

Cat Tales (July 2004)
by Paul Kovacs

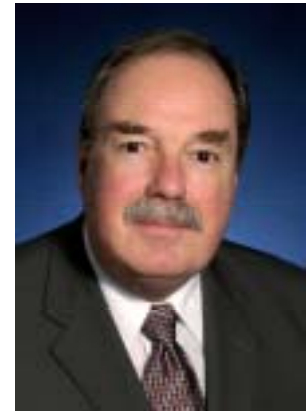
Cat Tales is the e-newsletter for members of the Institute for Catastrophic Loss Reduction. ICLR's disaster loss prevention research and education initiatives are part of the insurance industry's ongoing effort to save lives and reduce property damage. Please share ***Cat Tales*** with others in our industry. For further information visit www.ICLR.org. Items in this report include:

- David Wilmot elected chair
- Our first \$47 million in disaster safety research
- Earthquake hazard zones
- ICLR's hurricane resilient home
- Three little pigs project
- ICLR will host international *Water and Disasters* conference
- Loss reduction seminars for insurers

David Wilmot elected chair

David Wilmot was elected chair at the June meeting of ICLR's Board of Directors. Mr. Wilmot is Senior Vice President and Chief Agent with TOA Re. He was a member of the Insurance Bureau of Canada committee on catastrophic loss reduction that founded ICLR in 1997. David said, "ICLR has been a great success in showcasing the leadership role Canada's insurance industry is playing in the promotion of loss prevention research and education, and I look forward to many further successes in the years ahead."

The 2004/05 ICLR Board members are: Kathy Bardswick (Cooperators), Franco Berruti (UWO), Bob Cooke (State Farm), Alan Davenport (UWO), Paul Kovacs (ICLR), Rowan Saunders (Royal), Nick Smith (Lloyds) Brian Timney (UWO) and David Wilmot (TOA Re).



Our first \$47 million in disaster safety research

ICLR has completed a review of the Institute's impact. We found that the initial funding of \$3 million provided to ICLR by the Canadian insurance industry since late 1997 has been levered into \$47 million in disaster safety research, 350+ research papers, the founding of three research chairs at the University of Western Ontario and McGill University, and the direct participation of more than 30 researchers and 100 students in our study program.

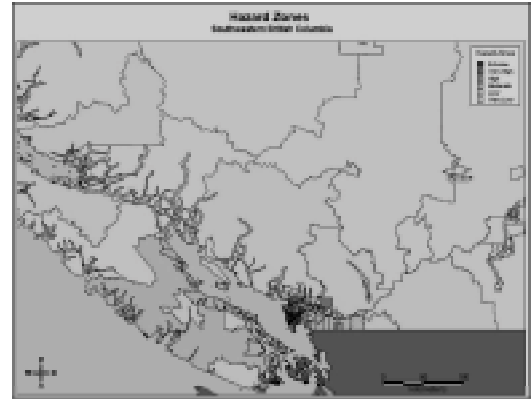
ICLR researchers have secured world class research facilities, and our research has provided the foundation for improvements in public policy. Several thousand people from member insurers have participated in seminars to share our loss prevention findings, and an active public education program has reached hundreds of thousands of homeowners. The Institute has also provided a continuing forum for Canadian insurers to work with other national and international organizations seeking to reduce disaster losses – like the Canadian Red Cross and government agencies that include the Meteorological Services of Canada, Public Security and Emergency Preparedness Canada, and Emergency Management Ontario.

This foundation of success positions ICLR well for its further efforts to support disaster safety research and education.

Earthquake hazard zones

ICLR has released a research paper for member insurers setting out earthquake hazard zones for Canada. This study is based upon research by ABS Consulting's EQECAT, commissioned last year by the Insurance Bureau of Canada and the Reinsurance Research Council. The objective of the study was to present information about the relative risk of earthquake damage in a form that

may be useful for underwriting purposes. The study covers all regions of Canada with a special focus on areas of high and moderate risk in British Columbia, Quebec and Ontario. Detailed maps are provided for Victoria, Vancouver, Ottawa, Montreal and Quebec City. A copy of the full study is available at www.ICLR.org in the section on publications under the title *Earthquake Hazard Zones: The relative risk of damage to Canadian buildings*.



ICLR's hurricane resilient home

To mark National Emergency Preparedness Week, ICLR completed a non-structural retrofit on a Halifax home to illustrate the simple steps Canadians can take to make themselves less vulnerable to natural disasters. This home now meets or exceeds the rigorous ICLR disaster resilience standards as set out under our *Designed... for safer living* program.

We are asking Canadians to take a more active role in protecting themselves and their communities. By getting involved, we can all become better prepared to face severe weather or other hazards. Because Halifax is prone to hurricanes, ICLR installed protective window film designed to reduce the risk of flying glass. ICLR also covered the oil tank to prevent ruptures, reinforced the chimney and removed a large tree that lost a main branch during Hurricane Juan and constituted a hazard. There is a lot of science behind these and the other simple steps to be better protected.

Most Canadians live in areas subject to natural hazards. The most expensive natural disasters in Canada's history – the 1998 ice storm, the Saguenay flood, Manitoba flood, Kelowna wildfire and Hurricane Juan – have occurred within the last ten years. We can't prevent these hazards but there are many simple actions we can all take to be better prepared.

The safety retrofit was covered by CBC and other media, and focused on the positive contribution of the Canadian insurance industry to disaster loss prevention.

Three little pigs project

ICLR researchers at the University of Western Ontario secured \$7 million to construct a new facility for full-scale testing on houses to analyze how they respond to wind, rain and mould. The ICLR wind engineering research team at Western are the only group in the world who will have access to a facility to test full-scale homes and a wind tunnel to test scale model homes, ensuring that the team will remain on the leading edge of international disaster safety research.



Team lead Dr. Mike Bartlett said "We're trying to engineer the wind. That's really what it's all about. That's what makes this project quite unique compared to any other project on the planet. We're trying to subject full-scale houses to simulated real wind"

The 10 members of the research team will be able to conduct tests on full-scale houses and other light frame construction in realistic extreme wind and snow conditions. The team will learn how houses are damaged in extreme storms and how construction can be improved to make these structures less susceptible to damage.

Disaster resilient housing is one of the main research themes at ICLR and these state of the art research facilities will support ongoing long-term research.

ICLR will host international *Water and Disasters* conference

Slobodan Simonovic, ICLR chair in engineering, has secured a major international conference that will be hosted by the Institute for Catastrophic Loss Reduction. The conference will focus on *Water and Disasters*. It will be held on December 13 and 14 at the University of Western Ontario. The leading international and Canadian organizations involved in flood management will participate in the conference including UNESCO, the International Hydrological Programme and International Flood Network. ICLR members interested in participating in the workshop should contact Sandra Doyle at sdoyle@uwo.ca.

Loss reduction seminars for insurers

ICLR hosts monthly *Friday Forum* seminars for members to share our disaster loss prevention research. Since January 1999, ICLR has hosted more than 60 seminars. These have been held across the country, primarily in Toronto. Disaster safety researchers review their findings through an informal discussion with member insurers. Please contact Tracy Waddington at twaddington@iclr.org for more information about future sessions.

Some of the sessions held or planned for 2004 include:

- January – Lindsay Olson – The impact of the 2003 B.C. wildfires on the insurance industry and the challenges dealing with government and media in times of crisis.
- February – Dr. Mike Bartlett – The response of wood-frame roofing, walls, and floor systems and the interaction between these systems during extreme wind events.
- March – Dr. Luc Chouinard – Seismic hazards for the City of Montreal and progress reports on the microzonation analysis of emergency buildings, bridges, and utilities.
- April – Dr. Peter Vickory – Climatology modeling, wind-induced damage modeling and risk assessment, with an emphasis on hurricanes.
- May – Dr. Horia Hangan – Downbursts and tornadoes are rare events that cause two-thirds of the property damage in North America. Dr. Hangan reviewed his pioneering research with respect to wind engineering to address the threat of damage due to downbursts and tornadoes.
- June 18 – Dr. Kristy Tiampo – New research predicts the location and timing of future earthquakes in California, an approach that could be applied to Canada.
- July 23 – Dr. Alan MacEachern – Lessons learned from Canada's most deadly wildfire, the 1825 Miramichi fire.
- September 24 – Richard McGrath – Canada's new building code and implications for insurers.
- October 22 – Dr. Peter Bowyer – The Canadian Hurricane Centre, Hurricane Juan and future Atlantic hurricanes.
- November 26 – Heather Auld – An assessment of the 1998 ice storm and changing likelihood of ice storm damage.
- December 13/14 – ICLR's *Water and Disasters* Conference

ICLR moves!

The Institute for Catastrophic Loss moved its Toronto office to 20 Richmond Street East, Suite 210 in downtown Toronto. Our London office remains on campus at The University of Western Ontario at 1389 Western Road. Also please visit us online at www.ICLR.org.

* * *