



PolySystems, Inc.

HORIZONS

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40

PolySystems, Inc.
Celebrating 40 Years of Service

You're Invited: Become a VACARVM Master

—John A. Adduci, FSA, MAAA, Vice President & Annuity Practice Manager

A Long Time Ago in a Galaxy Far, Far Away...

Three actuaries go to lunch. The waiter leaves a check for \$31.40 at the edge of the table. When the waiter returns, how much does he find to pay the bill?

Answer: Zero. Actuaries always round to the nearest million.

The above is an old joke, and I'm happy to report one that I did not write. It can at times serve as a metaphor for the level of perceived accuracy of actuarial reserves. Did any actuary think that *Actuarial Guideline 39* adequately reserved for tail risk in Variable Annuity guarantees by setting the reserve equal to an accumulation of charges? No, it was just a stop-gap measure and an easy number to calculate. It would serve as a reserve until something better came along.

A Disturbance in the Force

September 24, 2008: All Variable Annuity practitioners in the U.S. can feel it...a disturbance in the actuarial force. It was on this day that VACARVM was adopted as *AG43*. The guideline contains 73 pages, ten appendices and requires, among other things, scenario projections of both assets and liabilities. This is a long way from accumulating rider charges! *AG43* presented actuaries with a prescribed framework to model the excess benefit payments. *AG43* became effective 12/31/2009.

Flash forward to present day. If your company issued Variable Annuities with guarantees, you had to do something for year-end 2009. Ask yourself these questions:

- Did the process go smoothly?
- Are you confident that you understand exactly what was done to get to the reserve?
- Did you take enough time to get comfortable with the results?
- Are you ready to do it all again this year-end?

PolySystems software was ready for year-end 2009, and we're ready to work with you. AnnuityMaster and AnnuityDelphi can calculate the Standard Scenario Amount (SSA). AnnuityDelphi and Asset Delphi together can calculate the CTE (70) portion of the reserve. And AnnuityDelphi will soon project both the Basic Adjusted Reserve

(BAR) and the SSA. All of this is contained in a production environment, allowing the user the ability to reliably reproduce reserve values.

Thursday, April 15th and Tuesday, April 20th PolySystems will host a VACARVM seminar in our Chicago office. This full day seminar will cover everything you need to get your *AG43* process running smoothly. We will spend time on the following:

Return of the Guideline: General Requirements for AG43

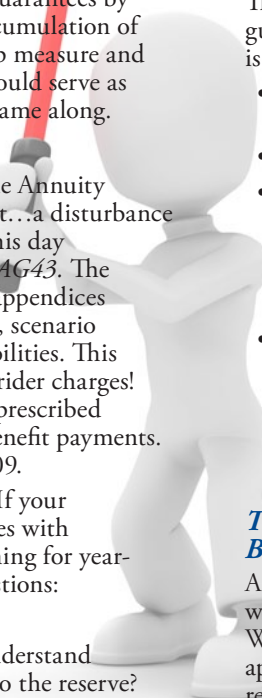
The seminar faculty will review and give guidance on what is required by *AG43* and what is open to interpretation. Topics will include:

- Basics of the Standard Scenario Amount calculation;
- Basics of the CTE (70) calculation;
- Assumptions prescribed by *AG43* and those that are at the actuary's discretion. How much leeway is there in this reserve, and how are other companies interpreting the guideline? Can this vary by product design?
- Sensitivity Analysis: Not all companies have interpreted *AG43* the same way, and at times there is no guidance regarding what is "correct." We will examine where company practice has diverged, and demonstrate the impact of these different interpretations.

The Actuary Strikes Back: Best Practices for Implementing AG43

After reviewing the general requirements, we will examine how *AG43* has been implemented. We will use sample data and a case study approach to examine and demonstrate the steps required by this guideline. The seminar will also highlight where PolySystems can improve the accuracy and timeliness of your results:

- PolySystems models are geared towards seriatim projection runs.
 - » When contracts are in or near the money, the in-the-moneyness of guarantees can be determined specifically for each contract. This eliminates the time consuming step of building a modeled in force that also reflects the in-the-moneyness.





» When contracts are significantly out-of-the money, it is OK to incorporate some modeled cells without losing accuracy.

- *AG43* also requires rerunning the Standard Scenario when a modeled in force is used for CTE; seriatic CTE projections in AnnuityDelphi eliminate the need for this additional run. Grid software can be utilized to easily address run time issues inherent in running many scenarios.
- The use of cash flow utilities and Cashflow Analyzer to reduce the number of runs for sensitivity analysis. Cashflow Operations can be used to strip off reinsurance vectors, thus removing the impact of reinsurance without needing to rerun the 1000 or so CTE scenarios. Expenses can be adjusted easily through cashflow operations. These are just two ways in which the software can save you time when calculating results.
- It is possible to adapt your VACARVM model for use in the C3-Phase II model for capital adequacy. Cashflow Operations and Analyzer can be used to adjust for the different assumptions in C3P2, thus eliminating the need for another set of stochastic scenario runs. We will show you how to do this.

This seminar will also serve as a platform for sharing our collective experience and lessons learned

implementing for year-end 2009. Since many of the *AG43* assumptions are prescribed, we have a lot of the tables and user formulas pre-coded. These can be easily dropped into your current setup with a minimum of effort. Other items, such as coding your company's specific benefit or calculating asset management fees and shared revenue require effort unique to each client.

Attendees will leave the seminar confident in their ability to run *AG43* successfully. Success is defined as producing results that follow the requirements of *AG43* and are consistent with best practices in the industry. PolySystems' results are reliable, reproducible, auditable and completed in a timely manner.

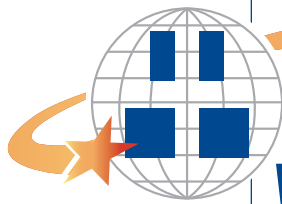
Dates: April 15, 2010 *or* April 20, 2010

Location: PolySystems – Chicago, IL

Registration Fee: \$125.00

For more information about our seminar and to register, go to our website at www.polysystems.com. Also, an email announcement with a complete syllabus and agenda will be arriving in your inbox soon. We hope to see you in April!

And remember, the next time you go out to lunch with a few of your actuary friends, please don't stiff the waiter! 🍷



BITS & BYTES

Winter of Webinars Continues & Some Other Info

—Jackie Smith, Actuarial Assistant

PolySystems' winter of webinars is not over yet. Two more complimentary webinars are scheduled in February, and only a few spaces remain. **Register Today!**

Introduction to LifeHorizon

Feb. 22, 2010 – 2:00 P.M. (CST)

Feb. 24, 2010 – 10:00 A.M. (CST)

LifeHorizon is PolySystems' history gathering software for traditional life products and creates the Policy Detail History (PDH) file. In this webinar, learn about the traditional life PDH, including how to build the PDH, analyze the BuildPDH results and maintain the ongoing BuildPDH process.

An Introduction to LifeMeasure

Feb. 23, 2010 – 2:00 P.M. (CST)

Feb. 25, 2010 – 10:00 A.M. (CST)

LifeMeasure is PolySystems' experience study software for traditional life products. In this webinar, learn how to set up an experience study and run LifeMeasure. The webinar will cover all of the LifeMeasure screens and introduce new screen options that will be available in releases soon.

The introduction to LifeHorizon webinar is a great accompaniment to our Introduction to LifeMeasure webinar. The PDH is the input file needed to run LifeMeasure. Familiarity

with the PDH will help with your experience gathering and experience reporting processes.

A Principles-based Approach is around the corner, and studying experience will be a requirement for the calculation of principles-based reserves. If you are not already using LifeMeasure to study your experience, we invite you to participate in both of these webinars to learn more about gathering your history and studying your experience.

Visit our website for more information and to register. www.PolySystems.com.

Thinking Ahead to RBC C3-Phase III?

Thinking ahead to RBC C3-Phase III? PolySystems is currently running a C3-Phase III case study. Look for our results in the March 2010 issue of our newsletter.

The Curling Quiz Results are in!

PolySystems' ad in the Jan./Feb. 2010 issue of *Contingencies* featured the sport of curling. We wanted to have a bit of fun, so we hosted a short curling quiz on our website. Thank you to everybody who participated. Winners have been notified, and the answers have been posted on our website. Visit us next month at www.polysystems.com to participate in our next quiz!

Who doesn't enjoy a chance to win valuable prizes?!? 🍷