

MINECRAFT & SCIENCE

INTERNATIONAL SPACE STATION

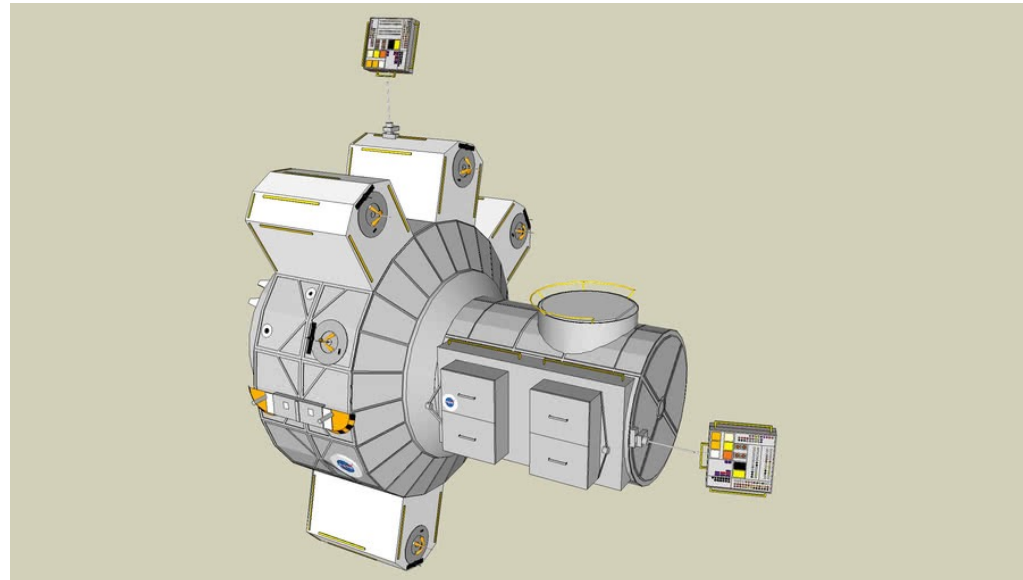
VERSION 1.0

Lesson 3

Airlock

THE AIRLOCK ON THE ISS

- What is an airlock?
 - A module that has two doors
 - Can seal against pressure
 - Allows the passage of people and objects to and from space
- The primary airlock on the ISS is called the *Quest Joint Airlock*
- It was launched on July 14, 2001



THE AIRLOCK ON THE ISS



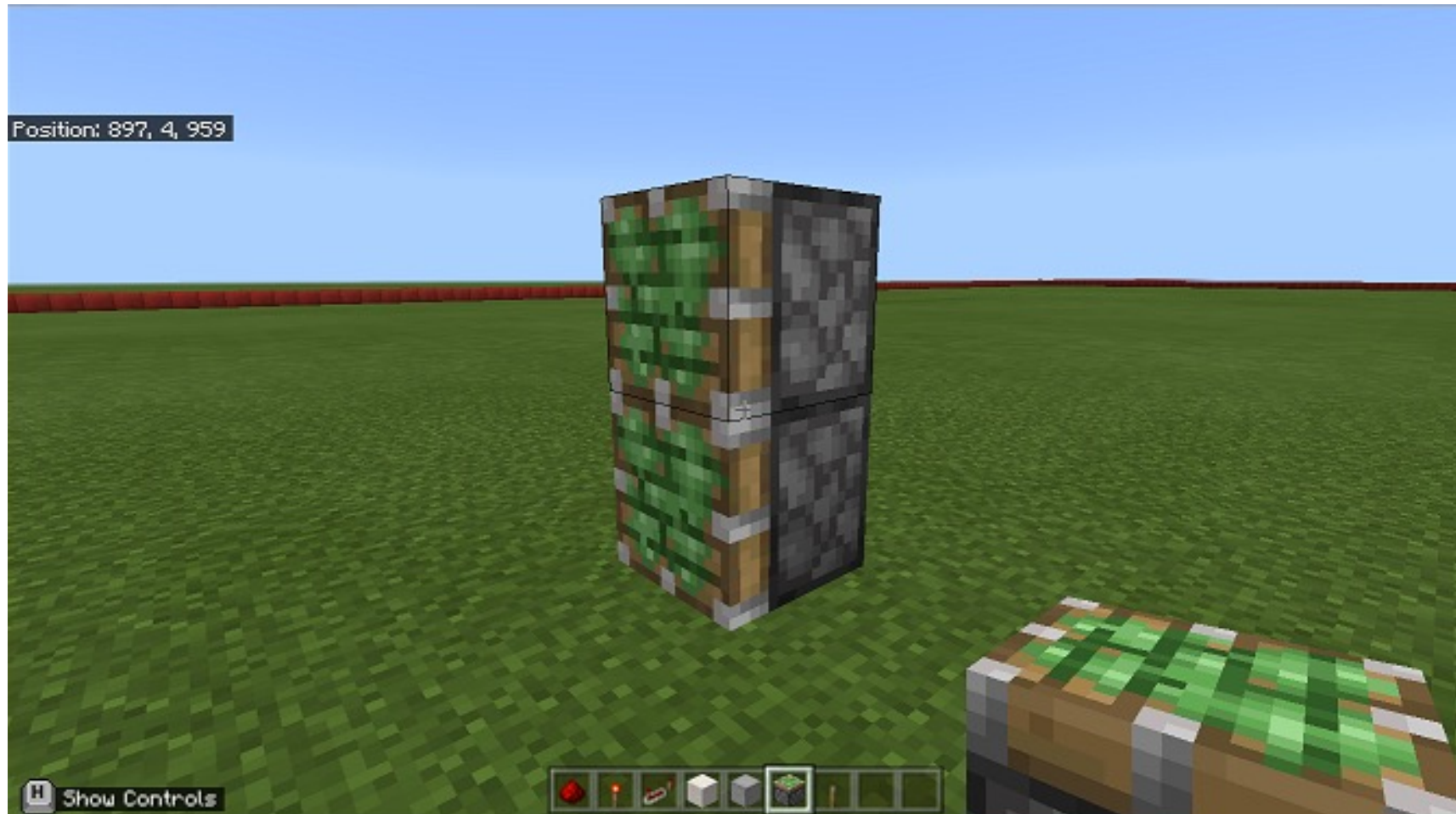
MINECRAFT AIRLOCK

- To build an airlock we will need to use redstone
- We will need to create two separate piston doors for the airlock
- The materials needed are:
 - Lever
 - Redstone
 - Redstone Torches
 - Sticky Pistons
 - Redstone Repeaters
 - Any two blocks



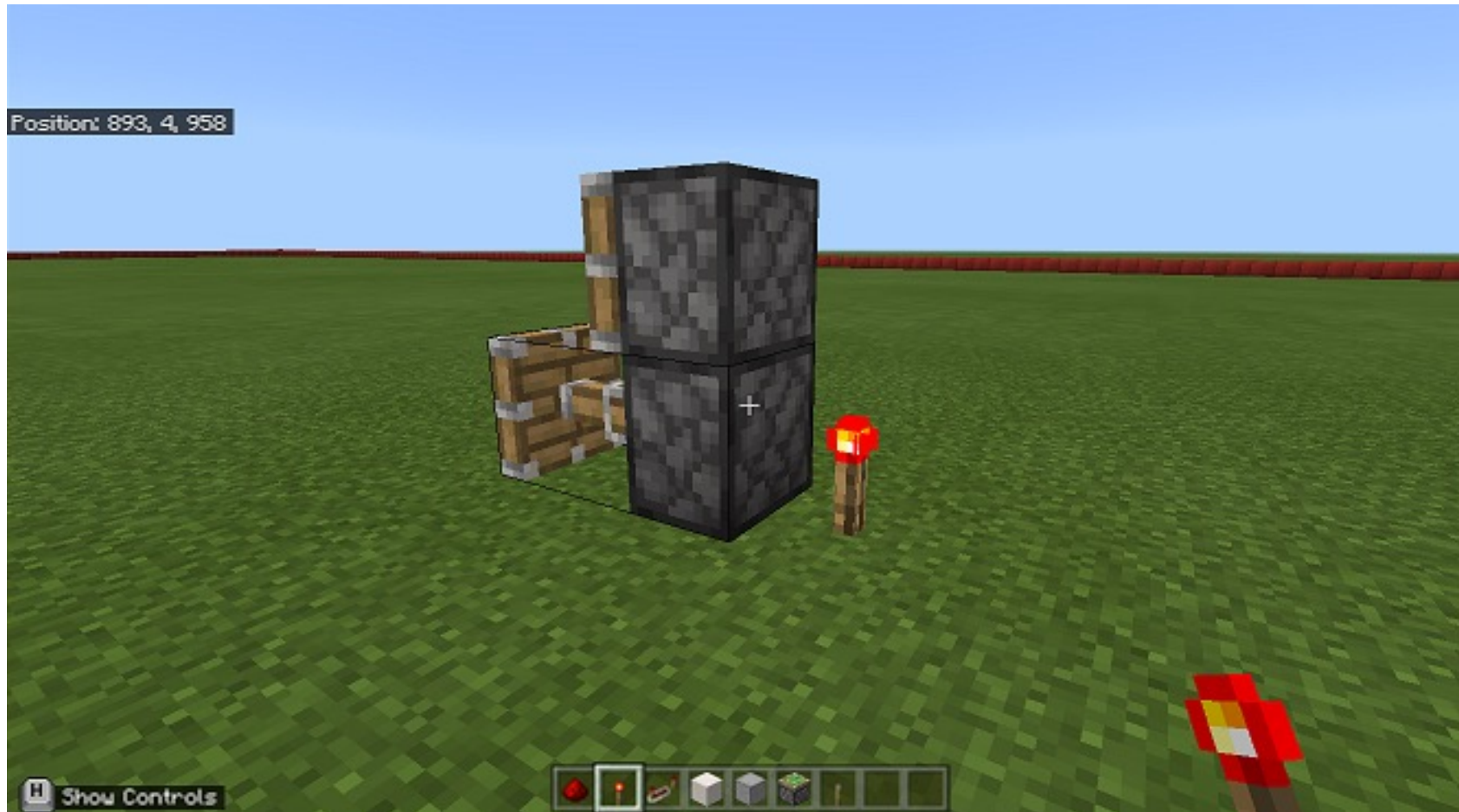
MINECRAFT AIRLOCK

1. Place two sticky piston, one on top of the other



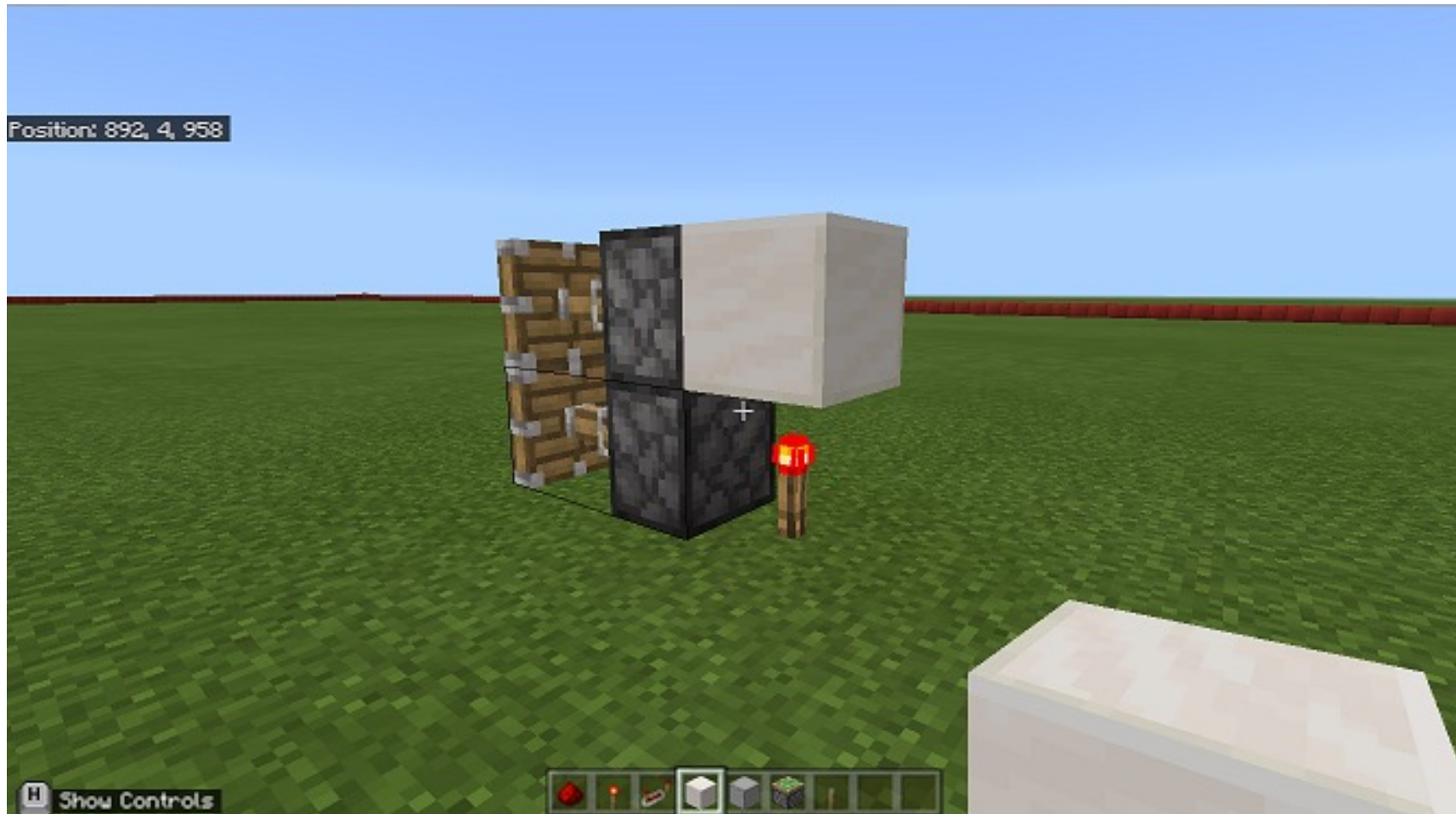
MINECRAFT AIRLOCK

2. Place a Redstone Torch behind the bottom sticky piston



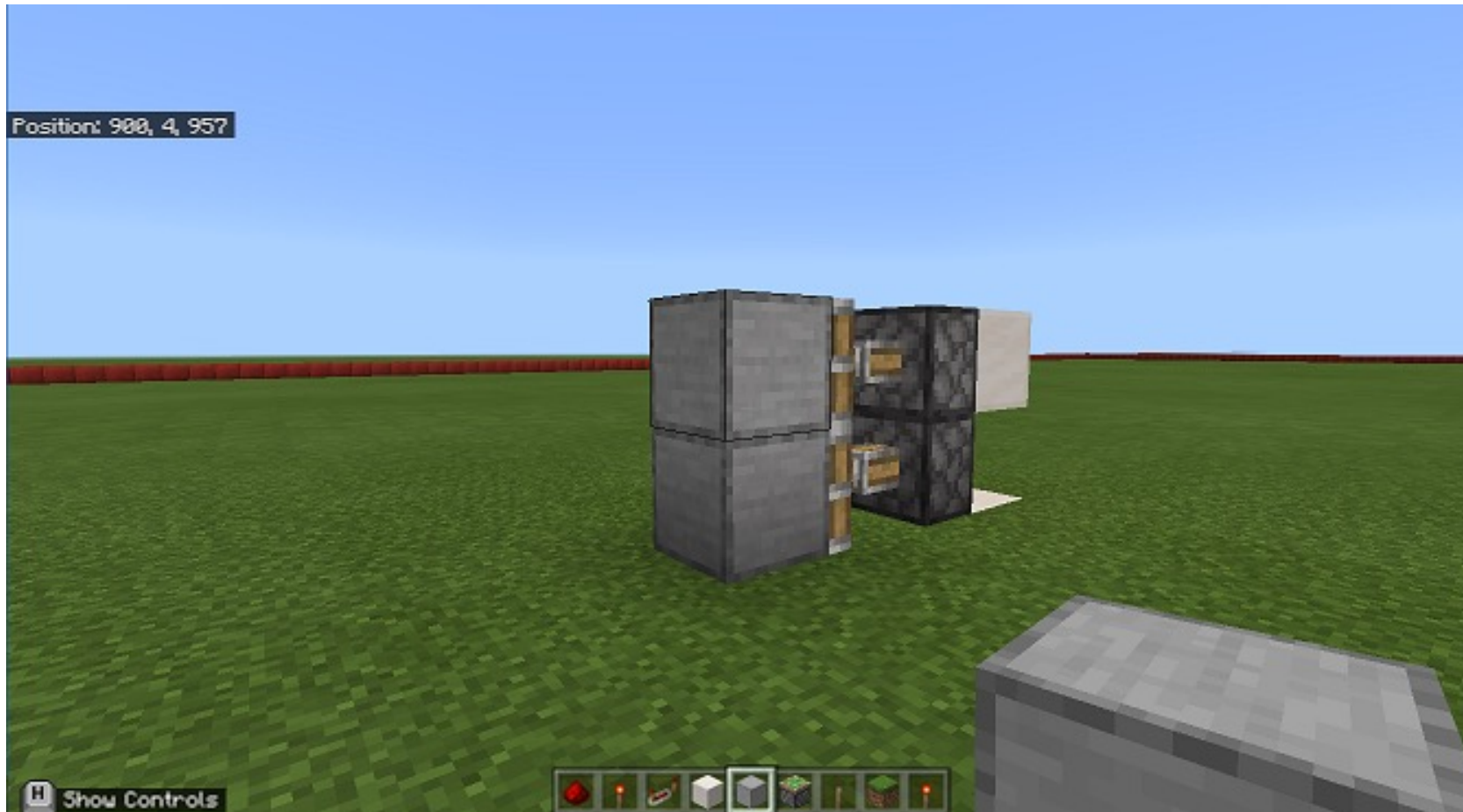
MINECRAFT AIRLOCK

3. Place a block on top of the Redstone Torch



MINECRAFT AIRLOCK

4. Place two blocks on the sticky pistons to use as the door blocks



MINECRAFT AIRLOCK

5. Create a circuit from a lever to the block that is holding the torch
- This will create a *NOT Gate* and will close the door when activated



MINECRAFT AIRLOCK

6. To create a 2x2 door, mirror this model on the other side
- Connect the circuit from the same lever



MINECRAFT AIRLOCK

7. Repeat the first 6 steps to create a second door



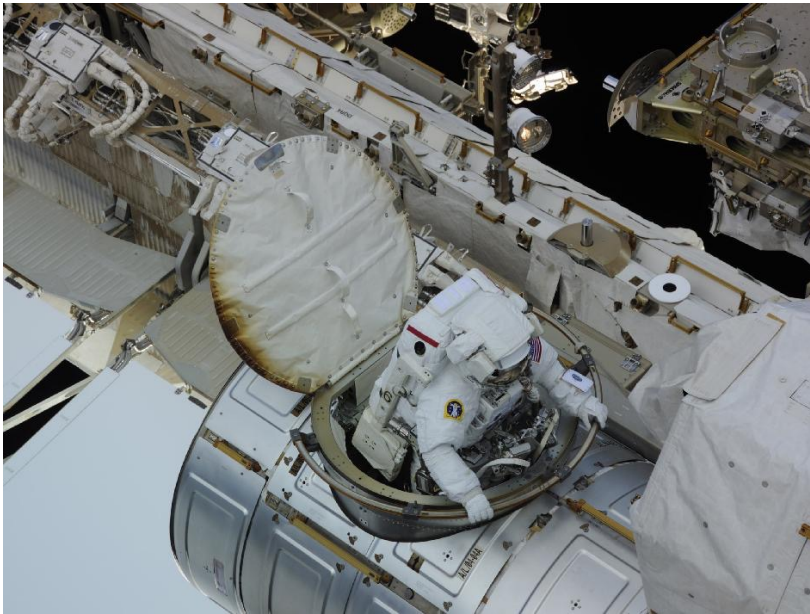
MINECRAFT AIRLOCK

8. Cover the redstone circuits with whichever blocks you like



STUDENT ACTIVITY – AIRLOCK

- Design and build an airlock for your space station in Minecraft.
- Use redstone wiring to create a piston door for your airlock.
- Use chalkboards to label your airlock.



END OF LESSON 3