

Primary

Images

African-American Codebreaking Unit. Photograph. National Security Agency.

https://th-thumbnailer.cdn-si-edu.com/ceaW9Vp8cGmZc33JDDVt7drEpjI=/fit-in/1072x0/https://tf-cmsv2-smithsonianmag-media.s3.amazonaws.com/filer/21/3c/213c2f2e-b2d6-4dd7-915d-918c2709c8a3/african_american_unit_courtesy_of_national_security_agency.jpg.

This is an image of the unit of Black women working in cryptanalysis. This image showed me that, even though they were hidden because of their race, the Black cryptanalysts were doing work of the same difficulty and importance as white cryptanalysts.

Alan Turing's Bombe Machines. Ca 1943. Photograph. Bletchley Park Museum.

<https://twitter.com/bletchleypark/status/1126381390231162880/photo/1>.

This is an image of the bombe machines at Bletchley Park designed by Alan Turing and operated by women cryptanalysts. This image showed how many bombe machines Bletchley Park needed in order to decrypt all necessary messages.

Arlington Hall. Photograph. United States Department of Defense.

<https://media.defense.gov/2018/Oct/01/2002046433/1920/1080/0/180930-D-IM742-2010.JPG>.

This is a photograph of Arlington Hall, the U.S. military's headquarters of cryptanalytic work.

Bunk Life. Photograph. Arlington Public Library.

<https://library.arlingtonva.us/wp-content/uploads/2017/10/6-Bunk-Life-1024x815.jpg>.

This is an image of the living quarters of the women working at Arlington Hall. This image displays the lack of privacy, allowing me to corroborate many of the experiences that WAVES and WAAC officers described.

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Falter, John Phillip. *On the same team - Enlist in the WAVES*. 1943. Poster. Hennepin County Library. <https://digitalcollections.hclib.org/digital/collection/p17208coll3/id/1319/>.

This is an image advertising WAVES enlistment to women. The poster says the words “on the same team,” showing that the war effort was seen as an undertaking of teamwork. This image showed me that one might want to enlist in the WAVES to become a part of something bigger than them.

Genevieve Grotjan Feinstein received an exceptional civilian service award from Brig. Gen. P.E. Peabody. 1946. Photograph. National Archives.
https://www.nps.gov/articles/000/images/slide-3_1.png.

This is an image of Genevieve Grotjan Feinstein receiving an award for her contributions to the field of cryptanalysis during her time in the military. The nature of the award showed me that cryptanalysts like her were incredibly dedicated to doing their difficult work.

I’ve found the job where I fit best! 1943. Poster. New York Historical Society Library.
https://wams.nyhistory.org/wp-content/uploads/2019/10/86218d_FindYourWarJobPoster-1024x719.jpg.webp.

This is an image of a woman operating agricultural machinery. Next to her the words “I’ve found the job where I fit best!” are displayed, showing me that the military believed that everyone could fit somewhere in the war effort. This image additionally helped me understand the wide range of military jobs offered to women during World War II.

Jarche, James. *A World War II cryptographer studies a math solution to a secret message while working in a Washington, D.C., laboratory*. February 4, 1944. Photograph.
https://i.natgeofe.com/k/f4ca3c85-bb57-468e-a96b-272d79f5a442/Woman-Equations_Codebreakers_KIDS_0322.jpg?w=636&h=650.

This is a photograph of a woman standing in front of a poster displaying information used to decipher encrypted messages.

Macchina Crittografica Elettromeccanica - Enigma. The National Museum of Science and Technology: Leonardo da Vinci.
http://www.museoscienza.it/dipartimenti/catalogo_collezioni/scheda_oggetto.asp?idk_in=ST010-00002&arg=enigma.

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This is a photograph of the Enigma machine used by the German military during World War II. This image creates a visualization of the descriptions used by many of my sources.

McAfee in her uniform for the Naval Reserve. Photograph. Vassar.

https://vcencyclopedia.vassar.edu/wp-content/uploads/2021/11/4724982598_a5451f310e.jpeg.

This is a photograph of Mildred McAfee, the leader of the WAVES.

Members of the Women Accepted for Volunteer Emergency Service (WAVES) marching past the NCR Sugar Camp gate house during the Second World War. Ca. 1943. Photograph.

Dayton Daily News.

<https://www.daytondailynews.com/news/oakwood-company-buys-iconic-sugar-camp-gatthouse/X5PA2TYKRJHO7GHL3Q7Q3HC5TE/>.

This is an image of WAVES officers marching in Dayton, Ohio near the national cash register company in which they built the first United States bombe machines. This image showed me that even though they were doing important work for cryptanalysis, the WAVES also had to learn tasks like marching.

Navy WAVE working on US Navy Cryptanalytic Bombe. National Cryptologic Museum.

https://airandspace.si.edu/sites/default/files/styles/callout_half/public/10926282_827780993955768_6579335784379262103_o.jpg?h=5b8a7869&itok=36ynQBHo.

This photograph shows a WAVES officer operating a bombe machine. The image generally shows what went into the process of operating a bombe machine. This image further reinforced my understanding of what work WAVES officers performed.

Nestor Family. Ada Nestor, certificate of service from the Military Intelligence Division War Department, signed by, at the time, Major General Clayton Bissell, issued in 1945.

<https://www.nps.gov/articles/000/images/ceret11111.jpg?maxwidth=1200&maxheight=1200&autorotate=false>.

This is an image of an award given to cryptanalyst Ada Nester for her contributions to codebreaking and military intelligence.

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Pagano. *Red Cross recruiting poster, Army and Navy Nurse Corps*. Poster. New York Historical Society Library.
<https://wams.nyhistory.org/wp-content/uploads/2019/10/R37.-Recruiting-army-navy-nurse-poster-e1571952657666-655x1024.jpg>.

This is a poster advertising the army and navy nurse corps. People in military uniform are looking up to the nurse, showing that nursing was seen as a very honorable position.

Rejewski, Marian. *Rejewski's Sketch of the Bomba*. 1979.
https://www.cryptomuseum.com/crypto/bombe/img/bomba_full.jpg.

This sketch depicts the original design for the bomba machine, which influenced the bombe machine. This sketch was created by Rejewski in 1979 as an improvement of his initial design idea.

Smith, Dan V. *WAAC - This is My War Too!*. 1943. Poster. Hennepin County Library.
<https://digitalcollections.hclib.org/digital/collection/p17208coll3/id/1412/rec/6>.

This is a poster advertising the WAAC. It displays the words “this is my war too!” instilling a sense of both responsibility and power over the war in women.

U.S. Army SIS cryptologists, in Arlington Hall. Circa 1943. Photograph. National Security Agency.
https://www.nps.gov/articles/000/images/Arlington_Hall_1943.jpg?maxwidth=1200&maxheight=1200&autorotate=false.

This is an image of women doing cryptanalytic work at Arlington Hall. This image displays their cluttered workspace. The abundance of paper and tools show how much their jobs entailed.

US Bombe. Photograph. National Security Agency.
<https://commons.wikimedia.org/wiki/File:US-bombe.jpg>.

This is a color photograph of the Bombe machine built and used by women in the United States military. It helped me understand the complexity of the machinery being used.

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WAAC Recruiting. 1943. Photograph in L. Mundy, *Code Girls: The Untold Story of the American Women Code Breakers of World War II*. Hachette Books, October 10, 2017, 447.

This is an image of WAAC officers with their suitcases, ready to be in the military. This image showed me the diversity of the women enlisting in the military in World War II.

WAVES (Women Accepted for Volunteer Emergency Service) built and operated the U.S. Navy Cryptanalytic Bombe from 1943 to the end of World War II to solve the German 4-rotor Enigma. Photograph. National Air and Space Museum.
https://airandspace.si.edu/sites/default/files/styles/body_large/public/media-assets/2008.0320.0008.jpg?itok=Ub-xaXxZ. National Cryptologic Museum.

This is an image of a woman military officer operating a bombe machine.

Who were the Codebreakers? Ca. 1945. Photograph. Bletchley Park Museum.
https://bletchleypark.org.uk/wp-content/uploads/2022/01/WhoWereTheCode_945x805-945x700.jpg.

This is an image of female codebreakers at Bletchley Park. This image helped me understand that many women were at the forefront of cryptanalytic work in both the United States and England.

William Coffee Receiving Meritorious Service Award. 1946. Photograph.
<https://www.puzzlebreak.us/blog/celebrating-black-history-month-the-black-code-breakers-of-arlington-hall-station>

This is an image of William Coffee receiving an award for his leadership of cryptanalysts during World War II. This award shows me that his organization and direction of the cryptanalytic women were very important.

Women cryptologists at work at Arlington Hall Station in Arlington, Virginia. Photograph. National Security Agency.
<https://www.nps.gov/articles/000/images/Screenshot-2022-06-13-132345.png>.

This is a photograph of women at Arlington Hall decrypting messages. As their work included a lot of math and pattern recognition, many of the women are using pencil and paper to decrypt messages.

Women in the Women's Army Corps during World War II served in the Army Signal Intelligence Service or the 2nd Signal Service Battalion operating Sigaba machines, decrypting messages, and intercepting and forwarding enemy coded messages. Photograph. National Cryptographic Museum.

https://airandspace.si.edu/sites/default/files/styles/body_large/public/media-assets/28685712_1824520824281775_276435451064090624_o.jpg?itok=Pb-Jch0S.

This is a photograph of a woman military officer doing cryptanalytic work. It displays the complex machinery that they used.

Interviews

Betty Bemis, interview by Mary Oliver. Dayton Codebreakers. Oct. 20, 2001.

<https://daytoncodebreakers.org/personnel/interviews/betty/>.

This interview covers Bemis' journey from working in a military cafeteria to soldering wires of bombe machines. Bemis describes that after she finished boot camp, she was abruptly instructed to solder wires, learning this skill as she worked. This interview helped me understand the hardships that WAVES had to overcome as they worked on bombe machines.

Goguen Alvida, interview by Mary Oliver. Dayton Codebreakers. Oct. 19, 2001.

<https://daytoncodebreakers.org/personnel/interviews/alvida/>.

In this interview, Goguen talks about her experiences leading up to and during her time as a WAVES officer. Goguen enlisted in the WAVES and after completing her training, she took a written exam and was assigned to build bombe machines in Dayton, Ohio. This interview helped me understand the secrecy surrounding the creation of the bombe machines, as Goguen describes that she herself had to figure out what she was creating.

Joan Precht, interview by Claudia Watson. Dayton Codebreakers. Oct. 18, 2001.

<https://daytoncodebreakers.org/personnel/interviews/joan/>.

In this interview, Precht discusses her training and work experiences in Dayton, Ohio and Arlington, Virginia. After completing training, Precht built bombe machines in Dayton, Ohio and was among the first set of women sent to Arlington, Virginia to operate them. Precht how she learned to operate a bombe machine, allowing me to understand the general step-by-step process that bombe operators went through.

Judy Parsons, interview by David Kohnen. *CNN*. August 2020.

<https://www.cnn.com/2020/08/04/us/world-war-ii-women-codebreakers-nebraska-avenue/index.html>

In this interview, Parsons describes her personal experiences as a WAVES officer. She talks about the difficulties of the work and the difficulties caused by secrecy. This interview helped me further understand how WAVES officers felt about their work; Parsons describes feeling sad that her work led to deaths, even if those deaths were of people on an opposing side of World War II.

Sue Unger, interview by Claudia Watson. Dayton Codebreakers. Oct. 20, 2001.

<https://daytoncodebreakers.org/personnel/interviews/sue/>.

This interview covers Unger's experiences and memories of the operations of WAVES. Unger is a WAVES officer who after completing training at Hunter College, was sent to Dayton Ohio to build bombe machines and then to Arlington Hall to operate them. This interview gives me insight into not only what cryptanalysts like Unger were doing, but also how they felt about their work.

Veronica Hulick, interview by Curt Dalton. Dayton Codebreakers. Oct, 2001.

<https://daytoncodebreakers.org/personnel/interviews/veronica/>.

In this interview, Hulick discusses how WAVES officers were treated. Hulick describes the secrecy, in which she was unable to talk about her job, and had to keep the commendation she received a secret. The transcription seemed to be flawed in spots, resulting in grammatical errors that had to be accounted for. This interview helped me to understand how women were treated and view their experiences from the perspective of the women.

Newspapers

"70 Greater Boston Girls Sworn In as WAVES on Esplanade." *The Boston Globe*. July 24, 1944. Accessed January 15, 2023.

<https://www.newspapers.com/clip/38385254/70-young-women-sworn-in-as-navy-waves/>.

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This newspaper article recounts the swearing-in ceremony of 70 WAVES officers from Boston. The article, from *the Boston Globe*, showed me that WAVES officers were celebrated for their service by many. This source helped me understand the different perspectives from which women in the military were viewed.

Brumley, Mary Jane. "Local Matron Decodes Cryptic Messages for Treasury Department." *The Evening Star Washington DC*. June 5, 1937.
<https://chroniclingamerica.loc.gov/lccn/sn83045462/1937-06-05/ed-1/seq-22/> (accessed January 15, 2023).

This article describes Elizebeth Friedman's prestigious cryptanalytic work. Friedman was one of the first cryptanalysts in the United States, using her abilities to decrypt smugglers' messages. This article helped me understand her achievements and how her work was perceived and understood by others.

"New Servicewomen's Club is Dream Come True." *The Brooklyn Citizen*. May 17, 1943.
<https://bplonsite.newspapers.com/image/544060695/?terms=military%20women&match=1>.

This article from *The Brooklyn Citizen* describes the Women's Military Services club. It describes it as being fancy and enjoyed, showing me that women in the military were given good accommodations.

"Urge Boro Women to Join Military, Volunteer Services." *The Brooklyn Daily Eagle*. Sept 17, 1943.
<https://bplonsite.newspapers.com/image/52668936/?terms=military%20women&match=1>.

This newspaper article describes a recruiting program that appealed to women considering joining the military. This source helped me understand the outreach methods that the military used to get more women into its ranks.

"WACS Sought Here For Secret Work In Signal Corps." *The Brooklyn Daily Eagle*. June 24, 1944.
<https://bplonsite.newspapers.com/image/52689053/?terms=arlington%20hall&match=1>.

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This newspaper article advertises to women, compelling them to join the military. Although the article describes that the jobs are “extremely interesting,” it does not go into any detail about what the jobs actually entail. This helped to show me the secrecy surrounding women’s positions in the military, proving their importance.

Miscellaneous

“Codebreakers | Recruitment - Real life stories from the Veterans of Bletchley Park.” Bletchley Park Museum. November 11, 2019. <https://www.youtube.com/watch?v=8fMxfyhMb-Y>.

This source describes the path which led women in England to work at Bletchley Park. The source includes video clips of women speaking about their abrupt process of assignment to Bletchley park. This video allowed me to draw comparisons between the secrecy of Arlington Hall and Bletchley park.

Enigma Red Messages. Bletchley Park Museum. November 2, 1944.
https://bletchleypark.org.uk/wp-content/uploads/2022/02/945x805_8_CU04-945x700.jpg

This is an image of a German Enigma message. This message was intercepted by Bletchley Park and displays the information that codebreakers had to work with to decrypt messages.

Enigma Red Messages. Bletchley Park Museum. November 2, 1944.
https://bletchleypark.org.uk/wp-content/uploads/2022/02/945x805_7_CU04-945x700.jpg

This is an image of a German enigma message. It displays the annotations that codebreakers used to decrypt the message. It helped me corroborate the format of the messages with other sources describing them.

Enigma Red Messages. Bletchley Park Museum. November 3, 1944.
https://bletchleypark.org.uk/wp-content/uploads/2022/02/555x730_9_CU04.jpg.

This is an image of a German enigma message. It allows me to make comparisons with other images of enigma messages in terms of their length and format.

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“Julia Parsons: World War II Codebreaker tells her story at age 100” WQED Pittsburgh.
November 11, 2021. <https://www.youtube.com/watch?v=2ThQVOMGEXY>.

This video celebrates the 100th birthday of Judy Parsons, a WAVES officer during World War II. In the video, Parsons speaks about how women were finally able to prove that they could do the same work as men. This source helped me understand Parsons’ perseverance and dedication to helping with the war.

Technical Information Division, WAAC. “Benefits to Women’s Army Auxiliary Corps.” *The Annals of the American Academy of Political and Social Science*. 1943.
<http://www.jstor.org/stable/1023638>.

This source describes the benefits given to and restrictions put on the WAAC. This source is from the Technical Information Division and describes everything from the ranks women in the military were allowed to have to the allowance they get for uniforms. This source showed me that WAAC officers were given as few possible accommodations, as the list of benefits they are excluded from is just as long as the list of benefits they are included in.

“US 6812 Division Bombe Report Eastcote.” June 15, 1945.
<https://web.archive.org/web/20090722155542/http://www.codesandciphers.org.uk/documents/bmbrpt/bmbpg001.HTM>.

This source prefaces a set of instructions for the Bombe Machine’s use. It describes the bombe as exceeding expectations in terms of speed. This source helped me understand how revolutionary the bombe machine was in assisting the allies in decrypting German messages.

“U.S. NAVY WAVES - Women Accepted for Volunteer Emergency Service , WOMEN IN WWII 20284.” Ca. 1942. Periscope Film.
<https://www.youtube.com/watch?v=dHBEudf94DU>.

This video advertises the WAVES, showing details about their lives from the training and lessons they receive to the food they eat. The voiceover of this source helped me understand how women were perceived, as it included some sexist comments about the WAVES officers’ bodies which were unrelated to the video’s topic.

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Secondary

Bearne, Suzanne. "Meet the female codebreakers of Bletchley Park." July 24, 2018.
<https://www.theguardian.com/careers/2018/jul/24/meet-the-female-codebreakers-of-bletchley-park>

This source describes the process which led many women to become codebreakers at Bletchley Park in England. Bearne is a journalist who writes for the Guardian. This source helped me further understand the requirements of cryptanalytic work and the experiences of people who did it.

"Bletchley Park and its Connections to Today's Cyber Security." Google Arts and Culture.
Accessed January 15, 2023. <https://artsandculture.google.com/story/jwXhiZthYm-MJg>.

This source gives a general overview of the use and legacy of cryptology during WWII. It was created through a collaboration between Bletchley Park and Google. The source includes many images of people operating enigma and bombe machines and helped me understand the contents of these images.

"Code Girls and Arlington Hall: A Diverse History." Arlington Public Library. October 24, 2017.
<https://library.arlingtonva.us/2017/10/24/code-girls-and-arlington-hall-a-diverse-history/>.

This website provides background information about Arlington Hall. The writers from Arlington Public library describe the girls' school that Arlington Hall housed before it was the headquarters of military cryptanalysis.

Ehrlich, Lara "She was a World War II Codebreaker." Boston University Arts & Sciences. 2018.
<https://www.bu.edu/cas/arts-sciences/2018/she-was-a-world-war-ii-codebreaker/>.

This source explains the life of Fran Pearlmutter, a codebreaker during WWII. Ehrlich, a senior editor and writer at Boston University, conducted an interview with Pearlmutter and recounts Pearlmutter's own words. This source gave me further insight into the life experiences of women cryptanalysts during WWII, including how they were treated and what work they did.

Ellsbury, Graham. "The Turing Bombe: What it was and how it worked." 1998.
<http://www.ellsbury.com/bombe1.htm>.

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Senior Individual Website

This source briefly explains how the Turing bombe machine worked. Ellsbury is a mathematician who researches and writes about topics like cryptology and boolean algebra. This source's insight into how the Turing bombe machine worked allowed me to further understand how it was used.

"Enigma Red messages." Bletchley Park Museum. May 2, 2018.
<https://bletchleypark.org.uk/our-story/enigma-red-messages/>.

This web page describes the aspects of enigma messages and how they were decrypted at Bletchley Park. It was created by Bletchley Park, England, and though my project focused on cryptanalysts in the United States, many of the methods codebreaking were shared between the two countries

"Genevieve Grotjan Feinstein: 2010 Hall of Honor Inductee Women in American Cryptology Honoree." National Security Agency. 2010. Accessed January 15, 2023.
<https://www.nsa.gov/History/Cryptologic-History/Historical-Figures/Historical-Figures-View/Article/1621585/genevieve-grotjan-feinstein/>.

This source provides an overview of the life of Genevieve Feinstein. It was created by the national security agency to commemorate her work. This source gave me insight into Feinstein work surrounding her contributions to cryptanalysis.

Joyce, Maureen. "Elizebeth Friedman Dies, Cryptanalyst, Pioneer in the Science of Code-Breaking." Washington Post. November 2, 1980.
<https://www.washingtonpost.com/archive/local/1980/11/02/elizabeth-friedman-dies-cryptanalyst-pioneer-in-the-science-of-code-breaking/22925d09-9535-4d4c-bcf7-73447f910d90/>.

This source discussed Elizebeth Friedman, one of the first codebreakers in the United States. It is by Maureen Joyce, a writer for the Washington Post. The article, written shortly after Friedman's death recounts her life achievements including her work during WWII and her work breaking smugglers' codes.

Lou Leto and Jen Wilcox. "WWII Women Cracking the Code." Accessed January 15, 2023.
<https://artsandculture.google.com/story/SgWBd8JZ6LxWIw>.

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Creating an interactive visualization for the authors' article for the National Air and Space Museum, this webpage provides a general overview of women's contributions to cryptanalysis during World War II. It was created through a partnership between the Smithsonian's National Air and Space Museum and Google by Leto and Wilcox, the Director of Education at the National Cryptologic Museum who specializes in WWII cryptologic history. This source helped me understand the different jobs that contributed to codebreaking.

Leto, Lou and Jen Wilcox. "WWII Women Cracking the Code." National Air and Space Museum. March 23, 2018.
<https://airandspace.si.edu/stories/editorial/wwii-women-cracking-code>.

This article details the qualifications and working conditions of WAVES officers working in cryptanalysis at Arlington Hall. Wilcox, one of the authors, is the Director of Education at the National Cryptologic Museum and specializes in WWII cryptologic history. This source helped me understand the specific work that was conducted by WAVES officers on a daily basis.

Mundy, Liza. *Code Girls: The Untold Story of the American Women Code Breakers of World War II*. Hachette Books, October 10, 2017.

This book describes and analyzes the lives of many individual cryptanalysts working at Arlington Hall in Virginia. It is by Liza Mundy, a journalist and non-fiction writer. Mundy provides many details about codebreakers and connects them to the bigger picture, providing me with a plethora of information and context to help me understand the topic as a whole.

O'Connell, Kim. "The Black Women Code Breakers of Arlington Hall Station." *Arlington Magazine*. June 7, 2021.
<https://www.arlingtonmagazine.com/the-black-women-code-breakers-of-arlington-hall-station/>.

This source discusses the unit of Black women whose contributions to cryptanalysis in WWII are often overlooked. It is by Kim O'Connell, a writer for *Arlington Magazine*. This source gave me further insight into the diversity of the women doing cryptanalytic work, and how many were obscured from others because of their race.

Schaefer, Agnes Gereben et al. *Implications of Integrating Women into the Marine Corps Infantry*. RAND Corporation, December 3, 2015.
<https://www.jstor.org/stable/10.7249/j.ctt19gfk6m.10?searchText=WAAC&searchUri=%>

Marisa Triola
Senior Individual Website

2Faction%2FdoBasicSearch%3FQuery%3DWAAC&ab_segments=0%2Fbasic_search_gsv2%2Fcontrol&refreqid=fastly-default%3Ad1ba774411d4406936351af1e2369fc0&seq=6#metadata_info_tab_contents

This excerpt from a book lists the many qualities in which the WAAC differs from other military services. One of the authors, Schaefer, is a Senior Political Scientist for the RAND Corporation. This source provided me with specific restrictions that were put on women in the army that were not put on men.

Scrivener, Laurie. "U.S. military women in World War II: The SPAR, WAC, WAVES, WASP, and women marines in U.S. government publications."
https://www.sciencedirect.com/science/article/abs/pii/S1352023799000519?casa_token=zLvdl8_RE0r8AAAAA:ZOu-D0hqXA8_qbTfjoAp-kzejAuVjqDK4EiK6FQVWUoJJFp1gKKM1ym8YRtv-KmGhZra0EKK.

This source discusses the roles of women in different services of the military during World War II, and how they were received by society. Laurie Scrivener, is a Social Sciences Reference Librarian at the University of Oklahoma Libraries. This source helped me understand the broader context of women's roles in both the military and society during World War II.

Wei-Haas, Maya. "How the American Women Codebreakers of WWII Helped Win the War" Smithsonian Magazine. October 5, 2017.
<https://www.smithsonianmag.com/history/how-women-codebreakers-wwii-helped-win-war-180965058/>.

This article describes the impact of the work done by the thousands of women in cryptanalysis during WWII. The author, Wei-Haas, is the assistant editor for science and innovation at Smithsonian Magazine. This source helped me understand how the work of cryptanalysts fit into the broader picture of WWII.

Wilcox, Jennifer. "Solving the Enigma: History of the Cryptanalytic Bombe" National Security Agency. 2001.
<https://web.archive.org/web/20100317234354/http://ed-thelen.org/comp-hist/NSA-Enigma.html>.

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This excerpt recounts the events affecting and affected by cryptography in World War II. Wilcox, is the Director of Education at the National Cryptologic Museum and specializes in WWII cryptologic history. This source provided me with a lot of information which helped me contextualize my other research and understand how events at Arlington Hall were influenced by other happenings

“William Coffee: 2011 Hall of Honor Inductee African American Honoree” NSA. 2011.
<https://www.nsa.gov/History/Cryptologic-History/Historical-Figures/Historical-Figures-View/Article/1621571/william-coffee/>.

This source, created by the National Security Agency details William Coffee’s achievements during his career in the military. The source helped me understand how he worked his way up to being a leader while battling racial oppression and injustice.

Williams, Kathleen Broome. “Women Ashore: The Contribution of WAVES to US Naval Science and Technology in World War II.” April 1, 1998.
<https://tnm.journals.yorku.ca/index.php/default/article/view/662>.

This source is an in depth description of how the WAVES and WAAC were introduced into the military. Williams was the Class of 1957 Distinguished Chair in Naval Heritage at the U.S. naval academy. This source helped me understand the logistical aspects of creating the WAAC and WAVES, including the reasons officials were for or against women in the military.

“Women in WWI.” National WWI Museum and Memorial. Accessed January 15, 2023.
<https://www.theworldwar.org/learn/women>.

This source provides information about women in military positions during WWI around the world. It was created by the national WWI Museum and Memorial. This source helped me contextualize the wartime roles women during WWI, which helped me understand the magnitude of changes made during WWII.

“The Women of Bletchley Park.” Google Arts and Culture. Accessed January 15, 2023.
<https://artsandculture.google.com/story/qgVxQIAxvdB-JA?hl=en>.

Marisa Triola
Senior Individual Website

This source focuses on the women codebreakers at Bletchley Park during WWII. IT was created through a collaboration between Bletchley Park and Google. This source provides textual and visual information about the women at Bletchley Park, allowing me to draw comparisons between codebreaking in the United States and that in England.