



EXERCISE 1.3: TITAN II & THE COLD WAR

Directions: Read the following information concerning the Titan II program & the Cold War. Answer the questions that follow in complete sentences.

The Titan II was a second-generation, two-stage, silo-stored, silo-launched, liquid propelled Intercontinental Ballistic Missile, or ICBM. It was stored in a hardened underground silo with its liquid propellant on board, so that it was ready to launch at all times. An ICBM is a missile specifically designed to carry a nuclear warhead or bomb from one continent to another. They are called “ballistic” because they receive a brief but powerful initial push from a rocket motor, followed by an unpowered ballistic free flight trajectory to the target. This is similar to how a shell fires from a gun.

The Titan II was developed at a time in United States history that is commonly referred to as the “Cold War”. The Cold War was the conflict between the United States and the former Soviet Union, which lasted from the mid 1940s (around the end of World War II) until 1991. Even though the United States and the Soviet Union had been allies during World War II, they became enemies after the war. The United States was the first country to develop the atomic bomb, and the Soviet Union was afraid that the United States would use this technology to destroy the Soviet Union. To protect itself, the Soviet Union wanted to expand its rule to other countries and then use those countries as a buffer to protect itself from invasion. The United States did not want the Soviet Union to expand because it was afraid that the Soviet Union would become too powerful. This conflict became the Cold War.

Historians call it the Cold War because it was mainly a political and economic struggle between these two countries, not a “hot war” in which the two countries would have been openly and actively shooting at each other. The “weapons” used to fight the Cold War were primarily science, economics, propaganda, espionage, threats, and intimidation. However, several conflicts were fought during the Cold War between countries allied with the United States and the former Soviet Union. Examples of these conflicts are the Korean War and the Vietnam War, in which many Americans fought and died.

One of the most visible aspects of the Cold War was the arms race between the United States and the Soviet Union. Fear drove the Soviet Union to catch up with the U.S. nuclear technology after World War II. A similar fear drove the United States to push its weapons development to stay ahead of the Soviets. The result was the biggest arms build up in history.

In 1957, several things happened that contributed to the creation and development of the Titan II. First, the Soviet Union announced that it had successfully tested an ICBM that was capable of reaching targets in the United States. Second, on October 1st of that year, the Soviet Union launched the first man-made satellite into space. It was called *Sputnik*, and American citizens could turn on their AM radios and listen to *Sputnik* transmit. Then the Soviets put two more satellites into orbit before the United States succeeded in launching its first satellite. Americans were concerned that the United States seemed to be losing its technological superiority over the Soviets. The leaders of the United States were worried for a different reason. They knew that if the Soviet Union could launch a satellite into space, then its claim that it possessed an ICBM that could reach America was probably true because the technology and equipment needed to do these things were the same.

So the United States started devoting more money to improving its own ICBM technology, and the Titan II concept was born in 1958. In all, there would be 54 Titan II sites, divided into groups of 18 missiles around 3 Air Force bases: Davis-Monthan AFB in Tucson, Az; Little Rock AFB in Little Rock, Ark.; and McConnell AFB in Wichita, Kan.

The Titan II was a retaliatory weapon. This means that the United States did not intend to launch the Titan II unless it was already under nuclear attack from another country. Although the Titan II was a weapon of war, its primary mission was peace. The United States' strategy in deploying the Titan II was to prevent other countries from ever attacking it with nuclear weapons by showing them that the Titan II had the ability to retaliate (or respond) against a nuclear strike to such a degree that the attacking country would be largely destroyed, even if that country launched its weapons first. This concept was known as Mutual Assured Destruction, or MAD. The Air Force defined this concept as "Peace through Deterrence." For 24 years, from 1963 to 1987, Titan II missiles stood guard over the United States, successfully fulfilling this mission.

The Titan Missile Museum is the only museum of its kind in the world. It is the only place where a visitor can actually walk around a former missile site and see an actual Titan II missile at close range. When you visit the museum, Education Docents will take you on a tour of the

site and show you all of the reasons the Titan II was so successful in fulfilling its mission of peace. You'll visit the underground Control Center and experience a simulated launch, and then visit the underground silo and see the Titan II missile in the launch duct. If you would like additional information on the Titan II and the Titan Missile Museum, please visit the following Internet sites:

1. Titan Missile Museum web page:
<http://www.titanmissilemuseum.org>
2. Information on the Titan II ICBM:
<http://www.fas.org/nuke/guide/usa/icbm/sm-68b.htm>
3. Information on Missile Site 571-7 (now the Titan Missile Museum):
<http://www.cr.nps.gov/nr/travel/aviation/air.htm>
4. For information on the Titan II ICBM in general from a former crew member's perspective, and to read the actual launch check list:
<http://home.teleport.com/~boelling/titan.html>

Questions (Use a separate paper):

1. In your own opinion, what was the Cold War? Use complete sentences, and use between 5 and 10 sentences.
2. In your own opinion, why was the Titan II important in the Cold War? Use complete sentences, and use between 5 and 10 sentences.
3. Using the Internet, visit one of the four sites listed above about the Titan II. Write down which website you visited, and then write down three things you learned from the website in complete sentences.