

ENGINEERING IMPROVEMENT PLAN

INTEGRATED ENGINEERING & DESIGN VALUE RE-ENGINEERING RESULTS

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The Integrated Engineering and Design Value Re-Engineering teams came up with several proposed ideas that have substantial promise to produce long term efficiency improvements toward performance of engineering and design tasks. These improvements can be expressed through implementing the integration of the following steps and ideas generated:

1. F.A.S.T. Diagram:

The F.A.S.T. function diagram is the basis for serving as a visual aide to the engineer. It simply describes the basic functions they expected to accomplish.

2. Graded Approach:

With any type of engineering task (simple to complex) the functions described in the F.A.S.T. diagram are essentially the same. However, with various safety class facility and system configurations, the level of detail to follow documented procedures varies greatly. Therefore, the F.A.S.T. diagram was architecturally designed to decompose into graded approaches to address different requirements as needed.

3. Computerization & Electronic Presentation of Procedures:

Leveraging the work done described in items 1 and 2 above, and utilizing the "VISIONS" software site license currently being used and updated in the TWRS program, the following concept can be established to improve the time it takes for an engineer to understand what exactly is involved in completing his engineering tasks:

3.1 The F.A.S.T. Diagram would serve as the first computerized visual image on the engineers desktop.

3.2 Depending on the specific task the engineer needs to do, they would click on a specific function diagram block. The engineer would then have options to search by key words or phrases for the information he needs to package together details and forms needed and tailored to his specific task. Packaging of specific information is facilitated by a keyword checklist of menu items presented to the engineer. The computer would automatically assemble all relevant information to the task.

3.3 All documentation would be on-line, including ECN's.