Our Nearest Branch is in Your Pocket

Available Balance: $12,395.25
My Checking: $2,739.84
My Savings: $1,968.48
Money Market: $3,247.06
Platinum Card: $2,981.52
Processing: $730.00

Check Balances
Transfer Funds
Deposit Checks
Pay Your Bills
Make A Purchase
Sign Loan Docs

Download the app today!
www.firefighterscu.com/mobile

We've got what you want

www.firefighterscu.com
801-487-3219 / 877-658-7395
To Subscribe:
To subscribe to the UFRA Straight Tip magazine, or make changes to your current subscription, call 1-888-548-7816 or visit www.uvu.edu/ufra/about/magazine.html. The UFRA Straight Tip is free of charge to all firefighter and emergency service personnel throughout the state of Utah.

UFRA Customer Service
Local (801) 863-7700
Toll free 1-888-548-7816
www.uvu.edu/ufra

UFRA Straight Tip
(ISSN 1932-2356)
is published quarterly by Utah Valley University and the Utah Fire & Rescue Academy and distributed throughout the state of Utah. Reproduction without written permission from the publisher is strictly prohibited.

Send inquiries or submissions to:
UFRA Straight Tip magazine
3131 Mike Jense Parkway
Provo, Utah 84601
Phone 1-888-548-7816
ufrastraighttip@uvu.edu

Disclaimer:
The opinions expressed in the UFRA Straight Tip are those of the authors and may not be construed as those of the staff or management of the UFRA Straight Tip, Utah Fire & Rescue Academy, or Utah Valley University.

On the Cover:
Photo courtesy of Lone Peak Hotshots. Wildland crew putting in direct handline to help secure division in steep terrain with a heavy dead and down fuel component. Horsethief Fire, Bridger Teton National Forest, 2012.
FROM THE DIRECTOR

In the last edition of the UFRA Straight Tip, I wrote about the need for more rigor in our state certification process. I intended to get you thinking about the testing process in general and the level of study and preparation that should be required to pass a state fire certification test. If you’re responding to my house, I would hope that your testing process was challenging and I think your neighbors would agree.

At Winter Fire School I had someone approach me and ask if my intention was to make Utah have the hardest certification system in the nation. I answered, “Hardest? No. But maybe the most demanding.” Remember that we’re talking about the testing process only. Students, career or volunteer, who come to the state certification process—having completed an excellent Utah Fire and Rescue Academy (UFRA) direct-delivery course using nationally recognized curriculum and taught by exceptional instructors—are prepared for a rigorous testing process. That’s assuming the student has attended all the classes, read the textbook, completed all assignments, and prepared properly. This brings me to this month’s topic: requiring retesting for recertification.

Starting a Conversation
I can’t think of a negotiation, a compromise, a change in a long-standing process, or a needed change in a tradition that didn’t start with a conversation. Let’s start that conversation. First, I have no intention or desire to take action on this subject in the near future. The implementation of a mandatory written and manipulative retesting program to recertify would most likely take a long time.

Let’s Look at the Current System
For the sake of conversation, let’s examine the career of Firefighter X. A typical scenario in Utah’s current system is that the first certification that Firefighter X receives is Firefighter I (Hazardous Materials Awareness and Operations included), which requires both written and manipulative testing. As Firefighter X progresses in his/her career, more state certifications would most likely be attained: Apparatus Driver Operator (ADO)-Pumper, ADO-Aerial, possibly Instructor I and Inspector I, and finally Fire Officer I—all requiring manipulative and/or written testing. I realize that many more certification levels are available, but I’m using these to make my point.

Fast-forward 12 years. Now Battalion Chief (BC) X has attained the Fire Officer I certification, is working on academic degrees, but is only required to submit recertification hours every three years to retain Fire Officer I certification, the highest level BC X has.

Here’s the Problem
The first problem is that sitting in a classroom doesn’t equate to competency. The system is pretty liberal with what counts as recertification hours, as many of us that have been in the system understand. Most skill sets in the fire service are highly perishable, some more than others. If documenting competency is the goal, then the only way to do it, as I see it, is retesting, both written and manipulative (for the certifications that require it) by a third party. This has nothing to do with not trusting a department to document hours. It has everything to do with being able to prove competency through a third party. It’s been my experience that
firefighters that are truly competent won’t oppose retesting—they’ll welcome it! Retesting provides them a platform for demonstrating their knowledge, skills, and abilities.

Now we come to the next problem as I see it. When BC X submits hours for Fire Officer I recertification, BC X is also automatically recertified at all other levels attained through his/her career (there are a few exceptions). This means that even though BC X may not have driven and/or pumped an engine or operated a ladder for ten years, BC X still gets recertified as ADO, along with the other certifications BC X has, minus the exceptions. BC X has no business being at the panel or turntable. This could result in firefighter injuries—or worse. This conversation is not about creating work for departments or making life miserable for firefighters; it’s about operational competency. If a battalion chief or captain in your department would be required to drive and pump fire apparatus and wanted to retain state certification as ADO-P and ADO-A, he or she should be required to prove competency through written and manipulative state retesting. Again, the same would apply for different levels of certification along with their primary (highest) state certification level. Think about it: if your state certification card says you’re certified at a certain level, shouldn’t that mean that you’re competent?

Raising the Bar
We all realize that medical calls comprise the majority of our responses. Working structure fires have declined steadily over the past two decades. Functioning (regardless of rank) at structure fires in general should now be considered low-frequency, high-risk events (including room and content fires). When is the last time you operated at a working structure fire? Compare that to the last time you operated at a medical call? My point? EMS personnel are called on to demonstrate their skills more often yet are required to retest (written and manipulative) to document competency. Why should firefighting skills be any different?

I have a neighbor who spends time in the flight simulator (here I go again with the pilot analogy) because the airline industry (federally mandated) must ensure that pilots retain their basic skills and are competent to also perform during low-frequency, high-risk events. This philosophy should apply to firefighting knowledge, skills, and abilities, ensuring competency for each certification level listed on your certification card. Not to mention, recertification reduces potential liability for departments and your chief by having ongoing third-party validation of employee competency. To me, it just makes sense.

I understand this concept would be expensive, would be logistically challenging, and would require a philosophical shift in how we go about testing and documenting firefighting competencies. This article is in no way a “shot over the bow” of the Certification Council nor a commentary on our current certification system or the current state of the fire service in Utah. It’s not intended to offend, hurt feelings, or otherwise insult anyone who has worked with or within the state certification system. It’s only intended to start a conversation on how we can raise the proverbial bar on fire service competency in Utah. Stay safe.

Stay safe,

Hugh

Hugh Connor was hired by the Orem Fire Department in 1979 where he worked for 27 years. He served as a firefighter/paramedic, engineer, lieutenant, captain, and battalion chief. Hugh has worked at the Utah Fire and Rescue Academy since 2005.
I always find it difficult to see the end of a game when I am right in the middle of it. I suppose that chess masters are able to visualize how things will turn out, but when the state legislature is in session, I’m just not too good at foreseeing the outcomes. It’s not that I’m not optimistic, but rather I’m realistic because I’ve seen just about everything happen over the years and have experienced both the highs of success and the lows of not getting a particular bill passed.

The legislative session will be complete by the time you are reading this article, but I must say that I am very optimistic about this session right now. There are issues relating specifically to individuals who participated in one of the state’s retirement plans and are going to be penalized for receiving a small stipend from being a volunteer firefighter within their community. Here’s how it was played out: an individual had spent over 30 years teaching school and retired from the state’s school teacher system. He had volunteered with a fire department for about that same 30-year time frame. Although he is older and may not be able to fight fire as he did when he was a little younger, he played a significant role at the fire department. He helped balance the financial budget for the department, worked on grants and other reporting systems, organized fund-raising and educational events for the community and department, and contributed in a myriad of other ways. His city provided a monthly stipend for him and a few other leaders, and now because he is retiring, the Utah Retirement System office was going to deduct some money from his retirement because of the benefit he was receiving from the city as a volunteer. HB 151 allows for any volunteer firefighter to receive up to $500 per month in benefits from the community where he or she volunteers. The benefit might be in the form of a take-home vehicle or some other remuneration, but this bill would prevent the retirement benefit from being affected just because an individual also volunteers for the community.

This bill and a number of other bills that are currently being considered seek to repair problems that were not intended but were discovered over the year—or in some cases, over many years. We have three different bills that are dealing with comprehensive wildland policies and funding. Other bills are in the works to help with the cost for reimbursement of ambulance transportation of Medicaid patients; retirement enhancement for dispatchers; and workers compensation coverage for cancers of the pharynx, esophagus, lungs, and mesothelioma (from asbestos exposures). Because of some line of duty deaths, the legislature has also been made aware of some roadblocks to dependent family members getting in-state tuition waived if the family members attended college when they came of age. These problems are all being investigated and will hopefully successfully pass in the legislature.

Finally, I’m very proud to have worked to earn recognition for the 50-year anniversary of the Utah State Fire Marshal's
Office officially being in business. That recognition comes in the form of a legislative resolution. All in all, I would have to say that the outcome of the 2015 legislative session appears to be one that we can foresee as a checkmate.

For a comprehensive list of 22 the bills currently under consideration in the legislature, see pages 12-13

Thanks for all you do out there! Be safe and I hope to see you soon,

Coy

Coy D. Porter retired from Provo Fire & Rescue after 30 years of service; he then worked for almost four years as the Assistant Director of Training at UFRA. Porter enjoys his association with the firefighters of Utah in his position as State Fire Marshal.

A MESSAGE FROM THE EDITOR

by Lori Marshall

After eight years working in the Certification Department for the Utah Fire and Rescue Academy, I’m taking on a new role as managing editor of the *Straight Tip* magazine. I have loved working with those who sacrifice so much for the good of others in our state. Unless a person has been directly served by a firefighter, I don’t think they understand the training and dedication that defines the life of a firefighter.

As I take this new role, I look forward to working with more members of the fire service and learning more about your training needs and how *Straight Tip* can provide additional information that will benefit you in your firefighting career. If you have any suggestions for the magazine, please contact me at Lori.Marshall@uvu.edu or at 801-863-7715.

PROMOTIONS:

Mike Phillips has been promoted to be the new chief of Cedar City Fire Department (CCFD). Chief Phillips got his start with Cedar City in May of 1994 as a volunteer firefighter. He took a full-time position in November of 1998. As opportunities arose, Chief Phillips enrolled in available classes through UFRA and UVU, and as a result became the Cedar City fire marshal in May of 2002. In 2005 he was promoted to fire marshal/battalion chief and received his executive fire officer (EFO) in July of 2014. Mike accepted his new appointment as CCFD’s chief in January 2015.

Dave Thomas has been appointed as new fire chief for Pleasant Grove City. Dave began his career with Orem Fire Department in 1979. He enjoyed serving in Orem for 27 years. In 2007 he retired and subsequently took the deputy fire chief position with Pleasant Grove Fire Department, working for Chief Marc Sanderson. He is excited for the opportunity to serve the citizens and continue to work with the honorable men and women at Pleasant Grove Fire Department as the fire chief.

HONORED FIREFIGHTER:

In December of 2014, Assistant Chief Dean McCoy was honored by Payson City for his 50 years of continuous service to its citizens.

Dean worked for Dugway proving grounds as a full-time firefighter and retired from his career with the federal government in 1993. Dean joined the Payson Fire Department in 1963. Since that time he has served in numerous positions, including chief, steward, and currently assistant chief.

Chief McCoy is among the most dedicated of our department. He is at the station almost every day working on equipment and keeping things in top working order. Payson Fire Department is honored to have him represent our organization.
Years ago when I became the battalion chief and a member of the Utah State Fire Chiefs Association, I had a pretty good idea of what the organization was about. From the periphery, I knew the organization was as good as we made it and becoming a member was a good thing. Soon after becoming the fire chief and getting bombarded with information from the Western Fire Chiefs Association and the International Association of Fire Chiefs, I had to take a step back and try to understand the different organizations and how they blended; I’m sure many have the same feeling. Hopefully these short descriptions will help you better understand how these organizations fit together and how they function.

**Utah State Fire Chiefs Association**

It shouldn’t be too difficult to understand what our Utah State Fire Chiefs Association tries to accomplish. This organization is established to further the advancement of the fire service in Utah, working with small groups of fire chiefs throughout the state. This organization works to have a voice that represents all of the fire chiefs in Utah, whether it is training, legislation, policy, representation, or merely the prospect to get to know your peers throughout the state. We provide information and opportunities for all members and welcome any opportunity to make this a better organization.

**Western Fire Chiefs Association**

Utah State Fire Chiefs is a part of the Western Fire Chiefs Association. The Western Fire Chiefs Association is a division of the International Association of Fire Chiefs and is made up of 11 states or territories: Utah, Nevada, Arizona, Alaska, California, Washington, Oregon, Hawaii, Idaho, Montana, and the Western Pacific Islands. The Western Chiefs is a highly functioning organization that helps our cause here in Utah in many ways. Most all of us receive the “Daily Dispatch,” which is tailored to our area. It also provides news and information that affects the fire service from around the country. The Western provides a “bookstore,” which, when our state uses it, provides Utah State Fire Chiefs Association with a rebate. The Fire Rescue GPO (Group Purchasing Organization) provides fire departments and their members access to aggressively priced contracts and equipment. Most importantly Utah fire departments get national representation as a part of this organization.

**International Association of Fire Chiefs**

The Western Fire Chiefs Association falls under the umbrella of the International Association of Fire Chiefs (IAFC). The IAFC represents the leadership of firefighters and emergency responders worldwide. The IAFC’s mission is to guide current and future career and volunteer firefighters, EMS chiefs, chief fire officers, company officers, and managers of emergency care and service. They provide many resources and information such
as grant opportunities, national legislation, position papers, conference opportunities, and much more that will benefit us all.

I hope that this short article may alleviate some confusion, but I encourage you to visit the websites of the organizations listed and take advantage of what these organizations have to offer. They are here for you and the advancement of our profession. Whether we are career, part-time, or volunteer departments, we are all professionals and want the best and most appropriate tools to do our job the best we can.

https://www.utahfirechiefs.org/
http://www.wfca.com/
http://www.iafc.org/

Gil Rodriguez has worked for Murray City Fire Department for 30 years. Rodriguez is originally from Los Angeles, California. He attended college at Southern Utah University, and upon graduation he moved back to Los Angeles, where he taught for three years. He moved to the Salt Lake area in 1981, where he taught for three years at South High School before getting hired by Murray City Fire Department in 1984.

APPARATUS SHOWCASE

Farmington City Fire Department

The Farmington City Fire Department (FFD) has taken delivery of a new / demo 116’ Articulating Platform / Quint manufactured by Pierce Manufacturing Inc., Appleton, WI.

This apparatus comes equipped with a 116’ Bronto Skylift (Gen3), 500 hp Detroit DD13 engine, Allison EVS4000 series transmission, 2,000 GPM Waterous pump (S100D / TC20B), Akron Navigator Valve Controllers—flow metered, 300 gallon poly water tank, and a full complement of ground ladders mounted on a Pierce Arrow chassis also equipped with TAK 4, ABS, personnel air bag system, command zone, side roll protection, traction control, stability control (ESC), Whelen lighting & signaling devices, and 10K Harrison hydraulic generator with heavy duty 200’ cord reels. FireCom wireless headsets are also incorporated for seating positions and platform.

Due to the unique operational capacity of this truck, all FFD personnel are required to undergo extensive training prior to placing the apparatus in service in the spring of 2015.

FFD administration would like to thank its city council, mayor, and city manager for their support and recognize all of its firefighters and engineers for stepping up to the challenge of yet another great benchmark at FFD!

Farmington City Fire Department
Proud Protectors of Your Life and Property
– Since 1907
The 2015 Utah Fire Caucus Luncheon held on February 9, 2015, attracted about 87 legislators and a similar number of firefighters from around the state. Battalion Chief Tom Roberson from Salt Lake City Fire Department (SLCFD) and Captain Fitzgerald Peterson from Unified Fire Authority (UFA) received the Distinguished Service Award for their service to Operation Cover Up. It is estimated that over 100,000 cold weather items have been donated to those in need through their work.

Operation Cover Up, as named by program founder SLCFD Battalion Chief Tom Roberson, aims to keep the less privileged warm in heart and body with donated blankets, warm weather clothing, and stuffed animals. To date, agencies that have received items from Operation Cover Up include the following:

- The Road Home Men’s, Women’s, Family and Overflow Shelter
- The Christmas Box House
- Salt Lake County Division of Aging Services
- YWCA
- Shriner’s Hospital
- The Rape Recovery Center

Unbeknownst to Tom, at the inception of Operation Cover Up, Captain Fitzgerald Petersen of UFA was also collecting blankets and coats. About three years into Operation Cover Up, a meeting was arranged between Roberson and Fitzgerald to coordinate their efforts.

Because of these men’s efforts, Operation Cover Up has been a successful program for over 22 years. This year’s Distinguished Service Award was given to both Tom Roberson and Fitzgerald Petersen for going above and beyond the call of duty.

Also as part of the caucus, outgoing fire caucus co-chairs, Sen. Pat Jones, Rep. Larry Wiley, and Rep. Ronda Menlove, received brass nozzles for their support of the fire service. Sen. Karen Mayne, Rep. Eric Hutchings, and Rep. Carol Moss received fire caucus badges as newly appointed co-chairs. All the awards were presented by Sen. Curt Bramble.

As of this writing (2/27/15), the Joint Council is monitoring 27 bills that affect the fire service.

For a comprehensive list of 27 of the bills currently under consideration in the legislature, see pages 12-13.
Cedar City Fire Adds Two New Rigs to Their Fleet

In July of 2014, just days before the Fourth of July, the Cedar City Fire Department (CCFD) received delivery of two fully equipped, brand new and state-of-the-art firefighting apparatus with a price tag of $1,750,000. The first apparatus is a 2014 Pierce Velocity Pumper and the second is a 2014 Pierce 100-ft Ladder/Platform. The new additions to Cedar City’s fleet will serve Cedar City, Enoch, and Iron County.

The Pierce Velocity Pumper will replace CCFD’s 1974 Mack and will become Cedar’s front line pumper. The 1974 Mack (CF600 1250) will become a reserve pumper, and the 100-ft Ladder/Platform will be a welcomed addition to CCFD’s fleet, increasing its suppression capabilities to keep up with the ever-increasing number of horizontal high-rise buildings erected in Cedar’s response area in recent years. The new apparatus will also greatly increase Cedar City’s capabilities when it comes to the preservation of life and property while adding significant points towards helping Cedar City maintain a class 4 (ISO) fire protection rating.

The two new apparatus were obtained using Permanent Community Impact Fund Board (CIB) funding. Application for these funds began nine years ago when Cedar City realized that inflation (approximately 3% to 6% increase in pricing each year) was outpacing the money that Cedar City Corporation was setting aside for future apparatus (approximately $50,000 per year). In June of 2013, Cedar City Fire Department was notified by the CIB board that funding for the new apparatus had been approved and that with Cedar City Council approval, enough money was available to purchase the requested pumper, and in fact money was also available to purchase the favorably needed 100-foot aerial platform.

The CIB is a Utah program that provides loans and/or grants to state agencies and subdivisions of the state that are or may be socially or economically impacted, directly or indirectly, by mineral resource development on federal lands. The source of the CIB’s funding are the mineral lease royalties returned to the state by the federal government. The CIB will consider only those applications submitted by an eligible applicant for an eligible project. Information on the CIB program can be obtained by visiting the website at http://jobs.utah.gov/housing/cib/cib.html.
## View From the Hill 2015 Legislation

**Joint Council of Fire Service Organizations**

**Updated: 27 Feb 2015 1:45 pm**

<table>
<thead>
<tr>
<th>Bill #</th>
<th>Title</th>
<th>Sponsor</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB 22</td>
<td>Fire Code Amendments</td>
<td>Sen. Curt Bramble</td>
<td>CO detector bill makes technical changes citing the correct NFPA standard</td>
<td>Done - Support</td>
</tr>
<tr>
<td>SB 56</td>
<td>Wildland Fire Policy Amendments</td>
<td>Sen. Evan Vickers</td>
<td>Puts in place wildland policies that move the Governor's wildland efforts forward (funding will be addressed next year)</td>
<td>Done - Support</td>
</tr>
<tr>
<td>SB 65</td>
<td>In-State Tuition for Fallen Public Safety Officer's Families</td>
<td>Sen. Curt Bramble</td>
<td>Removes a “Need Based” requirement to receive a tuition waiver for surviving spouse or child of a police officer or firefighter killed in the line of duty</td>
<td>Done - Support</td>
</tr>
<tr>
<td>SB 91</td>
<td>Post Retirement Employment Amendments</td>
<td>Sen. Lyle Hillyard</td>
<td>After a 60 day separation from employment, that employee may be employed in a part-time position if that part-time position has been in place for at least 3 years and is with a different agency from which the member retired.</td>
<td>Senate to Interim Study List - Watch</td>
</tr>
<tr>
<td></td>
<td>Prescription Database Revisions</td>
<td>Sen. Todd Weiler</td>
<td>Requires Law Enforcement to obtain a warrant in order to access this database</td>
<td>Passed Senate, House Bus &amp; Lab - Support</td>
</tr>
<tr>
<td>SB 135</td>
<td>Workers' Compensation Coverage for Firefighters</td>
<td>Sen. Karen Mayne</td>
<td>Assumes that firefighters with Pharynx, Esophagus, Lung or Mesothelioma cancers contracted that cancer as a result of an on-duty exposure (presumptive)</td>
<td>Passed Senate, House Bus &amp; Lab - Support</td>
</tr>
<tr>
<td>SB 172</td>
<td>Emergency Medical Services Amendments</td>
<td>Sen. Curt Bramble</td>
<td>Medicaid re-imbursement - increase reimbursement revenue from ambulance transports from current maximum of $142.00</td>
<td>Done - Support</td>
</tr>
<tr>
<td>HB 29</td>
<td>Liquified Petroleum Gas Board Amendments</td>
<td>Rep. Fred Cox</td>
<td>Allows the use of email when nominating/balloting for a board member who represents the LP Gas industry</td>
<td>Done - Support</td>
</tr>
<tr>
<td></td>
<td>Post Retirement Employment Task Force</td>
<td>Rep. Rich Cunningham</td>
<td>Removes the one year separation from employment from any URS covered employer and makes it only a 60 day separation. Keeps in place the existing benefit restrictions.</td>
<td>Passed House, Sen Retire comm - Support</td>
</tr>
<tr>
<td></td>
<td>Seat Belt Law Amendments</td>
<td>Rep. Lee Perry</td>
<td>Moves seat belt enforcement to a primary offense, amended to provide a warning for first offense</td>
<td>Passed House, Sen 2nd Read # 62 support</td>
</tr>
<tr>
<td>HB 115</td>
<td>Public Safety Retirement for Dispatchers</td>
<td>Rep. Kraig Powell</td>
<td>Provides for trained and certified dispatchers to be included in the Public Safety system</td>
<td>House 3rd Read #26 - Support</td>
</tr>
<tr>
<td>HB 133</td>
<td>Firefighter Retirement Amendments</td>
<td>Rep. Don Ipson</td>
<td>Allows fire service the same consideration as public safety when transferring into administrative positions</td>
<td>Done - Support</td>
</tr>
<tr>
<td>HB 151</td>
<td>Volunteer Firefighter Post Retirement Employment Amendments</td>
<td>Rep. Doug Sagers</td>
<td>When an individual retires from a URS covered position and then serves as a volunteer firefighter, that person may make a certain amount from the fire department's employer before any reductions from the individual's retirement benefit.</td>
<td>Passed House, Senate Floor - Support</td>
</tr>
<tr>
<td>Bill No.</td>
<td>Description</td>
<td>Sponsor</td>
<td>Description</td>
<td>Status</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>HB 196</td>
<td>Wildfire Mitigation Amendments</td>
<td>Rep. Joel Briscoe</td>
<td>Landowners may qualify for a tax credit for mitigation efforts of 50% of the cost to the landowner, not to exceed $2,500</td>
<td>Sent to Interim Study list - Watch</td>
</tr>
<tr>
<td>HB 212</td>
<td>Wildland Fire Liability Amendments</td>
<td>Rep. Mark Wheatley</td>
<td>Allows the use of certain kinds of ammunition with written permission of the State Forester Fiscal = $0</td>
<td>Passed House, Sen Nat Res-watch</td>
</tr>
<tr>
<td>3rd Sub</td>
<td>Fire Code Amendments</td>
<td>Rep. Michael Kennedy</td>
<td>Key Box requirements, Appeals process &amp; accountability of the master keys.</td>
<td>Passed House, Sen FLoor-Support</td>
</tr>
<tr>
<td>HB 246</td>
<td>Building Code Review and Adoption Amendments</td>
<td>Rep. Brad Wilson</td>
<td>Updates to 2014 NEC and repeals the Farmington st; adopts the Residential code every 6 years, does not allow locals to adopt any amendments to codes** will modify on floor**</td>
<td>House 3rd Read #27 - Watch</td>
</tr>
<tr>
<td>HB 285</td>
<td>Building Code Amendments</td>
<td>Rep. Fred Cox</td>
<td>Updates to the current National Electrical Code (2014) and repeals the Farmington City statute(s)</td>
<td>House Bus &amp; Labor Watch</td>
</tr>
<tr>
<td>HB 286</td>
<td>Building Code Amendments</td>
<td>Rep. Brad Dee</td>
<td>Establishes a peer review board for EMS personnel regarding disciplinary procedures and actions involving EMS personnel</td>
<td>House 3rd Read #32 - Support</td>
</tr>
<tr>
<td>HB 288</td>
<td>Line of Duty Death Benefits for Peace Officers and Firefighters</td>
<td>Rep. Paul Ray</td>
<td>Increases lump sum from $1,000 to 6 months final average salary, provides paid health coverage for spouse &amp; children</td>
<td>House Time Certain Feb 26 3:30 pm - Support</td>
</tr>
<tr>
<td>HB 292</td>
<td>Emergency Medical Service Providers Amendments</td>
<td>Rep. Daniel McCay</td>
<td>The Utah State Fire Marshal's Office was officially formed by the State Legislature in 1964 and has now completed 50 years of service to the citizens and fire service of Utah.</td>
<td>Support</td>
</tr>
<tr>
<td>HB 315</td>
<td>Building Permit Amendments</td>
<td>Rep. Mike Schultz</td>
<td>Allows for building permits prior to infrastructure being in place</td>
<td>House Rules - Watch</td>
</tr>
<tr>
<td>SB 226</td>
<td>Search and Seizure Amendments</td>
<td>Sen. Mark Madsen</td>
<td>Requires a warrant to use “any imaging device”</td>
<td>Sen 2nd read #68</td>
</tr>
<tr>
<td>SB 234</td>
<td>Utah Fire Prevention Board Amendments</td>
<td>Sen. Evan Vickers</td>
<td>Adds 3 new positions to the fire prev board; 1 from County of 1st class, 1 from 2nd, 1 from 3-6</td>
<td>Sen Nat Res</td>
</tr>
<tr>
<td>HB 343</td>
<td>Utah Communication Authority Emergency Radio and 911 Amendments</td>
<td>Rep. Brad Dee</td>
<td>Sets rate of 71¢ on all phones, funds monthly radio fees and allows for funding of updated infrastructure</td>
<td>House Rev &amp; Tax - Support as written</td>
</tr>
</tbody>
</table>
When responding to wildland fires, you may not have given much thought to protecting the origin since your primary objective is to suppress the fire. However, actions taken during the initial phases of suppression are critical to a successful fire investigation. This cannot be accomplished without the help of suppression forces.

The role of the first responder may vary by jurisdiction, but generally there are actions incoming resources can take to protect the origin area and secure evidence. First responders are directly involved in determining cause and may witness events or know specific details needed in an investigation. While most wildfires are suppressed at less than one acre, it is these small fires that may contain evidence that is a key to identifying trends. By understanding trends, we can design fire prevention strategies that address better product design and enhanced safety practices by the public. In addition, arson may be more quickly identified. When the fire results from negligent or intentional actions, costs for suppression may even be recovered in some cases.

Protecting origins and capturing observations may be as simple as expanding awareness of what is happening on and around the fire during initial attack.

**Approaching the Scene**

**Record Observations**

Your observations en route to the incident can be extremely important. Take notice of people, vehicles, or anything unusual such as open gates. If possible, write down specific details such as license plate numbers. Take photos of passing vehicles and other human activity that is likely to become compromised by an escalating incident. Admittedly, this can be difficult to do when you are alone but can be almost impossible to recall later. If you have the available personnel, designate a note taker or photographer who can quickly document these helpful investigation elements.

**Document Origin Area**

Just narrowing down the origin area can save investigators a tremendous amount of time and can be accomplished by documenting where the fire was actively burning when you arrived. It is easy to focus on the visible smoke and fire, but the area that is already burned is very important to the investigator because this is where the fire originated, and it may contain crucial evidence if protected. As the fire grows and winds shift, this information can be invaluable.

Wildfire origins differ from those of most structural fires in that the fire is not typically of great intensity where it starts. This leaves a classic sign of cooler burning and partially
burned vegetation remains. As the fire comes under influence of wind and slope and moves further from the origin, it gains in intensity. Look for these signs and others to identify a general origin area, such as the V- or U-shaped fire perimeter that is created as the fire develops a head and fans out from flanking.

**Suppression Tactics**

On a wildfire, protecting the origin and providing for safety should never be in conflict. Firefighter and public safety remain the first priority always. Just remember that fire investigators rely on the fire’s remaining fuels (burn indicators) to discover and verify the cause of the fire, and there’s a lot more to consider than suppression itself.

**Avoid Contaminating the Origin**

As you choose an anchor point, be cognizant of the general origin area. This is often the heel of the fire, but avoid driving through it. Although fighting fire near the origin is usually a mop-up operation, allow heavy fuels to burn themselves down. If the fire is small, establish containment lines and go light on mop-up. In rare circumstances, this may mean that the area is monitored and allowed to burn until investigators can examine it.

Direct and indirect wet lines near the origin can frequently offer the best burn indicator protection under active fire situations. Many points of origin have been protected by just a few feet of buffer from vehicles. Also consider where staging or other operations are established. The cooler area of the fire may seem like an ideal place to park rigs but it may also be the origin.

Be careful not to drop things like cigarette butts, cans, or water bottles near the origin as this can contaminate the scene. Even overturning rocks can delay the investigation and may create an unprecedented need to collect unrelated items.

**Be Careful with Water near the Origin**

Water use can be detrimental to fragile evidence and will destroy tire tracks or footprints if used in excess. Avoid using a straight stream to apply water, as it can literally wash the evidence away. If water is needed to cool hotspots in the origin, use a fog nozzle if possible.

**Document Harm Done**

Follow your agency protocols for protecting or documenting evidence that may be harmed by suppression actions. Fragile evidence such as tire tracks, footprints, or the source of ignition may be inadvertently destroyed during suppression. Do your best to preserve any type of evidence.

**Communication**

Communication between the incident commander, first units on scene, and the fire investigator can yield critical information. Brief the fire investigator on your observations of fire activity, witnesses, photographs, and other pertinent information. Also, be sure to mention whether you conducted any firing operations. This will assist with quickly identifying the origin and will avoid encumbering a larger analysis area than necessary.

First responders are critical to the successful determination of cause.

**Ensure an Investigator is Coming**

It may be necessary to ask whether a fire investigator has been dispatched to the incident. Some fire agencies may dispatch an investigator automatically depending upon jurisdiction and others may rely on the incident commander to request this resource. Timeliness of ordering an investigator is important not just for tracking the fire indicators back to the origin but also for identifying the responsible party, talking to witnesses, and collecting fragile evidence.

**Keep Witnesses**

If witnesses or the responsible party are on scene, ask them to wait to speak with investigators. Write down names and contact information. It is easy for these individuals to leave if not in custody and investigators may not be able to identify them later.

**Communicate with Incoming Resources**

Brief all incoming resources on the areas to be avoided. Flagging may be used to help protect any evidence or the origin from damage. Hazard flagging (yellow and black stripes) works well in this instance, as firefighters will avoid these locations.

First responders are critical to the successful determination of cause. The National Wildfire Coordinating Group has developed a short course called FI-110 Wildland Fire Observations and Origin Scene Protection for First Responders. Contact your local wildland fire agency for more information.

Teresa Rigby has investigated wildfires for 14 years and currently is a Fire Prevention and Mitigation Specialist for the Bureau of Land Management, West Desert District.
When discussing fireground tactics, perhaps the one fire scenario that will invoke the most debate is that of attic fires. In the course of my career, I have fought numerous attic fires using the tactics we will cover in this article. I believe each one has valid arguments, depending on the fire conditions.

First let’s talk about identifying the attic fire and related hazards. Identification of an attic fire is fairly easy, especially if there is sufficient volume of smoke to be pushed through gable vents or openings in the soffit and/or fascia. As with all structure fires, it is imperative to obtain a 360-degree walk-around report to assist in making proper tactical decisions. The use of a thermal imaging camera in conjunction with the walk around will enhance your ability to confirm any attic involvement if not readily visible.

HAZARDS
Older structures with larger attic spaces may be more prone to heavy storage and possible bedroom locations. Newer structures with smaller attics may still be crammed full of storage and could potentially have a furnace in the attic space. As we know with lightweight construction (circa mid 1970s to present), truss failure will be more rapid and could negate an offensive strategy if a significant amount of fire exists. Unlike an interior house fire, which is typically what we call “room and contents,” an attic fire actually involves the structural components due to the non protected, non sheet rocked areas of the attic itself. Often, we are already way behind on the “fireground clock” due to slower detection of an attic fire than an interior house fire.

TACTICS
There are three distinct attic fire tactics that can be identified:

End wall gable attack
This attack is the least risky and may work well with significant fire in the attic that hasn’t broken through the roof. In this tactic, a hoseline with sufficient GPM to overcome the BTUs is placed through either a gable vent or bird blocking vent if large enough. A fog pattern is employed, or if necessary a piercing nozzle through the siding, utilizing the confined area to assist in getting steam conversion to suppress the fire. If quick knock down is achieved, then a follow-up attack from below with ceiling being pulled (and salvage covers in place) would be in order.

Opening the roof
This approach would be similar to when an end wall attack might be utilized but involves more risk by placing firefighters directly above flames without the protection of drywall or being further from the fire (such as in a strip mall in a trench cut type operation). This tactic might be used when confronted with an older structure (pre late 70s) that has true dimensional lumber rafters (versus engineered lightweight trusses) and has interior ceiling protection with lathe and plaster. This tactic involves cutting into the roof deck, opening up a hole similar to vertical ventilation, and applying water directly to the fire in the attic. The lathe and plaster may make an attack from below difficult and time consuming.

Attacking from below
This tactic is probably the one I have utilized the most in my career. Many times we know we have an attic fire on arrival by the visual clues we see, but we may not know exactly where the fire is located. In this tactic we use a cautious approach upon entering the structure with a hoseline with enough GPM to overcome the BTUs and immediately make a quick inspection hole with a pike pole/trash hook to see what the conditions are like. As we progress into the structure to locate the fire, take caution to make small inspection holes until smoke or fire is visualized. Some of these inspection holes may be avoided if you have a clear indication of the area of the attic involved from outside visual clues or by using a thermal imaging camera. At
that point you may still be able to use the “confined fire” extinguishment ability with steam conversion. The use of a piercing nozzle once again could be beneficial. I like to have sufficient personnel to make sure I have salvage operations going simultaneously with my fire attack and enough truckies with hooks to pull ceiling as needed. It is imperative to pull lots of ceiling to gain total extinguishment, especially if encountering cellulose (blown) insulation.

This tactic is certainly not without inherent risk. If it’s too risky to put someone on a roof, it’s just as risky to put them below. This is where having an Incident Commander (IC) totally committed in a sterile cockpit environment “flying the plane,” so to speak, is crucial. Many times I have said to the IC, “We just about got it, Chief; give me another minute!” Fortunately my astute IC said, “Negative, Interior. We are going defensive; withdraw from the structure. Alarm, give me emergency traffic.” Upon exiting, I could see it was the right call as the attic collapsed into the house like a deck of cards.

As we fight attic fires, we must never lose sight of our risk management mantra: “We risk a lot to save savable lives. We risk our lives a little (within a structured plan) to save savable property. We won’t risk anything for lives or property that is lost.”

Kevin Ward is a 37-year fire service veteran, having been the fire chief for Layton City since 2004. Prior to this appointment, Chief Ward progressed through the ranks from firefighter/paramedic to battalion chief with the Chandler Fire Department in Arizona. He holds several NWCG qualifications, such as ICT3 and Structure Protection Specialist, and is an instructor for the Utah Fire & Rescue Academy. Chief Ward has been an instructor for UFRA’s Command Training Center since its inception.

EXPERIENCE:
THE UVU DIFFERENCE

4,680 ft² Fire Evolutions Laboratory

26 Full-time career firefighter instructors

70% Employment placement in emergency services within 3 years

438 Combined years of instructor experience

1,600 ft² State-of-the-art strength training and fitness facility

FIND OUT MORE AT
uvu.edu/esa/academics/rca.html

801-863-7749

April - June 2015 | 15
Years ago while winding down from a tiring day at the firehouse, I received a phone call. The off-duty captain on the other end of the line had gone out to dinner with his parents and wife in his brand new truck. Upon returning to his truck, he noticed a KY jelly–dripping condom had been placed on his antenna. In addition, KY jelly was all over the door handles and hood. To say the least, he wasn’t happy. He believed these actions were committed by an on-duty crew and wanted them held accountable. I asked for a moment to do some investigation and told him I’d call right back.

My next call was to the acting captain at the time of the errant behavior. The conversation started with, “I’m going to ask you a question. Please consider your answer carefully before you respond.” To the acting captain’s credit, he immediately fessed up. Long story short, the offending crew was required to make an immediate apology and received a written reprimand.

Times have changed. What once may have been acceptable or allowable behavior in the fire service is no longer. Uniformed, badged firefighters playing pranks in our cellphone-camera-riddled society just doesn’t pass muster any longer. Firefighters will always be fun-loving, light-hearted people, but as a battalion chief you must quickly discern where the line must be drawn. More importantly, it will fall on you to quickly hold the offenders accountable and correct behaviors that cross this imaginary line to minimize potential damage.

Far too real behaviors that occur in the fire service on a daily basis include physical assault or near assault on a fellow employee, sabotaging to one degree or another of personal protective gear, mocking or otherwise taunting a member of the public, irresponsible use of equipment or apparatus, and other potentially inappropriate on-duty behavior.

Ask yourself: if the general public were allowed to see what is happening or has happened, would they think it amusing? Better yet, what if that “film” was played over and over, say on a news show? How would it then be perceived? Again, it’s not that farfetched when you consider that almost everybody is now carrying a cell phone video camera. Fortunately, the times firefighters go above the call of duty far outweigh instances of poor behavior. It’s every bit as important to recognize these positive behaviors.

As a chief officer your view and opinions will unavoidably change over time as your duties and responsibilities change as well. Your actions as a chief officer should revolve around your organization’s core values, mission statement, and vision. These beacons of direction will greatly assist and comfort you in your work as a manager and a leader in your organization.

Paul Hewitt began his career as an Orem City reserve firefighter in 1987. After 20 years with the Salt Lake City Fire Department he served as a fire chief in Arizona before his 2011 appointment to fire chief of the Park City Fire District.
On behalf of the staff at the Utah Fire and Rescue Academy (UFRA), we would like to thank everyone who made Winter Fire School 2015 a successful experience. Our mission statement at UFRA is “to train, validate, and support the Utah fire service at the highest quality level possible.” I believe we accomplished that goal at Winter Fire School 2015. Close to 750 students from over 150 agencies or departments made the trip to St. George, Utah, this year.

We at UFRA strive to introduce new classes, instructors, and formats to each Winter Fire School, and this year was no exception. We hope participants benefited from some of the changes.

New to Fire School This Year

- **Emergency Apparatus Driving Simulator** – This simulator allowed students the realistic feeling of being behind the wheel of a fire apparatus and simulated different road situations and conditions without having to leave the confines of our trailer.

- **Fire Investigator Prop** – This hands-on prop allowed firefighters to actually investigate a fire and determine its cause and origin.

- **Class size and formats** – We used a couple of different formats this year to allow more participants the hands-on experience. We reduced some classes from 16-hour and 8-hour to 8-hour and 4-hour classes, which allowed double the participants to participate.

This year we had 79 classes, which were instructed by a cadre of instructors from all over the country. I can honestly say that all of our out-of-state instructors tell us that this is one of their favorite schools to instruct because of the support and caliber of firefighters attending the school. I would like to thank the instructors from within the state as well. Many have been teaching at UFRA for several years.

As in previous years, we could not be as successful without the help of the St. George and surrounding fire departments. I would like to extend a special thanks to them.

We are already planning Winter Fire School 2016, with a goal to continually improve and keep our instructor cadre experienced and relevant. We at UFRA are looking forward to next year and hope to continue the tradition of excellence that you have come to expect. **The dates for next year are January 8–9, 2016.**
In the fall of 2014, Salt Lake City Division Chief Martha Ellis graduated from the Naval Postgraduate School’s Center for Homeland Defense and Security with her master’s in security studies. The Monterey California–based program is eighteen months long and includes a distance-learning component in addition to travel to Monterey, California, for six two-week sessions plus the capstone and graduation week. The distance-learning component of the course was rigorous, as students are expected to participate in online discussions and group projects and regularly submit written assignments.

What Is the Center for Homeland Defense and Security?
The Center for Homeland Defense and Security (CHDS) was created in 2002 in response to the 9/11 attacks. The primary goal was to combine research, scholarship, and professional disciplines in order to improve the nation’s security effort. Since its inception, the school has graduated 725 master’s students at a rate of approximately 90 per year. Ellis is one of 10 master’s graduates from Utah.

In addition to the master’s program, the center also offers the Executive Leadership Program, executive education seminars, the Fusion Center Leadership Program, the Pacific Executive Leaders Program, the University and Agency Partnership Initiative, and self-study courses. Chief Ellis highly encourages everyone in the emergency response arena to apply for the courses offered. She stated, “It’s critical that leadership recognize the value of the Center for Homeland Defense and Security and how participation benefits individual agencies, municipalities, states, the national security effort and the center itself. The networking alone,” she continued, “adds a level of connectivity that can bring endless value to an organization.”

She acknowledges that it is a big commitment for an agency to sponsor an employee in the master’s program; however, most departments are able to recognize the value of this caliber of an education. All travel, books, tuition and per diem expenses are covered by the center. Utilizing vacation time, time set aside for department business, or a combination of the two will be time well spent and invested by the student and the sponsoring agency. Collaborating with the sponsor on topics for written assignments can also add immediate value to the sponsoring agency, as the center facilitates research that can address the current concerns the sponsoring agency may be facing.

What Will CHDS Students Learn?
The master’s curriculum is a rigorous study in critical infrastructure protection, the psychology of terrorism and fear, technology, global and domestic intelligence systems, comparative governance, strategic planning and budgeting, and research and writing. Class sizes are kept at thirty-two students, which is further reduced by half when the class is divided into cohorts. The intimacy of the classroom portion of the course affords personal attention to each student, enhancing the learning experience.

Graduates develop skills in program management, public speaking, critical thinking, and collaboration through multiple time-sensitive group and individual projects. Students are also required to compete a master’s thesis prior to graduating.

Ellis is excited to use the training she received—in addition to the unparalleled network she is now a part of—to foster a collaborative spirit within her area of responsibility. For more information about the Naval Postgraduate School’s master’s program in the Center for Homeland Defense and Security visit https://www.chds.us/?masters/overview.

Ellis’ thesis can be found at https://www.hsdl.org/?abstract&did=760171
The Forest Service has made the RT-212 Chainsaw Refresher a mandatory training for chainsaw operators. The State of Utah Wildland Fire Certification and Training Committee (SUWFCTC) has developed a RT-212 Wildland Fire Chainsaw Refresher course to meet this requirement. This course will be available to all state personnel and fire departments. This refresher course has been developed to be presented in a classroom setting.

The RT-212 chainsaw refresher training requires a minimum of two hours and will cover agency policy, PPE, safety, chainsaw maintenance, lessons learned, case studies, and changes to the carding system.

The previous Class A, B, and C Faller categories have been changed to Faller 3, 2, 1, respectively, and the process that the classifications are assigned has also changed. The new standards use complexity rather than the size of the tree to determine the classification of faller.

The Resource Ordering and Status System (ROSS) and Incident Qualification System (IQS) will convert existing Faller qualifications to the new qualification designations.

The committee is developing a chainsaw policy to be used for state personnel and cooperators. The policy will specify the requirements of the FAL 3, 2, 1 position task books.


For further information on how to schedule a RT-212 Chainsaw Refresher, contact your local Forestry, Fire and State Lands fire management officer or district fire warden.

On December 17, 2014, Class #69 of the Utah Valley University Emergency Services Recruit Candidate Academy (RCA) held its graduation ceremony. During the program, the College of Aviation and Public Services (CAPS) Associate Dean Tom Sturtevant, Ph.D., and Emergency Services Department Chair Gary Noll, M.Ed., spoke to the parents, friends, and family of the class. Candidate Scott Horrocks was awarded the Outstanding Student Award as well as the Charles J. DeJournett Recruit Excellence Award and Instructor Recommendation. Firefighter Will Mackintosh was awarded the Outstanding Instructor Award. Dustin Fowkes was the class officer. The following candidates earned the Physical Training Excellence Award: Dustin Fowkes, Benjamin Guerra, Cole Caldwell, Saman Kermani, Scott Horrocks, William Mines, Jesse McGrath, Jacob Campbell, Carlos Lopez, Alexandra Higham, and Nathan Parrish. Andy Byrnes, M.Ed., is the RCA program coordinator as well as the lead instructor for the semester and Captain Merrill Bone was the assistant lead instructor.
Research indicates that hazardous atmospheres are responsible for the majority of confined space deaths and injuries. OSHA defines a hazardous atmosphere as “an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness from one or more of the following causes:

1. Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);
2. Airborne combustible dust at a concentration that meets or exceeds its LFL; . . .
3. Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
4. Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, and which could result in employee exposure in excess of its dose or permissible exposure limit;
5. Any other atmospheric condition that is immediately dangerous to life or health” (OSHA Standard 1910.146).

Most often, these hazardous atmospheres are a result of inadequate ventilation. Consequently, one of the first hazard control objectives for rescuers during a confined space response is to ventilate the space. The purpose of ventilation during a confined space rescue operation is to supply enough clean air into the space and/or exhaust contaminated air from the space to eliminate any atmospheric hazards present. The ultimate goal of ventilation is to bring the space back into acceptable entry conditions by exchanging the air within the space as many times as possible.

Rescuers should consider the following when determining the ventilation method needed during a confined space rescue:

- Characteristics and size of the space
- Size and position of available openings
- Source and properties of the contaminant
- Ventilation type and fan capabilities
- Exhaust location and direction
- Environmental conditions
- Equipment and time available
- Patient condition and location

Mechanical ventilation using fans and ductwork is the only acceptable type of ventilation for confined space rescue operations; passive ventilation is just too slow and ineffective during emergency operations. Mechanical ventilation methods can be divided into three broad categories: positive pressure ventilation, negative pressure ventilation, and combination ventilation. Air exchanges, fans, and ductwork are other factors to consider when ventilating confined spaces.

Positive Pressure Ventilation (PPV), also known as supply ventilation, works by forcing clean air into the space through an opening. This introduction of clean air into the space not only raises the oxygen levels back within the acceptable range; it also mixes clean air with any contaminants, diluting them. While PPV does not necessarily “force” products out of the space, it does create a slight increase in air pressure and volume within the space, causing the contaminated air to exit the space out of any available opening. PPV is the quickest, most effective way to change the atmosphere within almost any space. However, rescuers must remember that PPV may cause other potentially undesirable issues as well, such as moving a rich explosive
atmosphere into its flammable range, stirring up dust or particulates, and pushing contaminates into other areas.

**Negative Pressure Ventilation (NPV)** works by “pulling” contaminated air out of the space through the fan itself. Clean air is then drawn into the space from the outside. Sometimes known as exhaust ventilation, NPV is most effective when the fan or ductwork face is placed as close to the product as possible. It works well in vertical spaces for products with a vapor density greater than one. Localized NPV is also used when contaminates are being released into the space from a single point source, such as an open valve, a pool of sludge, or during torch cutting operations. NPV allows rescuers to direct the contaminated air into a specific location of their choosing. However, it is usually slower and overall less effective than PPV.

**Combination Ventilation** utilizes the best aspects of both PPV and NPV. Using two or more fans, combination venting can quickly change any atmosphere. One fan provides positive pressure to the space while the NPV fan captures the contaminates and directs them out of the space to a specific location.

**Air Exchanges** per minute are based on the fan’s capacity in cubic feet per minute (CFM). Usually at least 10 to 15 air exchanges are needed to completely flush contaminates out of a space, provided no additional contaminates are being released into the space during ventilation. Rescuers typically do not have the time to wait for this many exchanges. During rescue operations, a minimum of four exchanges are recommended if possible prior to rescuer entry into a toxic atmosphere. To determine the number of required air exchanges, estimate the volume of the space in cubic feet. Determine fan capacity (CFM). Divide the fan’s CFM by the space’s volume and you have the number of required exchanges per minute. As an example, if rescuers are faced with a 20’ x 20’ x 20’ space, the estimated volume would be 8,000 cubic feet. If their fan’s capacity was 2,000 cubic feet per minute, they would get .25 air changes per minute or one complete air change every four minutes.

**Fans** (blowers) and ductwork are the typical tools used by rescue teams to ventilate confined spaces. There are two basic fan designs in use today: axial flow and centrifugal flow. Each has their own set of pro and cons. Rescue fans should be intrinsically safe and electric powered. Generally, fans used for confined space rescue are rated in either cubic feet of air per minute (CFM) or the linear feet of air per minute (LFM) it moves. CFM indicates the volume of airflow and can be used to predict air exchanges based upon space volume. LFM measures fan velocity measured at the face of the fan. LFM is used to predict the throw or reach of the fan into the space. It is important for rescuers to understand their fan’s capabilities during ventilation. During positive pressure operations, the velocity of air at a distance 30 diameters away from the fan’s face is 10% of the face velocity. As an example, the velocity at 30 feet away from a 12-inch fan with a velocity of 2,000 LFM is about 200 LFM (2,000 LFM x .10 = 200 LFM). This fan would provide 200 LFM at 30 feet (10% of face velocity). During negative pressure operations, rescuers only get 10% of the face velocity at just one diameter distance away from the face. For example, that same 12-inch fan with a face velocity of 2,000 LFM would have a reach of only one foot at 200 LFM. Teams should research which fan designs and characteristics work best for their given response area and operating procedures. Remember that a minimum air motion of 200 LFM is necessary to mix air and move airborne contaminants; anything less will not clear the space.

**Ductwork** is used to redirect fresh air into all areas of the space in an effort to create turbulence and diffuse clean air throughout the space. It is also used to prevent recirculation and ventilation “short circuiting.” Ductwork does add air “friction loss” to the fan, reducing some of the fan’s capacity. Ducting should be flexible, relatively lightweight, and setup without any tight bends.

Confined space ventilation is a primary skill and is used at almost every rescue operation. As with all tasks at the scene of a rescue, it must have some tactical objective and is not simply performed by default. If, for example, the atmosphere in the space is within its explosive range, the air initially exhausted from the space may be flammable or explosive. If the atmosphere within the space is above the upper explosive limit, the air inside the space and the air leaving the space will pass through its explosive range during the ventilating process. In this situation, improper ventilation may pose a greater hazard to the patient and the rescuers. Personnel assigned to establish ventilation should work closely with those performing the atmospheric monitoring to ensure that the space is clearing appropriately.

Remember that the ultimate goal of confined space rescue ventilation is to bring the space back into acceptable entry conditions by exchanging the air within the space as many times as possible. Proper and timely ventilation not only increases rescuer safety; it improves patient survivability and many times can make the difference between a rescue and a body recovery.
At the turn of the last century, the Panguitch Lake was a holiday destination for July 4th and 24th as well as for summer vacations. There were dances, horse racing, picnics, and fishing. It took two days to travel the 20 miles and 1800 feet elevation on foot from the city of Panguitch to the lake. The lake is 1,250 acres and is known for its “big fish,” which is the actual meaning of Panguitch in Piute.

Beginnings
The Panguitch Lake Special Fire District was created in 1996 due to the number of cabins being built around the lake. Panguitch Lake continues to be a seasonal recreational lake that goes from a population of 29 in winter to 3,000 in summer.

In 2005, the Panguitch Lake Fire District (PLFD) chief received a grant that provided five PPEs, six radios, and some wildland equipment. In 2007, the department consisted of two ex-military pickups sitting in front of the Rustic Lodge on West Shore drive.

New Chief and Recruits
That year, the chief was selling his business and leaving for China to continue his career. So in 2008, David Etter, was promoted to chief, and the district’s board decided that a fire station was an essential service for the region.

Faced with few amenities, Etter’s first challenge was to recruit and train actual firefighters. Fortunately, at that time incidents were minimal. By 2009, the department had three full-time volunteers and four seasonal volunteers.

New Station
Art Chidester, a board member in those bygone days of the department, accepted the challenge to supervise the building of a station that would become a home for the newly organized department. On April 29, 2010, the new fire station, complete with donated furniture, opened to a crowd of 70 people, only to have the 1500-gallon bladder, used for off-season water, explode and shower everyone in attendance! Three months later, when the renovations were complete, all three of the year-round volunteer firefighters moved in.

The next year, 2011, was a lucky year when Paul Robitaille, a retired Canadian firefighter, purchased a house at the lake and was persuaded by Chief Etter to join the department.

Equipment Acquisitions
Slowly, a team was formed with the motto of “beg and borrow,” and an empty building started to look somewhat like a fire station. Chief Etter
is well known for his phrase “I’ve never met a fireman I didn’t ask if they had anything they could donate.” The department received a 1977 Ward La France Urban engine from the county and outfitted it as best as they could with the limited resources available to them.

Next, the department bought a state surplus 450 pickup and built a brush truck. This was swiftly followed by a military deuce and a half from the Forest Service, and the Panguitch Lake Fire District (PLFD) team set it up as a tanker. The budget for the department was minimal due to the very large mortgage and allowed for minor purchases only. State grants were a godsend, allowing the fledgling department to purchase PPE for its volunteers. Several federal grants were applied for unsuccessfully.

**Training the Team**
Chuck Tandy of the Utah Fire and Rescue Academy was instrumental in setting up formal training for the department members. With the guidance of Mike Phillips of Cedar City, the PLFD volunteered many hours—frequently twelve hour days, seven days a week— and eventually filled the building with 15 volunteers actively recruited by Chief Etter. The chief also organized the department to meet state and federal requirements. To date, the department has 33 state certifications for its 21 volunteers. UFRA’s Winter Fire School is a must every year.

**Paying It Forward**
By 2013, the department was starting to gear up to a level that allowed them to help other small departments with equipment, training, and grant writing. By the end of the year, the department was fortunate enough that between savings and county grants, it was able to obtain a 4x4 1998 Smeal Pumper, a 1992 Pierce pumper, and a 1998 rescue vehicle complete with a donated rescue boat setup with pump and deck gun. The chief’s many hours committed to grant writing enabled PLFD to outfit their vehicles. Living by their own motto, they donated their 1977 engine to a fellow county department.

In 2014, Chief Etter was successful in obtaining a regional grant for SCBAs for the entire county. He is just now issuing them to each of the 11 departments in a county of 5,500 square miles with a population of 5,200.

The determined Chief Etter can take full credit for recruiting volunteers, recognizing their different skill sets, and obtaining funding to turn a department with a couple of trucks parked outside a local business into a department that is fully functioning within its own jurisdiction. The community of Panguitch Lake can sleep well in their beds at night knowing that they are benefiting from the dreams, passion, and many volunteered hours of Chief Etter and his team.

**Demographics:**

- **Members:** 21 volunteers
- **Chief:** B. David Etter
- **Assistant Chief:** Richard Roberts
- **Captains:** Paul Robitaille, Joe Worthen, Richard Murdock
- **Services Provided:** EMS, Structure, Wildland
- **Significant events:** Major fire in May 2013 – 11 companies
- **ISO rating:** 7/7x
- **Average runs per year:** 40
- **Grants:** $886,562 in four years
DEATHS:

**Captain Marty Fredel**
1946 - 2015

Marty Fredel passed away on January 13, 2015. Marty served the citizens of the St. George area for 34 years. He started in 1981 in Bloomington, Utah, and continued as Bloomington was annexed into St. George. He was promoted to captain in 2004. St. George Fire Chief Robert Stoker said, “[Marty] did a lot of great things for the department… He really was a friend to everyone who came in contact with him. Stoker continued in stating, “He is going to be hard to replace.”

**Earne H. Anderson**
1928 - 2015

Earne was an active member of the Park City Fire Department since 1952. Earne Anderson passed away on January 23, 2015. Earne was an active member of the Park City Fire Department since 1952 and retired as assistant fire chief in 1979. For 16 years he was historian/photographer for the Utah State Firemen’s Association. He coordinated to achieve a fire district for Park City in 1975. Earne left a great legacy in the fire service and as a volunteer in many other organizations.

**Floyd Williams**
Brigg Stewart
1922 - 2015

Floyd Stewart passed away on January 3, 2015. Floyd’s life was a life of service. He served his country in the United States Army during World War II. He served his community as a volunteer firefighter for 34 years, as president of the Utah State Firemen’s Association, as chief of Springville Volunteer Fire Department, and as a member of the Springville City Council.

**Richard “Dick” R. Simmons**
1945 - 2015

Richard R. Simmons passed away on February 5, 2015. Dick loved the farm and had a very sensitive understanding and appreciation for the needs of the land and animals. He found great joy in sharing these things with his family and teaching them that same love. He was an EMT and had been a member of the Payson Fire Department.

**William (Bill) Henry Spencer**
1977 - 2014

Bill Spencer passed away unexpectedly on December 23, 2014. Bill found the career he loved more than anything when he became a fireman for Tremonton City and then a fireman/driver engineer for Weber County Fire. He strived to continuously increase his education and advance his career. He was recognized as 2013 firefighter of the year by Tremonton City Fire Department. He always sought to help those around him. He was admired and respected by those who knew him.

NEW COURSE COMING SOON:

ENGINE COMPANY OFFICER INSPECTION

by Ted Black, Utah Chief Deputy State Fire Marshal, Adjunct Instructor, Utah Fire and Rescue Academy

**Why the New Course?**

The Utah Fire and Rescue Academy (UFRA) is in the process of developing an Engine Company Officer Inspection course to give engine company officers the skill set they have been looking for. Up until now, the only fire prevention course available at UFRA has been the Inspector I course. It offers great information for students beginning a career in fire prevention but includes more advanced training than an officer needs. We are working to meet officer needs.

**Course Description**

The course being developed will cover ethics, the purpose for inspections, general fire hazards, fire sprinklers, alarms, exiting, access and other inspection topics. It will guide students through the inspection process and give them answers to questions officers encounter performing inspections. The course will also involve hands-on inspections with an instructor. Students who complete this course will receive a certificate of completion.
How often have we seen news article headlines that begin with “Firefighter charged with...”? It is big news when firefighters break the law because of the violation of public trust. Professional and ethical conduct by all firefighters is vital to maintain public trust in the fire service. Citizens in our communities ask us to respond to their homes and provide emergency services without knowing who we are. Whether it be medical, fire, or even assessing a carbon monoxide detector, they are asking total strangers to come into their homes and mitigate a problem. With this trust comes the responsibility to act in a professional and ethical manner not only while we are on an emergency call but in everything we do. The public we serve expects to be able to trust us.

The Utah Fire Service Certification Council has been mandated by the Standards and Training Committee of the Utah State Fire Prevention Board to be the governing body for the firefighter certification system in Utah. Besides establishing standards and certifying firefighters, we are responsible for revoking certification under specific circumstances. The specifics are outlined in the Policy and Procedures Manual and can be found online at: http://www.uvu.edu/ufra/docs/certification/policies_procedures_approved_09_17_14.pdf.

Section 20.1 b addresses revocation of fire certification for conviction of criminal acts:

20.1 The Council may revoke, suspend, or deny the certification of any candidate or the testing privileges of a Certification Tester who:

b. Has been convicted of a felony, capital offense, class A misdemeanor, a felony plea-bargained down to a misdemeanor, or a crime involving violence to, or abuse of, another person.

When the Certification Council becomes aware—which through the media or another source—of a certified firefighter who falls into this category, an investigation will be conducted according to the guidelines outlined in Section 21 of the Policy and Procedures Manual. If a firefighter has been found to be in violation of Section 20.1.b, fire certifications may be revoked.

It is incumbent on all of us in the fire service to maintain the public trust. These policies give the Certification Council the ability to address incidents where public trust is broken due to criminal acts.

For questions regarding this policy, please contact Lori Howes, certification program manager, at LHowes@uvu.edu or 888-548-7816.

Course Text

The text for this course will be the Fire Inspector's Guide, a pocket guide based on the code that was originally created by UFRA and is published in cooperation with Utah Valley University (UVU), UFRA, and the International Code Council (ICC). Each student will be issued a pocket guide that they will use during the course and after, as they do inspections.

Course Structure

The course will be a blended learning experience. This means there will be contact hours with an instructor in a classroom setting, as well as internet-based learning experiences, assignments, activities, and testing.

This course is not intended to replace the current Inspector I course; Inspector I will continue to be offered for those who want more advanced training.

We are very excited about this course and believe it will fill a need we have had in the fire service here in Utah for a long time. Production of this course is moving forward, and we hope to roll out the pilot class in May of this year. We look forward to presenting instruction that will meet the needs of the engine companies and officers and increase the safety of the citizens of Utah.

If you have questions or ideas regarding this course, please contact Gary Kilgore, curriculum program manager, at kilgorga@uvu.edu or 888-548-7816.
MASSIVE FIRE ENGULFS NEW JERSEY TOWNHOUSE COMPLEX FOR A SECOND TIME

by Robert Moran & John Lewis

Avalon Bay (August 2000)
During the recent 2015 Winter Fire School, one of the classes Jersey Guys taught was titled “Firefighting Operations in Garden Apartments and Townhouses.” The motivation for developing this class came from a fire that John and I operated at in August of 2000 that totally consumed Avalon Bay, a 400-unit lightweight wood townhouse complex under construction in Edgewater, New Jersey. After this fire, it became apparent the New Jersey fire service needed to discuss the hazards associated with these complexes and the strategic, tactical, and command tasks required during suppression activities. In a proactive attempt to ensure this important information was communicated, we developed the class and began to share our knowledge and experience with firefighters in New Jersey and across the country.

In the townhouse portion of our recent 2015 Winter Fire School class, we discussed the importance of conducting global pre-fire planning and building familiarization drills at these complexes to ensure all department personnel become intimately aware of the building characteristics, construction techniques, auxiliary systems (sprinklers/standpipes), occupancy, water supply, interior layouts, fire department access/egress, life safety, and other special hazards firefighters may encounter. We also discussed the mandatory implementation of routine tactical objectives—such as apparatus placement, ground ladder use, attack line placement, ventilation, search and rescue, forcible entry, and rapid intervention—that would be needed to support a safe and effective firefight within these structures. After the session, we felt we had completed our mission of leaving Utah firefighters with an indelible impression of the importance of pre-fire planning and how implementing sound strategic and tactical decisions during fire suppression operations in townhouse developments could lead to successful outcomes.

Avalon on the Hudson (2015)
After the devastating fire in August of 2000 described above, the owners of the Avalon complex reorganized and completed the reconstruction of the 400-unit lightweight wood townhouse complex in Edgewater in 2002. Called Avalon on the Hudson, the development was the model for the renaissance of multi-residential construction in the small blue-collar community looking to capitalize on its location on the banks of the Hudson River. The complex was constructed to state fire codes in effect in 2002, including the installation of an NFPA 13R sprinkler system protecting all common areas and individual apartments. Void spaces, including the attic truss loft, were not required to be protected.

History Repeats Itself
Shortly after we returned home from the Winter Fire School, specifically on January 21, 2015, maintenance personnel from the Avalon on the Hudson complex were repairing leaking water pipes with a torch in a bathroom wall located in a first floor apartment on the west side of the complex. During the repair, the workers ignited a fire and attempted to extinguish it themselves. After an ap-
proximate fifteen-minute delay, they contacted 911 and requested fire department services.

The Edgewater Fire Department, which is an all-volunteer organization of approximately 40 members, protects a population of 11,500 in a densely packed 2.4-square-mile area. They have a busy fire inspection bureau that conducts hundreds of annual fire inspections and building pre-plans. Because of these efforts, all department personnel were very aware of the dangers associated with the Avalon complex. 911 dispatchers received a call reporting a “working apartment fire” at 4:26 p.m. The first due engine arrived on scene about 3.5 minutes after the call and were quickly reinforced by other Edgewater units. With the first due crew reporting heavy fire running both horizontally and vertically in the void spaces in the original fire apartment, the incident commander quickly requested mutual aid assistance. Other units checking for extension in the floors above and in the common hallway once again reported rapidly extending fire conditions.

Arriving mutual aid companies and Edgewater firefighters conducted aggressive interior operations during the beginning stages of the fire, including making several occupant removals via ground ladders and a number of notable attempts to confine the fire to one section of the sprawling multi-level complex. However, the rapid and intense movement of the fire throughout the interior void spaces and into the truss loft of the lightweight wood development eventually guided the incident commander to order the evacuation of all interior fire suppression units and a switch to defensive operations. In the end, the two-day firefight involved over 35 fire departments and 300 firefighters from Bergen, Hudson, Passaic, and Union counties. The Fire Department of New York (FDNY) sent three fireboats, and the Jersey City Fire Department sent one of their units to assist in drafting water from the Hudson River during the height of the operation.

As a result of this accidental fire, 240 of the 400 apartment units were totally destroyed and 500 occupants were displaced from their residences and lost all of their personal belongings. As of February 1, 2015, several civil lawsuits have been filed against the owners of the complex by tenants. Many legislators and residents of New Jersey, where a large number of these same types of complexes are currently under construction or have been given final approval, are now calling for a review of the state’s fire codes as they relate to sprinklers and inherent fire separation in multi-residential complexes constructed of lightweight wood.

Jersey Guys would like to take this opportunity to use the Avalon fires in Edgewater to reinforce some of the items we discussed at Winter Fire School concerning fire suppression operations in lightweight wood townhouse developments.

- Conducting pre-fire planning and building familiarization reviews of these complexes are critical to firefighter safety and effective operations.
- Rapid, unimpeded fire spread will occur in void spaces, soffits, and truss lofts.
- Maintain constant situational awareness of weakened building components.
- Prompt request for additional resources (manpower sponge theory) is essential to limiting and containing fire spread.
- Apparatus placement must be a proactive. Plan for defensive operations and the future establishment of collapse zones when placing equipment.
- The early establishment of a strong, unified command system is mandatory as is a thorough 360-degree size-up.
- Interior operations may be limited due to exposed building components. Hit it hard on arrival using appropriate tactical objectives and regroup if determined to be unsafe.
- Firefighter and occupant life safety is your number one priority. No building is worth the life of a firefighter.

We hope that reiterating this important information after such a devastating repetition of history will impress upon Utah firefighters how critical planning before and strategy during a fire such as this one is in order to achieve the best outcomes possible.

Edgewater tower ladder operating in courtyard in rear of complex. photography by Ron Jeffers
Jason Cook was promoted to battalion chief in January 2015. Battalion Chief Cook will lead “C” Platoon and will be assigned as the department’s EMS Division/Community Relations Battalion Chief and will continue to lead the department through the rapid sequence intubation (RSI) study.

Cyle Hall was promoted to captain/paramedic in January 2015. Captain Hall has been in the fire department since 2002 and has been active as a NWCG-qualified engine boss in wildland fire responses throughout the western United States.

Patrick McDonald was promoted to full-time firefighter/advanced EMT in January 2015. Patrick has been a member of the fire department since 2008.

Terrance Brian Reilly Jr. has served Payson City for 20 years as a police officer, 14 years as a firefighter, fire inspector, and fire investigator, and 18 years as an advanced EMT, with 3 of those years as EMS training officer. Terry has a bachelor’s degree in emergency services administration, an associate of science in emergency management, and an associate of applied science in fire science all from Utah Valley University. He has served five years on the board of the Utah Chapter IAAI, currently as the second vice president. He also worked as a reserve officer for Orem Police Department. Terry was appointed as assistant chief for Payson Ambulance in March 2014. The department has benefited from having him in this position. We recognize the time and sacrifices he has put forth to serve and protect the residents of Payson, and we are humbled and grateful to have him serve among us.

The following were promoted to captain:
- Captain Matt Black
- Captain Jared Norton
- Captain Jennifer Bevan
- Captain Robert Ayres
- Captain Kelly Millard
- Captain Brandon Boshard

The following were promoted to engineer:
- Engineer Todd Mickelson
- Engineer Jared Johnson
- Engineer William Dinkel
- Engineer Richard Berry
- Engineer Tim Collins
- Engineer Richard Larson
- Engineer Chad VanLeeuwen

The following were promoted as heavy rescue technicians:
- Specialist Matthew Ascarte
- Specialist Paul Van Harn
- Specialist Jonathan Van Huss

Michael DeGering was promoted to wildland specialist.

Congratulations to Brad Wilkes, Aaron Lance, Matt Shupe, and Nathan Nance for achieving Supervising Fire Officer Designation by the authority of the Utah Fire Officer Designation Commission. The Officer Designation Program recognizes firefighters who have met requirements in categories of education, certification, training, and experience that show an exemplary commitment to professional development. Go to http://www.uvu.edu/ufra/resource_center/fodp.html for more information.
Many Utah firefighters are unaware that there is a fire museum in Utah, and many more either have not been there or have not visited in a while. Dave Hammond, curator of the Utah Museum of Fire Service History, wants you all to know not only that there is a museum, it’s YOUR museum. Located just south of the Larry H. Miller Speedway in the Deseret Peak Complex, it’s about 5 miles west of Tooele and a 25-minute drive from downtown Salt Lake City.

The collection includes about 50 antique apparatus going all the way back to an 1896 hand pumper. Numerous fire departments have donated or loaned trucks, uniforms, turnouts, equipment, historical documents, books, videos, furniture, photographs, and memorabilia, etc. Exhibits change, as some departments periodically take their apparatus back for parades or special events.

Recent additions include a lot of Salt Lake City material that had originally been stored at the old Volunteer Ottinger Hall in Memory Grove Park then moved to a replica of that building at This is The Place Park. The collection there was not well protected and began to suffer, so some items went on display at the new fire/police exhibit at the Salt Lake City Public Safety Building and some went to the Museum of Fire Service History for safer display and curation.

The museum is generally open 11 AM–4 PM Fridays and Saturdays. Hammond is happy to conduct tours almost any time for school groups, scout troops, or anyone else interested in visiting. Since the museum is the particular business of Utah fire service history, Hammond urges every department to consider sharing part of its history at the museum through an apparatus or other display or in the Museum Library Archive, which includes hundreds of fire service books and amazing documents, such as a Utah Supreme Court writ that denied survivor benefits to the family of Harold Anderson, a Bingham volunteer who was killed in the line of duty in 1924.

Personal cash or in-kind donations to the museum are tax deductible and very much needed. Contact Dave Hammond at (435) 830-6556 for more information or to arrange a tour.
Successful vehicle extrication is obtained through proficient skills, efficient equipment operation, and solid teamwork. Once an Incident Action Plan (IAP) is established, the extrication team must work together as a single operational unit to carry out the plan. Each movement—cut, lift, pry, or crush—must complement the next and allow tactical operation to occur without setting down tools, changing hoses or tools, getting fresh batteries, or other procedures that waste time and effort.

Practice Together

Having team members that have worked and practiced together is essential to perform safe and efficient extrications. Each team member must constantly be anticipating the next move. The only reason they would stop is to address a safety issue or if a change of plan is required. Despite the difficulty of the method that the IAP calls for, all rescuers must know the plan and each required step in the correct order.

Always practice and train using the incident command system; this will reduce the chance of freelancing and adrenaline-caused tunnel vision and will increase safety, efficiency, and teamwork. The first time the responders hear the terms “incident command” and “coordinated teamwork” should not be at the emergency incident.

At the Incident

Establish hot, warm, and cold zones around the incident. Have the necessary resources, tools, equipment, and personnel in the appropriate zone to facilitate the efficiency of the rescue.

Having medical crews ready to access and start treatment of the patient as soon as the extrication operation is complete adds to the efficiency of the entire incident.

Examples of Extrication Procedures

Roof Flap

If the IAP calls for a roof flap, one team member can operate the cutters, making the first cut low on the A-post; this will create a hole in the laminated glass of the windshield as the frame is cut. The second cut should be made in the
roof rail directly in front of the B-post, providing a relief point. The third cut is made low in the opposite A-post, again creating a hole in the laminated windshield opposite of the first hole.

While the cutter operator makes a relief cut in the roof rail on the second side, another member can use a reciprocating saw or glass-cutting tool to cut the windshield glass close to the dash and between the holes made by the cutters. Both the final relief cut and the glass cut should be completed close to the same time.

With one team member on each side, the vehicle roof can now be folded back on itself; the windshield left in place will be moved out of the way in conjunction with the roof flap, saving time on unnecessary glass removal.

Spreaders
Another extrication example would be if you are using a spreader to force a vehicle door. While the rescuer operating the spreader makes access to the door hinges, a second rescuer can be ready with cutters to shear the hinges, allowing the door to be forced free and access to the victim enabled.

Once the door hinges are exposed, the rescuer with the cutter moves into position, as the spreader operator moves out of the way. The cutter operator shears the last hinge and spreader operator moves back into position to force the door away from the vehicle and so on. They should continue to move in sequence until the action plan is completed.

Watching a well-trained extrication team resembles the coordination of a factory assembly line: each move and action is purposeful and efficient. There is very little, if any, wasted time or effort. Practice extrication skills and techniques often, and review the training after each session. Determine which steps in the process can be eliminated to improve efficiency, maintain safety, and shorten the time it takes to accomplish the objective. Preparing yourself and your organization in this way will increase your success rate, reduce extrication times, provide a safer environment at the emergency incident, and decrease the time the victim is trapped in the vehicle.

Stay Safe… Chief Young

Russell Young is a battalion chief and assistant training officer for the Orem Fire Department, where he is responsible for extrication and ambulance driving operations. He is the chief of the Duchesne Fire Department and has been a paramedic for over 19 years. Young has a B.S. in emergency services management, is currently completing his MBA, has over 23 years of experience in fire and emergency medical service, and is an instructor and certification tester for UFRA.
Utah Valley University (UVU) students are using National Incident Management System (NIMS) standards and principles to prepare them to work in first-response agencies, non-profit humanitarian service organizations, and private risk management. At the heart of this preparation is the use of training and exercises.

This past summer I joined six UVU students in the Balkans on a global and multicultural humanitarian service learning project. As we set off to go to the Balkans, we had the same goals in mind for this excursion as first responders do with training and exercises: the experience was designed for students to build confidence, test and improve their knowledge and skills, develop teamwork and leadership, and advance inter-agency relationships. This would be achieved through encounters with international professionals and the opportunity to train students at a Balkan university.

The Balkans trip also helped students gain a greater appreciation of the importance of disaster preparedness and the needs of people in other countries, and increased their commitment to the emergency services.

Students visited three countries in the Balkans—Kosovo, Macedonia, and Greece—where they met with and learned from professionals about programs and disaster response procedures in those countries.

Lindsay Means, who graduated in May from UVU in emergency management, said discussions with disaster personnel in Kosovo, Macedonia, and Greece helped her make a comparison between what she knows about the United States disaster response system and that of these countries. Means indicated that she gained a greater appreciation for emergency management in the United States, where greater community outreach exists partly because of funding and training of first responders and volunteers.

While the visits with emergency agencies were educational, the highlight of the trip was in Skopje, Macedonia, where the American students trained local students and held functional exercises at a cooperating university—the International Balkan University. The Macedonian students had not had previous emergency training, so they were excited to learn about disaster response principles, search and rescue, triage, and emergency medical care. Means commented, “I think just by the hands-on work with the students and time spent teaching them the skills that we have learned reinforced our own skills as well as building relationships with them.”

Through the trip, students learned the following skills:

- **Building teamwork and leadership skills:** Working together on the trip—preparing and planning for the trip and teaching at the university—helped the UVU students build teamwork and leadership skills.

- **Testing and improving knowledge and skills:** The field experience in the Balkans provided students an opportunity to test and develop their emergency response skills and helped build self-confidence and trust in an applied learning experience, which supplemented and augmented their classroom experience.

Emily Hunt, a senior in emergency services at UVU, felt her knowledge and skills increased from the experience. “When you teach something you really learn it. You engrain it in your mind deeper. And you learn a lot of things connect when you are teaching—a lot of I things you didn't realize when you learned it in class.”

- **Applied learning versus classroom learning:** “I am a firm believer of learning on the job—or in the field,” said Whitney Johnson. “You can only learn so much in the classroom. It is only until you experience disaster situations or have hands on experience during real or simulation disasters that you can comprehend how to respond and improve on mistakes made.”

Volunteer and career fire fighters can also participate in similar experiences through UVU. If you are interested in finding out more about similar opportunities, contact Dr. John Fisher at John.Fisher@uvu.edu or at 801-863-7732.
On behalf of the Utah Fire & Rescue Academy, we thank you for your dedication, service, and support to Utah's fire service during the 2015 Winter Fire School.

This year was our largest expo yet—there were over 60 companies represented. One of the key strengths that makes fire school so successful is your participation and the quality of service your company provides. It truly is a pleasure working with each one of you, and we look forward to doing business with you for years to come!

For more information regarding vendor participation, please contact Jolene Chamberlain at jchamberlain@uvu.edu.

**Thank You, Fire School Vendors!**

<table>
<thead>
<tr>
<th>Vendor Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah OSHA Consultation</td>
</tr>
<tr>
<td>Fire Trucks Unlimited</td>
</tr>
<tr>
<td>Golight, Inc.</td>
</tr>
<tr>
<td>Public Safety Dive Services</td>
</tr>
<tr>
<td>Toyne, Inc.</td>
</tr>
<tr>
<td>Rosenbauer</td>
</tr>
<tr>
<td>Sutphen Fire Trucks</td>
</tr>
<tr>
<td>Life Skills Technologies, LLC</td>
</tr>
<tr>
<td>National Fire Fighter Wildland Corp.</td>
</tr>
<tr>
<td>LN Curtis &amp; Sons</td>
</tr>
<tr>
<td>Weidner Fire</td>
</tr>
<tr>
<td>Akron Brass Company</td>
</tr>
<tr>
<td>Skaggs Uniforms</td>
</tr>
<tr>
<td>Utah Safety Council</td>
</tr>
<tr>
<td>Alpine Cleaning &amp; Restoration Specialists</td>
</tr>
<tr>
<td>LION Apparel</td>
</tr>
<tr>
<td>Apparatus Equipment &amp; Service Inc.</td>
</tr>
<tr>
<td>Highway Products</td>
</tr>
<tr>
<td>Coaxsher</td>
</tr>
<tr>
<td>Mercedes Textiles</td>
</tr>
<tr>
<td>MTech</td>
</tr>
<tr>
<td>Interspiro</td>
</tr>
<tr>
<td>EVI</td>
</tr>
<tr>
<td>Young Fleet Sales</td>
</tr>
<tr>
<td>Dragon Fire Gloves</td>
</tr>
<tr>
<td>IFSTA / Fire Protection Publications</td>
</tr>
<tr>
<td>Firefighters Credit Union</td>
</tr>
<tr>
<td>EMSSHIRTS.COM</td>
</tr>
<tr>
<td>Diamond Back Fire &amp; Rescue</td>
</tr>
<tr>
<td>Global Traffic Technologies</td>
</tr>
<tr>
<td>Ross Equipment Co.</td>
</tr>
<tr>
<td>Pierce Manufacturing</td>
</tr>
<tr>
<td>Utah Disaster Kleenup</td>
</tr>
<tr>
<td>Columbia Southern University</td>
</tr>
<tr>
<td>Seventy Sevens Leather</td>
</tr>
<tr>
<td>Wise Safety &amp; Environmental</td>
</tr>
<tr>
<td>Lucky Jakes Firefighting Equipment</td>
</tr>
<tr>
<td>Physio-Control</td>
</tr>
<tr>
<td>Grainger</td>
</tr>
<tr>
<td>Kappler Inc.</td>
</tr>
<tr>
<td>FRC – Foam Pro</td>
</tr>
<tr>
<td>TPL Crawford, LLC</td>
</tr>
<tr>
<td>Res-Q-Jack, Inc.</td>
</tr>
<tr>
<td>IFSTA</td>
</tr>
<tr>
<td>White Cap / HD Supply</td>
</tr>
<tr>
<td>Airpro Incorporated</td>
</tr>
<tr>
<td>Kussmaul Electronics</td>
</tr>
<tr>
<td>Federal Signal</td>
</tr>
<tr>
<td>Municipal Emergency Services</td>
</tr>
<tr>
<td>Motorola Solutions Inc.</td>
</tr>
<tr>
<td>Task Force Tips, Inc.</td>
</tr>
<tr>
<td>IamResponding.com</td>
</tr>
<tr>
<td>Ward Diesel Filter Systems Innotex</td>
</tr>
<tr>
<td>Res-Q-Jack, Inc.</td>
</tr>
<tr>
<td>White Cap / HD Supply</td>
</tr>
<tr>
<td>Airpro Incorporated</td>
</tr>
<tr>
<td>Onspot</td>
</tr>
<tr>
<td>Braun Industries</td>
</tr>
<tr>
<td>Advanced Traffic Products, Inc.</td>
</tr>
<tr>
<td>Mountain West EMS Solutions</td>
</tr>
</tbody>
</table>

**Thank you to the following vendors:**

Hope to see you next year January 8 - 9, 2016
Have you ever had someone ask you, because you’re a firefighter, “What exactly is fire?” Or better yet, have you ever been asked that question in a professional situation, such as a training environment or a promotional interview? What do you answer? Should a firefighter be hired or promoted if he or she can’t explain what fire is?

The technical definition of fire that every firefighter should memorize and understand is this: “Fire is a rapid oxidation process; a chemical reaction resulting in the evolution of heat and light in varying intensities” (NFPA 921, 2014). This process, or chemical reaction, is known as an oxidation reduction reaction. In other words, the combustible fuel (reducing agent) is being oxidized by the 21% ambient oxygen (oxidizing agent) in the air. The fuel in the air must be ignited by some form of heat of ignition. Once ignited, the chemical reaction begins. Thus the “Fire Tetrahedron” is fuel, oxygen, ignition, and chemical reaction. Take any one of the elements away and the fire goes out.

Fuel – The reduction material must be combustible—or capable of burning. It can be a solid, liquid, vapor, or gas. Non-combustible materials such as rock dust, gypsum, and some metals will not support combustion or be ignited and thus are not capable of burning using ambient air as an oxidizer. You can make anything burn with the right oxidizer.
Oxygen – The speed of the oxidation reduction reaction is heavily dependent on the amount of available oxygen for the process. With 21% oxygen in air, fire is about as rapid as a reaction can be. If I provide more oxygen by mixing the fuel with an oxidizing agent such as potassium permanganate, ammonium nitrate, or organic peroxides for example, I can super charge the reaction and thus speed it up to an explosive reaction. Fire and explosions are the same process; the only difference is the speed at which the fuel is consumed and the heat and light output is instantaneous. Watching an explosion in slow motion, the amount of fire is clearly evident.

Ignition – Heat is required to start the reaction. This can be by pilot ignition, which is simply an open flame. The heat of ignition can also be provided by a chemical reaction that is exothermic—meaning heat producing. Some reactions can produce heat through friction, pressure, or even light depending on how sensitive the oxidation/reduction agents are.

Chemical Reaction – If the process of burning, which creates free radicals (ions looking to react with other ions), can be interrupted by a chemical agent such as Halon or other hydrochlorofluorocarbon (HCFC) substitutes, the reaction can be stopped. HCFCs have a greater affinity for the free radicals so they bind with them easily, which confiscates them from the process, and so it stops.

Water’s Involvement
We can’t discuss fire without talking briefly about water. When combustibles burn, the resulting energy from the reaction is expressed in British Thermal Units (BTUs). Water is the most common extinguishing agent—for good reason. It takes energy to convert water into steam. Water finds this energy in the output of the combustion process. The more water converted to steam, the more energy (BTUs) it robs from the fire. To make the steam-producing process more effective, fog streams can be used to break the water particles into smaller, more easily converted droplets.

If water can absorb more BTU than is being produced by the combustion reaction, then the fire goes out mainly through a process of cooling (BTU absorption). Water absorbs BTUs at a steady rate of about 9,400 BTU per gallon of 60° F water. When you consider that an 8-foot 2”x4” wood frame construction is capable of producing 8,000 BTU or that a single gallon of gasoline can produce 130,000 BTU, you can start to get an idea of the battle that goes on between water and fire.

In summary, fire is a rapid oxidation process that produces heat and light, and water puts fire out by absorbing the heat energy of a fire expressed in BTUs. It’s important that every firefighter, regardless of where you are in your career or what agency you work for, understands these basic processes that are such a fundamental part of what we do.

Andy Byrnes
retired after 21 years of service as a special operations battalion chief from the Orem Fire Department. He was also in law enforcement for 18 years and a certified paramedic for 16 years. He is currently an assistant professor and the coordinator for the RCA program at UVU. He is an experienced emergency services instructor, working for local, state, and national Fire/EMS and law enforcement organizations. He has reviewed and contributed to several textbooks related to hazardous materials/WMD response and he is a frequent course reviewer and subject matter expert in the areas of hazmat and firefighting leadership and management. Byrnes is a graduate of the National Fire Academy’s Executive Fire Officer Program. He holds an associate degree in fire science, a bachelors degree in public emergency services management, and a master’s degree in instructional technology from Utah State University.
FIRE OFFICER LEADERSHIP REFRESHER:
5 LOW-COST (OR NO-COST) TRAINING SUGGESTIONS

Whether you are a company officer or a chief officer, you are responsible in some capacity for training your personnel to ensure they are as prepared as they can be for the incidents they may be faced with during their service to your community. Good fire officers do not wait for their training officer to provide them with all of their required training and education. Good fire officers also do their own research and find their own sources to share with their personnel.

Below are five low- or no-cost suggestions to ensure up-to-date training and information about the fire service:

1. Internet
It doesn't get much easier or cheaper than this. Though it’s true that the Internet isn't free, your employer is already paying for it, so it shouldn't have to cost you anything. Computers and Internet access are the cost of doing business in today’s world and can provide hours of material you can share with your personnel.

A word of caution, though: before you share information, make sure you read or watch it first to ensure it meets your department expectations and there is nothing that could be considered inappropriate, offensive, illegal, or just plain wrong.

Below I’ll dig a little deeper into suggestions from the Internet.

2. Videos:
On the Internet, there are many videos you can download and share with your personnel. Some of the best websites for finding training videos include:

Statter911 – www.statter911.com
YouTube – www.youtube.com
Firefighter Spot – www.firefighterspot.com
Firefighter Behavior – www.firefighterbehavior.com
Firehouse Magazine – www.firehouse.com
Fire Critic – www.fircritic.com
Fire Rescue Magazine
(Firefighter Nation) – www.firefighternation.com
Fire Rescue 1 – www.firerescue1.com

Before sharing the videos, take the time to review them yourself to prepare for what questions others may ask and to ensure you can have an educated discussion on the situations being shared. Videos should be used as training tools. It can be very tempting to only criticize what is on the screen. Your goal should not be to point fingers; your goal should be to provoke a hearty discussion that may touch on some of those not-so-good practices that may be seen but, more importantly, will touch on the overall theme of what is being seen.

3. Publications
There are many great fire service publications (digital and print) that contain quality articles to share and discuss with your personnel; some you have to pay for and some are free. The Straight Tip magazine is an awesome publication and is a great starting point. Many of these publications are already being paid for by fire departments and are sent to each firehouse. Even if your department doesn't have the funding to subscribe to these publications, I encourage you personally to subscribe to them so that you are kept in the loop of what is occurring, including best practices, current trends and techniques, and recent incidents that may share lessons learned.
Some of the best fire service publications to learn from include but are not limited to:

Firehouse Magazine – www.firehouse.com
FireNuggets (Free!) – www.firenuggets.com
Fire Engineering – www.fireengineering.com
Fire Rescue Magazine – www.firefighternation.com
Within each issue, you can find something worth sharing and discussing with your personnel.

4. Free Email Lists
Most of the abovementioned websites have free email lists that provide up-to-date fire service news and information. The following websites offer free email mailing lists (some I have mentioned above) that are definitely worth subscribing to and reading:

Daily Dispatch – www.dailydispatch.com
Everyone Goes Home – www.everyonegoeshome.com
Firefighter Close Calls – www.firefighterclosecalls.com
Firehouse Magazine – www.firehouse.com
Fire Chief – www.firechief.com
Fire Engineering – www.fireengineering.com
Fire Rescue Magazine – www.firefighternation.com
Fire Rescue 1 – www.firerescue1.com
Statter911 – www.statter911.com
Utah Fire and Rescue Academy – send email to ufra-subscribe@yahoogroups.com
United States Fire Administration – www.usfa.fema.gov/email_subscriptions.html

If you are already subscribing to all or most of these email lists, good for you! If not, hopefully they will provide you with the inspiration to continue to be the best student of the fire service that you can be!

5. Your Department’s Training Library
In most fire departments, some form of training library is available containing books, videos, or other props fire officers can use to provide quality training and education to their personnel.

A good starting point is the department manuals. While most personnel would probably not be happy to review the basic manuals, regularly reviewing those boring manuals is a good practice, as they may just keep you or your person-

nel out of trouble and, more importantly, may set them up for success by knowing expectations!

Regardless of which sources above you may use to train your personnel, take the time to document the training so that you, your personnel, and your department get credit. Ten minutes here, thirty minutes there—it all adds up. And the next time your department is up for an audit or, even worse, a local OSHA investigation, your chances for a positive outcome will greatly increase! More importantly, though, the better variety of training and education you can provide your personnel, the better you can set them up for success to handle the next big one or to just handle their day-to-day responsibilities.

Steve Prziborowski has over 20 years of fire service experience, currently serving as a deputy chief for the Santa Clara County (Los Gatos, CA) Fire Department, where he has served since 1995. Since 1993, he has taught fire technology classes at the Chabot College Fire Technology Program (Hayward, CA). Steve is a former president of the Northern California Training Officers Association, was the 2008 Ed Bent, California Fire Instructor of the Year, and is a state-certified chief officer and master instructor. He has earned a master’s degree in emergency services administration and has completed the Executive Fire Officer Program at the National Fire Academy.

Steve is contributing editor to Firehouse.com and FireNuggets.com, is a regular speaker at fire departments and fire service events across the country, and has authored over 100 articles in leading fire service publications.

Steve is the author of three books: How to Excel at Fire Department Promotional Exams, Reach for the Firefighter Badge: How to Master the Fire Department Testing Process, and The Future Firefighter’s Preparation Guide: Being the Best Firefighter Candidate You Can Be!
Layton City Fire Department Battalion Chief Robert Adams has decided to hang up his white helmet and retire from the fire service after 37 years. Robert was hired by Layton City in 1978 as one of the first full-time firefighters. Chief Adams was very instrumental in developing the fire department and training of personnel. Layton City had one station and two people on duty when Robert first started. The fire department has since grown to three stations with 16 operations personnel per shift and nine administrative positions. Robert rose through the ranks of firefighter, captain, and then battalion chief. Chief Adams mentored many young firefighters during his tenure. Robert looks forward to spending more time with his family, riding his motorcycles, and spending time outdoors. Layton City Fire Department will miss Battalion Chief Adams and his vast array of knowledge and wishes him well in his retirement.

Marc Sanderson retired as chief of Pleasant Grove Fire Department. Chief Sanderson has been an extraordinary fire chief. His leadership took this fire department from a volunteer/part-time response model department to a full-time professional fire/paramedic service. All of us here at PGFD wish him great success in his new position as the emergency department director for the new Lehi Mountain Point Medical Center.

Chief Paul Irons retired as chief of the Cedar City Fire Department after 36 years of service, including 12 years as chief. In 1978, Irons joined what was then a volunteer fire staff after receiving some encouragement from friends and the assistant fire chief at the time. Under Irons’ tenure, the fire department has significantly grown from three full-time firefighters and 25 volunteers to 12 full-time firefighters and 43 volunteers.

For 34 years Millard County and the state of Utah have benefitted from the expertise and dedication of their county fire warden Howard Allred. Under his leadership, a long list of significant Utah fires occurred and fire departments in Millard County have taken countless classes to obtain NWCG fire qualifications. He has consistently provided competent leadership and is respected for his good judgment and for his loyalty to those working under him. For him, the safety of his firefighters was always the first priority. Three times during his career he was presented with the Governors award as Fire Warden of The Year. Howard was often involved in wildfire investigations. While his career has seen both successes and tragedy, his good judgment and professionalism has brought hundreds of men and women home safe and sound after controlling wildfires. Howard leaves behind a legacy of near legend proportion. He will be greatly missed.

Chief Mike Zamantakis of the Helper Fire Department has been a volunteer firefighter since 1972 and chief since 1996. He retired at the end of January 2015. Chief Zamantakis has seen many changes to the department over the years. He was the first state-certified EMT at the Helper Fire Department, and he has always been a proponent of continuous training. Currently, the whole department has EMT qualification and more, including firefighter I, firefighter II, wildland, and hazmat training. Under Chief Zamantakis’ leadership, the department obtained a fleet of emergency vehicles and a new building to house them in. After retirement, Zamantakis continues to serve the community working for the State Fire Marshal as an inspector for Carbon County schools.
Are you interested in an emergency services degree? Get started and gain experience with a paid summer internship offered through Utah Valley University and the State of Utah Department of Natural Resources Lone Peak Conservation Center. It is an opportunity to earn college credit at a highly discounted price while performing a rewarding service extinguishing wildfires and doing forest fire prevention work.

Historically the Lone Peak Conservation Center (LPCC) had an internship crew named after the Utah Fire and Rescue Academy. Traveling the nation, the UFRA crew built up a great reputation and evolved into the Alta Hotshots. After it became an elite hotshot crew, the number of internship slots decreased from eight per season to zero. Filling the gap, the type two initial attack crew Twin Peaks has taken over as the official UFRA internship crew. Lyle Jennings is the Twin Peaks Crew Boss as well as one of the head instructors for the UVU wildland class. He offers top notch training to the students from an engaged classroom setting to physical training. Those who pass the class, apply to the Twin Peaks crew, and make the cut have an opportunity for a three-season internship. Each year an intern earns five college credits towards an associates of applied science wildland fire management degree.

Wildland firefighting is a very physically and mentally demanding job in which a person’s true character is developed. During fire suppression we wear a 45-pound pack and walk an average of six miles per day. Shifts can be as long as sixteen hours daily for two weeks straight, with only two days off in between fire tours. Sleeping under the stars covered in ash and dirt, a shower becomes a rare commodity in the summer. You can go from 100-plus degrees in the desert to waking up in the high mountains at below freezing temperatures.

As the crew progresses through the training, they learn valuable skills. Training begins in the classroom, focusing on a basic knowledge of fire suppression, fire behavior, and the common equipment used. Next you will go through the interview process, which is a great opportunity to learn and practice interview skills. If hired on to a fire crew, one of the first skills that is taught is operating a chainsaw. We teach safe and efficient practices as well as the daily chainsaw maintenance that is required to keep a saw in good working order. Throughout the summer one can expect to learn team working skills, proper use of a wood chipper, firefighting terminology, and much more. An engaged and positive attitude as well as a desire to learn will go a long way. As with any experience, you can only take out as much as you put in.

There are other internship opportunities offered at LPCC. The type two Dromedary Peak crew actually hires the most interns and focuses mostly on fire prevention work. They do respond to wildfires within Utah and, for two weeks per summer, travel nationwide. Hiring the most students, Dromedary Peak ends their fire season mid-August to allow their employees to return to school. There are also two fire engines at LPCC that offer internship positions. Engine 1668 and Engine 1667 are nationally available for wildfire response from May to the end of October.

More information can be found at www.uvu.edu/esa/academics/wildland.html and http://lonepeak.utah.gov/.
**Scenario**
You are an EMS provider responding with your crew to a rollover accident. As you arrive, you see a vehicle on its top and relatively intact with no intrusion. Your patient is a 24-year-old male who is standing near the vehicle talking to a Utah highway patrol trooper. You learn from a second trooper that this male was the sole occupant of the vehicle that rolled once after driving off of the road and hitting a ditch. You assess the male and find a chief complaint of left arm pain with lacerations from the broken glass. The patient denies neck pain, back pain, numbness, or tingling in extremities. The patient is A&O x4 with no loss of consciousness. The patient agrees to be transported for the arm injury.

Do you place the patient in a cervical immobilization device and place him on a long spinal board? If so, why?

At a national conference I recently attended, spinal immobilizations were hotly debated. The arguments in the debate helped me begin to understand why I was not always thinking as clearly about the topic as I had hoped. Specifically, I began to consider the following questions:

1) Would you immobilize a patient found walking around scene involving a rollover with normal presentation and vitals?
2) Would you allow a patient to self-extricate on scene with normal mental status and no neck pain?
3) Would you allow immobilization without a long board?

**When Did Spinal Immobilization Start?**
Each decade of pre-hospital spinal immobilization brought a new dogma: from 1966 to the 1980s, we immobilized everyone. The 1990s introduced two new concepts: selective immobilization and standing immobilization. Then in 2000 we saw routine clinical clearance in the ER based on physical exam in the absence of x-ray. Now in our current decade, we have selective immobilization based on the EMS providers’ physiological findings of patient presentation and assessment.

As I explored and researched immobilization procedures, I discovered that a 1966 report by Geisler et al. describing the potential benefits and “no perceived downside” of spinal immobilizations is where the trend started. Today, the lasting perceptions from this report along with hearsay are the reasons we continue to backboard all patients with suspected spinal injury. Consider these comments you may have heard at some point in your career: “Any trauma patient who turns his or her head is likely to suffer irreparable spinal cord damage.” Or, “If my patient is crashing...
it must be from poor or missing immobilization.” Have you considered the accuracy of these statements based on current knowledge?

What's Wrong with Using Backboards, You Might Ask?
When you get down to the basics of care, there is generally nothing wrong with putting a patient on a long spinal board. However, consider the following:

- It's a relatively time-consuming process.
- It results in unnecessary transports.
- It's painful (lie on a backboard for a while and see how you feel).
- The patient may experience respiratory or airway compromise.
- It may exacerbate pressure sores for some patients.
- No studies show a positive contribution of backboards beyond facilitating patient removal during extrication.

How many times have you fought with patients all the way to the hospital over a cervical collar they did not want to wear? Search the web for protocols and practices limiting the use of spinal precautions. These protocols abound, especially internationally.2

Can We Eliminate the Guesswork?
Much of the rationale for reducing the use of long boards is found within various studies. In 2001 the National Emergency X-Radiography Utilization Study followed 34,000 ER patients receiving x-rays for cervical spine injury following blunt trauma. Essentially the study revealed that their evaluation tool accurately identified 810/818 patients with cervical spine injury and 576/578 with clinically significant spinal injury prior to x-ray results. Thus, when a properly applied tool is used, appropriate care was seen in 99% of patients with c-spine injury and 99.7% of patients with significant injuries. The study implies that if we use a good assessment tool, we can be about 99.35% accurate in determining who needs spinal immobilization.3

What Can We Do?
What has changed is not who we protect but rather how we protect. Many agencies within Utah have already transitioned to a selective immobilization protocol. Change is hard but necessary if we are really interested in the outcomes our patients experience.

To sum it up, the following conclusion was shared through an article by the Association of EMS Physicians and American College of Surgeons Committee on Trauma:

“All trauma patients should receive spinal assessment from EMS providers in the field. At a minimum, patients with potential for spine injury should be transported to the hospital using spinal precautions that include cervical collar and log roll procedures. Patients who are ambulatory or able to self-extricate without causing undue pain should be encouraged to move themselves to a supine position on the EMS cot, after application of a cervical collar. Backboards remain a valuable adjunct to spinal immobilization during patient extrication. Careful patient handling and transport of the patient with suspected spinal injury using spinal precautions remains prudent.”4

As EMS professionals, we are responsible to intervene in the lives of patients at urgent times. I suggest we rethink, study, and change in order to do the best for those we are charged to care for.

______________


3 These results were further studied in the 2001 Stroh and Braude report (White et al., p. 309). This study found when extreme age patients were involved, generally speaking, one should use caution despite a clinical tool.

4 White et al., p. 313.
When I first came on the job, I met a very well-respected firefighter. He seemed to be good at everything he undertook. I found, however, that he was not as happy as I thought he should be. He told me that he was going to retire. Having just come on the job, I was flabbergasted at anyone wanting to leave such a great job. He told me that it was time for him to leave because he was tired of all the “bull.” He didn’t want to stay too long and start disliking everything…and he was gone!

Now that I have gone down that road also, I reflect on the larger picture. I liken it to a train ride.

The train stops at the station and a very tired man gets off. As he leaves, a warm seat is open on the train, and you—a young and energetic man—are waiting to board. You have stars in your eyes and are eager to get going. You board the train and take the only seat available. It is warm and comfortable. You look around and notice men of all ages and sizes. They all seem to have one thing in common: they love this train ride. As the train gathers speed, all aboard seem to pull together. You, the rookie, look up and discover the beautiful scenery on each side of the train. My God, you think, What a wonderful ride! Why would that man have gotten off? But I’m glad he did, because I was able to take his seat. The train speeds down the tracks with an enjoyable hum.

As the years go by, you continue to bathe in the thoughts of all the wonderful things this train ride has to offer. You are trained

Over 25 years ago a friend of mine, Bob Haynes, retired from the Los Angeles Fire Department. When he left he wrote this article about his career. I rediscovered the article in my archives. As I read “A Train Ride,” two thoughts came to mind. First, Bob hit the nail on the head regarding fire department careers, and second, nothing has changed. I took the liberty of updating some of the article terms, but the article is Bob’s creation. I hope you enjoy reading “A Train Ride by Bob” as much as I did.
LEADERSHIP:

A TRAIN RIDE

well in everything, you can imagine. You are very confident in your abilities to keep this train going: up steep grades, around tight corners, but always on track toward the goal. At times you feel weary because of the workload, but you’re always ready for the challenge of what is around the next bend. As you become more involved in the ride, you begin to notice that you are surrounded by some of the highest quality people that you have ever known. These people would lay down their life for anyone on this train. Obviously you become closer and closer to them. You find yourself enjoying leisure time with them. You are involved in all phases of their personal lives. These people truly are your life.

When you had been on the train for many years, you start to notice the smoke from the engine. It isn’t bad, but you don’t like it. Each day you notice the clickity clack of those damn tracks. It isn’t too bad, though. The chief engineer is barking orders at everyone on the train, and the captain of each car tries gallantly to carry out those orders. Since you are an old timer, you can tell the difference between a good order and the “bull.” You often wonder how the poor captain can keep a straight face when relaying some of that fodder. They are generally pretty good at sifting through and keeping only the good stuff.

Each time the train stops at a station, some old timers get off. Almost immediately, their seat are filled with strong, smiling, and smart young men who begin to really enjoy this ride. It doesn’t take long for them to soak up the good stuff necessary to really be an asset to this train. But as you sit back in your seat, you notice that damn clickity clack. The smoke from that struggling engine is really beginning to annoy you. About this time, we take a real sharp curve, which throws you out of your seat. At that point, you decide that your ride is almost over. All these great people around you haven’t changed; you have. So, yes, at the next station, you get off that wonderful ride and leave your seat open for a wide-eyed, pink-cheeked young rookie to enjoy. You only hope that your peers have as much respect for you as you do for them.

Your wonderful ride is over. You hope that you leave the train a little better than you found it. You look away from the station and see a big beautiful world out there. You walk off the platform and into the rest of your life. From time to time you see that big train charging down the tracks and wave at those onboard. You really miss the passengers on that train, but you don’t miss the clickity clack and the smoke belching from that monster you call the train.

Once again, thank you Bob. As I said in my beginning thoughts, he hit the nail right on the head. Most of us loved our fire department careers. We contributed our skills, experience, labor, and knowledge to the department. We entered buildings where people were running out of and sometimes we wished we could go with them. Our entire careers revolved around helping people. Our courage was tested on the fire ground and our character was tested in the fire house.

We are proud of our careers and have made lifelong friends. However, over the years, things, conditions, and people change. Like most of us, Bob knew it was time to get off the train.

Stay Safe
Paul Stein (Happily Retired)

VIVI BENE- LIVE WELL
RIDI SPESSE- LAUGH OFTEN
E AMA MOLTO- LOVE MUCH

Paul Stein retired as chief officer from California’s Santa Monica Fire Department. After retirement he served as interim fire chief for the Lakeside Fire Department in California. He holds an A.S. degree in fire technology and a B.A. degree in management. Chief Stein is a master instructor for the California Department of Education.
Now is the time to begin working on your Emergency Services degree or finish the degree you have been working on.

Why should I earn a college degree?

- Personal improvement
- Preparation for promotion
- Expand career opportunities

What degrees are offered?

- One-year certificate – Firefighter Recruit Candidate and/or Paramedic.
- Associate in Applied Science – Firefighter/Emergency Care and Fire Officer.
- Associate in Science.
- Online Bachelor of Science in Emergency Services Administration with an emphasis in Emergency Management.
- Bachelor of Science in Emergency Services Administration with an emphasis in Emergency Care.

How do I enroll?

- Apply for admissions by going to: http://www.uvu.edu/admissions/
- If you have attended another college or university, request an official transcript be sent to: UVU Admissions Office 800 West University Parkway MS 106 Orem, Utah 84058-5999

What will it cost?

- For official UVU tuition/fee amounts go to: http://www.uvu.edu/tuition/tuitionFees13-1428-28.pdf
- Some courses have “course fees” in addition to tuition.

For more information regarding admissions and registration, call 801-863-7798 or 888-548-7816 to schedule a phone or office appointment with an Emergency Services Administration Academic Advisor.

SUMMER 2015 SEMESTER
ESFF FACE TO FACE CLASSES

ESFF 1360 Basic Firefighter Internship

ESFF ONLINE CLASSES

ESFF 1000 Introduction to Emergency Services
ESFF 2100 The Desire to Serve
ESFF 1120 FES Safety and Survival

ESEC FACE TO FACE CLASSES

ESEC 1140 Emergency Medical Tech Basic
ESEC 4110 Paramedic IV
ESEC 4120 Paramedic Clinical Concepts
ESEC 4150 Critical Care Emergency Medical Transport

ESAF ONLINE CLASSES

ESAF 2100 Airport Freighter
ESAF 2110 Aircraft Related Mass Casualty Incidents
ESAF 2120 Aircraft Mishap
ESAF 2130 Aviation Terrorism Response
ESAF 2140 Airport Operations for the ES Responder

ESMG ONLINE CLASSES

ESMG 310G Introductions to Homeland Security GI
ESMG 3150 Public Program Administration
ESMG 3200 Health Safety Program Management
ESMG 3250 Managing Emergency Medical Services
ESMG 3600 Psychology of Emergency Services
ESMG 4150 Humanitarian Relief
ESMG 4200 Disaster Response
ESMG 445G Human Factors Emergency Management GI
ESMG 4500 Customer Services/Marketing for ES
ESMG 4550 Principals Disaster & Emergency Management
ESMG 4600 Public Admin Emergency Management
ESMG 4650 Emergency Services Capstone
ESMG 481R Emergency Services Internship
ESMG 489R Special Topics in Emergency Services
ESMG 491R Topics in Cardiology and Medical Trends
ESMG 492R Topics in Trauma and Pharmacology
ESMG 493R Topics in Medical Litigation
FALL 2015 SEMESTER
ESFF FACE TO FACE CLASSES

ESFF 1000 Introduction to Emergency Services
ESFF 1360 Recruit Cand Acad Internship
ESFF 250A Firefighter RCA I
ESFF 250B Firefighter RCA II
ESFF 281R Emergency Services Internship

ESFF ONLINE CLASSES

ESFF 1000 Introduction to Emergency Services
ESFF 1120 FES Safety and Survival
ESFF 2100 The Desire to Serve

ESFO ONLINE CLASSES

ESFO 1100 Fire Behavior Combustion
ESFO 1110 Fire Prevention

ESEC FACE TO FACE CLASSES

ESEC 1140 Emergency Medical Tech Basic
ESEC 3060 Emergency Med Tech Advanced
ESEC 3110 Paramedic I
ESEC 3120 Paramedic I Lab
ESEC 3130 Paramedic II
ESEC 3140 Paramedic III

ESWF FACE TO FACE CLASSES

ESWF 1400 Wildland Firefighting Fund

Enroll early! Please note that courses are subject to cancellation due to low enrollment.

EARN YOUR EMERGENCY SERVICES DEGREE AT UVU

FALL 2015 SEMESTER
ESMG ONLINE CLASSES

ESMG 310G Introductions to Homeland Security GI
ESMG 3150 Public Program Administration
ESMG 3200 Health Safety Program Management
ESMG 3250 Managing Emergency Medical Services
ESMG 3300 Master Plan Pub Emergency Services
ESMG 3350 Analytical Research Approaches Public ES
ESMG 3600 Psychology of Emergency Services
ESMG 4150 Humanitarian Relief
ESMG 4200 Disaster Response
ESMG 4400 Legal Considerations for Emergency Services
ESMG 445G Human Factors Emergency Management GI
ESMG 4500 Customer Services/Marketing for ES
ESMG 4550 Principals Disaster & Emergency Management
ESMG 4600 Public Admin Emergency Management
ESMG 4650 Emergency Services Capstone
ESMG 481R Emergency Services Internship
ESMG 489R Special Topics in Emergency Services
ESMG 491R Topics in Cardiology and Medical Trends
ESMG 492R Topics in Trauma and Pharmacology
ESMG 493R Topics in Medical Litigation

RECRUIT CANDIDATE ACADEMY (RCA)

By Application Only. For more information visit http://www.uvu.edu/esa/academics/rca.html or make an appointment with an academic advisor by calling the Student Center at 801-863-7798.

On-the-job internships are available for all RCA graduates.

Application deadlines: June 1st for fall semester and October 1st for spring semester.

PARAMEDIC

By Application Only. For more information visit http://www.uvu.edu/esa/academics/paramedic_emt.html or call 801-863-7700 or 888-548-7816.
Same Great Company, Fresh New Look!

For over 40 years we’ve been working to develop and deliver a line of services for property restoration and recovery that provides customers with the best experience possible.

We work tirelessly to stay current with technology, equipment and service delivery tools in order to ensure the best outcome for our customers even in the worst of conditions.

Property Restoration and Recovery

- One Hour Emergency Response
- Water
- Fire
- Mold / Asbestos
- Personal Property
- Electronics
- Disaster

callUDK.com

Rely on Experience. Call UDK.
13001 Minuteman Drive, Draper, Utah 84020
(801) 553-1010