



### **Susan C. Ruth**

*Senior Project Engineer  
The Aerospace Corporation*

Place of Birth: Norman, Oklahoma, USA  
Current Residence: Whittier, California, USA

Domain: Aerospace

Years in systems engineering: Formally, 20

Year joined INCOSE: 1993

Roles in INCOSE: General “make it work” person; actively avoided any assigned role

**“We continue to find ways to work through difficult challenges and solve problems.”**

#### **How has systems engineering changed over the past 25 years?**

Systems engineering as a field continues to mature and more people have the basic skill sets. We continue to find ways to work through difficult challenges and solve problems. In order to share what we learned, we develop tools, methods and pictures to communicate.

I’ve seen the V model, X model, W model, etc. Now, we mostly use the V model – a picture that captures many of the historical elements of systems development and illustrates how they connect in a functional sense (rather than the heritage waterfall which depicts the timeline view). Model-based systems engineering (MBSE) is also working to earn its place as a methodology.

#### **What do you think is the most valuable benefit of INCOSE membership?**

The people. The opportunities. The education. The most valuable thing about systems engineering for me was that it enabled my career transition from a materials and processes engineer to a systems engineer.

The Los Angeles Chapter has given out the INCOSE Susan C. Ruth Award for Outstanding Long Term Service since 2001. What do you find most rewarding about contributing to your INCOSE chapter?

The most rewarding contributions for me have been providing people with opportunities to grow their capabilities, who have then surpassed their goals to become even more than they ever thought they could be.

#### **Anything you’d like to add?**

It’s been fun.

AN INSIDE PERSPECTIVE