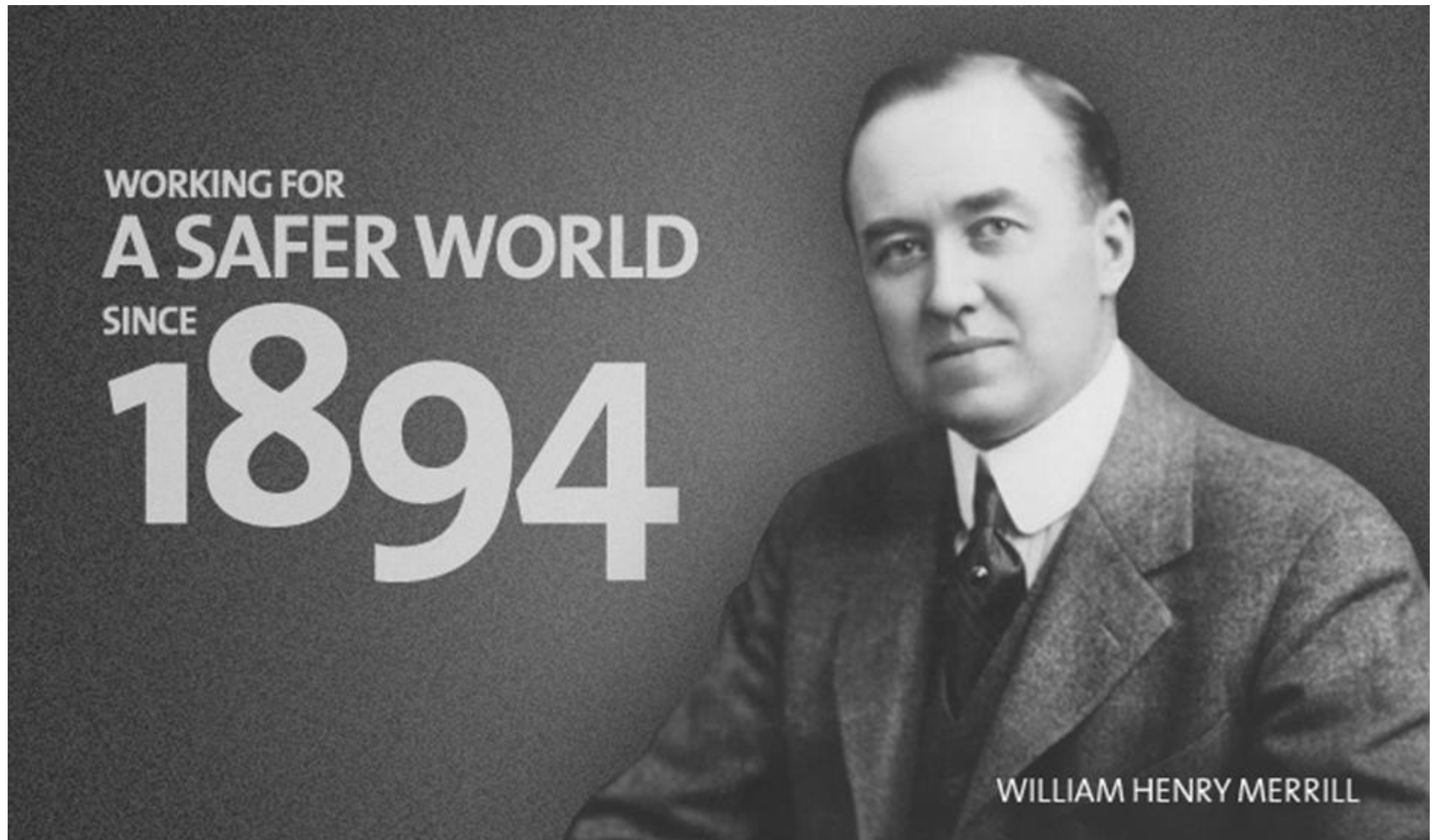


Underwriters Laboratories: An Introduction



Our Mission



International UL Standards Leadership

UL develops standards suitable for global use in key areas such as batteries and hoverboards

~100 UL staff participate in international standards activities, including IEC and ISO

UL staff serve as President and Vice President-Technical of the USNC to the IEC

UL represents the US at the IEC Council Board (CB) and the IEC Standards Management Board (SMB)

Our mission drives UL to lead or participate where appropriate



UL Standards Technical Panel (STP)

The Standards Technical Panel (STP) is the consensus body for developing/maintaining one or more UL Standards

- ~400 STPs exist today

- ~3400 unique members participate on the UL STPs

STPs are open to international representatives

9 interest categories make up UL STPs – one for international delegates

Currently, 72 unique representatives from China hold 171 voting spots and 3 non-voting spots on 103 different STPs.



UL Standards Technical Panel (STP)

- There are no membership dues associated with STPs
- Participation is open to all interested parties
- 24/7 online access to STP information and documents via UL CSDS
- CSDS is UL's "Collaborative Standards Development System"



Cooperative Efforts & MOUs

UL has signed MOUs with standards organizations in various countries in order to promote use of UL standards within that country and assist the country in establishing safety requirements.

- Provides access to entire library of UL standards
- Allows for translation by SDO to local language
- Allows for adoption and distribution of the UL standard within that country
- Aligns requirements and provides for easier trade
- Encourages participation in each other's standards development process
- In China, UL is cooperating with provinces and industry associations



Case Study: Hoverboards

- Battery operated, self-balancing scooters, commonly referred to as “hoverboards”, were a very popular gift for the 2015 holiday season.



Hoverboard Incidents

- The U.S. Consumer Product Safety Commission (CPSC) reports that, during the period from December 1, 2015 through February 17, 2016, the agency received notices from consumers of 52 separate fires directly related to self-balancing scooters, resulting in more than \$2 million in property damage.



History of UL 2272 Development

- UL has a long history of evaluating the safety of batteries dating back to the early 1980s.
- UL's experience and research capabilities allowed for quick development of a consensus document for the US and Canada

Standard No.	Title	Year Published
UL 1642	Lithium ion Batteries	1985
UL 1973	Batteries for Light Electric Rail (LER) and Stationary Applications	2011/2013
UL 1989	Standby Batteries	1992
UL 2054	Commercial and Household Batteries	1997
UL 2271	Batteries for Use in Light Electric Vehicle (LEV) Applications	2013
UL 2272	Electrical Systems for Self-Balancing Scooters	2016
UL 2580	Batteries for Use in Electric Vehicles	2010/2011
UL 2595	General Requirements for Battery-Powered Appliances	2013
UL 2743	Portable Power Packs	2014/2016
UL 3030	Unmanned Aerial Vehicles (UAVs)	2016 - 2017
UL 9540	Energy Storage Systems and Equipment	2015/2016



UL and China Partnership on Hoverboards

- UL and CPSC workshop on hoverboard safety was held in China in 2016
- UL has allowed UL 2272 to serve as basis of requirements in China hoverboard standard development
- Consider Joint Working Group to further develop common hoverboard requirements for the US and China?



Summary

- UL encourages international participants in its standards development process
- UL encourages use of its standards material around the world
- The CSDS system allows for access by anyone/anywhere to the UL standards development process
- UL's mission for a safer world leads to agreements that provide access to, and adoption of, UL standards by other countries
- UL is interested in cooperation with China on hoverboard requirements, as well as other new technology work such as batteries and unmanned aerial vehicles



QUESTIONS?

THANK YOU

UL Standards Staff:

Phil Piqueira, Vice President, phil.piqueira@ul.com

Sonya Bird, International Standards Manager, sonya.m.bird@ul.com

Eric Zhang, China Standards Manager, eric.s.zhang@ul.com

UL Beijing Branch Office

Unit 2201-06, East Tower, Twin Towers,

B-12 Jianguomenwai Av. Chaoyang District,

Beijing, China 100022

+86 10 8527 7110