

ENGINEERING STANDARDS UPDATE

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

Topics* this month:

- **Engineering Processes News**
- **LANL Standards Issued in March**
- **Training & Qualification**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed—April Fool's Day**

*** but lots of news and such peppered in**

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

ENGINEERING PROCESSES NEWS

AP Access in Troubled Times

To help users access the APs, Christina Salazar-Barnes created a webpage of the pdfs that can be reached from LANL Internal with any browser/machine combo (also, you can easily get to int.lanl.gov from mymail.lanl.gov). Once in, you can navigate from the top of the CoE home page or directly [here](#). On the other hand, if you need the AP Word forms, open a terminal session and use IE for SharePoint for best results. When all else fails, email her.

AP Revisions

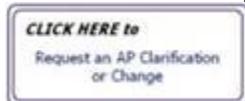
The following Administrative Procedures have been revised and posted to the COE Administrative Procedures [SharePoint site](#). Always ensure you are working to the latest version of all Engineering Administrative Procedures.

AP-341-101 R5	Designating Vital Safety System and Cognizant System Engineers	Issued 03/16/2020 Effective 04/14/2020
AP-341-703 R5	Commercial Grade Dedication	Issued 03/16/2020 Effective 04/14/2020

If you have been identified as requiring additional training on this AP you will see an assignment on your UTrain "to do" list.

The CoE Eng Processes Manager is Sarah Terrill, 667-7788, sterrill@lanl.gov.

Please enter issues with APs in the SharePoint issues database. Use the live button below, same one that's found in the upper right of the Processes SharePoint [homepage](#).



Nocturnal Discharge

New airport hangar gets covered in foam after 'accidental discharge' (The Independent)

An airport hangar was completely covered in foam after an "accidental discharge" earlier this week. [Read the full story_Additional_here_\(SimpleFlying\)](#)

[Spoiler alert: a plane's aux power unit (small engine/generator) was potentially running inside a new hangar. A strict no-no, inadequate exhaust, too sensitive a sensor, or what?]

LANL STANDARDS ISSUED IN MARCH
Engineering Standards Manual ESM STD-342-100

Chapter	Section	Title	Date	Summary of latest Revision
Ch. 1 - General	210	Attachment 1: Systems List	3/18/20	See summary at end of document. Thanks to delegated alternate POC Charlie Nuss and others.
Ch. 16 IBC Program	References	LBO Listing of Approved IBC Testing Agencies, Fabricators, and Products	3/31/20	
Ch. 17 - Pressure Safety	ADMIN-3	FM02 for ASME unfired vessel preapproval (new).	3/16/20	Thanks to POC Ari B. Swartz.

Personal Protective Equipment (PPE)

Today's LANL today noted that ASTM is offering their med-related PPE standards for free for now (masks, gloves, etc.), although the library's IHS Standards service probably gave Labbies access all along.

A related story may be of interest: we've heard a lot about N95 masks lately, so here's The N95 mask: [The untold origin story \(Fast Company\)](#)

Spring is Officially Here

Which brings windy conditions. Here's a scary video from Scott Q on that topic. Strong Winds Blow Roof onto Busy Street in Northeast China ([Weather.com](#))



Earth Day April 22, 2020—Celebrating 50 Years!

From <https://www.earthday.org/earth-day-2020/>

What is the history of Earth Day?

Earth Day was a unified response to an environment in crisis — oil spills, smog, rivers so polluted they literally caught fire.

On April 22, 1970, 20 million Americans — 10% of the U.S. population at the time — took to the streets, college campuses and hundreds of cities to protest environmental ignorance and demand a new way forward for our planet.

The first Earth Day is credited with launching the modern environmental movement, and is now recognized as the planet's largest civic event.

I remember my family taking glass to be crushed real-time at or around the time of the original event, and liking the crushing machine (future Mech Eng).

LANL normally has its own events during the week around April 22; maybe virtually this year.

Richter Scale Day is April 26

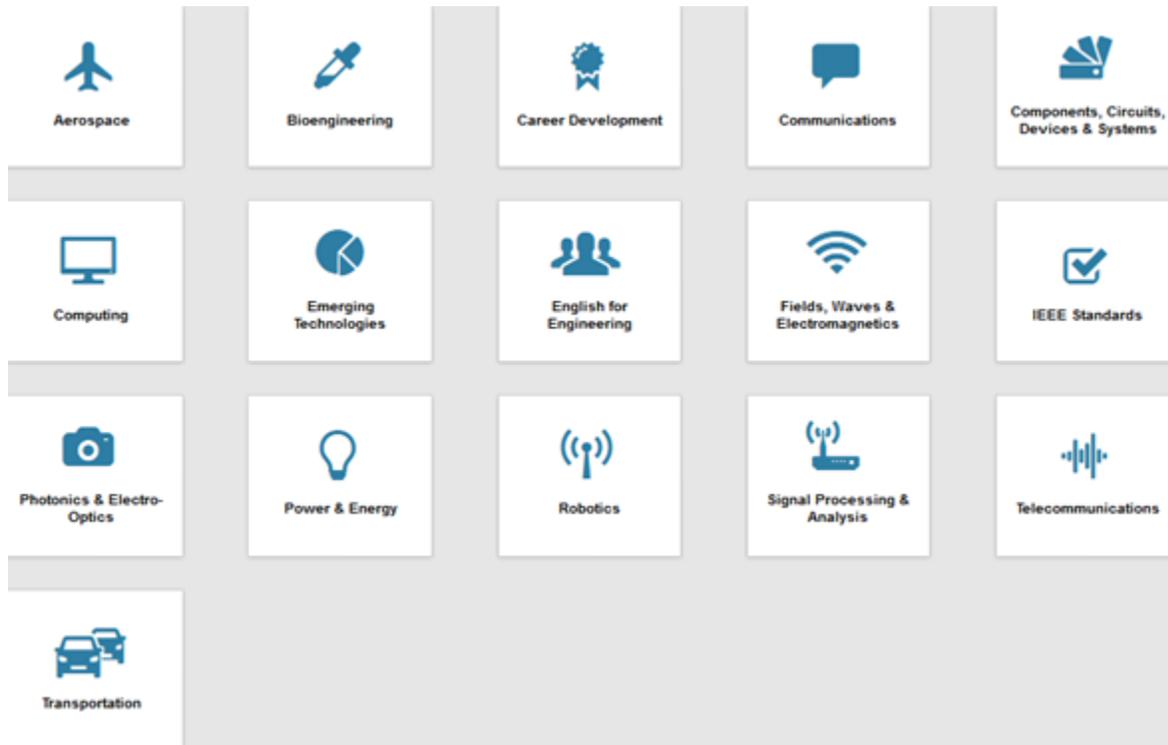
This day celebrates birth of Charles Richter in 1900. "Good vibrations: Celebrating a seismologist celebrity" is a short and interesting article on him—even if you're not a mover & shaker engineer. Apropos since Idaho just had a magnitude 6.5 last eve.



TRAINING & QUALIFICATION

On the qual front, ES-Div training specialist Ruby Molinar reports that LANL and NA-LA are discussing possible extensions but no decision as yet, so best to keep it up. It's understood that lack of live classes are an issue along with OJT, etc.

As far as training...sure, you can probably learn about using Zoom via LinkedIn and other courses—even though things more directly related to standards are what really matters ;-). So, as noted in [LANLtoday](#) on 3/31, LANL now has free access to IEEE's eLearning courses until April 30. There's a fairly broad range of topics given IEEE's focus is sparkheads. Read the article for tips, and here is a PDF of a user guide. Thanks to Sarah Hayes, GRA at the LANL Research Library, 667-0437.



**In other T&Q news: Upcoming LANL courses, COVID-19 willing:
Electrical Standards – Wed, May 27 Canyon Complex 165**

Four-hour course [17998](#) 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. AEs are also encouraged to attend. Taught by Electrical Standards POC Eric Stromberg from 8:00-noon.

For UTrain Courses: Registering: 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 yjtrujillo@lanl.gov with Z number.

‘Cause everything’s bigger in Texas...

"Super Flush" at Texas stadium is a testimony to plumbing code

Globe Life Field, the new home of the Texas Rangers, is still under construction with less than a month before the first scheduled event. Three hundred students from the Arlington Independent School District in Arlington, Texas, pitched in to help officials test the plumbing by flushing 2,600 toilets at the same time — a "super flush" — that was meant to simulate fans during a seventh-inning stretch. The test went off without any major glitches, a testament to the International Plumbing Code, which is used by the city of Arlington. [original article missing, substitute [here](#)]

It’s a sad spring when this is the biggest baseball news. Of course, LANL uses the competing Uniform Plumbing Code (per ESM Ch 16 IBC Program, IBC-GEN App A). It’s kind of a NM thing.

DOE TECHNICAL STANDARDS ACTION

Tech Stds Program [postings](#) in the past month: none

NATIONAL STANDARDS ACTION

LANL's IHS online codes & standards subscription news:

Document number: **ASME B31.5-2019**

Publication Date: **3/6/2020**

Title: **Refrigeration Piping and Heat Transfer Components**

Type of Change: **Complete Revision**

This code becomes effective six months after the issue date or 09/06/2020. At LANL, this edition may be applied before then as discussed in ESM Chapter 1, Section Z10 - General Requirements for all Disciplines/Chapters, 7.0 Code of Record. Questions? Contact Pressure Safety POC Ari Ben Swartz.

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED—APRIL FOOL'S DAY

Some companies known for celebrating this day, like Google, are taking a break this year—somber times. So no AFD jokes from me either, but instead a lighter news story from Italy, which is having an especially hard time these days.

A malfunction causes red wine to flow from faucets in an Italian town. [\(CNN\)](#)

I can't help wondering about the "faulty valve." Lack of backflow preventer maintenance, or lack of one entirely? Big shout out to LANL's ESM Mech Chapter and MSS Maintenance Programs' O&M Criterion 405, *Cross-Connection Control for Potable Water Systems*.

In other alcohol abuse news: The media says vodka makes a poor disinfectant/hand sanitizer. Save that for the trendy new drink, the Quarantini.

LAST MONTH'S UPDATE TOPICS

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

- **Electrical Inspection Plan Preparer's Guide—NEW!**
- **Viewing Entrust-signed PDFs with Firefox**
- **Training & Qualification (ASME...)**
- **LANL Standards Issued in February**
- **Engineering Processes News**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

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Tobin Oruch, Engineering Standards Mgr
Los Alamos Nat'l Lab, Conduct of Eng Program Office
(505) 665-8475 oruch@lanl.gov <http://engstandards.lanl.gov/>
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