

Hello to one and all, and welcome back to the program that will help you learn and improve your American English. I'm Jim Tedder in Washington. If you like things about science, today's program is just what you need. We'll talk about a way the United States hopes to get more scientists and engineers.

Then we'll board a famous ship and learn about the communications systems they used.

Thank you for spending some time with us to learn about our world ... As It Is.

The United States is one of the most technologically developed nations in the world. Yet the country is lacking in scientists and engineers. An effort to change that was the recent USA Science & Engineering Festival. The festival took place last weekend in Washington, D.C. June Simms describes what happened.



The festival offered visitors thousands of hands-on activities, stage shows and demonstrations, and even a career and college fair for high school students. Thousands of young people and their parents attended the event. Based on the large number of attendees, the interest in science and engineering is high.

But just over 10 percent of high school graduates say they are interested in a career in science and technology. That was the finding of a recent survey of more than a million American students.

Larry Bock helped to organize the USA Science and Engineering Festival. He says societies get what they celebrate.

"We celebrate athletes, pop stars, professional actresses and actors, and we generate a lot of wannabes (people who want to be something). But we don't celebrate scientists and engineers."

Larry Bock helped organize the first science festival in 2009 in San Diego, California. The technology industry quickly recognized the success of the event.



In 2010, Larry Bock launched a national science festival with the help of Ray O. Johnson of Lockheed-Martin, the defense and technology company.

The technology industry is struggling to find enough high quality scientists and engineers. Mr. Johnson notes the importance of four subjects -- science, technology, engineering and mathematics, commonly known as STEM. He says presenting these subjects in a fun way is sure to have a good effect.

"I am absolutely confident, without a shadow of a doubt, that in 10 years, in 20 years, they will be adults then, they would have entered into the STEM field, and they'll look back at this event and they'll say that's why I did this."

Festival goers were given a lot of hands-on experience, from using flight simulator programs and robotic printers to playing with man-made arms and legs.



Some children joined Travis Mills as he demonstrated his mechanical arm. The former soldier says there are a lot of people he knows who could help children learn about the science and technology involved with making artificial limbs.

"Kids are going to stare and wonder, so why not open their eyes to it and let them know how great the science is out there."

Some young men and women already experienced the excitement of creating new things. High school student Andrea Li was one of the young inventors last weekend. She says events like this could influence a lot of people.

"I think it's really exciting and that's how you get more people interested."

Organizers say they hope the success of this event will lead to more science festivals to help ease the nationwide shortage of scientists and engineers. I'm June Simms.



I Hear Dots and Dashes, Oh My!

The Queen Mary once sailed the North Atlantic Ocean. But the ship's permanent home is now Long Beach in California. Today the Queen Mary still has many visitors, and even a hotel. A room on the ship continues the tradition of wireless communications. The tradition lets visitors experience the excitement of amateur radio. Anna Matteo explains what those strange sounds are.

A young visitor gets to experience Morse code, the system of dots and dashes once used for wireless communication. Amateur radio operators, called "hams," still use it today. They can do so on the more than 300-meter-long ship.

The Queen Mary was launched in 1936. It was designed to carry nearly 2,000 passengers. It once had more than 1,000 officers and crew members. During World War II, the ship served as a troop transport. Sometimes it carried more than 15,000 soldiers.



The ship's communications center was the wireless room. Large rotating controls and other old equipment fills one area. Queen Mary Commodore Everette Hoard says the room was an important communications link in emergencies.

"And not only did they carry several transmitters for transmitting the ship's business. They also, even in 1936, had radio telephone service."

Today, volunteers from a local amateur radio club are demonstrating old equipment, and their new radios. Wireless room manager David Akins says they also talk to other ham operators around the world.

"Just chit-chat (small talk) back and forth, some of them for hours at a time, many on voice, some of them even on Morse code.

Volunteer Kurt Freitag says the wireless station is popular with visitors and hams overseas.



"When we get out there and say, this is W6RO, our call letters, we get a pile up. People go, 'that's the Queen Mary,' and they all jump in, 'talk to me, talk to me, no, talk to me."

Ham operators often help during disasters such as earthquakes and powerful storms. Nate Brightman is the man responsible for the Queen Mary's ham radio operation. The station was used to communicate information from Mexico City after an earthquake in 1985. He says helping in emergencies is an important part of amateur radio.

"And that's the big reason that the government is so nice to amateur radio operators and gives us all these frequencies to use, because we serve the public."

And these radio operators are continuing the tradition of seaborne communication on the Queen Mary. They reach out to people visiting the ship and to radio operators worldwide. I'm Anna Matteo.



And I'm Jim Tedder in Washington. Here is a brief history lesson. On this date in 1611, the King James Bible was first published in England. On this date in 1519, artist, scientist, inventor, and all around genius Leonardo da Vinci died. One of America's most famous doctors, Benjamin Spock was born on this date in 1903. His book on how to raise a child has sold over 30 million copies.

That's all for now, but stay tuned for more Learning English programs ...just seconds away. And world news follows at the beginning of the hour ...on VOA.



