



Dr Nicola Fox

Nicola J Fox, born in 1968, is the recently appointed Associate Administrator for NASA'S Science Mission Directorate. NASA'S new head of science is only the second woman to hold this position in the agency's history. In this position, she will oversee over 100 NASA missions to explore the secrets of the universe. These missions range from questioning how hurricanes form on Earth, how astronauts can be supported on the Moon and if we are alone in the universe. **Fox** will also have the responsibility for fostering an inclusive, welcoming atmosphere whilst supporting a diverse team of scientists and engineers at all stages of their careers.

Growing up in Hitchin, Hertfordshire, she was encouraged by her father to 'think big'. Dr Fox recollects a family holiday in Spain as a three-year-old where her father used objects to illustrate how the solar system worked instead of reading her a bedtime story. On many a clear night he would look up at the sky longingly and ask her if she could imagine what it would be like to walk on the moon. "Every time we saw a space launch, particularly the shuttle launches, he would make comments like, "There couldn't be a better job in the world than working for NASA," Dr Fox says, "I definitely grew up sort of starstruck by space."

While **Dr Fox** credits her father for inspiring her, it was her ‘quietly determined’ mother that encouraged her academically at school and beyond, “She may not have dreamed of walking on the moon, but she made sure I was going to have every opportunity I wanted.”

When **Dr Fox** was considering whether to accept the offer of the prestigious role at the science mission, overseeing many of NASA’s best-known programmes with an annual budget of approximately \$76bn (£5.8bn), her mother responded, “Of course you should, absolutely, go take it.”

Having always known she wanted to have a career as a scientist, it wasn’t until she was a PhD student at Imperial College London that she realised this could be a realistic possibility. It was while researching solar substorms (brief disturbances in the Earth’s magnetic fields that cause energy to be injected into the upper atmosphere, causing a sudden brightening of the northern lights) and using data from NASA when a scientist from NASA asked her if she would be interested in applying for a postdoctoral fellowship.

Dr Fox recalled later, “It was one of those ‘all the air had left the room kind of moments’, I’m sure my knees went wobbly. It was an enormous thing for somebody to ask if I’d consider it, rather than me having to sort of beg for it.”

When asked what her greatest challenge was, be it personal or professional she answered, “Without a doubt, my biggest personal challenge was in 2010 when my husband died very suddenly, leaving me with two children – then 1 and 3 years old. My life fell completely apart. I had never been good at admitting when I needed help – always wanting to be independent and not looking weak. I learned it was ok to need help and that nobody expected me to do everything alone. I had just joined the Parker Solar Probe Team and was fortunate to find myself in this incredibly supportive team.

I had the privilege of working on many incredible missions during my career and each holds a special place in my heart. The first mission I worked on was Polar, where I was the operations scientist. This was the first time I was given any real responsibility for a mission, and I loved it.

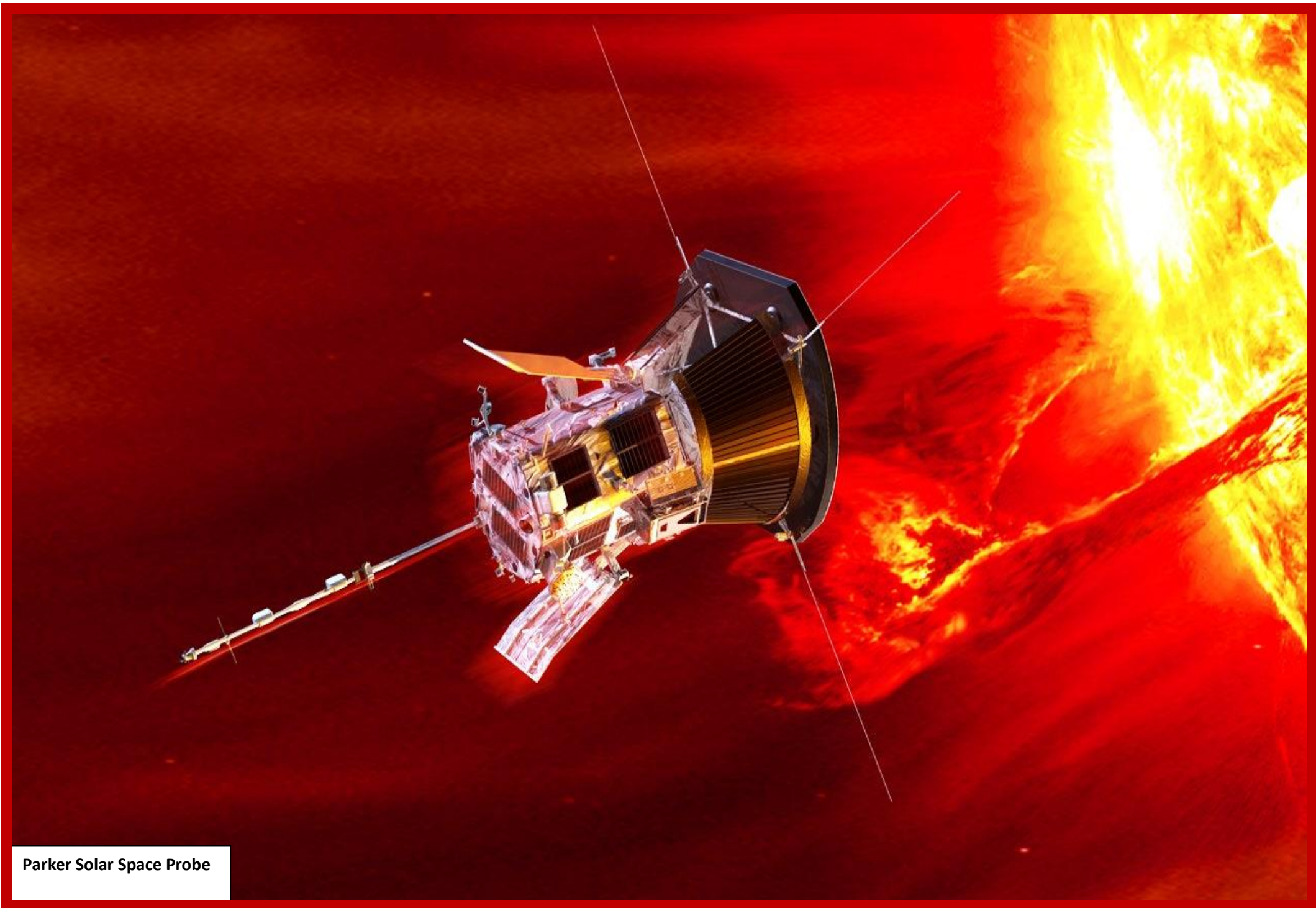
Working with the mission ops team to recover the spacecraft should anomalies occur, planning the science campaigns for the team, and most importantly meeting my late husband.



NASA'S Parker Solar Probe was launched on August 12, 2018, from Cape Canaveral Air Force Station. The spacecraft is humanity's first ever mission into a part of the Sun's atmosphere called the Corona.

Parker Solar probe was the first time that NASA had named a mission after someone in their lifetime.

It was a paper that predicted the existence of a solar wind, published in 1958. The paper was published by Eugene Parker and he and his family were present for the launch in 2018. This mission would mark the death of my husband and so this mission is deeply personal for me. I put my husband's name on the spacecraft, and my children know that Daddy's going to orbit the sun forever."



Parker Solar Space Probe

“The key to being a scientist is to love asking questions. If you are fascinated about how and why things work – you are already a scientist.”

“My NASA family inspires me every day. People who work on NASA missions are highly skilled professionals who are dedicated to their work. When issues arise, they just deal with it – they come up with a plan and they implement it.

There is nothing better than working as part of a high-performing team. The missions are fantastic. The technology is great. The science is awesome. But it's the relationships you make with the people that stay with you for life.”