

Donna H. Rhodes Principal Research Scientist Massachusetts Institute of Technology

Place of Birth: Worcester, Massachusetts (USA) Current Residence: Newton, Massachusetts (USA)

"While principles and

practices existed 25 years ago, they have matured and evolved."

Domains: Defense, aerospace, transportation, energy, commercial products and

services

many of the Years in systems engineering: 32

Year joined INCOSE: 1992

Roles in INCOSE: Journal associate editor, past president (2000), Fellow, Founders Award recipient, past director of strategy, past technical board chair,

past metrics working group chair

How has systems engineering changed over the past 25 years?

While many of the principles and practices existed 25 years ago, they have matured and evolved. We now see systems engineering performed in more domains and organizations. There are major advancements in model-based practices and enabling technologies, with a strong community around it. We have a much richer understanding of the competencies required for systems work. Many academic programs have been initiated, and now have welldeveloped programs and courses. Research is increasing and having real impact on theory and practice.

Tell us one memory you have about INCOSE.

In 1998, INCOSE held its first symposium outside the U.S. in Vancouver, To quote the INCOSE "INSIGHT" publication: "During the lavish banquet, Nisga'a dancers aroused the masses with their colorful native costumes, chants and music, getting some 900 attendees to their feet emulating wolves, eagles and killer whales (a sight well worth the admission price alone!)." This remains a vivid memory for me, a sense of INCOSE as one community working (and playing) together in unison.

What is the first thing you'd work on if you were named lead systems engineer for the United States?

I would get together a team of great systems people and task them with uncovering the underlying architecture of the whole enterprise, identifying the constituent parts and relationships, and assessing what current capabilities exist within and across the constituents from a value-centric perspective.

AN INSIDE PERSPECTIVE