

## Member Spotlight

A monthly highlight featuring an ASEG member. All past member spotlights can be found in our newsletter [archive](#).



We welcome **Adam Kroll** under the spotlight in this issue as he shares his enlightening story!

Adam is Chief Geophysicist of AirGeoX, a drone geophysics company.

*I grew up in Perth, Western Australia and have lived and worked in both Perth and Canberra for a mix of consulting, contracting work for the mining, oil and gas industry and government as well as many years working for airborne geophysics contractors. I love playing ultimate frisbee, shout out to all the geophysicists and geologists playing in Canberra.*

**1. For how long have you been a geophysicist?**

*I graduated from Curtin University in 2002, if my math is correct, that's 22 years.*

**2. What do you like most about being a geophysicist?**

*I love getting out into the bush and playing with tech. Before Starlink, when you were in the bush and things went wrong, it was hard to call for help, so you had to troubleshoot, think on your feet and come up with a solution. Failure's not an option.*

**3. Tell us who you are and what you do.**

*I'm Principal Geophysicist for AirGeoX, we have 3 geophysicists in the company. My favourite role is research and development for new hardware and software. It's challenging as a lot goes wrong, but rewarding when you see beautiful, clean crisp data at the end.*



*I'm also a drone pilot, flying multirotors and vertical take off fixed wing drones.*

**4. If you weren't a geophysicist, what would you be?**

*A mechatronics engineer. I love programming drones and robots and then they do what I've asked them to do. My kids don't do that.*

**5. What made you decide to be a geophysicist?**

*At a Curtin Uni open day, Dom said to me, do you like camping in the bush, I said yes, do you like physics, I said yes. He said, have I got the career for you. I doubt there's any other job that connects the two.*

**6. What reaction do you mostly get when you tell someone that you are a geophysicist?**

*The other day a police officer asked me what I do. I dumbed it down and said, we use physics to map geology. He said, like a geophysicist? He used to be a reservoir engineer and worked with plenty of geophysicists.*

**7. Who is your most respected geophysicist?**

*It's people who go above and beyond in their field. There are plenty of people who fit this description at Geoscience Australia, Richard Lane was a good example. He knew every aspect of the task he was working on inside and out, he was happy to share as much information as possible and he was enthusiastic about geophysics.*

**8. What is Your funniest or worst field memory?**

*We had 4 weeks in a really remote area, we didn't see a single person the whole time. We thought we'd try to catch a rabbit to eat for dinner. After two weeks of trying every night, we had no luck. Then one night a rabbit hops into the side of the car and knocks itself out while we were sitting there. It was our dinner the next day.*

**9. Tell us about a challenge you overcame, and how did you do so?**

*The biggest challenge was to develop an unmanned airship to acquire gradient magnetic data. We designed and built the whole airship with 3-4 people. The autopilot back in 2011/12 was full of bugs. One night it flew circles for a couple of hours without us able to intervene until it ran out of fuel. Another night it didn't turn at the end of the line and just kept going into the distance until it ran out of fuel.*

*We applied continual improvements and persisted over a couple of years until we completed a 2,000km survey.*

**10. Do you have any volunteering experience?**

*I had volunteered for a brief period with the ASEG ACT branch and currently volunteer for my kids various sports.*

**11. What's your most treasured textbook?**

*I like Geophysics for the Mineral Exploration Geoscientist, written by Mike Dentith and Steve Mudge. Sometimes I focus intently on one method, if I have to work on a different method after not using it for a few years, I quickly read the chapter on that method. It's very well written, concise and gives you all the info you need to be across the important principles of that method.*