

ENGINEERING STANDARDS UPDATE Trying to Make Standards Exciting Since 2001

This is the monthly newsletter of the LANL Conduct of Engineering Office's Engineering Standards Program. The Standards define the minimum technical requirements for the design, fabrication, construction, commissioning, repair, and replacement of both new and existing equipment and facilities, including both maintenance and modification, for programmatic and facility work at LANL [PD340].

Topics this month:

- Staycation at LANL!
- IBC and IEBC Classes
- LANL Standards Issued in May
- DOE Technical Standards Actions
- CoE Quote of the Month
- When Conduct of Engineering Isn't Followed

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

STAYCATION AT LANL!

Memorial Day? Time off. Independence Day? Time off. Do you REALLY want to be patriotic? Then cancel your vacation to Disneyland, Glacier National, or whatever, and attend training to benefit the government – we have great courses this summer!

Use-it-or-lose-it vacation balance? Donate it.

PG-13 movies with the family? Fuhgeddaboudit! Dump the kids on Grandma! Besides, Lyle's CoE classes have great engineering disaster videos (all free and PG or less!).

ASCE 41 Seismic Rehabilitation of Existing Buildings: Mon, June 27, 11:30-1:00 (1.5 contact hours)

Eric MacFarlane, SE, PE, etc in Design Engineering will be presenting on seismic rehabilitation of existing buildings per ASCE 41-06 to local structural engineers. The presentation covers what is required for a rehabilitation, a discussion on nonlinear modeling, and some retrofit solutions. This is the same presentation he gave at the SEANM February meeting in Albuquerque (presentation at SEANM <u>website</u>). It will be from 11:30-1:00 at the Canyon Complex (TA-00-0199-172). Bring a brown bag lunch. If interested, contact Eric, 665-3284, <u>emac@lanl.gov</u>.

Electrical Standards: Thurs, July 7, 8:00-5:00 (8 contact hrs)

David Powell, Electrical Standards Point-of-Contact, is retiring soon but he'll teach his famous course 17998, "LANL Electrical Engineering Standards" from 8-5 at the White Rock Training



Center a couple more times. 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. Enroll (or disenroll) using link above or call 667-0059 or e-mail Central Training at <u>esh-registration@lanl.gov</u>.

IBC Fundamentals Nonstructural Provisions: Tues, July 26, 8:00-3:30 (6 contact hours)

This seminar from the International Code Council focuses on the basic nonstructural concepts of the 2009 *International Building Code* (IBC). These concepts will provide a basis for the correct utilization of the code and a clear understanding of the identified requirements which allows the code user to apply the IBC in specific situations and helps build an understanding of the intent of the code.

Instructor: John M., Gibson, Jr. M.C.P., C.B.O.,C.P.C.A.,C.F.M. Technical Advisor and Instructor for the International Code Council (ICC). A Certified Master Code Professional and Certified Fire Marshal, he has 40 other certifications including 33 from the ICC.

Registration: Enroll or disenroll in EDS Course 57170 online <u>here</u>; others contact Yolanda Trujillo at 665-5696 or <u>yitrujillo@lanl.gov</u>

Location: Physics Auditorium, currently.

IEBC Fundamentals: Wed, July 27, 8:00-3:30 (6 contact hours)

For building modifications, repairs, additions, changes of occupancy, and relocations. Discusses critical concepts of the 2009 International Existing Building Code® (IEBC®). It will provide a basis for the correct use and application of the code, and build an understanding of the intent of the code through detailing basic tables, categorizations and case studies. **The rest:** Same as above, but EDS#57291 (online here).

Fire Penetrations to Meet the 2009 IBC: Canceled due to IBC course.

Conduct of Engineering Core Courses per Lyle Kerstiens

43666 Design Ctrl – Canceled, maybe July
43662 Quality – Canceled, maybe July
43663 Technical Baseline Tentatively 6/22 MSL Auditorium (TA-3/Bldg.1698) 8am – 5pm
43668 Project Engineering Overview 6/29 MSL Auditorium 8:30am – 3pm

Safety Basis Overview 39695 is being offered several times between now and November. 43667 Maintenance Processes was taught 2 months ago and will be offered again in August or September

40979 Maintenance Work Ctrl was taught 2 months ago and will be offered again in August or September

24140 Standards was just taught and will be offered again in August or September CMMS classes 15918 and 16970 are undergoing an instructor transition and will start being offered again shortly.

Enroll or disenroll for CoE courses online <u>here</u>; non-LANL can contact Yolanda Trujillo at 665-5696 or <u>vitrujillo@lanl.gov</u>



IBC AND IEBC CLASSES

Did I mention we're teaching these?

LANL STANDARDS ISSUED IN MAY

LANL Engineering Standards Manual (STD-342-100) Chapter 9, Security: Limited Area Fencing Requirement Reduction Variance 2011-089

LANL Master Specifications (STD-342-200) 26 0553 Electrical Identification, R2, 5/25/2011. Numerous changes, summary here.

DOE TECHNICAL STANDARDS ACTIONS

New or Revised DOE <u>Tech Stds</u> this past month (safety basis and I&C types, go wild):

DOE-STD-1196-2011, Derived Concentration Technical Standard.

<u>DOE-STD-1195-2011</u>, Design of Safety Significant Safety Instrumented Systems Used at DOE Non-Reactor Nuclear Facilities. SMEs say this STD will place a higher degree of expectation on both the engineering and safety analysis processes for safety significant. There will even be an effect on non-instrumented systems that have been identified as an independent protection layer. This will result in a change from the recognized processes in DOE-STD-3009 which allow worker safety controls to only be supported by the hazard analysis.

COE QUOTE OF THE MONTH

Bad conduct of engineering...I know it when I see it. -- Tobin Oruch, with apologies to U.S. Supreme Court Justice Potter Stewart in <u>Jacobellis v.</u> <u>Ohio</u>



Topics this month: June 2011

WHEN CONDUCT OF ENGINEERING ISN'T FOLLOWED

In honor of Electrical Safety Month, which was May.



LAST MONTH'S UPDATE TOPICS

Miss an issue? The archive is at "<u>Monthly Update</u>" on the Standards <u>homepage</u>. Last month's topics:

- IHS Standards Get 'Em and Get the Heck Out
- LANL Standards Popularity
- When Conduct of Spam Isn't Followed
- Eng Processes Changes
- Education out the Wazoo
- CoE Quote of the Month
- LANL Standards Issued in April
- When Conduct of Engineering Isn't Followed
- DOE Technical Standards Actions



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

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