

Systems Engineering Steering Group

A Panel Discussion

Bill Morgan of Johnson Space Center led the Systems Engineering Steering Group, accompanied by Dr. Mike Ryschkewitsch, Chief of the Systems Engineering Office at Goddard Space Flight Center, J. Milam Walters who manages the development of a project/engineering database at Langley Research Center for Internet worldwide, and Anthony D. Fragomeni, Associate Chief of the Systems Engineering Office at Goddard.

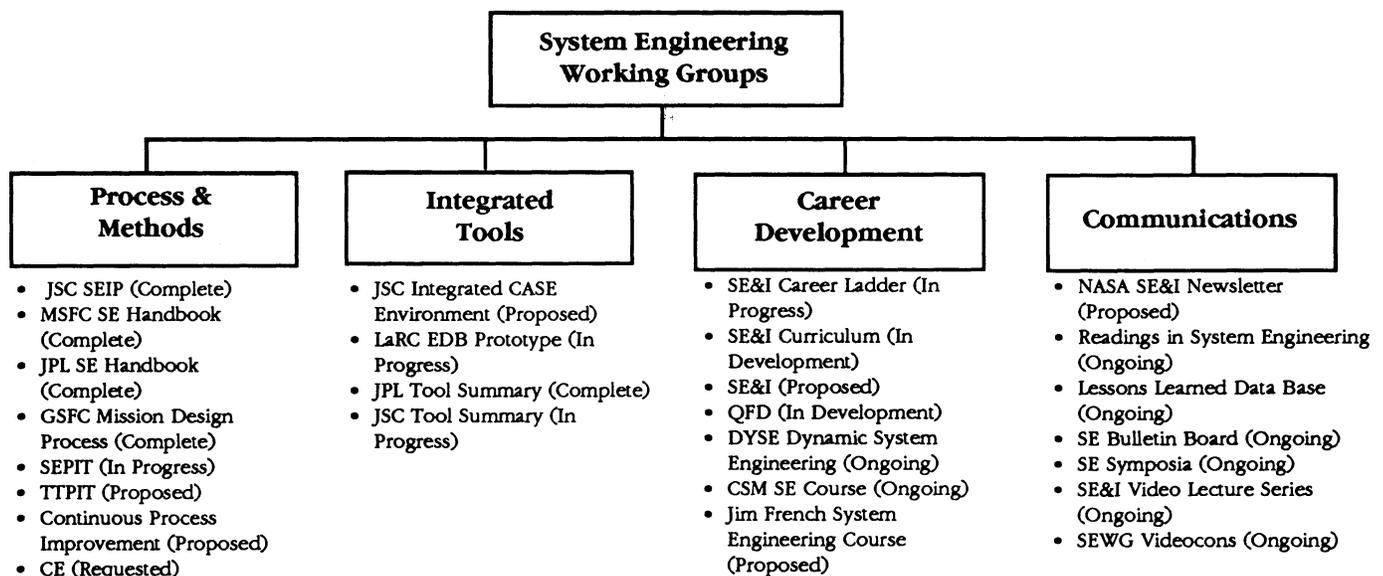
Bill Morgan presented an overview of current Systems Engineering Steering Group (SESG) activities including the publication of a draft NASA *Systems Engineering Handbook*, edited at the Jet Propulsion Laboratory, and *Readings in Systems Engineering*, edited by Frank Hoban and William Lawbaugh, with preprint copies made available to the participants. Morgan said Systems Engineering Working Groups are being formed at each NASA Center to define and improve the process and methods of systems engineering, integrated tools, career development and communications. In addition, Special Interest Groups are being formed to serve as intercenter product development teams. "NASA today is challenged by increased program complexity and duration, plus reduced resources," says Morgan. To meet these challenges, we must

increase the effectiveness of the Agency by:

- Developing compatibility among the Field Centers' processes for program management, program control and system engineering
- Improving the effectiveness of the civil service work force in executing these processes
- Enhancing the workforce collaboration throughout the Agency
- Increasing the future effectiveness by developing a continuous process improvement program.

Tony Fragomeni added "some food for thought." He said: "It is taken as axiom that what has worked well in the past is the best starting point for future improvements. There is a correlation between a fully adequate mission design process and a successful Phase C/D. Phase C/D cost overruns usually occur because of a lack of understanding of requirements, inadequate definition of requirements or changing requirements, both technically and programatically."

Current SESG Activities



Program Control Steering Group

A Panel Discussion

Dave Pine led the Program Control Steering Group presentation, joined by James E. Bone, the Agency-wide integrator for program control improvement, a part of the NASA Program/Project Management Initiative, and Paul A. Mowatt, Deputy Director of the Flight Projects Directorate for planning and business management at the Goddard Space Flight Center.

The panel discussed the program objectives for the program control network: "Strengthen current management and train the next generation of project man-

agement personnel in program control subjects."

They plan to accomplish this objective through skill courses, handbooks, and efforts in career planning and development. Their approach is to assign a full-time integrator and involve Center and Headquarters key personnel, such as program control managers and Center comptrollers. NASA experts will be tapped to develop and deliver training materials and incorporate them into Center training programs.

Program/Project Management And Control Life Cycle/Occupational Relationship

