

Afghanistan

Tim Peake explains how his skills as a pilot transfer to his career as an Esa astronaut.

I loved my career as an Apache helicopter pilot, but it certainly came with its fair share of risks. Flying reconnaissance missions or pushing experimental aircraft to their limits have their own dangers.

And with an emergency at 20,000 feet, you need to stay calm, identify the problem and quickly find a solution. That's similar I suppose to an astronaut faced with a system failure or needing to perform an emergency spacewalk.

Of course, flying a helicopter isn't the same as living on a space station. But I hope these years of dealing with the unknown have helped me prepare for it.

Take communication for example. Astronauts depend on support teams to survive, which in turn, rely on good communication with the ground crew.

Pilots are very familiar with how this works. The tandem seat arrangement inside the Apache is a good example. Without clear, concise comms, there's no way a pilot and co-pilot can operate the aircraft properly.

Operating equipment is also a transferable skill in itself. For example, I learned how to operate the Space Station's robotic arm, which is used to manipulate objects in space, it's very similar to the control inputs used to fly a helicopter.

And of course, an astronaut must learn to fly the spacecraft manually – should the automatic control systems ever let us down.