Annotated Bibliography

Primary Sources

"Agreement between British Government Code and Cipher School and U.S. War," May 17,
1943.
https://media.defense.gov/2021/Jul/15/2002763671/-1/-1/0/SPEC_INT_10JUN43.PDF.
This is a written agreement between the British Government Code and Cipher School and
the United States War Department to share information gathered from cryptanalysis. This
is helpful because it shows that the British would contribute decoded information to help
the Allied war effort.

Aleksander, Janowski. Warszawa. Wydawnictwo Polskie (R. Wegner), 1930.
This source was a book that contained images about Polish codebreaking. We used those
pictures in our website to show the importance of the Polish in the codebreaking.

"Battle of the Atlantic." *Naval History and Heritage Command.*
https://www.history.navy.mil/browse-by-topic/wars-conflicts-and-operations/world-war-ii
/1942/atlantic.html.
The collection of photographs are helpful in providing context for the Battle of the
Atlantic, whose outcome was greatly influenced by the Enigma Code. The photographs
provide a better understanding of the conditions of the battle.

Bletchley Park. "ATS 80th Anniversary".
https://bletchleypark.org.uk/our-story/ats-80th-anniversary/.
This source contains photos and information about the many codebreakers that worked at
Bletchley Park over the course of World War II. This source was useful in providing
information about who worked at Bletchley Park and what the work was like.

Bletchley Park. "Bombe Drawings". https://bletchleypark.org.uk/our-story/bombe-drawings/.
This is a collection of drawings that detail how the Bombe device (which was used to
figure out Enigma machine settings) works. This source is helpful because it shows how
the Bletchley Park codebreakers decrypted Enigma messages and why it was difficult.

Bletchley Park. "Codebreakers Recruitment - Real Life Stories from the Veterans of Bletchley
Park." https://www.youtube.com/watch?v=8fMxfyhMb-Y.
This source was a collection of interviews of former Bletchley Park workers, they
explained how they were selected to work there. This source was useful because it gives
us information about what it took to be able to work at Bletchley Park. In our project, this
source helped us give information about Bletchley Park.

Bletchley Park. "D-Day Decrypts".
https://bletchleypark.org.uk/our-story/d-day-decrypts/.
This source gave us information about how the codebreaking was being used during
D-Day. We used this information to help reinforce our turning point and show the
significance of the codebreaking.

Bletchley Park. "Intelligence Factory".
https://bletchleypark.org.uk/our-story/intelligence-factory/.
This source was a photograph of the Bletchley Park codebreakers doing their daily work.
This source was used on our website to visually show the work being done at Bletchley
Park and explain the significance of it.

Bletchley Park. "The First Huts". https://bletchleypark.org.uk/our-story/the-first-huts/.
This source contained many primary photographs of Bletchley Park. We used these
photographs in our website to show what Bletchley Park looked like and what it was like
to work there.

Bletchley Park. "75 Years since Colossus Arrived at Bletchley".
https://bletchleypark.org.uk/our-story/75-years-since-colossus-arrived-at-bletchley/.
This source contained images and information about the Colossus machine. We used this
to argue that the codebreaking in WWII contributed to advancements in computer science
and technology.

Boler, David. "Churchill Proceedings - Canada and the Battle of the Atlantic." *International
Churchill Society*, March 15, 2015.
https://winstonchurchill.org/publications/finest-hour/finest-hour-159/churchill-proceeding
s-canada-and-the-battle-of-the-atlantic/.
This document contains a quote from Winston Churchill that gave us insight into what he
thought about the Battle of the Atlantic. We used this quote to reinforce the importance of
the Battle of the Atlantic and how important codebreaking was.

Borchert, Erich. ""Frankreich".- General Heinz Guderian in Mittlerem Funkpanzerwagen
(Sd.Kfz. 251/3), Vorn Funker Am Verschlüsselungsgerät "Enigma"; PK OKW". May
1940. Bild 101-769-0229-12A. Bundesarchiv.
This is a photo of the Enigma Machine in use. This is helpful to demonstrate in our
project how the Enigma Machine was used by the Germans.

Borchert, Erich. "Photograph of General Field Marshal Heinz Guderian and a Radio Operator
with the Enigma Encryption Machine in a Medium-Weight Radio Tank (Sd.Kfz. 251/3)
during the Battle of France in May 1940". 1940.
https://artsandculture.google.com/asset/photograph-of-general-field-marshal-heinz-guderi
an-and-a-radio-operator-with-the-enigma-encryption-machine-in-a-medium-weight-radio
-tank-sd-kfz-251-3-during-the-battle-of-france-in-may-1940-eric-borchert-1911-1942/eg
FgPmhlnuoChA.
This is a photograph of the Enigma machine being used during the Battle of France. This
is helpful because there are very few photos of the Enigma machine actually being used
by Germany because it was a secret, and shows how the Enigma machine was operated.

Chiffriermaschine. "Photograph of an Enigma Machine in Use". 1940.
https://www.chiffriermaschine.com/explore/photograph-of-an-enigma-machine-in-use-62
c97956f5513cb1ec8d1ee0-c0004.

This is a photograph of an Enigma Machine in use. During the war, photographing the Enigma Machine was strictly prohibited so it is useful to have these rare photos in order to demonstrate how the Enigma Machine was used.

Computingheritage. "Manchester Baby: World's First Stored Program Computer". https://www.youtube.com/watch?v=cozcXiSSkwE.
This video explains the process of creating the Manchester Baby and its importance. It includes an interview with someone who was a research student at Manchester University at the time, which we used as a video on our website.

Computer History Museum. "Tom Kilburn and Freddie Williams - CHM Revolution". https://www.computerhistory.org/revolution/memory-storage/8/308/961.
This is a primary source photograph of Tom Kilburn and Freddie Williams,who built the Manchester MK-1. We used this to show the machine and the builders on our website.

Copeland, Brian Jack, et. "Colossus: The Secrets of Bletchley Park's Codebreaking Computers". Oxford University Press, 2010.
This book, written by Jack Copeland with valuable testimony from Tommy Flowers, helped to show how the Colossus was built and what went into it.

DebenDave. "Tommy Flowers". https://www.youtube.com/watch?v=yfz8ZYKIO5g.
This is an interview with Tommy Flowers, the engineer behind the Colossus machine. It was helpful because it showed what he wanted to accomplish with the machine and how it differed from previous codebreaking efforts.

"Deuxième Bureau." Mémoires de Guerre, June 9, 2014.
http://www.memoiresdeguerre.com/article-deuxieme-bureau-115460025.html.
This is a photograph of the French Intelligence Department. We used this photo when talking about all of the Allied countries efforts in breaking the Enigma code.

Eisenhower, Dwight. 12 July 1945,
https://www.eisenhowerfoundation.net/sites/default/files/2020-05/File%206%2C%20Article%201.pdf.
This letter from Dwight Eisenhower to the Bletchley Park codebreakers after the war demonstrates that in Eisenhower's opinion, the breaking of the Enigma code greatly contributed to the war effort and saved thousands of lives. This is useful to our project because we are also demonstrating how the breaking of the Enigma code greatly contributed to the war effort and saved thousands of lives.

The Enigma General Procedure (Der Schlüssel M Verfahren M Allgemein), 1940.
https://www.codesandciphers.org.uk/documents/egenproc/egenproc.pdf.
This is a translated version of the Enigma General Procedure, which is a manual for German operators on how to use the Enigma machine properly. The document explains what Enigma messages look like, which is helpful in understanding what the Enigma machine did and why it worked so well.

"Garbo: The Story behind Britain's Greatest Double Cross Agent." The National Archives Blog, 27 Sept. 2016, https://blog.nationalarchives.gov.uk/spy-garbo-story-behind-britains-greatest-double-cross-agent/.
This source contains a photograph of Juan Pujol Garcia, also known as Garbo. We used this to show his war-time appearance on our website.

"The Glow-Lamp Ciphering and Deciphering Machine: Enigma." Cryptologia 25, no. 3 (July 2001): 161–73. https://doi.org/10.1080/0161-110191889860.
This source contains an ad for the Enigma machine. This was helpful because it helps to establish Enigma's origins as a commercial machine.

Good Morning Britain. "Bletchley Park Code Breaker Reveals How She Kept War Secrets for Over 60 Yrs". https://www.youtube.com/watch?v=SM9Jf0IP40s.
This source was an interview of a former Bletchley Park codebreaker; she explains what her daily life was like working at Bletchley Park and what jobs she did. This information helped our project because it showed us how the decoding operation took place and what groups of people were a part of it.

"Gordon Welchman." GCHQ. https://www.gchq.gov.uk/information/gordon-welchman.
This source contains a photograph of Gordan Welchman, a man who worked on developing the Bombe. We included this picture on our website.

Hastings, Max. "WW2 Espionage: The Spies Who Surprised Me." HistoryExtra. https://www.historyextra.com/period/second-world-war/ww2-espionage-the-spies-who-surprised-me/
This document contains another photo of Bletchley Park. We used this photo to explain what occurred at Bletchley Park during WWII.

Highfield, Roger. "The Spirit Of Alan Turing." Science Museum. June 21, 2012. https://blog.sciencemuseum.org.uk/the-spirit-of-alan-turing/.
This document contained a photo of Alan Turing that we put into our website.

Hilton, Peter. "Reminiscence of Bletchley Park 1942-1945. ," n.d. https://www.ams.org/publicoutreach/math-history/hmath1-hilton22.pdf.
This article speaks about Alan Turing and is written by one of his coworkers. This source provided us with information about Alan Turing and the contributions that he made to the war while working at Bletchley Park. We used this source to gather background information about Bletchley Park and Alan Turing.

"How the Telegraph Covered VE Day in 1945." The Telegraph, May 6, 2020. https://www.telegraph.co.uk/news/0/telegraph-covered-ve-day-1945/
This document contained a primary source photograph from the Daily Telegraph newspaper. This image was the newspaper from when World War II finally ended in Europe and VE Day was celebrated.

Lucke. *"Enigma"-Gerät Der 7. Panzerdivision*. August 16, 1941. Bild 146-2006-0188.
   Bundesarchiv.
   This is a photo of the Enigma radio equipment. We used this photo to help illustrate what
   Enigma radio equipment looked like.

National Archives. "The Zimmermann Telegram,". August 15, 2016.
   https://www.archives.gov/education/lessons/zimmermann.
   This document contains a photo of a zimmerman telegram. This is what the Germans
   used to encode their messages in wwI. We used this picture to show how much the
   Germans were improving their cryptography with the Enigma.

The National WWII Museum New Orleans. "Alan Turing and the Hidden Heroes of Bletchley
   Park," June 24, 2020.
   https://www.nationalww2museum.org/war/articles/alan-turing-betchley-park.
   This website provided us with many primary images of the code breaking operations that
   were taking place at Bletchley Park. These pictures helped us understand what type of
   people were working to break the code and what actually took place that allowed the
   Allies to gain an advantage in the war.

"Nova Scotia Archives - Second World War." *Nova Scotia Archives*, April 20, 2020.
   https://archives.novascotia.ca/virtual/?Search=THIIwar&List=all.
   This document contains a primary photograph of a Nova Scotia port that we used to
   reinforce a quote that was used earlier in our website.

"Oral History Interview of Janice M. Benario." *Atlanta History Center*.
   https://album.atlantahistorycenter.com/digital/collection/VHPohr/id/333.
   This source is a video interview with a former Bletchley Park worker. This interview
   explained the importance of breaking the enigma code and how it was crucial in defeating
   German U-boats. We used this source to support our argument and provide information
   on the task that codebreakers completed.

Rejewski, Marian. "How Polish Mathematicians Broke the Enigma Cipher." IEEE Annals of the
   History of Computing 3, no. 3 (July 1981): 213–34.
   https://doi.org/10.1109/MAHC.1981.10033.
   This document is a personal account by Marian Rejewski on how the Enigma Cipher was
   able to be broken. This document is helpful because it discusses Polish mathematicians
   who worked on the Enigma cipher, who aren't always mentioned but still played a key
   part in the breaking of the cipher.

Russell, Jerry . "ULTRA AND THE CAMPAIGN AGAINST THE U-BOATS IN WORLD WAR
   II," May 20, 1980. https://www.ibiblio.org/pha/ultra/navy-1.html.
   This document, whose author was a Naval Commander during World War II, gives
   helpful insight on the usage of Ultra Intelligence from the Enigma Code to win the Battle
   of the Atlantic.

Scherbius, Arthur. Ciphering machine. 1657411A, filed February 6, 1923, and issued January 24, 1928. https://patents.google.com/patent/US1657411A/en.
This is the United States patent of the Enigma machine invented by Arthur Scherbius. The patent is useful because it greatly describes how the Enigma machine works and shows its origins.

Schulze. Polen, Warschau. - Parade Deutscher Truppen. Soldaten Auf Pferden; PK 501. September 1939. Bild 101I-001-0251-09. Bundesarchiv. https://www.bild.bundesarchiv.de/dba/en/search/?query=Bild%20101I-001-0251-09.
This is a photograph of German soldiers invading the Polish Cipher Bureau. We used this picture to show how Germans found evidence of the Polish reading the Enigma Code.

"The Story in Pictures - The Normandy Invasion". *U.S. Army Center of Military History.* https://history.army.mil/html/reference/normandy/pictures.html.
This website contained a picture we added of D-Day. We added this picture to give an idea of what was occurring and what it looked like.

TNMoC. "Capt Jerry Roberts: Did Alan Turing Help Break Tunny? Code-Breaking Machine Reliability." https://www.youtube.com/watch?v=ggmQdYGVAw4.
This source is an interview with a man who knew Alan Turing; he explained the role that Alan Turing played in the breaking of the enigma code. We used this source in our project to give information about Alan Turing's contributions to codebreaking in WWII.

Turing. Alan "Computing Machinery and Intelligence," 1950. https://redirect.cs.umbc.edu/courses/471/papers/turing.pdf.
This is Alan Turing's paper where he theorizes Artificial Intelligence through the "Imitation Game." This source illustrates how Alan Turing was forwarding computing after his work at Bletchley Park.

Turing, Alan. "On Computable Numbers, With An Application To The ENTSCHEDIUNGSPROBLEM,". May 28, 1936. https://www.cs.virginia.edu/~robins/Turing_Paper_1936.pdf.
This source is Alan Turing's paper proving that not all problems are solvable with machines. This document shows why Alan Turing may have been recruited to Bletchley Park, as he is talented in mathematics.

Turing, Alan. "Proposal for the Development in the Mathematics Division of an Automatic Computing Engine". 19 Mar. 1946. https://cs.furman.edu/~tallen/csc475/materials/Turing_Report_on_ACE.pdf.
This document is Alan Turing's proposal for the Automatic Computing Engine. This helpful because it shows he proposed such a device and provided Turing's description of the machine.

Turing, Alan. "Turing's Treatise on the Enigma". 1939. https://www.archives.gov/files/press/press-releases/2015/images/turing-enigma-treatise.pdf.

This is Turing's report on the Enigma works and how it was crackable. This report was used as a reference for codebreakers and was classified until Enigma came out of secrecy. This is useful to our project because it shows how much the Allies knew about the Enigma Code and their methods of cracking it.

"The US 6812 Bombe Report 1944 Formatted by Tony Sale (c) 2002," June 15, 1945. https://www.codesandciphers.org.uk/documents/bmbrpt/usbmbrpt.pdf.
We used this Document in our website to explain how the Bombe machines built by the Allies were used to decode the Enigma code. We also used this source for diagrams of the Enigma machine and the Bombe. This source was very useful in our project because it directly showed how the Allies cracked the code.

Welchman, Gordon. The Hut Six Story: Breaking the Enigma Codes. Harmondsworth: Penguin, 1984.
This document is Gordon Welchman's account of the cracking of the Enigma code, who was a co-inventor of the Bombe machine along with Alan Turing. This information is helpful to our project because it shows that the breaking of the Enigma code was a collaborative effort and was a high priority.

Secondary Sources

Bray, Jeffrey K., ed. "Ultra in the Atlantic". Rev. ed. An Intelligence Series 11–16. Laguna Hills, CA: Aegean Park Press, 1994.
This book discusses Germany's strategy for the Battle of the Atlantic as well as how the Enigma Code impacted it. This is helpful to our project because it helps prove our thesis that the breaking of the Enigma Code helped win battles in World War II.

Canada, Veterans Affairs. "The Battle of the Atlantic - Historical Sheet - Second World War - History - Veterans Affairs Canada," June 7, 2021. https://www.veterans.gc.ca/eng/remembrance/classroom/fact-sheets/atlantic.
The website provides background information on the Battle of the Atlantic. This is useful to our project because it helps demonstrate the scale and importance of the Battle of the Atlantic, which shows that Allied victory (aided by the Enigma code) was essential.

"Chapter II, Sitz & Blitz: 1939-1940, work of the Air Section & Huts 3 & 6 at BP". c1946-1950. The National Archives (Kew, United Kingdom). Declassified Documents Online: Twentieth-Century British Intelligence. https://link.gale.com/apps/doc/LVIRKV627787463/TCBI?u=omni&sid=bookmark-TCBI&xid=171141f2&pg=2.
This paper discusses the beginning of the British operation to crack the Enigma code. This is useful to our project because it provides context and when and where the Enigma code was cracked.

Claus, Taaks. "Scherbius and the Enigma. Political, Economic and Military Conditions. ," n.d. https://ecp.ep.liu.se/index.php/histocrypt/article/download/706/612/723.

This document provides information on why the Enigma machine was invented, and why it was helpful to the German war effort. This is useful to our project because it shows how important the Enigma code was and how it was important for the Allies to break it in order to win.

Computer History Museum. "Pilot ACE - CHM Revolution".
https://www.computerhistory.org/revolution/birth-of-the-computer/4/96.
This source provided a helpful picture of the Pilot ACE and also some details as to when it was finished. This was helpful in showing its close proximity to the end of World War II.

Flicke, Wilhelm . "The Beginnings of Radio Intercept in World War I A Brief History by a German Intelligence Officer," n.d.
https://www.nsa.gov/portals/75/documents/news-features/declassified-documents/cryptologic-spectrum/beginnings_radio_intercept.pdf.
This previously classified document, written by German Intelligence Officer Wilhelm Flicke, was useful in our project in establishing how radio communications grew in importance during the first World War. This was important context for the Enigma Code.

"The Forgotten Codebreakers of the First World War." *The History Press*.
https://www.thehistorypress.co.uk/articles/the-forgotten-codebreakers-of-the-first-world-war/.
This document was helpful because it showed the accomplishments of methods of World War I codebreakers. This was useful on our website because we used it to illustrate what was used before the Enigma Code.

Gladwin, Lee. "Alan Turing, Enigma, and the Breaking of German Machine Ciphers in World War II, 1997". https://www.archives.gov/files/publications/prologue/1997/fall/turing.pdf.
This document was a paper written about how the Enigma machine worked, and how the Allies were able to crack it. This source helped us understand why the Enigma was so difficult to crack and it provided background information about the codebreaking operation that helped us understand it more clearly.

Hamilton, Richard Vesey. "Naval Administration; the Constitution, Character, and Functions of the Board of Admiralty, and of the Civil Departments It Directs". *George Bell and Sons*, 1896. http://archive.org/details/cu31924030895860.
This source gave us an image depicting what Room 40 looked like. This was Britain's codebreaking center in WWI, this helped us provide context to our project.

Imperial War Museums. "How Alan Turing Cracked The Enigma Code."
https://www.iwm.org.uk/history/how-alan-turing-cracked-the-enigma-code.
This is a museum's website that provides information on the role that Alan Turing played in the cracking of the Enigma code. This article was useful to us because it provides background information regarding Alan Turing's work to help the reader understand his importance.

Kahn, David . "Codebreaking and the Battle of the Atlantic," April 4, 1994.
   https://www.usafa.edu/app/uploads/Harmon36.pdf.
   This is a paper about the importance of codebreaking during the Battle of the Atlantic and
   how this battle was one of the most important events of World War II. This source helped
   us understand the role that codebreaking had on actual battles in the war and why it was
   so important.

Kahn, David. "The UltraSecret: Enigma Unwrapped." Dec 29, 1974, n.d.
   https://ezproxy.lib.uconn.edu/login?url=https://www.proquest.com/historical-newspapers/
   ultrasecret/docview/120161572/se-2.
   This is a secondary newspaper article explaining how the military was able to deliver
   decoded messages to the president securely as well as what the contents of the decoded
   message were. This document has helped our project when it came to providing
   background information about the code breaking operation.

Meyer, Joseph. "Der Fall WICHER: German Knowledge of Polish Success on ENIGMA".
   https://media.defense.gov/2021/Jul/02/2002755854/-1/-1/0/DER-FALL-WICHER.PDF.
   This article details what the Germans knew about the efforts to crack the Enigma code.
   This was helpful to our website because it explained why the Germans kept changing the
   Enigma Code.

"Room 40's Brilliant World War I Codebreakers." *The History Press*.
   https://www.thehistorypress.co.uk/articles/room-40-s-brilliant-world-war-i-codebreakers/
   This document contains information about Room 40, this was Britain's WWI code
   breaking department. We used this information to show how Germany's weak code was
   partially to blame for their loss in WWI. We also used a photograph of the workers in
   Room 40.

"The Room 40 Compromise," June 13, 2012. 3978516. *NSA*.
   https://www.nsa.gov/portals/75/documents/news-features/declassified-documents/nsa-60t
   h-timeline/1960s/19600101_1960_Doc_3978516_Room40.pdf
   The article mentions previous code breaking efforts by the British in World War I, as well
   as how Germany's security was broken by them. This article is helpful because it shows
   that Germany knew that they had weak cryptography and would need to upgrade it for
   World War II.

Sale, Tony. "The Lorenz Cipher and How Bletchley Park Broke It."
   https://www.codesandciphers.org.uk/lorenz/fish.htm.
   This article about the Lorenz Cipher is written by Tony Sale, who would later lead efforts
   to rebuild the machine that broke the cipher. This article was helpful because we used it
   to describe how the Lorenz Cipher was created on the website.

Tavares, Ernest. Operation Fortitude: The Closed Loop D-Day Deception Plan. 1 Apr. 2001,
   https://apps.dtic.mil/sti/pdfs/ADA407763.pdf.
   This report provides helpful information on D-Day Deception efforts, and how the
   Enigma Code was involved.

Turing, Dermot. "The Codebreakers of Bletchley Park: The Secret Intelligence Station That
Helped Defeat the Nazis". *London: Arcturus Publishing Limited*. 2020.
This book was written by Dermot Turing, the nephew of Alan Turing. This is helpful
because it helped to fill gaps in our story, for example the Polish sharing their work with
Bletchley Park.