

# NGS

## Celebrates 200<sup>th</sup> Anniversary

**T**wo hundred years ago an Act of Congress, approved February 10, 1807, authorized a survey of the coast of the United States. This action, immediately following the successful return of Meriwether Lewis and William Clark's exploration of our western frontier, gave President Thomas Jefferson yet another reason to feel confident in the direction the nation was taking. A sum not exceeding fifty thousand dollars, to be taken out of any monies in the treasury that were not otherwise appropriated, fueled the humble beginning of today's National Geodetic Survey.

The following month a letter from the Secretary of the Treasury requested plans for the execution of the required work. While the proposal that was prepared by Ferdinand R. Hassler was taken into consideration, no further action was taken during the next four years. Hassler, formerly involved in the trigonometrical survey of Switzerland and also the professor of mathematics at West Point from 1807 to 1810, sailed for England on August 29, 1811, to procure the necessary instruments that would be needed to accomplish the coastal survey. The War of 1812, which lasted into 1815, prevented

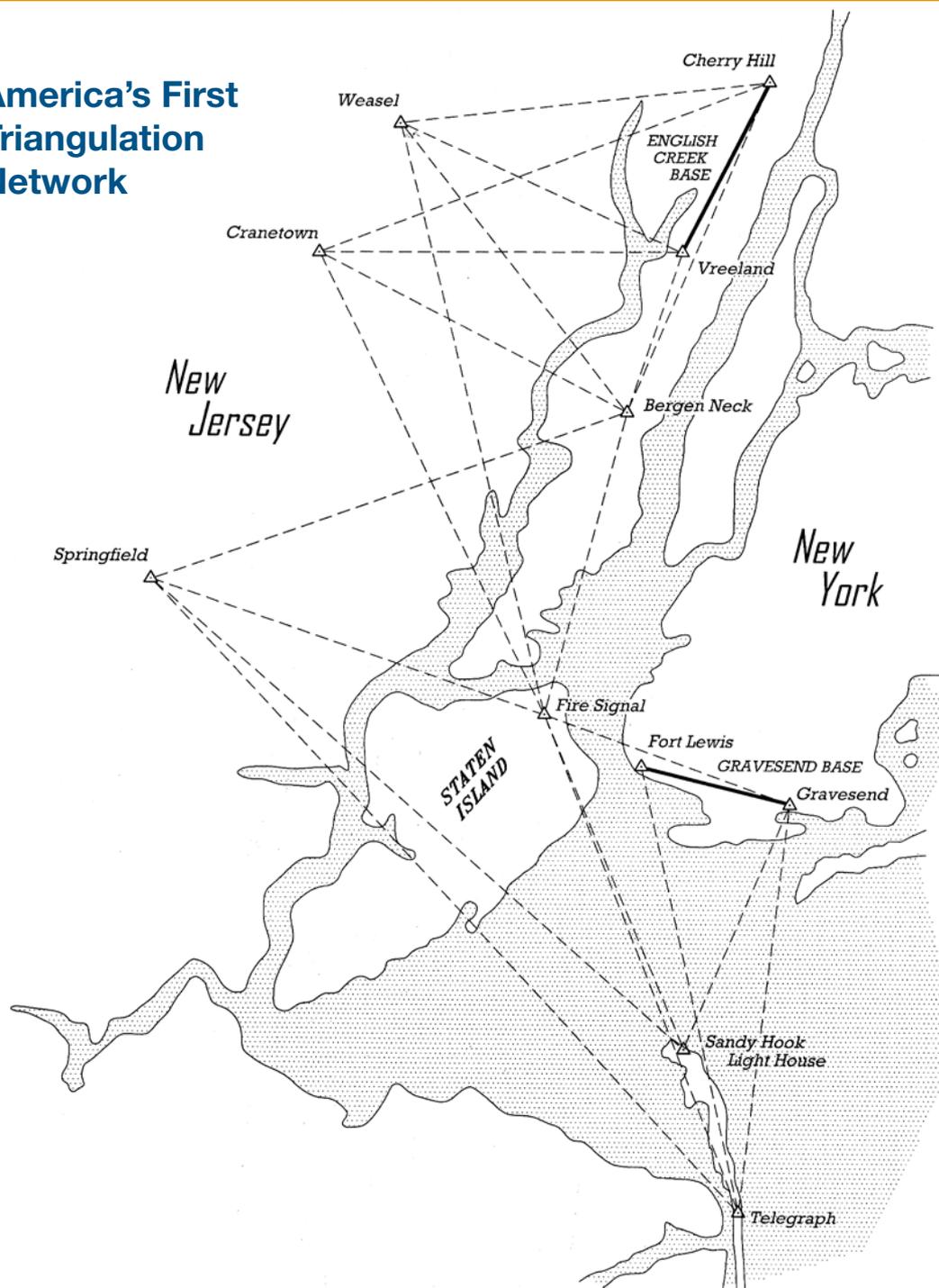
Hassler from returning to the United States, since our nation was at war with England. Upon his arrival back in the United States on October 16, 1815, Hassler began implementing his long sought after plan that had already lingered for nine years. The following year Hassler was named the first Director of the Coast Survey.

The first network of eleven triangulation points was established in the area of Staten Island, with two baselines being measured. The first measured line, known as English Creek, was completed on May 7, 1817; the second one, Gravesend, was completed on December 6, 1817. The first point believed to have been occupied for geodetic observations was station Weasel, which was located on a low mountain about two miles south of Paterson, New Jersey, and established on July 16, 1817. Angles were observed with an instrument built by Edward Troughton of London to Hassler's exact specifications while he was residing in England.

With the exception of one, none of the other original eleven points are believed to exist today. According to NGS historical records, the monument now marking the location of station Springfield perpetuates one of the original eleven positions.

>> By Jerry Penry, LS

## America's First Triangulation Network



A recovery team in 1869 located an earthenware cone buried 18 inches below the surface with stones piled three feet high around the station. A subsequent recovery team in 1934 placed the current brass disk in concrete after finding the earthenware cone. Station Weasel was marked with a 6" deep drill hole filled with sulphur. A search team in 1934 determined that the top of the mountain where it resided had been blown off, thus completely destroying the mark. Another

station, Cherry Hill, located at the north end of the English Creek baseline near Englewood, New Jersey was located in the 1970s and was scheduled to be moved to a protected area. Just days before this recovery took place, a construction company working in the subdivision destroyed the mark. The general location for station Cranetown, located north of Montclair, New Jersey was commemorated by the American Society of Civil Engineers with a plaque in 1987

as a historic landmark. The remaining points have been either destroyed or lost to history. This small network of eleven points represented the nucleus of the work by the Coast Survey that eventually expanded across the entire nation. 

**Jerry Penry** is a Nebraska licensed land surveyor. He is a frequent contributor to *The American Surveyor*, and has written numerous articles for other newsletters and magazines.