

**AIR'S CLIENT CONFERENCES** bring together a broad cross section of catastrophe risk management professionals, providing clients with the opportunity to discuss issues of common interest and gain the insight needed to drive risk management.

Learn how AIR's latest models and software initiatives are helping the industry better manage catastrophe risk:

### A STEP ADVANCE IN MODELING EUROPEAN WINDSTORM RISK

Lean how AIR has incorporated explicit modeling of temporal and spatial clustering, advanced downscaling and an unprecedented quantity of claims data to yield a step advance in modeling European windstorm risk

### **AIR'S NEXT GENERATION SOFTWARE PLATFORM**

AIR CEO Ming Lee will present AIR's vision for the future of catastrophe modeling technology and unveil AIR's next generation software platform

### **INTRODUCING THE INDUSTRY'S NEXT GENERATION U.S. HURRICANE MODEL**

Find out how the AIR U.S. Hurricane Model has been enhanced to provide the most comprehensive, realistic and detailed view of the risk

Monday, 27 September			
	8:00-9:00	Breakfast and Registration	
	9:00–9:15	Welcome and Opening Remarks	
	9:15–10:00	Keynote: The Future of Catastrophe Modeling*  Guest Speaker: Clustering of European Wind Storms  Break	
	10:00–10:45		
	10:45–11:15		
	11:15–12:00	Update to the AIR Extratropical Cyclone Model for Europe—Impact on Loss Estimates	
	12:00–13:00	Update to the AIR Extratropical Cyclone Model for Europe—Hazard and Vulnerability Enhancements	
	13:00–14:30	Lunch	
	14:30–15:30	Update to the AIR U.S. Hurricane Model	Streamlining Your Underwriting and Portfolio Management Workflows Using AIR Integration Solutions
	15:30–16:15	Updates to the AIR Pacific Typhoon Models—Hazard	Recent Enhancements to CATRADER®
	16:15–16:45	Break	
	16:45–17:30	Updates to the AIR Pacific Typhoon Models—Vulnerability	Recent Enhancements to CLASIC/2™
	19:00–22:00	Dinner and Reception	
Tuesday, 28 September			
	8:00-9:00	Breakfast	
	9:00–9:15	Announcements	
	9:15–10:00	AIR Research Roadmap*	
	10:00–10:45	AIR Product and Technology Roadmap*	
	10:45–11:15	Break	
	11:15–12:15	Guest Speaker: Current and Future Trends in Risk Transfer	
	12:15–13:00	Future Directions in Managing Exposure Data and its Quality	
	13:00-14:30	Lunch	
	14:30–15:30	Update on Recent Catastrophe Events	Solvency II and its Impact on Catastrophe Modeling
	15:30–16:15	Advancements in the Simulation of Pan- European Flood	Improved Portfolio Management and Optimization
	16:15–16:45	Break	
	16:45–17:30	Advancements in the Understanding of Pan-European Earthquake Risk	Trends in Alternative Risk Transfer

# AIR SOLUTION CENTER

Join us in our revamped
Solutions Center for
a series of scheduled
demonstrations on the use
of AIR's newest and most
recently updated models.
AIR technical staff will also
be available throughout
the conference to answer
your specific questions
and provide impromptu
demonstrations of AIR's
entire suite of web-based
and desktop software
applications.

<sup>\*</sup>This information is provided for informational purposes only and may not be incorporated into any contract.

### **GUEST SPEAKERS**

#### **CLUSTERING OF EUROPEAN WIND STORMS**



*Dr. Renato Vitolo, University of Exeter* "Clustering" refers to the tendency of catastrophic storms to occur in groups, rather than randomly in time. The storms of December 1999, Anatol, Lothar and Martin, provided evidence that clustering can play

a significant role when analyzing European extratropical cyclone activity, just as the 1990 storm series had shown nearly a decade before. In this session, Dr. Renato Vitolo, a Willis Research Fellow from the University of Exeter, will explain how and why clustering increases with storm intensity and why this phenomenon occurs most frequently over North-Western Europe. For companies that write business in this region, utilizing catastrophe models that realistically capture the effects of temporal clustering is critical to accurately assess potential aggregate insured losses over the course of a season.

### **CURRENT AND FUTURE TRENDS IN RISK TRANSFER**



Mr. Dirk Lohmann, Secquaero Advisers AG
Dirk Lohmann, the Managing Partner of
Secquaero Advisors AG and a thought leader
in the insurance-linked securities (ILS) sector
with 30 years of industry experience, will
discuss the current state of the reinsurance

market and future directions for the growth of alternative risk transfer vehicles. In this session, he will touch upon current developments in the ILS market, as well as discuss the tradeoffs between traditional reinsurance and insurance-linked securities. Finally, Mr. Lohmann will comment on potential implications of this year's hurricane season for reinsurers and investors in ILS.

### **EUROPEAN WIND RISK**

## UPDATE TO THE AIR EXTRATROPICAL CYCLONE MODEL FOR EUROPE—IMPACT ON LOSS ESTIMATES

The updated AIR Extratropical Cyclone Model for Europe provides the most realistic and detailed view of extratropical cyclone risk available for Europe by incorporating enhancements that encompass virtually every component of the model. This session will address how enhancements made to the model have impacted modeled losses. We will address the changes in the context of both industry losses, as well as losses for sample company portfolios to help clients incorporate loss estimates from the new model into their current risk management practices.

# UPDATE TO THE AIR EXTRATROPICAL CYCLONE MODEL FOR EUROPE—HAZARD AND VULNERABILITY ENHANCEMENTS

Learn how the updated model represents a step advance in modeling European Extratropical cyclones. Updates to the model's hazard module include explicit modeling of spatial and temporal storm clustering and the use of advanced downscaling techniques for modeling surface winds. The model's vulnerability module has also been enhanced by making use of the largest set of claims data available for this region to more accurately reflect the vulnerability of both residential and commercial structures. In addition, new coverages, business interruption, lines of business (automobiles for all modeled countries as well as forestry for Sweden and Norway), construction types and occupancy classes have been added.

### **CURRENT AND FUTURE STATE OF MODELING**

#### **KEYNOTE: THE FUTURE OF CATASTROPHE MODELING\***

Since AIR introduced the first commercial catastrophe model in 1987, there have been significant advances to the models and in the ways that companies use them. The detail and realism of individual models have meaningfully increased, while the range of models available has increased considerably. Over the same period, software technology and computing power have also undergone dramatic advances. In this keynote session, AIR President and CEO Ming Lee will present AIR's vision for the future of catastrophe modeling technology and unveil AIR's next generation software platform.

#### **AIR RESEARCH ROADMAP\***

While techniques for modeling natural and man-made catastrophes continue to improve, the key to a robust assessment of risk has remained constant: realistic simulations of catastrophic events that cover the full spectrum of possible outcomes. In this session, we will preview plans for new and updated models such as German Flood, Pan-European Earthquake, European Wind, Australian Brushfire and Indian Cyclone. Improved approaches for combining physical and statistical modeling techniques will be discussed, as well as approaches to help model users better quantify and communicate the uncertainty inherent in their model results.

#### **AIR PRODUCT AND TECHNOLOGY ROADMAP\***

AIR is committed to enhancing our catastrophe modeling systems to provide our clients with innovative new capabilities to support their risk management decisions. This session will preview plans for AIR's next generation software platform, which will improve usability, modernize design, and better support integration and automation through a common application platform. By leveraging a next generation service-oriented architecture (SOA), enhancements are planned in such areas as data management, GIS analytics, data analysis and reporting. AIR's goal is to improve the transparency, flexibility and performance of our products, so that catastrophe model users can spend less time manipulating data and more time analyzing results.

#### **RECENT ENHANCEMENTS TO CATRADER**

CATRADER®—the industry standard for analyzing reinsurance contracts and insurance-linked securities—has been enhanced with a number of powerful features. In this session we will review recently added capabilities that allow companies to manage and dynamically examine different risk management strategies for multiple portfolios that may contain a variety of reinsurance contracts, ILS, sidecars, and private placements. The session will also review enhancements for multiyear portfolio analysis, better handling of parametric indices, new reporting capabilities, improved performance, and more.

### **RECENT ENHANCEMENTS TO CLASIC/2**

CLASIC/2<sup>TM</sup> is the application of choice for companies who need to accurately assess risk down to the individual location level. CLASIC/2 takes full advantage of construction, occupancy, age and height of each structure, as well as location-specific geographical (e.g., land use/land cover, elevation, topography) and geological information, and insurance policy and reinsurance treaty terms. Recently added capabilities will be discussed, including support for 64-bit operating systems, a new disaggregation framework, and improvements to the financial module to better support and account for a range of complex policy terms. The latest functionality regarding policy exposures, step functions and offshore policies will also be discussed.

#### **UPDATE ON RECENT CATASTROPHE EVENTS**

In this session, AIR scientists and engineers will review the 2010 hurricane season to date and provide an update on AIR's analysis of recent catastrophes, including findings from post-disaster surveys for recent events.

<sup>\*</sup>This information is provided for informational purposes only and may not be incorporated into any contract.

### **ADVANCES IN GLOBAL RISK MODELS**

# ADVANCEMENTS IN THE UNDERSTANDING OF PANEUROPEAN EARTHQUAKE RISK

Earthquakes pose a significant risk throughout much of Europe and the Middle East. To address this risk AIR is expanding its earthquake model for the region by 13 new countries to include 19 countries in total. Join us for this session to learn about AIR's development of an updated seismic model based on recent research and new GPS data. The discussion will also preview the development of regional time-dependent fault rupture models and temporally and spatially varied vulnerability functions that realistically capture how the construction quality in each country has evolved over time.

### ADVANCEMENTS IN THE SIMULATION OF PAN-EUROPEAN FLOOD

In 2008, AIR released an Inland Flood Model for Great Britain that employed an innovative stochastic rainfall generation module, leveraging AIR's expertise in perturbing the output of Numerical Weather Prediction (NWP) models to produce realistic rainfall patterns in space and time. In this session, AIR will discuss the development of a new generation of large-scale precipitation models, where the event catalog is based on simulations using a Global Circulation Model (GCM) coupled with a mesoscale NWP model that covers Europe at 90 km resolution. This novel approach yields better representations of the spatial-temporal coherence of extreme rainfall patterns. To obtain the fine scale rainfall simulations required to accurately model flooding, AIR employs an advanced stochastic downscaling technique that relies on physical parameterization to yield statistically robust patterns that are visually undistinguishable from radar data. The development of sophisticated hydrologic and hydraulic components that accurately assess the probability of floodrelated losses throughout Europe will also be discussed.

### **UPDATE TO THE AIR U.S. HURRICANE MODEL**

Learn how the industry's next generation hurricane model is setting a new standard by providing the most realistic and detailed view of risk available. The Version 12.0 update to the model contains state-of-the-art enhancements that encompass virtually every component of the model to provide a complete and comprehensive view of U.S. hurricane risk. These include the incorporation

of the latest meteorological understanding of hurricane structure, a basinwide catalog, a model domain expanded by 3 additional states to now include 29 states and the District of Columbia, and more detailed modeling of spatial and temporal variations in vulnerability. Overall, the latest release of the AIR U.S. Hurricane Model will enable significantly more precise risk differentiation based on such factors as geography, construction, occupancy, year built and individual building characteristics.

### **UPDATES TO THE AIR PACIFIC TYPHOON MODELS—HAZARD**

The Pacific Ocean Basin accounts for nearly forty percent of the world's tropical cyclone activity and storms in this region typically affect multiple nations—sometimes as many as four or five. This session will discuss the latest enhancements incorporated in version 12.5 of the AIR Pacific typhoon models. Topics will include a new basinwide catalog that allows users to more accurately account for losses across portfolios spanning multiple countries; such updates to AIR's Typhoon Model for Japan as an improved wind field, the addition of a flood component, and support for additional lines of business; and the new AIR Typhoon Model for South Korea.

### UPDATES TO THE AIR PACIFIC TYPHOON MODELS—VULNERABILITY

The vulnerability modules of the AIR Pacific Typhoon Models are also undergoing comprehensive updates. In the Japan Typhoon Model, flood damage will be expligitly modeled and flood defense systems will be incorporated, regional variability in wind vulnerability will be based on local multi-hazard characteristics, fire class specific damage functions will be updated based on claims data, and the auto, marine and railway lines of business will be added. AIR engineers have developed a unique vulnerability module for South Korea. The new AIR Typhoon Model for South Korea includes separate wind and flood damage functions, incorporates regional wind vulnerability characteristics, accounts for existing flood mitigation measures, supports Korea-specific fire codes, and models construction risks. For the Pacific region, AIR has collected detailed claims data representing a significant proportion of the market and the individual models have been validated using this newly available claims data.

### CATASTROPHE MODELING BEST PRACTICES



### **IMPROVED PORTFOLIO MANAGEMENT AND OPTIMIZATION**

Optimal portfolio risk allocation involves the reduction of risk and the maximization of growth. These challenges, faced routinely by insurers and reinsurers alike, are often tackled by ranking risks according to some simplified metric or by using linear computational techniques likely to result in suboptimal allocations. This session will shed light on the mathematical complexity that underlies these objectives. It will also review the new functionality recently released in CATRADER that greatly simplifies portfolio management and preview the new solutions developed by AIR that combine traditional methods with state-of-the-art numerical optimization techniques.



### FUTURE DIRECTIONS IN MANAGING EXPOSURE DATA AND ITS QUALITY

This session will provide an overview of AIR's development process for the creation of global industry exposure databases (IEDs), including recent enhancements to the methodology. We will describe how AIR captures various types of information contained in the IED and review the novel approach employed to disaggregate European exposures using a high-resolution grid. We will also cover recent enhancements to TruExposure™, such as data scoring for the U.S. and the forthcoming extension of benchmarking and validation to Europe and Japan. Information will also be provided about recent and planned enhancements to CLASIC/2, such as exposed limit reports, and the ability to store exposure data and manage policy exposure accumulations for non-modeled countries.

### **SOLVENCY II AND ITS IMPACT ON CATASTROPHE MODELING**

Insurers, reinsurers, rating agencies and, in some cases, catastrophe modeling firms are coming under increased government scrutiny. Greater regulatory oversight of model development and use is viewed as a solution to reduce systemic risk. This session will review the proposed Solvency II regulatory framework and provide detail on AIR's approach to helping clients meet the coming challenges associated with this increased level of regulation.

# STREAMLINING YOUR UNDERWRITING AND PORTFOLIO MANAGEMENT WORKFLOWS USING AIR INTEGRATION SOLUTIONS

AIR Integration Solutions enable data and analytics to be embedded into your existing applications, enabling you to streamline processes ranging from underwriting individual risks to analyzing entire portfolios. This session will show how leading insurers and reinsurers are automating their workflows. We'll wrap up with a preview of planned enhancements.



#### TRENDS IN ALTERNATIVE RISK TRANSFER

Insurance-linked securities (ILS) are increasingly being used to transfer risk from catastrophe-exposed organizations to the financial markets. Solutions now exist to serve the unique needs of insurers, reinsurers, governments, residual markets and corporations. This flexibility is illustrated by the coexistence of trigger mechanisms as varied as "cat-in-a-box" parametric structures, industry loss structures focused on specific U.S. counties, and traditional multi-peril indemnity covers. As investors become more familiar with and sophisticated in their use of catastrophe models, so too are disclosure requests and model-related questions becoming more advanced, as are the tools used to assess the risk. In this session, we will examine the expanding scope of ILS and AIR's increasing capabilities for issuers and investors.



### REGISTRATION INFORMATION

You may register for the 2010 AIR Client Conference in Barcelona by visiting: www.air-worldwide.com/conference

Payment is due at the time of registration.

Registration fee (per person) €995 (EUR)

£825 (GBP) or \$1218 (USD)

Cheques can be made payable to AIR Worldwide in the amount of: €995 (EUR)

£825 (GBP) or \$1218 (USD)

Please mail payment to AIR Worldwide, Attn: Sacha Mackerwicz, 131 Dartmouth Street, Boston, MA 02116.

To arrange for wire transfer payments, please contact the events team at: 617-267-6645.

Credit Card payments will be processed in US dollars.

Note: Fees are not refundable after 20 September 2010

### **ACCREDITATION**

### **CHARTERED INSURANCE INSTITUTE**

The 2010 AIR Client Conference in Barcelona has been accredited by the CII and can be included as part of your CII CPD requirement should you consider it relevant to your professional development needs. For a list of all CPD accredited events please visit http://www.cii.co.uk/cii/news\_events.aspx.

#### AMERICAN INSTITUTE FOR CHARTERED PROPERTY CASUALTY UNDERWRITERS

The 2010 AIR Client Conference in Barcelona has been awarded 12 points under the Continuing Professional Development program for CPCUs. For more information regarding the American Institute for CPCU and Insurance Institute of America please visit http://www.aicpcu.org/default.htm.

### **AMERICAN ACADEMY OF ACTUARIES**

Actuaries attending the 2010 AIR Client Conference in Barcelona may determine that some or all Conference sessions attended meet continuing education credit requirements under the American Academy of Actuaries' newly revised Qualification Standards. For more information on AAA, please visit http://www.actuary.org.

### **ACCOMMODATIONS**

HOTEL ARTS BARCELONA MARINA 19-21 BARCELONA 8005 SPAIN +34 93 221 10 00

AIR has reserved a limited number of rooms at the Hotel Arts Barcelona. You may make reservations by visiting https://reservations.ritzcarlton.com/ritz/reservation/availability.mi?propertyCode=BCNRZ. Enter the conference dates and provide the code "EB6EB6A" to secure the AIR discounted hotel rates. You may also make reservations by calling the hotel at +34 93 221 10 00. To receive the special conference rate of € 225 single/double plus 8% V.A.T., please provide the hotel the conference code and indicate that you are with the AIR Worldwide Conference. The last day for booking hotel rooms at the special rate is 20 August 2010.

Please note that breakfast over the meeting days will be provided as part of the AIR Worldwide Conference and is not included in the room rates.

Once a reservation is confirmed by the Hotel, guests will be charged one night cancellation fee upon canceling 30 days or less prior to the program dates.

### **TRAVEL**

### **TRANSPORTATION**

El Prat de Llobregat Barcelona International Airport is located approximately 16 miles or 20 Km from the Hotel Arts Barcelona.

#### **TAXIS**

Depending on traffic, it takes approximately 30 minutes to travel via taxi to the hotel. Taxis are readily available at the airport near the baggage claim. The trip will cost an estimated €45 with potential additional baggage fees.

#### **BUSES**

The company Transports Metropolitans de Barcelona operates in the city. Bus stops are marked with red and white coloured signs. For more information and prices please contact the Concierge desk at +34 93221 1000 extension 601.

#### **METRO**

The Metro is a metropolitan rapid-transit system which links the most central parts of the city. It runs daily from 05.00 until 24.00. The station closest to Hotel Arts Barcelona is Ciutadella/Vila Olimpica on the yellow line (line 4). The hotel is a ten minute walk from the station.









# **SPECIAL EVENT**

**TUESDAY, 27 SEPTEMBER 2010** 

### **CARPE DIEM CLUB LOUNGE**

Join AIR for an evening of networking and culinary delights at one of Barcelona's hottest night spots! Located on the Barcelona seaside within walking distance from the Olympic Port, Carpe Diem Club Lounge offers a variety of fusion dishes with Asian and Mediterranean influences. Step outside onto the terrace and take in the ocean breeze over a cocktail, or slip inside to enjoy the Tibetan inspired interiors and exciting dinner cuisines. Don't miss out on the opportunity to enjoy this unique private dining experience with industry colleagues and AIR staff.







### **BARCELONA AREA INFORMATIONAL LINKS**

http://www.barcelonaturisme.com/ http://www.barcelona-tourist-guide.com/

131 DARTMOUTH STREET
BOSTON, MA 02116-5134
T: 617.267.6645 • F: 617.267.8284
www.air-worldwide.com

BOSTON & SAN FRANCISCO & LONDON & HYDERABAD & BEIJING & MUNICH & TOKYO



AIR WORLDWIDE CORPORATION IS A WHOLLY OWNED SUBSIDIARY OF ISO. © 2010 AIR WORLDWIDE CORPORATION