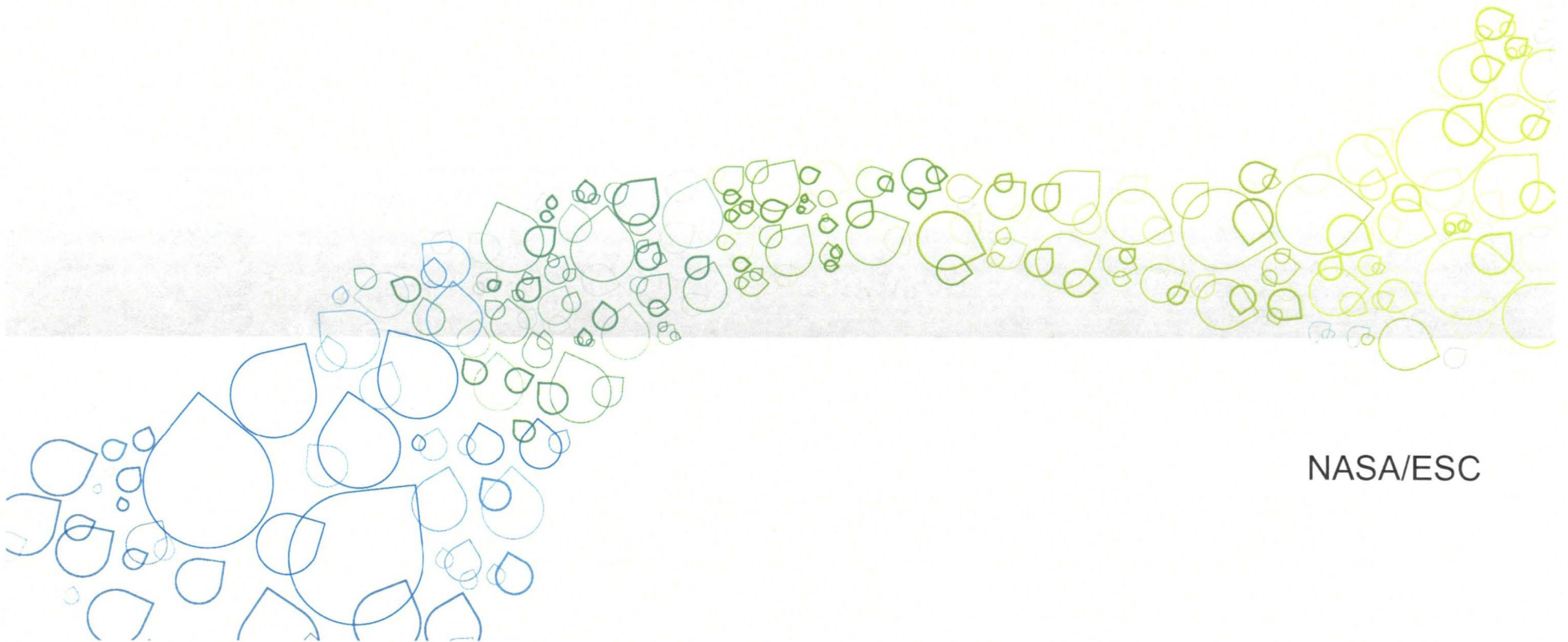


Large Assembly Management



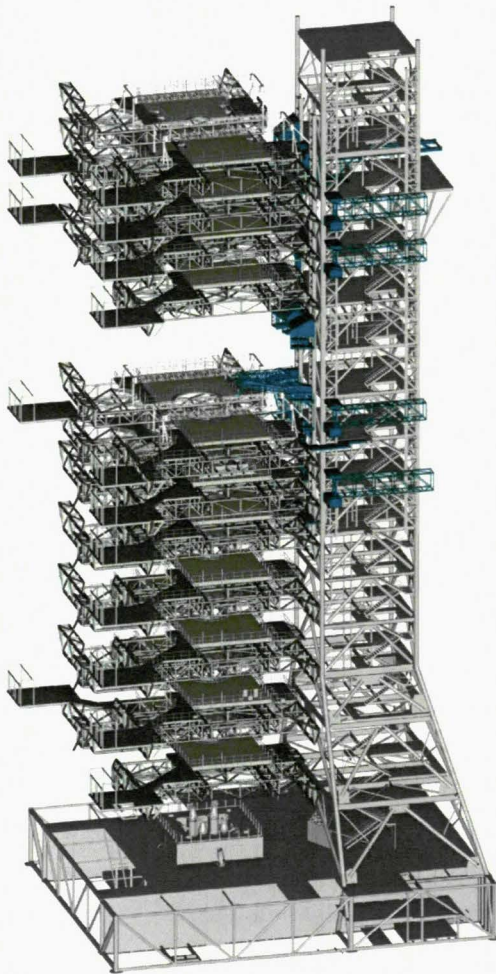
NASA/ESC

Agenda

- Background (Issues with Large Assemblies)
- Modular / Top-Down Assemblies
- Locator Skeletons provide “map” to linking modules
- Control Skeletons
- Publish Geometries convey modules to design teams
- “Class” Modeling provides varying modeling fidelities
- Utilization – Layouts, Installation Assemblies & Drawings

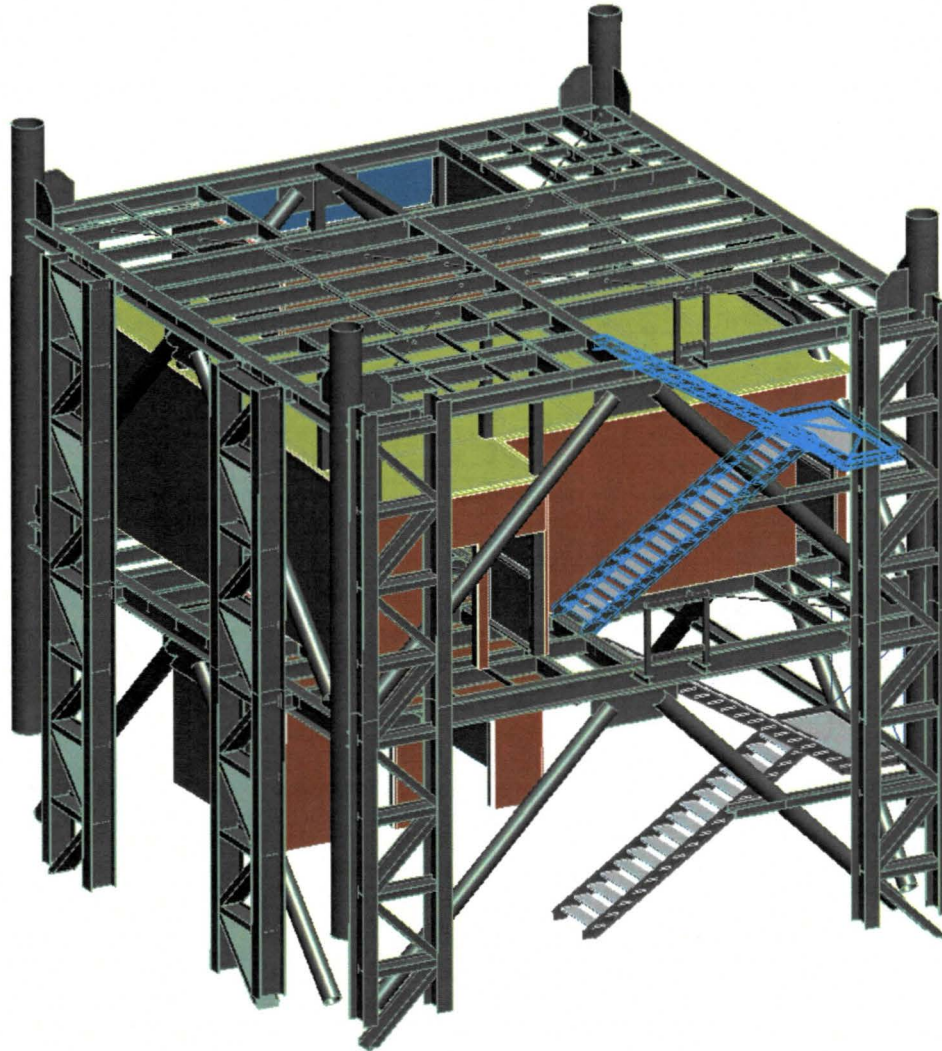
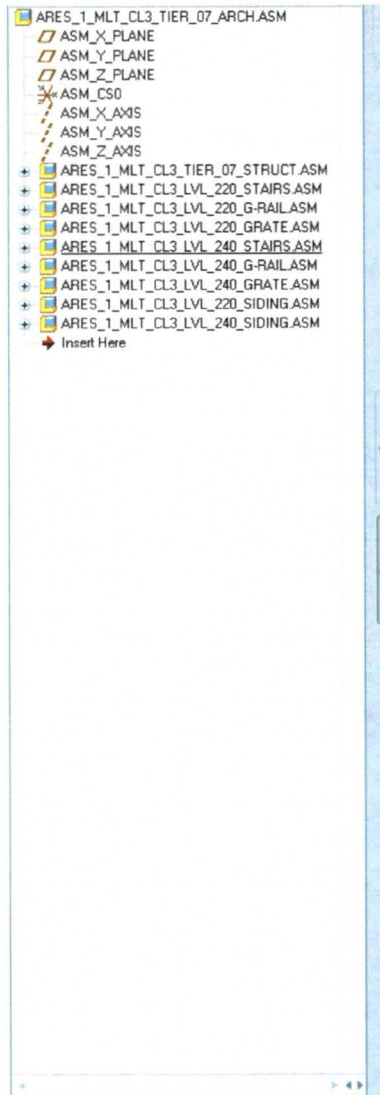
Large Assembly Management

Background (Issues with Large assemblies at NASA)



Large Assembly Management

Modular / Top-Down Assemblies

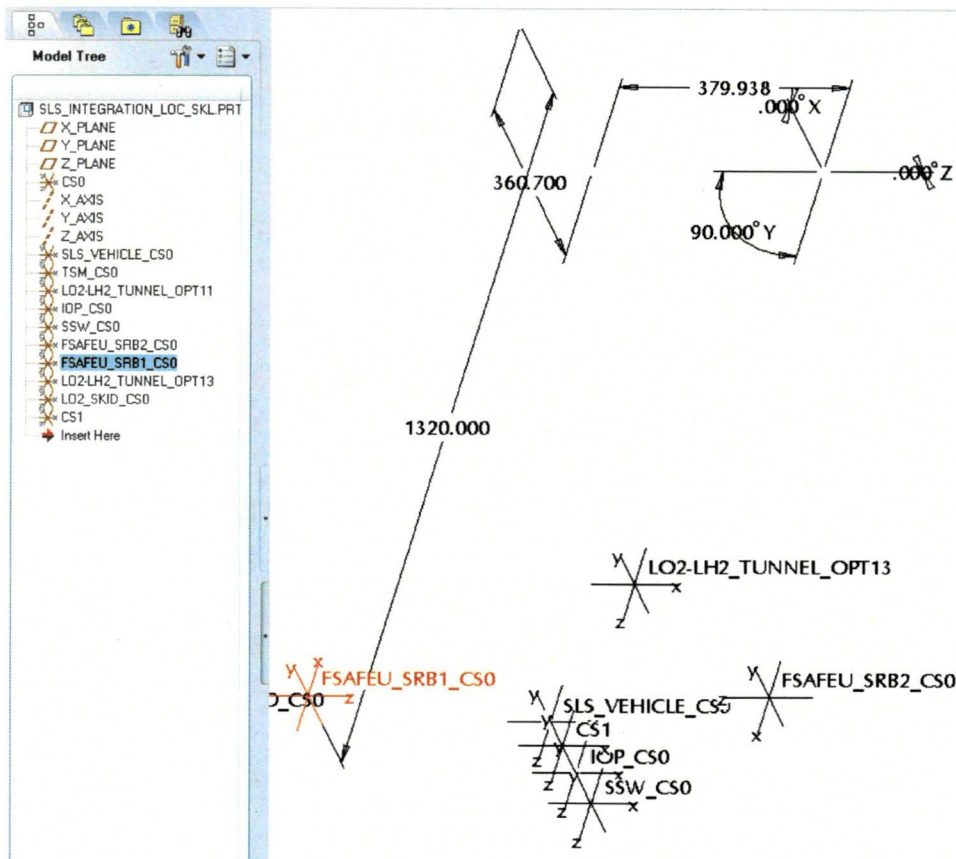


- Major Assembly Modules - Tier
- Minor Assembly Modules - Stairs

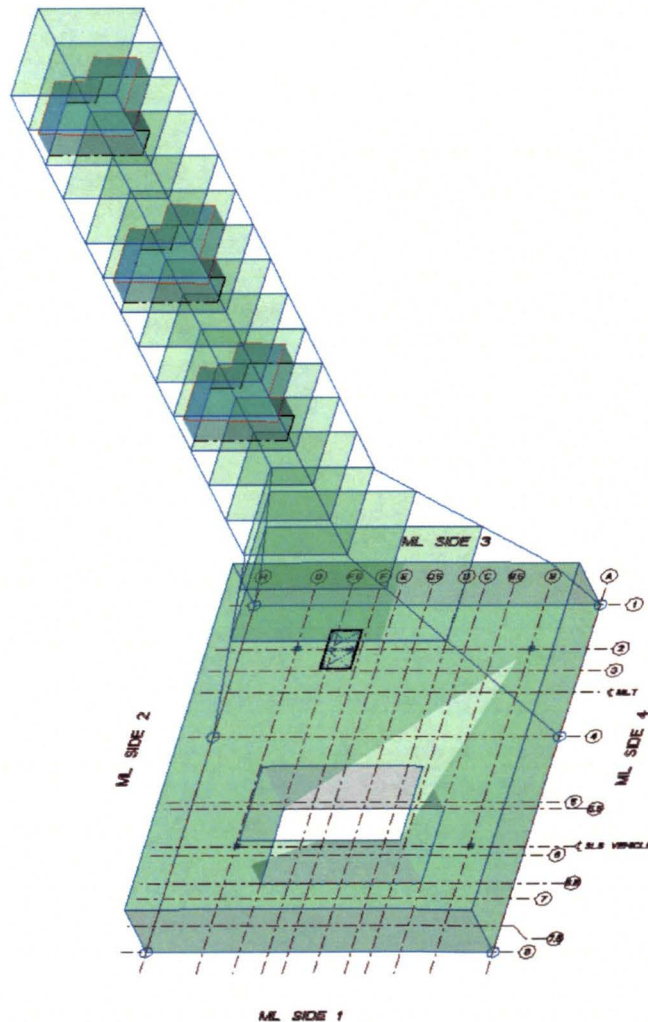
Large Assembly Management

Locator Skeleton Structure

- Offset from default CSYS
- No external references (Parents)
- Define Location and Orientation
- Logical feature names
- Filenames with “_loc” suffix



Control Skeletons

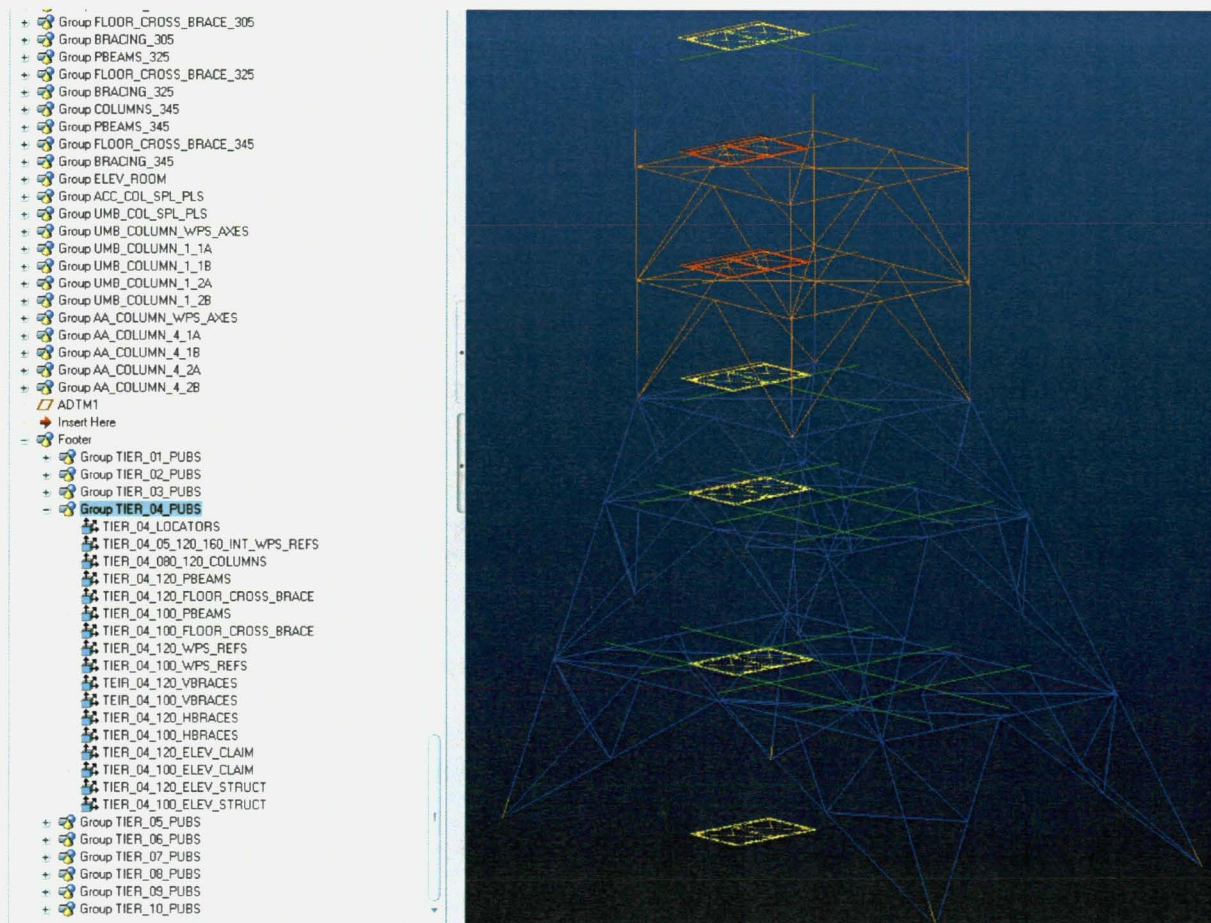


- Managed by product leader
- Originate ALL critical design elements via curves, points, planes and annotations.
- Publish Geometry features pass critical design elements to sub-assemblies (modules) via local control skeletons.
- All model fidelity's can be controlled by the same control skeleton

Large Assembly Management

Publish Geometry

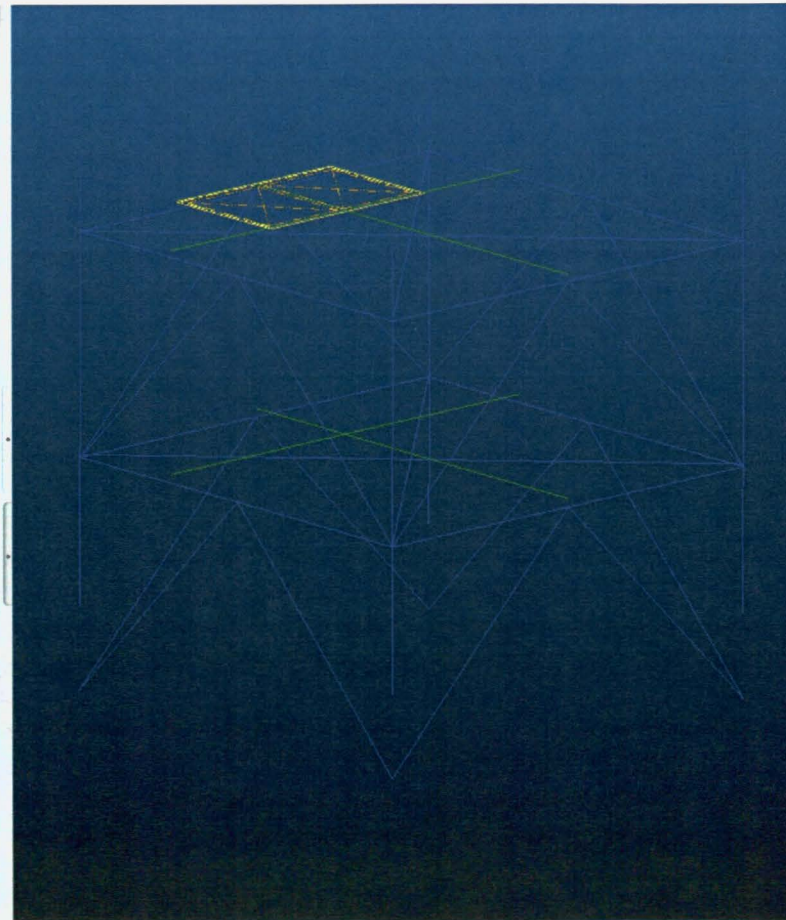
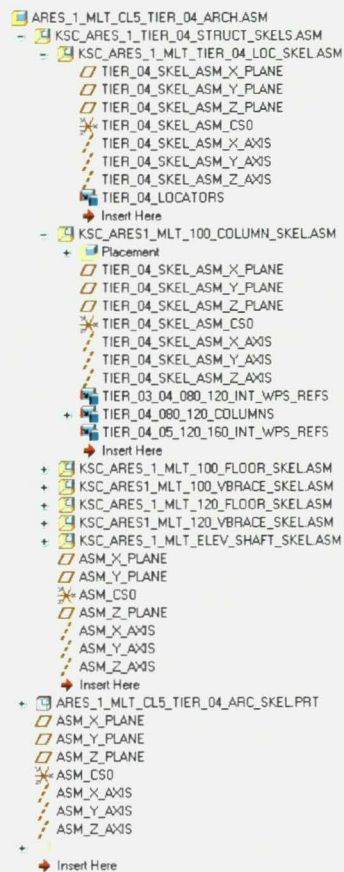
- Publish Geometry features convey critical design elements to sub-assemblies (modules) via local control skeletons.



Large Assembly Management

Publish Geometry

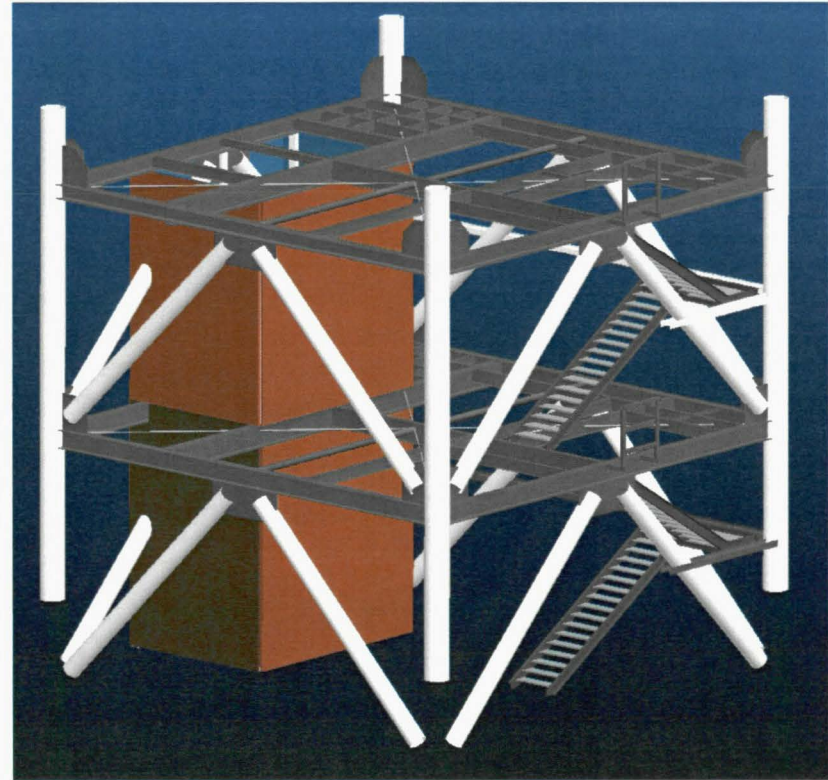
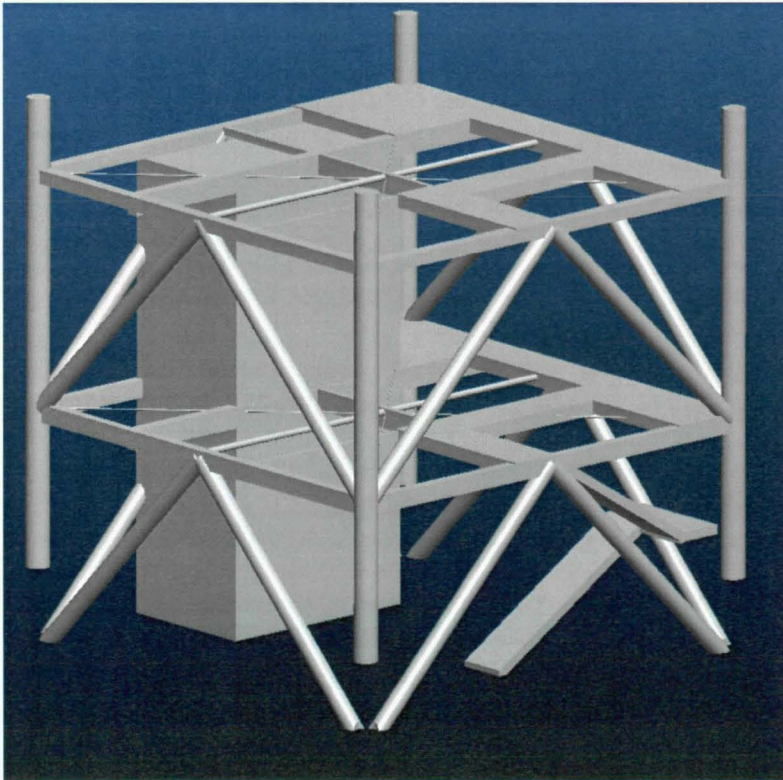
- Publish Geometry features used as Interface Skels.



Large Assembly Management

“Class” Modeling

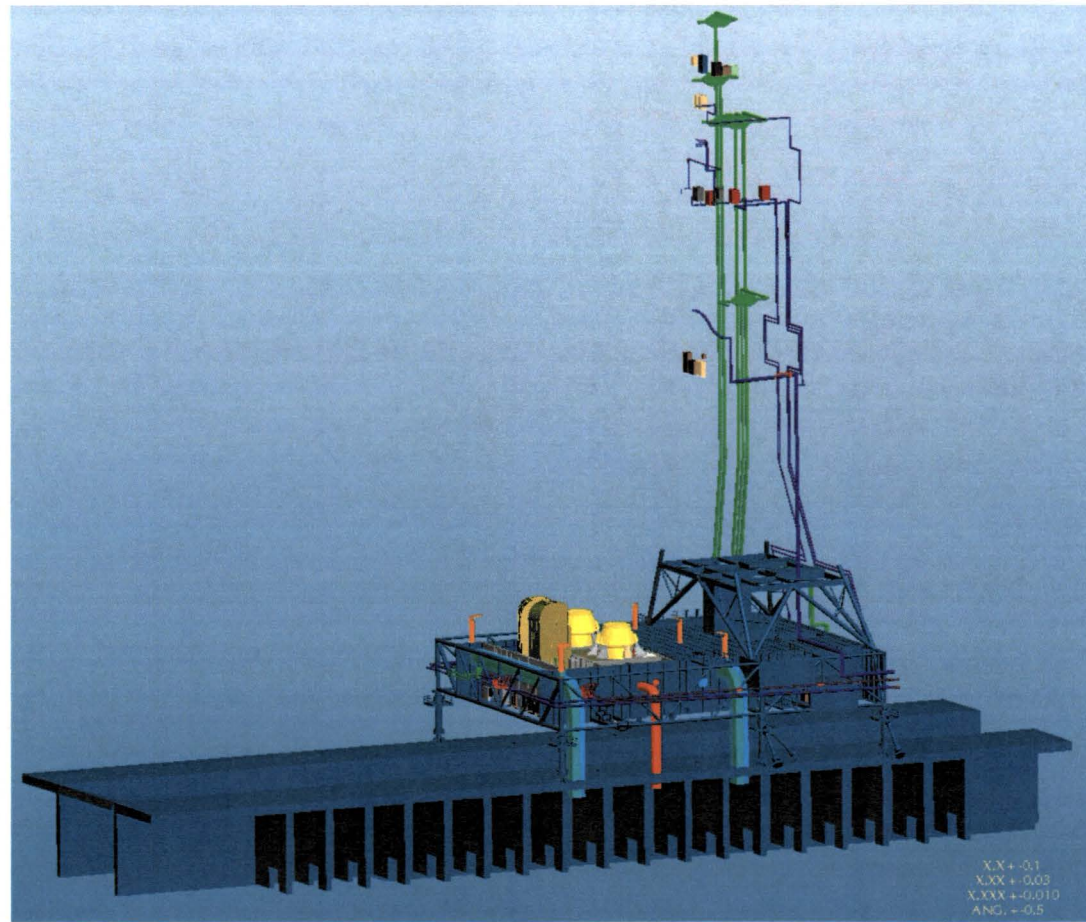
- Conveying only need Detail.



Large Assembly Management

Utilization

- Layouts, Installation Assemblies & Drawings



Questions?