the manufacturers of fire apparatus understanding the importance of seat belt usage in the fire service and the redesigning of the fire apparatus, the goal of reaching 100% compliance would be much easier to achieve.

5. TAKE THE NATIONAL FIRE SERVICE SEAT BELT PLEDGE

The National Fire Service Seat Belt Pledge was born on April 23, 2005 due to a very unfortunate circumstance. On this date, Christopher Brian Hunton, of the Amarillo, Texas Fire Department, fell out of his fire truck while responding to an alarm. He died two days later. He was not wearing his seat belt.

Due to this tragic incident, and the many others that are similar that happen each year, the USFA, under Acting Assistant Administrator Charlie Dickinson, developed the National Fire Service Seat Belt Pledge (Dickenson, USFA, February 28, 2007). The goal of the Seat Belt Pledge campaign was to have 1,000,000 firefighters sign up by June 21, 2007. Unfortunately, to date only 40,000 firefighters have taken the pledge. The main objective of the pledge is that no firefighter would die because they did not have their seat belt buckled (Clark, 1 more killed...., www.everybodygoeshome.com).

By having each individual of the fire service sign the National Fire Service Seat Belt Pledge, it would force each one of them to think about what could happen if they neglect to buckle up. As Dr. Burton A. Clark of the USFA's Fire Academy emphatically states, "Firefighters must show their individual and collective commitment to each other, their families and their collective communities" (www.trainingdivision.com/seatbeltpledge.asp). To sign up for the pledge, please visit the aforementioned web site.

6. ESTABLISH AN ENVIRONMENT OF SAFETY AT THE FIRE DEPARTMENT

The fire service is well grounded in its belief of being safe at all times. As Thomas W. Aurnhammer states (*Fire Engineering*, July 2007), the responsibility for overall safety rests on one individual. This individual is the fire chief. He, with the help of his fire officers, needs to develop a safety culture. By developing this culture, the fire department can work together as one unit to promote ways of working safely and not to tolerate any behavior that may potentially be hazardous to another.

To improve safety, such as wearing seat belts, the fire service has to eliminate ways that cause the incident to occur in the first place. The 3 factors that are most frequently involved in any incident are: situational awareness, human error and decision making. These 3 factors are the key components of crew resource management.

Crew resource management (CRM) is a program that has been adopted by the U.S. Military and U.S. Coast Guard. Both have realized significant reductions (74%) in injuries and fatalities after implementing CRM (Aurnhammer, *Fire Engineering*, July 2007). CRM utilizes 5 principles: communication, situational awareness, decision making, teamwork and task allocation. Each of these principles include error management through improved training skills.

According to CRM, communication is the key to success in any pursuit. It teaches people to focus on the feedback generated by the person sending the message and the receiver accepting the message. Speaking directly, respectfully and responsibly is important to communicate the change of behavior that is expected (in this case, the wearing of seat belts). Situational awareness arises by the need to stay focused on an event. This involves perception and observation. It is important because emergencies are dynamic and require the full attention of firefighters. Decision making relies on information. Too much or too little information may

lead to errors, injury or death. CRM teaches ways to identify relevant information so that an appropriate decision can be made (the buckling of seat belts). Teamwork is vital and incorporates two components: leadership and followership. All members of the team need to understand their respective place as well as the mutual respect and benefits of working together as a team. Lastly, task allocation is needed so that the team member most capable of completing the task is assigned the responsibility to carry the task to its completion. An example would be fire department officers enforcing the seat belt policy (National Firefighter Near-Miss Reporting System, supplement to *FireRescue Magazine*, 2006).

To succeed, CRM needs a commitment, specifically by the officers in charge, to change their fire departments safety culture. These leaders need to ensure to the other members of the department that it is their opportunity to not become a statistic, specifically when dealing with seat belt usage in the fire service.

7. DEPARTMENT OF TRANSPORTATION REGULATION

At this time, there is no governmental entity that governs or regulates the operation of fire apparatus. Perhaps the Department of Transportation (DOT) could make it a point to become the regulating/enforcement agency for the operation of fire apparatus. The DOT would be the most logical choice to offer its enforcement powers to help the fire service solve problems such as the seat belt usage problem.

Also, the DOT may require firefighters to obtain commercial drivers' licenses. This would require a testing procedure that entails safety issues that would start with the easiest task once inside the fire apparatus: buckling the seat belt (Wilbur, *Firehouse*, July 2007).

8. ADOPT THE 16 FIREFIGHTER LIFE SAFETY INITIATIVES

The National Fallen Firefighters Foundation (NFFF) was awarded a one million dollar grant to conduct a Firefighter Life Safety Initiatives Project. After various meetings and seminars with top officials of the fire service including the IAFF, NFPA, USFA and IAFC, the 16 Firefighter Life Safety Initiatives was born (Clark, *Firehouse.com*). By utilizing the 16 Firefighter Life Safety Initiatives as a platform, this breakthrough program provides an inspiring and educational blueprint for creating a safer fire service culture which will cease the preventable fire service line-of-duty deaths and injuries that are prevalent today. Listed below are the 16 Firefighter Life Safety Initiatives:

1. Define and advocate the need for a cultural change within the fire service relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility.
2. Enhance the personal and organizational accountability for health and safety throughout the fire service.
3. Focus greater attention on the integration of risk management with incident management at all levels, including strategic, tactical, and planning responsibilities.
4. All firefighters must be empowered to stop unsafe practices.
5. Develop and implement national standards for training, qualifications, and certification (including regular recertification) that are equally applicable to all firefighters based on duties they are expected to perform.
6. Develop and implement national medical and physical fitness standards that are equally applicable to all firefighters, based on the duties they are expected to perform.
7. Create a national research agenda and data collection system that relates to the initiatives.
8. Utilize available technology wherever it can produce higher levels of health and safety.

9. Thoroughly investigate all firefighter fatalities, injuries, and near misses.
10. Grant programs should support the implementation of safe practices and/or mandate safe practices as an eligibility requirement.
11. National standards for emergency response policies and procedures should be developed and championed.
12. National protocols for response to violent incidents should be developed and championed.
13. Firefighters and their families must have access to counseling and psychological support.
14. Public education must receive more resources and be championed as a critical fire and life safety program.
15. Advocacy must be strengthened for the enforcement of codes and the installation of home fire sprinklers.
16. Safety must be a primary consideration in the design of apparatus and equipment.

When asked his thoughts about adopting these initiatives for not only his fire department but for the entire fire service, Chief Comstock profoundly suggested that, “we (as a fire service) should not only adopt the 16 Firefighter Life Safety Initiatives, but rather, we should embrace them” (personal communication, July 31, 2007).

9. TAKE AIR PACKS OUT OF THE CAB OF THE FIRE APPARATUS

Instituting a policy to remove SCBA from the cabs of the fire apparatus would, in my opinion, be the one act that would improve safety immediately. Most of the excuses used for not wearing seat belts center around the SCBA. Take them out and the problem would be significantly reduced. All firefighters would then get to the incident scene in a safer manner, via the use of seat belts. Another way that removing the SCBA from the cab promotes safety is allowing the firefighters at the incident of a fire scene spend a little more time on scene size-up,

instead of rushing into the inferno with blinders on. This last point is especially important for responding fire officers.

Over 10 years ago, the Phoenix (AZ) Fire Department was one of the first fire departments to take the SCBA out of the cab of the fire apparatus. They had just bought a new truck that had the air pack integrated into the seat. Soon, the officers (and particularly Fire Chief Alan Brunacini) started to notice that while responding to fire emergencies, firefighters were not buckling their seat belts. It appeared that they were more concerned with strapping on their SCBA. After having meetings with all the department officers, the Phoenix Fire Department removed the SCBA from inside the cab of all fire apparatus and the SCBA were placed in exterior compartments (*Fire Engineering*, January 2005).

In a telephone interview with Attorney Mark Robens, who is the EMS Captain of the Phoenix Fire Department, he stated that there was plenty of dissention among firefighters when this rule was first mandated by Fire Chief Brunacini. Robens went on to explain that back then, as well as in present day situations, a cultural change was needed among the firefighters in regards to seat belt use. The Phoenix Fire Department looked at the seat belt issue from an internal (firefighters)/external (providing customer service) point of view. Brunacini theorized that if the firefighters were not arriving in a safe manner, then the end result of providing customer service to the community was not being met (personal communication, August 20, 2007).

To see how long it actually would take a firefighter to put on his/her SCBA at the arrival of an incident scene, a number of firefighters at my particular fire station, Station 74 of the Boardman (OH) Fire Department, agreed to participate in a study. Each participating firefighter was in his full turnout gear and sitting in the fire engine with their seat belt buckled.

The start time commenced at GO! and then the firefighter would unbuckle himself, get out of the truck, walk to the rear-most compartment, open the compartment, don the SCBA and securely fasten it. The time would then stop. Below is a chart displaying the results.

| Firefighter | SM | JG | CP | FJ | TT | RJ | MR |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Years of service | 5 | 8 | 13 | 22 | 14 | 8 | 27 |
| Elapsed time (in sec.) | 36.13 | 29.01 | 32.52 | 38.40 | 31.60 | 23.81 | 22.46 |

After eliminating the slowest and fastest times and then dividing the remaining sum by 5, the average elapsed time (in sec.) was 30.61.

After reviewing this study, a few firefighters mentioned that 30 seconds really is not a significant amount of time and that in this timeframe, they would be able to complete a very quick scene size-up prior to completing their task at the fire scene. Most of the firefighters realized the number one priority is arriving safely to the scene.

As Aurnhammer has remarked (*Fire Engineering*, July 2007), 135,000 fatalities and 3.8 million injuries have been prevented in the past 26 years due to the use of seat belts. This statistic was developed by the National Highway Traffic Safety Administration, and further states that \$585 billion in medical costs have also been saved due to buckling up.

By implementing the 9 points discussed in this paper, any fire department can resolve the seat belt problem that is prevalent in the fire service. There needs to be a change in the actions and attitudes of the 45% of firefighters not using their seat belts when responding to calls on the fire apparatus. As the NFPA points out, "Driver and passenger safety, particularly the use of seat belts, can have a direct and immediate impact on reducing some of the particularly preventable firefighter fatalities" (*NFPA Journal*, July/August 2007). Still, as of July 2007, 14

firefighters have died in the U.S. in line-of-duty driving related crashes this year (Wilbur, *Firehouse*, July 2007). This behavior needs to end NOW. Please do not become a statistic. BUCKLE UP!!!! Lead by example. It is the right thing to do for yourself, your fire department, your family and your community.

References

- 16 Firefighter Life Safety Initiatives*. Retrieved July 27, 2007, from <http://www.everyonegoeshome.com> .
- Aurnhammer, Thomas W. (2007, July) Creating a tradition of safety. *Fire Engineering*, pp. 111-112.
- California Wildland LODD, Texas firefighter seatbelt lawsuit*. Retrieved July 24, 2007, from thesecretlist@firefighterclosecalls.com .
- Clark, Burton A., Dr. (2006, January 24). Leadership: We killed firefighter Brian Hunton. *Firehouse.com*.
- Clark, Burton A., Dr. *1 more killed, 3 more injured: Flaw in our first line of defense*. Retrieved July 27, 2007, from <http://www.everyonegoeshome.com> .
- Comstock, David C., Jr., and Maxwell, Scott. (2004 January). Firefighters' 10 deadly sins of the fireground. *Fire Engineering*.
- Dickinson, Charlie (2007, February 28) United States Fire Administration. *Chief's Corner, National Seat Belt Pledge*. Retrieved July 27, 2007, from <http://www.usfa.dhs.gov> .
- Fahy Rita F., LeBlanc Paul R., Molis, Joseph L. (2007 July/August) Firefighter fatalities in The United States-2006. *NFPA Journal*, pp. 6-7.
- Kyle, Susan Nicol. NFPA releases firefighter death study. *Firehouse.com*. Retrieved on July 29, 2007.
- National Fire Fighter Near-Miss Reporting System (Annual Report 2006). Lessons learned, lessons shared. *FireRescue Magazine* (supplement).
- National Fire Protection Association (2003) *NFPA 1002 Standard on Fire Apparatus Driver/Operator Professional Qualifications*, p. 1002-7.

National Fire Protection Association (2007) *NFPA 1451 Standard on Fire Service Vehicle Operations Training Program*, p. 1451-4, 1451-6, 1451-9.

National Fire Protection Association (2007) *NFPA 1500 Standard on Fire Department Occupational Safety and Health Programs*, p. 1500-6, 1500-12, 1500-14, 1500-15.

National Fire Protection Association (2003) *NFPA 1901 Standard for Automotive Fire Apparatus*, p. 1901-36, 1901-37.

Schutte, John (2007, July 24). AFRL, local anthropometry business sizing up improved safety standards for U.S. firefighters. *Greene County News Service*, p. 7A.

Seat belt policies roundtable. (2005, January) *Fire Engineering*, pp. 22-36.

Specific safety requirements of the Bureau of Workers' Compensation Division of Safety and Hygiene (2003, November 1) *Ohio Administrative Code*, chapter 4123:1-21
Fire Fighting, p. 63.

United States Fire Administration (2006, June 19) *Fire Departments encouraged to Stand Down for firefighter safety, on June 21st*. News release.

United States Fire Administration. Firefighter fatalities historical overview. Retrieved on July 27, 2007, from <http://www.usfa.dhs.gov/fireservice/fatalities/statistics/history.shtm>

Wilbur, Michael (2004, July) Ignorance? *Firehouse*, p. 145.

Wilbur, Michael (2007, June) National seatbelt study update. *Firehouse*, p. 38.

Wilbur, Michael (2007, July) The killing fields. *Firehouse*, p. 50.