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## SUNDAY NIGHT

The show opened with the exhibitor's booths and the first of many great meals.

## MONDAY GENERAL SESSION

The conference started off each day with a "rock show" feeling with large screens and music. There were 4600 plus in attendance on Monday and over 4700 by the close of the seminar on Wednesday. SolidWorks CEO Jeff Ray spoke, as well as comedian Danny Forster of the Discovery Channel's "Build It Bigger" television series, and finally we had video clips and "live" demonstrations by Theo Jansen and his artificial beach animals.

## API Demystified Technical Discussion

Presented by Leonard Kiksta with a website of [www.lennyworks.com/solidworks](http://www.lennyworks.com/solidworks) with the following notes: a ".swp" file is a VBA program, the following trick was mentioned several times that you can create a slot using offset option with a base construction & cap ends, everything in SolidWorks programming is done in meters – all numerical linear dimensional inputs must be converted, a ".swb" file is a Visual Basic 6 or .NET program.

## Macros for Everyone – Part 1 Technical Discussion

Presented by Clint Hudson with the following notes (I did not get to go to Part 2 due to scheduling conflicts). Use the F8 to go step by step a macro and F5 to test run an entire macro. A clever new command for me was the "UNSTR" which is the reverse direction of the "INSTR" command which finds the last occurrence of a character in a string. Macros can actually send key strokes to Solid Works but this is not the normal method of communicating.

## Automating Your Designs, Excel, VBA & Beyond Technical Discussion

Presented by Paul Gimbel, a large ear ring with nuts and washer wearing "Design Sherpa" with notes at [www.Razorleaf.com](http://www.Razorleaf.com) with the following notes: A collection class in VB.net is a "super" object referencing many other objects. If "nothing" is selected then you must check the selection set for null.

## SolidWorks Users Group Network (SWUGN) Summit

Held by Richard Doyle, at [www.swugn.org](http://www.swugn.org), with the following notes: There will be a SWUGN one day technical summit, like a one day SolidWorks World, in Oklahoma City later this year. There is a new Users Group formed in Tulsa, OK.

## TUESDAY GENERAL SESSION

The morning general session had Dr. Don Norman speaking on designing for humans with a special emphasis on "no signs", and Dr. Robert Ballard of Titanic discovery fame

speaking on remote exploration of the ocean floor (my favorite line was when asked what was his first thought upon seeing Titanic was “wow, look at that great paint job, that’s still good paint after 70 years”).

### SolidWorks VBA to VB.NET Migration Essentials Technical Discussion

Presented by Jerry Winters with the following notes: VBA works with 32 bit applications and VB.net with 64 bit. Toolbar Buttons can use VBA. VB.NET express edition is a free download. API will be replaced with Video Studio Tools Applications. VBA can use the normal VB6 “com” interaction types & constants. Add-ins can be stand alone executable files (.EXE) or dynamic linked libraries (.DLL). If a DLL crashes it takes SolidWorks with it, an EXE doesn’t. There is no “SET” value in VB.NET. VB.NET needs a parenthesis for the msg command. You can download DLL stubs from API area. Warnings mean a programming error that the user never sees. You can now send messages to the Event Log. The Notify icon will go to the bottom right corner of the screen when minimized instead of across the bottom. Whenever you see “INTER OP” in the VB.NET world is like the “.com” in the VB6 world. VB.NET allows you to make ftp very easy. The VB.NET framework requires you “dispose” of loaded items instead of “close” items. There are a lot more VB.NET API calls than VBA API calls (six to ten times more). Open a “.DLL” from File Open and probably don’t put it in solid works\, it should go into program files\. If you want an installer, you should use something like macrovision.com which is a very elegant installer (install shield express is \$400 and works for almost everything – full version is \$1800). Worst news was that you have to redraw forms in VB.NET from VB6 or VBA. The “common language runtime” guarantees that VB.NET, C#, and other programs that accomplish the same tasks run the same speed. Cosmic blob – 3D clay modeler for kids – was mentioned in several meetings and comes from DSS, the makers of SolidWorks.

### Using the Power of 3D to Teach GD&T Technical Discussion

This was presented by Chris MacCormark of Northwest Technical Institute, a 2 year technical degree, had the weakest presentation that I attended, but in fairness the others were all super great. Key notes included that GD&T is a language that is exact and precise, you should always start with the assembly, keep out technicalities early on during the analysis, and use E-drawings for markups. He had a good line that there was “no partial credit in machine shop”.

### Exploring the SolidWorks API from a Battleship Technical Discussion

Presented by Bill Braggs, who was hired by SolidWorks this year, a great discussion involving the creation of a program inside SolidWorks to play the Milton Bradley Battleship game. Some key notes from the presentation was that False is 0 and everything else is True (-1,1,22, whatever). The most common macro in use is one that standardizes title blocks. You should use lots of snippets to debug portions of VB.net. He showed an E-Drawings Tic Tac Toe game using an API and API’s don’t travel with E-Drawings. He uses “SW” before Solid Work variables. You can use the “With Events” object to get an event from Solid Works. There is a “Listener” object that does

collects events, also known as “hosting”. XML can be used is like a setup/ini file. The Battleship game was absolutely amazing, blow you away, amazing.

## WEDNESDAY GENERAL SESSION

### New Features in 2009:

- Create an Assembly BOM without drawing that is editable and exportable
- Sheet Metal from solids has a lot of enhancements
- Assembly “pack” allows you to only load part of a large assembly even though graphically it all appears
- Assembly Feature – new virtual part is expanded
- Special plastic tools
- Sketch now allows negative dimensions
- Sensors (dynamic) allow you to monitor a design while you are working on something else. For example, put a sensor on a clearance dimension and tell it to warn you if clearance is less than .005” or more then .020”
- Size tool boxes graphically
- Magnifier allows you to zoom a section of the screen (called a View Bubble)
- Ribbon Cables / Harness Drawings
- Template Wizard
- Jogs for everything
- Leaders changes on dimensions for holes, chamfers, fillets, etc.

Available in 3 Q 2008

### Working with Assemblies Technical Discussion

Presented by Sol Lama with the following notes: new mechanical mates – screw, animator, virtual parts in assemblies (this is great for parts without geometry like grease, glue, solder, etc.), selected opens, “Add to Favorites” – open, and Pack–n–go works from Windows Explorer.

### Leveraging Design Tables & Configurations For Very Large Assemblies Technical Discussion

Presented by Kurt Shea, Alstom Power, with no notes.

### Shortcuts & Customization with the New SolidWorks 2008 Interface Technical Discussion

Presented by Joe Rowsey of Joe’s CAD Company in New Orleans. Lots of new keyboard shortcuts and menus can be selected.

***SolidWorks World 2009 will be February 9 – 11 at the Swan and Dolphin Hotel at DisneyWorld in Orlando Florida.***