



INTERNATIONAL COUNCIL ON SYSTEMS ENGINEERING

Monthly Tuesday Evening Meeting in Silicon Valley

Tues., December 14, 1999 at 5:30

Plain Old Telephone Service (POTS)

Have you ever wondered how the telephone system grew into the huge, world-wide infrastructure we use so casually today? Are you curious about the systems engineering that went into this system which was developed and deployed before we, as an academic discipline or as an industry, discovered how to engineer complex systems successfully? Did the plain old telephone system just grow like Topsy, or did some world class systems engineering underlie its growth? Are there lessons we can learn from the evolution of the telephone system which are relevant to some of the new systems we are developing on Internet time today?

Come hear a light-hearted talk to end the year for the San Francisco Bay Area Chapter of INCOSE, and gain some insights into the telephone system which may surprise you. The Plain Old Telephone Service (POTS) that is provided by the Public Switched Telephone Networks (PSTNs) and should be familiar to all is largely the legacy of one man's unique invention and the contributions of many. No comprehensive presentation on the history of the telephone, the Bell System, etc. could be completed in the allotted time. However, the contributions and actions of some of the more colorful individuals and organizations will be highlighted.

A description of the Subscriber or Local Loop from the telephone in one's home to its Central Office/Exchange will be given. This will include how a simple telephone works, pulse and touch-tone dialing, ringing, modems, etc.

The activities and equipment in the Central Offices will be discussed, the communication between Central Offices using "Trunks", and these topics will be combined to describe the anatomy of a telephone call. If time permits, other related topics will be touched on lightly.

In addition to this talk, the meeting will feature a preview of the year ahead by Bob Barter, our President-elect.

Presenter: Thomas Jackson received his BSEE from Purdue University in 1973 and his MS in Engineering from SJSU in 1993. He is a California registered Professional Electrical Engineer. Mr. Jackson has spent 25 years working at a variety of Silicon Valley employers, primarily in the defense sector, alternating between electronic hardware design and systems engineering positions. He recently joined Fujitsu Microelectronics, Inc., as a Staff VLSI Designer working on cable modems, networking interfaces, and other VLSI devices.

Mr. Jackson is a participant in the INCOSE Risk Management Working Group. He was a contributor to the Risk Management Chapter of the INCOSE Systems Engineering Process Guide. He is also the lead author of the INCOSE Automated Risk Management On-Line Resource (ARMOR).



<http://www.incose.org/sfbac>
INCOSE Home Page: www.incose.org
Next Meeting is Tues, Jan 11

<i>Tues, Dec 14:</i>	5:30 PM Social Half-Hour (hors d'oeuvres) 6:00-7:00 Talk followed by Questions. Networking and sidebars to 8 PM.
<i>Place:</i>	Lockheed Martin Missiles & Space , Sunnyvale, Bldg 157 Executive Conf. Room. Third & Mary (take the Mathilda exit of Highway 101) {Map on back. North on Mathilda, past the Blue Cube, and left on Third Ave. to parking lot at corner of Mary Ave. Parking is across the street from Building 157.}
<i>Donation:</i>	FREE for members. \$4 for others.
<i>Registration:</i>	Chuck Halligan (LMMS), 408-756-3100. <i>E-mail</i> charles.b.halligan@lmco.com Please Pre-Register to Facilitate Check-In

Driving Directions:

Hwy 101, North - exit at Mathilda. Proceed north on Mathilda to 3rd Ave. Left on 3rd to Mary.

Hwy 101, South - take Highway 237 exit to Mathilda. Follow instructions for Hwy 237 below.

Hwy 237, West or East - exit at Mathilda. Proceed north on Mathilda to 3rd Ave. Left on 3rd to Mary.

Highway 85, North - take Highway 237 exit to Mathilda. Follow instructions for Hwy 237 above.

Area Map to Sunnyvale, California

