From the Secretary-General

Happy New Year!

First of all, I would like to express my thanks to our 2011 Conference hosts, CESVI Mexico!

Their planning and organization team spent months working very hard to ensure that we had a successful Conference, and I am sure you will agree that our 2011 Conference in Merida was a complete success.

Our January Newsletter, as usual, contains a wide variety of interesting and informative articles. In this issue, you will find a summary of presentations given by the Jiken Center in the fall of 2011; a pair of articles from CESVIMAP on the electric car and the FORTECO training program; two submissions from KART on their training seminar with JKC and repair cost differences; a trio of offerings from IIHS on their 2012 Top Safety Picks, hybrids and injuries, and SUV safety; news from CZ on a new agreement with Toyota; an informative piece from CESTAR on their Ford Fiesta crash test results; another trio of articles from CESVI Argentina on 2011’s safest car, the launch of the Orion G2 claims management system, and the results of an audit of their helmet laboratory; word from IAG on their new web surfer for media distribution and a new website for motor assessors; news from MRC on their new corporate logo, hire purchase inspection program, training programs for young people, and their new electronic claims estimating platform; word from Samsung on hybrid battery crash test results; an update from KTI on their ‘Fair Repair’ program; a submission from AZT on their road safety efforts; information from Cesvi Mexico on their 2012 ERA auto repair show and some surprising facts about Mexican driver knowledge; a trio of offerings from Thatcam on their new strategic focus, Ready2Repair, and an AEB vehicle manufacturer meeting; and finally, from AXA, a synopsis of a rear-end collision study of a Volvo equipped with the City Safety system.

If you need to contact me for any reason, please use one of the following e-mail addresses:

rcarorg@hotmail.com, or wilf bedard@hotmail.com.

In closing, I hope you enjoy this latest Newsletter!

Wilf Bedard
From JKC:
Jiken Center Presentations in the Autumn of 2011

Jiken Center made three presentations at two technical conferences in the autumn of 2011.

One was titled ‘Analysis of Low-Speed Rear-End Collisions using Near-Miss Incident Database’, and was presented by Dr. Mitsunobu Fujita on September 7th in "the first international symposium on Future Active Safety Technology toward zero-traffic-accidents" organized at the Shibaura Institute of Technology in Tokyo. The aim of this presentation was to clarify the characteristics of low-speed rear-end collisions, which are the most frequent in Japan. This analysis is based on a large database, including video data recorded by drive recorders, which can often record the whole sequence of events associated with accidents or even near-miss incidents.

The others were respectively titled ‘User Interface for Time Study of Non-Standardized Repair Work of Damaged Cars’ presented by Mr. Ichiro Fujino, and ‘Experiments and Analyses for Traffic Accident Reconstruction’ presented by Dr. Mitsunobu Fujita. They made their presentations on October 14th at the JSAE Annual Congress (Autumn) held in Hokkaido.

The full paper, or abstracts in English, can be downloaded from the following JKC web site: http://jikencenter.co.jp/english/index.html
In the 3rd Lecture Series organised by the CESVIMAP Chair and the Universidad Católica de Ávila, the focus was on “the manufacture, use and repair of electric cars”. The highlights of the series were presentations by prestigious speakers representing manufacturers at the forefront of the electrical vehicle market, and the results of CESVIMAP’s research.

Guillermo Magaz, director of certification, parts and accessories at Mitsubishi, explained the research which has been carried out by his organization on electric vehicles, dating back to its start in 1971. He then focused on their i-MiEV model, the first 100% electric vehicle to be put into mass production, launched in 2010.
Gaspar García-González, director of Renault’s Twizy project, gave a presentation on the features of this vehicle’s assembly line, showing us its process of manufacture. The Spanish factory in Valladolid is the cradle of the Twizy, a two-seater with more than 35 meters of welding beads, the first mass-produced tubular structure, and made up of only 300 parts, instead of the 1,000 to 3,000 parts which are the norm. Marina López, marketing director for Opel (GMC)’s Ampera line, revealed the commercial features of this vehicle, whose combustion engine recharges its electrical engine with E-REV technology, a 500 km range of autonomy, and 5 Euro NCAP stars. Alejandro Valdovinos, in charge of new business for the Simon group, the recharging post manufacturer, spoke on electric mobility profiles by client, type of journey, and so on, which are crucial when deciding on the most suitable infrastructure.

On behalf of CESVIMAP, as the first research centre to have studied the electric vehicle in depth in Spain, Rubén Aparicio-Mourelo, the assistant manager, gave details of our analysis of a Mitsubishi i-MiEV, in terms of its repairability and usability. Distinguishing features of this model are its high and ultra-high elastic limit steel bodywork, stamped out made-to-measure, in line with the most modern vehicles, a technology which reduces weight and fuel consumption and improves resistance in crashes.

CESVIMAP has carried out two crash tests on the vehicle, one frontal and the other a rear-end, following RCAR standards, where the most notable discovery was that there was no difference in damage in any respect to that of traditional models. With regard to safety, when the pyrotechnical elements are set off (pre-tensioners and airbags), the high tension battery is disconnected, thus avoiding risks both for the occupants and for rescue teams. Conclusions from the rear crash test were that no damage was done to the engine, nor to the electrical devices, despite this equipment being located in the rear of the vehicle. When repair times and costs were compared, the results for the i-Miev were found to be on a par with those for other vehicles in its segment.

CESVIMAP continues to invest in the electric vehicle, and has installed the first recharging post for electric vehicles in Ávila.
FORTECO Reaches Training Milestone

The Spanish FORTECO training program (Coordinated Technical Training) has now trained 4,500 teachers for Vocational Education and Training in the Automotive Industry in the five years that it has been up and running. FORTECO came into being in 2006 in response to the need for training and recycling of knowledge in the automotive sector. The project enjoys the collaboration of principal automotive manufacturers, regional Autonomous Communities, and the Spanish Ministry of Education.

The companies making up FORTECO offer an annual series of free courses to high school and vocational training college teachers.

VETAS Innovation Award

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The companies making up FORTECO offer an annual series of free courses to high school and vocational training college teachers.
CESVIMAP has been a part of FORTECO since 2010. Other collaborating companies are: 3M, Audi, BMW, Bosch, Ford, Glasurit, Man, Maybach, Mercedes Benz, Michelin, Mini, Opel, Peugeot, Porsche, Renault, R-M, Seat, Skoda, Smart, Toyota, Volkswagen, and ZF, with their own know-how and training centres. The project promotes education and the transmission of renewed knowledge about the automobile, to ensure both that students are kept up to date technologically, and that the quality of these subjects in the automotive sector remains high.

Recently, FORTECO’s professional activity was given international recognition by the VETAS network (Vocational Education and Training in the Automotive Sector), and by the European Commission, with the “VETAS Innovation Award” for the most innovative initiative in the automotive sector in Europe, for its proven excellence, impact, and innovation in the automobile sector.

The Most Recent FORTECO Meeting Took Place at CESVIMAP

The most recent FORTECO meeting took place at CESVIMAP, with 457 places being offered on 40 courses at different locations in Spain. The meeting was officially closed by Enrique de la Torre, Director General for Vocational and Educational Training with the regional government of Castile-Leon.
KART hosted the 13th JKC-KART joint technical seminar on automobile repairs at our Incheon Korea KART facility on November 17th 2011. Five engineers from JKC, two from Audatex Japan, and twenty KART employees attended. Ten subjects were presented at this seminar. Presentation themes were as follows.

**KART**
- Outer Panel Repair Research
- Status of Imported Vehicles
- Studies on Head restraints; Whiplash protection
- Certification For OBD & New insurance
- Mobile AOS; Electronic estimating system

**JKC & Audatex Japan**
- Implementation of AEB performance testing and its examining methods
- Research on UHSS (Heat influence of material on car body side)
- Special work on the Nissan Leaf electric vehicle making JKC Repair Times
- Inspection activity by repair time specialists (Elementary time data of trim)
- Market Overview of Audatex Japan

This seminar provides a good opportunity to experience the research results of each organization by making presentations and exchanging information. Since the two organizations began holding this seminar in 1999, it has contributed to strengthening our cooperative relationships, as well as stimulating both centers’ young engineers by broadening their view. The 15th technical seminar will be hosted by JKC in 2012.
Repair Cost Comparison Studies on Imports & Domestics

Since 2007, KART has evaluated all new models launched in our domestic market by conducting RCAR structural tests for insurance group rating systems. However, imported vehicles have been exempted from our rating procedures due to the low volume of sales, based on claim data analysis.

Meanwhile, the sales number of imported vehicle is growing steadily and the high repair cost has been troublesome for Korean insurers. Accordingly, KART decided to conduct an RCAR structural test for the major imported models and compare the results with those of similar-sized Korean vehicles.

- Imported vehicles: Ford Taurus (SEL3.5), Toyota Camry (XLE2.5), BMW 320d
- Domestic: Hyundai Grandeur HG, Kia K7 (VG270), GM Korea Alpheon (CL300)

As a result of comparing the repair costs for the 3 domestic & 3 imported models in the similar group range, the average repair cost of imported models was found to be 5.3 times higher than domestic.

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<thead>
<tr>
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<th>Imported Vehicles</th>
<th>Domestic Vehicles</th>
<th>A/B</th>
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<tbody>
<tr>
<td></td>
<td>Ford Taurus</td>
<td>Toyota Camry</td>
<td>BMW 320d</td>
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<tr>
<td>Front</td>
<td>1,208</td>
<td>831</td>
<td>1,025</td>
</tr>
<tr>
<td>Rear</td>
<td>391</td>
<td>622</td>
<td>292</td>
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<tr>
<td>Sum</td>
<td>1,599</td>
<td>1,453</td>
<td>1,317</td>
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The repair cost of the Ford Taurus was found to be the highest, followed by the Toyota Camry and the BMW 320d. Damage characteristics for the imported vehicles were as follows.
**Ford Taurus**

The Ford Taurus is designed for the North American market; there were no features for the RCAR structural test such as a crash box. It was its unique model of airbag that was deployed which increased the frontal repair cost.

![Ford Taurus](image)

**Toyota Camry**

The Toyota Camry is also popular in the North American market. There were no crash boxes, either front or rear. The rear crash test resulted in significant rear-end damage, requiring the replacement of the trunk floor panel and rear side member,
BMW 320d
The BMW 320d was well-designed for the RCAR structural test, with a crash box for both front & rear. Damage for the rear was the best among tested vehicles, while frontal damage was quite interesting in that, although little damage was done to the crash box, there was significant damage transfer to the side member, which resulted in the enlargement of the repair job & associated repair cost.

BMW 320d

The result of comparison of repair cost by car price is shown below. The Ford Taurus was 44.4%, almost half of the car price; the domestic was below 10%; while the Chevrolet (GM) Alpheon was lowest at 6.6%.

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<td></td>
<td>Ford Taurus</td>
<td>Toyota Camry</td>
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<td></td>
<td>Total Repair</td>
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<td>Average</td>
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<td></td>
<td>1,599</td>
<td>1,453</td>
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<td></td>
<td>cost (A) (Front</td>
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<td>Hyundai Grandeur</td>
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<td></td>
<td>+ Rear)</td>
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<td>HG</td>
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<td></td>
<td>Car Price (B)</td>
<td></td>
<td>Kia K7</td>
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<tr>
<td></td>
<td>3,600</td>
<td>3,490</td>
<td>4,490</td>
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<tr>
<td></td>
<td>Rate (A/B, %)</td>
<td></td>
<td>GM Korea Alpheon</td>
</tr>
<tr>
<td></td>
<td>44.4</td>
<td>41.6</td>
<td>285</td>
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<tr>
<td></td>
<td>29.3</td>
<td>37.7</td>
<td>275</td>
</tr>
<tr>
<td></td>
<td>8.1</td>
<td>8.7</td>
<td>6.6</td>
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</tbody>
</table>

Research results were broadcast on all TV media in December, 2011, generating considerable public interest, especially since, due to the influence of Korea-EU & Korea-US FTA, the number of imported vehicles will be increasing all the more. As the issue of high repair cost of imported vehicles will be controversial, KART will continue to research imported vehicles to curb the high repair cost in various ways.

* Additional information is available at RCAR website (www.rcar.org) in a “RCAR Notification Form” section.
From IIHS:

IIHS Awards 2012 Top Safety Pick to 115 Models

The list of winners of the Insurance Institute for Highway Safety’s TOP SAFETY PICK award is longer than ever for 2012, with vehicles in nearly every category the Institute evaluates earning accolades.

In all, 69 cars, 38 SUVs, 5 minivans, and 3 pickups earn TOP SAFETY PICK. The award recognizes vehicles that do the best job of protecting people in front, side, rollover, and rear crashes based on ratings in Institute evaluations. The ratings, which cover all 4 of the most common kinds of crashes, help shoppers pick vehicles that offer the highest levels of crash protection. In addition, electronic stability control which has been a requirement for the award since 2007 to help drivers avoid loss-of-control crashes, is standard on all vehicles because the U.S. government now mandates it.

The winners’ circle includes 18 new recipients for 2012, while 97 models that previously qualified for the 2011 award carry over to 2012. Again this year every major automaker has at least one winner. Subaru remains the only manufacturer with the distinction of earning awards for every model it builds. Subaru picks up 5 awards.

Toyota/Lexus/Scion has 15 winners for 2012, more than any other auto manufacturer. General Motors is next in line with 14, followed by Volkswagen/Audi with 13, and Ford/Lincoln and Honda/Acura with 12 awards apiece.

Ten of the 18 new additions are Honda/Acura models, including the midsize Accord sedan, which hadn’t earned TOP SAFETY PICK since the Institute toughened criteria to win the 2010 award by adding a test to assess roof strength in a rollover crash.

The Toyota Camry, a midsize sedan, earns its first-ever TOP SAFETY PICK. Last year, the Camry missed the mark because of a marginal rating for seat/head restraints. The Toyota Yaris also earns its first TOP SAFETY PICK award. Toyota upgraded the roof and seat/head restraints of the 4-door hatchback model to win. Good ratings secure the Yaris a spot alongside 3 other minicars, the Fiat 500, Ford Fiesta, and Honda Fit, as 2012 winners.

For more information go to www.iihs.org or email publications@iihs.org
Hybrid Models Have Lower Injury Odds than their Conventional Counterparts

Hybrids have a safety edge over their conventional twins when it comes to shielding their occupants from injuries in crashes, new research by the Highway Loss Data Institute (HLDI), an affiliate of the Insurance Institute for Highway Safety, shows. On average, the odds of being injured in a crash are 25 percent lower for people in hybrids than people traveling in non-hybrid models.

"Weight is a big factor," says Matt Moore, HLDI vice president and an author of the report. "Hybrids on average are 10 percent heavier than their standard counterparts. This extra mass gives them an advantage in crashes that their conventional twins don’t have." He notes that other factors, such as how, when, and by whom hybrids are driven, also may contribute. Researchers included controls to reduce the impact these differences may have had on the results.

In the study, HLDI estimated the odds that a crash would result in injuries if people were riding in a hybrid versus the conventional version of the same vehicle. The analysis included more than 25 hybrid-conventional vehicle pairs, all 2003-11 models, with at least 1 collision claim and at least 1 related injury claim filed under personal injury protection or medical payment coverage in 2002-10.

Hybrids' injury odds were 27 percent lower than their standard counterparts for collision claims with a related personal injury protection claim and 25 percent lower than their twins for collision claims with a related medical payment claim.

Although hybrids share the same footprint and structure as their conventional counterparts, they outweigh them because of the added heft of battery packs and other components used in dual-power systems.

For more information go to www.iihs.org or email publications@iihs.org
Effort to Make SUVs Less Deadly to Occupants Paying Off

Today's SUVs and pickups pose far less risk to people in cars and minivans than previous generations, a new study from the Insurance Institute for Highway Safety shows.

Until recently, SUVs and pickups were more likely than cars or minivans of the same weight to be involved in crashes that killed occupants of other cars or minivans. That's no longer the case for SUVs, and for pickups the higher risk is much less pronounced than it had been.

For example, among 1-4-year-old vehicles weighing 3,000-3,499 pounds, SUVs were involved in crashes that killed car/minivan occupants at a rate of 44 deaths per million registered vehicle years in 2000-01. That rate dropped by nearly two-thirds to 16 in 2008-09. In comparison, cars and minivans in the same weight category were involved in the deaths of other car/minivan occupants at a slightly higher rate of 17 per million in 2008-09.

The researchers attribute much of the change to two things: improved crash protection in the cars and minivans, thanks to side airbags and stronger structures, and newer designs of SUVs and pickups that align their front-end energy-absorbing structures with those of cars. Better alignment allows both vehicles' front ends to manage the crash energy, helping to keep it away from the occupant compartments.

The more compatible designs are the result of efforts by automakers, the U.S. government, and the Institute to address the problem of mismatched vehicles. The automakers also pledged to strengthen head protection in all vehicles in order to improve outcomes when an SUV or pickup strikes another vehicle in the side. They accomplished this by installing more head-protecting side airbags.

For more information go to www.iihs.org or email publications@iihs.org
From Centro Zaragoza:

Toyota and Centro Zarigoza Sign a Collaboration Agreement

From left to right: Jose Manuel Carcaño (General Manager of CZ) and Miguel Carsi (Financial and Support Director of Toyota) Shake Hands on the New Agreement

TOYOTA ESPAÑA S.L.U., a company that markets Toyota and Lexus vehicles in Spain, and CENTRO ZARAGOZA (CZ), the Vehicle Research Institute owned by 19 insurance companies from Spain and Portugal, have signed a Collaboration Agreement, framed within a work line related to the location and recovery of stolen and compensated vehicles.
Miguel Carsi (Financial and Support Director of Toyota) and Jose Manuel Carcaño (Director General of CZ) have signed the aforementioned Collaboration Agreement, on behalf of their respective entities, in Madrid.

Through this agreement, CZ will provide TOYOTA with statistics related to stolen and compensated vehicles of the makes sold by TOYOTA, which have been located and recovered according to CZ files.

In addition, CZ will provide TOYOTA with information about the elements and systems manipulated during the theft of the TOYOTA vehicles that have been recovered and that reach CZ facilities for their legalisation process.

For its part, TOYOTA will identify and validate the vehicles that CZ requires, thus helping speed up the identification of the vehicles in the recovery work.

The aim of this collaboration protocol between both entities is to foster the recoverability of stolen vehicles that are compensated by the insurance sector.
From CESTAR:

Crash Test: Ford Fiesta

It was to be called “Verve”, and it actually has much. The “naming” gurus proposed this name, but in the end nobody dared change the memorable name chosen by Henry Ford II a long time ago.

Of course, the new model has precious little to do with the old Fiesta. It is not a matter of dimensions, as the new model is only 3 cm. longer, but it is a matter of style, image and quality perceived on board, and if we look at the data about sales, it is clear that the people have understood the message.

Over one million Fiestas have been sold in Europe since it was introduced on the market, that is in October 2008, to January 2011.

Fiesta’s completely new, appealing profile goes well with some interesting technical solutions, starting with the body shell, which is now made with a higher number of high-resistant steel sheets, in particular, the front and middle pillar are made with boron high-resistant steel. Although the body shell has been strengthened, the new model weighs on average about 40 Kg less than the old model.

What is to be underlined is that although Ford has created this model using many cutting edge technical solutions, which allowed the car to easily achieve a 5 star of EuroNCAP rating, it lacks certain devices which are useful to limit the damage in case of low-speed crashes.

In particular, after analyzing the new Ford Fiesta, Cestar has noticed that the version which is commercialized in Italy presents the set up for the installation of a cross member (whose function is to absorb the violence of a crash) behind the rear bumper, but no cross member is actually there!

Thanks to the cooperation of other European RCAR members (Germany, England, Swiss,...), Cestar was able to determine that, in some countries, the car is sold with a cross member, while in others countries (as Italy and Spain) the situation is different.

The cross member is an element which is designed to absorb the major part of the energy of an impact by deforming, without damaging the parts behind it.
As a consequence of the absence of the cross member, the energy of the crash will pass to some structural elements like the rear frame side member and to the floor, whose reparation is much more expensive. In order to assess how the presence of the cross member influences the extent of the damage produced in the case of an impact, after the reparation according to car maker’s prescriptions, the car will be subject to crash once again, but this time the original bumper beam which is commercialized abroad will be present in the rear part of the car.

In order to assess how the presence of the cross beam influences the extent of the damage produced in case of a crash and to determine its impact on repair costs, Cestar carried out an RCAR Rear Crash Test on the Ford Fiesta at a speed of 15 km/h in both conditions, with and without a cross member, and the different behaviors were analyzed.

The presence of the cross beam is actually not the only thing that distinguishes the two tests. After the first impact, the car which was not equipped with a cross member was repaired by Cestar staff, in order to get it ready for a new test.

Even if the car was repaired according to the car maker’s specifications, Cestar decided to carry out the test on both sides, so that the second impact occurred on the car side which was still original. In this way the repair could not influence the outcomes of the test. (According to the RCAR protocol, the certifying body is free to decide whether the test is to be carried out on the right side or on the left side of the car.)
The different extent of the two damages, which is shown in the pictures, is confirmed by the different time spent by Cestar for the reparation of the car. Thanks to the presence of the cross member, which absorbed a part of the impact energy by deforming, the time spent for reparations decreased by no less than 9 hours.

The following tables show the reparation operations necessary to repair the car, and the list of the spare parts in the two configurations. It may be noted that, while in the case of the Fiesta which was equipped with a cross member, only the replacement of the first part of the frame side member and the partial replacement of the covering were needed, while in the Fiesta which was not equipped with a cross member, the first part of the frame side member, the whole covering, and a part of the rear floor were replaced.
In conclusion, we can assert that the cross member, which was planned to absorb the biggest part of the energy of impact, protects the parts behind it and it is certainly useful in order to limit the accident’s costs. In the case where the cross member was not present, structural elements such as the rear covering and the floor were involved in the crash, and their reparation is much more expensive.
From CESVI Argentina:

2011 Safest Car Award

For the fifth consecutive year, CESVI Argentina awarded the automakers that made the best effort to protect the integrity of car passengers.

The 2011 Safest Car Award ceremony was held on November 30 at Black Rose of San Isidro Jockey Club, where the most outstanding vehicles based on the price-safety relationship of each market segment, were crowned with the Crash Test Award.

The distinction, divided by category, recognized the Chevrolet Spark (city car), Ford Fiesta Kinetic Design (small and also "Gold Car"), Nissan Tiida (medium), Volkswagen Vento (medium-large), Renault Latitude (large), and Peugeot 3008 (SUV). Also, the BMW 7 Series received the "Excellence in Safety MAPFRE Award" and the Peugeot 408 won a special mention as a product of National Industry.
The opening of this edition of the awards was conducted by Diego Sobrini, CEO of MAPFRE Holding and CESVI Argentina, Felipe Rodríguez Laguens, Executive Director of the National Highway Traffic Safety Agency, and Fabian Pons, General Manager of CESVI Argentina. There were also representatives from each car manufacturer awarded and automotive media and journalists.
Orion G2 Launch

On October 5, CESVI Argentina launched the most complete solution yet for managing claims: ORION G2. This new Claims Management System provides accurate and reliable information to all companies working in claims management and the auto repair market.

The event took place at the Puerto Madero Yacht Club and was attended by representatives from different countries of Latin America, of which 12 are already using ORION G2. This highlights the presence of the system in more than 50% of the countries of the region.
The new version of this system extends the range of solutions, optimizing, among other improvements, the communication between the parties involved in an insurance claim (insurance companies, lenders and insurers).

From left to right, Leonardo Andekian, Mauricio Ruiz and Fabián Pons at launch of New ORION G2 for Latin America
Helmet Laboratory Audit Produces Positive Results

Last August 2011, our Helmet Testing Laboratory had an external audit done by the Certification Body of the National Institute of Industrial Technology (INTI). The audit objective was to assess the technical competence of the laboratory, which currently is scoped to all tests under Rule-AITA IRAM 3621:2011, as well as implementing the IRAM 301:2005 / ISO 17025. The result of the audit was positive, and from that moment on, the Laboratory of CESVI Argentina began performing tests for the INTI and manufacturers that guarantee the certificate of compliance of the helmets.
From IAG:  
IAG Research Centre Develops Web Server for Media Distribution

The IAG Research Centre’s Audio-Visual department has developed a web-based server for the distribution of its research materials. The AV Server is a secure site and allows the Research Centre to upload large files for distribution, including media events and publication. Television and media crews can access high-resolution video files and photography without the need for expensive duplication and postage.

As recent as five years ago, Australian television stations only accepted footage on Beta-Cam or DV-Cam (digital tape formats). These tapes were expensive to create and deliver. These days however, television stations will accept digital footage in many formats, even if recorded from an iPhone. It was determined that modern television post-production specialists preferred digital media to tape or DVD, and that the Research Centre would need to develop a new platform to deliver this footage in a cost effective and time efficient manner.

As all footage is now recorded, edited and stored digitally, the web-based interface of the AV Server makes the transfer of video files cheaper and allows for reduced video production and delivery times. For example, footage recorded at an IAG media release traditionally took 30 to 40 minutes to run-off a print, and another 2 days to duplicate the required copies of Beta-Cam or DV-Cam tapes. When using DVDs it would take an entire day to encode the finished video and duplicate the required copies. Postage expenses and logistics would then need to be applied.
Using the new AV Server, the same media release can be completed in 3 hours and is instantly ready to distribute. The AV Server’s interface is easy to use and hosts an online run sheet and review clips so an editor need only download the clips they need. It also reduces the time editors need to spend reviewing a tape or DVD, hunting for the right shot.

Ultimately the IAG’s Research Centre AV Server has allowed for a streamlined, cost effective and time efficient manner to distribute media that is secure and easy to use.

**Access to Body Repair Manuals for Motor Assessors**

The IAG Research Centre has created a new website that contains information on Body Repair Manuals. This website is used by the Motor Assessor network via the secure New Times and Rates website.

This information allows Motor Assessors access to any available repair documentation from manufacturers, Thatcham, IAG Research and industry publications.

Information available includes the correct method of repair to industry standard. The site contains model-specific information, such as the availability of Headlamp Repair Kits or any repair information or research available. This information ensures vehicles are repaired correctly and safety the first time.
**From MRC Malaysia:**

* MRC Launches New Corporate Logo

MRC Malaysia is launching its new corporate image, creating a new logo which will be unveiled this January 2012, after 13 years with the current one.

The design is contemporary, easily recognizable, and distinctive. It projects dynamism, innovation and quickly crystallizes and encapsulates our roles and major contributions to the motor insurance/takaful and automotive collision repair industry.

**Hire Purchase Inspection**

Hire Purchase Inspection (HPI) was introduced in June 2011, and was made compulsory under Malaysian law in an effort to protect buyers from buying tampered or unroadworthy second-hand vehicles.

Any person or organization applying for a loan to purchase a used vehicle will need to have the vehicle undergo an HPI. This HPI includes 18-point specific checks, a combination of identity and physical/body structure checks.
MRC Organizes Special Training Programs for Young People

MRC Malaysia has organized a series of special training programs for young people at the start of their careers. The training program called ‘Vehicle Inspection Technical Training’ was held from November 14 to 18, 2011, and from November 29 to December 3, 2011 at MRC’s new in-house training facility.

The program had the participation of twenty-seven students from Kolej Komuniti (Community College) Bukit Beruang, Malacca, as well as thirty additional students from Kolej Komuniti Pasir Salak, Perak.

Another Vehicle Damage Assessor training program for seventeen graduates from Dungun Polytechnic was also held from November 28 to December 4, 2011. As part of their training, these young graduates were also brought to visit the national vehicle inspection centre, PUSPAKOM, a Proton body shop, and a BMW body shop.
MRC Launches New Electronic Estimating Platform

MRC Malaysia officially launched the Malaysian National Own Damage (OD-KfK) (Knock-for-Knock) and Third Party Property Damage (TPPD) electronic claims estimating platform, for submissions to the MRC Claims Processing Portal on November 1, 2011.

With the insurance industry and takaful operators utilizing front end estimating systems for the past 13 years in exchanging Own Damage claims, it is a natural process to introduce OD-KfK claims processing utilizing the current facilities available for all motor claims. As there are 3 MRC-certified estimating systems used, the complexity of communicating amongst multiple systems is the major obstacle that was successfully overcome. This solution is able to adopt multi-platform from multiple front-end estimating systems whilst maintaining a standardized format for exchange and communication.

The image below illustrates the flexibility of multiple systems communicating through a single standardized platform owned and managed by MRC. Information can be exchanged via various Handling Insurers (HI) front end systems while the Claimant Insurer (CI) is able to receive notification and download the enquiry through its preferred service provider. This reduces the complexity of the business users for both HI & CI in utilizing multiple front end estimating systems.
From Samsung:

**Ni-MH Toyota Prius (3rd Generation) Hybrid Battery Found Safe in High-Speed Rear-End Crash Test**

Car-to-Car Rear-End Crash (50 km/h)

The South Korean government has continuously made efforts to promote so-called ‘eco-friendly’ cars for the purpose of minimizing carbon dioxide emissions from the vehicle. To this end, it has established such related policies as a consumer tax cut, development of electric charging infrastructure, and high-performance secondary battery research. Responding to these policies, automobile manufacturers (Hyundai, Kia, Renault Samsung Motors, Toyota, etc.) have put a variety of hybrid and electric cars on the market in South Korea as a result.

To assess the safety of high-voltage batteries of hybrid cars, Samsung Traffic Safety Research Institute (STSRI) performed a rear-end crash test using the third-generation Toyota Prius that was recently for sale in South Korea. In this test, the Toyota Prius was struck by the same size small sedan (Hyundai Elantra) at 50km/h in the rear-end area in order to evaluate the safety performance of each major part (high-voltage battery, electrical circuits, etc.).

This high-speed rear-end collision experiment demonstrated that there are no significant safety issues such as critical damage or explosion, electrolyte leakage, and so on. In addition, all of the cells in the high-voltage battery were maintained as normal. STSRI will continuously do research on the safety, damageability, and reparability of eco-friendly vehicles (hybrid, plug-in hybrid, and electric types) in the future.
Non-professional repairs can have a negative influence on the deformation behaviour of a vehicle involved in a crash. The introduction by OEM’s of new materials and production techniques in cars makes it increasingly important that the repair of such cars is carried out with appropriate techniques and quality. These are the aims described in a project named “Fair Repair”, to which this paper is linked. This research project deals with the influence of non-professional repairs on the behaviour of a car's structure in an additional crash. KTI, with the support of the OEM (VW) tested the side structure of a VW Passat, MY 2005.

With a side impact at 50 km/h (Euro NCAP standard) it was shown that a non-professional repair of a vehicle previously damaged in the same side impact scenario results in negative influences on the crashworthiness and protection afforded by the structure. The repair of the damage caused by the first crash was carried out using incorrect repair methods and equipment, e.g. welding machines. It is evident that the safety of such a vehicle after the non-professional repair is not to the same high level as that of the original build, or to the standard of a professionally-repaired vehicle.

The next step is testing the performance of a professional repair on an equal car. With the same scenario, the car was crashed at 50 km/h, following by a professional repair.

First results of the crash test scenarios will be shown in the coming months.
Allianz has begun cooperation with the “Road Safety Fund” led by the FIA Foundation to support the “Decade of Action for Road Safety 2011-2020”. Both partners see the opportunity to significantly raise public awareness for road safety issues and support new road safety legislation in a joint effort.

An estimated 1.3 million people each year are killed in road accidents, and 50 million more are injured. Children are among the most vulnerable, with 1,000 young people killed every day. Unless immediate and effective action is taken, road traffic injuries are predicted to become the fifth leading cause of death worldwide, resulting in an estimated 2.4 million deaths each year.

“With its commitment to increasing safety and its supplementing competencies in the field of road safety, Allianz is a perfect partner for the recently established Road Safety Fund and the Decade of Action for Road Safety,” says David Ward, Director General of the FIA.

Allianz will support the “Decade of Action for Road Safety 2011-2020” through cooperation in their safety-related campaigns, on & offline.
About the Road Safety Fund, the Decade of Action for Road Safety and the FIA Foundation:

The Road Safety Fund, a global fund for road injury prevention, has been established by the World Health Organization and the FIA Foundation. It has been created to support the implementation of the United Nations’ Decade of Action for Road Safety 2011-2020 by raising financial support from corporations, the international donor community and the general public. The Road Safety Fund is hosted by the FIA Foundation, a UK registered charity and donor foundation which works internationally to promote road safety. The UN Decade of Action for Road Safety 2011-2020 has been established by the United Nations General Assembly and aims to save five million lives worldwide by 2020 through improved road injury prevention, particularly in low and middle income countries which account for 90% of global road death and injury.

UN Road Safety Collaboration Meeting at the World Health Organization Headquarters in Geneva

On behalf of Allianz SE, Dr. Christoph Lauterwasser of AZT Automotive GmbH took part in the 14th UN Road Safety Collaboration Meeting in November 2011. In the meeting, the progress and planning for the Decade of Action was discussed and best practice examples from various countries and stakeholders were presented.

“Given the magnitude of the problem with 20 to 50 million people injured each year, increasing activities at national, regional and global level are clearly indispensable”, he says. “The Global Plan for the Decade of Action is very much in line with many safety related activities of the RCAR research centers and can also be helpful in the implementation of local activities of the centers.”

Dr. Christoph Lauterwasser (right) with Dr. Etienne Krug, Director, World Health Organization

For more information, contact: christoph.lauterwasser@allianz.de
From Cesvi Mexico:

10th Edition of Expo Reparacion Automotriz (Automotive Repair Show) (ERA)

On March 15th and 16th at Mexico’s City World Trade Center, Cesvi Mexico will organize the 10th edition of Expo Reparación Automotriz (Automotive Repair Show) (ERA), which gathers together leading suppliers of paint, equipment, tools and software for bodyshop centers.

ERA is sponsored by the insurance company partners of Cesvi Mexico (Atlas Compañía de Seguros, AXA Seguros, GNP Seguros, Mapfre Seguros, Quálitas Compañía de Seguros y Seguros Inbursa).

Yearly, this show is a valuable appointment for collision centers owners and managers, car insurance directives, and everybody interested in the Auto-Repair industry in Mexico, Latin America, and Europe.
Mexican Drivers’ Knowledge of Safe Driving

Cesvi México confirms that too few Mexicans have the minimum knowledge of safe driving, which explains why Mexico is in the top ten countries with the most deaths annually by traffic accidents. Each year in Mexico, 24 thousand people die as a result of traffic accidents.

We offer the following information on Mexican drivers’ knowledge of safe driving to all the people related and involved in traffic accident prevention, for the purpose of using it for society’s benefit in car accident reduction.

![Graph showing knowledge of safe driving]

*Note: Evaluate the same driver, could have more than a bad habit*
It’s important to considerate these risk factors because all pertain to potential avoidance of accidents, and thus, could be used in statistical analysis, videos, or other types of road safety materials.
From Thatcham:

Thatcham: A New Strategic Focus

Director of Strategy – Neale Phillips

As a result of a detailed review of Thatcham’s key markets and business impact, followed by consultation with our insurer membership and wider industry partners, a new strategic plan has been launched that delivers over three quarters of a billion pounds in value to the UK Motor Insurance industry. Historically, Thatcham was set up and developed to control motor claims costs in the UK and raise the standard of repair; this objective essentially remains today.

On further analysis, it became clear that Thatcham’s resource allocation did not match the UK insurers’ current priorities. Thatcham has concentrated on accident damage, yet personal injury losses equate to almost half of today’s motor claims. Our market analysis also showed us that some of the company’s products and services are threatened by the current economic climate and are not sustainable propositions.

Going forward, three major strategies have been prioritised:

• A refocus on our core purpose and exit of any unsustainable commercial activity;
• The maximization of the potential for our repair methods to reduce claims costs;
• Drive the reduction of personal injury costs through vehicle based technology.

These strategies formed the basis of the new 3-year plan which will save UK insurers £750m over the next 3 years. Major investments include a further £1m in internal IS, which will underpin future product and service provision. Another £1m will be spent on updating our test facilities to enable us to gain Euro NCAP accreditation and allow us to purchase ‘robotised’ equipment for testing collision avoidance systems. As part of our refocusing, Thatcham will regain its pre-eminent position as a UK automotive training provider. This will be achieved through reassessing our offer to our customers and through increasing the market coverage of our repair methods product, eScribe. Key to the 3-year plan is the need to develop deeper relationships not only with insurers and insurer associations but also with vehicle manufacturers and the major repair bodyshops.

In order to implement this plan, a new management structure has been put in place to support the strategic plan, creating new senior and other management roles. There are new faces at Thatcham, and we look forward to introducing these to you in due course.

For more information contact Andrew Miller, Director of Research at andrew.miller@thatcham.org
Ready2Repair is a new initiative being developed by the UK’s largest motor insurer RBS Insurance together with Thatcham, to encourage both insurer networks and all other repairers to repair accident damage rather than simply replace vehicle parts.

This new scheme promises to benefit all parties concerned in the repair of a particular vehicle which has sustained damage to non-structural panels. The whole process will save time: work on vehicles can start immediately after the vehicle arrives in the bodyshop as no time is wasted on ordering and waiting for parts to arrive. The quicker the repair starts, the quicker the vehicle is repaired and the motorist can have the vehicle back on the road again. The insurer can reduce the number of total losses as vehicles which would have otherwise been written off, can now be repaired. At the same time, repairers are able to use their repair skills to the optimum and can make more profit from the additional labour hours required to carry out the repair. Money has been saved on unnecessary parts costs and repairers can increase their throughput and efficiency. All this while helping to save the planet!

Training courses have been specifically developed by the Thatcham Academy. Training instructors, supported by a range of new video material to demonstrate these techniques, so that repairers will have the necessary skills to participate in this initiative. Delegates have exclusive access to information prepared by Andy Walker, covering the most common repair scenarios on a range of volume selling vehicles.

For more information contact andy.walker@thatcham.org
AEB Vehicle Manufacturer Meeting

On 1st December 2012 Thatcham held a briefing for Vehicle Manufacturers regarding the introduction of assessment tests for collision avoidance systems – Autonomous Emergency Braking (AEB). The presentation described the test protocols which Thatcham has developed in the UK for three scenarios: a City situation – a longitudinal low speed crash, the typical car into the rear of another car, those which form the bulk of insurance claims for material damage and personal injury ‘whiplash’; an Urban situation – a longitudinal medium speed crash, typically car into another moving or slowing car, the material damage and personal injury claims arising from these are of a higher level and of a more serious nature; and a Pedestrian situation – the common scenarios for car into pedestrian, often fatal and in many cases leading to significant claims costs.

The first of these, the City scenario has been adopted in principle by the UK Insurer Vehicle Group Rating Committee which plans to introduce the assessment into the UK Group Rating system later in 2012 or early 2013. The assessment will assess the performance of vehicle systems which claim to avoid these common accidents, and a Grouping benefit will be awarded to vehicles which have systems fitted and which perform well in the assessment. It is hoped that the work of the RCAR P-Safe Working group will be completed in time for the UK Insurers to adopt an RCAR international standardised version of the assessment protocol.

Thatcham is also part of the Euro NCAP consortium and the suite of test protocols is being assessed as part of the development of the future star rating system. Current discussions within the consortium include a proposal to start to rate AEB systems in 2014.

The Vehicle Manufacturer Briefing on 1st December @ Thatcham

The presentation was well received by the attendant Vehicle Manufacturers and they continue to share their future plans with us for the inclusion of these technologies in future vehicle models, many within 2012. Thatcham looks forward to working with other RCAR members on the development of the future RCAR standards for AEB assessment.

For more information contact matthew.avery@thatcham.org
**From AXA:**

*Frequency of Rear-End Collision Accidents for Volvo XC60 Equipped with City Safety*

One of AXA accident research’s focuses is advanced driver assistant systems. One of the goals is to prove the efficiency of such systems on Swiss roads. Since Volvo launched City Safety in every XC60, this car provides a perfect opportunity to study its effectiveness in comparing claims frequency to other small SUV’s claims frequencies. (The whole study can be ordered by e-mail at Bettina.zahnd@AXA.ch).

**Introduction**

The aim of this study was to assess the impact on rear-end collision accident frequency of Volvo’s City Safety system. The claim frequency over two years of seven similar midsize SUVs was compared. City Safety was introduced for the first time in 2008 with the release of the Volvo XC60. The system was developed to avoid low-speed front-to-rear crashes or to reduce their severity considerably. The City Safety system has an optical laser sensor built into the windshield that detects other vehicles up to 6 meters in front of the XC60. It is activated at travel speeds from 4 to 30 km/h and initially reacts to slowing or stopped vehicles by pre-charging the brakes. The vehicle will brake automatically if forward collision risk is detected and the driver does not react in time. Volvo City Safety is standard equipment today in the Volvo S60, Volvo V60, Volvo XC60, Volvo XC70, Volvo V70 and Volvo S80, and is automatically activated when the vehicle ignition is turned on, but can be manually deactivated by the driver.

**Results**

Figure 1 shows the claim frequency (amount of accidents per insured vehicle years) during the examined period. The data are presented by vehicle model and standardised to the mean value.

![Claim frequency, standardised to the mean value](image_url)
In Figure 2, only rear-end collision accidents are considered. The respective claim frequency (amount of rear-end accidents per insured vehicle years) is shown by vehicle model, and standardised to the mean value.

Another approach worth considering is the percentage share of rear-end collisions per vehicle model.

It is apparent that despite having a similar claim frequency (see Figure 1), the percentage shares of different accident types diverge highly (see Figure ). For instance, Volvo XC60 and Lexus RX are involved in a noticeable high share of parking or manoeuvring accidents, and the Mazda CX-7 reaches nearly twice the rear-end collision ratio of the XC60.
Figure 3: Percentage share of rear-end collision accidents and other accident types

Conclusion

The Volvo XC60 shows an about 30 percent lower rear-end collision accident claim frequency than the mean value of all seven similar midsize SUVs, while being almost on the same level as the VW Tiguan. However, the latter shows also a particularly low overall claim frequency compared to the other models.

Considering the percentage shares of the individual accident categories per vehicle model, the XC60 achieves the lowest rear-end collision ratio with 19 percent, followed by the Tiguan with 21.6 percent. The highest ratio is shown by the Mazda CX-7, which reached 37.5 percent and hence nearly doubles the XC60's value.

Limitations

This study does not consider risk profiles, hence there was no compensation for covariates such as driver or car specific risk. In addition, for each case, there is not the same level of detailed information under which circumstances or road conditions the individual accident happened. Especially for the XC60, it is unknown whether City Safety was active.

A statistical evaluation with the chi-squared test did not reveal any statistical significance. Generally, due to the limited amount of data collected over the period of two years, the results must be interpreted with some caution. The amount of accidents of individual vehicle models ranges between merely 32 (Mazda CX-7) up to 305 (BMW X3). Therefore, single accidents may have a disproportionately high influence on the results of less widespread vehicle models.
On the Move:

Farewell Mika!

Mika Haakana

The management and staff at LVK Finland were very sad to say goodbye to LVK’s Technical Director Mika Haakana. Mika started in the spring of 2008 with LVK. Some of you may have met him at the Chicago Conference.

In Finland, there is a saying that goes “when the iron is hot, you need to hammer it.” Mika’s iron got hot some weeks ago, when he was given the opportunity to assume a new position as Managing Director of a company which sells metal work tools for industry.

Mika is currently on vacation, but will start his new position after his return.

In the meantime, at LVK, the show must go on, so LVK is busy recruiting a successor for Mika, which will likely take a couple of months. In the meantime, I am sure that all of you will join me in wishing Mika all the best in the coming years.
On the Move:

A Message From Terje!

“\textbf{This summer I was given the opportunity to take charge of the Norwegian Natural Perlis Pool, one of the largest Natural Perlis Pool in Europe. To make the decision to leave my position as a manager for NARC wasn’t easy, but I could not let this opportunity pass.}

Looking back, I have had an exciting time as a manager for NARC during the last 6.5 years. During these years, we have nearly doubled the number of loss adjustments handled in our systems, we have launched a number of new systems on our platform, the center is now making a nice profit, and NARC is on the verge of developing a brand new platform for all systems, the largest project since the launched of DBS in 1995.

The participation in the RCAR group has been a very interesting journey during these years. The work undertaken and coordinated by many of the members has repeatedly been used as a source of information in our development processes. Specifically, the Annual Conferences have been useful to connect with other centers, and to get to know new colleagues and over the years made good friends. It was an honor for me to serve as the host of the 2010 Conference in Oslo, and I was so pleased at the great number of participants and partners that joined us in our northern country.

This past Christmas we had had a big storm coming in over Norway, so I got my experience as a manager of the Perlis Pool J!

I am still located in our main office and actually on the same floor together with my successor, I still have my e-mail address terje.haug@fno.no and phone nr.: +47 92052202, and quite a few of us are linked on Facebook, so I hope we stay in touch from time to time.

Thank you all for a wonderful time in RCAR!”
On the Move:

Welcome Arne!

FNO Norway is pleased to announce that Mr. Arne Solum has joined Financial Services Union (FNO / Norway) as the new Director of Motor Assessment, effective immediately.

Arne Solum

Arne is a mechanical engineer with additional qualifications in management and economics. He brings 9 years’ experience in the insurance industry and 15 years’ experience in consulting.

His contact information is as follows:

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I am sure that all of you will join me in wishing Arne the best of luck in his new position.
The RCAR Network:

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The RCAR Newsletter

Editor: Wilf Bedard
Associate Editor: Larry Roberts
Technical Coordinator: Alida Meyer

Website Report

www.rcar.org

The total number of ‘visits’ to the RCAR Website ranged from 1,620 in October, to 1,581 in November, to 1,499 in December, while the number of ‘total pages viewed’ during that same period ranged from 4,286 in October, to 4,047 in November, to 3,242 in December.