Port of Corpus Christi

Special Meeting

Thursday, March 29, 2012 1:00 PM

NOTICE OF MEETING

The Port Commission ("Commission") of the Port of Corpus Christi Authority ("PCCA") will hold a Special Meeting on **Thursday, March 29, 2012, at 1:00 PM**, at the Ruben Bonilla Center for Global Trade located at 222 Power Street, Corpus Christi, Texas..

Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are requested to contact Sherry DuBois at 885-6174 at least 48 hours in advance so that appropriate arrangements can be made.

Si usted se dirige a la junta y cree que su inglés es limitado, habrá un intéprete inglés español en la reunión de la junta para ayudarle.

Members of the audience will be provided an opportunity to address the Port Commission. Please speak into the microphone located at the podium and state your name and address. Your presentation will be limited to three minutes.

PUBLIC NOTICE is given that the Commission may go into executive session at any time during the meeting to discuss matters listed on the agenda when authorized to do so by the provisions of Section 418.183 or Chapter 551 of the Texas Government Code. In the event the Commission elects to go into executive session regarding any agenda item, the presiding officer will publicly announce the section or sections of the Texas Government Code authorizing the executive session.

The agenda for the meeting is as follows:

1. Call meeting to order and receive Conflict of Interest Affidavits.
2. Receive comments from the public. ***(each speaker will be limited to three minutes)***
3. Approve insurance carriers for PCCA's property insurance for the 12-month period beginning April 1, 2012. 3
4. The Commission will go into executive session pursuant to §551.072 of the Texas Government Code to deliberate the sale of the following described real property ("Subject Property"): approximately 915 acres of upland property on Ingleside Point in San Patricio County, which includes the remaining portion (479.818 acres) of the former Naval Station Ingleside Main Base and 435.7 acres of undeveloped land adjacent to the western boundary of the former base, an easement on approximately 116 acres of submerged land in Corpus Christi Bay between the upland property and the Corpus Christi Ship Channel,and the improvements on the upland property and submerged lands, including the former Naval Station Ingleside Alpha Pier. In open session, the Commission may approve: (a) a letter of intent for the sale of all or part of the Subject Property, and (b) the sale of the remaining portion of the Subject Property by sealed bid. 29
5. The Commission will go into executive session pursuant to §551.071 of the Texas Government Code to consult with its attorney regarding Complaints filed against PCCA before the Federal Maritime Commission by CITGO Refining & Chemicals Company, L.P., and Valero Refining - Texas, L.P. The Commission may take action on this item in open session. 30
6. Adjourn.

John P. LaRue
EXECUTIVE DIRECTOR

PORT CORPUS CHRISTI

March 29, 2012

The Honorable Mike Carrell
The Honorable Richard M. Borchard
The Honorable Judy Hawley
The Honorable Robert Kostelnik
The Honorable Mike Scott
The Honorable Al Jones
The Honorable Charles Zahn
Port Commissioners
Port of Corpus Christi Authority

Subject: ***AGENDA ITEM NO. 3***
PCCA's Property Insurance Renewal for 2012

Dear Commissioners:

The Port's brokers, Hugh Wood Inc. and Carlisle Insurance, have been diligently working on obtaining quotes and premium rates for the Port's property insurance renewal set to expire on March 31, 2012.

As indicated in the attached Property Insurance Proposal there were a number of factors affecting the market conditions this year, especially for those in hurricane exposed areas. The largest increases were due to RMS 11 modeling. RMS 11 is the latest modeling tool used by most insurers to analyze the characteristics of past hurricanes. In this latest model the insurers now see that there are higher losses from wind and storm surge than previously calculated. It is now believed that a major storm would cause damage that would go through the entire primary layer of $25 million and into the excess. This coupled with major global casualty losses last year has resulted in a dramatic increase in premiums.

On March 12th staff met with the Audit Committee to discuss the anticipated premiums and market issues affecting the Port. During that meeting staff indicated that there could be as much as a 50% increase.

Over the past five years the Port has had premium reductions of approximately 30% from the Lexington insurance on our primary layer of $25 million as follows:

- April 1, 2008 – April 1, 2009: 15% reduction in premium.
- April 1, 2009 – April 1, 2010: This year the Port performed a port-wide property appraisal. Because the premium was to increase substantially, Commissioners requested that the appraisal be reviewed. Appraisers agreed to lower the values by 20%. Due to that fact, the premiums for the 2009 – 2010 year were basically flat.
- April 1, 2010 – April 1, 2011: 10% reduction in premium.
- April 1, 2011 – April 1, 2012: 10% reduction in premium.

The property renewal premium increases compared to last year are as follows:

- Primary layer ($25,000,000) increased 51.53%
- Excess Layers ($75,000,000) increased 7.25%
- NSI layer ($25,000,000) increased 13.36%

Total costs, including taxes, of our 2012 – 2013 property renewal is $2,240,160 compared to $1,701,730 last year. This is a 31.64% increased of $538,430 over last year's total.

Staff recommends approval of the property insurance for 2012 – 2013 as presented.

Sincerely,

John P. LaRue
Executive Director

Attachment

PORT CORPUS CHRISTI

PROPERTY INSURANCE RENEWAL PROPOSAL

APRIL 1, 2012 - APRIL 1, 2013

Presented by:

Tom Carlisle, CIC
President
Carlisle Insurance

Pete A. Rancourt
Vice Chairman

Roy Wilson
Senior Vice President
Hugh Wood Inc.

March 22, 2012

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I. Market Conditions 2012

Current Market conditions have significantly deteriorated from 2011 for all insureds in hurricane exposed areas. The Market now more closely resembles the post Katrina years with higher rates, deductibles and reduced capacity being offered by insurers.

The Port benefited by rate reductions of about 30% over the last five years but unfortunately this will not continue for 2012-2013.

Major contributing factors to the current market:

1. 2011 was the second worst year on record for worldwide losses– totaling over $100 Billion.

2. The resulting losses for insurers have also negatively impacted reinsurers.

3. RMS11 Modeling – (See the attached regarding Risk Management Solutions)

   This is the latest modeling "tool" used by most insurers to analyze the characteristics of past hurricanes and has resulted in much higher loss estimates from Wind and Storm Surge damage.

   For the Port of Corpus Christi, underwriters at Lexington, as well as other insurers, view Storm Surge in the Inner Harbor as the main threat – with losses from a major storm penetrating through the Primary $25,000,000 layer into the Excess.

4. General lack of competition for the Primary Layer of $25,000,000

   Given the potential for severe losses, there are only a handful of insurers willing to consider this layer of exposure. Those willing to participate are all reducing the capacity they will provide and imposing more restrictive terms and higher premiums.

   The demand for coverage grows while the supply declines.

5. Since Katrina, if not generally before, most insureds with substantial values in costal hurricane prone areas, whether a port or other type of operation, have had insurance programs with a 5% deductible of TIV and no maximum cap for Wind/Storm Surge.

   For these same years the Port has benefited by a 4% deductible of TIV with a maximum cap of $4,000,000 per occurrence. For 2012-2013, we are now catching up with the Market in terms of deductibles and rates, which for the Port, have been below the Market.

II. Summary & Recommendation

Major changes – 2012 – Higher premiums, higher deductibles with additional insurers participating in the Program to provide capacity.

	2011-2012	2012-2013
Total Insured Values (TIV):	$345,191,720	$348,723,054
A. Primary Limit:	$25,000,000 Per Occurrence	$25,000,000 Per Occurrence
Deductibles:	$100,000 except Flood, Named Windstorm, Storm Surge - 4% TIV involved in loss subject to minimal $250,000 and maximum $4,000,000 per occurrence	$100,000 except 1. Named Windstorm, Storm Surge – 5% of TIV involved in a loss subject to a minimum of $250,000 and maximum of $4,000,000 per occurrence or, which ever is greater 2. Flood – 5% of TIV involved in a loss subject to a minimum of $1,000,000 per occurrence. Applies to locations in Flood Zone A or B – (Inner Harbor is A & B; Ingleside in C Zone with a $100,000 deductible)
Policy Form:	Manuscript – HWI	Lexington Policy Form - attached
Primary Premium:	$880,239 plus tax	$1,333,866 plus tax
Participating Insurers:	Lexington – 100%	Lexington – 50% Allied World Assurance – 20% Steadfast Insurance – 10% Ironshore – 10% Hiscox – 10%

	2011-2012	2012-2013
B. Excess Limits:	$75,000,000 x $25,000,000 Per Occurrence	$75,000,000 x $25,000,000 Per Occurrence
Premium:	$647,987 plus tax	$694,950 plus tax
Participating Insurers:	**Lloyds of London 35%** Canopius Syndicate Colin O'Farell Syndicate Navigators Insurance **USA Markets 65%** AXIS Surplus Insurance Landmark American Insurance Aspen Specialty Alterra Excess ACE/Westchester Insurance	**Lloyds of London 35%** Canopius Syndicate Colin O'Farell Syndicate Navigators Insurance **USA Markets 65%** AXIS Surplus Insurance Landmark American Insurance Aspen Specialty Alterra Excess ACE/Westchester Insurance
C. Excess Layer Limits:	$25,000,000 x $100,000,000 Per Occurrence	$25,000,000 x $100,000,000 Per Occurrence
Premium:	$61,750 (No tax)	$70,000
Participating Insurer:	Allianz – 100%	Liberty International – 50% Alterra – 50%
D. Terrorism Limit:	Primary - $25,000,000 Per Occurrence	Primary - $25,000,000 Per Occurrence
Deductible:	$50,000	$50,000
Premium:	$35,000 plus tax	$36,500 plus tax
Participating Insurer:	Hiscox Syndicate	Hiscox Syndicate

	2011-2012	2012-2013
Total Premiums:	$1,624,976	$2,135,316
Texas Tax:	$76,754	$104,844
Total Costs:	$1,701,730	$2,240,160
		(Increase of 31.6%)

Comments:

1. Due to RMS 11, Lexington believes that the Storm Surge potential has substantially increased for the Inner Harbor.

2. Structures in the Inner Harbor showing both Wind and Flood/Storm Surge damage will be considered under the Flood/Storm Surge deductible – 5% with no maximum limitation.

3. Business Income Loss from Channel Blockage will be limited to 30 days Actual Loss Sustained after a 7 day deductible.

4. Ingleside – Replacement cost valuation if insured rebuilds within one year from date of loss.

5. Lexington has indicated that additional premiums are needed for the 2013-2014 term of approximately $325,000.

Recommendation:

Though disappointed by the increased rates and deductibles for April 1, 2012, we can report that the Market has been thoroughly explored and these are the most favorable terms and conditions available.

Consequently, we recommend that the Port Commission approve the Primary, Excess and Terrorism quotes noted in Section II pages 3 and 4.

Thank you very much.

Carlisle Insurance Hugh Wood, Inc.

III. Market Responses * Incumbent Market

*1.	Lexington	Quoted Primary – Various options 50% of $25,000,000
2.	Swiss Re	Quoted Primary – Not Competitive $10,000,000 Capacity - $1,200,000 Deductible – Wind/Flood/Storm Surge 5% TIV
3.	AMRISC	Have Primary capacity Reviewing – have not quoted – Appear to be Uncompetitive Can not provide Channel Blockage coverage
4.	TML with the Texas Windstorm Insurance Assn. (TWIA)	Quoted Primary – Not Competitive $25,000,000 - $2,504,063 Limit Flood Zone A - $10,000,000 Deductible – Flood - $5,000,000 Zone A Wind - 5% TIV TWIA Inspections needed
5.	Insure – London	Quoted Primary – Not Competitive $5,000,000 Capacity - $785,000 Deductible – 4% TIV
6.	Steadfast	Quoted Primary – Limited Capacity 10% of $25,000,000 – with Lexington
7.	Allied World Assurance Company	Quoted Primary – Limited Capacity 20% of $25,000,000 – with Lexington
8.	Hiscox Syndicate	Quoted Primary – Limited Capacity 10% of $25,000,000 – with Lexington
9.	Ironshore	Quoted Primary – Limited Capacity 10% of $25,000,000 – with Lexington
10.	Lloyds of London	Not Competitive – Primary $25,000,000

Excess Markets

*11.	Lloyds of London Canopius Syndicate	Quoted Excess – Quota Share - $75 x $25
*12.	Lloyds of London Colin O'Farell Syndicate	Quoted Excess – Quota Share - $75 x $25
*13.	Lloyds of London Navigators Insurance	Quoted Excess – Quota Share - $75 x $25
*14.	Axis Surplus Lines	Quoted Excess – Quota Share - $75 x $25
*15.	Landmark Insurance	Quoted Excess – Quota Share - $75 x $25
*16.	Aspen Specialty	Quoted Excess – Quota Share - $75 x $25
*17.	Alterra Specialty	Quoted Excess – Quota Share - $75 x $25
*18.	Westchester	Quoted Excess – Quota Share - $75 x $25
*19.	Allianz	Did not quote – Issue – Flood/Storm Surge
20.	Torus	Declined Primary
21.	Navigators	Could not compete with pricing – Primary/Excess
22.	Arch	Declined due to location
23.	Endurance	Declined withdrew from market
24.	Kinsale	Declined – Wind
25.	Catlin	Declined – Wind
26.	Essex	Declined – Wind $2,500,000 Capacity – Excess
27.	Maiden	Declined – Wind

Excess Markets cont'd

28.	Tokio	Declined – Wind
29.	Colony	Reviewing – Did not quote
30.	On Point	Declined – port exposures
31.	Chubb Custon	Declined – Wind
32.	XL Inland Marine	Declined – Wind
33.	General Star Indemnity	Declined – Wind
34.	Global Excess Partners	Declined – Wind
35.	Travelers	Not a Market – Windstorm Exposure
36.	Zurich	Not a Market – Windstorm Exposure
37.	Hartford	Not a Market – Windstorm Exposure
38.	CNA Insurance	Not a Market – Windstorm Exposure
39.	Liberty International	Quoted – Excess Layer

IV. Lexington's Quotation – Primary Layer

Lexington Participation: $12,500,000 part of $25,000,000 Per Occurrence and in the Primary – 50% of layer

Sub-Limits: **The following sub-limits are 100%** per occurrence ground-up sub-limits. We shall not be liable for more than our proportional share of the following sub-limits (aggregate where applicable) which are part of and not in addition to the policy limit of liability.

$25,000,000	Per Occurrence and Annual Aggregate for the peril of **Earth Movement** except; The Per Occurrence and Annual Aggregate Limit for the Peril of Earth Movement shall not exceed $25,000,000
$25,000,000	Per Occurrence and Annual Aggregate for the peril of **Flood** except;
$25,000,000	Per Occurrence and Annual Aggregate for the Peril of **Flood occurring wholly or partially within Special Flood Hazard Areas (SFHA), areas of 100-Year Flooding, as defined by the Federal Emergency Management Agency** (if these locations are not excluded elsewhere in this policy with respect to the peril of flood); The Per Occurrence and Annual Aggregate Limit for the Peril of Flood shall not exceed $25,000,000
$25,000,000	Per Occurrence for the peril of **Named Storm** (a storm that has been declared by the National Weather Service to be a Hurricane, Typhoon, Tropical Cyclone, Tropical Storm or Tropical Depression) **in the State of Texas**, regardless of the number of Coverages, Locations or Perils involved (including but not limited to, all Flood, (however caused) wind, wind gusts, storm surges, tornados, cyclones, hail or rain)

Sub-Limits:		The Per Occurrence Limit for the Peril of Named Storm shall not exceed $25,000,000
	Not Covered	Per Occurrence for the peril of **Named Storm** (a storm that has been declared by the National Weather Service to be a Hurricane, Typhoon, Tropical Cyclone, Tropical Storm or Tropical Depression) in **Tier 1 Counties attached, and the entire State of Florida**. Regardless of the number of Coverages, Locations or Perils involved (including but not limited to, all Flood, (however caused) wind, wind gusts, storm surges, tornados, cyclones, hail or rain)
	$25,000,000 or 25% of loss, whichever is less	Per Occurrence for **Debris Removal**
	$25,000,000	Per Occurrence for **Accounts Receivable**
	$5,000,000	Per Occurrence for **Concrete Substructures of Concrete Piers, Warfs, and Docks**
	$1,000,000	Per Occurrence **Replacement Cost and Debris Removal combined on Harbor Island Exxon Dock #2**
	$25,000,000 or 30 days maximum	Per Occurrence for **Civil or Military Authority**
	$5,000,000	Per Occurrence for **Contingent Time Element**
	$25,000,000	Per Occurrence for **Demolition and Increased Cost of Construction: Demolition Coverage A** (For the loss in value of the undamaged portion of the building as a consequence of enforcement of an ordinance or law that requires demolition of undamaged parts of the same building)
	$25,000,000	Per Occurrence for **Demolition and Increased Cost of Construction: Demolition Coverage B** (For the cost to demolish and clear the site of undamaged parts of the same building, as a consequence of enforcement of an ordinance or law that requires demolition of such undamaged property)

Sub-Limits:	$25,000,000	Per Occurrence for **Demolition and Increased Cost of Construction: Demolition Coverage C** (For the increased cost of repair or reconstruction of the damaged and undamaged property on the same or another site, limited to the cost that would have been incurred in order to comply with the minimum requirements of such law or ordinance regulating the repair of reconstruction of the damaged property of the same site. However, this Company shall not be liable for any increased cost of construction loss unless the damaged property is actually rebuilt or replaced)
	$25,000,000	Per Occurrence for **Electronic Data and Media (excluding non physical damage)**
	Not Covered	Per Occurrence for the peril of **Equipment Breakdown**
	$500,000	Per Occurrence for **Spoilage**
	$25,000,000	Per Occurrence for **Errors and Omissions**
	180 days	**Extended Period of Indemnity**
	$25,000,000	Per Occurrence for **Extra Expense**
	$1,000,000	Per Occurrence for **Fine Arts**
	$1,000,000	Per occurrence for **Fire Brigade Charges**
	$25,000,000 or maximum of 30 days	Per Occurrence for **Ingress/Egress**
	$5,000,000	Per Occurrence for **Leasehold Interest**
	$250,000	Per Occurrence and Annual Aggregate for **Limited Pollution Coverage**
	$25,000,000	Per Occurrence for **Miscellaneous Unnamed Locations**

Sub-Limits:

$25,000,000	Per Occurrence for **Newly Acquired Property for a period of 90 days, if not reported to the Company in that 90 day period then coverage ceases.**
180 days	Per Occurrence for **Ordinary Payroll**
$1,000,000	Per Occurrence for **Professional Fees**
$25,000,000	Per Occurrence for **Service Interruption**. A qualifying period of 24 hours applies to this coverage. Excludes overhead lines more than 1 mile from insured's location.
$1,000,000	Per Occurrence for **Transit**
$25,000,000	Per Occurrence for **Valuable Papers and Records**

Deductible: Each claim for loss or damage under this policy shall be subject to a per occurrence deductible amount of **$100,000**, unless a specific deductible shown below applies:

Earth Movement:

1. **$100,000** Per Occurrence, except as follows:

Flood:

1. **$100,000** Per Occurrence, except as follows:

2. **5%** of Total Insurable Values at the time of the loss at each location involved in the loss or damage, subject to a minimum of **$1,000,000** any one occurrence, **as respects locations wholly or partially within Special Flood Hazard Areas (SFHA), areas of 100-year flooding, as defined by the Federal Emergency Management Agency (FEMA); in addition, all properties located in Flood Zone B, as well as all properties owned by The Port of Corpus Christi, with the exception of Naval Station Ingleside.**

3. **$100,000 for all properties located within Naval Station Ingleside**

Deductible:

Windstorm or Hail:

1. **$100,000** Per Occurrence, except as follows:

2. **5%** of Total Insurable Values at the time of the loss at each location involved in the loss or damage arising out of a **Named Storm** (a storm that has been declared by the National Weather Service to be a Hurricane, Typhoon, Tropical Cyclone, Tropical Storm or Tropical Depression), regardless of the number of Coverages, Locations or Perils involved (including but not limited to, all Flood, wind, wind gusts, storm surges, tornados, cyclones, hail or rain) and subject to a minimum deductible of **$250,000** any one occurrence; and a maximum of **$4,000,000** per Occurrence.

*If two or more deductible amounts provided in this Policy apply to a single **Occurrence**, the total to be deducted shall not exceed the largest deductible applicable unless otherwise stated in this Policy. However, if:*

1. *The Time Element deductible and another deductible apply to a single **Occurrence**, then the Company shall apply both deductibles to the **Occurrence**; and*

2. ***Covered Loss or Damage by Flood arises out of a Named Storm, then the Company shall apply the Flood deductible set forth in Subparagraph G.1. or the Named Storm deductible set forth in Subparagraph G.3.b., Whichever is greater.***

Description of Property: Real and Personal Property; Machinery and Equipment; Furniture & Fixtures; Improvements and Betterment's; Inventory; Stock; EDP Hardware, Media and Data; Business Income – Gross Earning/Extra Expense and as further described in the policy form

Policy Form: Lexington Insurance Company Manuscript Domestic Property Policy Form (PR 8371)

Territory: Coverage under this Policy applies to Occurrences within the United States, its territories and possessions, Puerto Rico, and Canada, including their respective coastal waters.

To Indemnify Against Loss By: All Risks of Direct Physical Loss or Damage including Flood and Earth Movement except excluding Equipment Breakdown and as further described in the approved policy form.

Total Insured Values:	**$348,723,054**	Per Schedule on File with Company
Layer Premium:	**Subject to <u>25%</u> Minimum Earned Premium** **<u>Excluding Domestic Terrorism:</u>** **$1,333,866 (100%)**	**Plus Surplus Lines Taxes & Fees to be filed by the broker**
Lexington Premium:	**Subject to <u>25%</u> Minimum Earned Premium** **<u>Excluding Domestic Terrorism:</u>** **$666,933 (50%)**	**Plus Surplus Lines Taxes & Fees to be filed by the broker**
Subject To:	All Exclusions, Limitations, Terms and Conditions of the Agreed Forms and Endorsements and: 1. Receipt of Surplus Lines License Numbers 2. 25% Minimum Earned Premium 3. We require that you send us a completed and signed " Broker Responsible for Surplus Lines Filings Agreement"	
Includes:	1. Naval Station Ingleside Valuation 2. Channel Blockage Endorsement – Loss of Income 3. Grain Elevator – Loss of Rents 4. 10% Margin clause	

About RMS

Hemant H. Shah

Our Story

They said it couldn't be done. We thought otherwise.

As a graduate student at Stanford, in the heart of earthquake country, I wrote a business plan to spin out university R&D and commercialize a computer model that could quantify earthquake risk in three California cities. With a modest seed investment from my family and an office in my apartment, I convinced a few friends and fellow researchers to join up. Believe me, there was no shortage of skeptics. The financial industry and academic establishment told us that the problem warranted endless study in traditional silos. Venture capitalists struggled to understand what the category and business model would be ("catastrophe risk modeling?"). Fortunately, we were naïve and had the absolute conviction that if we got the right multidisciplinary team in the room, we could create a whole new category of analytic technology—and launch a new industry.

More than two decades later, we are now the world leader in catastrophic risk modeling. From earthquakes and hurricanes to terrorism and infectious diseases, our models provide critical risk management solutions to hundreds of financial institutions around the world. At RMS, we believe knowledge is power. Our work may serve some of the leading industries driving today's global economy, but we also believe it can make a real and positive impact on people's lives. How societies understand and manage risk affects us all. At RMS, our ultimate goal is to help create a more sustainable and resilient global society through a better understanding of catastrophic events.

Based in our headquarters in Silicon Valley and in offices throughout North America, Europe, and Asia, our team of nearly a thousand professionals may be a bit larger than it used to be, but we're as ambitious and innovative as ever. From day one, our passion has been innovation driven by the courage to tackle the problems others say can't be solved. Can we quantify the risks from climate change? Simulate how medical breakthroughs might lead to dramatic improvements in life expectancy? Deliver supercomputing in the cloud? Can our technology platform help transform an entire industry? Once again, they say it can't be done. We think otherwise.

Hemant Shah
Cofounder, President and CEO
San Francisco, California, 2011

Leadership Team

Hemant H. Shah
President and
Chief Executive Officer
California, US

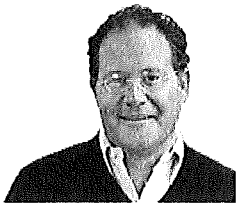
Hemant Shah is President and CEO of Risk Management Solutions. Since co-founding RMS in 1989, Hemant has become widely recognized within the global insurance industry as a proactive and influential leader.

Based in California, he was named one of North America's "100 Most Powerful People in the Insurance Industry" (Insurance Newscast, 2005, 2006), one of "35 Rising Stars" (Business Insurance, 2002), a "Leader of the Future" (Global Reinsurance, 2000) and also listed as one of the industry's Top 40 Most Influential (Global Reinsurance, 2008).

Hemant serves on the Board of Overseers of St. John's School of Risk Management and Actuarial Science (College of Insurance), is a Director of the RAND Center for the Study of Terrorism and Political Violence, a Director on the Board of RAND's Institute for Civil Justice, and a Director of the Singapore-based Institute for Defense and Strategic Studies.

Hemant is a member of the Aspen Institute's prestigious Henry Crown Fellowship Program, which seeks to develop our next generation of community-spirited leaders, providing them with the tools necessary to meet the challenges of corporate and civic leadership in the 21st century. He received a BS in Civil Engineering and an MS in Engineering Management from Stanford University.

Robert Bentley
Chief Operating Officer
New Jersey, US



Rob Bentley joined RMS as the COO in May 2007. In this role, Rob is responsible for all operational aspects of RMS and oversees RMS' execution of a multi-market, multi-business, and multi-platform strategy. Rob is a highly effective leader with an execution mindset and a track record of driving world class performance in the insurance and reinsurance markets.

Rob began his career at Guy Carpenter & Company, LLC. in 1987 as a property broker. In 1993, he moved to Aon Re, a global reinsurance and insurance brokerage firm, where he managed a team of property brokers placing national account property risk, catastrophe, and retrocessional business. He returned to Guy Carpenter in 1996 as a founding member of the company's property specialty division.

In 2000, Rob assumed leadership of Guy Carpenter's Instrat risk modeling operations. In 2002, he was chosen for the role of Western Region Manager, and then assumed the position of Global Chief Operating Officer in 2006. Rob holds a BA in philosophy from the University of Virginia. He also attended the Stanford Executive Program at Stanford University.

Debbie Byron
Chief Human Resources Officer
California, US

Deborah (Debbie) Byron is the Chief Human Resources Officer of RMS. She is a seasoned global executive with over 30 years of experience in corporate businesses, professional service companies, and educational institutions. Prior to joining RMS, Debbie was SVP of worldwide human resources for SAP Business Objects.

She has also held executive leadership positions for the international law firm Wilson Sonsini Goodrich & Rosati and the California State Automobile Association, and as principal of her own organizational consulting practice.

Debbie serves as co-chair of the Stanford Women on Boards Initiative and as a trustee of Harvey Mudd College. She also previously chaired the board of directors of the Career Action Center in Cupertino, and as a two-term president of the 15,000-student, top-ranked Cupertino Union School District.

Debbie holds a BA from Stanford University and an MBA from the Stanford University Graduate School of Business.

Stephen Robertson
Chief Finance Officer
California, US

Steve Robertson is the CFO of RMS, and also holds the role of Executive Vice President of Enterprise Services. He joined RMS in 2001 after prior positions as CFO of COLO.com, a telecom infrastructure company, and CFO of InsWeb, an online insurance marketplace, where he managed the company's initial public offering (IPO).

Prior to InsWeb, Steve spent 12 years in the investment banking business, focusing primarily on capital raising, mergers and acquisitions in the global insurance and reinsurance industry at firms now part of Citicorp (Salomon Brothers/Smith Barney), Deutsche Bank (Alex. Brown) and Lehman Brothers. Steve holds an AB from Princeton University and an MBA from the Stanford Graduate School of Business.

Philippe Stephan
Chief Technology Officer
California, US

Philippe Stephan is the CTO of RMS. Prior to joining RMS in 2009, he was most recently Head of Business Development for Sophis, a leading market risk technology vendor. Prior to Sophis, Philippe directed product development as the CTO of San Francisco based Moody's KMV, the award winning credit risk analytics vendor.

Philippe has also held senior management positions at Internet startups, built derivatives risk management systems for Societe Generale in Paris, and CA Lazard Financial Product Bank in London. Philippe started his career as a key contributor to the development of the Eiffel programming language in the early 1990s, after obtaining his MS in computer science from French Ecole Nationale Superieure des Mines de St Etienne.

Bobby Soni
Chief Platform & Services Officer
California, US

Bobby Soni is the chief platform & services officer at RMS, where he is responsible for building out an end-to-end cloud hosting & operations capability for RMS' new platform and solution portfolio.

He came to RMS from IBM, where he was vice president industry & cloud business solutions for IBM SWG. His responsibilities included leading worldwide strategy, market development, and investments for IBM's industry and cloud businesses.

Bobby was also vice president and global solution leader for IBM's global business services, and held the role of chief strategy officer and executive vice president of Webify Solutions, acquired by IBM in August 2006.

Before joining Webify Solutions, Bobby was senior vice president and chief technology officer at BearingPoint, and senior partner at KPMG Consulting and KPMG LLP, where he helped to create the world's largest ASP in the market.

Robert Muir-Wood
Chief Research Officer
London, UK

Robert Muir-Wood is CRO of Science and Technology Research at RMS. In this role, Robert heads the branch of RMS responsible for enhancing approaches to natural catastrophe modeling and developing models for new areas of risk such as liability.

Based in London, he has more than 20 years' experience in developing probabilistic catastrophe models and has most recently focused on the clustering of catastrophic events, insurance loss amplification, and "mega" catastrophes.

Robert was lead author on Insurance, Finance, and Climate Change for the 2007 Intergovernmental Panel on Climate Change (IPCC) Assessment Report, and is the author of six books, as well as numerous papers and articles in scientific and industry publications. Robert has recently focused on new models for clustering, time varying activity rates, loss amplification and Super Cats.

He is also a member of the OECD High Level Advisory Board of the International Network on Financial Management of Large-Scale Catastrophes. He holds a first class degree in natural sciences and a PhD in Earth Sciences, both from Cambridge University, and was a junior research fellow at Trinity Hall, Cambridge.

Educating the World **About Risk**

As a pioneer of catastrophic risk modeling, RMS leads the market and sets the standard for quantifying risk. Our science educates people on the physical and financial implications of natural catastrophes, terrorism, and the risks associated with changes in life expectancy.

RMS GLOBAL MODELS

All Models
Earthquakes
Tropical Cyclones
Fire
Storm Surge
Floods
Winter Storms
Windstorms
Severe Convective Storms
Terrorism
Infectious Disease

All Models

RMS models risk in over 100 countries, allowing stakeholders to analyze the probability of loss in regions with the highest exposure. Our models are built using detailed data reflecting highly localized variations in hazard, and databases capturing property and human exposures. They are continually updated with the latest scientific research and data.

Natural Catastrophe Modeling

Our natural catastrophe risk models help people, governments, and businesses better understand the potential impact of a wide variety of catastrophic events. We are continuously discovering new data and information to improve and expand our models, enabling risk holders to be better prepared and to make better decisions about managing risk.

HURRICANE IKE // 1-14 SEPTEMBER 2008

Building Performance

Forensic claims analysis is one way RMS learns more about major catastrophic events and their lessons for understanding risk. In studying $18 billion in recent U.S. hurricane claims data, our researchers noticed that damage to some types of buildings was greater than expected. Why didn't these buildings perform as well as they should have in relatively low winds?

Our structural engineers took a closer look at this unprecedented volume of claims. While building codes were sufficient to ensure buildings would withstand moderate hurricane winds, adherence to those codes was inconsistent in some regions, particularly for properties further away from the coast. In addition, our researchers found that some roofing materials deteriorated more rapidly than expected in certain atmospheric conditions, such as the high heat and humidity in the southeast.

These findings have implications not only for RMS clients, but for government and property owners as well. Armed with information from RMS, stakeholders can identify building shortcomings and promote improved building practices to ensure greater safety in the event of a major hurricane.

Formed:
September 1, 2008

Dissipated:
September 14, 2008

Highest Wind:
145 mph (230 km/h)

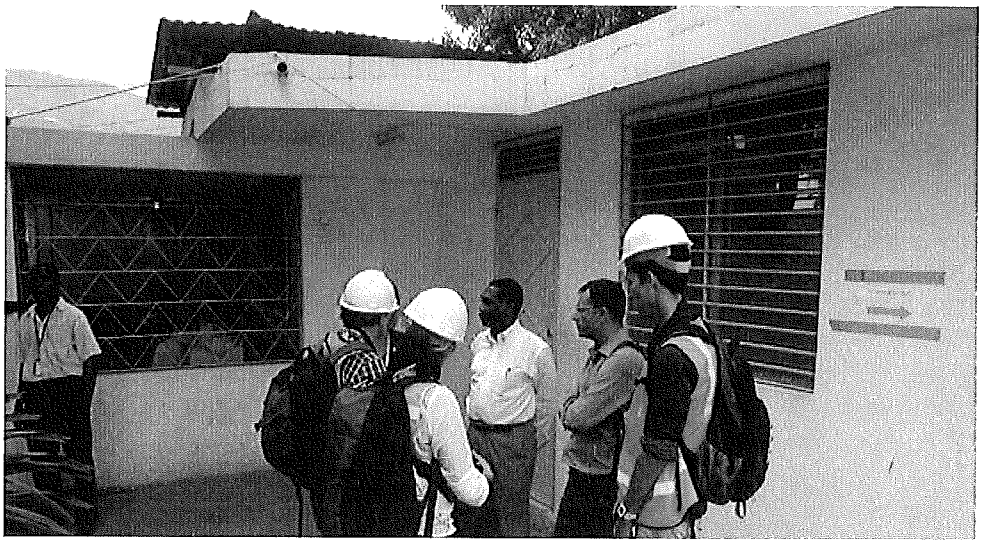
Lowest Pressure:
935 mbar (hPa; 27.61 inHg)

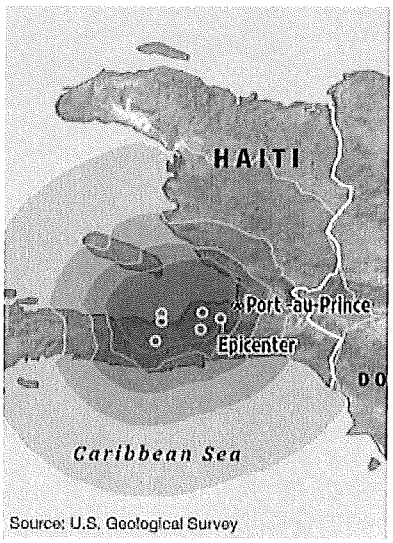
Fatalities:
103 direct, 92 indirect

Damage:
$37.6 billion (2008 USD)
$38.4 billion (2011 USD)

Countries or regions affected:
Turks and Caicos, Bahamas, Haiti, Dominican Republic, Cuba, Florida Keys, Mississippi, Louisiana, Texas, Mississippi Valley, Ohio Valley, Great Lakes region, eastern Canada

HAITI EARTHQUAKE // 12 JANUARY 2010





Certifying Hospitals in Haiti

One of the most destructive earthquakes in modern history, the magnitude 7.0 earthquake that hit Haiti on January 12, 2010, killed or injured approximately 600,000 people and destroyed 300,000 homes. Lacking a national building code, walls were often constructed of heavy materials without reinforcement, resulting in collapsed or compromised buildings and devastating loss of life.

Magnitude:
7.0 M_w

Depth:
13 kilometres (8.1 mi)

Epicenter location:
35.909°S 72.733°W

Coordinates:
18.457°N 72.533°W

After the earthquake, RMS experts joined a cross-organizational team of geologists and structural engineers in Haiti to assess the damage and learn lessons about how buildings perform in earthquakes. This information would be critical for improving future building practices in Haiti and elsewhere as well as improving the catastrophe models driving global business decisions.

As the local government struggled to examine critical structures, particularly hospitals, they relied on the network of visiting research and aid workers to supplement their stretched resources. Alongside partner organizations, RMS structural engineers helped evaluate the safety of hospitals that survived the earthquake, contributing vital expertise to help reopen hospitals as quickly as possible.

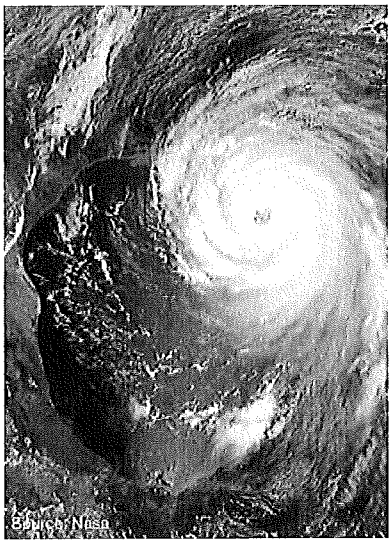
Countries or regions affected:
Haiti

Peak ground acceleration:
0.5 g

Tsunami:
Yes (localized)

Casualties:
92,000 - 316,000 deaths

HURRICANE KATRINA // 23-30 AUGUST 2005



Understanding Super Catastrophes

Hurricane Katrina changed New Orleans forever, but it also changed the science of catastrophe modeling. Until Katrina, models considered the damage to expect if a major hurricane made landfall or if a major storm surge overtopped flood defenses. But the levees crumbling, that was another matter.

After floodwaters filled the city, the U.S. struggled to grasp the magnitude of the damage. RMS modelers went to work day and night to quantify what they saw, estimating at least $125 billion in losses. Media and government agencies turned to RMS for information, and officials at the top of the Bush administration contacted RMS advisors for help in understanding potential economic losses.

After witnessing the tragedy of New Orleans, RMS experts began to contextualize their work—and re-examine historical events—in terms of an entirely new concept, the super catastrophe or "super cat," in which one massive event triggers secondary events that can have an even greater destructive impact. Today, RMS considers the possibility of super cats in all of our major catastrophe models, providing a more comprehensive perspective on the potential implications of extreme events.

Formed:
August 23, 2005

Dissipated:
August 30, 2005

Highest Wind:
175 mph (280 km/h)

Lowest Pressure:
902 mbar (hPa; 26.64 inHg)

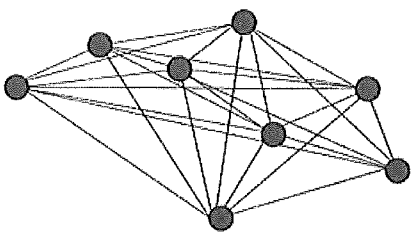
Fatalities:
1,836 confirmed

Damage:
$81.2 billion (2005 USD)
$90.9 billion (2011 USD)

Countries or regions affected:
Bahamas, South Florida, Cuba, Louisiana (especially Greater New Orleans), Mississippi, Alabama, Florida Panhandle, most of eastern North America

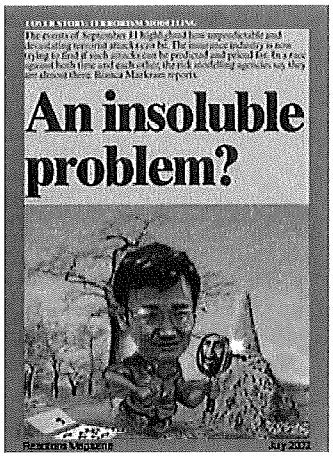
Terrorism Modeling

Terrorism has blighted human experience for centuries. Seemingly as random and unpredictable as natural disasters, terrorist attacks defy understanding. What can be done to prepare for a catastrophic terrorist act? What can we do to better understand how and where they might occur, and what sort of impact they might have?



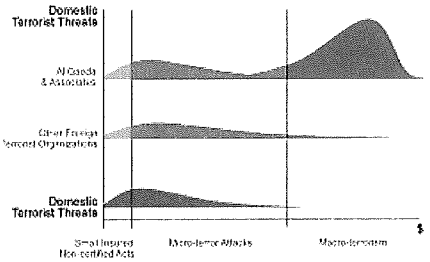
A new, systematic approach to understanding terrorism

RMS mathematician Gordon Woo saw a way to begin answering these questions. The means—whether bomb, biological weapon, chemical weapon, or other mode of attack—would tend to be the most readily available and accessible. Those probabilities could be modeled by conventional means. The targets would be the most visible with the highest psychological value—again, a quantifiable



aspect of the problem. The final variable was human nature itself. The strategic decision to commit a terrorist act would be the culmination of a series of other strategic decisions. No amount of historical data could account for that; there was no way to quantify capricious human impulse. Or was there?

Some terrorist networks operate as independent cells that are geographically spread but swarm in for coordinated attacks.



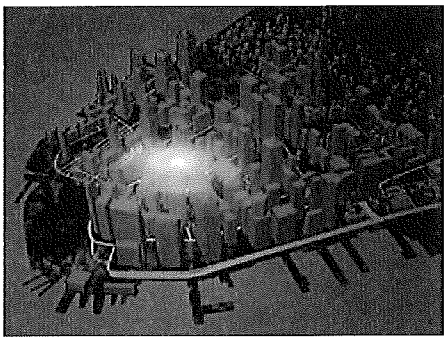
RMS quantifies risk across a spectrum of terrorism attacks, from both domestic and foreign terrorist groups.

Game theory and the decisions terrorists make

After the terrorist attacks of 9/11, Dr. Woo had an idea. Why not use mathematical game theory, made famous in the film *A Beautiful Mind*, to quantify and understand the probability of certain decisions? Ten years later, RMS terrorism risk models based on game theory and other methodologies are used to anticipate terrorist behavior and potential terrorist attacks and their effects around the globe.

Created in partnership with the world's terrorism experts

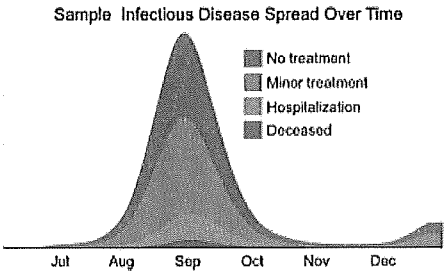
To build the most accurate and advanced model of probable terrorist strikes possible, RMS partnered with the leading think tanks and research institutions around the globe, including the RAND Center for Terrorism Risk Management Policy, Jane's Information Group, the Centre for the Study of Terrorism and Political Violence at the University of St. Andrews in Scotland, the S. Rajaratnam School of International Studies in Singapore, and dozens of leading terrorism scholars, consultants, and advisors.

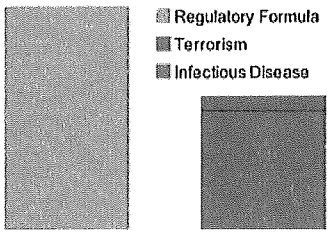


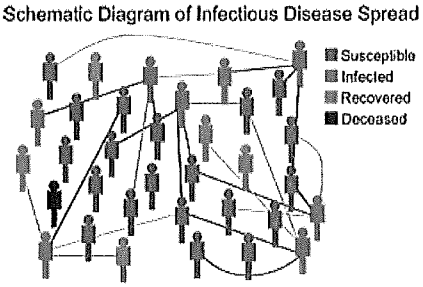
Truck bomb simulation in the financial district of Manhattan

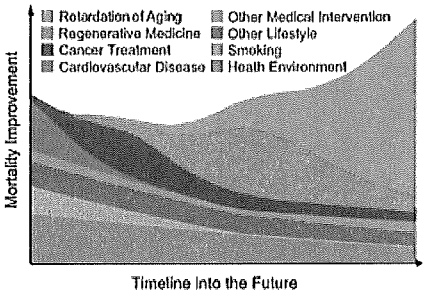
Longevity & Mortality Modeling

Life expectancy, the impact of lifestyle choices, and the toll that catastrophic events can take in terms of human lives lost can all have a dramatic impact on business as well as governments. From disaster response planning to pensions, insurance, and government policy, being prepared for the future depends on the best possible understanding of how long people will live, what factors drive longevity, and what can happen when catastrophe strikes.









Modeling Longevity Risk

Grounded in medical science, the RMS Longevity Risk Model analyzes the complex interplay of factors expected to drive future mortality rates:

- Lifestyle trends
- Environment
- Medical intervention

Modeling Excess Mortality Risk

RMS leads the industry in modeling potential sources of excess mortality risk, including infectious diseases, terrorism, and earthquakes. These models incorporate scientific and medical data as well as claims information from historical events around the world. Model output can be used to:

Underwriting and Portfolio Management

Mortality analytics informed by medical science achieve a higher level of granularity than is possible using conventional actuarial techniques. RMS analytics enable businesses to:

- Capture the interaction of risk factor variables and conduct predictive modeling of lifespans

- Regenerative medicine
- Strategies to slow aging

Output from the Longevity Risk Model can be used to assess capital requirements for pension and annuity longevity risk for internal planning or regulatory requirements, inform risk transfer decisions, and quantify and optimize the correlation between longevity and mortality portfolios.

- Understand the drivers and magnitude of excess mortality risk by line, country, and peril
- Inform risk transfer decisions
- Monitor and manage risk concentrations in key urban areas

using characteristics such as lifestyle, medical history, and medical testing
- Incorporate analytics based on disease studies, clinical trial data, and medical models
- Differentiate policy applicants based on individual health risk
- Assess the relative impact of a wide variety of risk factors and medical treatments on mortality

AGENDA ITEM NO. 4

No Attachment

AGENDA ITEM NO. 5

No Attachment