## **Works Cited**

## **Primary Sources:**

Blancke, W. Wendell. "Interrogation of Karl Gustav Arnold, 1946." The National Archives and Records Administration, 20 Nov. 1946,

This source allowed us to gain an understanding of Johannes Siegfried Becker's history prior to his involvement in South America. This detailed interrogation stated Sargo's every move, allowing us to see how powerful he really was. This source was used in the build-up.

Coast Guard Unit 387 and Bletchley Park Liaison, 1944,

archive.org/details/InterrogationOfKarlGustavArnold.

archive.org/details/CoastGuardUnit387andISKLiaison/page/n1/mode/2up.

This source provided us with documents written by the Coast Guard regarding Circuit 3-N.

The information obtained from this source was used in the heart of the story.

Diary, 1941. "Diaries of Henry Morgenthau, Jr., April 27, 1933-July 27, 1945: Franklin D. Roosevelt Presidential Library & Samp; Museum." Home - FDR Presidential Library & Samp; Museum. www.fdrlibrary.marist.edu/\_resources/images/morg/md0620.pdf.

This diary entry logged a conversation between US Secretary of the Treasury Henry Morgenthau Jr and several others. They discussed Elizebeth Friedman's resistance to her recruitment into the Navy's cryptanalyst unit. This was helpful in creating the heart of the story.

"Elizebeth Smith Friedman Collection." George C. Marshall Foundation,

www.marshallfoundation.org/library/collection/elizebeth-smith-friedman-collection/#!/collection=84.

The George C. Marshall Foundation is where most of Elizebeth's remaining, declassified documents went. These were handpicked by both her and William to showcase the work that they had done over the years. This foundation was very helpful to us in the sense that it provided a plethora of photos and information regarding Elizebeth's work. The pictures were incorporated throughout each section of the website and allowed us to gain a better understanding of the Friedmans' lives.

"Elizebeth Friedman Interviews." George C. Marshall Foundation,

www.marshallfoundation.org/library/collection/elizebeth-smith-friedman-collection/elizebeth-smith-friedman-interviews/#!/collection=854.

This collection from the Marshall Foundation showcases five interviews with Elizebeth Friedman. In them, she discussed her life at Riverbank and how she began her journey with coding. These interviews were helpful for us when we were making the "Context" page.

"Elizebeth Friedman Memoirs." George C. Marshall Foundation,

www.marshallfoundation.org/library/collection/elizebeth-smith-friedman-collection/elizebeth-smith-friedman-memoirs/#!/collection=853.

This collection provided the audio and transcripts from six interviews with Elizebeth Friedman. In these interviews, Elizebeth delves into the events that unfolded during and after Riverbank. These interviews allowed us to gain a better understanding of how

passionate Elizebeth was with the work she had done and was used to make the "Onset of WWII" page.

F.B.I. &; J. EDGAR HOOVER IN WORLD WAR II "BATTLE OF THE UNITED STATES"

GERMAN SPIES ESPIONAGE 24284, 9 Aug. 2016,

www.youtube.com/watch?v=pdMTRjRvqGk.

This video is from the FBI stating conflicts that occurred due to Nazi spy rings in South America. This video takes credit away from Elizebeth's team, showing that the FBI over-glorified its role during World War II. A clip from this video was inserted into the "Wartime Impact" page.

"Fireside Chat On National Security, 12/29/1940: Columbia Broadcasting System, Inc.: Free Download, Borrow, and Streaming." Internet Archive, 29 Dec. 1940, archive.org/details/FiresideChatOnNationalSecurity.

This source provides an audio recording of President Franklin Roosevelt, as he discusses the risk of takeover that is occurring in South America. President Roosevelt explains that the Nazis were willing to do whatever they could to gain more power and that America was ready to counteract them. A small clip from this audio was incorporated into the "Operation Bolivar" page.

Foundation for German Communication and Related Technologies. KV-2-1487-Wolf-Argentine, www.cdvandt.org/kv-2-1487-wolf-argentine.htm.

This source provided two pictures of Johannes Siegfried Becker (Sargo) prior to World

## War II. One of the pictures was used on the build-up page.

Friedman, William F. "Riverbank Publications No. 20 Several Machine-Ciphers and Methods for Their Solution by William F. Friedman on Kuenzig Books." Kuenzig Books, Riverbank Laboratories Department of Ciphers,

www.kuenzigbooks.com/pages/books/26832/william-f-friedman/riverbank-publications-n
o-20-several-machine-ciphers-and-methods-for-their-solution?soldItem=true.

This source shows several pages from Elizebeth and William Friedman's book "The Riverbank Publications". Each page displays tools and methods that they used to crack many codes during World War I and examined cryptography from a more statistical viewpoint. One of the pages was incorporated into the "Legacy" page.

"Gualberto Villarroel." Wikipedia, Wikimedia Foundation, 22 Feb. 2021, en.wikipedia.org/wiki/Gualberto\_Villarroel.

A picture from this source was used on the "Legacy" page. It showed how the assassination of Gualberto Villarroel indicated the return of South America from fascist ideologies.

History Of Coast Guard Unit 387 (Cryptanalytic Unit), 1940-1945, 1945, p. 130., archive.org/details/HistoryOfCoastGuardUnit387/page/n129/mode/2up.

This source provided us with information regarding Circuit 3-N, the Germany-Argentina line that allowed Elizebeth's team to eventually gain the upper hand for the Allies. The information provided on this source allowed us to expand on the heart of the story as well as gain a better understanding of the issues created by the Nazi codes.

Jones, Lt. Leonard T. History of OP-20-GU (Coast Guard Cryptanalytic Unit), 16 Oct. 1943, archive.org/details/HistoryOfOP20GU/page/n7/mode/2up.

This source provided us with information regarding the tense relations between the Coast Guard and FBI, allowing us to draw conclusions about the role of the bureau in their military affairs. The information obtained was used in the heart of the story and the short-term impact.

Jones, Lt. Leonard T. Memorandum to OP-20-G on Clandestine Radio Intelligence, 7 Sept. 1944, archive.org/details/MemorandumToOP20GClandestineRadio.

This source serves as a tribute to Elizebeth Friedman and her involvement in cracking Sargo's codes, as well as a historical overview of certain events that indicated a rise in war tensions. The information obtained was used to create the heart of the story.

"Knowledge Is Power." Folger Shakespeare Library, www.folger.edu/file/knowledgeispowerjpg.

This source was a photograph of Elizebeth and William Friedman alongside their students at Riverbank. When deciphering the tilt of their heads using a cipher they spelled out "Knowledge is Power", Francis Bacon's motto. This photograph, used on our home page, demonstrated the principle Elizebeth carried with her throughout most of her life.

"Latin American Internment Program." German American Internee Coalition, 16 Aug. 2019, gaic.info/history/the-world-war-ii-latin-american-internment-program/.

This source provides information regarding German immigration into South America. In this source, a political cartoon was used in our "Fascists Movements" page, which allows viewers to see a visual of the German thought process as they choose to spread their beliefs to South America.

Mrs. Friedman's Residence, 11 Nov. 1976,

www.nsa.gov/Portals/70/documents/news-features/declassified-documents/oral-history-in terviews/nsa-OH-1976-18-efriedman.pdf.

This source is a transcript from an interview with Elizebeth Friedman. The things that she stated in this interview allowed us to get a better understanding of how Elizebeth had been mistreated at Riverbank. This source was helpful when creating the "Context" page.

"Nazis Meeting in Puerto Varas, Chile." Archivo Nacional De Chile, Servicio Nacional Del Patrimonio Cultural, Santiago, 1937,

www.archivonacional.gob.cl/sitio/Contenido/Institucional/83091:Breve-historia-y-presen tacion-sobre-ideologia-nazi# ftnref3.

This photo was used as the background for the title "Onset of WWII". It was one of several photos depicting the rise of Nazi regimes in South America, which further emphasized Sargo's political influence.

"Part II Of The General-Major Friedrich Theodor Wolf Survey On the Argentine Events."

Foundation for German Communication and Related Technologies,

www.cdvandt.org/KV-2-1489-2-Part-II-General-Wolf-Argentine-Becker-and-Utzinger-V 2.pdf.

This pdf file provided us with written information from World War II that showed Sargo's

movement up until his arrest. This document was added to our site under the "Wartime Impact" page, and multiple pictures were used as well.

RESOLUTION Honoring the Life and Legacy of Elizebeth Smith Friedman, Cryptanalyst., www.wyden.senate.gov/imo/media/doc/Resolution%20Honoring%20Elizebeth%20Smith %20Friedman.pdf.

This source is a document made by the Senate that honors the life and legacy of Elizebeth Smith Friedman, officially giving her recognition for her work. This document was included as a pdf file on the "Legacy" page.

Rhp. "Nazi Rally in Buenos Aires, 1938." *Rare Historical Photos*, 14 Oct. 2017, rarehistoricalphotos.com/nazi-rally-argentina-1938/.

This website displays multiple photographs taken at Nazi rallies in Argentina during World War II. These photographs show how immigrant Germans had a massive influence on the political climate of Latin America during the 1930s and '40s. Pictures from this site were used in both the "Unmasking Sargo" page and the "Fascist Movements" page.

Szoldra, Paul. "We Toured the NSA Museum, a Building Dedicated to America's Secrets and Spies - Take a Look." Business Insider, Business Insider, 25 May 2016, www.businessinsider.com/nsa-museum-of-cryptography-2016-5#besides-a-display-for-ya rdley-the-museum-also-highlights-william-and-elizebeth-friedman-both-pioneers-in-code breaking-william-friedman-led-the-team-that-broke-japans-purple-code-allowing-the-us-t o-read-their-diplomatic-messages-prior-to-world-war-ii-13.

This source showed an exhibit that gave recognition to the work done by William and Elizebeth Friedman. The photo of the exhibit is shown on the banner for the page titled, "Legacy".

"16 Nazi Spies Still at Large". The Daily Banner, Greencastle, Putnam County, 29 January 1947.

The Daily Banner 29 January 1947 - Hoosier State Chronicles: Indiana's Digital Historic Newspaper Program,

newspapers.library.in.gov/?a=d&d=TDB19470129-01.1.1&e=-----en-20--1--txt-txIN-----

This source provided a newspaper article published in America that announced the arrest warrant for Johannes Siegfried Becker in Argentina. This newspaper clipping was used on the "Wartime Impact" page.

"The Gray Ghost: The Queen Mary during WW2." The Queen Mary at War, www.sterling.rmplc.co.uk/history/wartime.html.

This website showed a photo of the Queen Mary, a British supply ship used in World War II that Elizebeth had a key role in saving. The photograph, along with other key facts about the ship, was incorporated into our heart of the story.

U-Boat Warfare 1939-1940, www.naval-history.net/WW2CampaignsUboats.htm.

This source provided us with details regarding the German U-Boats. We were able to see an in-depth look into the use of these boats against the Allied Forces during World War II.

The picture was used in the heart of the story.

United States, Congress, The United States Coast Guard, and R.P. Schmidt. History of Coast Guard Unit #387, 1940-1945, 1945, pp. 1–366.

This source gave a detailed history of the unit Elizebeth Friedman had commandeered at the Coast Guard. This information was used in the "Unmasking Sargo" page and was helpful in gaining background knowledge.

## **Secondary Sources:**

Barber, James. "How a Suburban Housewife Became a Pioneer of Military Intelligence."

Military.com, 11 Jan. 2021,

www.military.com/off-duty/television/2021/01/11/how-suburban-housewife-became-pion eer-of-military-intelligence.html.

This was one of the first websites that we found that discussed the influence of Elizebeth Friedman on the events of World War II. With the help of this site, we were able to see a quick overview of Elizebeth's work and incorporated some of the key points into our website.

BERNHARDT, RICHARD F. "Is Latin America Going Fascist?" World Affairs, vol. 101, no. 2, 1938, pp. 105–110. JSTOR, www.jstor.org/stable/20663098. Accessed 11 Apr. 2021.

This source provided us with a document from the book, *World Affairs*. This document gave an opinion of the Allies towards the fascist movements occurring in Latin America during World War II. The document was included on the "Fascist Movements" page.

"Bolivar: Operations & Department of WWII." Bolivar | Operations & Operation

WWII, codenames.info/operation/bolivar/.

This source gave us a general rundown of the events that took place in Sargo's Nazi spy ring. This site allowed us to gain a better understanding of how the Germans made sure that their war tactics would allow them to succeed. The information provided was used for the build-up and the heart of the story.

"Breve Historia y Presentación Sobre Ideología Nazi." Archivo Nacional,

www.archivonacional.gob.cl/sitio/Contenido/Institucional/83091:Breve-historia-y-presenta cion-sobre-ideologia-nazi.

The official website for the Chilean national archives, archivonacional.gob.cl, helped us understand why Germans had specifically chosen Latin America as their home base for Nazi communication. The website was used in our build-up and was also used to gain a better understanding of the German influence on South America.

Britannica, The Editors of Encyclopaedia. "William F. Friedman and Elizebeth S. Friedman". Encyclopedia Britannica, 14 Dec. 2015,

https://www.britannica.com/biography/William-F-Friedman-and-Elizebeth-S-Friedman.

This source explained the life of William and Elizebeth Friedman, giving us an insight into the work that William Friedman had done. It explained the struggles that the Friedmans faced and allowed us to gain a greater understanding of a cryptanalyst's work.

Center for Cryptologic History. The Friedman Legacy: A Tribute to William and Elizebeth Friedman, Dec. 2006,

www.nsa.gov/Portals/70/documents/resources/everyone/digital-media-center/video-audio/historical-audio/friedman-legacy/friedman-legacy-transcript.pdf.

This source described codes and provided us with the actual coded messages that William Friedman had worked to solve. This source gave us an idea of the work that William was doing and allowed us to recognize how difficult cryptanalysis really was.

"Cybersecurity Needs Women." Exchange Initiative,

www.exchangeinitiative.com/cybersecurity-needs-women/.

This article by exchangeinitiative.com gives statistics on women currently in the field of cryptanalysis. The website features a graph, indicating the amount of women who worked in the cybersecurity field, and how many of them experienced any form of discrimination. This diagram was used on the "Legacy" page.

DeBakcsy, Dale, et al. "Forgetting Elizebeth Friedman: How America's Greatest Cryptanalyst Lay Unnoticed For A Half-Century." *Women, You Should Know*®, 25 Sept. 2019, womenyoushouldknow.net/elizebeth-friedman-americas-greatest-cryptanalyst/.

This article provided us with an in-depth look at Elizebeth's life and work. It was straightforward and concise, allowing us to gain only the necessary facts needed for our website.

"Elizebeth Friedman: The Rumrunner's Worst Nightmare." The Mob Museum, 24 Aug. 2019, themobmuseum.org/notable names/elizebeth-friedman/.

The Mob Museum provided us with insight into Elizebeth Friedman's life before

cryptology. This information was used in the background since we were provided with details of Elizebeth's life as a child.

"Elizebeth S. Friedman: 1999 Hall of Honor Inductee." National Security Agency Central Security Service,

www.nsa.gov/About-Us/Current-Leadership/Article-View/Article/1623028/elizebeth-s-friedman/.

National Security Agency's site provides information about Elizebeth Friedman's life before and after the Nazi Spy regime. Details such as her work at Riverbank were used in the background, and the detailed understanding of Elizebeth's work after World War II was used in our long-term impact.

Fagone, Jason. The Woman who Smashed Codes. DEY STREET Books, HARPER, 2018. The Women Who Smashed Codes by Jason Fagone is a book written to describe every part of Elizebeth Friedman's life from her birth until her death. This book was the most reliable and in-depth source that we used. It allowed us to back up many of our conclusions with historical evidence. This book was used in many parts of our website and allowed us to gain key knowledge.

Haynes, Suyin. "Codebreaker Elizebeth Friedman Never Got Her Due-Until Now." Time, Time, 11 Jan. 2021, time.com/5928583/elizebeth-friedman-codebreaker/.

The source provided by Time Magazine gives an in-depth overview of Elizebeth

Friedman's work during her life. The section in the article that mentions her work during

and after World War II was used in the heart of the story and the short-term impact.

"Home." > National Security Agency Central Security Service > Article View,
www.nsa.gov/About-Us/Current-Leadership/Article-View/Article/1623028/elizebeth-s-frie
dman/.

This source gave us a rundown of Elizebeth's life prior to World War II. The general information provided from this source allowed us to understand who Elizebeth Friedman was, prior to her work during World War II. The information found on this source was used to create the background page.

"Home." Famous Scientists, www.famousscientists.org/elizebeth-smith-friedman/.

This source allowed us to discover how Elizebeth debunked a century-old myth that Sir Francis Bacon was the true author of Shakespeare's plays and sonnets. With William, she was able to conclude that there was no substantial evidence to support this theory. This source was used as background research.

"How Codebreaker Elizebeth Friedman Fought Nazi Spies." PBS, Public Broadcasting Service, www.pbs.org/wgbh/americanexperience/features/codebreaker-elizebeth-friedman-fought-nazi-spies/.

This PBS article explains the work that Elizebeth Friedman did to put an end to the Nazi Spy Ring. The details mentioned in this article were used in the heart of the story and short-term impact pages.

"Jason Fagone Quotes (Author of The Woman Who Smashed Codes)." *Goodreads*, Goodreads, www.goodreads.com/author/quotes/63695.Jason Fagone.

This source listed some quotes by author Jason Fagone and Elizebeth Friedman herself, expanding on feelings she had about Riverbank, her role as a cryptanalyst, and societal expectations. The quotes on this site were used all over our website, on pages such as the thesis and the build-up.

"Learn More about the World of Elizebeth Smith Friedman." PBS, Public Broadcasting Service, www.pbs.org/wgbh/americanexperience/features/codebreaker-learn-more-elizebeth-smith -friedman/.

This site listed many other sources, such as books and articles that we used to describe the effect of Elizebeth Friedman's work on the future of cryptology. Most of the books listed on this source were used in the heart of the story and the long-term impact.

Lee, Max. "Elizebeth Friedman: Coast Guard Code Breaker." Boundary Stones: WETA's Washington DC History Blog, 28 Sept. 2016,

boundarystones.weta.org/2016/09/28/elizebeth-friedman-coast-guard-code-breaker.

This source explains Elizebeth's work before joining the Navy and was used in our background. We were also able to discover the type of person that Elizebeth was when she was younger and the profound work that she had done prior to World War II that we were unable to include in the website.

McGaha, Richard L. The Politics of Espionage: Nazi Diplomats and Spies in Argentina,

1933-1945, Nov. 2009, file:///C:/Users/student/Downloads/ohiou1256330041.pdf.

This dissertation described the mass Nazi immigration to Argentina that took place during World War II. It allowed us to discover who Sargo was and recognize his impact on Nazi politics on the vulnerable nation. The facts listed on this source were mentioned in the build-up.

Mowry, David P. "German Clandestine Activities in South America in World War II." German Clandestine Activities in South America in World War II, vol. 3, 1989. IV, www.nsa.gov/Portals/70/documents/news-features/declassified-documents/cryptologic-hi stories/german clandestine activities.pdf.

This FBI document written in 1989 explains the key issues that brought about the Nazi Spy Ring. Johannes Siegfried Becker was mentioned several times. This source allowed us to understand how the underground operations of Sargo and his associates culminated in the formation of spy networks. This was used in the build-up and the heart of the story.

Ouellette, Jennifer. "The Codebreaker Honors Quaker Woman Who Helped Bring down Nazi Spy Ring." Ars Technica, 12 Jan. 2021, arstechnica.com/gaming/2021/01/the-codebreaker-honors-quaker-woman-who-helped-bri ng-down-nazi-spy-ring/.

This website explains how the author, Jason Fagone, had researched Elizebeth Friedman. It helped us find a better connection between this year's History Day theme and the life of Elizebeth Friedman. It also directed us to more sources.

Sherman, William H. "How to Make Anything Signify Anything: William H. Sherman." *CABINET* /, www.cabinetmagazine.org/issues/40/sherman.php.

This source shows the types of codes that Elizebeth had to encipher throughout her years as a cryptologist. This source helped us understand the work of cryptanalysts and how convoluted some of their enciphered messages were.

Tappan, Nancy. "Elizebeth Friedman: Hidden Heroine." HistoryNet, HistoryNet, 12 Feb. 2019, www.historynet.com/elizebeth-friedman-hidden-heroine.htm.

This source gave us a general overview of Elizebeth's life and how she managed to contribute to the positive side of cryptology. Most of its key points were used in the short-term impact section.

"The Codebreaker." PBS, Public Broadcasting Service,

www.pbs.org/wgbh/americanexperience/films/codebreaker/#part01.

This documentary allowed us to see the life of Elizebeth Friedman through photos and video. It spanned the entire timeline of the project, giving us key details that allowed us to draw more concise conclusions about her positive impact on WWII. The facts listed in the documentary were used in all sections of our website. It was undoubtedly one of the most valuable sources we had.

"The Legacy of Women in American Cryptology: Part 2." National Security Agency Central Security Service, 13 Mar. 2020,

www.nsa.gov/News-Features/Feature-Stories/Article-View/Article/2109747/the-legacy-o

f-women-in-american-cryptology-part-2/.

This source provided a list of women who were affected by Elizebeth's contributions and paved the way for females in the STEM field in their own right. The nsa.gov site allowed us to gain knowledge on the impact of her work and helped in the creation of our "Legacy" page.

Tock, David. "German Immigration and Adaptation to Latin America." German Immigration and Adaptation to Latin America, 1994, p. 81. digitalcommons.liberty.edu,

https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1110&context=honors.

This article created by David Tock details the German immigration that took place in South America during the early 20th century. David Tock's research allowed us to gain a better understanding of the fascist ideals that were spread around South America and helped form our "Fascists Movements" page.

Weta. "Elizebeth Friedman: Coast Guard Code Breaker." Boundary Stones: WETA's Washington DC History Blog, 28 Sept. 2016,

boundarystones.weta.org/2016/09/28/elizebeth-friedman-coast-guard-code-breaker.

This source explained the work that Elizebeth did before she was involved with the Nazi Spy Rings. This source was very useful as it allowed us to better understand the issues she had to deal with as one of the only women in her field. The information we gained was used on the Context page.

Worrall, Simon. "This Woman Saved the Americas From the Nazis." National Geographic News,

18 Oct. 2017,

www.nationalgeographic.com/news/2017/10/elize beth-friedman-code breaker-nazi-spy-fagone/#close.

This National Geographic article explained the impact that Elizebeth Friedman had on the future of codebreaking. The article was used in the long term impact and allowed us to see the effect J. Edgar Hoover had on the truth.