7 THURSDAY

Time	Session
8:00 - 9:00	Breakfast and Registration
9:00 - 9:15	Welcome and Opening Remarks
9:15 - 9:45	The Future of Risk Modelling
9:45 - 10:30	AIR's Software and Technology Vision
10:30 - 11:00	Break
11:00 - 11:45	Introducing Analyze Re
11:45 - 12:30	Managing Casualty Accumulations with Arium
12:30 - 14:00	Lunch
14:00 - 14:45	Hazard and Vulnerability Enhancements to the 2017 US Earthquake Model
	What's New in Touchstone?
14:45 - 15:30	2017 US Earthquake Model - Modelled Loss Change Case Studies
	Harnessing the Power of the Cloud
15:30 - 16:00	Break
16:00 - 16:45	New Advancements in Inland Flood and Typhoon Modelling for Japan
	What to Expect from AIR's Gen-3 Modelling Framework
16:45 - 17:30	The New and Updated Australia Models
	Preview of Touchstone Re
19:00 - 22:00	Offsite Event
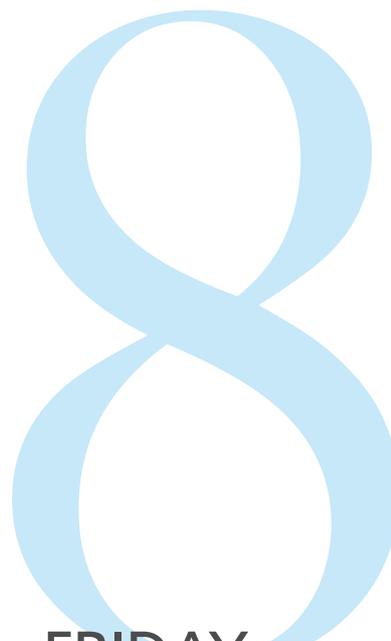
8 FRIDAY

Time	Session
8:00 - 9:00	Breakfast
9:00 - 9:15	Opening Remarks
9:15 - 10:00	Research Roadmap
10:00 - 10:45	Innovations in Modelling Cyber Risk
10:45 - 11:15	Break
11:15 - 12:15	Climate Change – A Panel Discussion
12:15 - 12:45	The Verisk Advantage Explained
12:45 - 14:00	Lunch
14:00 - 14:45	Hazard Enhancements for the 2018 Extratropical Cyclone Model for Europe
	AIR's Geospatial Vision
14:45 - 15:30	Introducing the Hazard Component of the New 2018 Severe Thunderstorm Model for Europe
	Developing Custom Models with Touchstone Model Builder
15:30 - 16:00	Break
16:00 - 16:45	Vulnerability Components for the Severe Thunderstorm and Extratropical Cyclone Models for Europe
	So You Want to Issue a Cat Bond: Selecting the Right Trigger Type
16:45 - 17:30	Preview of the Inland Flood Model for Central Europe and Coastal Flood Model for Great Britain
	Tips for Streamlining Your Cat Model Validation

GENERAL SESSIONS

THE FUTURE OF RISK MODELLING
Presenter: Bill Churney

The President of AIR Worldwide, Bill Churney, will present AIR's vision for the future of catastrophe risk modelling and the impact of technology trends on the industry. He will also review our continuing efforts to work in collaboration with Verisk Analytics and our expanding portfolio of models and software offerings.

INTRODUCING ANALYZE RE
Presenter: Adrian Bentley

Acquired by Verisk Analytics in 2016 and now part of AIR Worldwide, Analyze Re is a Software as a Service (SaaS) platform that provides real-time analytics and optimisation tools to significantly improve pricing, roll-up, and strategic planning for reinsurance contracts and portfolios. In this session, Senior Vice President and Managing Director of Analyze Re Adrian Bentley will provide an overview of the platform and discuss how it can be used to extend your organisation's analytical capabilities. You will also learn how Analyze Re fits with AIR's existing suite of tools and how these solutions can be integrated.

MANAGING CASUALTY ACCUMULATIONS WITH ARIUM
Presenter: Robin Wilkinson

Acquired by Verisk Analytics early in 2017, Arium broadens AIR's risk modelling capabilities to include liability. Arium's solutions enable companies to understand and manage their casualty accumulation risk. In this session, Robin Wilkinson, Vice President and Managing Director of Casualty Analytics, will discuss the risk posed by extreme liability events and explain how the cloud-based Arium platform can help organisations assess their overall exposure to these types of events.

RESEARCH ROADMAP
Presenter: Jay Guin, PhD

At AIR, we continue to expand the scope of what can be modelled, moving beyond natural and man-made catastrophes to investigate new areas of risk that focus on global interconnections. This means we need to model ever more complex and interrelated systems to understand how events that occur in one region might result in a vast array of consequences around the world. Our research encompasses everything from trying to untangle the global supply chain as it exists in both the digital and physical worlds to managing the risks of climate change. However, what may be less apparent is that the world of modelling "traditional" natural catastrophes is also undergoing transformational change. Newly available Earth observations and a near-constant stream of new data received from sources all over the world are driving the expansion of models to include new regions and perils, as well as supporting major upgrades to our existing suite of models.

INNOVATIONS IN MODELLING CYBER RISK
Presenter: Scott Stransky

Cyber risk is making the transition from an emerging threat to a growing business opportunity, and the insurance industry is increasing its investment in this sector accordingly. AIR is developing new cyber underwriting and portfolio management tools to support the market's needs for improved cyber risk management capabilities. In this session, you'll learn about the advancements being made in modelling cyber risk and how AIR's approach can provide actionable insights into your risk.

AIR'S SOFTWARE AND TECHNOLOGY VISION
Presenter: Sudhir Potharaju

Join us for an in-depth discussion of the future we envision for AIR's software and technology. This session will focus on a few topics, including our plans for the evolution of Touchstone®, the growing importance of the cloud, and the way modelling software can adapt to take advantage of new hardware designed to meet needs of each type of job and integrated software components that can make AIR's platform more robust and secure.

THE VERISK ADVANTAGE EXPLAINED
Presenter: Milan Simic, PhD

The insurance industry continues to evolve with the increasing availability of data and analytics designed to optimise decision-making. How can (re)insurers' business evolve and gain a competitive advantage? In this session, we will answer that question as you learn about the activities of Verisk Analytics in the insurance space, including innovations in underwriting global commercial properties, claims management, and the application of telematics.

CLIMATE CHANGE – A PANEL DISCUSSION

Moderator: Milan Simic, PhD (Verisk Analytics/AIR)
Panellists: Roy Nitze (EIOPA); Markus Stowasser, PhD (Allianz Reinsurance); Peter Sousounis, PhD (AIR)

As the Earth's climate is changing, the insurance industry is faced with complex challenges and no simple answers. What does climate change mean for catastrophe modelling and the insurance industry in the next 10 to 15 years and beyond? How can insurers manage to regulatory mandates? In this interactive panel discussion, industry experts will share their perspectives on climate changes' implications for the insurance space.

RESEARCH & MODELLING

HAZARD ENHANCEMENTS FOR THE 2018 EXTRATROPICAL CYCLONE MODEL FOR EUROPE

Presenter: Eric Robinson, PhD

With new data collected and lessons learned from recent storms in Europe and around the world, AIR has developed a set of enhancements to our existing Extratropical Cyclone Model for Europe. This session will begin by reviewing highlights of the existing model and then cover the latest updates to the hazard component of the forthcoming model, including incorporating the North Atlantic Oscillation, adding more historical events, bias correction through geo-statistics, and improved storm clustering.

INTRODUCING THE HAZARD COMPONENT OF THE NEW 2018 SEVERE THUNDERSTORM MODEL FOR EUROPE

Presenters: Eric Robinson, PhD, and Bernhard Reinhardt, PhD

Severe thunderstorms can account for more than one third of the annual insured losses in Europe related to atmospheric perils. This session will walk you through the hazard component of the model, describe how AIR's global experience in severe thunderstorm modelling has been applied, and discuss how data from the Europe Severe Weather Database, information on the basic state of the atmosphere, and various radar products have been combined in a hybrid physical-statistical approach to provide a comprehensive view of severe thunderstorm risk across Europe.

VULNERABILITY COMPONENTS FOR THE SEVERE THUNDERSTORM AND EXTRATROPICAL CYCLONE MODELS FOR EUROPE

Presenter: Cagdas Kafali, PhD

In this follow-up to the hazard discussions of the new severe thunderstorm and updated extratropical cyclone models

for Europe, Cagdas will provide an in-depth look at the vulnerability components for both models. From expanded coverage supporting new lines of business and new countries to updated damage functions with greater granularity, you'll learn how these models provide a comprehensive view of wind risk across Europe.

PREVIEW OF THE INLAND FLOOD MODEL FOR CENTRAL EUROPE AND COASTAL FLOOD MODEL FOR GREAT BRITAIN

Presenter: Bernhard Reinhardt, PhD

Insured exposures in Europe continue to grow and are becoming an increasingly large part of global re/insurers' portfolios exposed to flood risk and storm surge. To help companies assess their exposure to damaging floods, AIR is expanding the domain of the inland flood model for Central Europe to include Poland and updating the model for Austria, Czech Republic, Germany, and Switzerland. We will also be increasing the domain of the coastal flood model for Great Britain to include all of both England and Wales.

HAZARD AND VULNERABILITY ENHANCEMENTS TO THE 2017 US EARTHQUAKE MODEL

Presenter: Andrew O'Donnell

In this session, Andrew will provide a summary of the key enhancements to the hazard and vulnerability components of the US Earthquake model. With respect to the hazard module, we will describe the new science that drove changes to background seismicity and ground motion prediction equations and also about AIR's new induced seismicity catalog. Andrew will also summarise the many vulnerability updates to various types of exposures, including building contents, wood frame and unreinforced masonry construction types, manufactured homes, and industrial facilities.

2017 US EARTHQUAKE MODEL - MODELLED LOSS CHANGE CASE STUDIES

Presenter: Andrew O'Donnell and Caroline McMullan

This session is focused on helping you identify the key drivers of modelled loss change for your own book of business with respect to US Earthquake risk. Andrew will discuss changes to modelled losses for the entire industry, including the loss impact of sub-perils. Caroline will describe our lessons learned from change management meetings with London market clients, including the range of loss changes we have seen and what the most common drivers of those changes are.

THE NEW AND UPDATED AUSTRALIA MODELS

Presenters: Shane Latchman and Caroline McMullan, PhD
During this session, we will explore AIR's suite of Australia models, including the new severe thunderstorm model, which captures the risk of these frequent, potentially costly storms across the entire continent. This session will provide an overview of the key features of the severe thunderstorm model, including explicit modelling of tornadoes, hail, and straight-line winds. AIR will also provide an overview of updates to the earthquake, bushfire, and tropical cyclone models for Australia, including updated ground motion prediction equations used in the earthquake model and the utilisation of remote sensing to build a new fuels map for the updated bushfire model.

NEW ADVANCEMENTS IN INLAND FLOOD AND TYPHOON MODELLING FOR JAPAN

Presenter: Marc Marcella, PhD
AIR is pleased to introduce improved methodologies to flood modelling that will explicitly capture the effects of precipitation from all sources. During this session, Marc will discuss AIR's first application of these flood modelling enhancements in the new AIR Inland Flood Model and AIR Typhoon Model for Japan. The session will conclude with an overview of the updates to the typhoon model as well as a look at modelled losses for all three perils; flood, wind, and storm surge.

SOFTWARE & TECHNOLOGY

WHAT'S NEW IN TOUCHSTONE?

Presenters: Ffion Watson and Marius Henseli
Touchstone® 5.0 incorporates a number of key enhancements designed to streamline workflow while continuing to expand the platform's risk management capabilities. We've added multitasking capabilities so that you can keep multiple projects open and switch between them with ease. We've implemented new software features, such as a marginal impact tool, that enable you to easily assess the effects of new and renewing business on a portfolio. We've also made more third-party models accessible directly within Touchstone, with results that can be combined with AIR model output for a true multi-model assessment of risk.

DEVELOPING CUSTOM MODELS WITH TOUCHSTONE MODEL BUILDER

Presenter: Gayatri Natarajan
At AIR, we continue to explore ways to help our clients harness the power of Touchstone to develop their own models for a variety of risks, perils, and regions. Touchstone was developed to be an open platform that can be used to host a wide range of models. To that end, we are developing a framework for implementing third-party custom models within Touchstone. You can build a catalogue of events, define the intensity of the peril, and develop custom damage functions to create a model for any region or peril. If you've ever wished you could develop your own models, this session will show you how to do just that within the Touchstone framework.

PREVIEW OF TOUCHSTONE RE

Presenters: Anke Sielker and Colette Karakashian
Starting next year, Touchstone Re will bring state-of-the-art reinsurance underwriting and enterprise portfolio management capabilities to AIR's catastrophe risk management platform. The first release of Touchstone Re will include much of the functionality currently provided by CATRADER®, including aggregate modelling, full support for complex reinsurance terms, and portfolio roll-up capabilities. In this session, we'll discuss some of the features that will be available in 2018 to support enhanced portfolio analytics, exposure data warehousing, and reinsurance pricing to help you understand what you can expect from Touchstone Re.

AIR'S GEOSPATIAL VISION

Presenters: Sudha Maheshwari and Kate Stevens
More than ever, companies are seeking powerful new ways to visualise and understand their exposures and risks by using geographic information system (GIS) technology. In this session, you'll discover how AIR is leveraging GIS and spatial technologies to solve problems within the risk management sector today and how Touchstone's Geospatial Analytics Module will evolve over future releases, including the upcoming Touchstone 5.1 release, to help you better manage risk.

HARNESSING THE POWER OF THE CLOUD

Presenter: Boris Davidson

Companies are increasingly turning to cloud-based solutions to reduce overhead and streamline their operations. The AIR Cloud provides a complete turnkey solution that simplifies the deployment of catastrophe modelling platforms and allows you to focus on what really matters—managing your risk. In this session, Boris Davidson, AIR's Chief Software Architect, will describe how AIR has recently expanded our cloud capabilities for Europe and what the future holds in terms of AIR further embracing the cloud.

WHAT TO EXPECT FROM AIR'S GEN-3 MODELLING FRAMEWORK

Presenters: Baldvin Einarsson, PhD, and Shane Latchman

AIR is in the process of re-architecting core components of our models and financial module to provide our clients with greater transparency and flexibility as we implement our Gen-3 Modelling Framework. Using case studies, this session will explain the business benefits this updated architecture will offer. The Gen-3 framework will provide a more robust treatment of uncertainty and the ability to support an even wider array of complex commercial policy terms and reinsurance treaty structures.

MODELLING FUNDAMENTALS

TIPS FOR STREAMLINING YOUR CAT MODEL VALIDATION

Presenters: Katherine Westlake (AIR) and Junaid Seria (SCOR)

In this session, we will review practices for validating models, such as how you can adapt a general validation framework to deliver a more meaningful and proportionate validation. Topics include a review of AIR's top-down and bottom-up validation processes and the challenges involved in validating model results in various regions around the world. You will also learn how to effectively benchmark modelled losses against available historical loss data and learn about the range of resources AIR has made available to assist in model validation. Junaid will discuss how SCOR is embedding validation that is Solvency II-compliant but business-led, technically robust yet resource-efficient, and globally applicable but locally relevant. He will demonstrate the important role of model vendors in delivering this mission.

SO YOU WANT TO ISSUE A CAT BOND: SELECTING THE RIGHT TRIGGER TYPE

In this session, we'll review structural features used in insurance-linked security (ILS) transactions, most notably trigger types. We will also discuss other features such as resets, current market trends, and how to weight the trade-offs in choosing the most appropriate structure for your risk transfer use case.