Finding Ferner: The Story Behind the Re-discovery of a 2022 Cryptologic Hall of Honor Inductee – HISTORY TODAY, 28 March 2023

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"An important element of promoting the history of an institution is to preserve the legacies of the individuals who served in it, to record their accomplishments, and to keep them from being forgotten."

Donald A. Ritchie, Historian Emeritus of the Senate

The clues were there from the start. When a certain historian stumbled over first one of them and then another, the clues at last became so compelling that by the third time, she finally had to stop to investigate. The result was the rediscovery of one of America's best early cryptanalysts. He had been so thoroughly forgotten that the nearly universal response among those now hearing his story has been "I didn't know anything about him." None of us did.

I am that historian, and I first encountered Ferner's name in my normal course of studying the history of our cryptanalysis organizations. It took a while, but eventually I realized it was time, if not past time, to stop and find out: who was Robert Orestes Ferner?

The answer did not disappoint. Ferner had worked for William Friedman at the US Army's cryptanalytic organization from 1935 to 1948. Had he stayed a year longer, he would have become an employee of the first attempt to form a joint national cryptologic agency, the Armed Forces Security Agency. But he did not; his entire career was as an army civilian.

It didn't take long to realize that this was no ordinary cryptanalyst (even if there were such a thing). By the time I had read accolades from his peers ranging from "an Einstein among cryppies" to "genius" and even "the leading cryptanalyst that the United States has ever had," I knew I was onto something. And it's not every day you find William Friedman writing about somebody as "one of the best technical workers of the Army Security Agency."

The natural place to start was in NSA's own archives and records. Here I found a wealth of information about Ferner's work. Amazingly, he was not just a significant contributor to the army's success against the Japanese diplomatic PURPLE machine: with Frank Rowlett, he *co-led* the project. From there, his contributions went from strength to strength: solutions of extremely challenging Japanese and German systems; pushing the state of the art of using machines for cryptanalytic purposes; acting as technical liaison to US and foreign cryptanalytic partners; teaching other cryptanalysts about solving machine systems; and leading organizations comprising those deemed the army's most elite technical experts, even while still serving as one himself. This was not a man deserving of cryptologic oblivion.

In piecing together Ferner's life outside of work, I found great assistance from numerous organizations in his hometown of Alliance, Ohio and elsewhere. But there were gaps that no written source could completely fill. I had already discovered he had a daughter, and I eventually found a listing with that name in a location plausibly near where the Ferner family had lived decades ago. I can't think of many things I would less rather do, but eventually I did pick up the phone and start cold calling. I got it in one: when I told the voice on the other end of the line I was a historian for the Center for Cryptologic History and was looking for family members of Robert Ferner, the voice said "he was my father." She then added that she wouldn't be able to tell me anything about his work, because he never talked about it. I

quickly let her know it wasn't the work aspect I needed, but to learn more about his life. Ferner's daughter Jean has provided insights that I could have learned in no other way. She even sent family photographs, including the one used for Ferner's Hall of Honor photograph. With this article, we've included one not yet appearing elsewhere in our publications.

The cryptanalytic community remained aware of Ferner's legacy through at least the early 1980s. We know this because when the then-new KRYPTOS Society, NSA's professional society for cryptanalysts, inducted its first class of Distinguished Members, there was Robert Ferner alongside William Friedman and other early cryptanalytic giants. But in the ensuing decades, memory of his consummate skill and contributions had completely vanished.

In 2022, NSA restored Ferner's memory in the most meaningful way possible: selection as a member of the Cryptologic Hall of Honor. This article has given a glimpse



Robert and Erma Ferner, La Mesa, California, around 1959. *Courtesy of Mrs. Jean Ferner*.

into the behind-the-scenes story that led to this recognition. It's also just one example of what goes on in NSA's Center for Cryptologic History every day, as we seek to bring the workforce insights that will inspire and enable today's work. And, as with every CCH endeavor, this one represents teamwork—in this case, involving nearly every member of CCH in some capacity, as well as other Agency individuals and a number of external partners as well.

Now that you know the story behind the story, we invite you to explore Robert Ferner's story for yourself. You can find CCH's recently published unclassified booklet *"Give to Ferner": The Untold Story of an American Master Cryptanalyst* on nsa.gov at History -> Cryptologic History -> Historical Publications - > Personalities. If you prefer a print copy, please email your request to history@nsa.gov.

Source:

• Donald A. Ritchie, "Monuments, Commemorations, and Legacies," *Federal History* issue 9 (2017), 2.