

Primary Sources

62284main_onesmall2, Houston, Tranquility Base.

This was an audio recording, that was recording at the time of the moon landing at Tranquility Base, in Houston, Texas

Allen, Bob. "Launching the Space Race: Making Space." *NASA*, NASA, 1 Mar. 2017, www.nasa.gov/langley/100/making-space.

This article gives a detailed description of the mathematics and technologies used to send rockets into space. We used this information to understand the science behind space launch, and the difficulties they faced when entering space. Some of the information includes the facts that missile were repurposed to launch payloads and people into orbit.

Clarke, Arthur C. "Extra-Terrestrial Relays." *Communication Satellite Systems Technology Progress in Astronautics and Rocketry*, 1966, doi:10.1016/b978-1-4832-2716-0.50006-2.

This article goes over the probability of radio wave relays in space, and how they can be used for communication using satellites. We chose this article because it connects with our NHD topic and the NHD theme very well

"CONSIDERATIONS OF PROSPECTIVE WORK OF OUTER SPACE." *NASA*, NASA, history.nasa.gov/sputnik/russ5.html.

We used this source to find information about the USSR side of the space race. It gives quite a bit of information about the stuff that the Soviets were going to try and get done during the space race. Some of the information in this schedule includes, The carrying out of scientific research work for the development of interplanetary technology and a search for new, more perfected ways of developing outer space. This work to be completed in 1958-1961; and All the researches of the moon which we have projected would be carried out on the basis of the R-7 rocket with the third stage, and with a special additional fourth stage, which would be specialized for each task. This work is to be completed in 1961-1965.

Free Documentary. "Space Race to the Moon | Free Documentary." *YouTube*, 4 Mar. 2020, www.youtube.com/watch?v=WoJcvjhbJ70. Accessed 1 Oct. 2020.

This information about the space race tells how the space race was started. This information includes things that says The Explorer 1, America's first attempt at a satellite launch, failed and humiliated the USA. In 1958, the USA remodeled a redstone military missile to launch their satellite, they called it the Freedom 1 and it was a success. That same Year President Eisenhower, established NASA IN 1959 the US attempted 20 satellite launches, only 8 succeeded. In 1961 The Soviet Union sent the first man into space.

Impact of U.S. and Soviet Space Programs on World Opinion. history.nasa.gov/sputnik/july59.html.

This government document is about what reactions were to Sputnik 1 and the US's response to it. We used this source because it shows the concern to the Soviets beating the US to putting something into space and it shows what the US did in response. We learned that a lot of people were worried that the Soviets were going to use Sputnik 1 for military purposes.

Jackson, C. D. "Memo from C.D. Jackson Regarding Soviet Satellite, October 8, 1957." *C.D. Jackson Papers, Box 69, Log-1957 (4); NAID #12086487*,
www.eisenhowerlibrary.gov/sites/default/files/research/online-documents/sputnik/10-8-57-memo.pdf.

We used this memo to find more information about the communication in the space race. It has a lot of great information about the opposite side of the space race and the accomplishments they were having. Some of the information we used is, "The successful launching of the soviet satellite is an overwhelmingly important event -- against our side.", america is starting to become afraid of the soviet union because they were able to successfully launch a satellite into the earth's orbit. If they could do that, what else could they do?, and "This will be the first time they will have achieved a big scientific jump on us, ostensibly for peaceful scientific purposes, yet with tremendous military...", "Up to now, it has generally been the other way around."

Library, Dwight D. Eisenhower. National Security Council, "Official White House Transcript of President Eisenhower's Press and Radio Conference" 9 October 1957, Dwight D. Eisenhower Library, Abilene, Kansas., 9 October 1957.

This transcript is a great source of information for some of the declassified and important things that were going on during the space race. We used this transcript to gather more information regarding the space race and how they used and revolutionized communication. Some of the information included is, on July 29, 1955 at a White House Press conference it was announced that plans for an artificial satellite were in development, following the Convention the United States National Committee for International Geophysical Year recommended that the US

started a satellite program, and the first serious discussion of an earth satellite program took place in Rome 1954, at the International Convention Of Scientific Unions.

National Security Council, "Discussion at the 339th Meeting of the National Security Council, Thursday, October 10, 1957," 11 October 1957, NSC Series, Box 9, Eisenhower Papers, 1953-1961 (Ann Whitman File), Dwight D. Eisenhower Library, Abilene, Kansas.

This source explains the thought of the United States government after the launching of the USSR satellites. It includes quotes such as “Mr. Allen Dulles stated that at 1930 hours on October 4 the Soviets had fired their earth satellite from the TyuraTam range. Its initial path followed the range, crossing approximately over the range's other end at Klyuchi. Two hours after the successful orbiting of the earth satellite and after the second circuit of the earth by the satellite, the Soviets announced their achievement.” which states the way the soviets launched their rocket.

Official White House Transcript of President Eisenhower’s Press and Radio Conference #123 Concerning the Development by the U.S. of an Earth Satellite, October 9, 1957, 9 Oct. 1957,
www.eisenhowerlibrary.gov/sites/default/files/research/online-documents/sputnik/10-9-57.pdf.
Accessed 23 Oct. 2020.

We used this article to find information on why the world needed the communication that came out of the space race, and just general information about the space race. This article has great information, and it includes, Originally the US was not focused on the space race and were more focused on military endeavors, During a press meeting, the president acknowledged the soviets in their efforts and said that satellites are not a priority, and “In May 1957 the United

States satellite program dedicated that small sphere shapes were most suitable for testing propulsion to space.”

Reaction to the Soviet Satellite - A Preliminary Evaluation. The Eisenhower Library,
www.eisenhowerlibrary.gov/sites/default/files/research/online-documents/sputnik/reaction.pdf.

This document is about how the United States government reacted to Sputnik 1. This source was used because it tells about part of the reason the US felt like they needed to get ahead of the Soviets. We learned that the United States was very worried about the Soviets having an advantage over the US.

Tikhonravov, Mikhail T. 1954, *A REPORT ON AN ARTIFICIAL EARTH SATELLITE*.

We used this source to find information about the spacecraft used during the space race. This is a really good source for it. Most of the information that is in this report is about the requirements that the spacecraft would have to have to be able to achieve what they wanted to achieve. Things like how much it can weigh, how many people can be in it, where it's going to need to go, and what it needs to be able to do. In all, this is a really great source if you are looking for general information about the satellites and other spacecraft that were used during the space race

Secondary Sources

“A Radio Transmission Tower.” *Whirligig Snippets*,
www.whirligig-tv.co.uk/tv/memories/snippets/snippets2.htm.

This source is an image of a radio transmission tower. We used this image to show what life would be like without satellites and how we would have transmission towers everywhere.

[An image of Skylab]. (2013, August 2). Retrieved from

<https://www.nasa.gov/sites/default/files/sl2-7-633a.jpg>

This source is an image of Skylab. This image was used because on one of the website pages, the group talked about Skylab and we needed a picture to go along with it. This was the perfect image to use.

“Apollo 11 Aldrin Ausstieg.” *Wikipedia*, Wikipedia,

[sco.m.wikipedia.org/wiki/File:Apollo11-Aldrin-Ausstieg.jpg](https://en.m.wikipedia.org/wiki/File:Apollo11-Aldrin-Ausstieg.jpg).

This is an image of Buzz Aldrin climbing out of the Eagle. We're not sure if it's real, but it works for what we needed. we used this image for the Moon Landing page on our website. We think it fits the theme fairly well, and it adds some aesthetic value to it.

“Apollo 11 in Popular Culture.” *Wikipedia*, Wikimedia Foundation, 29 Jan. 2021,

[en.wikipedia.org/wiki/Apollo_11_in_popular_culture#:~:text=Over 53 million households tuned,programming up to that date.](https://en.wikipedia.org/wiki/Apollo_11_in_popular_culture#:~:text=Over%2053%20million%20households%20tuned,programming%20up%20to%20that%20date.)

We used this source to find information about Apollo 11, and how many people were watching the live news broadcasts. This is a great source if you are looking for information about Apollo 11, and a lot of interesting facts about this monumental event.

Commons.wikimedia.org, commons.wikimedia.org/wiki/File:Sputnik_1.jpg.

This source is a picture of the Soviet Satellite, Sputnik 1. We used this picture because we wanted to have a visual representation of Sputnik 1 on the website. The image also fits the theme of the page it is on.

“Conducting Experiments on Skylab.” *Nasa.gov*, NASA,
www.nasa.gov/sites/default/files/images/257798main_SL3-108-01268_full.jpg.

This Source is a picture of Alan L Bean running experiments on Skylab. We used this image to prove that Skylab was used for experiments and communication.

"Edwin Eugene Aldrin Jr., Dr." *Encyclopedia of World Biography Online*, vol. 18, Gale, 1998. *Gale In Context: Middle School*,
<https://link.gale.com/apps/doc/K1631000118/MSIC?u=onlinelibrary&sid=MSIC&xid=affcb442>.
Accessed 21 Oct. 2020.

This source is an article about Eugene “Buzz” Aldrin. We used this source because it gave background on what it was like to be in the space program. This article helped us understand my topic because we learned some of the process of getting into space.

Garity, Meghan. *The Race to Space: Effects on American Communication Culture*. 2017.

This article has a lot of information about the US side of the space race, and the technological advancements that we had as a country. Some of the information in this article is as follows:
“Aside from radio signals, the U.S. also experimented with sending images via satellites. In

August 1959, the Explorer VI was launched and was equipped with television like a camera.”, and “In another test, a telephone signal was bounced off the satellite from California to New Jersey, and vice versa, resulting in a relatively clear trans-continental telephone conversation. 13 Through these tests Echo proved that long-distance communications were not only possible via satellite, but also more efficient than traditional relay techniques.” This article has a lot of great information regarding the space race, and especially the US side of the technological advancements.

“How a GPS Works.” *Mdpi.com*, MDPI, 12 Mar. 2019,
www.mdpi.com/1424-8220/19/10/2291/htm

This source is a picture of how a GPS works. We used this picture because it was able to show how satellites are used for GPS. It was a very helpful Image.

Kowalski, Kathiann M. “The Space Race Begins.” *Cobblestone*, vol. 40, no. 6, July 2019, p. 4.
EBSCOhost, search.ebscohost.com/login.aspx?direct=true&db=mih&AN=136973930.

This source is about the important events of the Space Race. It tells you about events from 1957-1972. It talks about US and Soviet achievements. The document also gives information about the Gemini and Apollo missions. It doesn't go into detail about the events, but it gives a good list of things to know about the Space Race.

Labrador, Virgil. “Development of Satellite Communication.” *Encyclopædia Britannica*,
Encyclopædia Britannica, Inc.,
www.britannica.com/technology/satellite-communication/Development-of-satellite-communication.

This source is an article about satellites and how they were used for communication. We used this article because we wanted an article that shows not only how satellites were used for communication, but how they affected the Moon Landing.

Library, Dwight D. Eisenhower. National Security Council, "Discussion at the 443rd Meeting of the National Security Council, Thursday, May 5, 1960," 5 May 1960, NSC Series, Box 12, Eisenhower Papers, 1953-1961 (Ann Whitman File), Dwight D. Eisenhower Library, Abilene, Kansas., 6 May 1960.

This source is a United States document about the plans of the United States concerning their satellite program. This source was used because it talks about the plans of the US for satellites. We learned that the US thought that they were on par, or ahead of the Soviets in their space program.

"Little Boy." *History.com*, A&E Television Networks, 6 Sept. 2017, www.history.com/topics/world-war-ii/atomic-bomb-history#&gid=ci023ad3afe00024ab&pid=hiroshima-bomb-gettyimages-3091366.

This source is a picture of the atomic bomb nicknamed Little Boy. We used this image because the page we used it on was about the cold war between the United States and the U.S.S.R. It was used to show some of what the US and the Soviet Union were doing during the cold war.

Mann, Adam. "What Was the Space Race?" *Space.com*, Space, 7 Aug. 2019, www.space.com/space-race.html.

This article tells a useful amount of information about the space race as well as key events that happened during this event, The first bit of information is as follows, The opening

salvo of the space race was the launch of the Soviet satellite Sputnik 1 on Oct. 4, 1957. The U.S. government had already been planning to launch its own artificial satellite, and members of the public were shocked when they saw that the Soviet Union, which had been devastated during World War II, was able to achieve this milestone first. Less than a month later, the Soviets launched Sputnik 2, which carried a dog inside it. That same year, the US founded NASA and said that they were going to send human passengers to space. Still, for much of the first half of the space race, the Soviet Union was considered to be ahead.

Matthews, Andrew. "Race to the Moon TimeLine." *Cobblestone*, vol. 40, no. 6, July 2019, p. 8.

EBSCOhost, search.ebscohost.com/login.aspx?direct=true&db=mih&AN=136973931.

This article goes in depth about the Space Race. It talks about the different stages of the race and when events happened. The article also talks about how there is not a clear time when the Space Race ended. It talks mostly about US events so it may be biased. The article also talks about technological advancements that were made during the Space Race.

McLean, John. "History of Western Civilization II." *The Space Race | History of Western Civilization II*,

This article give information about sputnik 1, and other parts about the space race. Some of the information in this article is as follows: "When the Soviets launched Sputnik 1, they waited to celebrate until the radio transmitters on the satellite to beep, beep, beep", "Yuri Gagarin was the first man in space", And "When the Soviets launched sputnik, they showed that they had the power to launch things into space and they showed that they would be able to send nuclear missiles to America through space." It gives a lot of good information about the early stages of the space race, and has a lot of great information in all.

Staedter, Tracy, et al. "The Intersection of Technology, Innovation & Creativity." *Now. Powered by Northrop Grumman*, 9 Apr. 2020, now.northropgrumman.com/how-technology-from-the-space-race-changed-the-world/.

This article talks about how the technology developed during the Space Race changed the world. This source was used because it tells you about technology developed during the Space Race and how it affected the world. This source taught me that a lot of technology was originally developed for the military.

"Space Race." *Wikipedia*, Wikimedia Foundation, 5 Oct. 2020, en.wikipedia.org/wiki/Space_Race.

This source is an article about how the US reacted to the soviets launching Sputnik 1 into space. We used this source because it shows how the US reacted to advanced technology that they had never seen before. This source helped me understand my topic because it showed what happened with the first satellite.

Tanya.keusen. "United NationsOffice for Outer Space Affairs." *Benefits of Space: Communication*, UNOOSA, www.unoosa.org/oosa/en/benefits-of-space/communication.html.

We used this source because it gave a very simple explanation of why the Space Race was able to make communication easier. It is an article that is about how satellites made communication easier. We learned that one satellite takes the place of many buildings that would need to be set up in order to communicate the same distance.

Unknown. "Sky-Star-Galaxy-Milky-Way.jpg." *WallPaperFlare*, WallPaperFlare, c0.wallpaperflare.com/preview/53/742/336/sky-star-galaxy-milky-way.jpg.

We used this image as the background for the homepage of the website. It is an image of the milky way galaxy, it is a 4k image, and it perfectly suited the theme of our project. We would recommend this image.