

From the Secretary-General

Happy New Year!

I would like to take this opportunity to extend my sincere thanks, and congratulations, to the CESVI France team that did such a wonderful job organizing and hosting our 2008 RCAR Conference in Paris, France.



The conference planning and organization team, lead by Vincent Claeys, General Manager of Cesvi France worked extremely hard to put together a Technical Program, Social and Partner Programs designed to make our experience in Paris both informative and memorable.

On a more personal note, I enjoyed meeting with everyone for the first time in my capacity as RCAR Secretary-General. We also had the opportunity to bid farewell to some retiring delegates and their partners. Former Secretary-General Michael Smith and his wife Patricia Smith attended the conference as guests of RCAR, giving us an opportunity to recognize their contribution to RCAR over the past eight years. I also had a chance to meet a number of delegates and partners who were joining us for the first time.

In fact, during the course of the event, I was approached by some of you about putting together an RCAR 'Conference Guide,' containing pointers on what to do to achieve success for the benefit of those who will be hosting subsequent RCAR Conferences.

I am pleased to report that work on the Guide is almost complete, and should be posted on our Website soon. In addition, we are also close to finalizing a new 'look and feel' to our Website, which should be completed in the New Year.

At our meeting in Paris, we spoke about the value of the Newsletter being only as good as the level of participation by you, our Members.

Judging from the number of quality submissions received, as listed to the right, the current edition of the Newsletter should prove highly interesting, informative - and valuable - to all! Of particular note is a submission from Sang Woo Shim on his internship at Thatcham.

Thanks so much to all who contributed! Your participation is greatly appreciated!

Enjoy!

Wilf Bedard

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From IAG:

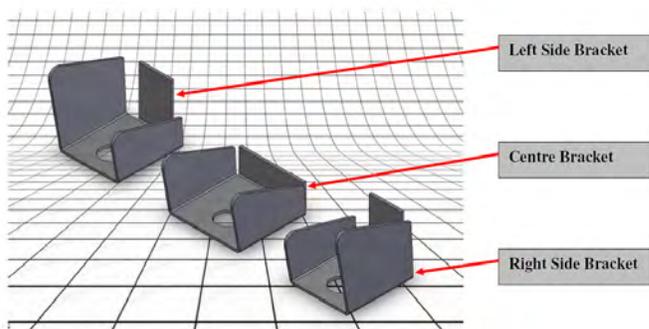
Update to the IAG Boot Lug Research

At the Paris RCAR Conference in September this year, Robert McDonald presented a repair method for Holden spare wheel wells.

These repair brackets have now been approved by General Motors and will be available in the form of a kit under a part number through the GM dealer network.

The kits are likely to be of interest to RCAR members in many countries, because Holden vehicles are sold throughout the world under various brands including: Chevrolet Lumina and Caprice, Buick Park Avenue, Daewoo Statesman, Pontiac G8 and Vauxhall VXR8.

For more information, please contact Anthony Boddy at anthony.boddy@iag.com.au



Holden Commodore



Chevrolet Caprice



Buick Park Avenue



Daewoo Statesman



Pontiac G8



Vauxhall VXR8

IAG Research Centre has a New Website

The IAG Research Centre has launched a new website. The website features a user-friendly layout and contains information and results from research conducted at the Research Centre.

The website will continue as a main information portal for the IAG assessor network. The website contains links to parts pricing, smash repair times and rates, vehicle identification and technical publications.

The new website now publishes car research, covering bumper test results, car theft ratings, visibility results and head restraint ratings.

Other new additions to the website include hail impact testing research, media releases and motorcycle research, including tip-over testing, design and damageability and issues on motorcycles.

The website can be found at www.iagresearch.com.au.

The screenshot displays the IAG Research Centre website in a Microsoft Internet Explorer browser window. The browser title is "IAG Research Centre - Swann Insurance Motorcycle of the Future - Microsoft Internet Explorer provided by ER&GA - IAG". The address bar shows the URL "http://iag.liquidcreations.com.au/content/view/full/78/96/". The website header features the "RESEARCH CENTRE" logo and the IAG Insurance Australia Group logo. A navigation menu includes links for Home, Media Releases, Industry Links, About, Search, and Contact. The main content area is titled "Swann Insurance Motorcycle of the Future" and contains an article titled "1. Opportunities to Improve Motorcycle Rider Safety through Dynamic Control Technology". The article text discusses Swann Insurance's 40-year history and its commitment to motorcycle safety research. A blue motorcycle is shown in a separate image. Below the article, there are two bullet points: "Casey Stoner unveils Swann Insurance Motorcycle of the Future. To read more, click [here](#)." and "Technical Overview of the Swann Insurance Motorcycle of the Future. To read more, click [here](#)." At the bottom of the page, there is a small image of a motorcycle dashboard showing a speedometer at 100 km/h and a "LOW AIR-PRNT" warning light. A sidebar on the left contains a "Login Form" with fields for Username and Password, a "Remember me" checkbox, and a "Login" button. Below the login form are links for "Lost Password?" and "No account yet? Register".

From CESVI Argentina, Brazil, Colombia, & Mexico:

2nd Latin American Insurance Conference: The Importance of Compensation Studies for Insurance Companies



(from left: Angel Martinez Alvarez, Director General, CESVI Mexico; Neival Freitas, Director, Insurance Companies National Federation; Jose Aurelio Ramalho, Executive Director of Operations, CESVI Brazil; Fabian Pons, General Manager, CESVI Argentina; Abelardo Guimarães de Queiroz Filho, Coordinator, Insurance Companies National Federation; Mauricio Ruiz Correa, General Manager, CESVI Colombia)

An event held by the CESVIs of Argentina, Brazil, Colombia and Mexico in October gathered together management of the CESVIs in Latin America, executives of South and Central American insurance companies, and representatives of insurance market entities. The event was supported by Fenaseg and Sindiseg-SP, representing the insurance market, and sponsored by Renault.

There were two days of meetings. The first day, which consisted of lectures, was held in the auditorium of a hotel in Sao Paulo; the second day included a tour of the CESVI BRAZIL facilities and a visit to the Auto Salon.

This 2nd Latin American Insurance Conference, held in Brazil, was preceded by a meeting in Argentina last year, where the theme discussed was “information technology in auto insurance management”.

The expectation is that the conference will continue to be held annually and that the next one will involve insurance market executives in Colombia in a meeting organized by the local CESVI. The theme and date will be announced at a later date.



The Conference in Progress



Um sopro pela vida

From CESVI Brazil:

Law 11.705/2008 Establishes Zero Alcohol Limit for Brazilian Drivers + Severe Fines for Drivers Under the Influence of Alcohol

In July of this year, a law was approved in Brazil which increases policing and punishment of drivers caught driving under the influence of alcohol. This was a victory for the entire Brazilian society and especially CESVI BRAZIL, which supported the creation of the law and contributed substantially with research and training of the highway police.

In a short amount of time, significant results were seen in traffic accidents in Brazil, with a 63% drop in deaths resulting from traffic accidents within the first weeks of the passage of the law. 4.5 million Reais (~ US\$ 2 million) were saved in public hospital expenses in Sao Paulo within the first months of the law being passed; 65 offenders were arrested, and 172 charged.

Despite these significant results, there are efforts in Brazil to repeal the law in Congress.

In light of the situation, CESVI BRAZIL created the “Manifesto for Life”, a movement by public and private companies who are in favor of the law and are working to defend the current legislation.



Agenda +

Since the beginning of 2008, CESVI BRAZIL has been presenting the Positive Agenda (*Agenda Positiva*) at public and private institutions. The project discusses the need to create a National Highway Insurance Plan and suggestions for actions and programs directed at citizens to stimulate safe driving behavior. This initiative is supported by important public and private institutions in Brazil, such as the National Public Transport Agency, the Brazilian Association of Traffic Medicine, and the Brazilian Association of Highway Contractors.

Among several lines of action necessary in a plan, suggestions are made that encourage safe behavior in traffic, with the provision of tangible benefits such as a reduction of taxes and fees in connection with vehicles and drivers who keep their driving record free of violations and accidents for a given period following the implementation of the incentive.



New CESVI BRAZIL Safety Index Classifies Vehicles According to their Safety Components

The Safety Index is a ranking that classifies vehicles according to availability of safety components. Its aim is to identify and measure the level of safety provided by the automobiles sold in Brazil, giving people vehicle safety criteria on which to base their decisions regarding which vehicles to purchase.

The rankings, divided by vehicle categories, are calculated based on the components of active safety (accounts for 45% in the calculation), passive safety (40%), and property safety (15%) offered by each model. Components of active safety are intended to avoid accidents (example: ABS); passive safety is intended to minimize the damage resulting from an accident (example: air-bag); while property safety is intended to reduce the risk of vehicle theft (example: immobilizer).

The Index is an unprecedented move for CESVI in the country, aimed at providing more technical guidance for the automotive, insurance and repair market as well as for the final consumer.

As is the case with the introduction of the Visibility Index, the Flood Damage Index, and the CAR Group, insurers and consumers will have more information on which to base their decisions, while factories have an important reference for developing safety systems for their vehicles.

From IAG:

All Terrain Vehicle Testing



ATV being tested for stability with a rider and payload

All-Terrain Vehicles, otherwise known as „Quads’ or „ATVs’, represent a danger to farmers on a daily basis. An ATV’s design has inherent stability issues when used to perform certain manoeuvres. Improper loading and operation can cause the ATV roll-over or tip, potentially injuring or killing the operator.

The IAG Research Centre has performed testing on several ATVs to get an understanding of how their stability is affected when loaded in different scenarios used in farming applications. A combination of specially designed and built apparatus determines how, and by how much, an ATV’s centre of gravity shifts and at what point an ATV will roll-over. The results will be used to educate the farming community, allowing them to make safer decisions when using their machinery.

For more information, please contact James Thomson at james.thomson@iag.com.au.

Colour of Car Research – Light and Bright is Best

The IAG Research Centre conducted a study to establish whether a car's colour impacts a car's visibility. Insurance claims data for accidents occurring at dusk and dawn (when visibility of cars on the road is poor) was analysed and correlated with Roads and Traffic Authority (RTA) registered car colour data. This enabled us to determine which car colours were over-represented in car crashes.

To provide visual evidence of the effect of car colour on visibility, we set up six cars of varying colour of the same make and model (Hyundai Getz) and photographed them from the period of mid afternoon through until sunset.

The results showed that light and brightly-coloured cars such as white, yellow, beige, and red are involved in around 10 percent fewer crashes than dark-coloured cars, such as black, green, and blue. The study also found the average cost of repairs for light-coloured cars is less than dark coloured cars, suggesting they may be involved in less severe accidents.

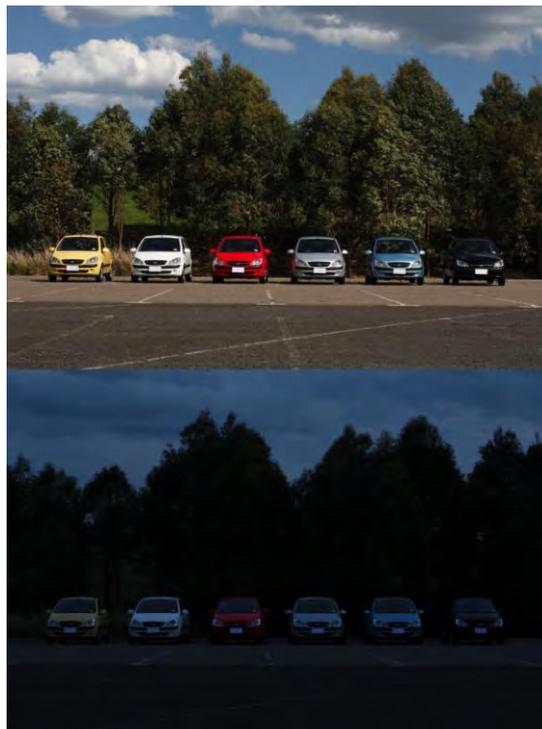
GOOD VISIBILITY	POOR VISIBILITY
Yellow	Green
White	Black
Cream	Blue
Beige	Silver
Red	

The aim of the study was to raise awareness of the visibility attributes of colour of the vehicle and encourage motorists to adjust their driving habits to improve their cars visibility. For instance, we urge motorists to use their headlights in the periods in dusk and dawn and even during the day on rural roads. We also encouraged new car buyers to consider the safety aspects of the colour of their vehicle. This release was designed to complement the safety messages we have previously reported with respect to Electronic Stability Control, head restraint ratings and the ANCAP crash test ratings.

The story received considerable coverage in print media, radio and breakfast television.

For more information, please contact Adam Macbeth at adam.macbeth@iag.com.au.

Visibility During Mid-Afternoon (top) and Sunset



International Bodyshop Industry Regional Symposium Sydney, Australia August, 2008



Chris Mann (left) and Khaeruddin Sudharmin at the Symposium

On the 7th of August 2008, *Managing Director & CEO* of Motordata Research Consortium Malaysia (MRC) Khaeruddin Sudharmin was invited as panelist, together with lead speaker Michiel Van Ratingen, *Secretary General, Euro NCAP*, to attend the inaugural Regional International Bodyshop Industry Symposium (IBIS) at the Sydney Convention and Exhibition Centre Darling Harbour, Australia. There were about 150 delegates from all over the Australian Island continent, from Darwin to Adelaide. The topic deliberated was, Technology – Vehicle Safety Systems and their impact on repairability. Khaeruddin shared with delegates the overall view of the revolution of the vehicle body, from expected significant changes to material selection and joining technology which will be around for at least another 5 years or so. In sync with the views of THATCHAM, he reiterated the importance of Damageability and Repairability of vehicles in the overall vehicle design by manufacturers which are namely efficient to build; compliant with legislation; safe for end users; and economically viable to produce. Both damageability and repairability as championed by RCAR, are enhancements which must be achieved without compromising the safety of vehicles or other road users.



Khaeruddin Sudharmin addressing the Symposium

Annual MRC Insurance Claims Managers' Dialogue October 30 2008, Kuala Lumpur, MALAYSIA

The annual MRC-Insurance Claims Managers' Dialogue was attended by over 90 invited guests and motor industry stakeholders, including insurance company claims heads, claims managers, independent loss adjusters, automobile franchisee/distributors, vehicle fleet owners, and representatives from the Malaysian Automotive Association and Federation of Workshop Owners Association.

The program included tabling of feedback from the industry on the national electronic estimating project, release of the 2007 Claims Monitor Reports, and the very beneficial presentation by **Mr. Andrew Miller, Research Director of Thatcham UK**, on **"Vehicle Security Systems – the UK Experience."** Industry members were very interested in learning and knowing how Thatcham managed to help UK insurers save over 2/3 of losses due to vehicle theft.

After the Dialogue and lunch, the guests from Thatcham attended a meeting at PIAM with the Motor Sub-Committee, who are also members of the Malaysian Vehicle Theft Reduction Council.



Attendees signing the attendance book and collecting the 2007 Claims Monitor



Delegates reviewing the 2007 Claims Monitor released at the Dialogue



Insurance companies representatives from the claims department



Mr. Andrew Miller, Research Director of Thatcham UK, presenting "Vehicle Security Systems - the UK Experience"



Delegates from Thatcham, UK



The plaque given to MRC by Thatcham UK to commemorate the successful partnership between MRC and Thatcham



Closing of the Dialogue



MRC staff who received their 10-year service awards



The MRC Team at the Dialogue

From CESVIMAP:

8th Annual Volvo Bodywork Meeting



Meeting Attendees Pose for a Group Photo

This is the eighth year that Volvo has chosen CESVIMAP's installations and technicians for their annual bodywork meeting. This day-long meeting is an important point of connection for the Swedish automaker's After-Sales Management and Spanish authorized centres for bodywork and paintwork, bringing together a total of more than 70 people from Volvo authorized centres.

At the meeting, the 2009 Training Plan was discussed, which, as has been the case for some years now, will be put into practice by CESVIMAP with the objective of increasing professional competency as well as profitability of the repair shop processes. To this end, the particulars of the new XC 60 were analyzed from a repair point of view, along with the establishment of an evaluation method for the preparation of estimates and general organization of repair shops.

The annual bodywork meeting included a frontal crash test on a Volvo C30 and analysis of the test results, as well as vehicle classification according to repairability characteristics and safety aspects, such as the *City Safety* system. At the meeting, various paint manufacturers were also invited to comment both on the advantages of their respective products and on their programs of assistance for repair shops.

Cesvi Recambios, a New Wholesale Client in Israel

The marketing work and the significant ecological components involved in the activity of CESVIMAP'S Authorized Treatment Centre for End-of-Life Vehicles *Cesvi Recambios* are bearing fruit in the form of a new client, this time in Israel. Contacts made between the two companies have led to the dispatch of various special containers with batches of engines, which left from Valencia for Tel Aviv.



Material en route from Valencia to Tel Aviv

Cesvi Recambios occupies an ever stronger position abroad, with businesses and clients from Israel, Portugal, Germany, Holland, France, Italy, Belgium and Denmark, among others. The CESVIMAP Authorized Treatment Centre for End-of-Life Vehicles decontaminates vehicles which have been registered as having reached the end of their useful lives. It carries out the draining of fluids and removes highly contaminating components, such as batteries and catalysers. Likewise, it provides for recycling of base materials by separating materials into families: plastics, aluminium, iron-based material, tyres, and so on. In addition, *Cesvi Recambios* recovers and markets those parts of the automobile which can be reused, offering vehicle owners and repair shops a supply of spare parts with full guarantees and at considerable savings on price.

cesvi recambios

Centro de Tratamiento de
Vehículos Fuera de Uso

t 902 363 122

f 920 259 988

@ recambios@cesvimap.com

Dutch Insurance Companies, Manufacturers and Repair Shops Network at CESVIMAP



Dutch Group Visiting CESVIMAP Facilities

CESVIMAP has been visited by a Dutch automotive group, which includes insurance companies such as Achmea and Unigarant, the training teams of manufacturers such as Daimler Mercedes and Volkswagen Holland, and paint distributors such as Spectrum.

The aim of this visit was to get a better understanding of the relations which our centre has with the main players in the automotive sector, such as manufacturers, insurance companies and repair shops, and look at their possible application in Holland.

In addition, the Dutch group visited the installations of CESVIMAP and of *Cesvi Recambios*, and were impressed by the high level of technology observed in our centres.

Samsung Traffic Safety Research Institute Visits CESVIMAP



(from left: Sang-Young Kim, Samsung General Manager; Jorge Gonzalez, CESVIMAP Assistant Manager; Seung-Jun Hong, Samsung Chief Research Fellow)

The Director General, Vice-President, and Research Director of the Samsung Traffic Safety Research Institute from Seoul (South Korea) have visited the CESVIMAP installations in Avila.

After learning about the evolution of the experience of CESVIMAP in the automobile repair research world, the Samsung representatives were keen to see for themselves the high level of technology at work in the activities and installations of CESVIMAP. Following this, they visited *Cesvi Recambios*, where the Korean visitors were impressed with the innovation that its processes and installations represent at a world-wide level.

The visit was part of a trip to visit the main European insurance company research centres. Accordingly, after they had learnt about CESVIMAP, our visitors left for Germany and Switzerland.

This institute was founded in 2000 by Samsung Insurance, the insurance company belonging to the Samsung automobile manufacturer. Its objective is to promote improvement in South Korean road safety, as well as to reduce the costs of material and personal damage for the insurance company. Samsung Insurance, in its automobile unit, holds approximately 30% of the share of the Korean market.

From IIHS:

Top Safety Pick Awards



The Insurance Institute for Highway Safety recently recognized 72 US car, pickup, and SUV models as *TOP SAFETY PICK* winners for 2009. This is more than double the number of initial 2008 recipients and more than 3 times the number of 2007 winners. This is the fourth year we've recognized *TOP SAFETY PICK* winners as vehicles that do the best job of protecting people in front, side, and rear crashes based on good ratings in our tests. Last year we added another criterion, so now winners have to have electronic stability control (ESC) to reduce serious crashes by helping drivers maintain control of their vehicles in emergencies.

For the first time, winners represent every class of vehicle we test except microcars. Ford and its subsidiary Volvo have 16 winners. Thirteen winners are from Honda and its Acura division. The Honda Fit with optional ESC is the first minicar to earn *TOP SAFETY PICK*. Honda, Acura, and Subaru, which picked up 4 awards, are standouts for 2009 because they have at least 1 *TOP SAFETY PICK* in every vehicle class in which they compete.

Consumers are the biggest winners because no matter what kind of vehicle buyers may be considering, now they can walk into just about any US dealership and find one that affords the best overall protection in serious crashes.

TOP SAFETY PICK provides an incentive for manufacturers to offer safer vehicle designs that go beyond basic federal standards. To win, automakers have beefed up the side structures of vehicles and added side airbags to do a better job of protecting people in serious side crashes. Automakers also are rapidly adding ESC and designing seats and head restraints that do a better job of protecting against whiplash in rear crashes. Still, 26 passenger vehicle models fall short of winning 2009 *TOP SAFETY PICK* solely because of inadequate seat/head restraint designs (they met the other criteria to win).

The sheer number of this year's winners indicates the improvements automakers have made. For years Toyota had more also-rans than winners, but for 2009 this automaker has come on strong by updating seats and head restraints in the Avalon, Corolla, FJ Cruiser, and RAV4 to earn good ratings. Volkswagen has done the same with the Eos, Jetta, Passat, and Rabbit.

Top Safety Pick Award Winners

2009 WINNERS

Large cars	Minivans
Acura RL	Honda Odyssey
Audi A6	Hyundai Entourage
Cadillac CTS	Kia Sedona
Ford Taurus	
Lincoln MKS	Large SUVs
Mercury Sable	Audi Q7
Toyota Avalon	Buick Enclave
Volvo S80	Chevrolet Traverse
	GMC Acadia
	Saturn Outlook
Midsized cars	Midsized SUVs
Acura TL, TSX	Acura MDX, RDX
Audi A3, A4	BMW X3, X5
BMW 3 series 4-door	Ford Edge, Flex, Taurus X
Ford Fusion with optional ESC	Honda Pilot
Honda Accord 4-door	Hyundai Santa Fe, Veracruz
Mercedes C class	Infiniti EX35
Mercury Milan with optional ESC	Lincoln MKX
Saab 9-3	Mercedes M class
Subaru Legacy	Nissan Murano
Volkswagen Jetta, Passat	Saturn VUE
	Subaru Tribeca
	Toyota FJ Cruiser, Highlander
	Volvo XC90
Midsized convertibles	Small SUVs
Saab 9-3	Ford Escape
Volkswagen Eos	Honda CR-V, Element
Volvo C70	Mazda Tribute
	Mercury Mariner
Small cars	Mitsubishi Outlander
Honda Civic 4-door with optional ESC (except Si)	Nissan Rogue
Mitsubishi Lancer with optional ESC	Subaru Forester
Scion xB	Toyota RAV4
Subaru Impreza with optional ESC	Volkswagen Tiguan
Toyota Corolla with optional ESC	Large pickups
Volkswagen Rabbit 4-door	Ford F-150
	Honda Ridgeline
	Toyota Tundra
Minicar	Small pickup
Honda Fit with optional ESC	Toyota Tacoma

Motorcycle Antilock Brakes



Honda Goldwing Equipped with Antilock Brakes

There has been much discussion at recent RCAR annual meetings about “insurance friendly” motorcycle designs. One technology, thought to be beneficial and already in case studies by Allianz Zentrum fur Technik, is antilock brakes. Now two studies, one by the Insurance Institute for Highway Safety and another from the affiliated Highway Loss Data Institute, confirm that motorcycles with antilock brakes experience fewer crashes and their riders aren’t as likely to die. Both the frequency of insurance claims and the rate of fatal motorcycle crashes go down among bikes with antilock brakes. Of course, adding antilocks doesn’t make motorcycling as safe as going by car, but it’s something manufacturers can do to reduce the risk of traveling on 2 wheels instead of 4. It’s a way to reduce the chances of overturning a bike and crashing, so it can save lives among people who choose motorcycles for their basic transportation, to save on gasoline, or just for fun.

Stopping a motorcycle is trickier than stopping a car. For one thing, front and rear wheels typically have separate brake controls. Both underbraking and overbraking the front and rear wheels can contribute to crashes. In an emergency, a rider faces a split-second choice to brake hard, which can lock the wheels and cause a motorcycle to overturn, or to hold back on the brakes and risk running headlong into the emergency. This is when antilocks can help. They reduce brake pressure when they detect impending lockup and increase the pressure again when traction is restored. Brake pressure is evaluated multiple times per second, so riders may fully brake without fear of locking the wheels. Antilocks won’t help a rider who’s about to be struck from behind, for example, but the new studies indicate that antilock reduce crashes overall and save lives.

One of the new studies compares insurance losses under collision coverage for 12 motorcycle models with optional antilock brakes versus the same models without this option. Regression analysis reveals 21 percent lower insurance losses for motorcycles with antilocks, primarily because the claim frequency is 19 percent lower than for bikes without antilocks. These findings are based on a dataset of more than 72,000 insured years. A complementary study of the rates of fatal crashes of motorcycle models with and without antilock is based on the experience of 8 models, a subset of the 12 included in the other analysis. A main finding is that there were 6.6 fatal crashes per 10,000 registered motorcycles without antilocks during 2005-06. The corresponding rate for the same bike models equipped with optional antilocks is 4.1, or 38 percent lower.

Australia’s Swann Insurance greeted these findings by calling on manufacturers to equip all motorcycles with antilocks. Swann Insurance Research Centre’s Robert McDonald says this is in keeping with the insurer’s “motorcycle of the future” concept, which includes antilock brakes.

Booster Seats



Proper Belt Fit using a Booster Seat

Booster seats used in the US market are meant to elevate children so safety belts designed for adults are in the right position to restrain kids during a crash. But 13 of 41 belt-positioning booster seats we recently evaluated, working with the University of Michigan's Transportation Research Institute, did such an unreliable job of improving the fit of lap and shoulder belts for children that we don't recommend them at all. Ten models are best bets, and 5 are good bets. These evaluations are the first to tell consumers how well boosters sold by US retailers improve belt fit for children in cars, minivans, and SUVs.

We evaluated the safety belt fit boosters provide, not crash protection, because unlike child restraints boosters don't restrain children in crashes. They simply position children so lap and shoulder belts are in the right place to restrain them.

In evaluating boosters by measuring belt fit on a dummy representing a 6 year-old, we attached more importance to lap belt fit than to the fit of the shoulder portion. All of the best-bet boosters locate the lap belt on children's upper thighs. The main problem for the boosters that aren't recommended is they leave this lap belt partially or fully on the abdomen. Fit is important because a correctly positioned lap belt loads pelvic bones during a crash, not the abdomen. A good booster also positions the shoulder belt at midshoulder, keeping the webbing away from the neck so it won't chafe and reducing the likelihood that kids will endanger themselves by putting the belt behind their back or under an arm.

Visit www.ihs.org to view model-by-model booster seat evaluations.

We'd expect the 10 best bets to improve belt fit for children in almost any car, minivan, or SUV. Likewise, kids in the 13 boosters we don't recommend aren't getting the full benefit of improved lap belt fit. These boosters may increase restraint use by making children more comfortable, but they don't position belts for optimal protection.

Child safety seat laws in 43 US states and the District of Columbia include booster seat provisions, but until now there has been little information on how to pick one that provides proper belt fit. Even given the Institute's new evaluations, parents still need to see how any specific booster will fit their child in their car. And no matter how a child fits, it's better for that children to ride restrained in any booster than to let them ride unbuckled.

From Centro Zaragoza:

Centro Zaragoza Joins „Stop Car Accidents’ Campaign



CENTRO ZARAGOZA, the Vehicles Research Institute that is owned by 23 insurance companies in Spain and Portugal, has signed on to the “Ponle Freno” (“Stop Car Accidents”) campaign promoted by one of the Antena 3 Group, one of Spain’s leading communications organisations (TV, radio, and the internet). The campaign has the institutional support of the DGT (Spanish State Traffic Office) and leading experts in road safety in Spain.

The research carried out by CENTRO ZARAGOZA during almost 20 years in the automotive sector, and the experience acquired during this time, have made it possible for CENTRO ZARAGOZA to make an active and willing contribution to social improvements, working with other institutions in the fields of road safety research and training.

“Ponle Freno” (“Stop Car Accidents”) is a social movement fighting for improved road safety in Spain, using TV, radio, and the internet to get its message across. CENTRO ZARAGOZA participation will make an important contribution to such an ambitious social project, one that aims at saving lives.

From AZT:

AZT Tests Fuel Cell Vehicle

Keeping people mobile despite declining fossil fuel resources will be one of the greatest challenges of the future. But how suitable are the new drive technologies for everyday use? Allianz’s driver service in Berlin is currently running a six-month test on a hydrogen vehicle from GM/Opel. The project is being overseen by the Allianz Center for Technology.

Worldwide, some 795 million cars are on the road today, and the figure is expected to rise to 1.1 billion by 2020. And 98 percent of them are propelled by fossil fuels. “As a global risk manager and investor, we see significant future risks in climate change and the limited supply of fossil fuel resources,” explains Dr. Karl-Walter Gutberlet, CEO of Allianz Versicherungs-AG. “That’s why we’re today already working with the technologies of tomorrow – so we can understand the risks and opportunities offered by climate change, support the move towards a low-CO2 way of doing business.”

The car, a HydroGen4 from the latest generation of GM/Opel fuel-cell vehicles, is being used at Allianz’s driver service in Berlin. Instead of conventional fuel, the high-tech vehicle uses hydrogen gas, which it carries in tanks pressurized at up to 700 bar. The core of the vehicle is a fuel cell unit that generates electric power by reacting hydrogen with oxygen from the air. With this drive the car can reach maximum speeds of 160 kph, and cover a range of about 320 km. It’s emission-free, and thus puts out no CO2 when it’s running. “This is an opportunity for the Allianz Technology Center to test a future vehicle concept in everyday use, in partnership with the GM and Opel research department,” says Dr. Christoph Lauterwasser, managing director at Allianz Center for Technology. “We must deal early with new technologies and their special characteristics. Additionally, all of us are affected by the question of how we can sustainably safeguard our mobility.”

(continued on next page)



The GM HydroGen4

Test field and technology

As an integral part of GM's overall advance technology strategy towards further electrification of the car, this fourth generation fuel cell vehicle is the result of more than 10 years of development work with hydrogen and fuel cell technology. The HydroGen4 features improvements in everyday usability, such as performance and durability. Globally, GM deploys more than 100 vehicles of this type in its Project Driveway testing program in the U.S., Japan, Korea, China, and Germany.

The vehicles are equipped with a wireless data transfer system that assists engineers by uploading vehicle performance data to a company server. Maintenance of the vehicles deployed in Berlin will be done at a regular Opel dealer equipped with the personnel and tools necessary for servicing fuel cell vehicles.

HydroGen4's fuel cell stack uses 440 single cells to provide the electric energy for the 73 kW-synchronous electric motor, delivering zero to 100 km/h acceleration in around 12 seconds and a top speed of 160 km/h.

The electric motor's instant torque characteristics also give the vehicle an excellent pick-up from low speed. The HydroGen4 is fitted with a 1.8 kWh buffer battery to store energy from the vehicle's regenerative braking system and cover peak electrical loads. The three carbon-fiber composite tanks hold 4.2 kg of hydrogen.

From JKC:

Insurance School Visit to Jiken Centre



Insurance School Visitors to Jiken Centre

The General Course of the Insurance School (Non-Life) of Japan (ISJ) was held in Tokyo from October 27th through November 7th. The ISJ has been run jointly, since its inception in 1972, by the General Insurance Association of Japan and the Non-Life Insurance Institute of Japan.

31 insurance practitioners selected from 14 East Asian markets participated, and paid a visit to the Jiken Center on November 5th. The visitors came from various insurance sectors, including government, banking and reinsurance.

They toured the facilities and observed the ways in which we attempt to develop techniques and methods for restoring and repairing damaged vehicles more efficiently and to train insurance adjusters in handling auto claims effectively.

They also watched our barrier testing and demonstration of fraudulently scratched car damages.

From JKC/KART:**JKC/KART Joint Technical Seminar****Seminar Participants**

The Jiken Center has hosted the technical joint seminar with KART since 1999, and this year was its 10th anniversary. The main purposes of this seminar are to exchange information, promote good business relationships between the two centers, and provide opportunity for the employees of both centers to improve their English presentation skills.

This year's seminar was held at the facility in Ichikawa-shi, Japan on November 20th and 21st. Five members from KART and a member from Japan Audatex participated, along with JKC members. The first day was spent making presentations at the Jiken Center. On the second day, they paid a visit to the claims service office of a major Japanese property & casualty insurance company and the home office of Japan Audatex.

The titles of presentations were:

From KART:

- Preparation of waterborne paint
- Car theft in Korea
- Crashworthiness of small-sized vehicles in Korea
- Impact on D&R according to displacement of bumper beam height in low speed crash
- ARECCOM (Automobile Repair Cost Computation) On-line System

From JKC:

- Repair of Scratch Shield
- Training Services of JKC
- Research on ASV Technology
- Study on the Corner Tests

From Japan Audatex:

- Solera Overview

From KART:

KART Side Crash Tests



Small Passenger Car with Side Impact from SUV

KART did side impact tests and released the test results to the public last October. This study was aimed at protecting passengers from injury due to side impacts to vehicles. In Korea, the number of deaths due to car-to-car crashes was 2,551 in 2007. The number of the deaths by side impact was 1,039, which was the highest of all crash types. Although the total number of deaths in crash accidents decreased from 2,659 to 2,551 during 2007, the number of deaths from side crashes increased to 1,039 in 2007 from 717 in 2005.

We tested three cases. First, an SUV was crashed into the side of a small passenger car without a side airbag. Second, an SUV hit the side of a small passenger car with a side airbag. Third, a small passenger car was crashed into the side of a small passenger car without a side airbag. The speed at which the three tests were conducted was 50Km/h.

In the first and second tests, the HIC36*(Head Injury Criteria) of a passenger in the vehicle with a side airbag was 332, which was lower than 603, the HIC of a passenger without a side airbag.

In the third test, the HIC of a passenger without an airbag was 529, which was higher than 332, that of the passenger with a side airbag crashed by the SUV. As a result, we concluded that side airbags are effective in preventing head injuries to passengers.

As the ratio of passenger cars equipped with side airbags in Korea is generally low, we will try to persuade car manufactures to equip more vehicles with side airbags in the future. We will also recommend that the Korean government strengthen and revise the KNCAP (Korea New Car Assessment Program).

*HIC36: The head injury value calculated from right after the crash to 36/1000 seconds after.

From MPI:

Mandatory Immobilizer Program Yielding Results in Reducing Auto Theft Numbers in Manitoba

Manitoba Public Insurance's efforts at combating auto theft are yielding impressive results. Auto theft costs Canadians a staggering amount – both in financial and human terms – the Insurance Bureau of Canada estimates these costs at \$1.2 billion per year. Insurance companies and policy holders bear the brunt of those losses, but when car thieves get behind the wheel and endanger public safety, innocent bystanders pay the price – sometimes with their lives.

Winnipeg used to be known as the auto theft capital of Canada. But thanks to a coordinated effort on the part of Manitoba Justice, the Winnipeg Police Service and Manitoba Public Insurance, we have happily shed that distinction.

The statistics are impressive. Among cities, Winnipeg's per capita auto theft numbers have fallen from first place nationally to fifth place overall, behind Edmonton, Saskatoon, Regina and Victoria, respectively. Provincially, Manitoba now ranks in fourth place behind first-place Alberta, second-place Saskatchewan and third-place British Columbia.

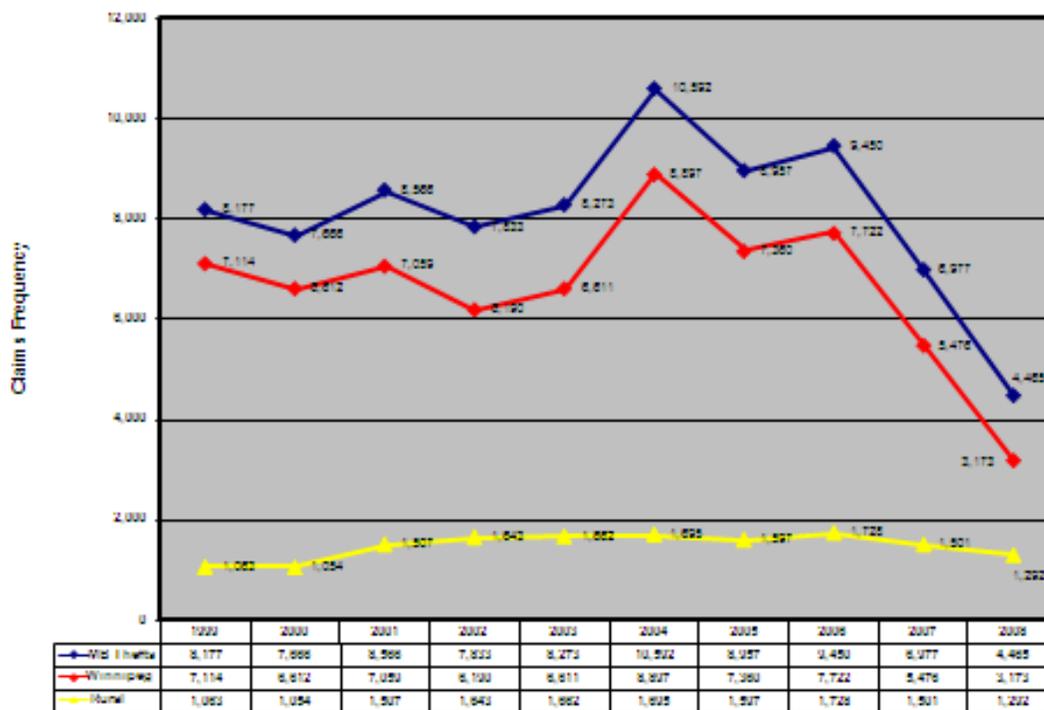
In real numbers, auto theft in Winnipeg has declined by an amazing 64 per cent since 2004, when total theft claims were at an all-time high. From March 1 - October 31, 2004, Winnipeg recorded 9,971 total theft claims. For the same period in 2008 there were 2,173.

The Conference Board of Canada credits the creation of Winnipeg's Auto Theft Suppression Strategy in 2005 as turning the situation around. WATSS, as it's called, approaches the problem from three separate angles: it provides intensive supervision of chronic car thieves, expands the number of immobilizers in Manitoba vehicles, and tries to address some of the root causes of auto theft.

Manitoba Public Insurance participates in all three strategies but directly oversees the second, which to date has resulted in over 47 percent of the Manitoba fleet protected by either factory-installed or after-market immobilizers.

Under the program MPI has mandated that certain types of vehicles recognized as being most at risk of being stolen be theft-proofed by the installation of VSIB approved immobilizers that meet the Canadian ULC Standard (CAN/ULC-S338-98) for aftermarket immobilizers. One component of the standard requires electronic disabling of a vehicle's starter, ignition, and fuel systems.

The following graph shows how thefts were increasing prior to 2006, and the reduction of thefts in Winnipeg and the Province of Manitoba overall since the start of the mandatory immobilizer installation program.



Attempted theft numbers show similar reductions. In the 2008 calendar year, attempted thefts across the province dropped by 43.1 per cent compared to 2007, or 6,389 attempted theft claims in '07 compared to 3,636 in '08.

The savings to Manitoba Public Insurance and its policy holders is equally dramatic. A fiscal year-to-date comparison between 2008 and 2004 shows costs incurred are down by 47 per cent, or \$21.9 million in 2004 compared to \$11.6 million in 2008.

The figure below shows the registration sticker applied to every vehicle with an approved aftermarket immobilizer installation:



To date, no aftermarket immobilizer system meeting the Canadian standard has been defeated by car thieves in Manitoba.

Under the Manitoba Public Insurance program, vehicle owners get an immobilizer and standard installation at no cost if their vehicle is on the list of vehicles stolen most frequently. Auto thieves know how to steal certain types of vehicles, and they prey on them again and again. These “Most-at-Risk” vehicles are up to twice as likely to be stolen as the average vehicle.

But even if a driver’s vehicle isn’t on the Most-at-Risk list, they can still get an immobilizer at a substantially reduced price. Manitoba Public Insurance will pay more than half the cost for an immobilizer and a standard installation.

The Manitoba Public Insurance approach has been unique among insurers, but there are signs that other jurisdictions are taking a page from our playbook. The Insurance Corporation of British Columbia, the public auto insurer there, has introduced an immobilizer program for some of that province’s most frequently stolen vehicles.

The number of protected vehicles on the road will only continue to grow because as of September 2007 federal law requires manufacturers to equip all new cars, light trucks, vans, and SUVs with immobilizers.

From KART

My Experience at Thatcham

By Sang Woo Shim, Research Engineer, KART/KIDI

I have been trained at Thatcham for 6 months (26/04/08~24/10/08) to learn about advanced research know-how in various fields as a part of KART's annual training scheme for developing international experts. My internship-training scheme with Thatcham was first discussed with Andrew Miller of Thatcham in 2007, and accepted at the end of 2007. When KART processed the selection of the trainees, fortunately I was appointed as an intern for training at Thatcham.

I was very happy and excited with the idea that I would be at Thatcham. But my excitement was turned into anxiety and woes as the time of departure was getting closer with the thought that I would have to stay alone in the UK without family, which meant I would have to take care of myself for everything!



- Center: taken on the last day of my training, at the Presentation Ceremony. Andrew is showing gifts to the Thatcham people who came to say goodbye to me. Upper-left: farewell dinner with crash team (left to right: Alix, Pete, Andy, me, Jone, Ed, Paula, Ben, Ozieh); Upper-right: Farewell with Thatcham people- Lower-left: The Thatcham Group Rating Team (left to right: Barry, me, Gordon, Howard(manager)); Lower-right: Farewell dinner with Repair Technologies Team (left to right: Chris, Yaron, me and Andy Walker(manager))

When I arrived at Heathrow Airport, it was raining, which continued for a week. As for the weather in the UK, there're many things to say. Definitely there is a lot of rain and wind in the UK, but there are only a few who seem to care. In fact, it is very hard to see people carrying umbrellas when it rains! Even if I felt uncomfortable at first, I became pretty used to it and even came to enjoy it. I especially liked the bright sunshine after a shower, which is so bright that I couldn't open my eyes. Also, I've seen beautiful rainbows several times. I think it is very important to adapt oneself to circumstances when people live in another country.

With assistance from all Thatcham staff, my anxiety was gone soon after I got acquainted with them. Every single staff member has tried to teach me something, and I tried to learn as best as I could. I can say that I have acquired a lot of knowledge that Thatcham has developed. Moreover, I have also met many people from manufacturers, repairers and related organizations, including some engineers from Korean car manufacturers, at Thatcham.

I was trained in vehicle security, repair technology & methods, crashes, and group rating in the Research Division at Thatcham. I've enjoyed working with Thatcham staff in each department. Below is **a rough summary of what I've learned**:

- Vehicle Security
 - NVSA (New Vehicle Security Assessment) criteria
 - Electronic criteria assessment (CAT1 ~ CAT5)
 - Relationship with UK group rating system
- Repair Technology
 - TTS, MET/Panel/Paint repair time research
 - PAS 125 (4M; Man, Machine, Material, Method)
 - Repair manual research
 - Spot welding research (spot weld strength from OE parts)
- Repair Method
 - Repair time making process (MET/Panel/Paint)
 - Vehicle Profile, Illustration, Glass replacement process research
 - EMI/FM1/FM2, Definition of element (Prime/Dummy)
- Crash
 - Whiplash research (EuroNCAP test protocol)
 - HPM/HRMD drops & measurement, Dummy positioning, Sled test
 - Barrier impact test (RCAR 15kph, Bumper test)
- Group Rating
 - Understanding of the UK group rating process
 - 20/50 group rating system
 - Damage diagnosis, D&R Accessing Estimate

I also attended a training course at Thatcham Automotive Academy located in Nuneaton, Midland, of the UK. The course was **"Introduction to Vehicle Damage Assessing,"** which taught about basic insurance principles, understanding the escribe system – a software program which consists of repair methods & times for quality repairers which was developed & distributed by Thatcham-, investigation of the damaged vehicle, and making the estimate.

It was a quite informative and beneficial training course for me, because it enabled me to understand the process of estimating damage from traffic accidents in the UK.

While I was at Thatcham, I undertook a project paper suggested by Andrew Miller about a new power train vehicle. It took me about 3 months of study, research, analysis, writing and reviewing to complete it. The theme is **"The emergence of a new power train and its impact on the insurance industry."** Even though I had heard about hybrid cars, I didn't know much about them. As a result, it was a massive challenge, and it took me a long time to understand the detailed information about this new power train, as well as what this meant in terms of trends. With a lot of support from Andrew, I was able to finish it before I came back home. It is still under the process of peer review by Andrew & I, and I hope that it will be a milestone for future research in the RCAR community.

I was also able to meet many engineers from carmakers worldwide. They came to Thatcham for evaluations of their vehicles in a number of cases. It was especially nice to meet engineers from Korean carmakers at Thatcham. As there were no Koreans except me around the Thatcham region, meeting a fellow Korean who could speak Korean presented a good chance for me not to forget the Korean language! Even if I met them for the first time, we became friends easily for the simple reason that we could communicate with the same language, Korean. While I met many engineers from many different carmakers, I could feel the power and the influence of Thatcham making them come to Thatcham. It was quite an impressive experience to meet so many people from so many different carmakers, repair industry, equipment/tool companies and insurance companies.

I have seen, heard and read much about the many things which took place at Thatcham during the 6 months that I was there, and I have learned and felt a lot from this activity. That 6 months at Thatcham was one of the most valuable times in my life, as Thatcham is such a well-organized and brilliant research center. I could see that Thatcham has been working with the vision **"Globally, vehicles are repaired safely, crash injuries are minimized and vehicle theft is eradicated,"** which is **RCAR's vision as well.** I could also see how Thatcham has been working not only for the UK market, but also globally, **because Thatcham's activities influence** vehicle manufacturers worldwide.

In closing, I would like to express my strongest gratitude to all Thatcham staff, including Andrew and Peter Roberts, CEO of Thatcham, for giving me such a wonderful chance to be trained and work together with all Thatcham staff. I believe my experience will contribute to improving my own career, as well as be of help to my company. In addition, I see my training experience as a good opportunity for KART to cooperate with Thatcham in the future, for mutual benefits. I think my experience is what the RCAR community is all about, and I believe similar experiences would enhance the ability of every RCAR organization to achieve our common objectives.



Thatcham Research Centre

Website Report: Interest in the RCAR Website Remains Strong



The total number of 'visits' to our website ranged from 2,323 in August to 3,280 in October to 2,808 in December, while the number of 'total pages visited' during that same period ranged from 4,916 in August to 7,408 in October to 6,225 in December. The 60,426 total hits recorded in October is a record for the RCAR Website.

On the Move:

Alaviiri Tapani is leaving VAT Finland to become the new Service Director of Motor Claims for Tapiola Insurance in Finland, tapani.alaviiri@tapiola.fi. Our new contact at VAT will be Heimo Jokinen, heimojokinen@vakes.fi.

Dr. Hartmuth Wolff is leaving AZT Germany to become a private consultant. He can be reached at wolff@arcor.de. Our new contact at AZT will be Carsten Reinkemeyer, carstenreinkemeyer@allianz.de, who becomes the new Head of the Safety & Security Research Division. Carsten studied Aerospace Technology at the University of Applied Sciences in Aachen, and gained experience in technical damage and accident investigation from 1992 through 1997 with the German Air Force. He joined AZT as a Test Engineer in 1997 and became involved in a number of projects concerning occupant safety, such as whiplash volunteer testing and dummy evaluation. He also assumed the duties of a Technical Consultant for product liability issues for Allianz Insurance. He has been Crash Test Facility manager since 2002, and is a member of the Crash Test (Bumper) WG and the IIWPG WG.



Carsten Reinkemeyer

The RCAR Network:

AZT Germany	www.allianz-azt.de
Centro Zaragoza Spain	www.centro-zaragoza.com
Cesvimap Spain	www.cesvimap.com
Cesvi Argentina	www.cesvi.com.ar
Cesvi Brazil	www.cesvibrasil.com.br
Cesvi Colombia	www.cesvicolombia.com
Cesvi France	www.cesvifrance.fr
Cesvi Mexico	www.cesvimexico.com.mx
CESTAR Italy	www.cestar.it
VAT Finland	www.liikennevakuutuskeskus.fi
Folksam Auto Sweden	www.folksamauto.com
ICBC Canada	www.icbc.com
IIHS USA	www.highwaysafety.org
KTI Germany	www.k-t-i.de
MPI Canada	www.mpi.mb.ca
JKC Japan	www.jikencenter.co.jp
KART Korea	www.kidi.co.kr
MRC Malaysia	www.e-mrc.com.my
FNH Norway	www.fnh.no
IAG Australia	www.iagresearch.com.au
State Farm USA	www.statefarm.usa
Tech-Cor USA	www.tech-cor.com
Thatcham UK	www.thatcham.org
AXA-Winterhur Switzerland	www.winterhur.com

Dates for your Diary:

Motortec International Equipment and Components for Vehicles Trade Fair, Madrid, Spain, March 10-14, 2009

SAE 2009 World Congress, Cobo Center, Detroit, USA, April 20-23, 2009

Details: www.sae.org/congress

Autopromotec International Biennial Exhibition, Bolonia, Italy, May 20-24, 2009

IBIS 2009, Hotel InterContinental, Berlin, Germany, June 10-12, 2009

Details: www.ibisworldwide.com

21st International Technical Conference on the Enhanced Safety of Vehicles (ESV), International Congress Centre, Stuttgart, Germany, June 15-18, 2009

Details: www.esv.nhtsa.dot.gov

Annual RCAR Conference, Chicago, USA, Sep 13-18 2009, hosted by Allstate