

“Men occasionally stumble over the truth, but most of them pick themselves up and hurry off as if nothing ever happened.”

SIR WINSTON CHURCHILL (1874–1965),
BRITISH STATESMAN AND AUTHOR



THE REST OF ANTHONY’S STORY

Notes

Chapter 1: The Magic Picture Frame

1. Birth records, school transcripts, and physical examinations confirm Anthony to be twelve years old, but a careful analysis of Anthony’s narrative reveals that he spent thirty-four years in the past. Scientists theorize that the Picture Frame created a time paradox, resulting in a discrepancy between Anthony’s physical age (twelve) and his experiential age (forty-six).

Chapter 2: The Men on the Moon

1. Stars don’t twinkle when viewed in outer space, because there is no atmosphere. Stars appear to twinkle when viewed from the surface of the earth, because Earth’s atmosphere is turbulent—windy and always moving—causing the light from the stars to shift and bend and bounce. The phenomenon is called stellar scintillation.

And Anthony is alluding to the first words spoken by astronaut Neil Armstrong on the moon. When Armstrong stepped onto the surface of the moon, he said: “That’s one small step for man, one giant leap for mankind.” Some people believe that Armstrong intended to say “a man,” but NASA’s transcript of the Apollo 11 radio transmissions do not include the “a.”

2. Anthony is referring to: *The Fly* [1958, NR], and *Stargate* [1994, PG-13].
3. Anthony says that he saw the earth rise above the horizon of the moon, but in reality, that is not possible. The moon spins on its axis in such a way that, as it orbits the earth, it always presents the same face to the earth. As a result, when viewed from any single place on the moon, the earth remains in about the same spot in the sky at all times.
4. “Apollo 11 Technical Air-to-Ground Voice Transcription,” NASA Manned Spacecraft Center, Houston, TX, July 1969, time code 04:13:43:16. Asterisks denote clipping of words and phrases. Reprinted courtesy of NASA. Hereafter cited as: Transcript: Courtesy NASA. Note: First voice is Buzz Aldrin; second voice is Neil Armstrong.

5. The Apollo 11 mission patch depicts an eagle carrying an olive branch to the surface of the moon; the Apollo 11 crew contributed to the design of the patch. Astronaut Jim Lovell, Neil Armstrong’s backup for the Apollo 11 mission, introduced the idea of using an eagle on the patch. Astronaut Michael Collins sketched the first concept of an eagle flying over the lunar surface. The original drawing had an olive branch in the eagle’s beak, but the astronauts decided that the eagle looked too menacing that way, so in the final drawing the olive branch was placed in the eagle’s talons. The Apollo 11 mission patch became the basis for the design of the Eisenhower/Apollo 11 silver dollar coin, minted from 1971 to 1974.

✓ **Anthony Recommends:** *Space Mission Patches*, by Gregory Vogt [0761316132, NF, MS+].

6. Transcript: Courtesy NASA, time code 04:13:49:42.

7. Transcript: Courtesy NASA, time code 04:14:14:05.

8. Anthony is experiencing Newton’s First Law of Motion, also called the Law of Inertia. The law states: An object in motion will stay in motion, with constant speed and direction, until it encounters an outside force. So, if the moon’s gravity (an outside force) were zero, Anthony would float in a straight line forever, far out into space. The Law of Inertia is one of Isaac Newton’s Three Laws of Motion. The three laws describe force, acceleration, and momentum (Anthony’s momentum is equal to his mass multiplied by his velocity; his momentum would be the same on Earth). Newton’s First Law of Motion owes much to the experiments conducted by Galileo Galilei in the early part of the 17th century. Galileo, experimenting by rolling a ball up and down an inclined surface, surmised that a force—friction—caused the ball to slow down and stop. Galileo theorized that if the frictional force were reduced to zero, the ball would roll forever without stopping.

✓ **Anthony Recommends:** *Galileo*, by Paul Hightower [0766018709, NF, MS+]; *Isaac Newton*, by Margaret Anderson [0766018725, NF, MS+]; *The Isaac Newton School of Driving*, by Barry Parker [0801874173, NF, HS+].

9. Transcript: Courtesy NASA, time code 04:14:15:06.
10. Transcript: Courtesy NASA, time code 04:14:13:42.
11. Transcript: Courtesy NASA, time code 04:13:51:30.
12. Transcript: Courtesy NASA, time code 04:14:08:55.

EVA is the NASA abbreviation for Extra-Vehicular Activity. EVA is also called a “space walk.” The first EVA was by Soviet cosmonaut Aleksei Leonov on March 18, 1965; he was tethered to the Voskhod 2 spacecraft. The first American astronaut to “go EVA” was Ed White on June 4, 1965; he was tethered to the Gemini IV capsule. The first woman to go EVA was Soviet cosmonaut Svetlana Savitskaya on July 25, 1984; she was tethered to the Salyut 7 space station. The first non-tethered EVA was by American astronaut Bruce McCandless on February 7, 1984, during Space Shuttle *Challenger* mission 41-B.

Tethered or not, “going EVA” is very dangerous. The primary danger is collision with micrometeoroids and space debris. Micrometeoroids are high velocity fragments from passing comets that are as small as a grain of sand, and they can easily puncture an astronaut’s spacesuit. Space debris is trash that has been left in Earth orbit by decades of space exploration and satellite launches. In Anthony’s time, there are millions of fragments of rocket bodies, spacecraft parts, paint chips, and lost equipment in Earth’s orbit. Space debris objects larger than ten centimeters in diameter are tracked by NASA radar so that satellites and space shuttles can steer around them.

13. After the launch of Sputnik in 1957, millions of people went out at night to spot the lone artificial satellite. Even with the naked eye, it is easy to see a satellite moving through the night sky because it reflects the light of the sun and moves with constant speed. In Anthony’s time, thousands of satellites orbit the earth and it’s easy to spot one every few minutes on a clear night.
 - ✓ **Anthony Recommends:** *Secrets of the Night Sky*, by Bob Berman [006097687X, NF, MS+].
14. The man most responsible for the Soviet Union’s early success in space was Sergey Korolev. In 1933, Korolev directed the launch of the first liquid-propelled rocket in the Soviet Union, and it looked as though he would lead the Soviet Union’s rocket research programs. Then, in 1938, his boss was accused of treason and executed. Korolev was sentenced to ten years hard labor in a gold mine in Siberia. Half-way through his prison sentence, Korolev was released and ordered to develop rockets for the Soviet Army during World War II. In 1957,

Korolev created and tested the world’s first intercontinental ballistic missile (ICBM); it was Korolev’s ICBM engine technology that put Sputnik into orbit. In the 1960s, Korolev directed the Soviet Union’s Soyuz manned space missions. The Soviet Union kept Korolev’s role in its space program secret until his death in 1966.

For the record, here are some American space program achievements: The first American in space was Alan Shepard on May 5, 1961. The first American to orbit the earth was John Glenn on February 20, 1962. The first American to walk in space was Ed White on June 4, 1965. The first man to stand on the moon was Neil Armstrong on July 20, 1969. The first American woman to go into space was Sally Ride on June 18, 1983.

15. Courtesy NASA History Office.
16. “Kennedy to Johnson Memorandum re: Space Program,” 4/20/1961, courtesy JFK Library/U.S. National Archives and Records Administration (hereafter cited as: NARA).
17. “Special Message to the Congress on Urgent National Needs,” 5/25/1961, courtesy JFK Library/NARA.
18. Ibid.
19. Ibid.
20. “Address at Rice University on the Nation’s Space Effort,” 9/12/1962, courtesy JFK Library/NARA.
21. Anthony didn’t know it, but there was a significant debate over whether or not the Apollo 11 astronauts should plant the United States flag on the moon. The debate had its roots in the 1967 United Nations Outer Space Treaty signed by the United States. Article II of the treaty states: “Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means. . . .” Planting the U.S. flag on the moon, some people argued, constituted national appropriation. They suggested that the astronauts should plant the United Nations flag on the moon, instead. The U.S. Congress settled the issue on June 10, 1969, when it informed NASA that only the American flag would be raised on the moon. Congress made its decision law [PL.91–119, 83 Stat.202, 11/18/1969] with the following words: “The flag of the United States, and no other flag, shall be implanted or otherwise placed on the surface of the moon, or on the surface of any planet . . . as a part of a mission under any subsequent program, the funds for which are provided entirely by the

Government of the United States. This act is intended as a symbolic gesture of national pride in achievement and is not to be construed as a declaration of national appropriation.”

In 1980, American Dennis Hope staked a claim to the surface of the moon, and to the surfaces of all of the other eight planets (and their moons) in the solar system. Hope reasoned that the 1967 United Nations Outer Space Treaty gave him the legal right to stake a claim to solar system real estate because although the treaty forbade “national appropriation” of the moon (and planets), it neglected to mention whether or not individuals could own such property. Citing the precedent set by American western frontier settlers, Hope staked his claim. Hope also formed the Lunar Embassy Corporation to sell solar system real estate to interested buyers and land speculators.

22. Transcript: Courtesy NASA, time code 04:14:15:47.
 - The aircraft carrier USS *Hornet* recovered the Apollo 11 astronauts when they splashed down in the ocean on July 24, 1969.
 - ✓ **Anthony Recommends:** The USS *Hornet* Naval Museum [Alameda, CA, 510-521-8448, www.uss-hornet.org].
23. “Joint Meeting of the Two Houses of Congress to Receive the Apollo 11 Astronauts,” *The Congressional Record*, 9/16/1969. Reprinted courtesy of *The Congressional Record*. Hereafter cited as: Courtesy CR: 9/16/1969.
24. Transcript: Courtesy NASA, time code 07:09:34:44.
25. Author Tom Wolfe coined the term, “The Right Stuff,” when he titled his book about the test pilots and astronauts who started the U.S. space program.
 - One man widely credited with helping the American space program become a success is Wernher von Braun. Von Braun developed rocket weapons for Nazi Germany during World War II. Fearing capture by the Soviet Army at the end of the war, von Braun loaded three hundred railroad boxcars with top-secret German rocket program documents, put his team of engineers aboard the train, and delivered the train into American hands. Von Braun became a U.S. citizen in 1955. Working for NASA, von Braun developed the rockets that carried men into space. Von Braun also wrote books describing space stations, space shuttles, and manned missions to Mars. The books were so popular that Walt Disney collaborated with von Braun to produce television programs dramatizing America’s future in space.
 - ✓ **Anthony Recommends:** *Tomorrowland: Disney in Space* [2003, D, NR].

26. If Anthony had spent more time at NASA with the Mercury Seven, he might have run into the “Mercury Thirteen.” In 1960, NASA began a research program to determine whether women could qualify as astronauts. America’s best female pilots were invited to undergo the same physical and psychological tests as the Mercury Seven candidates. Of those women invited to try, thirteen passed the tests and were enrolled in NASA’s experimental female astronaut training program. The Mercury Thirteen were: Rhea Allison Woltman, Myrtle Cagle, Geraldyn “Jerrie” Cobb, twin sisters Jan and Marion Dietrich, Mary Wallace “Wally” Funk, Sarah Gorlick Ratley, Jane “Janey” Briggs Hart, Jean Hixon, Irene Leverton, Geraldine “Jerrie” Sloan Truhill, Bernice “Bea” Trimble Steadman, and Gene Stumbough Jessen.

Even though the thirteen women performed well, the female astronaut program was abandoned in 1964. NASA feared the negative publicity that might result if a female astronaut was killed in a space program accident. Congressional hearings on the subject of women in space also led to the program’s demise, and society’s discrimination against women played a role. Before the program ended, NASA hinted that Jerrie Cobb would have been the first woman to go into space. As a flyer in her twenties, Cobb had set world records for speed, distance, and altitude. In 1949, Cobb was awarded the Amelia Earhart Gold Medal of Achievement.

Jackie Cochran, the famous American female pilot of World War II, served as a consultant to NASA during the female astronaut experiment. During World War II, Jackie Cochran was director of the Women’s Air Force Service Pilots (WASP) program. Cochran directed the training of civilian women pilots in case they were needed for the war effort. More than one thousand women trained and flew military missions ferrying aircraft and towing targets. In 1953, piloting an F-86 Sabre jet, Jackie Cochran became the first woman to break the sound barrier.

✓ **Anthony Recommends:** *Space for Women*, by Pamela Freni [1931643121, NF, MS+]; *Those Wonderful Women in Their Flying Machines*, by Sally Keil [0962765902, NF, MS+]; *The Mercury 13* [2000, D, NR].

27. In April 2001, American businessman Dennis Tito became the world’s first space tourist when he visited the International Space Station as a guest of the Russians; he paid \$20 million for his tour. In May 2002, South African Mark Shuttleworth spent a week at the International Space Station; he paid \$20 million to tag along with the Russian cosmonauts. In August 2002, it looked like Lance Bass, member of the rock band N-Sync, would be the world’s third space tourist, but his funding never came through. In March 2004, American businessman

Gregory Olsen announced that he would pay the Russians \$20 million to become the third space tourist; his trip is scheduled for April 2005. In September 2004, British entrepreneur Richard Branson announced that he would create a company called Virgin Galactic that would one day offer trips into outer space; William Shatner, a star of the *Star Trek* TV series and motion pictures, said he would buy a ticket.

Anthony thinks space tourism is a great idea, but he also knows that America needs serious, specially trained astronauts to explore the “final frontier.” You can become an astronaut by working hard in school, excelling in math and science, staying physically fit, and applying to NASA. Joining the Boy Scouts or the Girl Scouts can also help. According to NASA, 70 percent of U.S. astronauts have been scouting alumni. Candidates for commander/pilot astronaut positions should have at least one thousand hours flying time in jet aircraft, plus at least a bachelor’s degree in engineering, biological science, physical science, or mathematics. Candidates for mission specialist astronaut positions should have advanced master’s degrees or doctorates. All astronaut candidates must pass rigorous physical tests.

✓ **Anthony Recommends:** The Official NASA Astronaut Selection Web site [www.nasajobs.nasa.gov/astronauts].

28. Transcript: Courtesy NASA, time code 04:14:25:09.

29. Transcript: Courtesy NASA, time code 04:14:41:25.

30. Seamstresses using needle and thread and pots of glue assembled the high-tech Apollo 11 spacesuits by hand; the seamstresses got to know the astronauts personally because the spacesuits were made to fit the astronauts individually.

✓ **Anthony Recommends:** *U.S. Space Gear*, by Lillian Kozloski [1560983825, NF, MS+].

31. On January 28, 1986, Space Shuttle *Challenger* exploded shortly after liftoff, killing all aboard. In his address to the nation that day, President Reagan said: “And I want to say something to the schoolchildren of America who were watching the live coverage of the shuttle’s take-off. I know it is hard to understand, but sometimes, painful things like this happen. It’s all part of the process of exploration and discovery. It’s all part of taking a chance and expanding man’s horizons. The future doesn’t belong to the fainthearted; it belongs to the brave. The *Challenger* crew was pulling us into the future, and we’ll continue to follow them.” [Source: “Address to the Nation on the *Challenger* Disaster,” 1/28/1986, courtesy Reagan Library/NARA.]

32. *The Dream of Spaceflight*, by Wyn Wachhorst [0465090575, NF, HS+], page xiv. Reprinted by permission of Buzz Aldrin.

33. *First on the Moon*, by Neil Armstrong, Michael Collins, Edwin Aldrin [156852398X, NF, HS+], page 193. Reprinted by permission of Konecky & Konecky.

34. Courtesy NASA History Office.

35. Courtesy CR: 9/16/1969.

36. *Carrying the Fire*, by Michael Collins [081541028X, NF, HS+], page 352. Excerpt from “To a Husband Who Seeks the Stars” and excerpt from *Carrying the Fire* by Michael Collins copyright © 1976 by Michael Collins. Reprinted by permission of Farrar, Straus and Giroux, LLC.

37. “Special Message to the Congress on Urgent National Needs,” 5/25/1961, courtesy JFK Library/NARA.

38. *First on the Moon*, by Neil Armstrong, Michael Collins, Edwin Aldrin [156852398X, NF, HS+], page 32. Reprinted by permission of Konecky & Konecky.

39. Transcript: Courtesy NASA, time code 04:15:02:08.

40. The aurora borealis can be seen from many locations in North America.

✓ **Anthony Recommends:** *Northern Lights*, by Calvin Hall [1570612900, NF, MS+].

41. Transcript: Courtesy NASA, time code 04:15:11:15.

42. The first person to hit a golf ball on the moon was astronaut Alan Shepard, during the Apollo 14 mission. Shepard attached a golf club head to a lunar soil sampler scoop handle, and then used the makeshift golf club to hit the longest golf ball drive in history; the drive was estimated at over 400 yards. As the ball sailed out of sight, Shepard was heard to say: “. . . miles and miles and miles.” The absence of an atmosphere on the moon helped Shepard break distance records, but on Earth, a golf ball’s aerodynamic efficiency (how easily the ball moves through the air) makes all the difference in how far it will fly. When Anthony said that there was NASA technology in the longest-flying golf balls, he was referring to the Wilson Ultra 500 Series golf balls introduced in 1995. A Wilson company engineer who had once worked for NASA came up with the golf ball design that optimized lift and range: 500 dimples arranged in a pattern of 60 spherical triangles.

✓ **Anthony Recommends:** *Inventions from Outer Space*, by David Baker [0375409793, NF, MS+]; *It Came from Outer Space*, by Marjolijn Bijlefeld [0313322228, NF, MS+].

43. “Address at Rice University on the Nation’s Space Effort,” 9/12/1962, courtesy JFK Library/NARA.

44. Courtesy CR: 9/16/1969.

45. In 1977, NASA launched the twin spacecraft, *Voyager 1* and *Voyager 2*. The five-year mission was to conduct studies of Jupiter and Saturn. After the spacecraft completed the mission, NASA reprogrammed the Voyager twins to explore deeper regions of space. In Anthony’s time, the Voyager twins are headed out of the solar system. Aboard each Voyager spacecraft is a gold-coated phonograph record inscribed with the music, images, and sounds of the planet Earth, including the following: directions to the planet Earth; diagrams and medical images of human anatomy; a description of human DNA; photographs of nature, cities, and human endeavor; recordings of greetings in all the major human languages; sounds of the animals on earth; recordings of music. The last human voice on the Voyager recording is that of Carl Sagan’s five-year-old son, Nick, saying: “Hello from the children of planet Earth.”

✓ **Anthony Recommends:** *Beyond*, by Michael Benson [0810945312, NF, MS+]; *Murmurs of Earth*, by Carl Sagan [0345315367, NF, MS+]; *Star Trek: The Motion Picture* [1979, PG]; The NASA/Jet Propulsion Laboratory Voyager Web site [<http://voyager.jpl.nasa.gov>].

46. In Anthony’s time, support for space adventures has waned and the importance of bold space exploration seems to have been forgotten. In Anthony’s time, no child has seen a man walk on the moon, and NASA sends astronauts on space shuttle missions that the public barely notices. About the situation, former astronaut Buzz Aldrin wrote: “A lasting human presence in space won’t result from sudden leaps like Apollo; it has to move outward on a broad base of permanent support. But what we lack at present is less the technology than the vision.” [Source: *The Dream of Spaceflight*, by Wyn Wachhorst (0465090575, NF, HS+), page xiv. Reprinted by permission of Buzz Aldrin.]

On January 14, 2004, President George W. Bush announced “a new plan to explore space and extend a human presence across our solar system.” He outlined a plan for America to “return to the moon by 2020, as a launching point for missions beyond.” The president said: “Mankind is drawn to the heavens for the same reason we

were once drawn into unknown lands and across the open sea. We choose to explore space because doing so improves our lives, and lifts our national spirit. So let us continue the journey.” [Source: “President Bush Announces New Vision for Space Exploration Program,” 1/14/2004, courtesy The White House.]

47. Courtesy CR: 9/16/1969.

48. Transcript: Courtesy NASA, time code 04:15:39:13.

49. As the Apollo 11 astronauts climbed the lunar module’s ladder, Neil Armstrong reminded Buzz Aldrin to leave behind some items that he had been carrying in his spacesuit pocket. The items were as follows: an Apollo 1 mission patch, a solid gold olive branch, a silicon message disk, and two Soviet cosmonaut medals. The Apollo 1 mission patch honored the American astronauts who died in the 1967 Apollo 1 fire. The gold olive branch signified that the Americans had “come in peace for all mankind.” The silicon message disk carried goodwill statements by Presidents Eisenhower, Kennedy, Johnson, and Nixon, a listing of the leadership of the U.S. Congress, the names of NASA’s management team, and messages from leaders of seventy-three countries around the world; the disk was inside the aluminum capsule that Anthony saw on the surface of the moon. The Soviet cosmonaut medals had once belonged to Yuri Gagarin, the first man in space, and Vladimir Komarov, who died aboard Soyuz 1 in 1967; American astronaut Frank Borman obtained the medals from Gagarin’s widow. Two additional items that Anthony did not see were brought to the moon, and then returned to Earth: a stamped envelope postmarked on route by the Apollo 11 crew, and a piece of wood and fabric from the Wright brothers’ airplane that made history’s first powered flight on December 17, 1903.

50. Transcript: Courtesy NASA, time code 04:16:06:16.

51. *A Man on the Moon*, by Andrew Chaikin [0140272011, NF, HS+], page 204. From *A Man on the Moon* by Andrew Chaikin, copyright © 1994 by Andrew Chaikin. Used by permission of Viking Penguin, a division of Penguin Group (USA) Inc.

52. Anthony didn’t know it, but after the Apollo 11 astronauts lifted off from the moon, President Nixon quietly discarded a speech he thankfully wouldn’t have to give—the speech had been prepared in case the Apollo 11 mission met with disaster. If tragedy occurred, NASA planned to close down communications with the astronauts and let them die on the moon in un-televised peace, or commit suicide, while the president addressed the American people with the words:

“Fate has ordained that the men who went to the moon to explore in peace will stay on the moon to rest in peace. . . .” [Source: “In Event of Moon Disaster,” 1969, courtesy Nixon Library/NARA.]

53. Anthony is quoting Tycho Brahe (1546–1601), the Danish astronomer.

54. *The Last Man on the Moon*, by Eugene Cernan [0312199066, NF, HS+], page 347. Copyright © 1999 by Eugene Cernan. From *The Last Man on the Moon* by Eugene Cernan. Reprinted by permission of St. Martin’s Press, LLC.

55. Courtesy CR: 9/16/1969.

Chapter 3: To America I Will Go

1. The A/G Vulcan Shipyard in Stettin, Germany, built the SS *Konig Albert* in 1889. The steam-powered, twin-screw ship weighed 10,484 gross tons, cruised at a speed of 15.5 knots, and was 521 feet long and 60 feet wide. The ship carried 2,175 passengers: 257 in first class, 119 in second class, and 1,799 in third class, or steerage. The ship was assigned to the transatlantic crossing in 1905. Seized by the Italian government in 1915, and renamed the *Ferdinando Palasciano*, the ship served as a transport for the Italian Navy during World War I. The ship was scrapped in 1926.

2. In 1910, the U.S. Government placed undercover agents on transatlantic ships to learn more about the conditions immigrants faced. About sleeping berths, the agents reported: “The mattress, and the pillow if there is one, is filled with straw or seaweed. . . . The berth, 6 feet long and 2 feet wide, and with 2½ feet of space above it, is all the space to which the steerage passenger can assert a definite right.” About ship ventilation: “When to this very limited space and much filth and stench is added inadequate means of ventilation, the result is almost unendurable. . . . In many instances persons, after recovering from seasickness, continue to lie in their berths in a sort of stupor, due to breathing air whose oxygen has been mostly replaced by foul gases. . . . In two steamers the open deck was always filled long before daylight by those who could no longer endure the foul air between decks.” [Source: “Report of the Immigration Commission on Steerage Conditions,” U.S. Congress, 12/5/1910.]

3. To the immigrants who landed there, Ellis Island was both an “Island of Hope” and an “Island of Tears.” The island represented hope because it was the doorway to America, and a new life filled with opportunity. But the island was also a tearful place because some

people were denied entry into the United States; they were turned away at America’s “Golden Door.”

As Anthony observed, the Statue of Liberty was the first glimpse that immigrants arriving by ship had of America. The Statue of Liberty represented America’s promise of acceptance, freedom, and opportunity. In 1883, American writer Emma Lazarus wrote a sonnet entitled *The New Colossus* to express her belief in America as a refuge for the oppressed of other nations. In 1903, the sonnet was inscribed on a bronze plaque and mounted inside the base of the Statue of Liberty. The last few lines of the sonnet are the most famous:

Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, the tempest-tost to me,
I lift my lamp beside the Golden Door!

The Statue of Liberty was a gift from the people of France. The plan was to present the statue to the United States in 1876, in time to commemorate the centennial of the American Declaration of Independence, but lack of funds delayed the statue’s completion until 1885. French sculptor Frederic Auguste Bartholdi designed the statue; French engineer Alexandre Gustave Eiffel helped build it. When the statue was completed, it was disassembled, packed into 214 separate crates, put aboard a steamship, and sent to America where it was reassembled on its pedestal on Liberty Island in New York Harbor. The model for the Statue of Liberty was Bartholdi’s mother, Charlotte.

✓ **Anthony Recommends:** *Liberty for All*, by Lee Iacocca [0966333713, NF, MS+]; *The Statue of Liberty Encyclopedia*, by Barry Moreno [0684862271, NF, MS+]; *Ken Burns’ America: The Statue of Liberty* [1996, D, NR].

4. Immigration law in the early 1900s was designed to prevent people from entering the country who might become a burden to American taxpayers. The medical officials at Ellis Island were instructed to examine immigrants for diseases and disabilities. Because thousands of immigrants came through Ellis Island every day, the doctors had to develop a shorthand code for their diagnosis—the chalk marks that Anthony saw. Some of the codes included: PG for pregnant, K for hernia, FT for feet, L for lameness, H for heart trouble, F for facial rash, E for eye disease, and X for suspected mental disability. A chalk mark usually meant that the immigrant would be detained on Ellis Island until a more detailed examination could be performed, but an immigrant marked with an X or an E stood a good chance of being

sent back to their home country. Only 2 percent of new arrivals were denied entry for medical reasons, but it was a heartbreaking experience when it happened to only one member of a family traveling together. The family would have to decide whether to return home together, or split up and allow some members of the family to enter the United States. Anthony reported that he saw a family make just such a decision. First, he saw a mother marked both X and E taken from the line and led to an examination room. Then, he saw the father write instructions on the children’s paper tags. Most likely, the parents had decided to let their children continue on to America alone, wearing their father’s written instructions to someone who would be waiting for them in New York City.

5. The medical officials at Ellis Island used buttonhooks to upturn the eyelids of new arrivals and inspect for signs of the highly contagious eye disease called trachoma; the examination hurt. Even in Anthony’s time, trachoma is the world’s leading cause of preventable blindness. It is estimated that six million people are blind from the disease, mostly in the poorer regions of the world where people have limited access to clean water and health care.

6. Anthony is referring to the Great Hall, also called the Registry Room, on the second floor of the Ellis Island Federal Immigration Station building. The Great Hall was 200 feet long, 100 feet wide, and 56 feet high; the room was large enough to process 5,000 new arrivals every day. In 1907, there was a large U.S. flag hanging on the wall. Anthony’s observation is correct: There were forty-five stars on the U.S. flag in 1907.

✓ **Anthony Recommends:** *Stars & Stripes Forever*, by Richard Schneider [0060525371, NF, MS+]; *Stars and Stripes Forever* [John Philip Sousa, 1896].

7. Questioning new arrivals and documenting their intentions in the United States was the primary duty of immigration officials at Ellis Island, and it was a big job. From 1901 to 1910, 8,795,386 people immigrated to the United States, mostly through Ellis Island. From 1892 to 1954, Ellis Island officials processed and documented more than 22 million immigrant, passenger, and crew arrivals.

8. Passenger Manifest: SS *Konig Albert*, Left Naples 8/23/1907, Arrived New York 9/5/1907.

9. The final staircase had three exits: The first exit was designated “New York Outside,” and led to a ferry to New York City where an immigrant’s sponsor would be waiting; the second exit was designated

“New York Detained,” and led to a holding area where immigrants would remain until a sponsor arrived to claim them; the third exit was designated “Railroads,” and led to a ferry that would take the new arrivals to Hoboken, NJ, to catch trains for all points west. The immigrants called the final staircase the “Stairs of Separation,” because they might never again see any of the people with whom they had crossed the Atlantic Ocean. In 1907, nearly one million immigrants walked down the Stairs of Separation.

10. At the turn of the 20th century, immigrants referred to America as a place “where the streets are paved with gold,” meaning that the United States was a place where jobs could be found and money could be made. Francesco’s humorous twist on the original saying was also a popular immigrant anecdote at the time; he was not the first to make the comment.

11. “Wop” and “Dago” were derogatory terms applied to Italian immigrants. The term Wop probably came from the “Without Passport” notation that immigration officials put on the entry papers of immigrants who had fled their home country without getting a valid passport. The term Dago may have had its origins in the fact that many Italian immigrants applied for day-labor jobs; hence, “day-go.” Each successive wave of immigrants had to deal with undeserved discrimination and prejudice in the New World, not only from Americans, but from immigrants of other nationalities as well. At the turn of the 20th century, however, discrimination against Italians was especially bad; in 1910, Italian immigrants were some of the lowest paid workers in America.

Perhaps the worst case of discrimination—and violence—against Italian immigrants occurred in 1891 in New Orleans. A gang of men had shot and killed David Hennessy, the city’s chief of police. Before he died, Hennessey reportedly said the word “Italians.” The police quickly rounded up dozens of suspects, and suspicion finally fell on ten Italian immigrants. But at their trial, all ten suspects were acquitted for lack of evidence. Not satisfied, newspaper editors and politicians fanned the flames of prejudice, blaming Italians in general for a number of the city’s ills, not just the murder of Chief Hennessey. On March 14, 1891, an angry mob of several thousand citizens of New Orleans stormed the jail and hanged and shot the ten innocent men, plus one man being held for a lesser and unrelated crime. Eight of the murdered men were naturalized American citizens, and three were Italian citizens. The incident sparked an official protest from the government of Italy (diplomatic relations with the United States were severed), requiring President Benjamin Harrison to intervene.