

PROFESSOR THADDEUS S.C. LOWE US Army Civilian, (Deceased)



On 7 July 1858, Thaddeus Lowe built his first balloon and made his first ascension at Ottawa. This earned him a reputation as a capable and successful balloonist. Between 1859 and 1860, he built the largest existing aerostat (an aircraft using gas lighter than air). His first trip in the new craft nearly cost him his life when he landed in the Confederate-occupied state of Virginia. However, his trip did help him realize the importance of aerial reconnaissance, which led him to develop balloon activities for the Union Army.

On 26 June 1861, the US Army Corps of Topographical Engineers adopted the balloon for the Army Service. Lowe was given the title Aeronaut, Commanding Balloon Department, Army of the Potomac. Lowe organized and trained

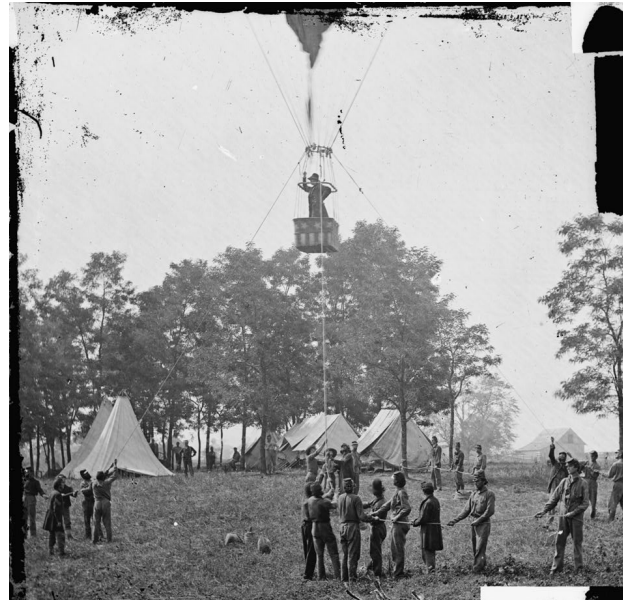
the Aeronautic Corps for the Balloon Corps of the Army of the Potomac, which became an official branch on 22 December 1861.

Lowe was the first to direct artillery fire from his air balloon in the battle at Fort Corcoran, Virginia. He assisted the Topographical Engineers in making reliable maps of battlefield areas and enemy positions, which has been considered his most valuable contribution to the Civil War. He also devised a simple communications code which could be shown or dropped from the balloon as an alternative to telegraph messages. To help fill the balloons, Lowe invented the mobile field generator. Finally, he established the world's first aircraft carrier (a coal barge towed by a tug) for transport and tow of the balloons.

Lowe built five airships of various sizes. The largest of his ships, the *Intrepid*, was 32,000 cubic feet in size and required 1,200 yards of silk. He used it to conduct surveillance during and after the Battle of Fredericksburg. His corps of aeronauts made thousands of successful flights in these balloons, doing artillery spotting and telegraphing reports to ground commanders about the locations of the enemy.

In May 1863, Lowe resigned his post. The Balloon Corps was abandoned five months later, only two years after it was activated. During those two years, Lowe and his crews made more than 3,000 flights over enemy territory and decisively established aerial reconnaissance as an Army Intelligence discipline.

Thaddeus Lowe passed away in 1913. He was posthumously inducted into the Hall of Fame in 1988.



In the fall and winter of 1861, GEN Joseph Hooker urged aggressive action of various kinds. However, he was frustrated by his inability to find out where the batteries' supporting force was positioned, or how numerous it was. When McClellan allotted him one of Professor Lowe's balloons, his lack of knowledge of the enemy's main positions was corrected in a single ascent. In this photo at Fair Oaks, Virginia, (left), Prof. Thaddeus S. Lowe replenishes the balloon INTREPID from the balloon CONSTITUTION.

