

## BATTLEBOTS 2019

SCOTT ROSENTHAL, HOLBORN CORPORATION





Challenge Accepted!

OK...Revised Challenge Accepted!

Back to the Lab

Ready for Battle!

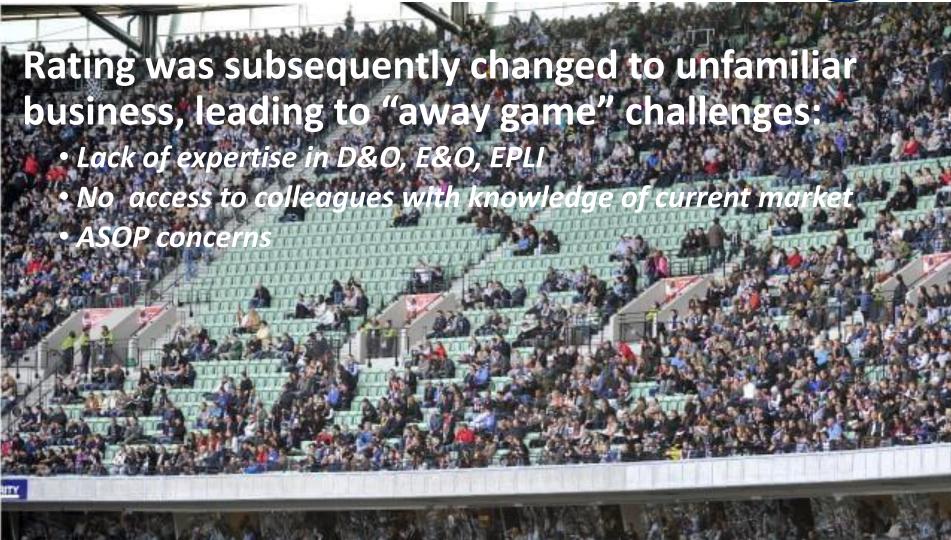
## RISING TO THE (EASY) CHALLENGE





## PROFESSIONAL LIABILITY: A DIFFERENT GAME





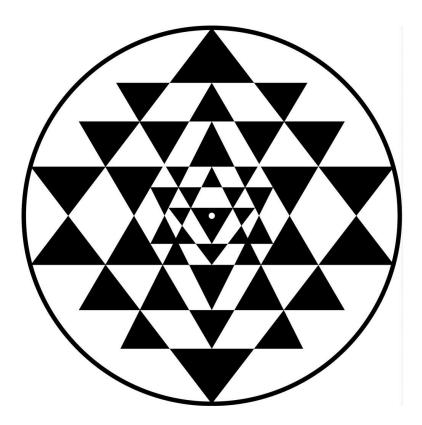
### PLAYING THE HAND YOU'RE DEALT





### WHAT DOES 43 TRIANGLES LOOK LIKE?

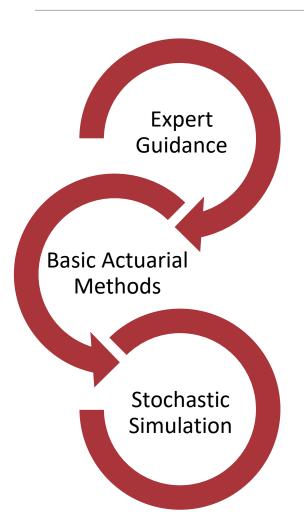


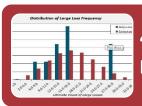


Sri Yantra – Hindu representation of the totality of the cosmos and an expression of non-duality.

## RETOOLING/SEGMENTATION STRATEGY







"Regular Losses": Traditional actuarial methods
Frequency / Severity, Loss Ratio, Simulation



Clash Losses: ": Treat like a CAT shock



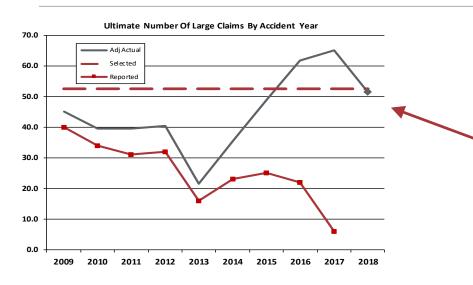
**SCA/Derivative/EPLI:** Adjust experience for environmental trends/

Traditional actuarial methods applied to each segment above.

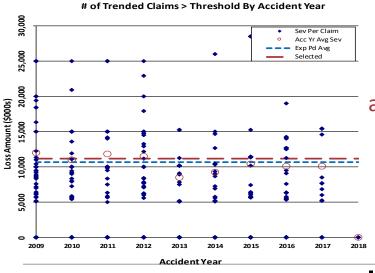
Parameters run through a simulation engine for pricing.

# BATTLE TIME: ANALYSIS/OBSERVATIONS **EXCESS of LOSS**

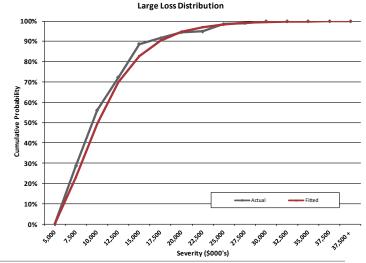




Selected 53 claims/year above \$5M (Lengthy claim count development)



Each claim averages \$10.6M.

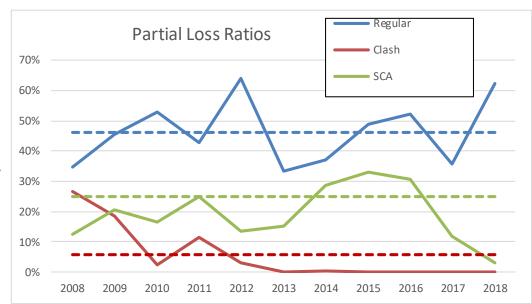


# BATTLE TIME: ANALYSIS/OBSERVATIONS QUOTA SHARE



Ultimate, trended, on-level loss ratios:

- Regular is stationary at 46%
- Clash is highly variable around 6%
- SCA/EPLI/Derivative is rising to 25% -



#### Trends

- 1. Increased cyber liability
- 2. #MeToo litigation
- 3. Advanced litigation tactics

### BATTLE TIME: RESULTS



	Loss Ratio			% of Premium		
SEGMENT	Mean	Disc Mean	Std Dev	Ced. Comm.	Brokerage	Margin
Regular	46%	42%	11%			
Clash	6%	5%	9%			
SCA	25%	23%	9%			
TOTAL	77%	69%	13%	23%	2.5%	5.2%

Quota Share pricing" defined by 23% commission.

	Large Loss xs 5M		40x10 Layer			
SEGMENT	Freq	Sev	Mean	Disc Mean	Std Dev	Premium
All LOB's	53	10,600	118,855	106,969	31,275	114,788

Subj Premium 2019	931,314
5 a b j 1 1 c 11 11 a 11 11 2 5 2 5	331,31.

Excess of Loss Reinsurance premium = \$115M for free & unlimited reinstatements.

#### Structural alternatives:

...for Quota Share: Sliding Scale commission

...for Excess of Loss treaty: Paid reinstatements, AAD

90.0% discount factor for time value (4.0 years payment lag at 2.4% UST rate)