#### **Actuarial Shareware**

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# Program

- Demos
- Status of package
- Volunteers

#### Demos

- FFTs vs shifted lognormals to compute aggregate distributions
- Loss development, confidence intervals
- Regression tools
- Histograms, 2D histograms
- Task-Project Manager Philosophy
- Myers-Read demo
- Cool stuff

- GREAT home page
  <a href="http://www.mynl.com/GREAT/home.shtml">http://www.mynl.com/GREAT/home.shtml</a>
- Contains latest distribution of tools
  - Installs to c:\program files\GREAT
  - Registers DLLs
  - Can be uninstalled using Control Panel, Add/Remove Programs
  - NT4.0 (SP4), 2000 or XP required
  - Excel 97 or later required for Add-In
    - User must manually add the add-in c:\program files\great\greatools400.xla
  - Some laptops require slightly different load

- Documentation
  <a href="http://www.mynl.com/GREAT/help.shtml">http://www.mynl.com/GREAT/help.shtml</a>
  - Currently more aimed at developers than users
  - Modules, functions and subs, menu commands
    - Automatically generated from source code
  - Help in toolkit links to internet site

- Bugs: yes
- Tested: not entirely
  - Curse of proliferating options
- Development
  - Regression tools not completed
    - Extend to include Zehnwirth-like triangle analysis tools
  - Visualization component being re-written
  - SADCo, FFT tools largely complete
    - More distributions
    - Testing
    - Memory leak
    - Iman-Conover, multivariate sample section needs rewriting

- \* Tools
  - VBA Add-in
    - 14,000 lines of code
  - C++
    - VISCo VTK
    - SADCo FFTW, Blitz++
    - LinAlg2 Lapack (Fortran)
    - Variant
  - HTML, XML, CSS

#### Volunteers

- Testers Grade A
- Testers Grade B
- Contributors
- Proselytizers and Users

#### Volunteers

- \* Testers Grade A
  - Look at code, check the math, generate examples, help write documentation
- Testers Grade B
  - Does it run on your machine?
    - Looking for a range of machine types and OSs
    - Download, install, run some samples, report

#### Volunteers

- Contributors
  - Pure Excel (add-in code), COM-objects
  - Nothing proprietary! Methods not parameters
- Proselytizers and Users
  - All pointless unless people start using tools
  - Goal

Actuaries regard an aggregate distribution as just another parametric distribution