# **FUTURE** FELLOWS

March 2016, Volume 22, No. 1

# **Drone Insurance Coverage**

#### By Ling Tan, FCAS, Candidate Liaison Committee

echnology associated with unmanned aircraft has rapidly developed in the past few years. Along with decreasing manufacturing and operating cost, it has made drones much more affordable. The size, weight and shape of a drone enable it to enter areas that a traditional aircraft is unable to access or too dangerous for human-beings. Therefore, drone usage has widely increased in many industries. Meanwhile, the use of drones has become an emerging risk in the insurance industry because the nature of risk cannot be easily combined with an existing product in the market. **Definition of drones** 

An unmanned aircraft system (UAS) or unmanned aerial vehicle (UAV) is commonly referred to as a drone. The Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 defines it as, "an aircraft that is operated without a possibility of direct human intervention from within or on the aircraft."

⇒ turn to page 2

#### CAS HIRES FIRST STAFF ACTUARY



Richard W. Gorvett, FCAS, CERA, MAAA, Ph.D., has been hired as the first CAS staff actuary. He will be an in-house advisor to the organization, offering the perspective of an experienced P&C actuary on issues related to thought leadership, content development, strategic planning and communications. Gorvett is a 30-year veteran of the insurance industry and a longtime member of the CAS with a background in both corporate and academic practice.

#### CAS SEMINARS AND MEETINGS

CAS Spring Meeting Seattle, WA May 15–18, 2016



# Getting the Most Out of Study Groups

By Elizabeth Demmon Storm, ACAS and Elizabeth End, FCAS, Candidate Liaison Committee

hen studying for an actuarial exam, the phrase "misery loves company" definitely applies. However, sometimes a study group can turn into an hour of complaining about the Bailey and Simon paper on Exam 8 before someone decides they'd probably better leave to study on their own. Here are some suggestions on how to get the most out of a study group when every moment of study time is precious.

Limit the time spent in a study group and have it be focused. Instead of studying as a group every day, study together once a week. Set an agenda at the beginning that outlines what topics will be discussed each week. This can help everyone get through the source material in a reasonable time. In order to share the burden, assign the responsibility of creating study content in a rotation with each member of the group taking a turn. Depending on the group, the study content could be review sheets or practice problems, but this should be agreed upon at the beginning. At the end of each meeting, allow time for questions on the topic. This can generate good discussion, and since it is at the end it cannot derail the whole meeting if the conversation gets sidetracked.

Develop a competitive game to quiz that group. Asking questions in a style similar to Jeopardy can help since competition can bring out better performance. This works well with topics that require memorizing lists or formulas. Categories can be split by sections on the syllabus, with point values increasing with the level of difficulty. This is most helpful when conducted in the final few weeks leading up to an exam.

Create a practice exam as a group. Writing exam questions is not an easy task, but there is a lot to gain from cooperatively creating a practice exam. First, you need to know the material well to write a good, relevant question. Knowing that you must write an exam question that will be an-⇒ turn to page 4

### **Drone Insurance Coverage**

from page 1

#### **Applications of drones**

According to the FAA, drone operations are categorized into public operations and civil operations.

**Public Operations:** These are government operations that can be determined by drone ownership, operator or purpose of flight. Example includes military use, surveillance, search and rescue, law enforcement and border protection.

**Civil Operations:** Non-government operations can be further divided into commercial use and recreational use. Commercial use examples include video-/photo-taking for clients, information gathering in dangerous areas for scientific research/

journalism/construction, industrial surveying, damage assessment, filmmaking, cargo delivery, agricultural application, etc. Recreational use is mainly for hobbyists to take video or photos or gather information for personal enjoyment.

#### Insurance coverage for drones

As an emerging risk, insurance coverages for drones are still at a developing phase. Like most insurance, coverage for drones can be split into first-party and third-party.

**First-Party Damage to Drones:** This is the coverage for damages directly to a drone. During the operation of a drone, accidents can occur due to malfunction of aerial or control components, collision with another object or loss of control from out-of-power or out-of-range operation, or it can even be shot down by an angry

neighbor. The increased popularity of drones is mainly driven by the relatively low cost. Thus, first-party coverage for drones is not very popular because the value of a drone is usually below a typical deductible.

Third-Party Liability Coverage: This coverage for drone usage is the main area of concern. Drone use can potentially cause many types of damages with varying severity. Some of the common liabilities are bodily injury or property damage to other objects due to collision in the air with another flying object;

damage to property or people on the ground by the drone itself, (its parts or its payload;) trespassing or violation of privacy; violation Insurance bureaus and carriers still need to collect a lot more data to create sophisticated rating plans.

from unsafe operation or improper training; or even cyberrisk due to dependency on telecommunication technology (i.e., a hacker takes control and causes damage to others). Homeowners policies may cover this risk for recreational use, but commercial general liability policies typically exclude this risk, with a separate endorsement often needed for the coverage.

#### Trend in insurance industry

Realizing the rapid growth of risk exposure, more and more commercial insurance carriers are willing to offer coverage for drones. For commercial users, liability coverage is far more

> popular than first-party property coverage. A liability loss can be much more severe than damage to a drone, and insurance requirements also play an important role in some areas. In the U.S., drone insurance is not currently required for either recreational or commercial use. However, in Canada, a minimum of \$100,000 liability insurance is required if operating commercially. Yet, the U.S. regulation is quickly catching up with all the drone development, as the FAA initiated the mandatory registration of drones effective December 21, 2015, for all recreational uses, and approval is needed from the FAA for all commercial uses.

> With drone use being a new risk exposure without much data, pricing insurance coverages is also developing simultaneously through many organizations. There are common risk characteristics that are widely

considered in pricing, such as weight and type of use, but insurance bureaus and carriers still need to collect a lot more data to create sophisticated rating plans. Recognizing the growing demand for commercial uses of drones, in 2015, ISO filed six new optional endorsements for use on commercial general

liability policies. These endorsements are intended to provide flexibility for carriers to include/exclude drone coverages.

To learn more about U.S. requirements of drone operations, visit https://www.faa. gov/uas/. ff

# **Captive Insurance Companies: A Primer**

By Mark Maenche, Candidate Representative to the Candidate Liaison Committee

s a future Fellow, you may have heard the term "captive insurance company" or "captive" floating around in the insurance industry lexicon. You may have wondered what a captive is. How can an insurance company be captive to anything? Has it been taken hostage in some way? Even using your Internet sleuthing skills may leave you bewildered as to what a captive insurance company actually is.

In the 1950s, an insurance broker in Youngstown, Ohio named Frederic Mylett Reiss was confronted with the possibility of losing one of his most valuable clients due to dramatic increases in premium and the inflexibility of the insurance marketplace. By most current accounts, it seems that Reiss was not one to allow the situation to dictate his response. He set about helping his client solve this problem. Reiss was able to convince underwriters at Lloyd's of London to offer reduced premiums if he could provide loss prevention and risk management through a fronting company in the United States. The old axiom "necessity is the mother of invention" was reflected in his solution. Insurance typically uses the law of large numbers to help level out the loss experience of all customers, but Reiss's concept was in direct contrast to that arrangement. His client would form an insurance company in Ohio that would be the fronting company for Lloyd's and then self-insure a portion of claims while reinsuring losses above a retention with London. It would be an insurance company whose only client was its owner. In 1955 Steel Insurance Company of America became the first pure, single-parent captive insurance company.

United States regulations in the late 1950s were not conducive to the formation and operation of these captive insurance companies; therefore, Reiss began to seek out other regulatory jurisdictions that would help promote the idea of captive insurance companies. By 1960 Bermuda had become an offshore financial center offering creativity in risk-taking activities and low-regulatory hurdles. It was there in 1962 that Reiss formed International Risk Management Ltd. beginning the expansion and promotion of the captive industry.

Over the past 50 years, the captive insurance industry has grown significantly, with more than 7,000 captives in more than 49 domiciles around the globe. Each captive insurance company selects a jurisdiction in which it will be formed and under whose rules it will be regulated. Within the United States, more than 30 states have enacted legislation that authorizes the formation of captive insurance companies. The first state to do so was Colorado in the 1970s. Today, Vermont is the leading domestic domicile with more than 1,000 captives formed. Each of the more than 30 state domiciles have various rules and regulations that a captive must follow. These differences, as well as legal and accounting complexities, have given birth to an entirely new industry surrounding captive management.

Captive management firms help entities that are interested in forming a captive insurance company navigate the entire formation process. This process includes but is not limited to deciding which risks to insure, selecting a domicile and connecting the owners with service providers. The service providers usually include a legal team, accounting and auditing personnel, and actuarial services. Now that you know more about captive insurance companies, you may be curious to know some additional reasons for forming one.

The reasons for forming a captive insurance company are numerous. Many of these reasons revolve around a company wanting more control over managing and financing its risk. As many as 90 percent of all Fortune 500 companies now have captives. These companies know that conventional insurance products are an expensive form of risk-financing when losses are predictable. A captive insurance company serves as an alternative risk-financing technique that allows a company to tailor coverage to meet their unique needs, reduce risk management costs and have direct access to the reinsurance marketplace, among other benefits.

When forming a captive insurance company, there are a variety of structures that can be used. The following are the common types, along with a brief description of each:

- Single Parent or Pure Captive: An insurance company formed and writing only the risks of its owner/parent and/or affiliates.
- Group Captive: A captive insurance company established by a group of unrelated companies with similar businesses or exposures writing only the risks of its owners and/or affiliates.
- Association Captive: A captive insurance company owned by a trade, industry or service association (e.g., doctors) to insure the risks of its member organizations.
- Rent-a-Captive: A captive owned by an outside organization and open to participants for a fee. Members "rent" licenses and capital from the rent-a-captive owner. This type of structure is often used by entities that prefer not to form their own dedicated captive or for a program that is too small to justify incorporating its own captive. This rent-a-captive-type structure has various names depending on the domicile and governing law such as "protected cell company," "special purpose vehicle," and "segregated portfolio company."
- Risk Retention Group (RRG): A special type of group captive formed for the principal purpose of assuming and spreading risk for commercial liability exposures. They are authorized by a federal law, the Liability Risk Retention Act of 1986. An RRG is licensed in one state to write liability insurance and may operate nationwide, provided it properly registers with each state in which it proposes to solicit or write insurance.

Over the past year, captive insurance companies have been in the news because they were included in the "Dirty Dozen" list of tax scams identified by the Internal Revenue Service (IRS). Section 831(b) of the Internal Revenue Code makes provisions for small businesses to form captive insurance companies with some tax advantages. The IRS is charging that some entities are using these captives in an abusive manner for tax avoidance by creating them to "cover ordinary business risks or esoteric, implausible risks for exorbitant premiums." There are people on both sides of this issue within the captive industry, and debates regarding the legitimacy of various 831(b) captives can be quite contentious. Recent laws have been passed to address these issues. To date, members of the captive industry have proven to the courts that they are operating legally.

So, as a future Fellow, where you do you fit in with captives? There are a number of roles for an actuary associated with



ditional insurance company. This review of the estimated unpaid claim liabilities falls well within the scope of standard actuarial work.

Captive insurance companies have become a useful tool in the arsenal of businesses to help manage and finance their risk. Using the studious approach, for which actuaries are known, they can master the skills and

the formation and operation of a captive insurance company. Before a domicile regulator will approve the formation of a captive, a feasibility study must be prepared. This feasibility study is typically prepared by an actuary and addresses the risks contemplated by the captive, the price to insure those risks and the potential for sustainability of the risk-financing program. Many domiciles also require captives to evaluate their reserves on a regular basis just like a traunderstand the intricacies of working with these complex alternative risk-financing mechanisms. The market for captive insurance companies continues to expand to smaller businesses that are good at managing their risk and want to take more control of their financial destiny. It appears that captives will provide both pricing and reserving work for actuaries now and for years to come.

## Getting the Most Out of Study Groups

#### from page 1

swered by your peers can motivate you to thoroughly understand the topic for which you are responsible. If this topic is tested on the actual exam, you should be well poised to answer it. Second, having different individuals write questions will add variety and different perspectives to the exam topics and the presentation of the questions. It seems that the exam writers are always looking for new ways to test classic, core concepts. If a student can derive a new question for a particular topic, there is always the possibility that the official exam writers also thought of that new way of asking the question, and you'll see it on the exam. Last, if your practice exam turns out to be quite spectacular, you could have a product that you could pass along or sell to other exam takers.

To build a full-length practice exam, have someone be a designated coordinator who oversees the practice exam creation and compiles the final exam. That person should specify the topics that need to have questions written and seek volunteers for each topic or assign topics to those studying for the exam. The coordinator would ideally receive more questions than will be included in the final practice exam and should prioritize the most interesting questions and those on new topics. Questions can be compiled to have the total points on the practice exam be similar to historical exams. The coordinator should not worry too much about the length of the exam, since students often experience exams that feel too long or too short throughout their official exam-taking career. Questions and answers should be submitted on separate Excel tabs or Word documents, so that the coordinator can easily put the practice exam together without having to do a lot of cutting and pasting. The coordinator should briefly review everything for unclear wording and obvious errors, returning any unclear or erroneous question to its owner for revision. Ideally, the questions will all be created at least a few weeks prior to the exam, giving the exam coordinator enough time to forget the reviewed questions and answers so that he or she can have a somewhat fresh look at the practice exam closer to exam time.

Writing an exam question can seem daunting, but you do not always have to start from scratch; past exams are a great resource. You can take an old question and simply change a few of the numbers, which still helps practice the mechanics of the calculations. Another way to use old exam questions is to reverse engineer the calculations: If the original question gives you x and y and asks you to solve for z, write your question with x and z given, and yas the unknown. You can also build upon old exam questions. In the original exam, you had to forecast for year x. Make your new question require the test taker to forecast for year x and year x+1. For new papers and previously untested or rarely tested material,

# CAS Examinations, Fall 2015

	Registrations	Exams Taken	Exams Passed	Ineffective Candidates	Effective Pass Ratio	
CAS Exam LC						
U.S.	96	93	68	6	78.16%	
Canada	14	14	12	0	85.71%	
Caribbean	0	0	0	0	0.00%	
Europe	1	0	0	0	0.00%	
East Asia	5	5	0	1	0.00%	
Other*	3	3	3	0	100.00%	
TOTAL	119	115	83	7	76.85%	
CAS Exam ST						
U.S.	240	232	174	15	80.18%	
Canada	47	44	37	0	84.09%	
Caribbean	1	1	0	0	0.00%	
Europe	3	3	3	0	100.00%	
East Asia	5	5	5	0	100.00%	
Other*	2	1	1	0	100.00%	
TOTAL	298	286	220	15	81.18%	
CAS Exan	n S		I			
U.S.	170	152	48	49	46.60%	
Canada	18	13	9	1	75.00%	
Caribbean	0	0	0	0	0.00%	
Europe	1	0	0	0	0.00%	
East Asia	16	11	4	3	50.00%	
Other*	4	1	0	1	0.00%	
TOTAL	209	177	61	54	49.59%	
CAS Exan	n 5		1			
U.S.	569	525	175	32	35.50%	
Canada	156	144	54	6	39.13%	
Caribbean	1	1	1	0	100.00%	
Europe	8	6	1	0	16.67%	
East Asia	99	86	12	11	16.00%	
Other*	19	18	0	3	0.00%	
TOTAL	852	780	243	52	33.38%	
CAS Exan	n 6C					
U.S.	0	0	0	0	0.00%	
Canada	103	94	36	2	39.13%	
Caribbean	0	0	0	0	0.00%	
Europe	1	1	0	0	0.00%	
East Asia	2	1	0	0	0.00%	
Other*	3	3	0	0	0.00%	
TOTAL	109	99	36	2	37.11%	

	Registrations	Exams Taken	Exams Passed	Ineffective Candidates	Effective Pass Ratio			
CAS Exam 6US								
U.S.	497	453	158	27	37.09%			
Canada	2	2	1	0	50.00%			
Caribbean	0	0	0	0	0.00%			
Europe	5	4	1	1	33.33%			
East Asia	35	33	11	5	39.29%			
Other*	10	10	3	1	33.33%			
TOTAL	549	502	174	34	37.18%			
CAS Exam 8								
U.S.	618	583	233	21	41.46%			
Canada	134	130	66	2	51.53%			
Caribbean	0	0	0	0	0.00%			
Europe	13	13	3	1	25.00%			
East Asia	47	43	11	5	28.95%			
Other*	6	2	0	0	0.00%			
TOTAL	818	771	313	29	42.18%			

\*"Other" includes Bermuda, India, Pakistan, Australia, South America and counties in the Middle East and Africa.

Demographic Summary for Exams LC, ST, S, 5, 6C, 6US, 8						
	Percentage					
Exams in the U.S. and Canada	2,664	90.18%				
Exams outside the U.S. and Canada	290	9.82%				
Total	2,954					

2,901
2,730
2,696
67
61
6
162

January 2016

## Getting the Most Out of Study Groups

from page 4

you can develop "briefly describe" questions based on the readings, or attempt to create something totally from scratch. Be creative and try your hand at developing a question that is considered high level according to Bloom's taxonomy. You and your practice exam co-authors might find that you enjoy writing exam questions and that you are eager to volunteer for the CAS Exam Committee when you have finished with your exams!

Future Fellows would like to thank Andrew Yuhasz, FCAS, for sharing his experiences and advice regarding coordinating practice exams with us.

# Actuaries and Data Science: Highlights From the 2015 CAS Annual Meeting

#### By Rachel Hunter, FCAS, Candidate Liaison Committee

nyone who saw the first session of "Survey Says – Professionalism Edition" at the 2015 Annual Meeting in Philadelphia might have thought the highlight of the meeting for me was being on a team that won the first round of professionalism trivia. Volunteering to challenge my memory of Statements of Principles was thrilling, but as someone who works with other actuaries and data scientists building pricing models, I felt the overall content of the 2015 Annual Meeting was well-tailored to my interests.

The announcement of a predictive analytics and data science credential to be developed by The CAS Institute (see article on page 8) was only the beginning of a CAS Annual Meeting that was highly focused on the intersection of actuarial and data science. When Bob Miccolis delivered the president's address as part of the business session, he took us through the evolving nature of the CAS. He reviewed the themes of the president's message series he wrote for the 2015 Actuarial Review issues. Miccolis highlighted the need of the CAS to evolve not only to be ready for emerging risks and changes in the insurance marketplace, but also to embrace new technologies and innovations such as expanded application of data science techniques. The address painted a picture of a professional society working to grow its boundaries and bring in a diversity of talents to benefit the insurance industry. The partnership with The Institutes is just one part of that evolving strategy.

Given the increased focus on predictive analytics and data science, you may wonder how the role of the actuary may change in the future. Insurance companies continue to employ actuaries but are also hiring data scientists to help with the analysis of problems within the traditional actuarial specialties



Philadelphia's Franklin Institute was the setting for the CAS Annual Meeting Tuesday evening dinner. Photo credit: Matt Caruso.

of pricing and reserving. We are also seeing more actuaries crossing outside of pricing and reserving to apply models and analytics in other areas of insurance operations, such as marketing and distribution. The Annual Meeting included content reflecting this current state.

Concurrent sessions included overviews of technical methods, as well as general guidance for actuaries on how to work with and understand models in an increasingly technical insurance environment. With today's computing power, exploration of data using new techniques is no longer limited to the realm of those with highly specialized training. To make sure actuaries have the background needed to deal with more complex models, the CAS continues to refine curriculum. Exam S now includes introductory material related to generalized linear models and the coverage of modeling techniques in upper-level examinations is increasing.

"Cyber Risk" and "What Is the Next UBI?" were two of the sessions that gave overviews of new insurance challenges that are potential targets for sophisticated modeling techniques. How do we develop the appropriate coverage and pricing for these sorts of emerging risks? How do we use our business knowledge to leverage data science and "Big Data" to help answer questions that cannot be answered by historical claim data? In addition, there was a session on price optimization and the current regulatory environment. Price optimization, as implemented in marketplaces such as the U.K., continues to be a frontier of pricing that is well-suited for the application of advanced techniques. What do actuaries need to understand to help with implementation and communication of models in this area?

"Man Versus Machine: Do Actuaries Have the Correct Skills to Leverage Machine Outputs in Future Forecasting?" was a talk by Temple University professor Guntram Werther that highlighted the importance of broad-based knowledge in interpreting the results of models. Werther argued that selecting the correct answer, given the variety of predictions that models and computers can produce, requires historical context beyond what is captured in any single model. He proposed that "man *and* machine" is the ideal solution and challenged the profession to develop actuaries with multidisciplinary expertise beyond computational skills. Diversity of experience among actuaries would certainly be of benefit in this context.

The final session of the 2015 CAS Annual Meeting was a panel discussion called "Blending of Data Scientists and Actuaries." Panelists included an actuary working in predictive analytics (Louise Francis, Consulting Principal, Francis Analytics &

## **Actuaries and Data Science**

from page 6

Actuarial Data Mining, Inc.), an actuary overseeing a large group producing models (Chris Steinbach, Chief Pricing Actuary, Global Specialty Lines, AIG) and a data scientist (Swapnil Chhabra, Data Scientist, Zurich North America). The panel painted a picture of the continued viability of the actuarial profession. Actuaries add value to their employers no matter where on the spectrum they fall — all the way from a "technical actuary" with interest in applying cutting-edge data science methods to a "business actuary" interested in leading and managing change in an increasingly complex insurance marketplace.

The panelists pointed out that even a very accurate model is only as helpful as its practical application. With the combination of broad-based insurance knowledge and analytical training, actuaries are particularly well-poised to help guide the creation and implementation of complex models. The message to current candidates is clear: Actuaries can and should learn how to include applications of data science in solving insurance problems and add value to that work by incorporating their unique perspective in developing viable solutions. Actuaries should be ready to embrace the increasing application of advanced techniques within their own practice, whether through partnership with data scientists or actuaries with technical talent, but there will continue to be the need for high-level integrative thinking.

# Reminders

Use the CAS website for the following resource tools:

- CAS Syllabus of Basic Education and updates
- "Verify Candidate Exam Status" to confirm that joint exams and VEE credits are properly recorded
- "Looking at the Exam Process" series
- Feedback button to the Candidate Liaison Committee
- Feedback button to the Examination Committee
- CAS Regional Affiliates news

#### Candidate Liaison Committee Mission

The Candidate Liaison Committee communicates with CAS candidates, collectively and individually, who are taking CAS examinations. The committee informs candidates as to appropriate courses of action available to them. Through periodic communication, this committee informs candidates of results of examination administrations, actions taken on complaints received regarding examination questions and reasons for syllabus and examination changes being implemented. Communication encompasses existing policies and procedures as well as changes being considered. The committee should advise the CAS and its committees of the interests of the candidates regarding matters that come before the CAS and its committees. Candidates may contact the Candidate Liaison Committee at the CAS office address. The Casualty Actuarial Society is not responsible for statements or opinions expressed in the articles, discussions or letters printed in *Future Fellows*.

# **FUTURE<sup>®</sup>FELLOWS**

*Future Fellows* is published four times per year by the Casualty Actuarial Society, 4350 North Fairfax Drive, Suite 250, Arlington, Virginia 22203.

Telephone: (703) 276-3100 Fax: (703) 276-3108

Email: office@casact.org Website: www.casact.org

Presorted Standard postage is paid at Lanham, Maryland.

Candidate Liaison Committee: Dan Tevet, FCAS, Chairperson Elie Bochner, FCAS Kudakwashe Chibanda, FCAS Derek Chin. ACAS Elizabeth End. FCAS James Englezos, ACAS Heidi Givens, FCAS Rachel Hunter, FCAS Winnie Li, ACAS Katrine Pertsovski, ACAS Ling Tan, FCAS Glenn Walker, FCAS **Dylan Williams, FCAS** Diana Zaidlin, ACAS Candidate Representatives:

Agatha Caleo Isabel Ji Mark Maenche David James McFarland, ACAS Edgar Pal Kristen Leigh Schuck, ACAS Elizabeth Demmon Storm, ACAS

David Zornek Examination Committee Liaison to the

Candidate Liaison Committee: Sharon Mott, FCAS

CAS Director of Admissions: Ashley Zamperini

CAS Admissions Manager: Catie Amsden

CAS Examinations Coordinator: Robert L. Craver

CAS Manager of Publications: Elizabeth A. Smith CAS Desktop Publisher: Sonja Uyenco **Subscriptions** to the newsletter are complimentary to CAS candidates who registered for a CAS Examination during the previous two years.

For information, please contact the CAS Office. Send all letters to the editor to the CAS Office address.

**Postmaster:** Please send all address changes to: The Casualty Actuarial Society, 4350 North Fairfax Drive, Suite 250, Arlington, Virginia 22203.

For permission to reprint material, please write to the chairperson of the CAS Candidate Liaison Committee at the CAS Office address. The CAS is not responsible for statements or opinions expressed in the articles, discussions or letters printed in this newsletter.

©2016 Casualty Actuarial Society ISSN 1094-169-X



Casualty Actuarial Society 4350 North Fairfax Drive, Suite 250, Arlington, Virginia 22203 PRSRT STANDARD U.S. Postage **PAID** Lanham, MD PERMIT NO. 4410



# New CAS Institute to Offer Specialty Credential in Predictive Analytics and Data Science

INSTIT

ate last year, the CAS announced the formation of The CAS Institute, or iCAS, a subsidiary of the CAS that will offer new credentials and specialized professional education for quantitative professionals. The iCAS specialty credentials are separate from actuarial credentials and are designed for any professional seeking specialized recognition in quantitative practice areas such as predictive analytics, data science and catastrophe model analytics. Professionals can leverage this recognition in order to enhance their skills, set themselves apart from other professionals, secure additional job duties, attract premium compensation and advance their careers. CAS Members and Candidates have the opportunity to certify specialized knowledge and skills that both complement and expand the actuarial skill set.

The first credentials to be developed and granted by The CAS Institute will focus on predictive analytics and data science; additional credentials will follow in other areas of specialization such as catastrophe modeling, capital modeling and quantitative reinsurance analysis. Each specialty credential offering will be overseen by an expert panel comprised of industry specialists and thought leaders in relevant quantitative practice areas. The expert panel will be responsible for creating the curriculum, setting the competency levels, directing development of educational materials, overseeing high-quality examination and scoring, and establish-

ing eligibility requirements for each specialty credential. The CAS has also partnered with The Institutes, a leading global provider in education, to support the iCAS credentialing process in meeting the highest standards of excellence in professional education.

The CAS Institute plans to begin offering its programs in the latter part of 2016. For more information, visit TheCASInstitute.org for the original iCAS announcement and a set of Frequently Asked Questions.