2014 is off to a good start at the UCSD OSHA Training Institute Education Center. Our classes are very busy with many new Outreach trainers attending the required OSHA Standards classes and then continuing to the trainer classes.

We are also seeing quite a few trainers returning for their refresher classes when their four-year authorization has expired. It appears that there are many more organizations requiring the OSHA 10 and 30 hour Outreach cards for their employees and contractors, not just in those places where the government requires it, but by voluntary requirements as well.

We’ve always had many student trainers in our Construction trainer classes, but it appears that Maritime and General Industry business are also finding that the Outreach training is a benefit for their exposures.

Here at the UCSD Outreach Newsletter Headquarters, we’re pleased to provide you with each issue and hope you’re finding them valuable.

One side note: your humble editor is also an instructor and I’m hearing very good comments about the newsletter’s value and especially with our On-line Reporting Tool and the quick turnaround of the Outreach cards.

Many of our student trainers have been authorized previously at other OSHA Training Institute Education Centers and wonder why only UCSD has this kind of system. It’s because UCSD spent the time and money to create the system based on the needs of our Trainers and the problems with the old ways of obtaining Outreach cards.

Kudos to Stephanie MacGilfrey for her efforts in making the Tool a reality and continuing to ensure that it functions effectively. Please let us know if there is anything we can do to improve the system.

Harold Gribow, Senior Editor


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**April—June Refresher Courses**

- Las Vegas: OSHA 502—Construction, April 7-9
- Los Angeles: OSHA 502—Construction, April 21-23
- Los Angeles: OSHA 5029—Cal/OSHA Construction, April 24
- Phoenix: OSHA 502—Construction, May 5-7
- Sacramento: OSHA 503—General Industry, June 2-4
- Tucson: OSHA 503—General Industry, June 16-18

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Outreach Trainer Spotlight – Ziul Bayardo

**UCSD-authorized OSHA Outreach Trainer Ziul Bayardo is the Safety Manager for Building Materials and Construction Services in Las Vegas.**

**Please tell us about yourself and business.**
Our business is in the construction industry, concrete, windows, framing, stucco and the delivery of goods for homes to large buildings. In Nevada the construction industry is nonstop, with new casinos, infrastructure and new home development. Our company has been busy and continues to grow.

**What is your audience for Outreach classes?**
The main audience is in the construction population, the construction worker who migrates from state to state and comes to Nevada. Nevada OSHA mandates that every construction worker needs to obtain and maintain his OSHA Outreach training to be able to work in this state.

**How did you develop your training materials?**
Some of my main material has been acquired from UCSD, hands on and other sources. But a large part of my photos and materials have come from over 18 years in the safety field.

**Do you have any techniques that help make your classes more interesting and engaging?**
Yes. I believe that is a good principle to be able to bring the communication of the regulations down to the employee level. Don’t over sell the regulations but don’t undersell the importance of why the safety procedures should be followed and the consequences of non-compliance to the employee and his family. I explain to the employees the what and the why. I don’t under play the circumstances. But at the same time I keep the class fun, interactive, interesting and use plenty of photos. Sometimes a good photo will make a better impression to a participant than fifteen minutes of talking. Encourage and enable the employees to participate, be part of the class, realizing that sometimes they may have a better scenario or story.

**Do you see the demand for Outreach classes changing in the next five years?**
I do see an increased demand. Why? The type of injuries that I see now are less severe. I receive that feedback from the employees at the time of the training and months later. I have received several calls from employees who had taken the training and mention or question safety items that they have found in the field or in their work area. They also mention items and issues that they learned from the 10 Hour class. Because of this, I see the benefit from the employee side. From the employer side, injuries are down, the injuries are less severe, less costly and employees return to work more quickly. The Outreach training benefits both, employee and employer. When other states see all the benefits, the question is not why not, but when can we start training all employees.

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**UC San Diego Trainer Tip Of the Month**

**by Harold Gribow**

Did you know you can present training with an iPAD? In a recent trainer class, one of our students did his entire instructor qualification presentation using his iPAD rather than the traditional method using a laptop. I had never seen this done before and I found it to be quite interesting since this technology would reduce the amount of gear necessary to haul to a class. From what he told me, it requires a “dongle” (it’s an adapter) that plugs into the power plug of the iPAD and allows VGA connection to projectors. I think he used Keynote as a presentation app. He stores his PowerPoints in the “cloud” and accesses them electronically as necessary. It affected me greatly since I’m a recent convert to Apple devices and I think I’d like to try this out in the future.

It probably would work with other tablets, but since I’m a Mac-man, I don’t know anything about the others. Thanks to Jacob Maxfield from Utah for displaying this new technology.

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General Industry  by Harold Gribow

No More Falling Workers: OSHA focuses on protecting cell tower employees after increase in worksite fatalities

OSHA is concerned about the alarming increase in preventable injuries and fatalities at communication tower worksites.

In 2013, thirteen fatalities occurred in this industry, more than in the previous two years combined. This disturbing trend appears to be continuing, with the four worker deaths occurring in the first five weeks of 2014.

In an effort to prevent these tragic incidents, OSHA is increasing its focus on tower safety. Today, the agency has sent a letter to communication tower employers urging compliance and strict adherence to safety standards and common sense practices.

OSHA has created a new Web page targeting the issues surrounding communication tower work, which is available here.

This outreach follows a November 2013 memo to OSHA’s compliance officers and regional administrators mandating increased attention, education and data collection on the industry.

Of the 13 communication tower-related fatalities that occurred in 2013, the majority were a result of falls. OSHA requires employers to provide adequate fall protection equipment, train employees how to use the safety equipment and ensure that they use it properly and consistently.

In the past few months, tower workers have also been injured or killed by falling objects, the structural collapse of towers and equipment failures.

OSHA is committed to working with the communications industry to prevent these injuries and fatalities, and it will continue outreach and enforcement efforts to make sure that communication tower workers are adequately protected.

Small- and medium-sized employers can access OSHA on-site consultation programs for free assistance in providing safe workplaces.

New and updated OSHA resources available

OSHA has released a new Fatal Fact resource on “Falls from Telecommunications Towers” (PDF*), illustrating how failure to plan, provide the right equipment, and train workers effectively can lead to worker deaths.

A Fact Sheet for asbestos hazards (PDF*) has been updated with revised information for employers and workers describing the hazards of asbestos on the job, protections that exist in OSHA standards and workers’ rights. Additional Fatal Facts can be found at www.osha.gov/Publications/fatalfacts.html.

OSHA has released an updated version of the Cold Stress QuickCard (PDF*), which describes common types of cold stress, risk factors, protection tips and recommendations in the event of cold stress.

OSHA’s new Worker Safety in Hospitals Web page provides:
- detailed educational material about worker safety in hospitals
- easy to use products on implementing safety and health management systems

The website also contains information to help prevent the most common type of injuries in hospitals – injuries from manually lifting and moving patients. The guidance products include fact books, self-assessments & best practices guides. The website and materials are available at www.osha.gov/dsg/hospitals.
Oxygen/Fuel Gas Cylinder Portable Cart Separation Wall

In the Maritime industry, we routinely defer to the Occupational Safety & Health Standards (29 CFR 1910) for issues not identified in the Maritime Standards (29 CFR 1915, 1917, 1918, and 1919). 29 CFR 1910.253(b)(4)(iii) stipulates that “…Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet (6.1 m) or by a noncombustible barrier at least 5 feet (1.5 m) high having a fire-resistance rating of at least one-half hour.”

The Occupational Safety & Health Review Commission (OSHRC) has determined that a steel plate does not meet the requirements identified because it is not tested to meet the necessary fire-resistance rating.

There is a “firewall series” Oxygen/Fuel Gas Cylinder Cart that not only fulfills the fire-resistance rating criteria, with a steel baffle partition with a ceramic membrane, but permits hoisting the entire cart with contents and caps on the cylinders as required.

ANSI Launches Online Portal for Standards Incorporated by Reference

On October 28, 2013, the American National Standards Institute (ANSI) announced the official launch of the ANSI IBR Portal, an online tool for free, read-only access to voluntary consensus standards that have been incorporated by reference (IBR) into federal laws and regulations.

The ANSI IBR Portal provides a one-stop mechanism for access to standards that have been incorporated by reference in the U.S. Code of Federal Regulations (CFR). These standards incorporated by the U.S. government in rulemakings are offered at no cost in “read only” format and are presented for online reading. There are no print or download options.

Available on the Internet at [http://ibr.ansi.org/](http://ibr.ansi.org/), the following IBR Standards are hosted by ANSI:
- International Electrotechnical Commission (IEC)
- International Organization for Standardization (ISO)
- Association of Home Appliance Manufacturers (AHAM)
- American Welding Society (AWS)
- International Association of Plumbing and Mechanical Officials (IAPMO)
- Illuminating Engineering Society (IES)
- National Electrical Manufacturers Association (NEMA)

Available on the Internet at [http://ibr.ansi.org/](http://ibr.ansi.org/), the following IBR Standards are hosted by the various Standards Developing Organizations (SDOs):
- The Engineered Wood Association (APA)
- American Petroleum Institute (API)
- American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)
- International Code Council (ICC)
- Manufacturers Standardization Society (MSS)
- National Association of Corrosion Engineers (NACE International)
- National Fire Protection Association (NFPA)
- Underwriters Laboratories (UL)
**Construction**  by Jeff Beeler

When we are choosing topics for our 10-hour and 30-hour construction outreach classes we should consult with the customer or students to see what their needs are based on the job they do and/or environment they work in. One of the subjects that we generally don’t see chosen is Ergonomics. That subject is as palatable to the construction worker as spinach is to a small child but it is an important subject none the less. Many construction workers are injured due to improper lifting, material handling, tool use, etc.

When she was young, my daughter did not like spinach so I used to sneak it into her other foods to hide it. I would put the spinach in spaghetti or a casserole that would mask the taste and look of it. Similar to sneaking spinach into my daughter’s food, you too can sneak some ergonomics into the training you provide to your students.

The most apparent subject to cover in ergonomics is in a Material Handling presentation. There are topics such as rigging and Powered Industrial Trucks that could be covered but ergonomics can be added also when discussing manually moving equipment and materials. The use of proper lifting techniques and/or aids such as hand-trucks or carts are options to encourage. Getting help lifting an object is another consideration.

When you cover Power and Hand Tools there are many opportunities to discuss the proper, ergonomically correct, ways to hold and use tools. When discussing scaffolding or aerial lifts you may consider the effect on the body from doing overhead work. In demolition, you may discuss the issue of vibration injuries. In roofing or concrete work you might evaluate the stress on the back from bending and stooping over constantly. There are many subjects where ergonomics can be skillfully added.

So now you may wonder where you might get information to include in your training. One resource that has information regarding ergonomics in construction is at the Center to Protect Worker’s Rights. An example of what they offer can be found at: [http://www.cpwr.com/sites/default/files/publications/ergo_checklist.pdf](http://www.cpwr.com/sites/default/files/publications/ergo_checklist.pdf). Here you will find a checklist that can be used to evaluated ergonomic issues at a job site. Another resource is the OSHA web site. There are many pages of information regarding ergonomics. An extensive list of resources on the subject can be found at: [https://www.osha.gov/SLTC/ergonomics/controlhazards.html](https://www.osha.gov/SLTC/ergonomics/controlhazards.html).

Don’t let this important subject slip through the cracks when presenting your OSHA 10-hour and 30-hour courses. It can be painless and informative if presented in a way that is interesting and relative to the student’s job. It just may take a little creativity on your part.

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**Outreach Program**  by Stephanie MacGilfrey

There is never a dull moment in the world of OSHA. Guidelines are constantly changing and require constant revision to maintain the high quality and standards of the classes we teach. New changes were recently updated on the OSHA website. It is the responsibility of the OSHA Outreach Trainers to monitor the OSHA website for recent guideline and curriculum updates.

The Directorate of Training and Education (DTE) has recently revised the “Introduction to OSHA” training materials for the 10- and 30-hour Outreach Training Program classes. The materials were revised to incorporate the recent changes to the Hazard Communication Standard to align with the Global Harmonization System (GHS).

The revised materials include:

- Introduction to OSHA Instructor Guide – Replaced references to Material Safety Data Sheets (MSDS) with Safety Data Sheets (SDS) including Table of Contents, Appendix A1, C1, and D1
- Introduction to OSHA Power Points – Replaced slides 13, 14, 22, and 39 to reflect Safety Data Sheets
- Safety Data Sheet (SDS) handout replaces Material Safety Data Sheet (MSDS).

The revised training materials are located on the OSHA Web site at: [http://www.osha.gov/dte/outreach/teachingaids.html](http://www.osha.gov/dte/outreach/teachingaids.html).

Training materials should be reviewed prior to conducting training and used as a resource in all course planning and presentation of the “Introduction to OSHA” mandatory course topic. Trainers are required to adhere to the new changes and implement the new materials into all upcoming courses. Please contact our Outreach department if you have any further questions at (858) 534-9283 or oti-outreach@ucsd.edu.

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The UCSD OTIEC is part of UC San Diego Extension, which has served as a premier source of lifelong learning for adults seeking professional and personal growth for nearly five decades. Currently, Extension educates over 22,000 professionals annually in more than 4,600 courses and over 80 certificate programs including the multi-track Professional Certificate in Occupational Safety and Health.

The UCSD OTIEC has consistently provided quality, innovative and cutting edge occupational safety and health construction and general industry standards based education and training since 1992 when it was chosen as one of the original four OSHA Training Institute Education Centers. In addition to the U.S. Department of Labor OTIEC courses, Extension has a long history of providing courses in safety and health management and training, hazardous waste management and emergency preparedness.

Trainer Resources

Below is a collection of tools we think you will find very useful. Every month in this space we will be highlighting select resources to help you, our Trainers.

- **Napo Videos** - These films are produced as computer graphics & feature characters in the world of work, faced with safety issues. The main character, Napo, and his partners express themselves in wordless language. Culturally, they are "neutral" and therefore anyone can identify with them, whatever their language, country of origin or culture. [http://www.napofilm.net/en](http://www.napofilm.net/en)

- **Safety Awakenings** - An open-source workplace safety website providing links to over 20k free international safety resources! Every link is reviewed and selected by their staff. There are PowerPoints, safety apps, video clips and safety humor, all free and open for use. Follow this link: [http://www.safetyawakenings.com/](http://www.safetyawakenings.com/)

- **Rockford Systems Machine Guarding videos** – There are ten videos on this site that show several different kinds of machine guarding options for production machinery. There are useful for training or for the safety professional who may be looking for a way to provide effective protection for machine operators. They are also available on YouTube. Follow this link: [http://www.rockfordsystems.com/machine-safeguarding-videos.html](http://www.rockfordsystems.com/machine-safeguarding-videos.html)


- **Cal/OSHA Pocket Guide for the Construction Industry** – Published on the Cal/OSHA website, this guide details the requirements under Title 8 of the California Code of Regulations. The guide is intended to be used as a reference for workers, employers, supervisors, job stewards, safety personnel and others. It is also available in Spanish. Follow this link: [http://www.dir.ca.gov/dosh/dosh_publications/ConstGuideOnline.pdf](http://www.dir.ca.gov/dosh/dosh_publications/ConstGuideOnline.pdf)

Looking for the full list? They’ve moved! Please [click here](http://www.rockfordsystems.com/machine-safeguarding-videos.html) for a PDF with all the current resources listed.