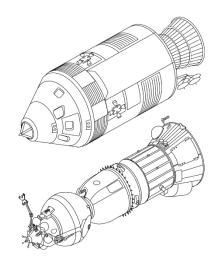
The pen that saved three astronauts



Apollo 11 mission could have ended in disaster!

On July 20, 1969, the first men to land on the moon, Neil Armstrong and Buzz Aldrin, had been on the moon's surface collecting rock and dust samples for almost three hours.

As they were climbing back into the Lunar Module in preparation to return home, Aldrin accidentally knocked the circuit breaker switch with the life support backpack attached to his suit. He broke the switch!

The switch activates the spacecraft's ascent engine to lift them off the moon so they could rendezvous with Michael Collins, who was in the Columbia command module orbiting overhead.

The astronauts notified Mission Control by radio, but the astronauts had already disposed of most of their tools aboard to make the module lighter. They were in a difficult situation, with no tools to fix the switch.

Using what they had, a pen, Aldrin activated the inside switch to engage the circuit breaker and trigger the engine.

"So, I pushed that in. Houston says, 'Oh we've got a good complete circuit,'" Aldrin said.

The pen used to fix the broken switch and bring the Apollo 11 astronauts back to Earth is on display at The Museum of Flight in Seattle, Washington, accompanied by the original broken circuit breaker switch.

This pen is equipped with a pressurized ink cartridge and can function in a weightless environment, underwater and in extreme temperatures—still used by astronauts today.

Activities

- 1. What was special about the Apollo 11 mission?
- 2. How did the circuit breaker switch break?
- 3. Why was the switch so important?
- 4. What did Mission Control tell them to do?
- 5. What did Aldrin do instead?
- 6. We know that Aldrin was a dedicated Christian. What role do you think his faith would have played in this emergency?
- 7. What is special about the pen?