

TITLE: THE Gallaudet Eleven

PAGES: 1 to 4

PAGE 1

PANEL 1

Description: Establishing shot. Eleven men communicating with one another through sign language in space suits.

Caption Narrator:

The world is full of people. Over eight billion humans, to be exact. But of those billions of people, just over 700 have been to space. Broken down into a percentage that is less than 0.00001% of the world's population. Yet it is within those billions of people who haven't been to space that are necessary in making spaceflight possible. Among these brilliant astronomers and scientific giants who revolutionized spaceflight is a lesser-known group dubbed the Gallaudet Eleven. An unrecognized crew that played an essential role in helping the United States land the first men on the Moon in 1969.

This is the remarkable true story of the "Gallaudet Eleven," a brave team of deaf men who were instrumental in shaping America's astronaut training program. Their names are Bob Greenmun, Harold Domich, Barron Gulak, Raymond Harper, Jerald Jordan, Harry Larson, David Myers, Donald Peterson, Raymond Piper, Alvin Steele, and John Zakutney.

PANEL 2

Visual Description: Long Shot of a floating spacecraft in space.

Caption Narrator: "Before we begin our mission to learn about these unsung heroes, imagine the following scenario."

SFX:

Beep, Beep, Beep

Astronaut Phoebe:

"Mission control, we've had a problem here! There's been an explosion! Do.. you.. copy...?"

Mission Control OP: "Affirmative, we copy. What kind of explosion? Did space junk hit the aircraft? Did cosmic radiation damage the ship?"

PANEL 3

Visual Description: Wide shot of a group of astronauts in a spacecraft vomiting as they float.

Astronaut Phoebe:

"Negative, there has been an explosion of vomit, and it's everywhere! Astronaut Lily's upchuck is floating through the air and entering the ship's electrical equipment. Astronaut Glover threw up in his helmet, and now it's trapped inside. He can't see and is bouncing off the walls like a balloon. And Astronaut Sam can't help me with this spew-Armageddon because they have puffy head bird legs and need to pee immediately."

PAGE 2

PANEL 1

Visual Description: Medium shot. The narrator is talking while floating in space surrounded by space junk.

Caption Narrator:

"Now, I know you probably have a few questions. Like, why were the astronauts throwing up so much? Is puffy head, bird legs a real thing? And why does this story begin with an imaginary scenario? Isn't this supposed to be a non-fiction book? Yes, it is. But before we get into the real stuff, I wanted you to envision astronauts having explosive vomit."

SIDEBAR / INSET BOX: *Space junk* or orbital debris is "junk" that is circling the Earth. Most of this clutter consists of scraps from humans launching objects into space, such as spacecrafts, rockets, and satellites. Types of debris can include tiny flecks of paint from spacecrafts, as well as parts of operational and non-operational rockets and satellites. Orbital debris has become a serious issue for space exploration because the large number of debris orbiting the Earth travels at very high speeds. Objects can reach speeds of up to 18,000 miles per hour. A speck of chipped paint might seem harmless, but traveling nearly 20,000 miles per hour, it could rip through almost anything in its path. This environment is hazardous to astronauts, spacecrafts, and satellites, as debris could collide with them.

SIDEBAR / INSET BOX: What is *Puffy Head Bird Legs*? Have you ever hung upside down on the monkey bars for a while? Have you noticed that when you do that, you start to feel dizzy, and your head feels full? This is because blood rushes to your head. Well, this is similar to what happens to astronauts in space. Humans have fluids in their bodies, and on Earth, these fluids are perfectly balanced to suit Earth's gravity. However, in microgravity (very low gravity), about a gallon and a half of blood and other body fluids are pushed "upward" from the legs and abdomen toward the heart and head. This creates a puffier head and thinner legs. And how does tinkling help in this peculiar situation? An astronaut's uncomfortable, puffy head will eventually go away after peeing out excess fluid.

PANEL 2

Visual Description: Close-up of a child shouting, "*The emesis is coming! The emesis is coming!*"

Caption Narrator:

You read that right, vomit. Or if you want to sound fancy in front of your friends, you can call puking emesis (EH-meh-sis). That's the medical term for vomiting. It's essential to this story. And as the author with no authority over your life, I give you permission to go around saying the word emesis. For example, if someone you know is about to be sick, you can shout, *The emesis is coming! The emesis is coming!* Then, of course, apologize so you don't come across as rude.

When America was trying to land the first men on the moon, scenarios like the fictional account you just read were at the forefront of scientists' minds. The astronauts in the made-up scenario were experiencing a real condition called Space Adaptation Syndrome. This is a unique type of motion sickness that astronauts experience in space. (Believe it or not, puffy head bird legs is a condition astronauts experience in space, too!) In space, motion sickness that causes nausea and vomiting is dangerous. Therefore, scientists desperately sought a way to prevent motion sickness that could jeopardize spaceflight. To help achieve this mission, scientists called on the Gallaudet Eleven.

PANEL 3

Visual Description: The eleven deaf men who made up the group dubbed The Gallaudet eleven were Bob Greenmun, Harold Domich, Barron Gulak, Raymond Harper, Jerald Jordan, Harry Larson, David Myers, Donald Peterson, Raymond Piper, Alvin Steele, and John Zakutney.

Caption Narrator:

As for how the dozen deaf men nicknamed the Gallaudet Eleven contributed to the first men landing on the Moon, well, that has a lot to do with the astronaut training program. And to understand how, we must go back in time to meet our heroes. Now, readers, this is where our story gets historic.

PAGE 3

PANEL 1

Visual Description: Close Up: John F. Kennedy giving his **September 12, 1962**, space exploration speech at Rice University Stadium in Houston, Texas.

Caption Narrator:

Beginning in the late 1940s, the United States and the Soviet Union were in a historic war. The battle between these two dominant nations was not one of combat but of power. This lack of fighting is why the conflict was labeled the Cold War. To prove their dominance, each country desperately wanted to show the world that its nation was the strongest, the smartest, and the most innovative. It was a competition to be considered the ultimate superpower.