

## **INCOSE Spotlight on Stephen Cook**

Interviewed by Sandy Young, info@incose.org



Name: Stephen Cook

Titles/Organizations: Director and Principal Consultant at Creative Systems Engineering and Professor of Defence Systems at the University of Adelaide

Place of Birth: Amersham, England, UK

Current Residence: Adelaide, Australia

Domain: Defence and Academia

Studied in college: Electronic engineering, systems engineering and computer science

Year joined INCOSE: 1998

Roles in INCOSE: INCOSE Fellow, past-president Systems Engineering Society of Australia (INCOSE chapter in Australia), and member of various Working Groups: Systems of Systems Engineering, Model-based Conceptual Design, Systems Science and Complex Systems

Years in systems engineering: 35

### **1. Why did you become a systems engineer?**

I started my career as a design engineer working on telephony and aerospace equipment in the late 1970s. Soon I was responsible for designing systems comprising new designs and a significant amount of existing equipment. I was keen to find out the best way to go about it, and had the opportunity to do so when I became the project engineer at British Aerospace Australia for the design of the electronic subsystem of a scientific satellite.

### **2. What are your favorite and least favorite parts of being a systems engineer?**

I enjoy being a thought-leader in the industry – whether it be as an academic and teacher, a consultant, or as a practitioner working on major projects. It is fabulous working in areas that appreciate the value of systems engineering and where it is understood and thoughtfully applied in both the acquisition and supply side.

On the other hand, it is a struggle trying to help with situations or projects that are destined for a bad outcome because their management is convinced that systems engineering is something they can do without. Fortunately, this does not happen very often.

### **3. What piece of advice would you give to someone considering a career as a systems engineer?**

First, take an engineering degree or other degree that will give you a good grounding in mathematics and science. Then start your career in detailed design and implementation, and progress through equipment, subsystem and overall system design. Always seek challenging work that gives you the opportunity to demonstrate high performance – the hallmark of a successful systems person.

**4. You have published more than 200 articles and reports over the course of your career. Tell us briefly about one that you are most proud of and why.**

I am currently finishing a report on recommendations for rolling out Systems of Systems Engineering (SoSE) within the Australian Department of Defence. This report seeks to shape SoSE practice for years to come, and I believe the recommendation will bring substantial improvements over the previous arrangements.

**5. What do you like to do outside of work?**

I have been a competitive in-line speed roller-skater for more than 20 years, and I am ramping up my training for the national championships next January. I'm also a competitive table tennis player and play several times a week. As I have said for 40 years, with just a bit more coaching I know I can make it to the next grade ...