

ENGINEERING STANDARDS UPDATE

Standards are serious business, but this newsletter isn't.

Topics this month:

- **Electrical Standards Course Tomorrow**
- **Engineers Week...Days**
- **Nuclear Workers Behaving Badly**
- **LANL Standards Issued in January**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

The Standards Homepage: <http://engstandards.lanl.gov/>

ELECTRICAL STANDARDS COURSE TOMORROW

Tues Feb 4 8am-12pm, White Rock Training Center (TA00-B1308-Rm118)

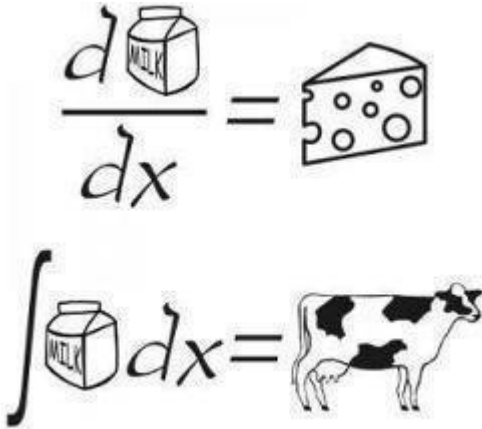
A compact four hours, this course covers the electrical engineering standards in Chapter 7 of the LANL Engineering Standards Manual and discusses mandatory requirements and good practices for those involved in electrical design. Strongly suggested for electrical designers, electrical engineers, electrical safety officers, and facility managers. **Taught by Electrical Standards POC Duane Nizio, 7-3217.**

In UTrain, search in upper right for LANL Standards, scroll down to course, add to To-Do List, and register. Or click Catalog/Advanced Catalog search, and enter 17998 as ID. AEs are encouraged to attend and can contact CT-ITS, 7-0059 or e-mail esh-registration@lanl.gov. **IF YOU SIGN UP TODAY, CALL NIZIO to ensure a handout. Seven enrolled, lots of personal attention...**

ENGINEERS WEEK...DAYS

LANL's annual Engineers Week festivities will take place on Thursday, February 20 from 11:00 until 2:30 at the Study Center. The keynote address will be given by Julia Phillips, VP and Chief Technology Officer at Sandia National Laboratories, at 1:00. The topic of the talk is the National Academy of Engineering's Grand Challenges and what they mean to the national laboratories. The talk will be preceded by an Engineering Showcase featuring posters from recent R&D engineering projects from 11:00 until 1:00. Light refreshments will be served during the poster session. Thanks to Heidi Hahn for this story.

Also, NM's Discover Engineers Week event is Friday, February 21 in Albuquerque. It includes luncheon MC meteorologist Kristen Van Dyke and a two-hour ethics course (\$75 for course, \$190 for full day, etc.). [Click here for brochure.](#)



NUCLEAR WORKERS BEHAVING BADLY

(this month, aka when good conduct of training isn't followed).

These aren't nuclear workers in the usual sense since they're not in the weapons or energy production business. But they are at the end of the nuke cycle if you don't count dismantlement (or the targets), and mistakes by them could have about the worst of all consequences. Maybe they need four hours of ethics training – or more...

[**Air Force chief cites 'systemic problems' as nuke cheating scandal ...**](#)

[security.blogs.cnn.com/.../air-force-nuclear-cheating-scandal-expan...](#)

CNN 1 day ago - A cheating scandal involving members of the **Air Force nuclear** command has tripled in size over the past two weeks with more people ...

[**100 Best Jobs of 2014**](#) from U.S. News & World Report

"All jobs aren't created equal. In fact, some are simply better than the rest. U.S. News 100 Best Jobs of 2014 offer a mosaic of employment opportunity, good salary, manageable work-life balance and job security. Some careers offer just the right mix of these components – for instance, nearly 40 percent of our picks are health care jobs – but the list also includes strong showings from occupations in the social services and business sectors. And for the first time, our No. 1 pick is a technology job. Read more on [how we rank the best jobs](#), and check out our complete list."

Jobs held by some readers:

- 18. Civil Engineer
- 19. Mechanical Engineer
- 34. Maintenance and Repair Worker
- 37. Construction Manager
- 54. Compliance Officer
- 59. Cost Estimator
- 92. Architect

Sorry if you didn't make the list...

LANL STANDARDS ISSUED IN JANUARY

Eng Standards Manual [STD-342-100](#)

Chapter/Section	Summary of Changes
Ch.13 Welding, Joining, & NDE, GWS 1-05 Welder Performance Qualification & Certification, Attachment 12 Rev. 1.1	Administrative change to signature line of welder cert record form.

Master Specifications [STD-342-200](#)

03 3001 R8, Reinforced Concrete	New preapproved LATM Mix 15X at 2.7.H; added plastic form ties 2.2.C. Drum revolutions revised 3.11.A.4 (incorps VAR-2014-004). Batch ticket submittals reduced for preapproved mixes (incorps VAR-2013-134) due to annual source verification and other appendix references updated.
31 2000 R7, Earth Moving	U&I name revision. Wording clean-up. Lessons learned from recent projects and inspector comments.
32 3100 R7, Fences and Gates	1.3.A added "wire" for a submittal. 1.4.A.1, deleted web site as it does not bring up the appropriate site. Changed Fed. Spec. number to RR-F-191/4.
33 7119 R4, Electrical Underground Ducts and Manholes	U&I name revision. Clarify contractor material. Revised the early warning tape to be consistent with 31 2000.

A CASE OF THE MONDAYS

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DOE TECHNICAL STANDARDS ACTIONS

DOE [Tech Stds](#) activity this past month:

[DOE-HDBK-1118-99](#), Guide to Good Practices for Continuing Training Reaffirmed 2014

The Best Practices for Continuing Training handbook provides contractor training organizations with information and methods useful in the development and implementation of continuing training programs that are using a Systematic Approach to Training (SAT) process. It can be used with DOE orders, standards, and handbooks to aid in the development of continuing training programs. It should be used in conjunction with the DOE Training Program Handbook: A Systematic Approach to Training and the DOE Handbook for Alternative Systematic Approaches to Training.

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

[Report: Engineer said "engineering wasn't allowed to be done right" on bridge](#)

In 2008, engineers working on the San Francisco-Oakland Bay Bridge in California reported to the state's Department of Transportation, or Caltrans, that they had discovered "hundreds of cracks" in welds of pieces produced for the bridge, according to a report by state Senate Transportation and Housing Committee. The report states it was decided work shouldn't be delayed. "This is the first time in my career the engineering wasn't allowed to be done right," said Douglas Coe, a civil engineer who used to work at Caltrans, according to the report. "Engineering decisions were made by non-engineers."

[Bloomberg](#) (1/23), [SeattlePI.com/The Associated Press](#) (1/22)

LAST MONTH'S UPDATE TOPICS

Miss an issue? The archive is at "[Monthly Update](#)" on the Standards [homepage](#). Last month's topics:

- **Standards POC Changes**
- **NFPA 70E-2012 in Contract**
- **Electrical Standards Course Feb 4**
- **Ethics Course Evaluation**
- **LANL Standards Issued in December**
- **Eng Processes Changes**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

To request a change to this newsletter's distribution, please contact me.

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