

# Examining the Life of MG George Owen Squier

## *Book review*

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In the book “George Owen Squier: U.S. Army Major General, Inventor, Aviation Pioneer, Founder of Muzak,” published by McFarland in 2014, Paul W. Clark and Laurence A. Lyons have meticulously researched and examined the life and times of George Owen Squier, the eighth Chief of Signal. This very valuable contribution extends and deepens the distinguished history and record of the U.S. Army Signal Corps.

This easy-to-read work is divided into 15 chapters and a technical appendix. Modern-day warfighters will find that the core themes of the book still resonate and can be plumbed for their wisdom. Some of these themes include the adoption of (or reluctance to adopt) new technology, officer career development, and military cooperation with industry and academia.

The book’s content is a mix of historical prose and lower-level scientific writing. Although it has moments where its natural momentum is disrupted by technical language, it never overwhelms the narrative. Squier had a remarkable career by any measure. After graduating seventh in his West Point class of 1887, he joined the artillery and earned a doctorate in electrical engineering in 1893 from Johns Hopkins University while assigned to Fort McHenry in Baltimore (pp. 4-5). His education and scientific training made him among the few experts in the world in matters related to radio and submarine cable. This expertise paradoxically disrupted his conventional career several times and simultaneously created opportunities that would have been impossible without it. The modern Army places tremendous value on advanced education and owes a debt to the risk and scorn that Squier often bore for his graduate education.

The Army directly benefited from his scientific expertise throughout his entire career. Beginning in 1894, he and a partner accurately measured the muzzle velocity of artillery pieces with a new high speed Chronograph. The more accurate data resulted in increased combat effectiveness and accuracy by improving ranging and more precise powder measurements (p. 38).

Chief Signal Officer, Brig. Gen. Adolphus Greely, noticed Squier’s talent and expertise and correctly reckoned that he was a better match within the Signal Corps and asked the adjutant general to reassign him to the Signal Corps Volunteers in 1897 (p. 49). He was put in charge of searchlight experiments for the Army

in 1898 (p. 43) and later appointed a regular officer in the Signal Corps in January 1899 p. (53).

Greely had grand designs and uses for Squier’s impressive repertoire of skills and experiences. He ordered Squier to the Philippine Islands in 1900, where his first major duty as a Signal Corps officer was to begin laying cable connecting the islands to each other to better facilitate their administration. Before he returned to Washington D.C., he had supervised the laying of 30 separate cables ranging over 1,300 miles, which connected all the principal islands of the archipelago (p. 64).

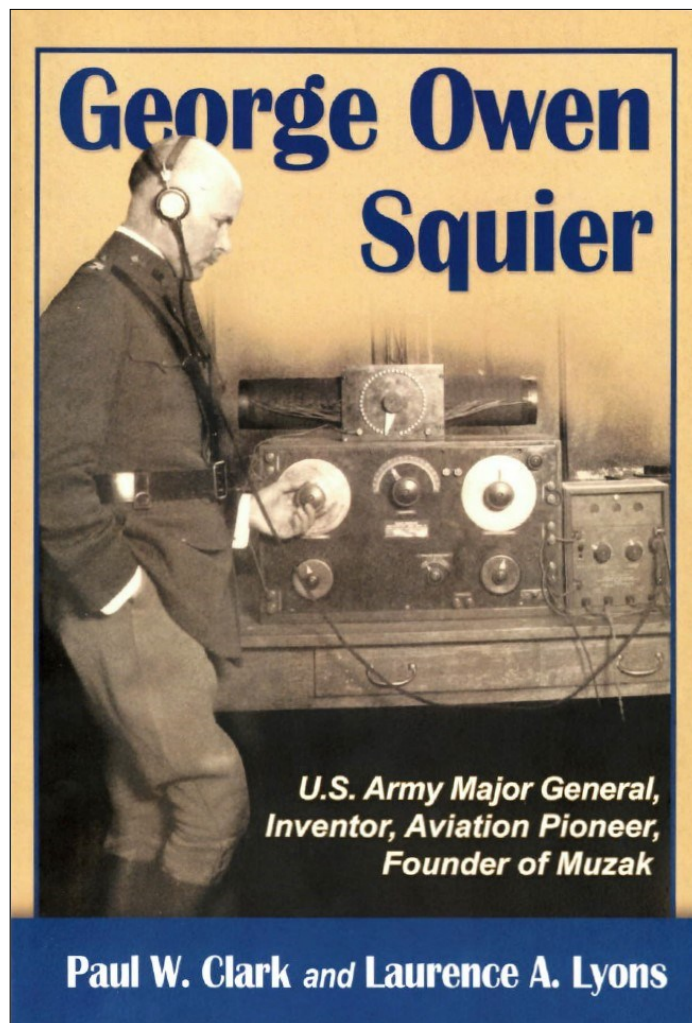
Upon returning to the United States, he was made the commanding officer of the Signal School and assistant commandant at Fort Leavenworth, Kansas (p. 75) in 1906. When Greely was promoted and reassigned, James Allen became the chief signal officer, and Squier became his assistant (p. 81). Allen immediately assigned him the task of preparing a comprehensive study of the “entire field of airplane, dirigible, and balloon theory and practice” (p. 82). Squier became a leading advocate for aviation and was present at the birth of this industry. In fact, he was the second passenger of the Wright Brothers when they delivered the first airplanes to the Army at Fort Myer, Virginia (p. 88). Later, the Army was awarded a radio research appropriation of \$30,000, and Squier was launched headfirst back into studying electronic communications in 1908 (p. 101). The culmination of this research was the discovery of and patenting of multiplex telephony and telegraphy (p. 107).

After so much time in Washington D.C., Squier was due for a field rotation, but Allen recommended Squier for a two-year assignment to London as a military attaché (p. 113). Within a year, he reported on the aerial tactics and lessons of the Balkan Wars (p. 117). When World War I broke out in 1914, he was given the “exclusive privilege ... to go with the British army in the field” (p. 123) even though other neutral powers’ attaches were not (p. 126). Squier gathered critical data on the use of airplanes in combat (p. 127), staff organization, and ammunition expenditure rates (p. 134) as well as sending back books, Army orders, periodicals, proposed budgets, war photographs, front-line dispatches, publications on medicine, information about ordnance railroads, and signaling (p. 135). This vicarious learning enabled Army leaders to begin gaining a genuine understanding of the war. Squier was so valued by the American ambassador that when his two years were up, the ambassador’s request was respected, and Squier was extended. He made a total of three trips

to combat zones in France (pp. 136-137). Squier returned much heralded for his exploits and within nine months was promoted from lieutenant colonel to brigadier general and appointed the Chief of Signal just as the Army was preparing to enter World War I in 1917 (p. 138). His greatest contribution as Chief of Signal was to force aviation upon a reluctant Army, securing the largest congressional appropriation for a single purpose in July 1917, for \$640 million for Army aviation (p. 153). Despite this windfall of resources, aviation remained woeful compared to other world powers due to the nascent state of the industry, the double lack of reliable engines and a national lab, and a spate of patent-driven lawsuits.

In April 1918, the Secretary of War ordered the transition of the branch out from under the Signal Corps. Before he retired in December 1923, Squier supported early rocket research and commissioned professional scientists and engineers to increase the profile of these skills and their practitioners in the Army.

Today's Army is the realization of Squier's dual vision and legacy. He wanted an Army driven by the latest scientific discoveries and was as an advocate of the early adoption of new ideas and technologies, no matter how it might disrupt the current order. Despite some clumsy chapter transitions between the authors, this book is an excellent contribution to the history of the Signal Corps. While this book has broad appeal, it is best suited for captains and higher in the Signal, Aviation, Intelligence, Cyber and Electronic Warfare branches who make the greatest use of advances in electronics, communications, and STEM-related applications.



*Published in 2014, the book "George Owen Squier: U.S. Army Major General, Inventor, Aviation Pioneer, Founder of Muzak" details the life and career of Squier, a chief signal officer during World War I. (Courtesy image)*

### ***About the author***

Ivan Zasimczuk graduated from the University of California at Davis (UCD) with a Bachelor of Arts in History and Political Science, and a minor in English. He joined the Army through the UCD Reserve Officers' Training Corps and entered active duty in 1997 as an adjutant general officer. Zasimczuk has served in Germany, Bosnia, Kosovo, Kuwait, Iraq, and Jordan. He attended Kansas State University earning a Master of Arts in History with a follow-on teaching assignment at the United States Military Academy at West Point where he taught Military History and Leadership. He retired in 2017, then worked at the British Embassy in Washington D.C. for one year before becoming the Military History instructor for the U.S. Army Signal School. He is an archivist and will begin a new role as a training developer in July 2025. Zasimczuk is a frequent contributor to Army History Magazine.

