EXERCISE 1.2: Titan II and the 390th SMW

Background: The Titan II missiles were an important part of world history. These reading selections will help you learn more about these missiles and the people who worked with them.

Directions: Read the following history and description of the Titan II Intercontinental Ballistic Missile (ICBM) and the 390th Strategic Missile Wing (SMW). Then answer the questions after each section.

SECTION ALPHA:

The Titan II was the largest and most powerful ICBM in our nation’s arsenal. Fifty-four Titan II missile sites were located around three Strategic Air Command bases: Davis-Monthan Air Force Base in Arizona; McConnell Air Force Base in Kansas; and at Little Rock Air Force Base in Arkansas. There were eighteen missile sites around each base.

These underground launch sites were hardened against attack. All launch critical items and those required for post attack readiness were below ground, safely protected from a nuclear blast. Standing 103 feet tall, with a 10 foot diameter, and weighing 150 tons, Titan II could be up and out of its silo in less than a minute after receipt of a launch command, hurling its payload at speeds over 15,000 miles an hour, nearly halfway around the world.

1. How many Titan II missile sites were there?

2. True or False: The Titan II was the largest ICBM in the United States arsenal.

3. How tall was the Titan II?

4. Fill in the blank in the following sentence: The Titan II could be up and out of its silo in less than a ______________ after receipt of a launch command.
SECTION BRAVO:

In December of 1963, the 390th Strategic Missile Wing at Davis-Monthan Air Force Base became fully operational with 18 missile complexes on alert status. The mission of the 390th from 1962 until deactivation in 1984 was to maintain and be prepared to launch Titan II missiles on receipt of a lawful order. Missile site 571-7, now the Titan Missile Museum, was once part of the 390th.

The day for a missile crew began at 6:30 a.m. The crew members arrived at a Wing Briefing Room for a briefing on scheduled maintenance, changes in technical procedures, intelligence information and that day’s strategic forces readiness condition. Following the briefing, the crew would drive to the missile site that would be their home for the next twenty-four hours. Arriving at the missile site, the Crew Commander would call the Control Center from the gate phone to get permission for the crew to enter the missile complex. The crew then drove to the access portal and the duty crew commander verified that the oncoming relief crew had the proper authorization to enter the missile site Control Center. The other crewmembers began a series of daily inspections to insure that all of the equipment on the missile site was functioning properly. After inspecting the above ground equipment, the crew would enter an entrapment area where electronically controlled doors would remain locked until the crew in the control center had made a visual check of the incoming crew by a remote television camera.

5. What was the mission of the 390th Strategic Missile Wing?

6. What time did the day begin for a missile crew?

7. When the crew arrived at the missile site, what phone did the Crew Commander use to get permission for the crew to enter the missile site?
SECTION CHARLIE:

Once the relief crew had been recognized, they were allowed downstairs; the new crew then went through a series of three-ton blast doors and into the Control Center. Upon entering the Control Center, the crew would perform a “crew changeover” to relieve the duty crew of its responsibility for the missile site. During this crew changeover, the relief crew was briefed on any changes that had occurred at the missile site since the crew’s last alert. The new duty crew then began a series of checklists to test and verify the operating condition of all equipment in the Control Center and launch silo. After equipment checks in the Control Center were completed, two enlisted crew members would depart to inspect the launch site’s equipment area. They took a radio so that communications with the Control Center could be maintained at all times.

During their inspection of the nine-story underground launch silo, the crew members wore hard hats to protect them from low hanging conduits and sharp edges on equipment. Before entering the silo, they checked a vapor sensor designed to detect any presence of fumes from the liquid propellants that powered the engines of the ICBM. Inspecting the nine levels of pumps, fans and motors that kept the Titan II in a state of constant readiness generally took the crew members between three and four hours. This check of all silo equipment was made every twelve hours so the crew could readily detect any problems that might affect the missile’s launch capability. Aside from their other daily responsibilities, the crew members spent much of their time monitoring radio messages from Strategic Air Command and the Base Command Post, waiting for a message that never came—the message to launch their ICBM.

8. Fill in the blanks in the following sentence: When the crew members inspected the nine-story underground launch silo, they carried a __________ so that communications with the Control Center could be maintained, and they wore ________________ to protect them from low hanging conduits and sharp edges on equipment.

9. How often was the silo equipment checked?
SECTION DELTA:

During the twenty-year history of the 390th Strategic Missile Wing, its men and women distinguished themselves by earning several high honors and awards. Among these were three Outstanding Unit awards presented for their meritorious service. Other honors included being the best Missile Wing in Strategic Air Command, Best Titan II Wing in the Air Force, and numerous awards for outstanding performance of maintenance, logistics, security and communications. The men and women who made up the 390th made it possible for the Wing to accomplish its mission. Thanks to the pride, dedication and devotion to duty of these people, the Titan IIs at Davis-Monthan served their purpose—-to deter aggressive action against the United States.

In July 1984, the 390th Strategic Missile Wing was officially deactivated. The missile sites are gone, and the people who worked in support of the mission moved on to other Air Force assignments. Little remains to remind people that for twenty-two years, a select group of people stood guard twenty-four hours a day, seven days a week to protect the rights and freedoms that we enjoy in the United States.

The Titan Missile Museum is the only remaining Titan II missile site. The mission of the Museum is to preserve and tell the story of the Titan II and the men and women who served in the Titan II system, and the Titan II’s role in deterring nuclear aggression against the United States during the Cold War.

10. How many Outstanding Unit Awards did the 390th Strategic Missile Wing receive?

11. True or False: The 390th Strategic Missile Wing was officially deactivated in July of 1984.

12. True or False: The Titan Missile Museum is the only remaining Titan II missile site.

13. What is the mission of the Titan Missile Museum?
Answer Key: Exercise 1.2

SECTION ALPHA

1. 54
2. True
3. 103 feet
4. minute

SECTION BRAVO

5. To maintain and be prepared to launch Titan II missiles on receipt of a lawful order.
6. 6:30 am
7. gate phone

SECTION CHARLIE

8. radio, hard hats
9. every 12 hours

SECTION DELTA

10. 3
11. True
12. True
13. The mission of the Museum is to preserve and tell the story of the Titan II and the men and women who served in the Titan II system, and the Titan II’s role in deterring nuclear aggression against the United States during the Cold War.