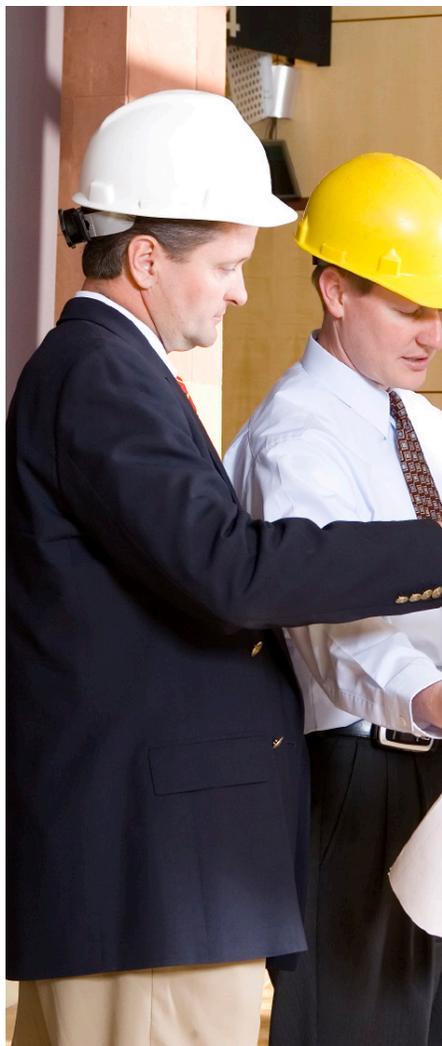


BOAT Bulletin

a publication by the Building Officials
Association of Texas



The Many Roles of a Building Official

The title on your business card may say "Building Official," but you probably have to play several different roles to get the job done, says Penny Peterson. Read her thoughts on page 4.

Message From the President



Let me start off by saying Happy New Year to all our BOAT family and friends.

We are embarking on a new year and new, fresh approach to what type of education we will be bringing to the members this year at the upcoming BPI's and Annual Conference to be held in Texarkana. We are steering our education back to where the roots of the chapter started - back to the building code official. It is our duty to support, supply information, knowledge, training and tools to local officials so they can be successful. That is what we have heard from the members, what they are anticipating and what we are going to do.

We touched on it in Granbury and are rolling it out at the Annual Conference in Texarkana. We are going to include the Region 10 group that consists of Oklahoma, Arkansas, and Texas, and are reaching out to Louisiana as well. We want this to be the best conference to date and provide the education needed to be successful in what we do as local officials. We have a great location and even better program as we gear it to the building official and the ICC Building Department Administration.

As we remember our past successes and disappointments, we must ask ourselves where do we go from here? Were our BPI's successful or were they not? How do we capitalize on what we have? How do we become successful? We need you to step up. BOAT is providing the training and taking the risk, and we need you, the student, to do your part.

I look forward to seeing you all at the BPI's and the Annual Conference Texarkana.

Here are some of our upcoming events:

2015

Houston BPI - February 23 - 26, Double Tree by Hilton Houston Hobby Airport

Arlington BPI - May 18 - 22

BOAT Annual Conference – August 18 - 21, Texarkana

2016

BOAT Annual Conference – August 2 - 5, Sugarland

We can't do any of this without you, the membership. You have the dates, so please help us get the word out and let's make all our training and education events successful for all who participate and for BOAT.

Kurt Kasson, CBO
President
City of Allen

The Building Official – More Than Who We Seem to Be

By Penny Peterson, City of North Richland Hills

Ah, the days of Hammurabi. In 2000 BC being a building official was somewhat easy. They really only had three rules to go by: 1) If the builder builds a house solid and proper, he gets paid; 2) If the builder builds a house that fails and someone is killed, the result is the same for the builder or his family; and 3) If the house or property is destroyed then the builder must replace all with his own money. Life was good.

Today's society frowns upon rule number 2, so we evolved by developing building codes (which help prevent the death of the builder). Unfortunately, most building codes were created due to the deaths of many people. The building official today helps to create these codes as materials and building methods change.

There are some citizens that would argue that the building official is just trying to interfere with their life. They should be able to do as they please with their house, accessory structure, or commercial building. The citizen does not see that the building official is only enforcing the minimum standards. Nor do they really see how many hats we have to wear.

Enter the building official - the negotiator. The citizen complains that they cannot afford the excessive costs (they think) that building to code requires. You try to reason that the code is a minimum standard that works to help protect the general public, the property owners and their loved ones. No go. You reach into your brain for the library of hundreds of codes and begin to give the citizen some options that would help them to meet code. They smile, you smile, and they leave your office. Success, you think.

Now meet the building official - the site consultant. The citizen calls



Being a building official sometimes requires us to wear multiple hats to get the job done.

you back. They are in the middle of their project. Your options don't work, PLEASE come to the site. Being the concerned building official that you are, you rearrange your schedule and agree to meet. As you are walking out the door, your phone rings. The city manager wants you in his office... NOW. Yikes! Although most of the time you handle being in two places at once, you do the next best thing and call your best inspector to meet with the citizen. Priorities in order, good thing you sent your inspector, the citizen misplaced the screw pattern. All is well.

And then there's the building official as the social worker, the soothsayer. Each day brings a variety of citizens to your office. Some are there for basic needs, simple over the counter permits. Your staff smiles, helps them, sends them on their way. Some are hostile at the thought they must get a permit. The building official steps in, saves the staff. A lot of

contractors come in for permits but do not remember where they are working. Your staff (and possibly yourself) becomes the psychics to mind probe the location of their job. There are the citizens that have gotten lost on our freeways. You become the way finder.

There are the citizens that you find. The ones that have been displaced by severe damages to their homes, the elderly that need meals, children that should be in school, citizens that have neglected their homes to the point of dilapidation due to their obsession with hoarding. All these and countless other situations you find just doing your job as a building official. You provide information; refer citizens to agencies that can help.

So, are we just building officials? I say "no." We have evolved, we care, and we strive to help, protect, and look for new and efficient ways to create life-saving codes. We Rock! ♦



New Ideas for Building Official Education

By Kurt Kasson, CBO, City of Allen

I believe as we start this New Year, and as we focus on the years to come, we want to bring back to the building code officials what this chapter was created to do: generate information, create training, and share our combined knowledge to support the local building code official and help them be successful. I believe in “mentoring” just as I was mentored when I became the city building official.

There are books, classes, and courses to take; but there is also combined education and knowledge that can only be passed on as we network with each other. We all know that somewhere, another building official has been in the same (or similar) situation that we are going

through. We need to extract that knowledge before it is lost. As a lot of us baby boomers retire within the next decade, we need to encourage the next generation to take over the reins.

We are experiencing difficulty when it comes to qualified individuals expressing interest in the field. How can we change that? It may be up to us to “raise up” and “replenish” the next generation of building code officials. We must be willing to recruit those that have an interest, visit schools and make contact, speak at local events, and promote Building Safety Month in neighborhoods and to local organizations. So I ask of you, “Are you up for the challenge?”

I believe one step we can take as an association is: create a Building Official Orientation class. We will work on setting up such a training class that

will be offered at all three BPI locations regularly. Newly appointed building officials will be able to attend training that will help them as they go forward.

The training will focus on creating a deeper understanding of the role of the building official in Texas and local regulatory system. Training topics will range from being consistent in application submittal, enforcement of the code, learning how to approve alternative methods and materials, and how to efficiently administer the locally adopted code or state code.

More information will follow on this important topic. I ask all of you with your seasoned experience to forward to me any ideas and suggestions that would make this program a huge success. We will have the BOAT Board evaluate your topics and develop a program that works. ♦

Great Opportunity from TBPE!

The executive director of the Texas Board of Professional Engineers (TBPE), Lance Kinney, P.E., has a great announcement. The TBPE is working on an outreach program for city officials.

This program is designed to educate cities on what the board does and how it relates to them. The TBPE regulates the practice of professional engineering in

Texas and investigates cases of fraudulent use of engineering stamps. The board has informative materials, including a flowchart titled “When is a professional engineer required on a project?”

The TBPE staff is available to make outreach presentations directly to a city or TML region. This can be done either in person or via webinar. Materials are

available on the website: <http://engineers.texas.gov/media.html>.

For further information, please contact:
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Email: lance.kinney@engineers.texas.gov
Phone: 512-440-3080

“American Sniper” – the Movie, the Man, and Taya

By Lauren Grosman, BOAT Affiliate Services Coordinator

“Clear eyes, full hearts, can’t lose.”
Coach Taylor, Friday Nights Lights

I know the quote above is from a fictional character in a TV show, but when I thought about writing this article those were the words that kept running through my head about Chris and Taya Kyle. (Besides, both Chris and Coach Taylor are Texas boys through and through!)

This past August at the BOAT Annual Conference, we had the opportunity to hear from Taya Kyle, widow of former U.S. Navy Seal, Chris Kyle. Everyone attending the conference received a copy of the book, *American Sniper* — which is the basis of the new movie release by the same title. If you have read the book and/or seen the movie you’ll know that while their way was filled with obstacles, in the end neither Chris nor Taya lost their focus and they never lost their purpose.

How do you not lose your focus when you’re Chris, you’ve fought through four tours of service, and killed roughly 150 insurgents to save American military lives? Or Taya who had to deal with a husband in danger, care for two children on her own, endure the murder of her husband when he was supposed to be safe on U.S. soil, and deal with a lawsuit started before and continued after Chris’ death?

As Taya told us during her address at the conference, it comes from believing in God, country, and family - the three principles in which both she and Chris used to guide their lives (although each put them in a different order). Taya talked about how

those principals helped her through her life as a military wife, Chris’ death, carrying on the work she and Chris started for military families, and the lawsuit with Jesse Ventura.

I don’t think there was a single person in the audience who was not moved by her pain, her joy, and her overall kindness. After her speech, Taya stayed and signed everyone’s book in spite of the heat because of the broken air conditioner. She had kind words to say to everyone and was happy to pose for pictures. She is one of the most down-to-earth people you can meet.

For Chris, he fought for his country and to protect his fellow warriors in battle. And in spite of believing 100% in his work, his place, and his job with the SEAL teams, Chris wasn’t left untouched by the violence he experienced. He had to adjust to coming back home and becoming the family man he wanted to be. Those experiences are detailed in his book and in the movie.

Taya has commented publicly that the movie captures the essence of Chris and has been a painful yet beautiful experience. This is from one her Facebook posts:

“I guarantee you will see and feel Chris in this movie. You will also feel the story of many of our veterans and their families from all of our wars. Our stories may have different details, but our battles are astoundingly similar.”

I’ve seen BOAT members jump into the fray many times to be of service to their community and surrounding areas that need their help. Is it the same as combat? No. But service to others is important in any degree. Hearing Taya, reading the book, and seeing the movie is just a reminder that we all are capable of serving in some way, even when it is suddenly thrust upon you. Even more we must all remember our service men and women, respect and be grateful for their work for this country, and appreciate the hardships they and their families endure. ♦



Chris and Taya Kyle never lost their focus despite the obstacles they faced.



David Denney, who heads up the building inspections division for the city of Terrell, holds a plaque from the Building Officials Association of Texas naming him as code professional of the year in 2012. From left are municipal development director Terry Capehart, Denney, Mayor Hal Richards and BOAT president Lawrence Crow. Photo by Gary E. Lindsley/The Terrell Tribune

Remembering Words and Gifts

By Selso Mata, AIA, CBO, City of Plano

The holiday season often brings opportunities to pause, reflect, remember and give, put things in perspective, and recall all of our blessings.

During this time we heard news about David Denney, the building official in Terrell, Texas. I met David once but you might recall him as the recipient of the BOAT - Code Official of the Year award in 2012. Sadly, at that time David had been diagnosed with the final stages of skin cancer and had months or at best a year or so to live. He remained active up to his abilities but had a far-reaching goal of one day achieving the Certified Building Official certification. It was something David highly regarded.

Lawrence Crow, Field Services Supervisor – Irving, Texas, and past president of BOAT, remained in contact with David but only recently learned that his condition had worsened. Upon hearing the news, Lawrence asked ICC CEO Dominic Sims to consider bestowing the certificate of CBO upon David.

Dominic agreed to issue an Honorary Certified Building Official Certificate to David Denney two days before Christmas on December 23, 2014.

A few days later, on January 5, 2015, Lawrence Crow sent an email to Dominic Sims and the BOAT Board saying “Our friend and new CBO, David Denney went to be with

the Lord this morning. Dominic, you gave many gifts this Christmas, but none more special than this one. Thanks for the extra special effort! Your newest CBO will pass on a good word for you in heaven I am certain!”

We of course thank Lawrence and Dominic and all associated with this grand effort.

Almost at the same time, Sport Centers’ longtime anchor, Stuart Scott passed away from cancer — one day before David. He was, of course, in the public eye and had his life story broadcast to many in the sports world. While both David and Stuart are no longer here, I am sure they might be sharing a talk today about all of us and how we remember them. Some parting thoughts from Stuart as he accepted an award in one of his last public appearances: Stuart said, “When you die it does not mean you lose to cancer. You beat cancer by how you live, why you live, and the manner in which you live.”

Since that night, “you beat cancer by how you live” has become a rallying cry for millions of patients and their families. I don’t think about it often and perhaps it only occurs as you approach your last days, but we can learn a lot from Stuart’s words of wisdom. They are not only a rallying cry to beat cancer but on being your best in all you do; “how you live, why you live, and the manner in which you live” words to remember when you need some reassurance or purpose in life. ♦

Are Basements a Bargain or a Nightmare?

By Cyndi Lewis, City of University Park

With a basement construction still in the works and fresh on my mind, I wanted to share my most recent experience. This 1,200 square foot basement excavation was estimated to take 3 to 4 weeks to complete; it actually took about 11 weeks! With issues of over-excavation, improper excavation, collapsing sidewall, heavy rainfall, broken pumps, pumping sludge into the alley without a filter, failure to divert displaced water to the storm drain, failure to install permanent drain, neighbor complaints, failure to protect neighboring properties, collapse of the neighbor's yard into the pit, and leaving the site open – this project became a nightmare. Daily inspection reports from the engineer quickly became a requirement. Sixty-eight inspection reports and 84 site visits later, the final excavation report arrived.

Although basements are not commonplace in this area of Texas, there are dozens in some cities and we are seeing an increase in this trend. Some cities are land-locked and as price per square foot tends to drive density, more and more owners are opting to increase square footage by building vertically as lot coverage maximums are met. When height restrictions come into play, some are opting to take a downward vertical construction option. Necessity is the mother of invention, or in this case, written local ordinances concerning basements.

If you do not have a specific ordinance or procedure concerning basements, you may want to begin that process. Besides safety, escape and rescue, insulation, and typical construction concerns, the main challenge we have faced during construction is the actual excavation

and associated site concerns during this process.

Although the following information is not comprehensive or exhaustive, it contains items that we have found to be extremely important. If you compile a list of required documentation beforehand, it can help alleviate future headaches.

Basement excavation site safety during and after construction hours is very important. Once excavation has begun, keep the site secure with a durable construction fence and locking gates. After a heavy rain, an excavated pit can be very attractive to children who are looking for new places to explore

or swim. Pumps should keep the excavated site free of standing water. The importance of this task is doubled with the threat of West Nile infected mosquitoes.

Consider setbacks for below-grade construction. Will they be the same as the main

structure? If so, make sure you account for escape and rescue and/or window wells and check those at the form board survey inspection.

Ask that an engineered excavation plan be submitted by a Texas Registered Professional Engineer with expertise in soil dynamics. You may get puzzled looks from contractors or engineers, but OSHA consultants confirmed that this is definitely not an unreasonable request.

OSHA provides excellent guidelines and their information is online. They only become involved with residential construction on a complaint basis; their main concern is protection of construction workers actively working in the pit. If you're interested in learning more, OSHA has released [a publication on excavations](#) on its website.

Based on a geotechnical report, the engineered excavation plan should include details outlining the method and extent of excavation. While the geotechnical report will provide the

information used in the engineered design, you should also ask for a dimensioned site plan that outlines the extents of the excavation, sectioned details showing the depth and method of excavation, as well as the proposed method of soil retention as required. The plan should outline safety precautions to be used by all contractors to ensure safety, and details depicting how adjacent properties will be protected. Heavy rainfall and erosion, weather events, and other delays should all be factored in. No one wants the neighbor's yard, pet, or swing-set to end up in the excavated pit. Any neighboring foundations, if nearby, could be adversely affected if care is not taken. The registered design professional in charge of the project should provide inspection reports.

Some cities require an engineered drainage plan, showing how excess subsurface water displaced from the basement will be handled. Some basements will incorporate sumps, which pump several gallons of water each day; some basements displace hundreds of gallons per day. During construction, a pump and pipe system carries accumulating water away to the storm inlet. A permanent pump and drainage system will be installed during construction. This water is sometimes diverted to a cistern that is used for irrigation, or carried away to the city's storm water drainage system through enclosed piping.

Recently, a co-worker and I read a paragraph written by an engineer who had proposed a particular method of soil retention. Then we each went to a whiteboard and drew the "detail" each of us thought we understood or interpreted. Although we had read the same paragraph, we both drew completely different details. And a contractor in the field may have interpreted the written detail yet some other way. So why leave this up to interpretation? The engineer should provide clearly depicted, dimensioned, and denoted details so there is nothing left to conjecture. Remember a picture is worth a thousand words. ♦

“When height restrictions come into play, some are opting to take a downward vertical construction option. Necessity is the mother of invention, or in this case, written local ordinances concerning basements.”



Customer Service Reality and Perception

By Thomas Hosey, CBO, CASp, City of Houston

Development is booming in the great State of Texas and no more so than here in Houston, the state's biggest city. As 2014 ended, Houston issued permits for more than 50,000 new residential and commercial projects, performed more than 500,000 inspections, with development totaling over 9 billion dollars in valuation. The development volume was less than half of that just a few years ago. While activity has increased exponentially, the ability to find, recruit, and train quality staff has not kept pace. This is not a challenge unique to Houston, the entire industry struggles with this challenge, as we all compete with one another and the private sector for quality staff.

Given unlimited resources we would want and easily be able to provide optimum customer service. Unfortunately resources are always limited and demand is dynamic and ever changing. Balancing this to achieve the best possible result is part of the art of management and a vital responsibility of a professional building official.

Comprehensive customer service can mean different things, and is a very wide-ranging area of study beyond the scope of this brief article. However I would like to look at an often overlooked, but vital component of customer service. I doubt anyone would disagree that the public safety mission of building and safety is an important component and must be fully accomplished. What is this mission?

One definition of this mission is to help insure quality, safety, usability, accessibility, and sustainability in the built environment in a cost effective, efficient, and the most user friendly

manner possible, by the application of codified standards in the review of designs, inspections of the physical construction, administration, and related enforcement. As this core component continues to be met, and development activity and staff workloads increase, the most common outward signs to customers are increased time frames in plan reviews, less flexibility in inspection scheduling, and less availability of city staff time to answer questions and assist them through the process. Although as Building Officials and good managers we will streamline for efficiency, coach and insure our staff is professional and friendly, and acquire as many new resources as possible to minimize this. Unfortunately this increase in time frame will ultimately still occur. When this happens, perception – that overlooked component – becomes a vital issue to address.

Perception and how to manage expectations can be your saving grace or it can be your downfall. For example, in a moderate development cycle you might be able to consistently provide 14-day initial plan review turnaround times on a commercial project, and next day inspections within a one-hour appointment window; however with higher activity these time frames and windows may greatly increase. With just this information customer service will be “perceived” as greatly diminished. The reality may actually be that procedures have been greatly improved to allow more plan reviews and inspections to be completed, with the same degree of thoroughness. Change the expectation and you will change the perception of good or bad customer service.

To do this a three-pronged approach consisting of statistics, anecdotal evidence, and outreach can

be used. One of my favorite quotes, attributed to Mark Twain, is “there are lies, damn lies and statistics.” The phrase is meant to reinforce the power of numbers and presenting your information to achieve the greatest possible impact.

To change expectations you need to begin by not just disseminating all of the key monthly information and statistics, you need to include metrics comparing historical staffing and activity levels and spotlight these numbers. In addition to these hard numbers, you need to change the anecdotal perception. This will be different in each community however an example of this approach is as follows: I have distributed several magazine and news articles comparing Houston's current development activity as outpacing both the entire State of California for single family home starts and New York City for commercial square feet under construction. I followed that up with a comparison of staffing size—which in Houston is much smaller.

Finally the most important part of this is active outreach. The building official (and senior staff) should already be participating in industry and political groups and this is a perfect forum to include all of this information. We need to be actively engaged by appropriately presenting the workloads, spotlighting all of the ongoing efforts, successes achieved, and soliciting input from these local groups. The industry understandably will not like the changing expectations, however by including their input they have an active voice and become part of the ongoing challenge. If it is presented to them in the correct manner they will become accepting of it (or at least resigned to it in the short term). ♦



National Association of State Fire Marshals (NASFM) Applauds Texas Governor Perry's Proclamation On Yellow CSST Safety Education

AUSTIN, Texas, Oct. 22, 2014 /PRNewswire/ -- Today, Texas Governor Rick Perry issued a proclamation commending efforts to enhance public safety and promote consumer awareness on the proper installation of yellow Corrugated Stainless Steel Tubing (CSST). Governor Perry also encouraged further education on the need to properly bond yellow CSST in houses that contain the product.

Yellow CSST is a flexible metal gas tubing which has been installed in more than seven million homes in the U.S. since the early 1990s. It is used to supply natural gas or propane to furnaces, water heaters, and other gas appliances.

In July 2012, the National Association of State Fire Marshals (NASFM) and a coalition of CSST manufacturers launched a nationwide safety campaign to bring awareness to homeowners on the importance of proper bonding and grounding of yellow CSST to current code standards. Governor Perry's proclamation underscores the importance of awareness by all Texas

homeowners.

"We applaud Governor Rick Perry for joining in our effort to raise awareness about this issue and contributing to the safety of Texas homes," said Chris Connealy, Texas State Fire Marshall and NASFM board member.

In recent years, manufacturer's instructions and national building codes have changed with respect to requirements for bonding and grounding of yellow CSST in new installations. NASFM is leading the way by bringing awareness to homeowners to ensure yellow CSST is properly installed to updated specifications in all homes.

Research by the Gas Technology Institute (GTI) into the effectiveness of direct-bonding of CSST, documented in a September 5, 2013 report, "validation of installation methods for CSST gas piping to mitigate indirect lightning related damage," confirms direct-bonding CSST results in improved safety.

When not installed to current code standards, yellow CSST can be affected by a direct or indirect lightning

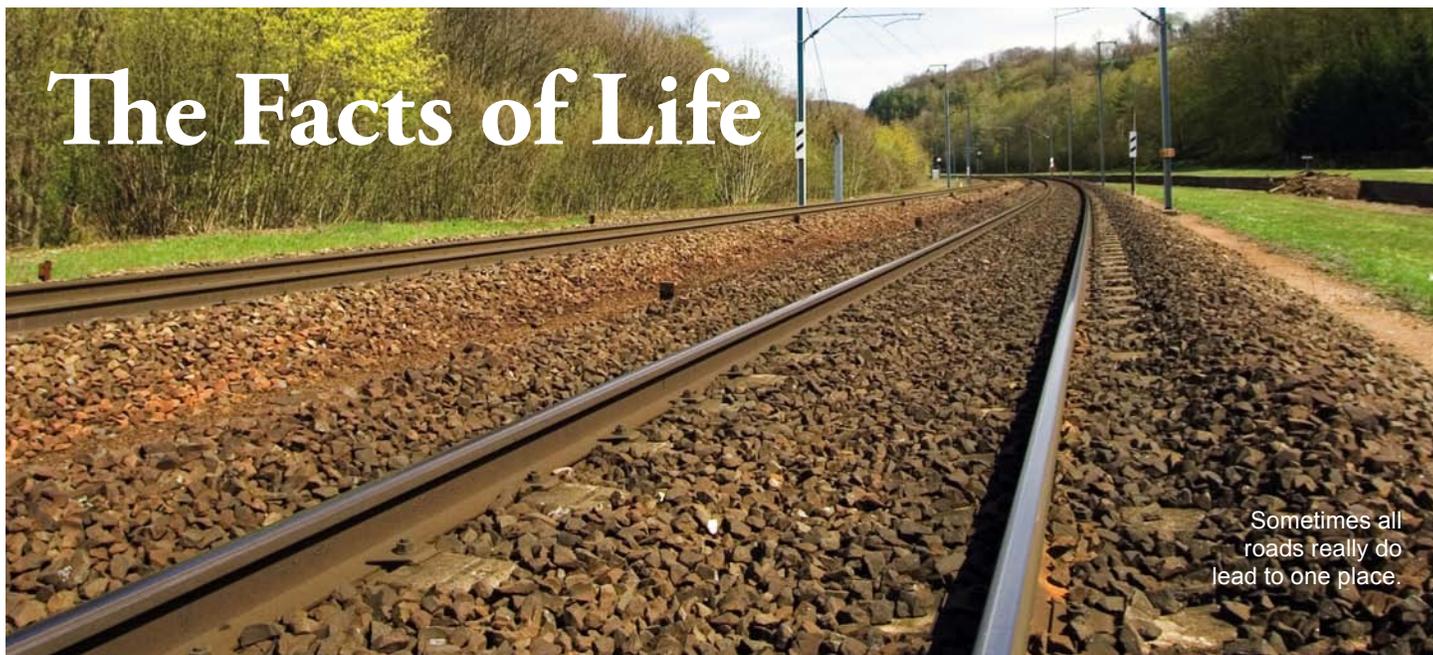
strike and may cause a perforation increasing the risk of fire.

"It is important that homeowners be aware and take the necessary precautions. NASFM looks forward to joining efforts with Governor Perry to continue educating homeowners in Texas about proper yellow CSST installation to current code standards," said Jim Narva, NASFM Executive Director.

Homeowners and property owners who have yellow CSST installed in their homes are encouraged to determine whether the system is properly bonded and grounded. Licensed electrical contractors can determine if a yellow CSST system has been installed in accordance with current manufacturer installation requirements and code standards.

To view Texas State Fire officials' public service announcement on the yellow CSST safety campaign and for more information, please visit <http://www.CSSTSafety.com>. ♦

The Facts of Life



By Mike Olson, CFM, City of McGregor

The United States standard railroad gauge (distance between the rails) is 4 feet, 8.5 inches. That's an exceedingly odd number. Why was that gauge used? Because that's the way they built them in England, and English expatriates designed the U.S. railroads.

Why did the English build them like that? Because the first rail lines were built by the same people who built the pre-railroad tramways, and that's the gauge they used.

Why did they use that gauge then? Because the people who built the tramways used the same jigs and tools that they had used for building wagons, which used that wheel spacing.

Why did the wagons have that particular odd wheel spacing? Well, if they tried to use any other spacing, the wagon wheels would break on some of the old, long distance roads in England, because that's the spacing of the wheel ruts.

So, who built those old, rutted roads? Imperial Rome built the first long distance roads in Europe (including England) for their legions. Those roads have been used ever since.

And the ruts in the roads? Roman war chariots formed the initial ruts, which everyone else had to match for fear of destroying their wagon wheels. Since the chariots were made for Imperial Rome, they were all alike in the matter of wheel spacing. Therefore, the United States standard railroad gauge of 4 feet, 8.5 inches is derived from the original specifications for an Imperial Roman war chariot.

In other words, bureaucracies live forever. So the next time you are handed a specification, procedure, or process, and wonder, "What horse's rear came up with this?" you may be exactly right. Imperial Roman army chariots were made just wide enough to accommodate the back end of two war horses.

Now, the twist to the story: When you see a space shuttle sitting on its launch pad, you will notice that there are two big booster rockets attached to the sides of the

main fuel tank. These are solid rocket boosters, or SRBs. The SRBs are made by Thiokol at a factory in Utah. The engineers who designed the SRBs would have preferred to make them a bit larger, but the SRBs had to be shipped by train from the factory to the launch site. The railroad line from the factory happens to run through a tunnel in the mountains, and the SRBs had to fit through that tunnel. The tunnel is slightly wider than the railroad track, and the railroad track, as you now know, is about as wide as two horses' behinds.

So, a major space shuttle design feature, of what is arguably the world's most advanced transportation system, was determined over two thousand years ago by the width of a horse's backside.

And you thought being a horse's rear wasn't important! Now you know, horses' backsides control almost everything.

Explains a whole lot of stuff, doesn't it? ♦

