A Review by John Riley – Former Owner of Gabriel Used Bookstore in Northampton

Photographed Letters on Wings: How Microfilmed V-Mail Helped Win World War II by Tom Weiner with Bill Streeter

Levellers Press, Amherst, Massachusetts 2017Â \$18.95 ISBN 978-945473517 by John Riley, owner Gabriel Books, Northampton, MA

V-Mail is an undeservedly obscure topic of military and philatelic history. It was a short lived (1942-1945), but strategic technology used to miniaturize paper mail utilizing microfilm systems to free up space and cargo weight on planes supplying the troops during WW II.

This is a very important book for anyone interested in postal history, the history of microfilm, espionage and war time communications, and the enormous effort made by the postal service and the military to keep the battlefront and the home front in constant communication. The military viewed rapid communication between front line troops and family members, loved ones, and other supporters as paramount in maintaining troop morale and bolstering support for the war effort back home.

The book is a labor of love on several fronts. First of all, there is William Streeter, who did the primary research and compiled the relevant documents. He was inspired by the V-Mail he used to communicate with his double cousin, Henry Streeter during the war. Henry died at age 19 in battle. This book is William Streeter's way of honoring his cousin and the other troops who served during the war.

The other person in this triangle is Tom Weiner, who took up the task of writing the book and completing the research necessary to bring the book to publication. He met William Streeter near the end of Streeter's life and was inspired by the depth of his research and the passion he had for the subject. Mr. Weiner previously wrote "Called to Serve: Stories of Men and Women Confronted By the Vietnam War Draft", a personal recounting of the effects of the war featuring interviews with men and women representing all of the choices faced from serving to resisting, from leaving the country to conscientious objection and

"beating the draft". Also included are chapters on the history of the draft and of conscientious objection. He came at this book about V-Mail with his own passion and depth of research.

The book begins with a comprehensive recounting of the history of microfilm and micro-photography, which is coeval with photography itself. The earliest micro-photographs date to 1839 when a daguerreotype process was used to produce novelty texts. By 1851 James Glaisher suggested storing documents using microfilm and Sir John Herschel envisioned creating microscopic editions of reference works for use by librarians and researchers. One of the major impediments to wider usage of micro-photography was the lack of an inexpensive, easy to use lens for viewing it. Rene Dagron improved on the one-piece microscope invented by the Earl of Stanhope and with its introduction micro-photography became available to a wider public. By 1862 Dagron was producing "microscopic photo-jewelry." As with so many other steps forward in the world of viewing technology, pornography became a popular use of the device. Microscopic images were embedded in rings and lockets for gifts and personal enjoyment.

At about that same time the military was starting to take notice of the technology. The ability to miniaturize large amounts of information was extremely useful in the spy game and in military communication. The Siege of Paris in 1870 was an important step in the military use of microfilm. Because of the complete entrapment of the City, military intelligence could only be exchanged by means of hot air balloons, which were easily shot down, or by means of a very old technology, in use for thousands of years: pigeons! Pigeons had been used since the time of Alexander and Caesar for military communication and even the Reuters news service was using pigeons up until 1860 to transmit stock prices between Brussels, Belgium and Aachen, Germany. With the advent of microfilm much more text could be sent by air.

During the siege pigeons were outfitted with small tubes made from goose quills which held the rolled-up microfilm. The tubes were then attached to the tail feathers of the pigeons. The canny Prussians countered the flocks of pigeons with trained hawks of their own which hunted down their slow flying prey. When (and if) the microfilm arrived, it was projected by special lanterns onto a white wall

where the messages were transcribed by numerous secretaries. From the time of the Siege of Paris until World War II there were numerous developments in microfilm technology, including its growing use in banking, legal document and blue print storage, library storage (especially newspapers), and of course, espionage. After a thorough history of microfilm, the book moves on to its main subject, microfilmed mail (i.e. V-Mail) and its use in World War II.

V-Mail was an outgrowth of "Airgraph," which was used by the British starting in 1940. "Airgraph" was a partnership between Pan Am Airways and Kodak which utilized the same technology Kodak had developed with its Recordak microfilm company and which would subsequently come to be used by V-Mail. The British faced the brunt of the war at the outset and thus anticipated the need for lighter weight cargo while supplying the far-flung troops of their Empire. To put the savings in perspective: "... 1500 letters could be put on a roll weighing a few ounces...and mail that would have necessitated the use of fifty planes could now be carried with one plane!"

When the U.S entered the war, the way was clear to emulate the "Airgraph" system to supply the hundreds of thousands of troops stationed in multiple theaters of war. Besides the obvious advantages of miniaturization, V-Mail also allowed for the indefinite retention of the original letter on microfilm rolls. With many planes being shot down close to the front, this allowed the postal service to resend letters that were lost. Once the letters were delivered the stored microfilm rolls were destroyed.

V-Mail started out slowly, with only 35,000 letters sent from stateside in 1942, but by 1943 millions of letters were being sent. By the time it ended over a billion letters had been sent and received. With V-Mail, as opposed to regular post, there was no cost for troops writing home. The stationery was free for families and the cost of postage was only three cents. The ease of use, speed of delivery, and the effort by family members to stay in touch added to V-Mails popularity. The one drawback to V-Mail was that all messages had to be written on official forms that were already quite small and no inserts were allowed, so no lipstick kisses, locks of hair or perfume made it through the processing.

There were three centers for aggregating mail for microfilming: New York, Chicago and San Francisco. In each location hundreds of specialized workers prepared the rolls of film for shipment. On the battlefront, V-Mail stations were operational within days of securing a position. Some of the more exciting stories in the book involve the jury rigging of photography labs in the wake of recent battles. Soldiers and technicians managed to eke out enough water even in the desert in order to finish their mission.

As with all wartime mail, V-Mail was subject to censorship, both to protect sensitive information from reaching the enemy, but also to keep families at home reassured that all was well with their loved ones. Officers' mail was self-censored, but enlisted men's mail either had offending passages blacked out or cut out. Some mail was even tested for secret ink to ferret out spies.

As the war wound down V-Mail also slowed down and was no longer in service by 1946.V-Mail proved its usefulness during the war, but dreams of expanding it to civilian use never materialized as regular air service made the use of Recordak and microfilming simply too cumbersome for regular postal service.

Rounding out the book are samples of V-Mail letters called "The Voices of V-Mail" which give a living picture of the war and the close bonds that were maintained by the correspondence. There are also numerous facsimiles of the vivid advertising used to promote V-Mail

The book closes with an exhaustive bibliography of books, journal articles, and digital resources.

Due to its multi-disciplinary approach this book should find a place in any library.