

7th Annual INCOSE Great Lakes Regional Conference

Leadership Through Systems Engineering

Aerospace | Commercial | Defense | Health Care | Manufacturing | Academia

David Mason, *INCOSE Student Division presentation and workshop*

Abstract: The demand for graduates in Architecture and Engineering disciplines continues to grow at a rate of greater than 10% according to Bureau of Labor and Statistics from 2010 to 2020. This demand is based on increases in population, environmental concerns, and the retiring of the experienced workforce. To meet this demand several STEM initiatives have been created to excite our younger generations at all grade levels of the benefits of engineering careers. These initiatives include programs such as FIRST FRC and Lego Leagues, ISEF, ROBAFIS and assorted local robotic completions. The INCOSE Academic Matters endorses these programs and the Student Division program designed to introduce college students to Systems Engineering and the benefits of INCOSE membership. The Student Division recently received a dramatic increase in college student enrollment due to the infusion of 'Systems Thinking' early in the undergraduate engineering programs using the INCOSE Systems Engineering Handbook (SEH) as a reference, along with ASEP certification training offered in parallel to provide graduates a resume discriminator when applying for employment. A recent Student Division workshop performed at the INCOSE International Symposium identified additional value propositions for the 4-Way Benefit Model stakeholders to establish and sustain student divisions and membership in INCOSE. This presentation, and workshop, will present key statistical data reflecting engineering demands, the results of the INCOSE IS2013 Student Division Panel, and workshop with the audience at GLRC to gain additional acceptance criteria, success metrics, and implementation strategies.

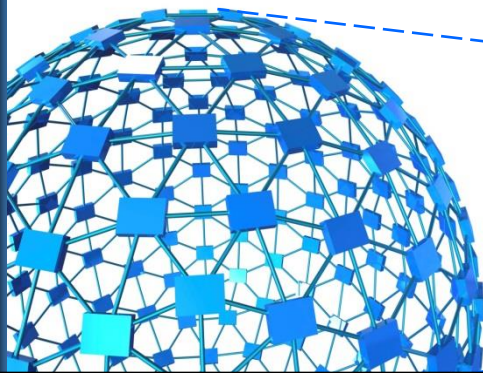
Author: A systems engineer with more than three decades of experience in the aerospace industry specializing in systems integration and test of space qualified hardware with the Lockheed Martin Space Systems Company.

His responsibilities spanned the product life cycle to include requirements analysis, design analysis, systems integration, and Verification and validation of space qualified electro-optical instruments as the Lead.

Mr. Mason's academic accomplishments include a Bachelor of Science in Business Administration (BSBA) and a Master of Science in Business Administration (MSBA) majoring in Quantitative Business Methods.

Mr. Mason is an INCOSE Certified System Engineering Professional (CSEP), Past-President of the INCOSE SFBAC in 2009, currently serving as the INCOSE Assistant Director for the Student Division.

Abstract



**GLRC 2013: *Leadership
Through Systems Engineering***

