websights

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WebSights features announcements and reviews of select sites of interest to physics teachers. All sites are copyrighted by their authors. This column is available as a web page at PhysicsEd. BuffaloState.Edu/pubs/WebSights/. If you have successfully used a physics website that you feel is appropriate for WebSights, please email me the URL and describe how you use it to teach or learn physics—macisadl@buffalostate.edu.

• U.S. government releases Charting a Course for Success: America's Strategy for STEM Education, report guiding federal agencies that offer STEM funding opportunities

whitehouse.gov/wp-content/uploads/2018/12/STEM-Education-Strategic-Plan-2018.pdf

stemx.us/news/2018/12/new-federal-stem-plan-released-first-thoughts/

stemecosystems.org/ tinyurl.com/WS-UCStrump tinyurl.com/WS-UCStrump2

The plan outlines three aspirational goals: 1) Building strong foundations for STEM literacy, 2) Increasing diversity, equity, and inclusion in STEM, and 3) Preparing the STEM workforce for the future. It builds on four pathways: 1) Develop and enrich strategic partnerships, 2) Engage students where disciplines converge, 3) Build computational and digital literacy, and 4) Be transparent and accountable, to measure the impact of collective STEM efforts.

The 36-page document is concise, very well referenced and well founded; I particularly appreciated the systems engineering approach to STEM education reminiscent of the STEM Learning Ecosystems movement. However, the White House was legally required to publish this plan as Congress mandated the publication of "five-year STEM strategic plans" in the America COMPETES Act of 2010. In reality, concerns with White House STEM policy under the Trump regime abound; see the Union of Concerned Scientists links for details. This report's situation is reminiscent of the recently released U.S. Fourth National Climate Assessment (last month's *WebSights* column). *Posted to AMTAlist by Jane Jackson, ASU & AMTA*

•Ultimate Women in Science Reading List Contributions of 20th Century Women to Physics, and Must Have Resources for Equitable STEM Classrooms

womenyoushouldknow.net/ultimate-women-in-sciencereading-list/ cwp.library.ucla.edu/

stemteachersnyc.org/culturally-responsive-stem/

A recommended reading list from Women You Should Know includes stories of Lise Meitner, Madame Wu Chien-Shiung, Fay Ajzenberg-Selove, Mary Agnes Clerke, and Joan Freeman. In 1999, the APS Committee on the Status of Women in Physics and the Forum on the History of Physics co-sponsored the compilation of the CWP historical archive website on 83 selected 20th-century women physicists.

STEMteachersNYC recently released a list of 23 resources for Culturally Responsive STEM. The teacher-led CRT Committee has a mission of establishing inclusion, fostering confidence, enhancing meaning, responsive and active teaching, using a critical lens, and building community. The committee is seeking new members and material suggestions; they curate a website of these resources (books, tools, articles, workshop slides, etc).

• NYT Virtual Tour of CERN's Large Hadron Collider tinyurl.com/WS-NYTCERNtour nytimes.com/science

This augmented virtual reality tour of the LHC requires a free download of a NYTimes applet to view. The four main detectors, data center, office, and tunnel settings are explored. NYT Virtual Tours of NASA's Insight Mars Mission and the Thai Cave from recent news are also available, with plans for more. The NYT Science Twitter stream @NYTScience is also well worth following. *Posted to OPHUN-L by Michael Herzog*

MIT Ion powered glider grabs attention

nature.com/articles/d41586-018-07477-9 news.mit.edu/2018/first-ionic-wind-plane-no-movingparts-1121 scientificamerican.com/article/silent-and-simple-ion-enginepowers-a-plane-with-no-moving-parts/ tinyurl.com/WS-rimstarLifter jnaudin.free.fr/lifters/orville/

Multiple sources have pointed out to me an ion wind-powered glider powered by Li-polymer batteries recently published in *Nature*. While "lifters" and other electrostatic kites have been commonly built as projects for some time, this is a cool new device suitable for inclusion in your introductory E&M course problems. Of course, one can always build lifters and read of the adventures of Orville the electronaut mouse in his little-known historic 2003 lifter flight.