

INTERFACE DEVELOPMENT WORKSHOP



A One Day Tutorial -- October 21, 2000

Instructor: Mr. Jeffrey O. (Jeff) Grady

Systems Engineering and Interface Management are often viewed and practiced as separate disciplines. This tutorial introduces the notion of Systems and the central role that interfaces play in their existence, development, and operation. This tutorial will also address the special problems of managing interfaces with volatile division ownership and global membership.

WHAT'S IN THIS TUTORIAL:

1. Interface Analysis and Definition

Definition of interfaces as a relationship between two objects in a system. The use of schematic block diagramming as well as functional and physical n-square diagrams to identify interfaces. Relate needed interfaces to the way functionality is allocated to items in the system.

2. Interface Responsibility Model

Discuss the three-rule set for establishing responsibility and the three interface subsets (interface, outface and crossface) as a function of their individual system view. Discuss internal, supplier and associate interfaces.

3. Identification Workshop

Introduce a team project that has interfaces that entail mechanical, electrical, fluid and software interfaces. The teams will identify the needed interfaces using the methods discussed in Section 1.

4. Interface Requirements and Design Documentation

Discuss performance and detailed documentation for interfaces. Show the need for interface verification requirements in a living Interface Control Document.

5. Workshop on Writing Requirements

Introduction to writing skills using the progressive scenario and the use of schematic block diagram or n-square diagram created in Section 3 as the means to identify what to write and how to well to describe the requirement.

6. Interface Management Infrastructure

Discuss Letters of Understanding or Agreement and interface management plans. Explain the use of Technical Interchange Meetings (TIM) to resolve conflicts and the use of ICNs to revise ICDs.

7. ICWG/TIM Workshop

The teams will resolve interface conflicts in an ICWG/TIM based on the work that was accomplished in Section 5. The teams will relate their experiences in this section to the class as a whole.

Date: **October 21, 2000**

Time: 8 a.m. to 5 p.m. (includes an hour for lunch; lunch is provided)

Place: San Jose State University, Engineering Building Auditorium

Cost: Space is limited. Enrollment deadline is **October 13**

	INCLOSE Member	Non- Member	Non-Member plus Membership *
Registration	\$90	\$140	\$150

(Fee for parking on campus is not included)

(*Reminder - Non-members can enroll at the member's rate by including the membership fee. Membership good to 5/31/2001. Prorated membership will be \$60.)



San Francisco Bay Area Chapter

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**ENROLLMENT AND
CONTACT INFO ON BACK**

About the Instructor

Mr. Jeffrey O. Grady is the President of JOG System Engineering, Inc.; a system engineering consulting firm focused on assessment of company current capability coupled with education leading to planned improvements. Formerly Engineering Manager of Systems Development at General Dynamics Space Systems Division. Jeff has had prior systems experience as systems engineer, project engineer, and field engineer for Teledyne Ryan, and system engineer at GD Convair on cruise missiles,

Mr. Grady is the author of five books in the System Engineering field, an instructor in systems engineering certificate programs at UC San Diego, UC Irvine, and he has lectured in system engineering at Long Beach State, UC Berkeley, and in logistics at National University. He is a member of the UCSD and UCI System Engineering Certificate Advisory Boards. Jeff is a member of SOLE, AUVSI and IEEE. He is also a Charter member of, the first elected Secretary for and initial editor of the Journal of the International Council on Systems Engineering.

INFORMATION

Pre-Registration is Required. Fill out and return the enrollment form provided. Acceptable forms of payment are checks, bank drafts, and money orders (sorry, no purchase orders or credit cards). Fees are payable to INCOSE. To "reserve" a space in the tutorial when paying by company check, remit a personal check and attach a note to hold for company payment. Pre-registration ends **October 13**.

Late Registration. Enrollment forms postmarked after **October 13** will be treated as Late Registration. Late Registration received prior to **October 20** will require a \$15 late fee. Late registration received on **October 20** and walk-ins on **October 21** will require a \$30 late fee. Late registrants are not guaranteed handouts at the beginning of the tutorial. We will attempt to make handouts available during the day of the tutorial.

Confirming Enrollment Call 408.257.5501 if enrollment confirmation is not received by **October 17**.

Enrollment Packets A confirmation notice will be in the enrollment information package. A map to San Jose State and the auditorium will be provided as well as parking information and a phone number to be used in an emergency. Course material will be distributed on the day of the tutorial at the registration desk. Registration begins at 8 a.m. The course is scheduled to end at 5 p.m.

Lunch is Provided A one hour lunch break is scheduled. Lunch will be provided and the entree will be a selection of sandwiches with various meats and cheeses. Please list dietary restrictions on the enrollment form.

Cancellation Policy Full refunds will be made prior to **October 13**. The registration fee will also be refunded if the tutorial must be canceled or rescheduled due to circumstances beyond our control.

Event Coordinator Ms. Linda Howell of **SERVICE PLUS** provides event operations support. Enrollment status and changes should be given to

SERVICE PLUS 408.257.5501 or incose@svcplus.com

Our thanks to Dr. Ernest Unwin and San Jose State University for making SJSU facilities available for this tutorial.

For Information about INCOSE Tutorials: Barney Morais at 408.720.8431, bgmorais@ieee.org

✂ ----- complete and mail ----- ✂

Enrollment Form for INTERFACE DEVELOPMENT WORKSHOP (Postmark by October 13)

Name _____ (for Certificate of Completion) _____

Mailing Address _____

Position _____ Company _____

Day Phone _____ Fax _____

Email _____

Remarks/Request _____

<i>Circle the amount enclosed</i>	INCOSE Member	Non-Member	Non-Member plus Membership*	<i>Mail completed form and fee (made out to INCOSE) to:</i>
Registration	\$90	\$140	\$150	SERVICE PLUS
(Fee for parking on campus is not included)				SFBAC Tutorial
(*Reminder - Non-members can enroll at the member's rate by including the membership fee. Membership good to 5/31/2001. Prorated membership will be \$60.)				P.O. BOX 2610
				Cupertino, CA 95015-2610