## S-I-T (SURPRISING-INTERESTING-TROUBLING): QUOTES ABOUT THE SPACE RACE

## What do you find **surprising**, **interesting**, and/or **troubling** about the following quotes?

- 1. "There was no second chance. We knew that. We took our work seriously, many of us beginning this journey while still in our 20s. Coming up with solutions and new ideas was an adventure. Dedication and commitment were a given. Mutual respect was across the board. Because software was a mystery, a black box, upper management gave us total freedom and trust. We had to find a way and we did. Looking back, we were the luckiest people in the world; there was no choice but to be pioneers." –Margaret Hamilton, MIT computer scientist who worked on the Apollo program
- 2. "I am immensely glad that my beloved fatherland was the first in history to penetrate cosmos. The first airplane, the first satellite, the first cosmic spaceship and the first manned flight into space, these are the stages on the great road of my fatherland toward the conquest of the mysteries of nature." —Yuri Gagarin, Soviet cosmonaut and first person in space
- 3. "But why, some say, the moon? Why choose this as our goal? And they may well ask why climb the highest mountain. Why, 35 years ago, fly the Atlantic? Why does Rice play Texas? We choose to go to the moon...in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone and one which we intend to win...." —President John F. Kennedy
- 4. "The early trajectory was a parabola, and it was easy to predict where [Alan Shepard's spacecraft] would be at any point... Early on, when they said they wanted the capsule to come down at a certain place, they were trying to compute when it should start. I said, 'Let me do it. You tell me when you want it and where you want it to land, and I'll do it backwards and tell you when to take off.'" –Katharine Johnson, mathematician and one of the first African-American women to work for NASA
- 5. "If our countries [USSR and US] pooled their efforts scientific, technical, and material to master the universe, this would be very beneficial for the advance of science and would be joyfully acclaimed by all peoples who would like to see scientific achievements benefit man and not be used for 'cold war' purposes and the arms race." -Nikita Khrushchev, Soviet leader
- 6. "I immediately went out in the backyard like everybody else did in Oklahoma City [to] see if I could see [Sputnik], and I could. I could see it with the naked eye. It was like being invaded here in Oklahoma City. It was unimaginable that somebody could be coming over Oklahoma skies, and you could see something from Russia. It was scary.... We had just come out of the '50s with the atom bomb experience threat, and then here's something orbiting that is right

## over our homes. And what could it carry?" —Jerry Elliott, Osage-Cherokee physicist and NASA employee who helped save the lives of the Apollo 13 astronauts

- 7. "I went to manual control and continued in that mode during the second and third orbits and during re-entry.... The malfunction just forced me to prove very rapidly what had been planned over a longer period of time.... It made for a very spectacular re-entry from where I was sitting. Big chunks of the burning material came flying by the window." —John Glenn, describing how he avoided disaster after orbiting Earth for the first time
- 8. "You just sort of have to put [the threat of disaster] out of your mind. There's always the possibility that you can have a catastrophic failure, of course. It could happen on any flight. It could happen on the last one as well as the first one. You just plan as best [as] you can to take care of all these eventualities, and you get a well-trained crew, and you go fly." —Gus Grissom, discussing the risks of space travel, shortly before he died in the Apollo 1 tragedy
- 9. "As I pulled myself back toward the airlock, I heard Pasha talking to me: 'It's time to come back in.' I realized I had been floating free in space for over 10 minutes. In that moment my mind flickered back for a second to my childhood, to my mother opening the window at home and calling to me as I played outside with my friends, 'Lyosha, it's time to come inside now.'"

  —Cosmonaut Alexei Leonov, recalling the moment he took the first-ever spacewalk

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