Q&A

PETE LAWRENCE, ASTRONOMY EXPERT, OMEGA BREAKS

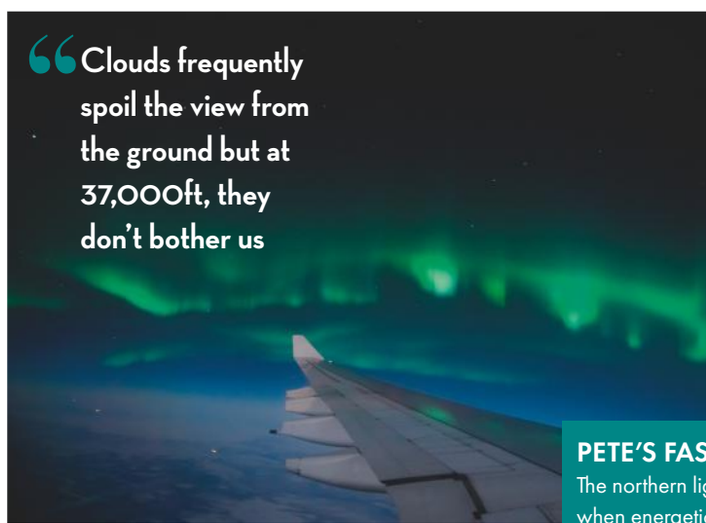
INTERVIEW BY Laura French

Q. What sparked your interest in astronomy?
A. I've been interested in astronomy for as long as I can remember. My grandfathers had an interest which influenced me, and my parents bought me a small telescope at an early age. When I wanted something bigger, my dad bought me a mirror grinding kit and I made a 222mm reflector from scratch.

Q. How did you come to work with Omega Breaks?
A. I started in 2005 when a colleague asked me to help out with a northern lights flight. I jumped at the chance! It was a great success and to date I have supported many hundreds of similar flights.

Q. What does the flight involve?
A. Omega Breaks operates northern lights flights from a wide range of regional airports in mainland UK. The experience consists of a pre-flight briefing, a 30-minute talk on the stars and planets visible while we are flying and a 30-minute presentation on the northern lights. Once everyone has boarded the plane, we fly to the northern border of British airspace. All lights are turned off and the plane becomes very dark. We begin looking at the stars and constellations and hopefully see the northern lights.

Q. What advantage does viewing the northern lights from the air provide?
A. The main advantages are convenience and weather. It's quite remarkable being able to hop on board a plane under cloudy and often rainy conditions on the ground, and head up to a magical view of the heavens, then fly home in a single evening. Clouds frequently spoil the view from the ground but at 37,000ft, they don't bother us.



PICTURE: Shutterstock/Julia Kuznetsova

PETE'S FAST FACT
The northern lights occur when energetically charged particles pass through our atmosphere. Energy is transferred to the atoms and molecules in our atmosphere, causing them to emit light

Q. What else can guests expect apart from the northern lights?
A. Guests will see the stars much clearer than they've ever seen them before. The Milky Way is commonly seen too. The sheer number of stars visible can be confusing and that's where the astronomers come in. We clarify the view, giving information about the physical nature of the objects seen and tell of the myths and legends that accompany the constellation which contains them. If the northern lights don't show, we do our best to make up for it with our rich commentary.

Q. When is the best time to spot the lights?
A. Aurora displays occur on any night of the year. In theory, displays should be stronger near the equinoxes (late March and late September) due to better alignment between the magnetic fields of the sun and Earth, but strong displays can be seen any time. The best displays tend to happen around magnetic midnight, the time when you, the north or south magnetic poles and the sun line up. We generally time our flights to coincide with magnetic midnight.

Q. What's been your most memorable viewing experience?
A. It's hard to choose! Seeing the Milky Way's core from the Atacama Desert was incredible, but experiencing steady skies to look at the planets through a big telescope is something I strive for. From the UK, such conditions are rare. An active, high-rate meteor shower is quite a sight too. I also help plan and accompany tours organised by Omega Breaks to see solar eclipses, and these can be incredible. I accompanied an eclipse cruise in 2015 on *Boudicca*. The chances of seeing the eclipse were very poor with 89% cloud cover predicted, but a receptive captain who listened to my advice meant that, against all odds, we got to see the whole thing!

Q. And finally, what is it about space that most fascinates you?
A. I've always been interested in seeing details on the sun, moon and planets, and I find it amazing how we can measure and deduce the workings of the universe from our infinitesimally small viewing platform on planet Earth. TW