The Eiffel Tower

The Eiffel Tower (or as it is called in French: “La Tour Eiffel”) is a tall iron tower located on the Champ de Mars in Paris. Around the time of its construction in 1889, many Parisians criticized the Eiffel Tower as unsightly with its steel girders and odd shape. Many artists wrote letters of complaint to Paris newspapers demanding it be torn down. Other critics complained about the appearance of the tower on the Paris landscape but reassured themselves that it was scheduled to be demolished twenty years after its construction. The planned demolition never happened, of course, and one of the reasons is because the Eiffel Tower fulfilled several purposes beyond its role as a tourist attraction.

Although Gustave Eiffel did not intentionally design the Eiffel Tower to function as an antenna, its material components, shape, and height made it almost ideal for broadcasting. The height of the tower allowed it to send radio waves. To enhance this ability even further, the tower was fitted with special transmitters in 1903. Soon after, a permanent underground radio station was operating at the Eiffel Tower. In 1925, the Eiffel Tower sent out the first public broadcast over the airwaves. The tower was also used to broadcast information from one French observatory all the way to America.

The Eiffel Tower had uses beyond the broadcasting of information. During World War I, the French used its communication equipment and antenna to intercept German military radio traffic. The tower had essentially provided the French with the means to spy on their enemies. They also used the Eiffel Tower’s radio capabilities to jam German military radio frequencies. This provided the French with a considerable military advantage because German military commanders were unable to talk to each other over the radio. As a result, they were unable to coordinate attacks on the French. They were also unable to warn each other of impending French attacks.

These days, the Eiffel Tower is still being used for communications. Its 70-foot antenna broadcasts many FM radio frequencies and television signals. The underground radio station beneath the tower is still in operation today. High winds sometimes blow through the area, making the tower and its equipment sway. An engineer is always on duty in case the equipment breaks down and stops broadcasting. Gustave Eiffel’s design unintentionally led to the construction of the world’s largest antenna, which saved it from certain destruction in the early 20th century. Today, the tower stands as a symbol of France and its usefulness and history as a modern communications tool is largely unknown by most visitors.
1. According to the article, when was the Eiffel Tower built?
   a) in 1889
   b) in 1898
   c) in 1903
   d) in 1925

2. It can be inferred from paragraph 1 that when the Eiffel Tower was first built people living in Paris thought that
   a) it was useless
   b) it was not attractive
   c) it was too bright
   d) it intercepted signals

3. The phrase “complained about” in paragraph 1 is closest in meaning to:
   a) attributed
   b) concealed
   c) criticized
   d) complimented

4. Paragraph 2 is about:
   a) the various components of the Eiffel Tower
   b) how the Eiffel Tower was adapted as a transmitter
   c) the first radio station that operated from the tower
   d) how the Eiffel Tower was used for exploring space

5. The word “this” in paragraph 2 refers to:
   a) airwaves
   b) send radio waves
   c) height of the tower
   d) special transmitters

6. According to the article, when were special transmitters affixed to the Eiffel Tower?
   a) in 1889
   b) in 1903
   c) in 1909
   d) in 1925
7. The word “operating” in paragraph 2 could be replaced with:
   a) creating
   b) enforcing
   c) behaving
   d) functioning

8. The word “means” in paragraph 3 could be replaced with:
   a) method
   b) median
   c) wealth
   d) average

9. The word “jam” in paragraph 3 could be replaced with:
   a) pack
   b) fill
   c) block
   d) crush

10. The word “they” in paragraph 3 refers to:
    a) the French
    b) attacks
    c) radios
    d) German military commanders

11. The word “High” in paragraph 4 refers to:
    a) Strong
    b) Tall
    c) Important
    d) Gentle

12. It can be inferred from the article that the Eifel Tower was not demolished twenty years after it was built because
    a) it was found to be useful
    b) people loved to climb the tower
    c) it was too large to demolish
    d) there were too many pieces of iron