



RCAR

Research Council for Automobile Repairs

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Newsletter

www.rcar.org

June 2000

News From The Centres

Allianz - Germany

Allianz joins forces with BMW.Williams Formula 1 and FIA (Fédération Internationale de l'Automobile) to sponsor the Formula 1 team and to co-operate in the transfer of racetrack safety to road users.



In Munich, Germany, on 19 May, Dr Schulte-Noelle, Director General of Allianz, said: "We have joined forces with our local companies and their strong brands to gear up for this development. Yesterday afternoon we signed a partnership contract with the Formula 1 Team, BMW.Williams F1, and signed a letter of intent with the FIA (Fédération Internationale de l'Automobile).

Our co-operation with these partners is designed for the long term:

- It includes global sponsoring activities that complement and support our international image campaign, "The power on your side", which has now been running for over a year. The focus will be on markets where the position of Allianz, its expertise in risk management and its image as an insurer are not as high profile as they are in Germany.
- The joint venture also envisages—and this is an innovation in Formula 1—a co-operation in risk management that is combined with knowledge transfer between the BMW.Williams F1 team and Allianz, and in particular with the Allianz Center for Technology. The objective is to co-operate on optimizing the high safety standards in Formula 1 and the industry, so that they can then be applied for the mutual benefit of the general public. In other words to create an added value for private and industrial customers.
- We will become the official partner for Williams in the area of financial services, eg insurance and asset management.
- Finally, we will also co-operate with FIA in the area of traffic safety. This will bring together the specific expertise of the Allianz Center for Technology and the International Automobile Fédération.

The challenges are many. Identification of risks before they arise, before they begin to exert an effect. We want to help prevent losses or at least limit their effects. We don't just want to be an insurer, but a developer of solutions for safety. That has been our ambition for decades.

Special points of interest:

- News from 12 RCAR Centres.
- RCAR Members at Berlin Motor Vehicle Insurance Conference.
- Analysis of Japanese Non-Life Insurance market..
- News Sources, RCAR Standard, and Forthcoming Events.
- Technical Data attached.

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News From The Centres

Allianz - Germany (continued)

On the same day in Brussels, Belgium, Max Mosley, FIA President, said:

“Today I am delighted to announce a unique new partnership. For the first time the FIA will work with a Formula One team and their sponsor to transfer Formula One expertise and experience for the benefit of the motoring public. It’s too early to go into any specific details but it is the objective of the new partnership to research and develop a Formula One inspired safety product which will break new ground in levels of road safety performance.

“A project group, comprising Professor Sid Watkins, FIA; David Ward, FIA; Peter Wright, FIA; Patrick Head, BMW Williams F1; Dr Dieter Anselm, Allianz, and Dr Lutz Cleemann, Allianz, will take this exciting project forward.

“The FIA’s objective in this partnership is to help reduce deaths and serious injuries on our roads. We feel that the unique experience brought to this project by each of the partners will help make a tangible contribution to achieving this goal.

“Later in the season the FIA will publish a new report which identifies in more detail the FIA’s strategy on track and road safety and the potential synergies between motorsport and motoring.”

(AZT is at azt.allianz.de)

CESVI - Argentina

A wealth of topics are covered in two issues of the Centre’s magazine. The May issue included Welding, Paint Preparation, Road Safety, Training Activities and an analysis of the Escort CLX 16V. Following on from an earlier interview with the After Sales Manager of Mercedes Benz in a previous issue, there is an interview with the After Sales Manager of Volkswagen, Argentina.

From 24 May the Centre featured in a TV programme called “Crash Test”. Further public relations activities included the sale of the Centre’s magazine via 1500 newsstands in the Buenos Aires area.

Preparations for the annual RCAR Conference are now taking shape. The Centre looks forward to welcoming RCAR Members to Buenos Aires in October.

(CESVI Argentina is at www.cesvi.com.ar)

IHS - USA

The Institute has issued three “Status Reports” since our last newsletter. As in the past the thrust of features is in the area of safety, and particularly this time with traffic rather than vehicle and occupant safety. The following topics are covered.

Nationwide take-up of automated traffic enforcement is reported, with widespread benefits and an interesting slant in a recent Virginia project where “the video-based system predicts potential red light violations and triggers an emergency extension of the red light signal for crossing traffic to help prevent collisions”.

Young drivers featured and, in particular, the requirement for 16 year olds in Connecticut to have a learner’s permit and therefore delay driving unsupervised, leading to a reduction in crash rates.

Drink driving was also covered (as in other recent RCAR publications—see Zaragoza Centre in March RCAR Newsletter). There were some interesting international comparisons between USA, UK, Canada and Australia.

There is a report of a study showing that roundabouts sharply reduce crashes and so proving that the British are not quite so eccentric (see details on www.tfhr.gov).

And there is a very timely reminder that in pedestrian crashes it is vehicle speed that matters most (see details on www.nhtsa.gov)

Other features cover vehicle theft, where Mercedes seemed to be most popular and material damage showing damage sustained in 5 mph crashes.

Finally under Occupant Safety the damage to Child Restraints following crashes is reviewed (see also ICBC front cover of March RCAR Newsletter).

(IHS is at www.highwaysafety.org)

News From The Centres

KART - Korea

A pendulum test system was recently installed in KART (see photo). The system was designed and constructed by MGA in USA and its maximum testing speed is 18 mph, which is considered to be a little higher than conventional pendulum test systems. The testing speed was elevated to allow more multiple use of the system.

The system's basic technical specifications are:

Pendulum Frame Dimensions:

Height 5.48 m (216 ins)

Length 7.03 m (277 ins)

Width 6.15 m (242 ins)

Vertical Adjustment Capacity:

0.35-5.30 m (14-21 ins)

Actual Top Speed:

29 kph (18 mph)

Barrier Equivalent Speed:

20.4 kph

Carriage Dimensions:

Height 0.61 m (24 ins)

Length 1.52 m (60 ins)

Width 1.80 m (71.1 ins)



Carriage Weight Adjustment Capacity: 600 kg—2,750 kg

Velocity Measurement System: Type - Portable Stand (optical emitter and detector), Accuracy - 0.01 msec

Instrumentation: Load Cell 2,500 lbs x 3 ea

(KART is at www.kidi.co.kr)

JKC - Japan

The recent Japan Non-Life Insurance Newsletter (www.sonpo.or.jp) contained two important automobile subjects, namely a Review of Compulsory Automobile Liability Insurance (CALI) and the Creation of an Automobile Theft Project Team by the Non-Life Association.

"Automobile Insurance In Japan" was also published in April 2000 by the Automobile Insurance Rating Organisation of Japan (AIRO), 9 Kanda-Nishikicho 1-Chome, Chiyoda-ku, Tokyo 101-0054, Japan.



JKC announced the retirement of Hiro Takeuchi, JKC President, on 16 June 2000, after providing leadership to the Japanese research centre for the past eight years. We wish Hiro a very pleasant retirement, and welcome the new President, Mr Yasuaki Kada, former managing director of the Tokio Marine & Fire Insurance Co Ltd. Mr Kada will attend the RCAR Conference in Buenos Aires in October.

The picture on the left shows Hiro Takeuchi with fellow JKC directors and the RCAR Secretary General, taken outside JKC headquarters, Chiba, in March of this year.

News From The Centres

CESVIMAP - Spain

CESVIMAP's latest magazine includes six main areas of interest: "The Future's Here Already" reviews new techniques and materials in vehicle body manufacture and looks at reductions in weight and cost which do not compromise safety or the environment; moving from solvent based paints to water based paints; analysis of the Alfa Romeo 156. Airbag Systems; a review of the Drester 1000 spray Gun Cleaner; the Würth DBS 350 pneumatic sander and lighting in the workplace.

CESVIMAP has also issued an information bulletin on Traffic Safety and a number of technical information sheets covering data for Volvo C70 Cabrio, water based paint, Sun Wheel alignment equipment, and data for the new Iveco Daily and Repair Manuals for Seat Ibiza '99, Iveco Daily and Daelim VS 125.

(CESVIMAP is at www.cesvimap.com)

CESVI Mexico

The Centre has carried out research on five models, namely Volkswagen Panel, Peugeot 206, Ford Focus, Mercedes Benz A Class and Volkswagen Golf. This research covers Crash Testing, Repair Manuals, Times and Manufacturers' Information. A number of Tool and Equipment Tests were carried out including Impact Gun IM5100, Drester Gun 8000 Cleaner and Walcom Gun FX91 Geo 24.



Training has seen great activity with over 30 courses for insurance companies and body shops. Information has been published in the form of Bulletins, Manuals and Training Videos. The photographs above show groups of trainees undergoing instruction in repair procedures and welding techniques.

(CESVI Mexico is at www.cesvimexico.com.mx)

NRMA - Australia

NRMA's drive to introduce an e-commerce approach to the motor claim handling process has taken a step closer with the introduction of On-line Repair Management Pilot working with a small group of repairers in the Canberra region.

The May 2000 edition of NRMA's "Impact" news outlines the development of the Pilot as the first stage of a "Virtual Claims Pocket" (VCP) - an NRMA initiative to introduce an e-commerce solution to the repair and claims management process. "Impact" - sent to all RCAR centres - outlines the process where the repairer, using digital images and an itemised quotation, transmits via the internet to NRMA's On-line Management Centre. A key feature is the creation of an Industry Standard that is currently not present in the USA and Europe.

This is an important area of interest for RCAR Members. We wish NRMA well and look forward to hearing how the project develops.

(NRMA is at www.nrma.com.au)

MPI - Canada

Manitoba Public Insurance's Research Department has carried out a number of projects. A Technical Bulletin on one very practical project, the Repair of Plastic Radiator Tanks, is attached to this newsletter. We thank Steve Hudey and Sid van Oeveren of MPI for sharing their work with us.

News From The Centres

KTI - Germany

KTI report on their assessment work into the re-usability of hydro-pneumatic impact absorbers with integrated crash box to maintain vehicle safety. The research was carried out on a Volkswagen New Beetle, build year 1998, and we thank Dipl.-Ing. Bernd Kindsvater and colleagues at KTI for sharing their work with us. The Technical Bulletin providing details of the project is attached.

(KTI is at www.k-t-i.de)

Thatcham - United Kingdom

The centre moves to new premises on 31 July 2000. The picture below shows the new research offices and workshop on the 9,000 square metre site. The move, the first in the thirty year old history of Thatcham, is to a site adjacent to the current premises.

The Crash Laboratory, currently nearing the end of an investment programme to extend the runway, improve lighting and incorporate a new dummy room, will remain on the present site. The Training Centre, also undergoing improvements to internal classrooms and instructional facilities, remains on its present site.



On more routine research matters, recent additions to Methods Manuals are Volkswagen Lupo 1999, Saab 9-5 1998, Ford Focus and Rover 25. Also a further 10 Technical Newsletters, "Equipment In Use at Thatcham", and Paint and Material Cost Guide April 2000, have been issued.

(Thatcham is at www.thatcham.org)

Centro Zaragoza - Spain

Centro Zaragoza has issued its magazine and circulated it to RCAR Members. Topics covered are: repair times and certification for automobile plastic parts; informed paint drying techniques (part three); anti-lock braking system ABS and Spanish national legislation update. Under the analysis heading, laminated glass repair, four wheel alignment and steering geometry and stop-by-step repair of plastics are covered.

To mark the 10th Anniversary of the Centre José Manuel Carcaño, Director of Centro Zaragoza, was interviewed (see pages 40 and 42 for photographs of our RCAR colleagues). During the interview he talks with pride of the achievements of the Centre in terms of establishing relationships within the industry providing services to insurers, vehicle testing and training. He affirms that the Centre's ultimate aim is to be self-funding and that it has moved closer to this goal in the last three years.

(Centro Zaragoza is at www.centro-zaragoza.com)

From The Secretary General

Welcome to the June 2000 RCAR Newsletter. In considering the format of the Newsletter, I was conscious that there seemed to be a reasonably positive reaction to that used in March and therefore I have adopted a similar approach to this June 2000 issue.

News From The Centres

"News from the Centres" again features 12 of our 23 centres. They report on a variety of issues. The range of activity is really impressive, with Formula 1 Motor Racing in Germany (and Worldwide), to roundabouts in the USA, digital imaging of material damage in Australia, and the installation of a new crash rig in Korea, as just some examples of this variety. There is of course a common thread running through the work of our RCAR Centres. This is the drive to reduce insurance claims costs.

Conference Season

Just recently I have attended a number of conferences. First I spent 3 days in Bath updating on whiplash. Whiplash 2000 covered medical, bio-mechanical and legal issues and once again I was struck by the different approach of the "engineers" and the medical profession. I am concerned that our medical colleagues may find it difficult to reach a consensus on diagnosis and treatment protocols. I then spent one day at the London Headquarters of my institution – the Mechanical Engineers. This was a session organised by the materials group on energy absorption in structures. It was a fascinating day and key energy absorption principles were illustrated over a range of industries. I was particularly interested in one presentation from the rail industry looking at the compatibility of carriages and the problem of override with different loadings and centres of gravity in a collision situation. The problem was identified following a tragic rail accident at Clapham Junction in South London some years ago. There seemed to be a direct linkage to our current problems of automotive compatibility between trucks and cars, and the large sports utility vehicles (SUVs) and cars. We seem to have learned little from serious accidents in other industries. The urgency of the compatibility problem was brought home to me since it formed part of the Vehicle Safety 2000 Conference I attended shortly afterwards. The conference was co-sponsored by AAAM, IRCOBI and Thatcham. RCAR Centre, IIHS, led on a series of vehicle compatibility papers.

The theme of these conferences is learning and networking, but I would add that getting away for a day or so

does help to focus more on the real issues facing us in our every day work.

Visit to Japan

You will see Hiro Takeuchi's article on the next page. I suppose the restructuring of financial services, and therefore insurance, is a world-wide trend. This is certainly the case in Europe, but in Japan restructuring follows closely on from de-regulation. The changes are, therefore, quite profound for a hitherto very stable industry in that country. I am most grateful that Mr Takeuchi has guided us through the maze.

Hiro Takeuchi leaves us this month (see under JKC on Page 3) and I am sure you will join me in wishing him well in his retirement. I believe we gain in RCAR from the Japanese insurance industry policy of appointing a very senior man to be President of JKC.

I was certainly very pleased to be able to spend a few days in Japan in late March this year. I visited the Jiken Centre and spent time with the Directors of the centre, touring their impressive facility. I visited Toyota in Nagoya and Nissan in Tokyo, discussing economic vehicle design and safety issues, and I travelled to Tsukuba to the Japan Automobile Research Institute (JARI), there discussing research into head and neck injury (whiplash) with Koshiro Ono. It was a very useful visit and I thank JKC for sponsoring me and for looking after me so well.

Research Areas

I have been asked for assistance during the last few months on a number of issues but one in particular is of note. This is the question of the repair of full frame vehicles or vehicle chassis. I received requests for data and repair procedures from Japan and the USA. The only repair procedures I was able to provide were those issued some time ago for Land Rover chassis repairs. I know the North American centres are reviewing this area, as indeed others may be also. However with the growth of SUVs in quite a few countries I suggest this as an area of material damage research that will provide a good economic return.

Finally I look forward to receiving details of your delegates and topics for the RCAR Conference to be held in Buenos Aires in October of this year, and I look forward to seeing you all there.

Best Wishes,

Michael Smith

RCAR Members at Motor Vehicle Insurance Conference in Berlin

RCAR Members from Germany, Canada, UK, Spain and USA were invited by Volkswagen AG to join the 5th International Handelsblatt Annual Conference in Berlin from 31 May to 1 June 2000. The conference focussed on Motor Insurance, covering Classification and Technical aspects, Calculation Processes and Claims Management. RCAR speakers were Dr Dieter Anselm, Allianz; Brian O'Neill, IIHS; Ken Roberts, Thatcham; Henning Norup, VICC; John Gane, ICBC; Dr Christian Deutscher, Allianz.

Some 250 European insurers, vehicle manufacturers and others attended the conference. It provided an excellent opportunity to address key issues in insurance in an influential setting. Thanks are due to Volkswagen for sponsoring the event and for their generosity and hospitality.

Analysis of Recent Non-Life Insurance Market in Japan

The Merger Problem



Hiro Takeuchi, until recently President, JKC, helps us to make sense of recent activity in the Japanese market place.

On 27 March this year, Mitsui Marine & Fire Insurance Co and Sumitomo Marine & Fire Insurance Co announced they will merge in October 2001, moving up the schedule earlier by six months.

A business plan for the new firm will make them rank No.1 in total assets and No.2 in premium revenues among Japanese casualty and property insurers. The plan will aim to increase their premium revenues to ¥1.24 trillion in fiscal 2004 from the two firms' combined premium revenues of ¥1.15 trillion in fiscal 1998. In achieving this objective and promoting their efficiency, the two insurers will cut a total of 390 offices (360 in Japan and 30 abroad) by the end of fiscal 2004 and also slash their combined workforce by 3,000 through attrition and transfer of excess workers to new businesses and affiliates.

Last autumn, Mitsui Marine & Fire Insurance Co announced a three-way consolidation plan with Nippon Fire & Marine Insurance Co and Koa Fire & Marine Insurance Co, but early February this year Mitsui backed off from the tie-up plan because of the other two firms' participation in a Sanwa Bank-led financial alliance and shortly after the backing off, to everyone's astonishment, Mitsui announced it would merge with Sumitomo Marine & Fire Insurance Co. Mitsui Marine & Fire belongs to the Mitsui corporate group which is led by Sakura Bank. The Mitsui-Sumitomo tie-up is widely seen to have been influenced by the last year's announcement of merger between Sakura and Sumitomo Banks. Sumitomo Bank leads the Sumitomo corporate group and is known to be very aggressive on business.

As a result, Nippon Fire and Koa Fire formally announced on 23 March this year that they have agreed to merge on 1 April 2001, and unveiled the details of their merger plan. Nippon and Koa plan to cut their combined workforce of 9,000 to 7,000 by the end of fiscal 2003, slash sales offices from 548 to 330, and reduce the number of claims-handling offices from 296 to 210. They will also cut overseas offices from 27 to 18.

Nippon Fire, the nation's sixth largest non-life insurance company, and Koa Fire, which ranks tenth, in premium revenues respectively, will boast the fifth largest on a combined basis, following the current industry leader, Tokio Marine & Fire Insurance Co., the planned Mitsui-Sumitomo group, Yasuda Fire & Marine Insurance Co. and another planned Chiyoda-Dai-Tokyo group.

Early March this year, another merger was announced by two mid-size non-life insurers, Chiyoda Fire & Marine Insurance Co. and Dai-Tokyo Fire & Marine Insurance Co., and they will merge in April 2001. Chiyoda and Dai-Tokyo will create a new firm, which ranks the nation's fourth largest premium revenues on a combined basis. Chiyoda is a Toyota Motor Corp-affiliated insurance company, nearly 50 percent of which is owned by Toyota. These two insurers' combined premium revenues rank third in automobile insurance alone and will try to gain a competitive edge by focussing more on the automobile insurance business. It seems to be sure that Toyota will buy shares of the merged company to the level of ownership at 33.4 percent or more in order to maintain association with Chiyoda and Dai-Tokyo and in part to fend off takeover bids from outsiders. Under Japanese law, having 33.4 percent stake in a firm gives the shareholder the right to veto proposals concerning company management.

The development of recent consolidation moves among non-life insurers comes after liberalization of insurance implemented on 1 July 1998, and are largely influenced by the mergers happening in Japanese financial world, which have led leading city banks into four groups. Now the focus is shifted onto the future actions of the remaining two giants, Tokio Marine & Fire Insurance Co, currently No.1 casualty and property insurer, and runner-up, Yasuda Fire & Marine Insurance Co, both of whom have so far stayed away from the merger rush. The final results will be seen in a few years and the number of Japanese non-life insurers might be down to a half.

For data see tables attached.

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News, News...

It is not the intention to provide the latest automotive or insurance industry news in this Newsletter. However there are some excellent sources available on the Web and members may find the following sites useful in staying in touch with the latest news.

www.ap.org
www.ft.com
www.smmr.co.uk
www.individual.com
www.automotive-online.co.uk
www.newspage.com
www.bloomberg.com
www.automotive.com
www.feer.com
www.jrm-software.co.uk
www.sillicon.com
www.koreaheadline.com
www.nytimes.com
www.slate.com
www.wired.com
cgi.zdnet.com
www.msnbc.com
www.cnn.com
www.interactive.wsi.com

Dates For Your Diary

Advanced Air Bag Technology in Frontal and Side Impacts (Sponsored by AAAM and organised by Prof D F Huelke, University of Michigan) - to be held at Southfield, Michigan, 27-28 June 2000.

Automechanika is to be held in Frankfurt on 6-10 September 2000.
Details: www.automechanika.com

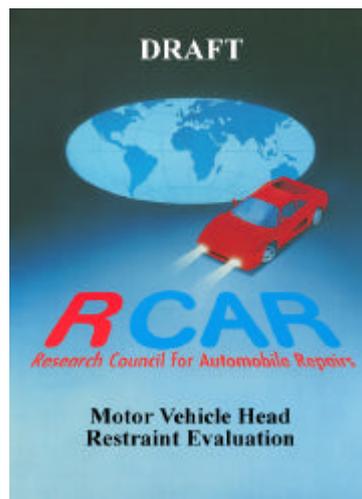
Association for the Advancement of Automotive Medicine (AAAM) 44th Annual Conference is to be held in Chicago on 2-4 October 2000. Details: www.carcrash.org.

Annual RCAR Conference 2000 is to be held in Buenos Aires on 22-27 October 2000 and will be hosted by Cesvi Argentina.

STAPP, 44th Stapp Car Crash Conference is to be held in Renaissance Waverly Hotel, Atlanta, Georgia, on 6-8 November 2000.

NACE International Autobody Congress & Exposition is to be held at the Orange County Convention Centre, Orlando, Florida, 7-10 December 2000.
Details: www.nace-99.com/main2000.htm.

RCAR Standard Nears Completion



The Draft RCAR Standard for the evaluation of vehicle head restraint geometry at present being put together by ICBC, Thatcham and IIHS, is nearing completion. A meeting will be held in USA in July to agree the final draft before it is sent out to RCAR members for their consideration and comment. It is planned that this should happen in August and that it will be discussed and tabled at the October RCAR conference in Buenos Aires. The Draft Standard will also be put on the web (www.rcar.org/papers) later in the year.

Honda "Autopilot" Cleared for Road Test

Following on from the article on ITS and Telematics in the last RCAR Newsletter, members will be interested to note that Honda has gained approval in Japan for public road testing of its prototype automated vehicle control system.

The Honda Intelligent Driver Support System (HIDS) can detect when there is a vehicle ahead and control the HIDS car's speed to maintain a safe pursuit distance - it can also detect lane markings in order to keep the car in lane.

Honda has been developing the system for some time and joins other manufacturers in seeking to gain operational experience with the use of ITS. The system layout is shown below - a fuller description is attached.

