



# RCAR

Research Council for Automobile Repairs

# Newsletter

Research Council for Automobile Repairs

www.rcar.org

June 2005

## News From The Centres

### State Farm—USA



**The Centre of Attention  
Illinois State Representative, Dan Brady (left),  
Police Sergeant Monica Blue and child’s father (right)**

State Farm reinforced its ongoing commitment to child passenger safety by hosting its fifth annual Child Safety Day at more than 120 locations across the country on various dates throughout May to educate parents and anyone who has children in their vehicles about the importance of properly buckling up kids. Events will also be held throughout the country during September.

While motor vehicle crashes are the leading killer of children over the age of one in the United States, many of these tragedies could be avoided through appropriate safety restraint use. Child Safety Day focuses on the significance of car seats, booster seats and seat belts for children riding in motor vehicles. Additionally it promotes the critical message that age-appropriate restraint and rear seating provide the best protection for children in motor vehicle crashes.

“Those of us who are parents want our children protected as well as possible when they’re passengers,” said Susan Hood, Claims Vice President, State Farm Insurance Companies. “By hosting these Child Safety Day events, State Farm continues its commitment to child passenger safety by providing necessary resources to educate parents on the proper safety practices for children riding in cars.”

**Giving Car Seats A Check-Up.** Safety experts report that 72 percent of child safety seats are misused. Furthermore, some parents do not realise that children ages 4 to 8 are too young to use adult seat belts. During Child Safety Day local certified technicians will teach parents how to correctly use booster seats, car seats and seat belts. State Farm Community Volunteers will be on hand to provide assistance. This year State Farm developed a grant programme with MANA, a National Latina Organization, to address the need for Spanish speaking child passenger safety technicians at Child Safety Day events across the country

#### Special points of interest:

- News from 11 RCAR Centres.
- Euro NCAP Results.
- News Sources and Forthcoming Events.

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## News From The Centres

### State Farm-USA (continued)

In addition parents can have their child safety seats and booster seats inspected on-site for free. During the past four years more than 37,000 safety seats and booster seats have been inspected at State Farm's Child Safety Day events.

**Teaching Children New Safety Tricks.** Child passenger safety isn't the only topic covered at Child Safety Day; some cities host events that cover other child safety related topics, including bike safety, 911/0 emergency safety and child identification safety. Local organisations such as fire departments, police departments, hospitals and the American Red Cross, will help State Farm lead the following educational activities:

- **Bicycle Safety Rodeo**—Basic bike safety techniques, including mounting and dismounting, balance and steering, speed control and braking are shared with families. Children manoeuvre through a number of checkpoints to determine their level of skill. Participants can bring their bikes to be inspected to ensure the bike's size is appropriate for the child's height and age. A *Safe Bicycling Quiz* and bike licences are distributed to each rodeo participant.
- **911/0 Emergency Safety**—Children and their families will learn emergency tactics through various safety activities such as the *Operator Rap* and *911 Jingle* songs, *What to do in an Emergency* handout, 911 Simulator and a visit from the Good Neigh Bear. The 911 Simulator allows children to actually practice dialling 9-1-1 and reporting an emergency to a local operator.
- **Good Neigh Bear Child ID Card and Booklet**—State Farm distributes child ID cards and booklets to Child Safety Day attendees. The child ID card and booklet are useful tools to help parents keep their child's identification handy in case of an emergency. Each tool provides a space for the child's photo and pertinent information.

**Safe and Sound.** This summer State Farm will release a new national television ad aimed at promoting child passenger safety. The 30 second spot features a family re-enacting a compelling, real-life State Farm story. In 2003 a family from Pennsylvania attended their local Child Safety Day event and had their children's two safety seats checked by certified technicians. Shortly after they left the family experienced a rollover accident. At the time of the accident the mother was driving her two parents and two children in her SUV. The mother lost control of the vehicle and flipped over the SUV so the vehicle was resting on its roof. Fearing her children were injured in the crash, the mother scanned the scene until she discovered her kids were hanging upside down from the back seat, safely secured in their child safety seats. To this day the mother claims the car seat safety check at State Farm's Child Safety Day saved the lives of her two precious children.

**The Road to Protecting Back Seat Riders**—Since 1997 State Farm has fostered an ongoing research partnership with The Children's Hospital of Philadelphia called Partners for Child Passenger Safety (PCPS). This joint effort represents the largest study ever conducted in the world of children in motor vehicle crashes. More than 300,000 State Farm customers have shared their vehicle crash experiences with Children's Hospital researchers who are then able to determine how and why children are killed and injured in these vehicle crashes.



State Farm Chairman & CEO, Ed Rust, with young friend at the Illinois Safety Day

For more information on Child Safety Day events visit: [www.statefarm.com/kidsafety.htm](http://www.statefarm.com/kidsafety.htm).

For more information on The Children's Hospital of Philadelphia visit: [www.chop.edu](http://www.chop.edu).

(State Farm is at: [www.statefarm.com](http://www.statefarm.com))

# News From The Centres

## AZT—Germany

### Fewer Accidents with Driver Assistance Systems on Commercial Vehicles

Halving the number of deaths on European roads by the year 2010 is an ambitious goal set by the EU. It highlights the increasing significance of traffic and transport safety initiatives focussing on the interrelationship between individual, environment and vehicle. In this context driver assistance systems play an important part. The motorist is supported by the provision of information, warnings or even interaction while driving. Benefits, especially for commercial vehicles that were investigated by the German Insurance Association (GDV) are in line with the experience of Allianz Centre for Technology.

From the point of view of accident research, the benefits of driver assistance systems currently available are indisputable. These include the anti-skid-system and the electronic stability programme (ESP). Active driver safety systems are particularly effective with regard to utility vehicles, the passive safety of which has its inherent limitations—a consequence of mass, form and stiffness aggressiveness relative to other road users.



**Research shows that driver assistance systems can contribute significantly to reducing the number of accidents with bodily injuries and/or damage to property**

In addition to further optimising partner protection by means of under-ride protection systems it is therefore necessary to develop and establish driver assistance systems with high potential benefits to avoid accidents and enhance road safety.

The traffic engineering institute of the German Insurance Association (GDV) investigated the potential effectiveness and the benefits of driving assistance systems presently available. Drawing on several accident databases, the specific situation of accidents was examined individually and the possible effects of driver assistance systems were analysed. With regard to electronic stability programmes, rear view cameras, turning assistants, side safety clearance warning systems and adaptive cruise control the following benefits were estimated. Particularly great safety benefits are to be derived from speed controlling devices (eg speed alert) in all motor vehicles. Detailed research is still needed for utility vehicles.

The future development of driver assistance systems in utility vehicles in Europe is currently being advanced by initiatives of manufacturers and suppliers as well as by national and European projects. This development has to be supplemented by on-going accident research in order to make optimum use of the safety potential that driver assistance systems may offer.

The results provided by the insurance industry (eg GDV) and the experience of Allianz Centre for Technology indicate that driver assistance systems are potentially very effective in utility vehicles. Driver assistance systems can contribute significantly to reducing the number of accidents with bodily injuries and/or damage to property. With regard to efficiency and acceptance of these systems, special attention has to be paid to system reliability, fault tolerance and usability.

Driver Assistance System	Accidents with severely injured in Germany that can be influenced	
	relative	absolute
Electronic Stability Program for		
- Van	10 %	360
- Truck	9 %	420
Rear view camera		
- Van	5 %	180
- Truck	1 %	50
Adaptive cruise control for Truck	11 %	550
Turning assistant for Truck	3 %	150
Side safety clearance for Truck	3 %	150
ISM* for all motorcars	(30...60 %)	(≤57,100)

\* Intelligent Speed Management Data:GDV

“Driving assistance systems hold high potential safety benefits for all road users. Key to efficiency will be the technical reliability of the systems and the usability of the devices. The driver should not be distracted by the systems nor should they impart a false sense of security,” summarises Dieter Anselm, Managing Director of Allianz Centre for Technology.

(AZT is at [www.allianz-azt.de](http://www.allianz-azt.de))

## News From The Centres

### Centro Zaragoza—Spain

#### Eurotax Presentations

In March 2005 Centro Zaragoza hosted a major presentation by Eurotox Glass. More than one hundred professionals from the automobile sector attended the presentation of Eurotax Repair Estimate, Eurotax Repair Estimate Manager and Eurotax Claims Control. These are the IT tools to report and manage car claim estimates. Among the attendees present were delegates from 27 insurance companies which represent approximately 90% of the automobile insurance industry in Spain as well as representatives from all workshop associations, the experts' association, research centres, network workshops and other institutions belonging to the automobile sector as well as 15 mass media representatives.

This was the first step by Eurotax Glass Spain to bring together the main members of the insurance, experts and workshop sectors and the result has been a successful participation.

Mr Carcaño (General Manager of Centro Zaragoza) welcomed the attendees, after which Mr Gaskell (CEO of Eurotax Glass Group), presented his company, active in 28 countries (27 in Europe and Australia). This meeting was called to present its new products, namely Eurotax Repair Estimate and Eurotax Claims Control that are aimed at the insurance, expert and workshop sectors. The presentation was led by Mr Santarossa, General Manager of Eurotax Glass Spain.



#### Collaborative Research into the Prevention of Traffic Accidents in Spain



**Mr Rodrigo, Mr Fernández and Mr Carcaño sign the agreement**

In May 2005 a delegation from the Spanish Government in Aragón, Centro Zaragoza and the MAZ Hospital signed a collaboration agreement to develop research that allows determination of the correlation between the violence of the impact in traffic accidents and the severity of whiplash injuries.

This collaboration agreement was signed by Mr Fernández (delegate of the Spanish Government in Aragón), Mr Carcaño (General Manager of Centro Zaragoza) and Mr Rodrigo (Manager of the MAZ Hospital).

These days whiplash is the most frequent injury caused by traffic accidents. More than half of all injury compensation claims paid by Spanish insurance companies are because of whiplash. In Europe this represents more than 10 million Euros a year, including sick leave and direct compensation. In Spain 98% of cervical injuries are caused by traffic accidents.

The aim of this collaboration agreement is to make recommendations to car manufacturers to help to reduce the number of whiplash injuries. The methodology of work in this research is as follows. The analysis of whiplash injuries will be studied together by a medical team of neurosurgeons and radiologists from the MAZ Hospital and by a team of engineers from Centro Zaragoza with expert experience in traffic accident research and road safety. This pioneering, multi-disciplinary approach to analyse the correlation between accident severity and whiplash injuries and its conclusions will help to improve protection for vehicle occupants.

(Centro Zaragoza is at [www.centro-zaragoza.com](http://www.centro-zaragoza.com))

# News From The Centres

## ICBC—Canada

### ICBC Judges in Science Fair.



Similar to many countries, Canada holds an annual Science Fair for students where they create and present research projects in various scientific fields. This year regional winners attended the National Finals in Vancouver. Also, for the first time, this year's fair included a category for Automotive Research and ICBC's Vehicle Safety & Research Department participated by judging in the Automotive Research category.

There were 447 finalists in the Vancouver event who competed for prizes with a total value of more than \$300,000 in awards and scholarships. All the students showed refreshing initiative and enthusiasm in their work—with the Gold Medal winner being a project reviewing the various compounds used as anti-icing agents for winter road maintenance in Canada. It studied the effectiveness, costs and environmental effects of several alternatives in comparison to normal road salt.

ICBC believes that supporting the Student Science Fair is a great investment in Canada's scientific future and in developing future researchers. Maybe some of today's science fair winners will become RCAR members of the future.



(ICBC is at [www.icbc.com](http://www.icbc.com))

## KTI—Germany

### New System for Body Repair.

KTI have tested several low cost systems for the repair of bodywork. These systems are all based upon the first tool into the machine, known as MIRACLE. It is not always necessary to replace complete modules so body shops can save money. A further advantage of these tools is that structural parts are not cut. Three systems are illustrated below.



**Autorobot**



**Miracle**



**Axi-Dent**

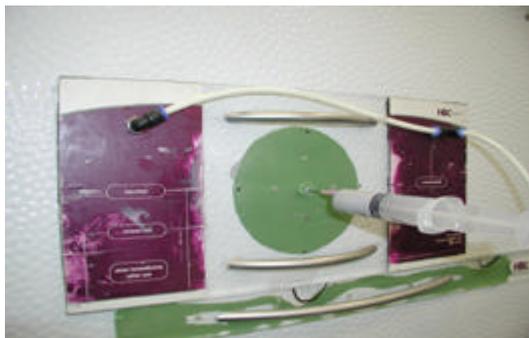
KTI are conducting a comparative trial on these systems at present and will report on advantages/disadvantages in the future.

## News From The Centres

### KTI—Germany (continued)

#### Caravan Repairs

KTI have evaluated a system from HBC which enables spot repairs to be carried out on caravans. With the HBC-System and the right colour match, a spot or small area can be repaired economically and to a high standard rather than replacing the entire caravan wall, which the manufacturer would have you do. This process of spot repair follows on from any necessary work rectifying the structure of the caravan. To achieve good results the worker needs sound training and experience in the use of the system. The rewards are a good, economic, high quality repair. The equipment and finish are illustrated below.



#### Rectification Programme for Honda Motorcycles

Honda Motor Europe North used KTI's background and expertise in the repair of aluminium to rectify some 400 Goldwing 1800 GL motorcycles. The frame where the lower cross pipe (part supporting the lower rear bumper) meets the pivot plate (side surface of main frame) was modified to reshape and strengthen the welds. The welding was also tested by NHTSA.



These illustrations show the KTI facility in Lohfelden and processes involved.



## News From The Centres

### KTI—Germany (continued)

#### Training for the World Championship



KTI is training the candidates for the 2005 World Championships to be held in Helsinki. The picture shows the German, Dutch and Swiss candidates together with instructors and the Head of Centre, Klaus-Dieter Moser.

(KTI is at [www.k-t-i.de](http://www.k-t-i.de))

### CESVIMAP—Spain

#### AUGE—A New Software Programme for the Management of Small and Medium-Sized Automobile Repair Shops

During the VIII International Automation Equipment and Components Fair, Motortec, an agreement was signed between Audatex, Cetraa and Cesvimap covering the development and launch this September of the new IT programme for repair shop management, AUGE. The agreement was signed by representatives of the three companies involved: Andrés Brehmer (Managing Director of Audatex Spain), Francesc Faura (President of CETRAA) and Ignacio Juárez (Manager of CESVIMAP).



AUGE is a new IT programme created for the small and medium-sized automobile repair shop, which will make organisation easier and more efficient for these businesses.

The thinking behind the programme is simple: to process reception and management of vehicles in a repair shop in a matter of minutes, using a standard computer and with call for only basic computing knowledge. This piece of software is designed to open and modify repair orders, print counterfoils, prepare estimates, order spare parts—by fax or e-mail—export data to standard accounting programmes, generate bills and check, at any given moment, the status of costs, repair orders, the repair itself, billing and collecting payment. The search for status information can also be carried out by the customer.

Installation and connection is via the internet, in a secure web setting which files the repair shop data included in the programme for a minimum of five years. Likewise, the information can be adapted for accessibility so that each employee has access to specific AUGE information.

## News From The Centres

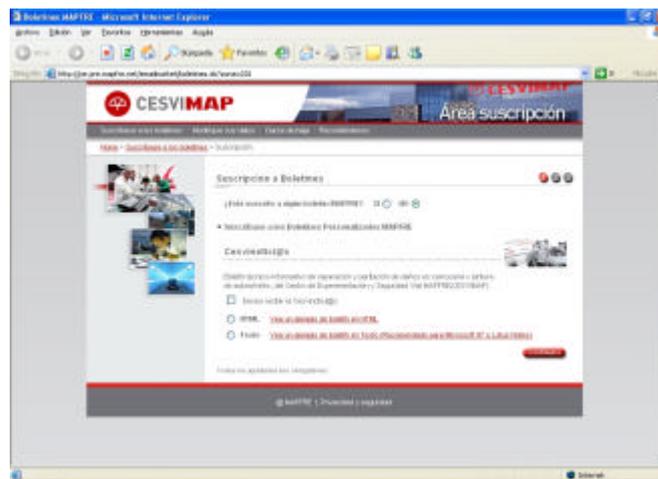
### CESVIMAP—Spain (continued)

The programme can be personalised with each workshop's logo and adapted for each Spanish Autonomous Regions since it includes the legal documents corresponding to each of these regions.

The programme is the result of collaboration between three heavyweights in the vehicle repair world: **Audatex**, whose experience in the design of computer programmes for automobile damage evaluation and in the development and management of databases is a guarantee; **CESVIMAP**, Mapfre's Centre for Experimentation and Road Safety, who have brought to bear their experience to this programme, stemming from the creation of a powerful and very versatile workshop management programme called Spiga®, a piece of software which processes all the information relating to the vehicle to be repaired; and **CETRAA**, THE Spanish Confederation of Repair and Related Workshops, which has brought its practical knowledge of day to day work in the AUGÉ repair shop.

### Cesvi Notici@s, CESVIMAP's E-Bulletin

CesviNotici@s, Cesvimap's technical information bulletin on automobile bodywork and paintwork repair and damage claims adjustment, is moving forward into a new era. Since 2001 it has been sent, free of charge, periodically to subscribers and it is now coming out in a new, more interactive, and undoubtedly more attractive, format. CesviNotici@s gives a summary in headlines of what is in hand at Cesvimap and in the automobile repair sector, and from now on our readers will be able to send the bulletin on to a friend, to personalise the bulletin with their password and e-mail address in order to have access to the data it contains, and to decide which bulletin they want or in which format (html or text) and even, in some cases, to decide what content they want.



CesviNotici@s sits alongside a travel bulletin (Viajes Mapfre), one for Automobiles (Club Mapfre del Automóvil) and a health bulletin (Mapfre Caja Salud) within the subscription area of Mapfre's e-mailed bulletins.

### CESVIMAP Publishes “Surface Trims”, a New Title for Bodywork Students

“Surface Trims” is the latest title in CESVIMAP's collection, “Professional Training Courses”. Written for the curricular development of the exam subject bearing the same name (in the bodywork module studied at professional training colleges), this book offers an easy-to-understand and thorough development of the procedure to be followed when facing paintwork jobs on vehicle parts or an entire vehicle. The text goes into detail with regard to the tasks of colour matching, masking, and preparing the vehicle for entry into the paintwork booth, preparing the colour mix, application, equipment cleaning, varnishing, polishing, shining and, where necessary, paintwork defect correction.

The work explains the main working methods used in surface trim tasks. There are numerous photographs taken in the CESVIMAP repair workshop which illustrate these procedures, step by step, showing how to go about paintwork jobs on whole sections of parts, partial paintwork jobs, wet on wet, water based paint jobs, feathering, speed repairs and paintwork jobs on plastic parts. The book also has a sizeable chapter on vehicle customisation using spray guns or techniques such as stripes, decals or paint transfer.

As with the rest of the books in the collection, special interest has been shown in safety measures which have to be taken when carrying out tasks related to surface trims.

“Surface Trims” includes a complete colour appendix with the photographs from the chapters referring to colour theory (colourimetry), and to the identification and correction of paintwork defects and damage.

## News From The Centres

### CESVIMAP—Spain (continued)

#### Teacher's CD



This book is accompanied by a CD for the teacher, which includes the curricular development to be followed for this exam subject as dictated by the Spanish Ministry of Education, self-assessment questions to check the degree of comprehension of students for the subjects presented, activities proposed for carrying out practical exercises in the workshop, and a wide bibliography. It also includes additional material not published elsewhere (40 pages relating to the composition and drying of paint, colour adjustment, and the maintenance of installation) and more than 350 colour photographs, taken from the book, to make class preparation easier for the teacher.

(CESVIMAP is at [www.cesvimap.com](http://www.cesvimap.com))

### MPI—Canada

#### Manufacturing Defects and Vehicle Fires

MPI has a team of fire investigators dedicated to determining the cause and origin of vehicle fires. The team is comprised of seasonal law enforcement investigators, technicians with a mechanical background, supplemented by engineering knowledge and test facilities.

Fires result primarily from two events: defective design and arson. MPI's fire investigation team has been instrumental in containing the number of fraudulent claims relating to vehicle fires and has also been effective in containing fire costs stemming from manufacturer defects. MPI's fire investigators work closely with Transport Canada Road Safety, the government arm responsible for vehicle safety in Canada, and with vehicle manufacturers in identifying design defects that compromise vehicle safety.

The team's past research into cause and origin of vehicle fires resulted in one manufacturer recalling over 1.5 million vehicles in Canada alone. MPI fire investigators had identified a trend in fires originating within the passenger cabin of one particular manufacturer's products. Investigators concluded that a faulty ignition switch design was the cause of numerous fire claims. By the time the defect was acknowledged and a recall issued, MPI had suffered in excess of \$3,000,000 in fire losses. To date we have recovered the majority of these costs and the recall ensured that this costly design was corrected. The investigation team's objective is to identify manufacturer design flaws early in a model release to contain our exposure to these types of losses and to reduce the risk of casualties relating to vehicle fires.

At this time we are investigating dash fires involving 2004 Ford F150 Supercab light duty trucks. This article reports on our recent investigations into the cause of two such fires. Similar circumstances surrounded both fires. The vehicles had been parked when the fires were spotted. One vehicle had been parked for four hours, the other for over two hours. In one fire witnesses reported that flames were seen coming through the dash on the driver's side of the passenger cabin.

Fire damage to the first vehicle was extensive and had totalled the vehicle (*Figure 1*). There was extensive under-hood fire damage with the burn area localised at the left rear engine compartment. At first glance the fire appeared to have originated with the fuel supply system. The fuel supply and return lines as well as the fuel rail hose located between the fuel rails were burnt and melted.



*Figure 1—Fire consumed the engine compartment and interior cabin*

## News From The Centres

### MPI—Canada (continued)

Through the course of the investigation the fuel supply system was ruled out as the cause and the most likely source was determined to be at the wiring connector feeding the instrument cluster (*Figure 2*).



*Figure 2—Frontal view of F150 Instrument cluster*

The fire to the second vehicle had been extinguished before it consumed the entire vehicle. Extensive damage to the left hand portion of the instrument panel pointed to an under dash origin for the fire (*Figure 3*). Further investigation pinpointed the fire origin at the instrument cluster.

*Figure 3—View of second vehicle's left hand dash panel*



Engineering tests carried out on both vehicles' instrument clusters and connectors supported the assumption that the origin of the fire was at the wiring connector joined at the instrument cluster. A 32-pin connector is located on the top left-hand side of the instrument cluster assembly and feeds the instrument cluster (*Figures 4 and 5*).



*Figure 4—Rear view of instrument cluster and harness*



*Figure 5—Rear view of cluster, harness connector at top left hand*

The cause of the fire was isolated to a problem in the connector/connection of this 32-in connector. Possible high resistance/arcing may have occurred in the pins between the connector thereby causing the plastic connector to heat up and ignite. Flammability tests where an open flame was applied to a sample connector discovered that the sample connector burned readily when exposed briefly to the open flame. The hot connector reacting with the plastic provided the necessary ingredients for a burn.

# News From The Centres

## MPI—Canada (continued)

The short-circuiting eventually caused fuse #21 to burn out. Fuse #21, a 15 amp fuse, is a constant source of power to the instrument cluster and is hot at all times.

Figure 6—Shorted fuse #21.  
Protects cluster keep alive system

15	5A*	interlock solenoid, Heated PCV
16	10A*	Overdrive cancel, Cluster, Brake-Shift Interlock (BSI)
16	10A*	ABS module (Hup/Start power)
17	15A*	Fog lamp relay (R202)
18	10A*	Hup/Start feed - Flasher relay, Electrochromatic mirror, Heated seats, BSM, Compass, RSS (Reverse Sensing System)
19	10A*	Restraints (Air bag module)
20	15A*	PCM 4x4 power
21	15A*	Cluster keep alive power
22	10A*	Delayed accessory power for audio, power door lock switch and moonroof switch illumination
23	10A*	RH low beam headlamp
24	15A*	Battery saver power for demand lamps
25	10A*	LH low beam headlamp
26	20A*	Horn relay (PCRD), Horn power

We conclude that the very localised nature of the fire damage on the second vehicle provides strong evidence that the cause of the fire originated with a defect in the 32-pin connector. Engineering reports were provided to Transport Canada Road Safety for their investigation. Further information on this investigation and MPI’s fire investigation team can be obtained by contacting Mr Wilf Bedard at Manitoba Public Insurance.

(MPI is at: [www.mpi.mb.ca](http://www.mpi.mb.ca))

## CESVI Argentina

### Automobile Recycling Centre

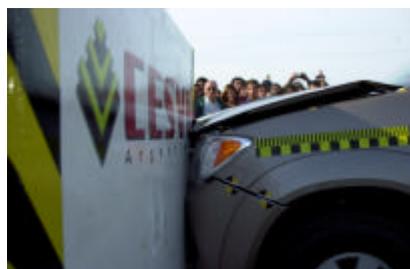
The building of the Automobile Recycling Centre into CESVI Argentina’s facilities is now in progress. The spare parts recycling and recovery project has the following main objectives: to cut the automobile’s theft circuit that feeds the illegal dismantling shops with parts and documentation; to contribute to environment protection; and to recycle recoverable parts from the vehicles in accordance with the laws in force. This is the way to organise a system of supplying the spare parts market with hard-to-get and valuable parts and elements. The new facilities will be open by the end of next September.



The Automobile Recycling Centre begins to take shape

### Toyota Hilux SRV, 4WD Front Crash Test

A 2005 Toyota Hilux SRV 4WD made in Argentina (and exported worldwide) was submitted to a front crash test at Cesvi Argentina on 29 April 2005, in accordance with RCAR standards. The test showed some unfavourable issues: the front left fender backwards displacement and bonnet side displacement. Also the VIN location on the front end beam is an unfavourable point if a repair is needed (which is very often) and the manufacturer does not take into account its partial substitution.



## News From The Centres

### CESVI Argentina (continued)

#### Orión, Claim Management Software



Fabian Pons presents Orión

This software comprises a group of modules that provide an integral solution to the claim area of the insurance companies. **Orión** is unique in Argentina and works within a net of companies providing efficiency and control of available resources.

**Orión** has 5 different modules: **Orión Cesvicom** (the most complete tool to value vehicle repair costs); **Orión Times** (including the repair times of more than 4,600 car models); **Orión Spare Parts** (operating with a supplier net into the local market through e-commerce); **Orión Management** (to generate reports for the users of the above mentioned three modules); and **Orión Previous** (allows full information on previous inspections made by insurance company).

#### First Crash Test on a Sport Chassis

For the first time in South America CESVI Argentina conducted a crash test on a sport chassis. This Formula Renault Argentina Class chassis, labelled “Tito 01”, was crashed into a 32 tns rigid barrier at 28.8 km/h (8 m/s). The test was conducted under race category standards, supervised by the Automobile Sport Committee of a FIA Member, the Argentinean Car Club. The objective was to verify this type of car safety, testing the performance and energy absorption capacity of the security cage in a frontal crash. This test will contribute to research on driver protection in these kind of races.



(CESVI Argentina is at: [www.cesvi.com.ar](http://www.cesvi.com.ar))

#### IIHS—USA

Recently two Status Reports have been published. The first concerns the issue of alcohol-impaired driving and the second the question of vehicle incompatibility in crashes.



Status Report No.4, April 2, 2005, notes that the worldwide trend to reduce serious crashes involving drivers who were impaired by alcohol has stalled. Progress was made in reduction during the 1980s and into the 1990s but has now been generally halted. Trends in a number of countries are discussed as are differing attitudes to random testing. These countries include Australia, Sweden, United States and the United Kingdom. Reasons for the slowing down and reversal in one case in progress are set in a context of changes in habits and quantities of alcohol consumed and lack of sobriety checks. Institute President, Brian O’Neill, observes, “The complacency isn’t justified because the problem is far from solved. Alcohol impaired driving is still a big concern despite the progress that was achieved during the 1980s and 1990s. In more recent years this has become an intractable problem. What’s needed in the near term is expanded application of sobriety check points. In the longer term innovative technologies might help to stop driving while impaired by alcohol.”

Questions relating to sobriety check points, hard core drinkers and innovative technology are also addressed in some detail in this special issue.

## News From The Centres

### IIHS—USA (continued)

Status Report No.5, April 28, 2005, covers a problem that in collisions with cars, sports and utility vehicles (SUVs) are incompatible. The issue is full of cartoons illustrating important points on incompatibility and the aggressive nature of some SUVs. It also contains key graphical information on the distribution of car occupant and SUV occupant tests, self-protection and risks in colliding cars. Information is also given on fatal two vehicle crashes, front versus side impacts.



The concept of crash incompatibility is developed and set in the context of self-protection, eg size, weight, crumple zones, strong occupant compartments and state of the art restraint systems which can be good in all vehicles. However SUVs are higher off the ground than cars and their front ends are stiffer. Both these characteristics, like vehicle weight, can influence risks for occupants of cars that collide with SUVs.

However with 42% of car occupant deaths coming from single vehicle crashes and 63% SUV occupant deaths coming from SUV single vehicle crashes, there is a need to view compatibility in perspective. “The extra risks posed by the incompatibilities between cars and SUVs are real, but it is important to note that two vehicle crashes with SUVs aren’t the cause of most occupant deaths”, Institute President, Brian O’Neill points out. “People riding in cars are far more likely to be killed in single vehicle crashes than in collision with SUVs.”

The extent of the incompatibility between cars and SUVs is discussed as is the reaction of the automakers in addressing these incompatibilities. The automakers plans are outlined both for front-to-side impacts and in the front-to-front crash. This is being carried out in a number of phases. Institute President, Brian O’Neill, ends on an upbeat note: “The key is for automakers to follow through.” he says. “They’ve completed the agreement for Phase 1 of their commitment to improve vehicle compatibility in both front and side impacts. Now they need to focus just as hard on the second and subsequent phases. In the meantime the Federal Government is also conducting research on crash incompatibilities, so one way or another the cartoon image of predatory SUVs should recede. We’re going to have cars, SUVs and pick-ups that do a better job of protecting not only their own occupants but also people in the colliding cars.”

(IIHS is at: [www.iihs.org](http://www.iihs.org))

### From the Secretary General

Welcome to the June 2005 RCAR Newsletter with news from 11 of our 25 centres. There is news of safety initiatives from the USA and Germany, technical aspects of repair from Germany, Spain and Canada, management, strategic and public affairs from Spain, Canada, Argentina and the USA, and testing from Argentina. It adds up to a varied and substantial contribution from our research centres in saving lives and reducing injuries on the road and in controlling the cost of motor insurance. I thank all the contributors for sharing part of their work with us. We do not have a technical article in this edition but I have enclosed a paper from Thatcham on “*Trends in vehicle body construction and the potential implications for the motor insurance and repair industries*”.

In early May I was invited to join members of the RCAR Crash Test Working Group, which met for two days at Thatcham. I must report being very impressed at the work of this group, chaired by Hartmuth Wolff of AZT Germany. There has been a great deal of testing, discussion, thought and reflection in attempting to put together a new generation low speed test and at this meeting the focus was on the performance of bumpers and the testing protocols to address these and related matters. Since May further testing has taken place and the group meet again in late July at CESVIMAP, Avila, Spain, where they will attempt to refine outline testing protocols. Findings and recommendations will be presented at the forthcoming RCAR meeting in Milan in September. The group are shown in the photograph below.



I am currently working on the RCAR Conference programme with our hosts, CESTAR. I look forward to a worthwhile meeting with 23 of our 25 centres attending and also look forward to seeing you all again in Milan.

Best wishes,

Michael Smith

(From left to right) Masatoshi Saito (JKC), Andrew Miller (Thatcham), Joseph Nolan (IIHS), interpreter, José Conde (Cesvimap), Shigeyuki Yamaoka (JKC), Nadia Bestaoui (Cesvi France), Michael Smith (Secretary General), Hartmuth Wolff (AZT, WG Chairman), Matthew Avery (Thatcham), Adrian Lund (IIHS), Guillaume Langlade (Cesvi France), Jürgen Redlich (GDV).

## The RCAR Network

Of the 25 RCAR Centres in 18 countries, 22 have websites. Addresses are to be found on [www.rcar.org](http://www.rcar.org), but for convenience websites are also listed below.

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Lockeridge  
Marlborough, Wiltshire  
SN8 4EL United Kingdom

Phone: +44 1672 861072  
Fax: +44 870 705 8565  
Email: [michael.smith@rcar.org](mailto:michael.smith@rcar.org)

## Dates For Your Diary

**Annual RCAR Conference 2005** is to be held in Milan, Italy, 4-9 September 2005 and will be hosted by CESTAR.

**49th Annual Conference of the Association for the Advancement of Automotive Medicine (AAAM)** is to be held in Boston, Massachusetts, 11-14 September 2005. Details: [www.carcrash.org](http://www.carcrash.org)

**49th STAPP Car Crash Conference** is to be held in Washington DC, 9-11 November 2005. Details: [www.stapp.org](http://www.stapp.org)

**NACE 2005** is to be held in Las Vegas, Nevada, 2-5 November 2005. Details: [www.naceexpo.com](http://www.naceexpo.com).

**SAE 2006 World Congress** is to be held in Detroit, Michigan, 3-7 April 2006. Details: [www.sae.org/congress/2006](http://www.sae.org/congress/2006)

AZT  
Centro Zaragoza  
Cesvimap  
Cesvi Argentina  
Cesvi Brasil  
Cesvi Colombia  
Cesvi Mexico  
CESTAR Italy  
Folksam Auto  
ICBC  
IIHS  
JKC  
KART  
KTI  
Lansforsakringar  
MPI  
MRC Malaysia  
NRMA/IAG  
State Farm  
Tech-Cor  
Thatcham  
VIC/IBC

[www.allianz-azt.de](http://www.allianz-azt.de)  
[www.centro-zaragoza.com](http://www.centro-zaragoza.com)  
[www.cesvimap.com](http://www.cesvimap.com)  
[www.cesvi.com.ar](http://www.cesvi.com.ar)  
[www.cesvibrasil.br](http://www.cesvibrasil.br)  
[www.cesvicolombia.com](http://www.cesvicolombia.com)  
[www.cesvimexico.com.mx](http://www.cesvimexico.com.mx)  
[www.cestar.it](http://www.cestar.it)  
[www.folksamauto.com](http://www.folksamauto.com)  
[www.icbc.com](http://www.icbc.com)  
[www.highwaysafety.org](http://www.highwaysafety.org)  
[www.jikencenter.co.jp](http://www.jikencenter.co.jp)  
[www.kidi.co.kr](http://www.kidi.co.kr)  
[www.k-t-i.de](http://www.k-t-i.de)  
[www.lansforsakringar.se](http://www.lansforsakringar.se)  
[www.mpi.mb.ca](http://www.mpi.mb.ca)  
[www.e-mrc.com.my](http://www.e-mrc.com.my)  
[www.nrma.com.au](http://www.nrma.com.au)  
[www.statefarm.com](http://www.statefarm.com)  
[www.tech-cor.com](http://www.tech-cor.com)  
[www.thatcham.org](http://www.thatcham.org)  
[www.vicc.com](http://www.vicc.com)

## Euro NCAP

Euro NCAP released their latest results on 28 June as follows.

	Occupant	Child	Pedestrian
<b>Super-Minis</b>			
Peugeot 1007	5 Stars	3 Stars	2 Stars
Renault Cleo	5 Stars	4 Stars	1 Star
Citroën C1	4 Stars	3 Stars	2 Stars
Suzuki Swift	4 Stars	3 Stars	3 Stars
Smart Forfour	4 Stars	2 Stars	1 Stars

### Small Family Cars

Mercedes A-Class	5 Stars	4 Stars	2 Stars
Fiat Stilo	4 Stars	4 Stars	1 Star
Dacia Logan	3 Stars	3 Stars	1 Star

### Family Cars

BMW 3-Series	5 Stars	4 Stars	1 Star
VW Passat	5 Stars	4 Stars	2 Stars

### Executive Cars

Lexus GS 300	5 Stars	4 Stars	2 Stars
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### Small MPVs

Opel/Vauxhall Zafira	5 Stars	4 Stars	2 Stars
Honda FR-V	4 Stars	3 Stars	3 Stars

