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## **When**

January 18th from 11am-12pm EST

## **Topic**

Systems Thinking Throughout the Life Cycle for Man-made Systems

## **Speaker**

Dr. Alex Both

## **Abstract**

This paper explores how Systems Thinking can be applied effectively throughout the development life cycle of complex systems. Although traditional systems thinking is linked to our ability to understand the interactions between components of existing complex systems, in this paper we take a holistic view of man-made systems by looking at how systems thinking can be applied during the key phases of the development life cycle, i.e. the Concept Definition, the Design & Built and the Operational phase. This holistic approach to systems thinking is not only meant to assist in the development of new systems but also help with the understanding and modeling of existing ones.

## **Biography**

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Dr. Alex Both has worked for more than 35 years in the aviation industry in various engineering and program management positions dealing with complex avionics systems. His educational background is in flight controls but during his career he has worked on numerous research and development programs spanning the avionics spectrum from inflight entertainment to GPS-based autoland systems and integrated modular avionics.

Dr. Both has a keen interest in the cost effective development of complex systems and has worked with suppliers and OEMs in exploring ways to manage cost, schedule and performance objectives. His mission is to translate his lesson learned into an educational roadmap that can empower young engineers to enter the work force with the necessary knowhow and skills to excel as systems engineers, technical leaders and entrepreneurs.

Dr. Both has a Master in Aerospace for the Technical University in Delft, The Netherlands, a Doctor of Engineering degree for the University of Kansas, also in Aerospace and an MBA from Seattle University.



Dr. Alex Both

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Regards,

Andy Pickard  
Rolls-Royce Representative, INCOSE Corporate Advisory Board,  
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