The Pegasus Bridge¹ Operation²: its Role in the Success of the Normandy Invasion and in Winning World War II

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HIST 395 Spring 2015
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¹ The Pegasus Bridge, formerly known as Benouville Bridge, is a bascule bridge and is located in over the Caen Canal in Caen France, which is about 5 miles from the Normandy coast
² The operation to capture the Benouville Bridge was codenames Operation Pegasus. It was executed by the gliderborne Company D of the British 6th Airborne Division and was led by Major John Howard.
Bridges have always played a crucial part in war because of their strategic locations. Whoever holds the bridge has control of the land it leads to and also commands the waterway in the area. Control of a bridge is useful for transporting necessary supplies and military support. In the case of the Pegasus Bridge, to prevent enemy forces or reinforcements from using the bridge to resupply Germany lines from reaching Sword Beach on June 6, 1944. The Pegasus Bridge, also a bascule bridge or movable drawbridge, allows smaller naval crafts to travel up the canal. Not only does the drawbridge control the immediate surrounding area of land, it also means control of any persons, troops, or supplies attempting to utilize the body of water. Without the control of the Pegasus Bridge, the Normandy invasion would have ultimately failed, in turn drastically affecting the ending of WWII. Most importantly, the Pegasus Bridge shut down German movement through Caen and set up the Mulberry Harbors off Sword Beach.

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3 The Mulberry Harbors were artificial harbors created to float off the coast of the Norman Coast in order to make unloading supplies easier and more efficient. They were made of steel and concrete.

In order to understand the importance of Pegasus Bridge it is essential to break down the development of World War II, specifically the importance of the French theatre in the end of the War. Six years after becoming the chancellor of Germany, Adolf Hitler determined that he intended to invade and occupy Poland. Great Britain and France signed a pact on March 31, 1939 that guaranteed military support for Poland if Germany were to invade. So, on September 3, 1939 Great Britain and France declared war on Germany, just 2 days after Hitler’s armies began their invasion and occupation of Poland. The key alliance between Great Britain, Poland, and France became know as the Allied Powers. Although the Allies had superior resources and manpower, the German Army, Wehrmacht, still prevailed because of their discipline, training, and combativeness. The campaign to capture France began on May 12, 1940 with the German invasion of Sedan. The German troops invaded the unprotected countryside and subsequently captured the surrounding areas. The French armies were weak and their supplies were depleted so German tanks took advantage and captured a relatively undefended Paris on June 14, 1940. German campaigns to conquer France continued for the next three years and by October of 1943 all of France was occupied. The Allies knew that in order to liberate France it was going to take a feat of military strategy and strength greater than any effort of war before; and so the planning of the invasion of Normandy began in November of 1943. The operation was to be codenamed Operation Overlord and proved to be the largest aquatic invasion in history.

The Allied Powers came together, land, sea, and air, across the coast of France in a united effort to win back France. Deception was key in planning for the invasion, as is often the case with large military operations. The German intelligence knew that the Allies were going to attack the French coast but because of decoy operations they were thrown off course as to the location
and date. The Germans spent a great deal of time building up and fortifying the Atlantic Wall⁵, reinforcing some areas more heavily than others.

Figure 1 This photo depicts the types of fortifications that were made along the coasts, this photo also highlights the obstacles that were placed in the water like pieces of metal, mines, and Rommel’s asparagus that were used to damage the incoming boats and soldiers. (http://www.globalaviationresource.com)

Figure 2 This photo is of the German anti-tank machine guns and the pillboxes were key in the German defensive strategies that were set up all along the Atlantic Wall. (http://users.skynet.be/jeeper/page94.htm)

⁵ The Atlantic Wall as a series of fortifications that were set up along the coast of German occupied Europe and Scandinavia between 1943 and 1945 in preparation for the Allied attack.
Hitler doubted that Normandy was going to be the target of the invasion so it was not the focus of his attention. When preparing for this impending invasion, the German forces had to account for and adapt their fortifications to the development of modern war tactics.

Viewing the developments in warfare throughout history shows the magnitude of technological advancements. Modern warfare tactics were developed throughout the course of WWII out of necessity, forever changing the strategies implemented in all wars. After Germany’s loss in World War I they started making radical adjustments to their weapons and fighting tactics. By 1939 the development in German military aircrafts and armored tanks were far superior to those of the Allies. Germany was able to conquer and control so much because of this and the Allies had no chance of retaliating until their weapons matched Germany’s. America was able to remain absent from the war until 1941, saving valuable money and resources, allowing America to mass-produce new technologies. Under the Neutrality Act of 1939\(^6\) and the Lend-Lease Act\(^7\), America had the opportunity to share these valuable advancements with the Allied forces. Tanks themselves became more heavily armored and tank platoons grew individually larger and more widespread. Furthermore, Aircraft advances allowed for variety in size as well as increase in speed and range. Because of these innovations warfare became increasingly more dangerous, part of why World War II was the most destructive and deadly war in human history. Bombing and air warfare increased dramatically because of the newly developed airplanes. Blitzkrieg\(^8\), Kamikaze\(^9\), and the atomic bombs attacks all came out of these innovations.

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\(^6\) The Neutrality Acts of the 1930’s were acts legislation passed by Congress to keep the United States from getting involved with the war in Europe. In the Act of 1939 Roosevelt lobbied Congress to renew the cash-and-carry policy that the United States had with Great Britain and France that allowed the sale of arms legal to these countries.

\(^7\) The Lend-Lease was enacted on March 11, 1941. The policy allowed the United States to supply free France Great, Britain, the Republic of China, and other Allied nations with food, oil, and other supplies.

\(^8\) Blitzkrieg is a German term that literally translates as “Lighting War,” it was a military tactic in which low flying planes would use massive amounts of firepower to create disorganization and scare enemy armies.
To put the importance of the Pegasus Bridge into historical context, one must also understand the vital role of bombing strategies in World War II. Railways, bridges, and even civilian cities became the targets of destructive bombing. The German military believed that the key to winning war was to damage as much infrastructure as possible. To the German mindset, if the cities were destroyed, less people would be available to fight or even produce supplies for the war. Along the same lines, German bombs had the capacity to destroy entire cities in these fatal campaigns, exemplified in Caen’s 80% destruction by German forces. When entire cities were not the target, bombs were specifically targeted towards railroads and bridges. These were the most efficient, and sometimes only, modes of transportation for supplies; therefore, setting plans back significantly when compromised. The Germans did not destroy every bridge though; they of course needed to use these bridges as well. As a precaution, the German’s attached bombs to bridges so that the usefulness of the bridge could be quickly diminished, making any Allied attack pointless. Because German’s set up bombs along the sides of Pegasus Bridge using a detonation location next to the bridge, it became key that the Company’s first objective was to neutralize these bombs. The Germans used a similar bombing strategy for key harbors that were essential for restocking and reinforcing troops on land. Such advances changed the world’s outlook on warfare for years to come.

Operation Deadstick\(^9\), or more specifically Operation Pegasus’ main objective was a \textit{coup de main}\(^11\) glider\(^12\) borne raid on the Benouville Bridge just before the start of the Normandy Invasion. This key factor ensured Allied control of the area leading to and from the Normandy

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\(^9\) Kamikaze a Japanese phrase that translates as “divine wind,” these were suicide attacks by Japanese pilots who flew their planes full of explosives into Allied ships

\(^10\) Operation Deadstick was the glider borne operation to capture both the Benouville Bridge and the Ranville Bridge before the initial landings at Normandy

\(^11\) \textit{Coup de main} - French for blow with the hand - is “a swift attack that relies on speed and surprise to accomplish its objectives in a single blow”.

\(^12\) The Horsa Glider powerless wooden aircraft that was used in WWII to take troops into areas more discretely than conventional aircraft, it could carry 28 men and two pilots who steered and landed the plane.
Caen was a major center for the German Army since most troops passed through Caen to get to their destination. Therefore, to take control of this area was critical in slowing German defenses. Major John Howard\textsuperscript{13}, Commander of the British 6\textsuperscript{th} Airborne Division, rigorously trained the 181 men of Company D to land six powerless gliders at night in less than ideal conditions for two years to prepare them for this one mission. Ultimately, the training paid off when five of the six gliders landed at their target just after midnight on the 6th and they surprised and eliminated the German defenses in less than ten minutes. After the British troops had secured the bridges they then could prevent any German reinforcement as well as send any support to the frontline after the initial invasion. The operation would have failed if it had not been for the technical skill and specialized training of the Company D. The unique success of Operation Pegasus at the Benouville Bridge, later renamed Pegasus Bridge, contributed a great deal to the overall success of the Normandy Invasion. Had the mission instead failed, German reinforcements have more easily reached the shores, creating a more fatal ending for the British at the battle at Sword Beach. Since the operation was so difficult, the likelihood of success was slim, adding shock value when Capital D proved victorious. The victory took place before the D-Day invasion even began, boosting the moral of the soldiers and set the tone for success as the Allied Powers prepared for what would be their bloodiest battle yet.\textsuperscript{14}

\textsuperscript{13} John Howard, a British Army officer who lead the glider borne assault of Operation Deadstick.
Figure 3 This map depicts the frontline at the time of the Normandy Invasion. It highlights the location that Hitler thought the Allies were going to attack (Pas-de-Calais) and then where the Allies actually attacked (Normandy.) It also depicts what land was occupied by Germany. (pegasusarchive.org)

When Major-General Gale of the British Army initiated planning for the *coup de main*\(^\text{15}\) with the help of Brigadier Nigel Poett\(^\text{16}\) and Brigadier Hugh Kindersley\(^\text{17}\), who suggested

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\(^\text{15}\) Major-General Richard Nelson ‘Windy’ Gale MC (1896-1982) was a soldier in the British Army during World War II as well as World War II. During World War II he served in the 1st Parachute Brigade and then 6th Airborne Division during the invasion of Normandy and was involved in the planning and execution of the capture if the Benouville and Orne Bridges.

\(^\text{16}\) General Sir Joseph Howard Nigel Poett (1907-1991) was a British Army officer who commanded the 5th Parachute Brigade of the 6th Airborne Division.

\(^\text{17}\) Brigadier Hugh Kenyon Molesworth Kindersley (1899-1976) served in the Scots Guard in World War I and World War II. In 1943 he was appointed Commanding officer of the 6th Airlanding Brigade and it was because of his recommendation that Major John Howard’s Company was selected for the operation at Pegasus and Horsa.
Howard’s Company for the operation. The three put Howard’s company to the test, a simulation exercise named “Operation Mush”. The Company had to simulate the capture of a bridge held by the 1st Polish Parachute Brigade. They did not employ the use of gliders in this mission; rather they were driven into position and simulated the capture. While Gale and Kindersley were impressed with the Company’s speed and overall skill the group ultimately failed their mission because they took out the wrong ‘enemy’. After this test Howard was told that his company was to spearhead the effort by capturing the two bridges. His Company was expanded from four to six and they began training straight away. The failure in accuracy was the driving factor behind all of Howard’s training exercises there after.

The British Army started to plan a cross-Channel invasion but there were many factors to consider. In 1943 a position was created called the Chief of Staff to the Supreme Allied Commander (COSSAC) and given to Lieutenant-General Frederick Morgan\(^\text{18}\) who appointed a planning team to look at and analyze what conditions would make for the most ideal raid.

They had to consider [possible landing areas] in terms of air cover, enemy airfields, the German naval threat, enemy fixed defenses, the ability of the Germans to use flooding as a defensive weapon and to deploy reserves, the presence of ports, and landing beaches. Their conclusions were that fighter cover was needed over the beaches and that airfields must be captured early so as to maintain air support once the force advanced inland. The rate of build-up of the force must be at least equal to the deployment of German reserves, and the beaches themselves needed to be sheltered from the weather. They stressed the need to capture a sizeable port early.\(^\text{19}\)

\(^{18}\) Lieutenant-General Frederick Morgan (1894-1967) was a British Army officer who served in both world wars, he is best known for his position as Chief of Staff to the Supreme Allied Commander (COSSAC) and as the original planner of the D-Day Invasion.

\(^{19}\)The D-Day Atlas 25-26
Many locations were suggested but none were as promising as the coast north of Caen in Normandy. Even though Caen lacked a large port, the target location had essentially everything that the COSSAC was looking for, making it a key location to progress the war. Another element that made even better is that it was a crossroads for German soldiers and if the Allied powers could gain control then they would control what reached the coast north of Caen. Germany was expecting a cross-Channel attack at some point, they just did not know specifically where or when to expect the assault. The Allies knew that it would be hard to hide their plans for Operation Overlord\textsuperscript{20} from the Germans so the Allied powers deceived them.

Under the codename of Bodyguard an elaborate deception plan had been drawn up. It had two aims. The first was to present threats elsewhere to dissuade the Germans from bringing in reinforcements from other theatres of war. The other was to make the Germans believe that the main assault would be in the Pas-de-Calais.\textsuperscript{21} Because of Bodyguard the Allied forces had a enough confidence to work comfortably knowing that the Germans would not know the real plan of attack. There were many crucial elements involved in the success of the Normandy Invasion, but arguably the most important was the mission led by Major John Howard to secure a single bridge.

Major John Howard\textsuperscript{22} served as a common soldier in the British Army during the peacetime of the Great Depression between World War I and World War II. Because of Howard’s inherent knack for athletics he thrived in the army and allowed him to pick up

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\textsuperscript{20} Operation Overlord was the codename for the Normandy Invasion, the Allied operation to invade and liberate German occupied western Europe, specifically France. It was supposed to be executed on June 5, 1944 but because of weather it took place on June 6, 1944. The assault included 1,200 planes and 5,000 plus ships. More than 160,000 soldiers were involved in the initial attack on June 6. The United States, the British, and the Canadian militaries ambushed five beaches.

\textsuperscript{21} The D-Day Atlas 34

\textsuperscript{22} pegasusarchive.org and Pegasus, Ambrose
Corporal rather quickly; despite his success, he was rejected for commission\textsuperscript{23} when he applied since common soldiers could become officers during peacetime. In 1939 his service period ended and he left to start his newly wedded life with his wife Joy. Less than six months later he was called back into service because of the impending world war. Again, Howard gained rank rapidly and by 1940 he was prompted to regimental Sergeant Major. Since it was no longer peacetime the restrictions on promotions were lifted and in May Howard was offered, and gained, commission. However, he left the Regiment to join the Oxfordshire and Buckinghamshire Light Infantry. Howard was promoted to Captain of the 2nd Battalion just before it was converted to a gliderborn unit of the 1st Airlanding Brigade in 1941. In 1942 he picked up Major as well as command of D Company. “In training, Howard was ruthless and demanded nothing less than first class standards of fitness.”\textsuperscript{24}

In order for this mission to be carried out successfully Howard was going to need as much information as he could get, all of which would come from information reconnaissance done by the French resistance. The intelligence information that was being gathered was incredibly detailed, every aspect necessary for the operation was being recorded and Howard had full access. The French Resistance and the RAF\textsuperscript{25} was providing most of the information including detailed reports of what happened at the bridge daily as well as notes on the structure of the bridges and canals themselves. The reconnaissance on the bridges was so thorough that the reconnaissance team knew within forty-eight hours of Generalfeldmarschall Erwin Rommel authorizing the construction of an anti-tank gun. The French Resistance and RAF had collected so much detailed information that they created a 12x12 feet scale model that was completely

\textsuperscript{23} A commission is a formal document issued to appoint a named person to high office or as a commissioned officer in a territory's armed forces.
\textsuperscript{24} Pegasus Archive Biography of John Howard
\textsuperscript{25} Royal Air Force
accurate down to every tree and ditch. Because of the detailed information Howard was able to train his Company with an incredible level of accuracy and precision.

Another important reconnaissance tool came in the form of individual families. For example, the Gondree Family lived and operated a small cafe across the road from the Pegasus Bridge and fed information to the French Resistance. Georges and Therese had three daughters Georgette, Arlette, and Francoise. In the beginning of the German occupation their resistance was small, at first they did not allow the German soldiers to stay in their home. Georges was fluent in English and Therese spoke German, though they hid that fact from the soldiers. As the German soldiers behavior and treatment of the locals became worse Therese started to listen in on the soldier’s conversations and then her husband would give the information to the French Resistance. Most of the information that they collected went straight to Major John Howard. This information was very useful because it could give more specific context for the pictures that Howard was receiving.

Howard trained his troops to be prepared for any and every situation so they would have the skill set to adapt to even unimaginable problems. Successfully, Howard creates realism in training techniques in any way that he could, wisely using the recon info. Howard had the opportunity to take advantage of Brigadier Poett’s promise to provide Howard with anything he needed to train his men. Utilizing these resources, Howard only trained the men against opponents dressed as German soldiers, carrying German weapons, and speaking German. He wanted his Company to have a comprehensive knowledge of German soldiers so that they could identify the enemy, even at night. He also found an area with the most similar landscape in Exeter, England, which two bridges in close proximity, so that he could to simulate the
conditions of at Caen. Howard trained the company here at day and night\textsuperscript{26} in every scenario imaginable with every thing that could go wrong, training each man so that he could do any job to be prepared for any mistake.

Then we practiced in all seriousness on real bridges with blank ammunition and things like that, thunderflashes, lots of noise, day and night. It made the local villagers’ life hell, but we were only there for three days, three nights, but we were dead beat at the end of that session… In the course of twenty-four hours we would have done it at least twenty-four times each day, practicing the different attacks, first over the bridge, then second over the bridge, and then third. The third platoon had to dash over the bridge to reinforce the first platoon, so that the bulk of the force would have been on the western bank of the canal. God knows how many time we attacked that bridge…\textsuperscript{27}

This quote is from one of the infantrymen in Company D and in it he describes just how rigorously Howard was training his troops for a mission they were not even aware of yet.

Howard felt the most important aspect of securing the Pegasus Bridge was making sure to take out the anti-tank gun and pillbox position before the Germans had a chance to fight back. Not only was the position a threat because of the gun, the Germans could also have detonated the explosives to destroy the bridge. It was crucial that the bridges remained intact and fully functional so that Allied reinforcements could reach the beachhead once the invasion began. That Howard would not reveal to the Company what they were training for, for information secrecy security reasons. The only thing he said about it was:

We are training for some special purpose. You'll find a lot of the training that we are doing, this capturing of things like bridges, is connected with that special purpose. If any

\textsuperscript{26} Parachute operations in Normandy
\textsuperscript{27} The Pegasus and Orne Bridges page
of you mention the word 'bridges' outside our training hours and I get to know about it, 
you'll be for the high jump and your feet won't touch before you are RTU\textsuperscript{28}.

The plan to capture these specific bridges was set two years before they actually executed the mission. If the Germans had discovered this information it could have alerted them to which Norman beachhead the Allies intended to attack. As D-Day approached the 6th Airborne Division was locked down on their base so Howard could reveal their next mission and the reason for their intensive training on bridge capturing techniques. Because of the incredibly detailed model and photos of the bridges Company D was able to study every detail of the landscape while preparing for their mission.

The first battle of D-Day started 16 minutes after midnight on June 6, 1944. The glider-borne assault on two bridges over the Caen Canal and adjacent Orne River--was among the most spectacular of the special operations carried out during the Allied invasion of Normandy. \textsuperscript{29}

By the end when the time had come for the 6th Airborne Division to put their training to the test Howard had sent them through 54 practice landings in all combinations of day and night, and countless amounts of practices simulating bridge captures. All of the training exercises to ensure the success of a highly complicated, dangerous yet crucial mission.

\textsuperscript{28} abbrv. - Return To Unit
\textsuperscript{29} Pegasus & Horsa, Zabecki
The invasion was set to begin on June 5, 1944 but because of inclement weather, wind and rain, it was pushed back twenty-four hours. The weather broke and at 22:56 the first glider took off followed by the next just 1 minute behind. The gliders that the platoons were on were powerless gliders that had parachutes attached to them to slow them down before impact. These gliders were quieter so they drew not as much attention to their approach than a regular plane would. The six gliders were towed behind bigger, powered planes and as they approached their target their towropes were cut. The first glider to land, the platoon that had the objective of blowing up the pillbox, also carried Howard and his troop. The five of the six gliders made it to
their intended targets; one of the gliders tow ropes was compromised before they reached their target and they had to meet with the rest of the party some time after the capture of the bridges. The landings at Caen were very rough and the men were all knocked unconscious, just for a moment, by the impact. The three gliders that were sent to the Caen all landed with impressive accuracy and precision. By 00:16 the men were fighting and in less than 15 minutes the platoons had successfully captured the bridge, intact.

Figure 5 This photo shows the three gliders that landed at the Pegasus Bridge, the pilots had so much precision while landing that the glider closest to the bridges was only 47 meters away. (pegasusarchive.org)

By 01:00 parachute reinforcements landed, and intensity was over. All of their training had paid off and almost made this dangerous mission look easy. By the time the initial landings were happening there had already been a victory. When other areas of battle seemed in desperate situations, this mission went even better than expected. Reflecting on the battle proves that the operation took incredible amounts of skill, training, and bravery. If it had not been for the coup de main on the Pegasus Bridge, the course of history would have ben altered. Ultimately, the
outcome of the Sword Beach invasion and in the Normandy invasion as a whole relies on the success of the Pegasus Bridge mission.

Figure 6 This photo was taken after the operation and the gliders can be seen as well as the German pillbox that was the initial target after the landings. (pegasusarchive.org)

One unforeseen advantage of having control of the Caen came when it was time to place the Mulberry Harbors off the coasts of Sword and Omaha Beach. The artificial harbors were comprised of long, steel roadways that floated about steel or concrete pontoons. They stretched about six miles across the English Channel. They were created as a result of the German harbor bombing strategies after the initial landings in Normandy. The harbors were incredible feats of engineering which made the unloading large cargo ships much more efficient. Just four days after both of the harbors were fully functional there was a violent storm that destroyed the harbor off the coast of Omaha. These harbors were critical for resupplying the troops as they made their
way inland and without them their mission would have failed. Without the harbor at Omaha all supply for the rest of the invasion came in through Sword Beach, securing the importance of the success of Operation Pegasus.

Figure 7 This is a photo of the floating steal roadway that brought supplies, combat vehicles, arms, and even troops into the shore in order for the liberation of France to continue successfully. (http://www.historylearningsite.co.uk)  

One of the most dangerous and complex airborne operations in the history of war was the Operation Pegasus. On account of the immense detail that went into the planning and training for the *coup de main*, Company D was able to secure their target in the most effective formation possible. The fate of World War II rested on the success of this raid. At the time, no one could have known how important this mission was actually going to be to the victory at Normandy.
Circumstances that no one could have predicted arose but thanks to the immense skill of the 6th Airborne Division and the leadership of Major John Howard the D-Day invasion was opened with a victory. Even when everything seemed to go wrong Caen and its bridge were there to hold the liberation of France together. The Benouville Bridge was the keystone for all of the Normandy Invasion and without it there to hold everything together the ending of World War II might have looked very different.

Figure 8 This photo is of the Pegasus Bridge raised to allow a cargo ship to pass up the canal, this photo is a good representation of the full use of the bridge and how significant the control of this waterway was. (pegasusarchive.org)
Annotated Bibliography

Primary Sources


● Barber, Neil. *The Pegasus and Orne Bridges: Their Capture, Defence and Relied on D-Day*. Great Britain: Pen & Sword Military, 2009. This book is a really great source for quotes; it tells the story using mostly quotes from men who were part of Company D as well as quotes from Gale and Howard. It is really great to getting a better understanding of the operation from the soldier’s point of view.


● Heavy Fighting In Normandy. FROM OUR MILITARY CORRESPONDENT *The Times* (London, England), Thursday, Jun 08, 1944; pg. 8; Issue 49877. Accessed April 6, 2015. http://gdc.gale.com/products/gale-newsvault/discover/title-list/ This article describes the fighting that was taking place still in Normandy and how there were still more soldiers landing on the beaches, as well as referencing the weather and how that was affecting the invasion. The author also describes the port of the Caen Canal and how it was a center for communication.


● Preliminary Invasion Targets: Precision Bombing of Seine Bridges. *Illustrated London News* (London, England), Saturday, June 17, 1944; pg. 687; Issue 5487. Accessed April 6, 2015. ttp://gdc.gale.com/products/gale-newsvault/discover/title-list/ This article talks about the military strategy of bombing bridges, specifically the Sine Bridge to stop Rommel’s forces. There was very little writing; two pictures of the demolished bridge took up most of the page.
The Great Assault Going Well. *The Times* (London, England), Wednesday, Jun 07, 1944; pg. 4; Issue 49876. Accessed April 6, 2015. [http://gdc.gale.com/products/gale-newsvault/discover/title-list/](http://gdc.gale.com/products/gale-newsvault/discover/title-list/) This article describes the first day of the Normandy Invasion. This was published on the 7th, so within one day of the invasion the public was already aware that it was happening.

- War Notes from the Pegasus Archive. There are many, many war notes on this website from people of all ranks. The notes from whole days are available as well as notes from a specific moment. There is a helpful list of abbreviations at the beginning of each note.

**Secondary Sources**

- Ambrose, Stephen E. *D-Day June 6, 1944*. New York: Simon & Schuster, 1994. Ambrose is an expert on this topic and is very well known for his works, this book is great because it covers all of D-Day but in great detail. He describes all aspects of D-Day that have to do with the military and talks about the fighting that continued after the initial assault to move inland.

- Ambrose, Stephen E. *Pegasus Bridge, June 6, 1944*. New York: Simon & Schuster, 1985. This work is fantastic because Ambrose highlights a very important operation that took place before the Normandy invasion. He describes the intense amount of training that went into preparing for the operation and he also describes how difficult a task it was. The ultimate success of the Normandy Invasion rested on this operation and Ambrose does a great job telling this story.

- Collier, Richard. *D-Day 6 June 1944 The Normandy Landings*. New York: The Abbeville Publishing Group, 1992. This work is great because it gives great background and context for the D-Day invasion and the author looks at other aspects that lead to the invasion other than just military. This book has great maps, photos, and illustrations that are very useful.

- Cowen, Ron. “The Tides of War: D-Day’s lunar connection,” *Science News* 145, no. 23 (June 4, 1994): 360-364. Accessed April 6, 2015. [http://eds.b.ebscohost.com/eds/detail/detail?sid=a7d3f3e5-e159-4200-96c7-da1609b28b95%40sessionmgr115&vid=9&hid=120&bdata=JkF1dGhUeXBlPWlwLGNvb2tpZSxlcmw5Y3BpZCxlWQmY3VzdGlkPXMXODYzMTM3JnpdGU9ZWRzLWxpmUmccNvcGU9c2l0ZQ%3d%3d#db=edsjsr&AN=edsjsr.3978083 This article provides interesting insight and explanation into why the Normandy Invasion did not go as smoothly as the Allied Powers had planned for.


Lee, Loyd E. *World War II*. Westport, Connecticut: Greenwood Press, 1999. This book gives a great overview of World War II and is very easy to read. It highlights the major themes of the war and briefly explains them. It also gives biographies for important people from the war as well as primary documents and a chronological listing of major events through the whole war.

Lowden, John L. *Silent wings at war: combat gliders in World War II*. Washington: Smithsonian Institution Press, 1992. This book is really great because it talks about gliders which are an important part of air warfare. The book goes through this history and use of gliders in World War II. It highlights the use of gliders in the Normandy Invasion.


http://uw8rw3ad9q.search.serialssolutions.com/?genre=article&issn=00263931&title=Military%20Affairs&volume=47&issue=2&date=19830401&atitle=Bombing%20Policy%20in%20the%20Rome%20and%20Pre-Normandy%20Invasion%20Aerial%20Campaigns%20of%20World%20War%20II%3A%20Bridge-Bombing%20Strategy%20Vindicated%20and%20Railyard-Bombing%20Strategy%20Invalidated&spage=53&pages=53-58&sid=EBSCO:JSTOR%20Journals&aulast=Lytton,%20Henry%20D. This article is great because it gives great context to the key role that bridges play in war. This highlights the tactics that were used in World War II, specifically bombing, to keep control of bridges and what tactics were adopted because of this.

Messenger, Charles. *The D-Day Atlas: Anatomy of the Normandy Campaign*. New York: Thames & Hudson, 2004. This book is great because it gives background great context into the planning and execution of the invasion. It has a plethora of very detailed maps not only of the June 6 invasion but of Normandy in every stage of planning as well as the similar missions in other theatres of the war.


http://site.ebrary.com/lib/jmulibrary/reader.action?docID=10527801 This article goes into very specific detail about the operation from start to finish. The author sets up the scene by giving an overview of the mission. He talks about Major John Howard and the incredible task of capturing the bridges.


http://eds.b.ebscohost.com/eds/detail/detail?sid=a7d3f3e5-e159-4200-96c7-da1609b28b95%40sessionmgr115&vid=3&hid=120&bdata=JkF1dGhUeXBjPWlwLGNvb2tpZSx1cmwysY3BpZCxlWQmV3YzdGlkPXM4ODYzMTM3JnNpdGU9ZWRzLWxpdnUmc2NvcGU9c2l0ZQ%3d%3d#db=f5h&AN=39556737 This article is not very long but it is full of great information. The author is discusses the importance of the bridges and the operation as well as describing the significance of the bridges today. The author also references the Gondree Family, who lived across from the Pegasus Bridge, and their involvement in the French Resistance.