
ENGINEERING STANDARDS UPDATE

[Standards are serious business](#), but this newsletter isn't.

Topics this month:

- Training & Qualification
- Engineers Week Feb. 20
- LANL Standards Issued in December
- DOE Technical Standards Action
- National Standards Action
- When Good Conduct of Engineering Isn't Followed

The LANL Engineering Standards: <http://engstandards.lanl.gov>

TRAINING & QUALIFICATION

Correcting a goof from last Update: CGD Preparers/Reviewers Course [30727](#) is actually this Thurs, Jan 9, Canyon Complex room 165, 8:00-5:00 p.m.

Required if you need to do commercial grade dedication for nuclear service per AP-341-703. Overview 30726 is a required prerequisite. Taught by Rick Sarwal.



LANL Explosives Safety Overview [47934](#), Wed, Jan 15, TA-46-0535, 9-noon.

This live, pilot course provides an overview of the LANL Explosives Safety Program and DOE-STD-1212 for high explosives workers. Course replaces the Pantex Live (#54474) which is no longer provided. There are still seats available, and Explosives Safety Office chief SME Michael Lake (OSH-ISH, 7-4221, mlake@lanl.gov) says they'll be future sessions (if you can't do 1/15, self-assign after that to waitlist). Thanks to Emma Starrett for this tip.

LANL Engineering Standards Intro [24140](#) – Jan 21-22 mornings

This course provides familiarity with national and LANL engineering standards for anyone performing, reviewing, or managing design activities. **Required** course for many LANL engineers, recommended for those at local AE firms. An 8-hour course presented 8 a.m.– noon on two back-to-back days by yours' truly.

COE Safety Basis Overview for (non-safety basis) Engineers [39564](#) January 27 and 31, 9 AM - 11:30 AM.

The instructor is Joy Getha.

REGISTERING for UTrain Courses: Go to [UTrain](#), search on course, select and enroll. Disenroll if you have to bail. AEs can also register; use token (CryptoCard) or contact ES T&Q coordinator Yolanda Trujillo at 665-5696 or ytrujillo@lanl.gov with Z number.

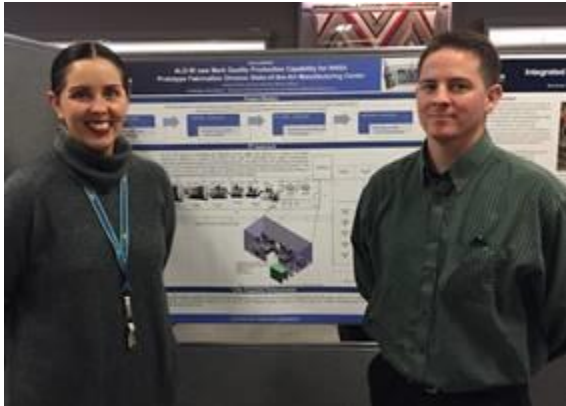
ENGINEERS WEEK FEB. 20

From [LANLTODAY 12/9](#), with minor changes:

This year's national theme "Engineers: Pioneers of Progress" celebrates engineers, technicians and students.

Of general interest: The 10th annual poster session will be held on **Feb. 20** at the J.R. Oppenheimer Center Santa Clara Gallery and Jemez/Cochiti Conference Room, along with a keynote address and likely Postdoctoral Publication Prize in Engineering Science presentations. You may want to block your calendar for the above, which is typically 1–4 p.m. or so.

For the engineer-types, an invitation to submit your Engineers Week poster **abstract by Jan. 17**.



Don't miss the chance to showcase your favorite engineering project at the Lab's poster session during [National Engineers Week 2020](#) (also known as DiscoverE). Hurry — the deadline to submit your poster title and abstract is Friday, **Jan. 17**.

James Owen, associate Laboratory director for Weapons Engineering (ALDW), invites employees, students and postdoctoral researchers **from all engineering organizations** (Ops, R&D, etc.) to participate.

Poster submission guidelines

- Open to Los Alamos students, postdoctoral researchers and staff members
- Submit poster titles and abstracts to [Lynn Lemler](#) no later than **Jan. 17**
- Poster dimensions: 46-7/8" wide by 36.5" high, maximum
- Space is limited to 36 posters
- Acceptance notifications will be made no later than Friday, **Jan. 24**
- Posters presented during this past year at other forums are allowed

Questions? Contact **Lynn Lemler** at 606-0000.

LITTLE ENGINEER'S ROOM

Because evidently it gets wet in there sometimes. From the "Talking in Code" column of the [ICC's Building Safety Journal](#):

International Code: 2015 International Building Code, Section: 1210.2.2

Question: Section 1210.2.2 specifies that walls and partitions within 2 feet of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet above the floor. Does paint over drywall qualify as smooth, hard, nonabsorbent surface?

Answer: Section 1210.2.2 stipulates that the material be "hard." The intent of this section is that the surrounding material should not be of a type that is easily damaged such that the material could become absorbent and thus, not readily cleanable and sanitized. Painted drywall, even where coated with highly durable paints, does not meet the intent of Section 1210.2.2. The typical materials used for this application are ceramic tile, fiberglass reinforced plastic (FRP) panels, phenolic panels, laminated plastic panels, painted steel and stainless steel.

Some memes never get old.



LANL STANDARDS ISSUED IN DECEMBER
Engineering Standards Manual [ESM STD-342-100](#)

ESM-Chapter	Volume	Section	Title	Rev.	Date	Summary
Chapter 1 - General	–	230	Attachment 1: Equipment Type and Subtype	–	12/4/2019	Expanded to include Type and Subtype. Thanks to delegated alternate POC Charlie Nuss, Jacque Seay, Dominic Garcia, Desiree Mang and others.
Chapter 13 - Welding	Vol. 6	6-02	Attachment 3 - Written Practice for NDE Personnel Qualification & Certification and its Form 1–NDE Certification Application	6	12/10/2019	Thanks to David P. Harvey, POC David Bingham
Chapter 17 - Pressure Safety	–	GEN-1; ADMIN-1	Definitions and Acronyms; LANL Review Processes	1	12/19/2019	VAR-10281- Certification of Pressure Systems, Rev 2 issued to define peer review training and update who may request additional documentation. Thanks to POC Ari B. Swartz.

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

Spec Number	Rev.	Spec Title	Effective	Summary of latest Revision
11 5311.12	5	Glovebox Installation	12/10/2019	Separated the GB Acceptance Checklist into two distinct sections to better serve construction deliverables (to include initial Process hardware readiness, and valve lineup and systems check as part of the checklist prior to going “hot”). Thanks to Renee Mondragon (and several others still at ES-55).

DOE TECHNICAL STANDARDS ACTION

Tech Stds Program [postings](#) in the past month:

DOE-SPEC-1142-2019, Beryllium Lymphocyte Proliferation Testing (BeLPT)

This specification is for beryllium lymphocyte proliferation tests (BeLPT) used for detecting whether an individual has developed a sensitization to beryllium and for clinical evaluation and diagnosis of patients for chronic beryllium disease (CBD). However, a lung biopsy is needed to fully establish the presence of CBD. This specification should be used in all contracts with laboratories for the purchase of BeLPT Services. Supersedes DOE-SPEC-1142-2001, dated 5-7-2001.

NATIONAL STANDARDS ACTION

LANL's [IHS](#) online codes & standards subscription news:

FYI, since LANL will continue to use the 2014 edition invoked by the 2015 IBC:

Document number: **ACI 318**

Publication Date: **June 2019**

Title: **Building Code Requirements for Structural Concrete (ACI 318-19) Commentary on Building Code Requirements for Structural Concrete (ACI 318R-19)**

Type of Change: **Complete Revision**

Document number: **NFPA 75**

Publication Date: **2020**

Title: **Standard for the Fire Protection of Information Technology Equipment**

Type of Change: **Complete Revision**

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED (DEPT. OF GLOOM AND DOOM)

Remember the deadly Oct 12 Hard Rock New Orleans collapse (Nov Update)? [They now plan to demolish it](#), of course.

In other news, from the Dec 10 [McPaper](#), this sounds a bit like the Space Shuttle Challenger (if true)...

“The Boeing factory that produced the 737 Max jetliner has such deep safety and quality concerns that it should have been shut down until they were rectified, a former senior manager plans to tell a House subcommittee Wednesday.

“Ed Pierson said he warned Boeing executives multiple times in writing about risks due to lapses at the plant, but added that they refused to take action. The plant's production problems contributed to the crashes of two 737 Max jets, one last year flown by Lion Air

and the other in March by Ethiopian Airlines, he asserts in his prepared statement to the House Transportation and Infrastructure's aviation subcommittee.

"The two crashes killed 346 passengers and crew combined..."

"...Four months before the Lion Air crash, Pierson said he emailed the 737 general manager advising that the production line be shut down temporarily to allow teams to "regroup" in order to safely finish work on the planes. In the same missive, he wrote, "for the first time in my life, I'm sorry to say that I'm hesitant about putting my family on a Boeing airplane.

"Despite the factory being in "chaos," he said he was rebuffed. A 30-year Navy veteran and flight officer, he said told the general manager that the military would suspend operations for even lesser safety problems. The general manager responded, "the military isn't a profit-making organization."...

LAST MONTH'S UPDATE TOPICS

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

- **LANL Standards Issued in November or so**
- **Training & Qualification**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

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