

Y O U N G P E O P L E

Citroën heads north

S P O R T

*Pierre Lartigue:
interview with a champion*

P R O D U C T

Concept car: Xanae

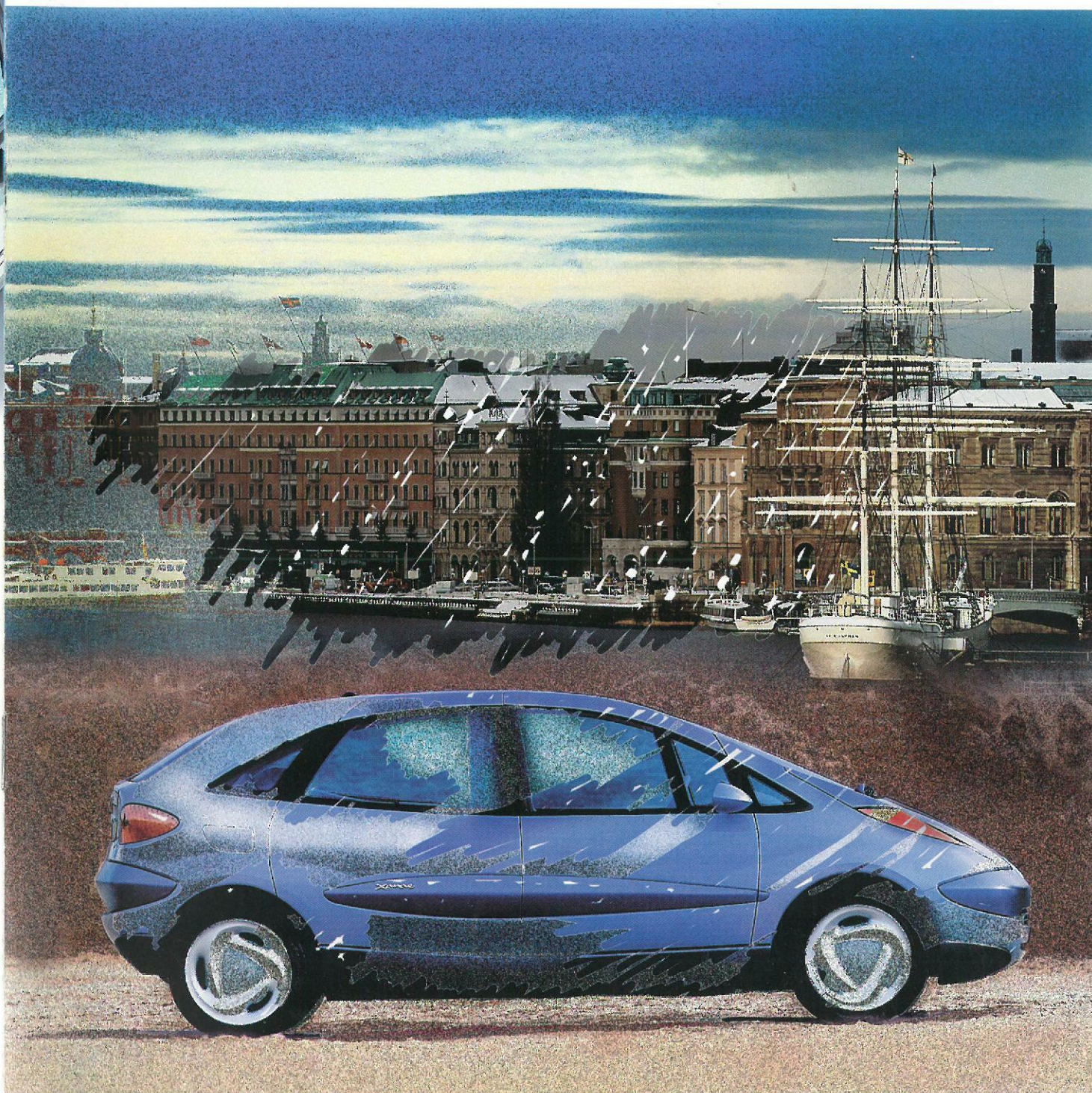
S P O T L I G H T

Scemm: the key to competitiveness

double chevron



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editorial

Making dreams come true

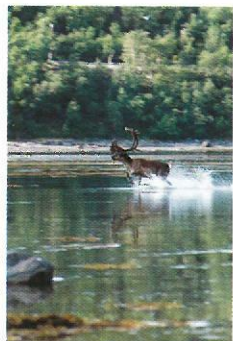
The gap that separates childhood from adulthood is a narrow one. Although children live in a world of imagination while adults must deal with reality, each is naturally drawn to the other. The child seeks to mimic a world that he believes to be boundless, while the adult wishes he could return to the days of innocence, when anything - or almost anything - seemed possible.

Double Chevron decided to bring dreams and reality together as another year draws to a close.

For the second year in a row Pierre Lartigue has won the World Cross-Country Rally Cup in his Citroën Rallye Raid. It seems like only yesterday that he was driving around the fields on his father's tractor! When we were children, most of us had to make do with toy cars, dreaming all the while about the real thing. Today, a French company, Norev, makes miniature cars that are good enough to be real! Play

is usually considered to be a childhood activity, but Citroën sets great store by games, which it uses to train its employees. Looking into the future, the Marque has dreamed up the ideal prototype: the Xanae. And with the XM 2.5 Turbo Diesel Exclusive, it has made motorists' dreams come true.

Yes, to succeed in the automotive world, you have to believe in your



dreams. That is something with which Philippe Guyard, director of Citroën's Swedish subsidiary, and Gérard Maitre, managing director of Citer, would certainly

agree. To give substance to its dreams, Citroën relies on SCEMM to provide the nuts and bolts. But if you still don't believe that dreams and reality can live side by side, prepare to be proved wrong: the participants in the Paris-Nordkapp rally actually saw Father Christmas's house! We wish you all a Happy New Year and hope that in 1995 you will discover all that Citroën can do for you.



ERIC EHRSAM
DIRECTOR OF CORPORATE COMMUNICATIONS

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His dream is to open a driving school one day. But for the time being, Pierre Lartigue still gets a thrill out of racing.



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Unveiled at the 1994 Paris Motor Show, Xanae was a major hit with its appealing and innovative design.



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A replica perfect in shape and style... this is the golden rule for Norev with its carefully crafted miniature automobiles.



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Citroën heads north

An unforgettable auto-photo rally vividly described by the winner of the competition organized by Citroën's Corporate Communications Division.



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Scemm : the key to competitiveness

A Citroën subsidiary in the city of Saint-Etienne, Scemm designs and manufactures the machines and tools used to produce parts for the Group.



Pioneers in the Czech Republic and Slovakia

Sales are rocketing in the Czech Republic and Slovakia where Citroën opened a sales office in spring 1994. Sales have topped 1,100 compared with 357 in 1993. Some 500 vehicles were sold as a result of a promotion - advertised by posters all over Prague - in which the C15 was offered at an interest rate of 0%. At the same time, Citroën is setting up a network which should include some 20 dealers and 30 resellers by late 1995.

Hungary: off to a good start

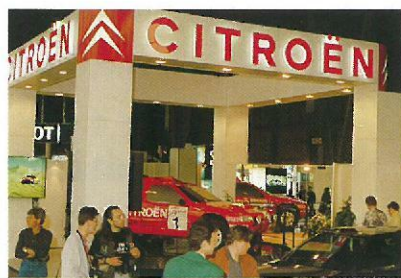
Citroën's Hungarian subsidiary opened in February 1994 and is forging ahead on all fronts. The first showrooms were inaugurated in October; the subsidiary's 0% interest leasing programme on the C15 - an innovation in a country where inflation is consistently high - chalked up 100 sales in just one month; and the marque is sponsoring the leading first division football team, a great way to gain media exposure in a country where football is the national sport.

With this dynamic approach, the subsidiary should have no trouble reaching its target of 1,300 cars sold by 1995.

Big news in Poland

Citroën announced its arrival in Poland with an attention-grabbing poster display campaign that won it a communications award.

Now, Citroën Polska is starting to pick up speed. Barely one year after



the opening, the situation looks good. The marque has a network of fifteen dealers and approximately twenty resellers, total sales of 1,100 vehicles and an industrial co-operation agreement with IFO, the largest local manufacturer, and its subsidiary NYSA to assemble the C15. Further highlights were Pierre Lartigue's visit to the Poznan Motor Show and the success of "Citroën Invasion", an operation in which all the vehicles in the range were exhibited in a tent for two weekends in a row in Warsaw's main square. A full 100 vehicles were sold as a result of this campaign. The network is doing well and aims to sell 1,800 vehicles in 1995, with an additional 1,000 C15s.

Education and information

Citroën recently invited sixteen car maintenance inspectors and specialists to test the new SC.CAR roll-limitation system fitted on the Xantia Activa. Twelve other specialists were invited to test the multi-plexed servo-systems on the XM.

The marque has also trained 22 sales instructors to teach Citroën's sales methods and invited 50 high school teachers and guidance counsellors to the 13th annual exhibition on the automotive business. These are just a few of the marque's ongoing activities.





**Citroën SM:
Che bella macchina!**

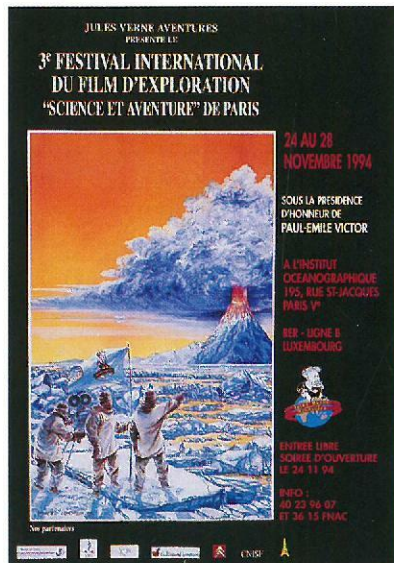
On 1 and 2 October, the members of Club SM Italia met at the military port of Spezia in southern Italy. The star of the annual get-together? The SM, naturally! Born of an agreement signed with Maserati in 1968, the luxurious coupe combines beauty, safety, comfort and performance. And what's more age has not touched it. The weekend was also a chance for the Italian club to celebrate its links with the SM Club de France (BP 22, F-95530 La Frette-sur-Seine, tel: (33-1) 34 50 01 98).

Citroën under the lights

For the second year running, Citroën was a partner in the 20th annual American film festival in Deauville, which ran from 2 to 11 September. The stars were chauffeured around the city in XMs, Xantias or Evasions while cinema buffs - and local residents - had an opportunity to admire the XMs and Evasions displayed in strategic locations around the city.



**Evasion
and Exploration**



The third International Exploration Film Festival got under way on 24 November and ran to 28 November in Paris. The event was presided by Paul-Emile Victor. The festival was sponsored by Georges de Caunes, Jean-François Deniau, Jean-Louis Etienne, Pierre-Dominique Gaisseau, Commander Marcus, Hubert Reeves and Jean Tiberi. As partner in the event, Citroën lent organisers six Evasions, and presented its film *La Croisière Jaune* outside competition. On 28 November, Eric Ehrsam, Communications Director at Citroën presented the grand prize voted by the jury presided by the writer Jacques Lanzmann.

**The trials and tribulations
of collectors in Asia**

Aline, Christophe, Matthieu and Thierry have arrived in Asia on the next stage of their search for unusual collections. Their Citroën C25 was not allowed to enter China and has continued the trip alone towards Australia. So our collectors continued their search using other means of transportation. In Hong Kong, they visited a temple where a collector had gathered almost 12,800 statuettes of Buddha, all covered in gold. While they did not come across any collectors in China or Vietnam, Thailand's collectors more than made up for it. One business man had a collection of snake skins, carts, bottles - and other things - in two buildings and a field. They also met a captain of industry who is so protective of his collection of 150 rare birds that he refused to have them photographed. The group also met a collector of kites who had designed nearly half of his 250 flying machines. Next stop Australia.

**Citroën awarded
for social innovation**

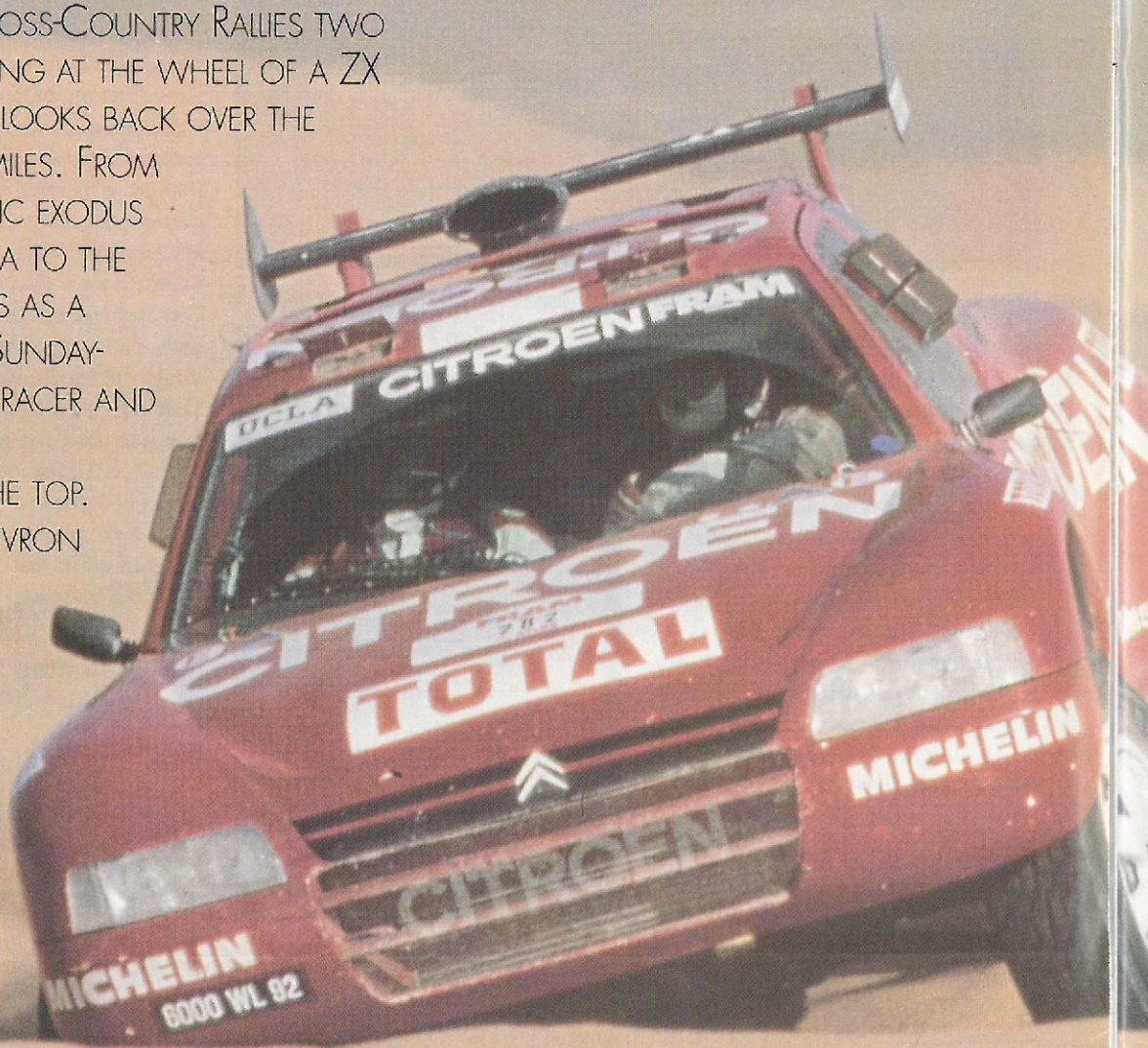
François Cusey, director of Citroën's human resources division, accepted one of six rewards for social innovation - "Distinctions de l'Innovation Sociale" - from the French Minister of Labour, Michel Giraud. The marque won the award for the training programme set up at the Caen production facility. The in-house policy of promotion through training was set up in 1992 and aims to move Caen personnel up through the ranks over a period of three years. A total 96,000 hours of training will be given to the 200 trainees involved in the programme.



Pierre Lartigue

Interview with

PIERRE LARTIGUE, WINNER OF THE WORLD CUP FOR CROSS-COUNTRY RALLIES TWO YEARS RUNNING AT THE WHEEL OF A ZX RALLYE RAID, LOOKS BACK OVER THE YEARS AND MILES. FROM THE TRAUMATIC EXODUS FROM ALGERIA TO THE TOUGH YEARS AS A PROMISING SUNDAY-AFTERNOON RACER AND THE THRILL OF REACHING THE TOP. DOUBLE CHEVRON INTERVIEWED THE CHAMPION.



Double Chevron: Pierre Lartigue, you were born on 22 October 1948 in Mostaganem, Algeria.

Pierre Lartigue: Yes, I grew up on a farm. My parents had 100 hectares of vineyards and 20 hectares of orange groves. Already at the age of four, I rode on my father's lap and steered his tractor. Two years later, I was driving it alone, hanging onto the steering wheel to reach the pedals and change gears. At eight, I was working on the farm myself, and used to take the labourers out to the vineyards in a wagon behind the tractor. In order to drive our

2 CV, I had to sit on a milk crate. Otherwise, I would have had to watch the road through the air vent! I didn't take any formal lessons. I learned how to drive on my own. By 1957, I was zipping around in my dad's Beaulieu.

D.C.: Who were your idols as a teenager?

P.L.: We were pretty isolated at the time. But I remember one of my uncles used to read *Auto-Journal*. And the father of one of my friends, who had a driving school in Mostaganem, used to take part in regional car rallies in his

4 CV, and then in a Dauphine. I was interested in that, but I was really fascinated by the huge trucks owned by one of our neighbours. He used them to cross the desert.

D.C.: Then you had to leave Algeria?

P.L.: Yes, my father died and we had to sell the farm to the local co-operative.

D.C.: Where did you go?

P.L.: My mother moved to Antibes in the south of France, but I was sent to a Catholic boarding school in Nice to learn boilermaking and

th a champion

coachwork. I was always getting into fights because the other boys used to make fun of me for being born in Algeria. So I spent most of my Sundays in detention. Four years later, in 1967, I graduated with a training certificate and a very tough hide.

D.C.: How did your military service go?

P.L.: As a war orphan, I was given permission to do my sixteen months' service in Nice as a coach builder. I used the time to get every driver's licence possible, except for the passenger car licence, which I got the day after I turned eighteen. I had taken four half-hour driving lessons, just so I could say I'd taken a driver's training course. While I was in the Army, I took part in my first car rally with my brother in June 1969. We had a Mini Cooper 1100 that a girlfriend of his had lent us. We didn't even know that we needed to change the tyres and brake pads! So I finished the last five special events using the hand brake!

D.C.: What happened after you'd finished your military service?

P.L.: Well, there weren't many jobs available in my line of work, so I went to work for a cousin in Perpignan. He owned a fleet of trucks and was looking for a driver. For the first year, I delivered fresh produce to Paris and Reims three times a fortnight. Then, I went to Nice and drove to Italy twice a week for a transport company. I did that for 13 years.

D.C.: Had you given up on racing?

P.L.: Not at all. In 1972, I bought a R12 Gordini, since I couldn't buy the BMW I'd always dreamed of. I loved the R12 Coupé on sight with its 4L seats. But buying that car was probably the biggest mistake I've ever made, because I thought it was a good replace-

ment for the R8 Gordini. Unfortunately, it wasn't. Strangely enough, I still managed to finish second overall in a rally run in the snow. That really gave my confidence a boost.

D.C.: How did you manage to balance your work and your passion for racing?

P.L.: For every two runs I made to Italy, I was given a day off. So, I collected those days and used them for racing.

D.C.: You must have been in great shape!

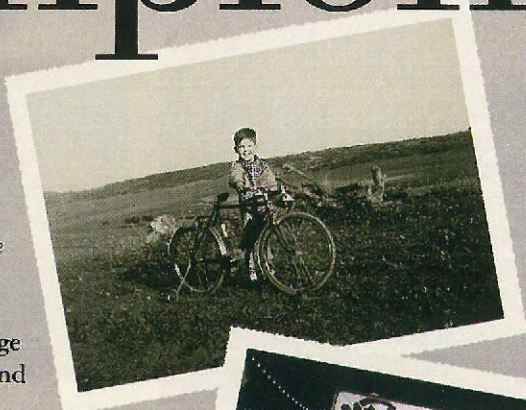
P.L.: Actually, I was quite thin at the time. Every week I loaded 40 tonnes of sausages and cheese onto my truck - alone. I wouldn't trust anyone else to do it because I was afraid that I'd find everything jumbled together. Since I made deliveries to 70 customers every week, I couldn't take that risk. Other than minor fender benders in town with cars that were where they shouldn't have been, I never had an accident. My trailer had wide axles which made it particularly stable, so I used to take risks. The Italians thought I was out of my mind when I purposely spun the trailer round on one occasion in a snow-covered parking lot in Parma.

D.C.: How long did you drive your R12 Gordini?

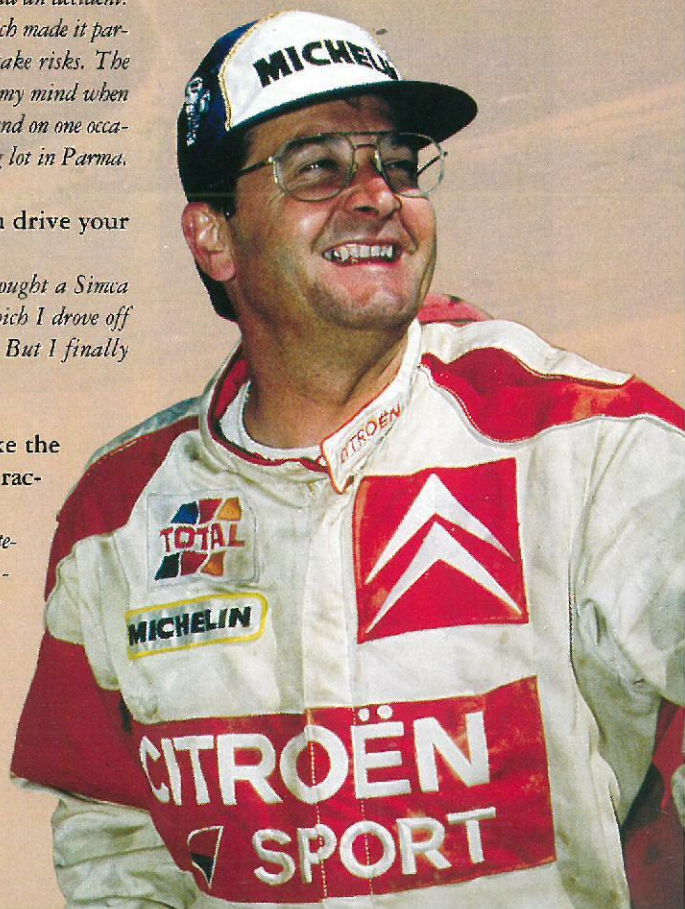
P.L.: For one year. Then I bought a Simca Rallye 2. I kept that car, which I drove off track as well, for two years. But I finally decided to move on.

D.C.: How did you make the transition to professional racing?

P.L.: I was in Nice for the "Côte-Côte" rally (Côte d'Ivoire - Riviera) and I met Bob Neyret who managed a number of women drivers, including



*Rallye des roses en 1969 à Antibes sur la Mini Cooper d'une copine de mon frère**



* At the Roses Rally in Antibes, back in 1969. The Mini Cooper belonged to my brother's friend.

PIERRE LARTIGUE - PUSHING THE LIMITS

Jean-Claude Vaucard, former member of the Peugeot Sport team, is famous for his exploits with the 205 in the World Rally Championship and the 405 in the desert. He is used to working with champions such as Vatanen and Salonen. Today, he heads the Chassis and Driving section at Citroën Sport. He has a clear opinion on the qualities of Pierre Lartigue: "He is an extremely sensitive driver.

Overtime, we have developed our own jargon and that helps us to work together efficiently. He helps us to adjust the car's vertical balance and to correct over- and under-steering. Despite his laid-back appearance, Pierre Lartigue loves test driving and knows absolutely everything about his ZX."

Alain Nay has been official team leader for Pierre Lartigue's car almost since Lartigue joined Citroën. He confirms Vaucard's opinion: "Lartigue can feel even the slightest adjustment. He is extremely exacting." What's more, he has become a member of the technical team. "When Pierre takes out the ZX, he trusts us, just like we trust him. He hates to damage his car. And when we have to do work to a tight deadline, he doesn't put any additional pressure on us."



*Aussi incroyable que cela puisse paraître, je n'ai pas vu ce bateau au sommet de la dune!**

Michèle Mouton. He sold me a 504, which I then drove during special events for 100,000 km. In 1978, I finished 15th in the Acropole, with two tyres, a few cans of oil and a tool chest in the boot. Then, in 1981, I chalked up the best time in my class in the Mille Pistes rally at the wheel of a group 2 104 ZS equipped with a compressor. That put me on the cover of Auto-Hebdo and Echappement

trendy Paris nightclub offered me a Range Rover and asked me to participate in the Dakar with one of their bartenders as navigator. We came in first in the category of individual participants and fourth overall. The next year, with Butagaz as my sponsor, we came in first in our class again and third overall.

D.C.: So your dream was starting to come true.

P.L.: Yes. I was contacted by Jean-Claude Poch, an importer for Lada, for what I thought was a simple test drive. But in August of 1983, I became a professional driver and drove in the Pharaohs' rally. Over a period of four years, I won the Tunisia rally, the Baja Aragon, and the Algeria rally. One of my partners during that time was Bernard Giroux. In 1989, when the Niva programme ended, I joined up with Mitsubishi, where I developed the "independent four-wheel drive", and I won the Atlas and the Tunisia rallies. At that time, I was the only person who posed any kind of threat to Vatanen and his Peugeot. Then Guy Fréguelin signed me up with Citroën. And you know the rest...



magazines. After that, things really started to happen. One night when I arrived from Italy at two in the morning, Club 78, a very

D.C.: Tell us about when you met Michel Perin.

P.L.: He was forced on me for the trials at Djebel in 1992. So our first meeting was not what you'd call friendly. Guy Fréguelin recruited

* Incredible as it may seem, I really didn't notice that boat on the top of the dune!

MEETING THE FANS AT THE 1994 PARIS MOTOR SHOW



Pierre Lartigue and Michel Perin were the star attractions at the Citroën stand, which was engulfed by crowds of fans. One of them, 17-year old Osvaldo, clutches his precious autographed poster and confides that he would just love to be in the shoes of "his" champions. A pretty young girl standing in the crowd admits that she really is not very interested in racing, but plans to give the poster to her father who is one of the duo's fans. "Sometimes the posters disappear into the crowd before I've even finished signing my name," laughs Pierre Lartigue. Still glowing from their recent World Championship win, the duo sign over a thousand posters

amidst the heat and noise of the show. Yet another exploit for Lartigue and Perin. "People come to see us for all kinds of different reasons," they explain. "Some just want to see us, and talk to us, while others aren't quite sure why they've come, but they're just happy to be there. We meet all kinds of different people at this sort of event. One guy, who works for Renault, was just so happy to see a French carmaker come out on top of all the rest. One little handicapped boy in a wheelchair, Nicolas, was overjoyed with the autographs we gave him. His father quickly told us that his son loves anything that goes fast. We may even have met our future replacement: a 24-year old dentist from Bordeaux who is seriously planning to run the Dakar one day with a friend who is a mechanic."

him while Michel was co-pilot for François Chatriot in the French rally championship. It didn't take me long to see how good he was. After that, we became really good friends.

D.C.: Over the past ten years, you've had a bird's-eye view of all the changes in car rallies.

P.L.: *The sport has become too expensive. In 1973, my Simca Rallye 2 cost me FF 13,545.*



That was right at the end of the time when you could have fun driving without spending too much money. Today, the cheapest production car for rallying is still the AX. We have to help young people who want to get into the sport.

D.C.: With two World Cup wins already under your belt, what keeps you going?

P.L.: *The pleasure of driving. I love to wrestle with my car. I'd rather drive a really technical Baja with long straight stretches than a Dakar. It's a sort of game where you have to drive as fast and as far as you can without destroying your car.*

D.C.: Have you thought of changing jobs?

P.L.: *My dream is to open a racing school. But I can't do that as long as I'm still competing. If that kind of thing is going to work, you have to give it 100%.*

D.C.: How do you unwind?

P.L.: *I like to go mountain-biking. There's just enough danger in riding the back roads of Nice to keep me interested. And I like to walk.*

D.C.: And are you a strict father?

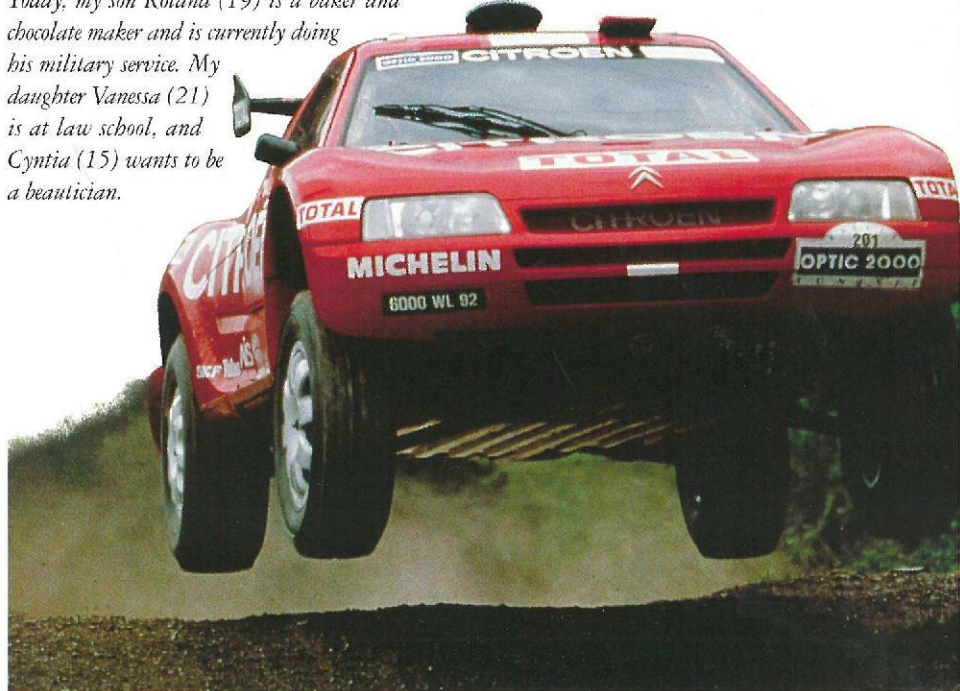
P.L.: *Unfortunately, I'm rarely at home. Basically, my wife has raised our children. They used to come to me when they had to have a paper signed because of bad marks in school. Today, my son Roland (19) is a baker and chocolate maker and is currently doing his military service. My daughter Vanessa (21) is at law school, and Cyntia (15) wants to be a beautician.*

D.C.: Would you accept the term of "test driver" in the sense of "test pilot"?

P.L.: *Well, we are like test pilots in that we push components and materials to the limit so that we can be sure we're safe during a race. But you can't think of the dangers. In any case, it's safer to be on the ground than in the air.*

D.C.: Is the new ZX Evolution revolutionary?

P.L.: *There's more clearance between the bodywork and axle and we go faster over difficult stretches. We used to do a high-wire act on the Paris-Le Cap rally, flying into the air. Now we can go over the most awesome trenches at lightning speeds without sustaining any damage. The ZX is more comfortable, more reassuring.*



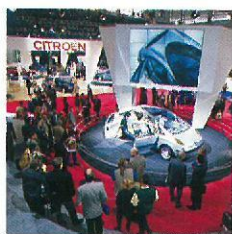
Concept car

Xanae

THE XANAЕ WAS WITHOUT A DOUBT THE STAR OF THE 1994 PARIS MOTOR SHOW. CITROËN'S FULLY OPERATIONAL CONCEPT CAR STOLE THE SHOW AS JOURNALISTS AND VISITORS ALIKE FLOCKED TO WITNESS ITS INNOVATIVE STYLE.

THE XANAЕ OPENS THE WAY TO THE TWENTY-FIRST CENTURY AND EXPLORES NEW CONCEPTS WHICH ARE LIKELY TO BECOME STANDARD FEATURES IN THE NEAR FUTURE.

During the entire ten days of the motorshow, the Xanae forum at the Citroën stand was a beehive of activ-



ity. Admirers came in droves to sit on the steps of the forum, admire the Xanae and daydream. The Xanae was displayed on a rotating platform and highlighted by a light show, which showed off its special pearlescent paint and underscored its comfortable and user-friendly style. The car definitely accomplished its mission: to provide a forum for discussion with users in order to build a better car for tomorrow.

When Citroën opens the lines of communication

The Xanae owes its existence to the studies performed by the Automotive Research & Technology Department and the Marketing Plan and Programmes Division and to the imagination of the

stylists at Citroën's Creative Design Centre. It is a concrete and realistic proposition. "We were looking for a new type of compact car, a short vehicle that would offer comfortable seating for five people. We wanted something new - something between a traditional car and a people-carrier. On the one hand, you have people-carriers, which are comfortable but nevertheless reminiscent of utility vehicles. On the other, you have conventional cars, which are definitely more stylish but somewhat less comfortable and roomy. And yet, car users want comfort and style. So,



we wanted to create something that was totally new: a cross between a saloon and a people-carrier," explains Constant Violini, Future Products manager at the Marketing Plan



Programmes division. A team of thirty specialists in a variety of fields, i.e. marketing, interior and exterior design, equipment, electrical systems and electronics, worked together under the authority of Luc Epron for six months to make the Xanae a fully operational vehicle. Says Violini: "For our car to be credible and taken seriously, it had to be made of



GLOBAL SAFETY

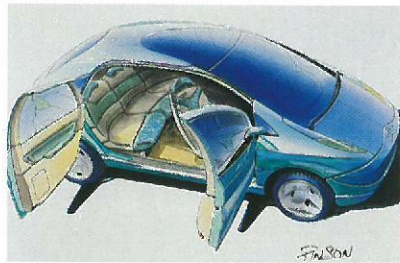
In addition to its flat, raised closed-section floor, which guarantees effective protection against side impact, the Xanae has been engineered around the Xantia's robust subframe. The Xanae is equipped with Hydractive II, Citroën's latest suspension system, as well as the marque's new active roll-limitation suspension system (SC.CAR). These features work together to give the Xanae dynamic comfort and a high degree of global safety.

SC.CAR gives each of the five passengers a pleasant and comfortable ride.

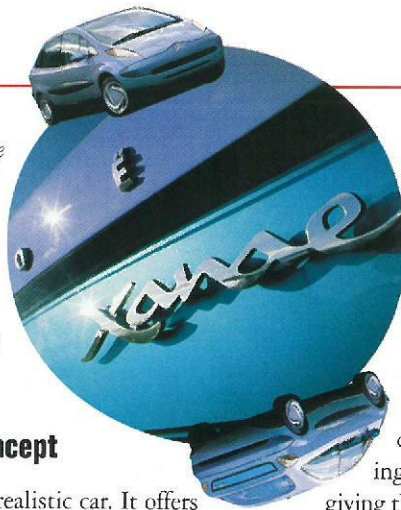
Whatever the attitude of the vehicle, braking, grip, wheel control and traction are optimized. When cornering, man and machine are in perfect harmony thanks to the vehicle's roll correction system, which relies on centrifugal force to keep the car from wallowing as it negotiates bends. The car's occupants discover an entirely new sensation that blends ride comfort with driving pleasure.

The Xanae is equipped with a 2 litre, 16 V engine delivering 135 bhp.

The vehicle's automatic transmission system is electronically controlled from a remote satellite located near the steering wheel.



steel and offer the same level of finish as a production car. And obviously, it had to run. This was imperative if we were to sustain a dialogue with the user".



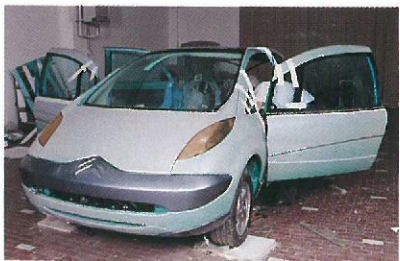
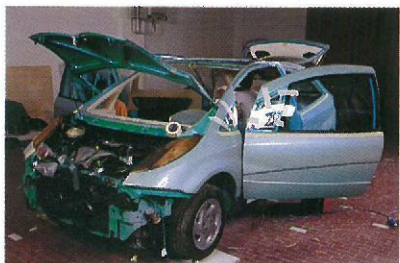
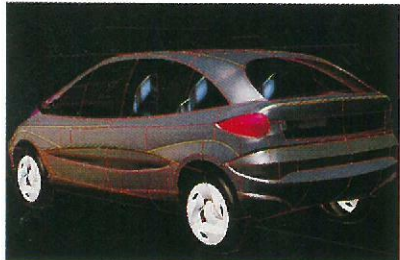
the Xanae contains the originally shaped headlamp units equipped with discharge bulbs and optical fibre connections. The front wings of the vehicle are designed to angle inwards towards the centre of the body, creating harmonious curves and

An original concept

So, the Xanae is a realistic car. It offers maximum comfort and global safety packed into a compact frame (4.20 metres long). It also has a strong personality, expressed through fun styling that breaks with recent bio-design trends, a personality that reminds you of an old and much-loved friend. Most importantly, however, the Xanae's exterior has been designed to improve driving pleasure while, at the same time, being firmly innovative. For this reason, the Xanae has large windows. Generously proportioned, the windscreen sweeps up into the roof to form an arc, thereby increasing the amount of light entering the cabin of the vehicle. The interior concept and exterior styling meet in the side doors, which open fore-and-aft with no central pillar on the right-hand side offering easy access. The front end of

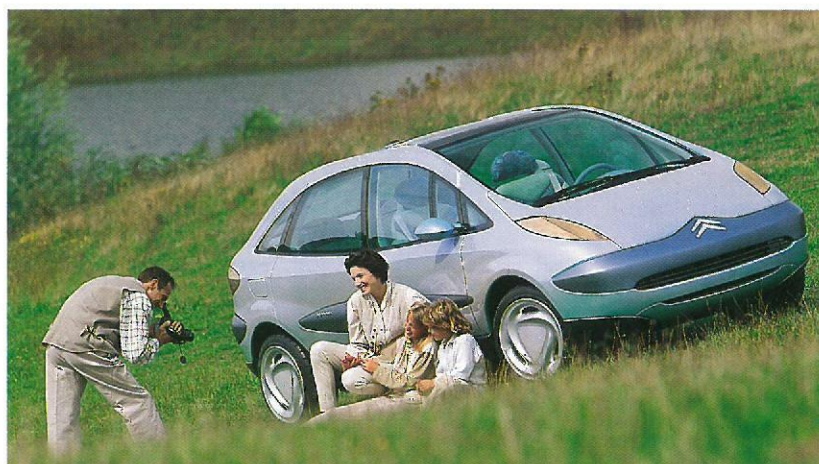
giving the Xanae a feel of robustness as well as emphasizing its forceful personality.

The front section of the bonnet is strongly and distinctively contoured. And to emphasise the new silhouette and shape, the Xanae has been painted with a special pearlescent paint. Thus, the Xanae brings together a host of innovations in terms of styling, roadholding, user-friendliness, ease of use, global safety and comfort.

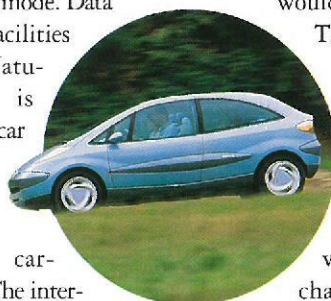


Comfort above all

The Xanae is ideally sized. With an overall length of 4.20m, the Xanae is midway between the ZX and the Xantia while in terms of height (1.55m), it is between the Xantia and the Evasion. In terms of length, it is equivalent to the XM. The designers at the Citroën Creative Design Centre used these data to create the car's interior with a single aim: to give occupants optimum comfort and space. Visitors to the Paris Motor Show were able to see for themselves that that goal has been met. The dashboard frees up a lot of cabin space and is truly user-friendly. The control panel can be raised and lowered along with the steering column and the instrument cluster is located to the right of the steering wheel. Information essential for driving is displayed at the base of the windscreen, making



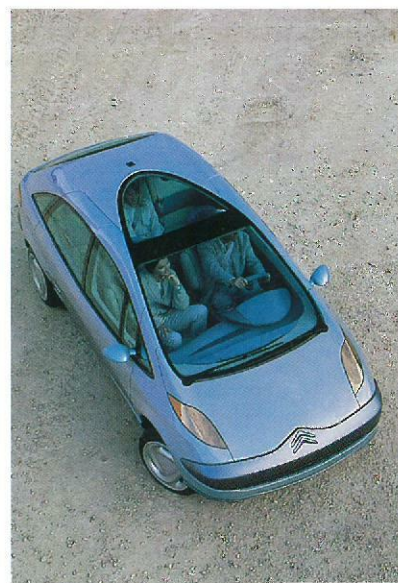
it easier to read quickly. The two LCD data screens display vehicle speed, radio stations and frequencies, and telephone numbers in carphone mode. Data selection and entry facilities are also included. Naturally, the Xanae is equipped with an in-car entertainment system complete with CD player and hands-free car-



phone. The interior space has been designed to make the car comfortable for family use. The result is a highly modular lay-

out. The rear seat curves around inside the cabin, allowing the three rear passengers to enjoy the same comfort as they would in their own living room.

The cabin is also highly versatile, with removable central and right seats. Moreover, the front seats swivel in order to make the car even more cosy and user-friendly. To make this comfort and versatility possible, the gear-change lever of the Xanae is located on the steering wheel in order to free the space between the front seats and make full use of the possibilities offered by the swivelling seats. The all-embracing feeling of comfort is further emphasised by the choice of materials and trim.



Citroën, star of the 1994 Paris Motor Show

The 1994 Paris Motor Show ran from 6 - 16 October at the Porte de Versailles exhibition centre. With 180,000 square meters, 881 marques and almost one million visitors, the show confirmed the truth of its slogan "on n'arrête pas un rêve qui marche" (you can't stop a dream on the move). The French stands were the main focus of the show, with Citroën attracting the most attention. The marque was showing 22 vehicles,



a concept car and a research vehicle, the AX Eco. The Citroën stand was designed around the theme of communication with three main strategies: stronger corporate identity, a broader offering and total safety

through technological progress. Both the passenger car and utility vehicle stands displayed the message "Discover what Citroën can do for you". Last, visitors were able to try out eighty vehicles at the test centre of the Paris Issy-Les-Moulineaux heliport. By the end of the show, the number of test drives totalled 2,500. The Xantia and Evasion accounted for a full 55% of tests. The Citroën hostesses and sales team took 550 firm reservations, 65% of which were for diesel vehicles. In all, 14,000 contacts were registered at the show and 32 tonnes of documentation distributed.

Prestige, a vintage range

Presented at the 1994 Paris Motor Show, the Prestige series encompasses the Citroën AX and ZX, 3- and 5-door models, the Xantia, the XM and the Evasion. While retaining the family spirit and style, these personalized series are characterized by a specific external and internal design. The Citroën signature embroidered across the top of each seat has all the style and allure of a vintage production. Moreover, on all cars, the grey velvet upholstery has a transversal insert of the same colour as the bodywork.

The colour Amazon Green was launched as part of this series but the number of bodywork colours differs according to the type of vehicle: Birman Blue, Griotte Red, Banquise White, Stratos Blue.



Citroën XM Alto, the smart car

Over the past eight years, PSA Peugeot Citroën has been involved in the European research programme Prometheus, which seeks to improve safety and traffic flows through the incorporation of electronic functions. Innovation and realism were the key concepts of the studies undertaken by the Group as part of this programme. On October 18, PSA Peugeot Citroën presented 12 prototypes and a concept car, the Citroën XM Alto (Advanced Leading Technology Onboard).

The XM Alto is a smart car that addresses five research topics in the field of onboard electronic technology: night vision, lane stability, co-operative driving, vehicle monitoring and interactive guidance systems. The objective is to provide



information on the environment as well as decision support data, without taking ultimate responsibility away from the driver.

Citroën carries off four prizes at the Birmingham Motor Show

The British organization IBCAM awarded its 1994 automotive design prizes at the Birmingham Motor Show. Citroën won four awards: the concept car prize with the Xanae, the fleet car prize for vehicles of under £12,500 with the ZX Avantage Entreprise, the people-carrier prize for vehicles of more than £20,000 with the Evasion and the utility vehicles prize for vehicles of less than £15,000 with the Jumper.

Top prize for the Activa



The Danish automotive journalists' club, MKD, awarded its 1995 top prize to the SC.CAR roll-limitation system. Citroën won the award for its achievement in using technological innovation to further active safety. The marque has received the MKD prize once before in 1984 for the use of composite materials on the BX.

rear sliding door on the left to make it easy to load a wheelchair. These adaptations do not prevent the vehicle being driven by a non-handicapped person since the original controls - accelerator and brake pedals on the floor - have been left in.

Moreover, the model offers the qualities for which the ZX is unanimously recognized: driving pleasure, roadholding and safety. Last, all the vehicles in the Citroën range can be modified in many ways to respond to specific requirements: main brake on the right or left, in a vertical or horizontal configuration, adaptable remote control unit on the wheel incorporating eight functions, swivelling driver's seat, back support and hoist.

ZX Aura, bringing greater independence to the handicapped

In November, the Citroën branches in the cities of Paris, Lille, Strasbourg, Lyons, Marseilles and Rennes introduced a scheme to place specially adapted vehicles at the disposal of the handicapped while their own vehicles are immobilized for maintenance.

As part of this operation, Citroën joined forces with Okey Technologic, a coach builder specialized in the supply and equipment of vehicles for the handicapped.

The model offered is a ZX Aura 1.8i automatic with the accelerator and main brake controls on the wheel and a





FOUR DAYS TO GET TO GENEVA, DRIVE DOWN TO THE HEART OF THE BERN OBERLAND BY THE ROUTE THAT RUNS ALONG LAKE GENEVA AND REACH THE FOOT OF THE EIGER. SUCH WAS OUR AMBITION. WE COULD NOT HAVE ACHIEVED IT WITHOUT THE HELP OF OUR SPECIAL PARTNER: THE CITROËN XM 2.5 TD EXCLUSIVE.

Tale of a Swiss tour

Paris. The sky is clear and the capital is basking in temperatures that are more reminiscent of June than October. Moved by an urge to experience the first snows on the mountain peaks overlooking the romantic village of Lauterbrunnen, we decide to visit Switzerland. The new Citroën XM 2.5 TD Exclusive is clearly the right partner for the trip.

Distinguished, elegant and powerful, this seasoned tourer is undoubtedly up to the challenge. It is also extremely comfortable and a pleasure to drive.

Our Stratos Blue XM is ready to go. All it needs is the driver and passenger. As soon as we're in our seats, we realize that the ride is going to be great. Key in the ignition, engine immobilizer de-activated, seats adjusted with the electric controls ... and we're off down the A6 motorway.





THE HOME OF VOLTAIRE



Three hundred years after the birth of Voltaire, the city is paying him homage. Three exhibitions and a number of other events have been organized in honour of the great writer, who lived in Geneva and also in Ferney-Voltaire just on

the other side of the border. The exhibition "Voltaire chez lui: Genève et Ferney", for example, traces the writer's cultural activities and his economic role. In 1775, Voltaire purchased the property "Les Délices" to "cultivate his garden" and made Protestant Geneva tremble with his writings. His ambition was to create a theatre at Les Délices. As soon it was opened, it was closed down. Voltaire also contributed to the development of the Encyclopaedia by introducing D'Alembert to the pious pastors of Geneva. But the writings of the Encyclopaedists caused widespread fury.



En route for "Les Délices"

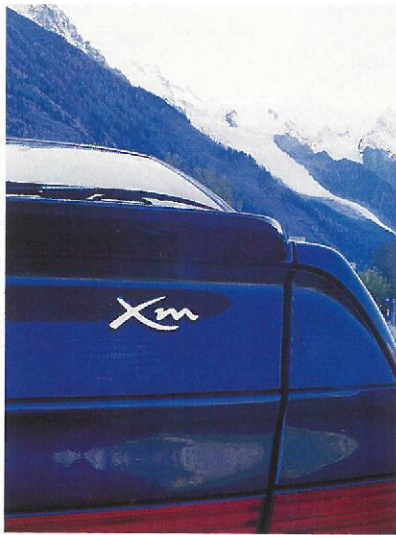
The XM comes into its own as soon as we hit the road: a potent mix of power and driving pleasure. Amidst the wealth of equipment and systems, we particularly appreciate the air-conditioning, which maintains a temperature of 19°C to pro-



tect us from the heat. As we listen to a stack of CDs on the high quality stereo system, the kilometres fly by and soon we reach Mâcon. Geneva is not far away. The next step is to find a bureau de change. When we get to Geneva, the illuminated signs of banks from around the world are a powerful reminder of the country's banking tradition. Geneva is a city with a strong personality and extensive influence. During the Reformation, Geneva became the

"Protestant Rome". Throughout its history, it has always exerted a strong economic, cultural and artistic influence. We are reminded of this when we take a stroll along the Quai des Bergues and see Jean-Jacques Rousseau Island in the middle of the Rhône. And we cannot help but remember the heated correspondence between Voltaire and the "Citoyen de Genève" broadsheet. We set off towards Les Délices (see box), where the Voltaire Institute is commemorating the tercentenary of the writer's birth. Our XM guides us to the heart of the old city: the power steering and self-steering rear axle take us effortlessly through the maze of narrow streets. We admire the houses dating back to the Renaissance and the 18th century, the Cathedral, of Saint Peter






and the Tavel house, which is the oldest building in Geneva. Rousseau was born in No. 40, Grande Rue. Here, the very stone tells a story. Going down the Rampe de la Treille that overhangs the Promenade des Bastions park, we come to the Place Neuve. Dotted around the square, the Rath museum, music conservatory and Grand Theatre form an attractive architectural whole. After visiting Voltaire's home, we go on to the Place des Nations, which is the headquarters of "international Geneva". An impressive number of international organizations are based here, from the UN, which has its European headquarters in the Palais des Nations, to the Red Cross. We leave Geneva for Bern by the Lake Geneva route. Once more, our XM draws admiring glances. It has to be said that its natural elegance is a perfect match for the landscape. Some 90 km separate us from Bern: the town with the most beautiful floral decorations in Europe and a place on the Unesco list of the world's cultural heritage. We pay a flying visit before heading for the first snows.

From Bern to the Oberland

Tramways, trolleybuses and bicycles ... In Bern, headquarters of the Swiss federal authorities, every precaution has been taken to protect the mediaeval city centre. The road signs direct cars through the old alleys to the main streets of the centre. Coming out onto the Kramgasse - the most beautiful street in the old city - we stop to hear the chimes of the Clock Tower, which was the Western gateway of Bern until 1256. Four



THE BEAR OF BERN

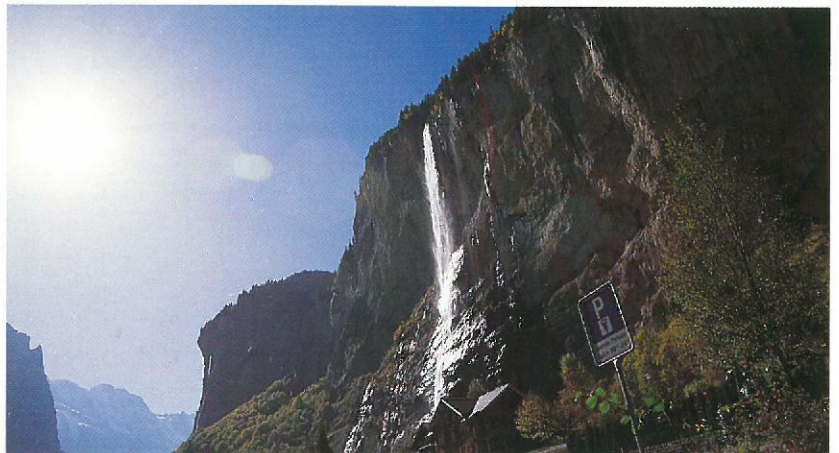
Represented in the form of statues, fountains, clockwork toys - or simply as living animals - the bear has been the symbol of Bern ever since the city was founded in the 12th century by Berthold V, Duke of Zähringen. The Duke decided to build the city on a narrow loop of the Aare river and declared that the first animal to be hunted on the outskirts would give the new city its name. That animal was a bear. And so it was that the bear became the emblem of Bern. Ever since that time, the people of Bern have kept live bears in a pit that was formerly located in the heart of the city but is now at the end of the Nydegg bridge.

minutes before the hour strikes, the puppet and bears pop out and dance to the bells of a jester. We wander down the road, strolling under the arcades, admiring the Zähringer fountain with its emblematic bear, the Samson fountain, and the old houses with their oriel windows and turrets.



We stop at No. 49 to visit the home of Albert Einstein. But time is running short. We get back into the XM and head for Lauterbrunnen. Thinking wistfully of the Paul Klee paintings that we did not have time to admire at the Museum of Fine Arts, we drive towards Interlaken. Before leaving

Bern, we stop to say hello to the living symbols of the city: the bears in the bear pit. Comfortably ensconced in our XM, we bowl along Route Nationale 6, our 130 bhp of raw power eating up the kilometres. Thun and its lake are the gateway to the snowy peaks of the Jungfrau. In a romantic setting, where villages of picturesque chalets alternate with rows of pines, firs and larches, we come at last to the Lauterbrunnen valley. Here, the Schilthorn, Mönch and Eiger peaks are covered with snow but the mountain is green. The fawn and brown patches of the grazing cows provide a splash of colour on the landscape. In the heart of Lauterbrunnen, the figure of James Bond 007 haunts the alleys of the village, reminding us that the famous scene from the film *On Her Majesty's Secret Service* was shot in the panoramic restaurant of Schilthorn. Pursuing our quest, we drive along the road that takes us to the impressive Staubbach waterfall. After that, we have to continue on foot.



citer



invents the mobile automobile

THE ONLY COMPANY TO OFFER CITROËN'S ENTIRE RANGE OF VEHICLES, CITER SA IS OUT TO ATTRACT NEW CUSTOMERS. WITH ITS REVAMPED IMAGE, EXPANDED NETWORK AND INNOVATIVE SYSTEMS, CITER HAS ACQUIRED THE RESOURCES TO WIN BOTH THE BUSINESS AND LEISURE SEGMENTS OF THE CAR RENTAL MARKET. DOUBLE CHEVRON DECIDED TO FIND OUT MORE.

Located on two floors of a complex in the centre of Paris, the headquarters of Citer SA reflects the image the company is seeking to convey. The landscaped offices with their attractive red-and-blue furnishings house a management team specialized in business administration, marketing and training. On the second floor, the receptionists for Citer's "Central Reservation" service are taking customer orders, while the Managing Director of Citer, Gérard Maitre, talks to *Double Chevron*.

Double Chevron: Citer changed its image recently. Does that mean you have changed your strategy too?

Gérard Maitre: *Not really, you could say it was the other way round. In 1990, Citer set up a limited company in order to become a subsidiary of Citroën.*

This was because it was vital for Citer to move into all the traditional sectors of car rental: travel, business, leisure, small and medium-

sized companies and local customers. When I took charge of Citer in 1992, we performed an image audit. The results showed our strengths but also revealed a number of grey areas.



D.C.: Can you tell us what they were?

G.M.: *Well, for one thing, we discovered that we were not always sufficiently visible to our customers. In the audit, some of those questioned said that "Citer is good, but it isn't repre-*

sented at airports". Actually, we've had offices in almost all French airports for over ten years! So we thought that maybe our colours - red, white and blue - were not being associated with our name and we hired an agency to define a colour that would be emphasized in our logo. Blue seemed to be the natural choice. At the same time, we updated the style of the lettering and the logo. And below the name, we added "Location de voitures" (Car rental). Now, our corporate identity is clearly stated.

D.C.: And have you tried to change your position on the market?

G.M.: *Yes. We have tried to define our role more clearly. We don't just want to rent cars, we want to be seen as a solution to our customers' travel difficulties. To do this, we have developed specific systems to satisfy our customers' requirements. To give you an example, we have provided one of our customers, Ecia, with a fleet of vehicles. We manage the fleet, which is used by the company to make the trip to and from*

employees also receive special training in using our computer systems.

D.C.: How extensive is your network?

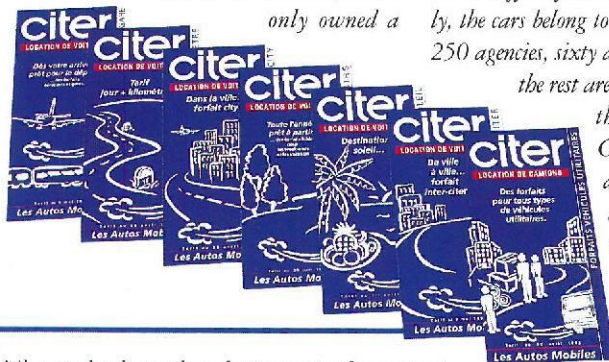
G.M.: Citer has 250 agencies in France, including more than 40 in airports. We have offices at almost all the destinations of the domestic airline Air Inter. We are also setting up agencies at major TGV (high-speed train) stations. We recently opened branches in Nantes and Rennes.

D.C.: And in the rest of Europe?

G.M.: Citer is present in Spain through Atesa, a subsidiary of Citibisa. This gives us a strong base in all Spanish airports in addition to our agencies in the cities. We are also present in Morocco, in Tunisia, in the French overseas territories, and soon in Mauritius through franchised agencies. We are also working on an international development project.

D.C.: And what about Citroën garages?

G.M.: At one time, Citer only owned a



Gérard Maitre, Managing Director of Citer.

head office and a fleet of cars, and Citroën subsidiaries and dealers took care of renting the cars. But in January 1993, Citer SA took over all the operations formerly controlled by Citroën. We still operate at Citroën points of sales, but the personnel is from Citer and we rent the offices from Citroën. Most importantly, the cars belong to Citer. At present, of our 250 agencies, sixty are managed directly and the rest are under franchise. Most of the franchisees are also Citroën dealers and some are exclusively car rental agencies. This organization is the same for all rental units.

D.C.: So taking control of the company was part of your strategy?

G.M.: Indeed it was! Citroën and Citer have different activities, even if they do complement each other. What's more, we are the only rental company on the market to offer a complete range of Citroëns. Two or three years ago, we opened our fleet to the group and now we rent mainly vehicles from PSA Peugeot Citroën. At present, we have a fleet of 6,000 passenger and utility vehicles.

D.C.: Do you use the image of Citroën's products in your advertising campaigns?

G.M.: Every time we launch an advertising or direct marketing campaign, we use the slogan "Citer prefers Citroën" and we display one of the models from the range. Since the Xantia is the most recent saloon, we use it on our advertising documents. Recently, we did a mailshot for a new product: the Citer Travel Card. We sell the card for a modest price, and the holder gets a 30% reduction on our prices for a year. The card is aimed at small- and medium-sized companies who rent between 5 and 10 vehicles per year. We want to reach those customers who are not big enough to constitute one of our major accounts. The card allows smaller companies to obtain special prices. To launch the Citer Travel card, we gave 10,000 companies scale models of the Citroën Xantia!

They tend to be people on business trips for companies with which we have special agreements. Their vehicles are reserved in advance, so we prepare the rental contracts ahead of time. This way, when the customer arrives at the counter, our representatives simply check the person's driving licence and hand over the car. An operation that takes less than three minutes. In the late afternoon, however, a lot of cars are returned and things can really get hectic. So to avoid long waits, we've set up a mailbox system," explains Carole Dougny, agency manager at Orly. "Ready to drive as soon as you arrive". Citer's slogan for airports and train stations is more than just a snappy phrase.

Juliette: working in the wings

Owing to its high level of activity, the Orly agency has a fleet of 300 vehicles, made up primarily of passenger cars since there is little demand for utility vehicles at the airport. Like most other Citer agencies, Citer Orly has a home

base. The base of the Orly agency is located three kilometres from the airport in the "Juliette" industrial zone. There, the cars are checked, vacuumed and washed before being sent to the airport terminals. "The work is organized in much the same way as at the airport. There are nine people in all at Juliette, including two mechanics who work in teams of three to maintain our fleet of vehicles. Every night, they check all the cars to make sure that they are ready for the next morning. We hate to have to refuse a customer, so we always try to find a solution. This is why we use flexible management. For example, every morning before I go in, I stop and take a look at what's available. That way, I know how many cars I have for the



next few days. And if I run out of cars in the home base, I call around to other agencies in the region to see whether they can help. That's how we get "Mobile Automobiles!", concludes Carole Dougny. Mobility and professionalism are the keywords at the Orly agency; an agency that reflects Citer today.



Playing the game



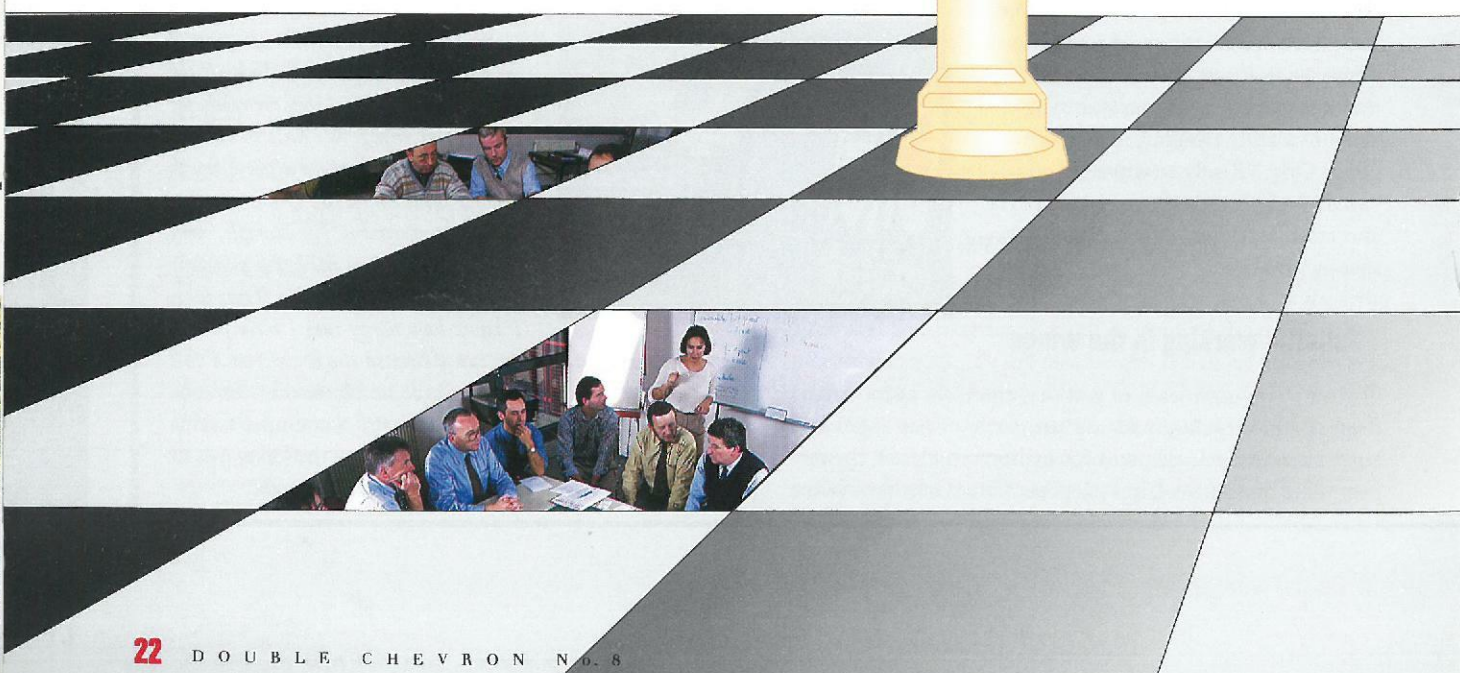
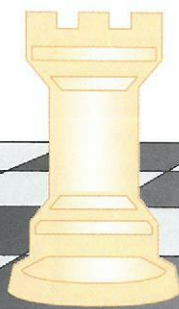
XABERGO, GOPAL, TROIS CROCHES ARE THE EXOTIC-SOUNDING NAMES OF GAMES USED BY CITROËN INSTITUTE TO HELP EMPLOYEES LEARN NEW CONCEPTS IN FIELDS AS DIVERSE AS ECONOMICS, PULLED-FLOW PRODUCTION AND PRODUCTION ENGINEERING.

Training occupies an important place in Citroën's human resources policy. In addition to the programmes that accompany the launch of new products, the annual training plan gives every employee the opportunity to better understand and adapt to new jobs and technologies. Last year, close to 850,000 hours were spent in training, equivalent to 4% of the wage bill. Most training courses are organized and taught by Citroën Institute. The objective is to target the course content as accurately as possible in order to avoid wasting time. One particularly effective way of doing this is by using specially

designed games. "After all, everybody likes to play games," says Annie Brunet, Communications Manager at Citroën Institute.

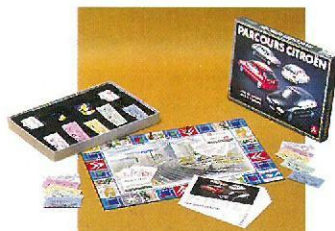
Serious fun

Role play and Monopoly-style board games are just some of the methods used by the teachers. The aim is to encourage full participation so that trainees acquire knowledge pragmatically. "By using games, our teachers succeed in teaching concepts that would seem extremely complex and uninteresting if presented in a purely theoretical manner. Games also make it





easier to learn a new function or job. Trainees are constantly asking for more of this type of teaching", explains Annie Brunet. The games used in the courses are designed



especially for the Citroën environment and are tailored for use in specific training modules in a variety of areas, including economics, management, fabrication,

pulled-flow production and recycling. "We usually use games designed by an outside company. When we have chosen a game, we ask them to adapt it to our corporate culture, that is, our terminology and our functions. Once the game has been adapted, we test it on a small control group of future trainees. Then we adapt it even further during our courses." However, the games do not detract from the role of the teacher. For a game to become a useful teaching tool, teachers must be able to adapt it to each new group of trainees.

Let's play Xabergo!

Gilles Ozanic has been a teacher at Citroën Institute for a year and a half.

LEARNING TO BE A MANAGER

For Citroën employees rising to the position of manager, Citroën Institute has designed special training modules to teach them the relevant skills. The courses include a theoretical and a practical part. It is during the practical section that trainees are introduced to the game "The manager's role in the company". An outside company tailored the simulation game to Citroën's situation. The object of the game is simple: players work in pairs and choose cards which present them with situations that they might encounter or may already have experienced. The players then have to decide how they will solve the problem. The decision is graded by the other trainees based on a set of precise criteria.



THE RECYCLING GAME



The Rennes-la Barre-Thomas production unit has a problem: it has to decide exactly what to do with the 8,000 tonnes of waste it produces in the course of its activities every year. Last year, close to 3,000 tonnes of the total amount was recycled. To make its workers more aware of the importance of waste collection, Rennes-la Barre-Thomas has

set up a special training programme that is aimed at all its staff. One original feature of the programme is a game that teaches players to identify the different types of waste and to make a decision on where each type is to be put.

The recycling game is based on a series of questions concerning the environment and the site. Each player receives a card with a list of the different types of waste - from disposable pens to the rubber used to produce automotive parts. The card also tells the player where each type of waste should be disposed of. The aim of the game is to reduce the amount of waste produced by Rennes-la Barre-Thomas and - even more importantly - to recover it so that within three years, a full 70% of the unit's waste will be recycled. A total of two thousand people have already been trained in this way. The game is so successful that workers at the Rennes-la Janais plant have joined in and are now playing as well.

He knows just how important these teaching tools are since he is one of the creators of the game Xabergo. "I was working at the Manufacturing Division (DFA) when I was asked to design a training course that would teach workers to implement plant methods. The course was to be for new employees, either just hired or transferred from other sectors. Some of the jobs that the new employees have to deal with are complex and use a complicated vocabulary. So a game seemed the ideal way to get the information across."

For six months, he and Patrick Xavier from the Manufacturing Division worked on designing a role play game adapted to production engineering instructions. "We created an imaginary company called Xabergo that manufactures a product called X. Then, using production engineering instructions, we created 27 different scenarios to simulate absolutely everything that happens in a factory. Each scenario has a multitude of possible solutions which we have also planned for. Depending on the solutions, the trainees have to monitor three indicators: production costs, sales curves and profit curves," he explains. The game is played by course partici-



pants during the last week of the five-week course as a sort of review of everything they have learned. Xabergo has been in use since January of this year and it seems to reach the goals Gilles Ozanic had set as part of the programme. "At the end of each course, our students leave knowing how to apply production engineering procedures." Gilles Ozanic is firmly convinced of the efficacy of games in learning.

He is applying the same principle in another course teaching the Kanban or pulled-flow method, which has been implemented in Citroën's production units.

The Kanban course is aimed at a much broader audience, since it is for employees, technicians, supervisors, engineers and managers. In this course, too, games are used as a teaching tool. "Gopal is a card game. Each trainee is in charge of one of Citroën's major functions: paintwork, assembly, logistics, etc. Each player has a product range that he or she produces, and receives products that they order. We promote the Recor system by explaining the methodology and stages that have to be respected in



real life. The great strength of the Gopal game is that all the trainees, from line operators to managers, have the opportunity to make decisions. Everything they have learned on the course becomes concrete," concludes Gilles Ozanic.

Making note blocks with *Trois Croches*

The game *Trois Croches* (three quavers) is used by Citroën in management and business economics courses. Certainly the most popular game with trainees, it was designed to appeal to employees, technicians, supervisors, engineers and managers alike. *Trois Croches* is used as a teaching aid in



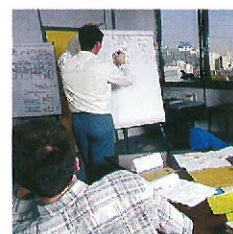
two different modules: business economics and management refresher courses. "On the first day of the course, we review basic economic concepts. We explain how an imaginary company which makes a specific product is organized. The players are all given a sum of money and they have to draw up a provisional budget and prepare accounting reports," explains Raymond Pelletier, a teacher at Citroën Institute.

The game is played as follows: fifteen people set up three companies called Tremolo, Concerto and Allegro. Each company is thus composed of five people who each have a specific role to play in the day-to-day running of the company - from the managing director to the sales director to the marketing manager.



The companies produce note pads. The objective of the game is to have each of the three groups of players prepare the companies' balance sheets and profit-and-loss accounts for the next five years. "Naturally, we link the game to the automobile industry. Each company has the same shareholders' equity and the same machinery with which to manufacture its products.

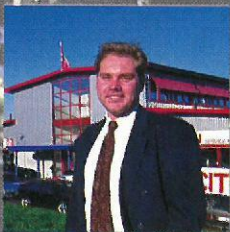
From these data, the players have to calculate the expenses, loans and stocks, then define a strategy. The goal is to make the company as competitive as possible. To help it with marketing research, each company is allowed to buy information - from a marketing consultant, for example. The cost of that service has to be factored in." The game is a full-scale simulation and covers all of the situa-



tions that a company has to face in the natural course of events.

The game also includes "Economic climate" and "Government decision" cards for each year. "We use *Trois Croches* as a tool in our training course. As the game progresses, we analyse all the decisions that the trainees make in reaction to different situations. At the end of the course, the trainees understand the financial results published by the company and the sort of difficulties that it can face in the marketplace," concludes Raymond Pelletier. Maybe in the future, Citroën Institute will offer other game-based training programmes using new multimedia technologies to make them even more fun... and educational.

SINGLE-FRANCHISE DEALERSHIPS: THE SECRET OF SUCCESS



The revamped Frontbilar garage has an air of youth that is shared by the people running it. Bjorn Hagman and his nine-strong team, average age 30, defend Citroën's colours - and Citroën's alone - at a garage on the outskirts of Göteborg. Pretty brave considering that Göteborg is the home of Volvo. But for Ola Lorsvé, sales manager, "A single-franchise dealership is the secret of success.

That's true for two reasons: first, we know the cars far better than the multi-franchise dealers and second, Citroën customers have a passion for the marque. They make a conscious decision to buy a Citroën". The garage places the emphasis on customer relations through long-term contact rather than aggressive sales tactics. The objective is to open one more establishment. Since Bjorn Hagman started as a Citroën dealer in 1991, sales have grown from 100 vehicles annually during the first two years to 157 annually in 1993 and 1994. Unlike other dealerships, he targets individuals rather than companies.

The garage workshop now employs five mechanics - and the supervisor is a former Citroën salesman. The dealership is open seven days a week.

Ola Lorsvé takes a scathing view of the price war raging between marques. He prefers to offer customers an item of equipment or an accessory, "You are more likely to win the loyalty of customers who have paid the full price".

Where silen

IN 1994, CITROËN SWEDEN WILL POST TOTAL SALES OF MORE THAN 3,000 VEHICLES COMPARED WITH A SALES TARGET OF 2,750. THE

MARQUE'S SHARE OF THE TOTAL SWEDISH MARKET (PASSENGER CARS AND UTILITY VEHICLES) HAS RISEN FROM 1% IN 1992 TO 2.2% IN 1994. CITROËN'S SWEDISH SUBSIDIARY HAS SUCCESSFULLY FITTED INTO A HIGHLY UNUSUAL CONTEXT. IN SWEDEN, LEGISLATION IS EXTREMELY STRICT AND ECOLOGY IS MORE THAN JUST A BUZZWORD.

DOUBLE CHEVRON TRAVELLED NORTH TO INVESTIGATE.

Sweden is as fresh as the first breath of life with its brightly coloured fir trees, birches, lakes and rocks. In the vast open spaces of Sweden, the car - although indispensable - is considered as a risk to the environment and a threat to safety. The speed limit is 90 km/h on secondary roads, 110 km/h on motorways. In the cities, preference is given to public transport. To list just a few of the main features of the Swedish market: cars over four years old are required to undergo annual technical inspec-

ence reigns supreme

tions; bottom-of-the-range vehicles are considered as dangerous and hold a negligible share of the market (5%); certain functions are required by national legislation or come as standard, e.g. headlamps that light up when the engine starts, heated seats, a high-mounted brake light, a driver's airbag (Volvo is now bringing out side-airbags) and rear head-rests. The market is dominated by three carmakers, two of them domestic: Volvo (27%), SAAB (11%) and Ford (13%).

The kingdom of the company car and the second-hand vehicle

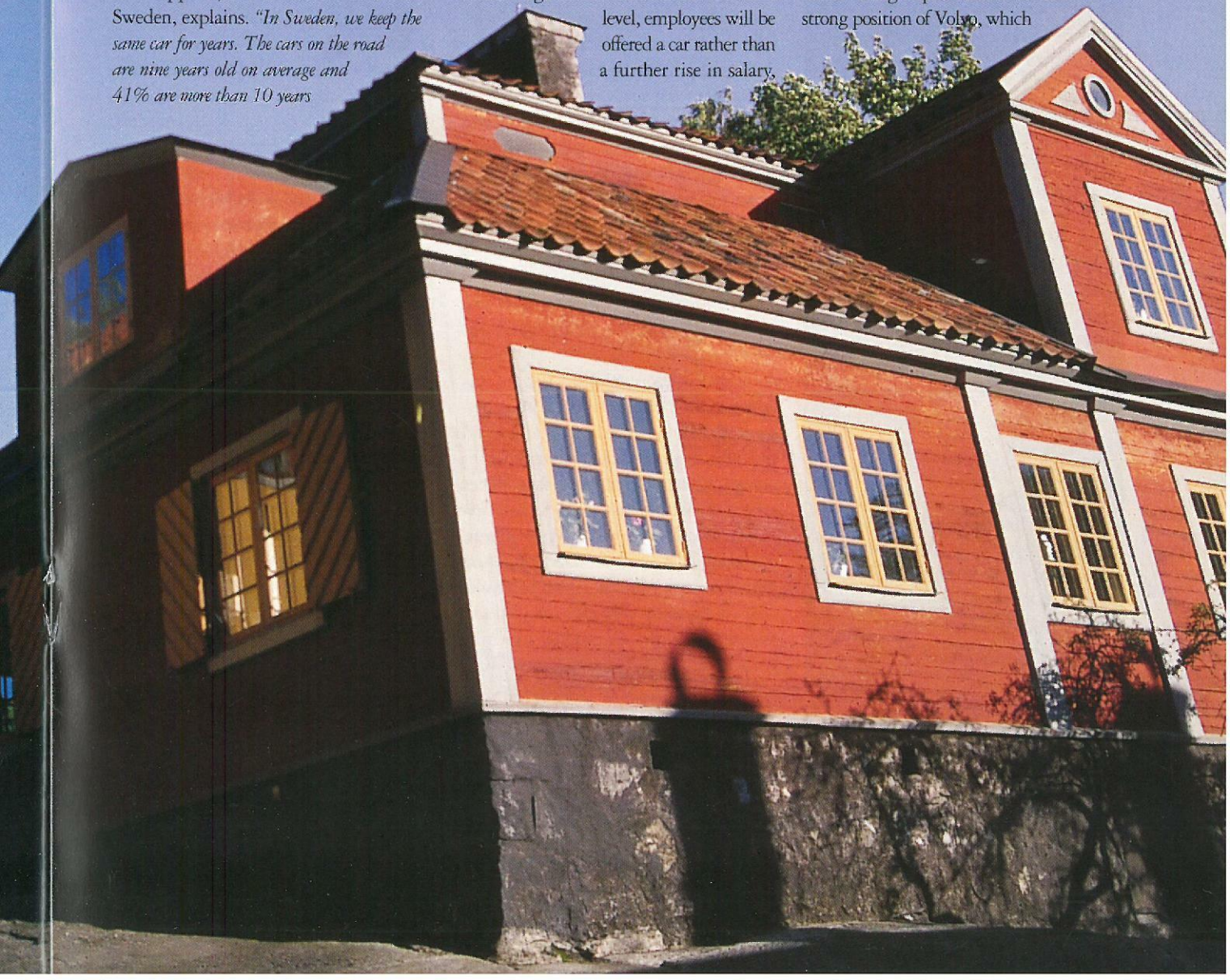
Eric Uppsäll, Sales Director of Citroën Sweden, explains. *"In Sweden, we keep the same car for years. The cars on the road are nine years old on average and 41% are more than 10 years*

old. This figure compares with 23% in France. As a result of the frequent technical inspection required by law, cars are still in good condition after ten years." Moreover, Sweden has a law requiring carmakers to guarantee the pollution control systems on passenger cars for five years or 80,000 km. This works against sales of new cars - the market for second-hand cars is twice as big as the new-car market. As a result of legislation, second-hand vehicles are expensive but maintain their value. *"In Sweden,"* notes Eric Uppsäll, *"a car loses one-third of its value in four years. In France, its value drops by the same amount in just eighteen months"*. Second-hand vehicles are sometimes purchased by companies.

When wage increases rise above a certain level, employees will be offered a car rather than a further rise in salary,

owing to Sweden's high taxation. When corporate fleets are renewed, the old cars are either sold back to employees or part-exchanged by garages. Despite the economic crisis, company cars still total 69% of the market. The predominance of the top-of-the-range segment (48% of the Swedish market) is partially linked to these habits. For Sweden is a country of choice. A choice granted during the golden era of Sweden's economic, cultural and social miracle. A choice reflected in the range segment and equipment - leather upholstery, air conditioning, radio, aluminium wheel trims, and so on.

The second explanation for the predominance of high-spec vehicles is the strong position of Volvo, which



REGIONAL ASSISTANT




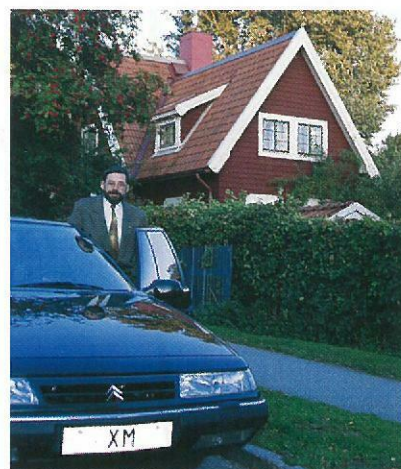
Philippe Guyard has no qualms about breaking with tradition. Appointing a woman as "regional assistant" is part of his policy of continuous improvement. Margaretha Hjort is responsible for northern Sweden. Citroën's presence is strongest here, with 23 points of sale over a total area of ... 270,000 km²! Ms Hjort leads a nomad's life covering some 8,000 km² every fortnight to visit dealers. She holds the budget allocated by Philippe Guyard and it is up to her to decide whether to give financial assistance, to harmonize initiatives and to report back to head office. Margaretha Hjort has been working in the automotive industry since 1964. On joining Citroën in 1990, she came into daily contact with the dealers, and that is what she finds most interesting. "Direct contact is important." Equipped with a mobile phone, Ms Hjort can be reached round the clock. That's vital in Sweden's vast open spaces.

holds 27% of the Swedish market. Volvo exports one-quarter of its production to the USA. To satisfy American standards, the marque created a number of top-of-the-range models that it then decided to market in Sweden. The third reason for the popularity of top-of-the-range cars is that Sweden's long roads are often crossed by reindeer and elk at night - and in Sweden the nights are long. An H segment vehicle, heavier and bigger than other types, stands up better to head-on collisions. So how does Citroën fit into this context?

A recession-husting policy

Citroën's Swedish subsidiary has experienced a number of changes of status since it was first established in 1946. Today, it is the marque's only sales unit to be attached to the European subsidiary "Autogruppen", an entity importing and selling vehicles and spare parts for both Peugeot and Citroën. Each marque retains its own sales and aftersales networks. Citroën's affairs have been managed for the past three years by Philippe Guyard, a young man with qualities beyond his years. His training as a legal expert, accountant and administrator, coupled with professional experience in France and elsewhere, have given him the capacity to manage unusual situations.

"International business," he explains, "is linked to the etymology of the word 'enterprise' to my mind. It means to venture, to move forward. You have nobody to turn to but yourself and fast reactions are a must. Also, you have to enjoy responsibility". Philippe Guyard is the link between the carmaker and the sales network of the country in which he is working. He represents the network at the marque's European sales division. When asked, he defines his role as "both simple and complex. How do you convey the requirements of Swedish customers to headquarters? How do you convey Citroën's product policy to the Swedes? You have to use their language and their sales strategy". Backed by a team of ten people, including three regional assistants who between them  cover an area of 450,000 km², Philippe



Guyard has naturally placed the focus on team spirit and not on paperwork. Action and efficiency are the key concepts. "Everybody has to be versatile." This principle has become increasingly meaningful in a context of economic crisis where unemployment - unknown in Sweden before 1992 - has soared and the automotive market has shrunk two-thirds in five years. Faced with the need to protect the marque's commercial interests, and to compensate for the absence of a Citroën branch in Sweden, Philippe Guyard's strategy has been to support the marque's technical and sales network. "The success of the Xantia has helped us to exceed our target. Although it was launched just one year ago, the Xantia now generates almost 50% of our sales. It has attracted 30% of former owners of Japanese cars." Eighteen new dealers have joined the network in less than a year, increasing numbers from 50 to 68 and extending the marque's coverage of Swedish territory from 64% to 86%. "The new dealers are young people who understand that they have to chalk up sales before they can hope to make exorbitant profits. Swedish dealers tend to think that if you buy a second-hand car for 30,000 krona, you have to sell it for between 40,000 and 45,000 krona. Dealers prefer to keep the car in stock for 2,3 or even 4 years in order to sell it at that price. It is difficult for them to understand that the faster they renew their stock, the higher their profits."



MULTI-FRANCHISE PROFESSIONALS

The Philipson garage in Göteborg, Sweden's second biggest city, is a multi-franchise dealership. In January 1994, Citroën became the third marque to be represented after Mercedes and Nissan. The Philipson garage has a proven reputation. In eight months, it has become one of Citroën's leading sales units in Sweden: 123 new cars sold, 150 on contract and 600 second-hand cars. Over the same period, the marque's share of the Swedish market rose from 1.4% to 2%. These results have nothing to do with chance. They stem from dynamic management and the attention given to quality of service. Four times a year, Sven Ake Karlsson, Chairman and Managing Director, asks an outside consultant to organize a survey on customer satisfaction. A seven-point customer satisfaction programme specific to the garage is set out in a promotional brochure: cars loaned for a day while the customer's car is being repaired; cars systematically washed before they are returned to their owners; cars examined in the presence of the owner; guaranteed repair prices; customers contacted when the car is ready; round-the-clock emergency service; contract with a consumer's organization for surprise inspections to guarantee the quality of repairs. The customer-satisfaction programme has existed for three years. The concept is firmly established in the minds of the salespeople who put it into practice whenever a car is delivered. With eleven multi-franchise salespeople, 60 mechanics, and a staff of 106 people in three facilities (11,000 m²), the Philipson garage has a turnover of some 300 million krona. *"The objectives of the three marques are discussed every morning with the sales managers and sales team,"* explains Sven Ake Karlsson. *"The showroom and the workshop have to work closely since each is a potential sales force."* In order to reach objectives, a bonus system has been set up. Sales are rewarded by a bonus and this is followed by a draw in which the first prize is a holiday. One hundred and fifty contracts are signed every year for a total of 800 new cars (all marques) and 2,000 second-hand cars. The garage is currently being restored and modernized. When the work is complete, Citroën will have a showroom that is separate from those used by the two other marques as well as its own workshop reception area.



The growing dealers' network, combined with a policy of bonuses, new advertising more closely linked to the products, the creation of a magazine for Citroën owners, and Kenneth Hansen's first place in the European cross-country rally championship at the wheel of a ZX, have all helped to increase Citroën sales in Sweden and to change the marque's image. Having long hovered between 0.98% and 1.69%, Citroën's share of the Swedish market cleared the 2% threshold last August. And when this issue of *Double Chevron* went to press, it stood at 2.2%!

A complex network

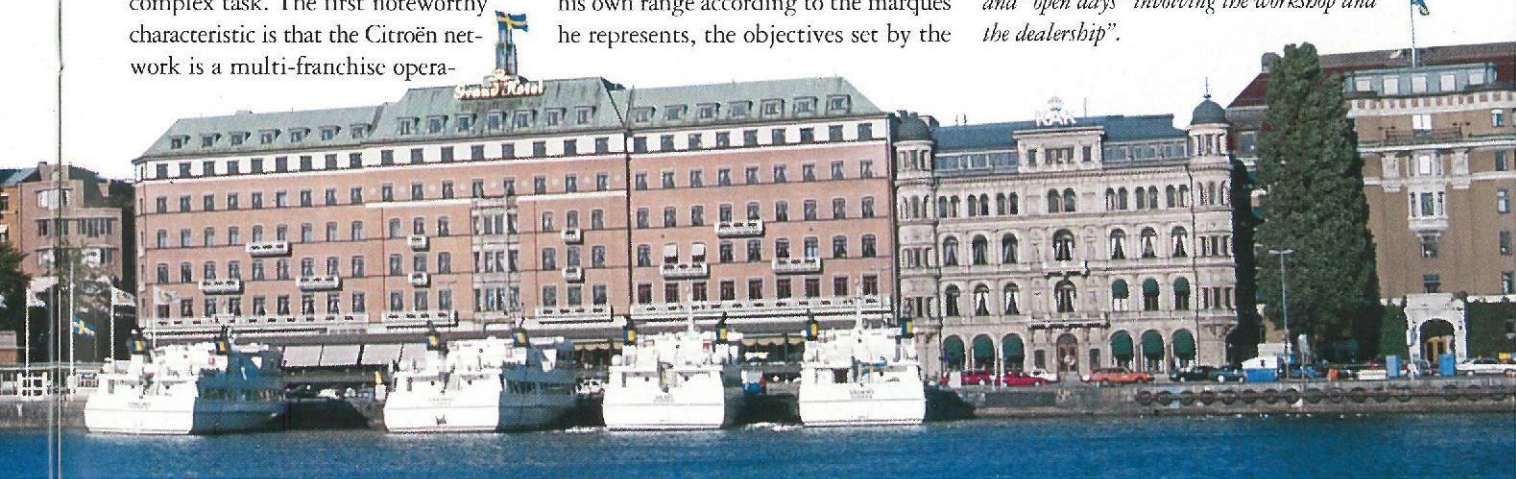
Citroën's Swedish network is rather like a Russian doll, with specific characteristics that slot into each other and overlap to make management a relatively complex task. The first noteworthy characteristic is that the Citroën network is a multi-franchise opera-

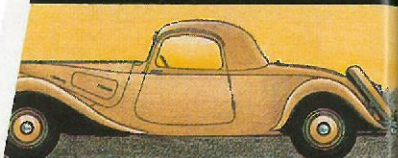
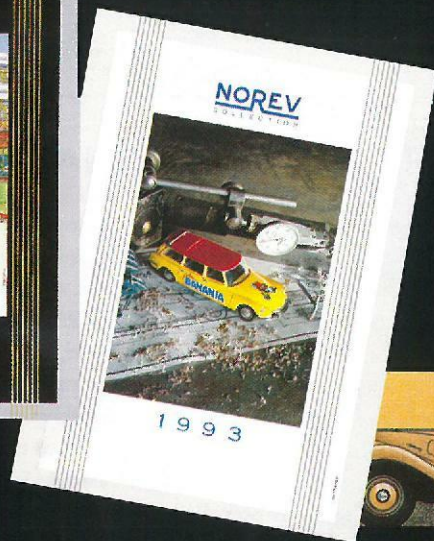
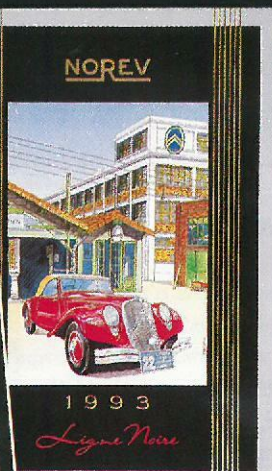
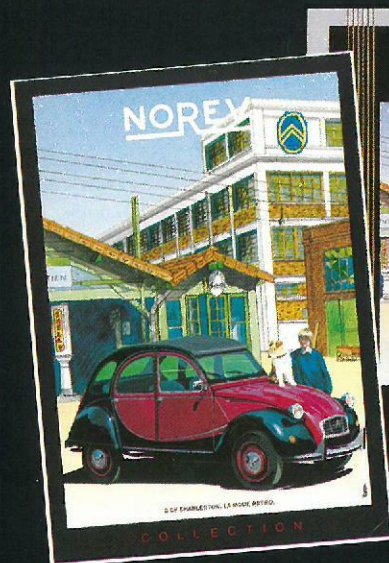
tion: Mercedes, Nissan, Mitsubishi, BMW, Subaru and Mazda are most frequently associated with Citroën. *"Naturally,"* says Philippe Guyard, *"we would prefer to have exclusive dealers - and 23 of them do work for Citroën alone - but how*



can you hope to have exclusive dealerships when most points of sale sell an average of forty vehicles a year?" Clearly, this structure has an impact on the distribution of the different models. The dealer builds up his own range according to the marques he represents, the objectives set by the

subsidiary - or by the competition - and the potential expectations of customers. He trims "his" range accordingly. As a result, it is not always easy to make certain models available in Sweden. The second noteworthy characteristic of the network is the separation between the network selling new and second-hand cars and the technical, aftersales and spare parts network. About forty dealers concentrate solely on sales without any involvement in after-sales activities. The third and last noteworthy characteristic is that the independent workshops are also multi-franchise! *"Gradually,"* explains Philippe Guyard, *"we are combining the benefits of sales and aftersales activities by getting them to work with each other. This is one of the tasks performed by the regional assistants. They are responsible for marketing initiatives, mailshots, advertising initiatives and "open days" involving the workshop and the dealership."*





"THE CHILD OF TODAY IS THE COLLECTOR OF TOMORROW." THAT IS THE GUIDING PRINCIPLE APPLIED BY MARC FISCHER, CHAIRMAN AND MANAGING DIRECTOR OF NOREV. THE MINIATURE KINGDOM OF NOREV IS THE REALM OF BOTH TOY CARS AND COLLECTOR'S ITEMS. DOUBLE CHEVRON BRINGS MINIATURIZATION INTO CLOSE FOCUS.

Norev has been a toy specialist since 1946, making such items as miniature cars, garages, roads and farms. In



recent years, the firm has gained a reputation for superlative quality in another field: miniature collector's cars. Marc Fischer, who bought Norev in 1986, is one of the prime movers of this process. Yet his passion for miniature cars was

not inbred. *"It came to me very slowly, even though you could say I spent my childhood close to cars since my father made toy garages. I followed everything that went on in the world of cars. It was a friend of mine called Mr Vavrot - a confirmed Citroën enthusiast - who gave me the bug. He owned a 1939 Traction Avant and also designed packaging for Norev. It was because of him that I dropped toy cars in favour of collector's items."*

Norev, the hallmark of quality

Marc Fischer set out not just to market collector's cars but also to upgrade Norev's image. Norev is now a reference recognized by the public. Its name has become synonymous with quality, even for toy cars. This acclaim is the

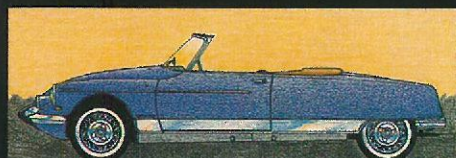
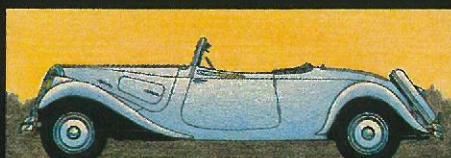
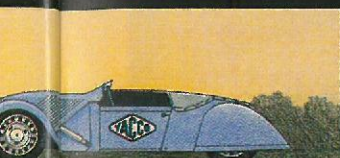
result of a number of factors, including the quality of the materials used. Until the firm began to manufacture miniature collector's cars made of metal, Norev was synonymous with plastic, a material frequently used to manufacture models after the war. Contrary to expectations, customers started to ask for toy cars when "Norevs" became collector's items. Production started again at the end of 1993. So what's the difference between a toy car and a collector's car?

"First and foremost, the underlying principle is different: toys are for children while collector's items are for adults, who are far more demanding. This difference is reflected in small details, such as the two-part headlamps, the monogram and also the rear lights and windscreen wipers, which are mounted separately on collector's cars and etched on for toys. The presentation is also different: a rigid transparent box with an explanation for one, a simpler packaging for the other. The two types of car also follow different sales channels: toys are sold in supermarkets and collector's items in specialized shops," explains Marc Fischer.

Surprises and 2 CVs

Norev collector's cars are also popular outside France: 33 % of the 61,000 mod-

Reality in



els manufactured in 1993 were sent to European countries, South Africa, Australia, Japan and Hong Kong. However, production focuses primarily on French marques, with the exception of Bugatti.

To manufacture the first miniature collector's car, Norev's mechanics chose a major technical challenge: the two-tone Simca Chambord. The result was a resounding success. The firm then turned to Citroën's with the DS Cabriolet, ID Break and 2 CV. This step marked the beginning of a long relationship between the manufacturer and the marque. "We started with the 2 CV

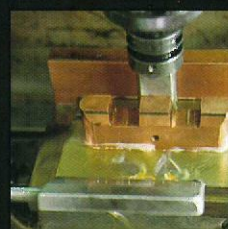
- "a unique range comprising all the Citroën 2 CVs" - which featured just twenty models! Also, collectors were asking for the pro-



totype 2 CV. So just to see what would happen, we made one with new materials: a zamak zinc-alloy chassis and a resin body-work." Another resounding success. That gave Norev the idea of creating a new range, "Ligne Noire", commemorating cars that other manufacturers have forgotten. The firm produced other small 2 CVs - the Cyclope, the Bol d'Or, the Yacco - and the mythical Traction Avant 22 - in production runs of 2,500 maximum, as compared to 5,000 for the 2 CV prototype. Simply for pleasure, Norev created the Emotion line for Bugatti (engineering models, sports models, production models, prototypes etc.), which has given the company a firmer footing abroad. This is a role that Citroën has played within Europe.

The keys to success

The decision to manufacture the Citroën 2 CV - Norev's best selling model - was taken by the selection committee. The members of the committee - a collector, a production representative, a sales representative, the sales and administration manager in contact with customers and Marc Fischer - meet once a fortnight on average to draw up the list of future cars. Usually, four mechanics work on a model for about nine months. That may seem a long time but that is the price to be paid for quality. Naturally, the company works on several models at the same time. Collective deci-



models from 1948, 1950 and 1957, the special 2 CV, the Spot, the Charleston, the Cocorico and so on." explains Marc Fischer. "We realized that the field was vast, with more than forty variations on a theme. This was a long way from our advertising

sion-making is a key word at Norev. The mechanics are professionals and can manage a model from start to finish. They naturally share the tasks according to their individual affinities and do not hesitate to submit their suggestions to the Chairman

miniature



NOREV UNVEILS A HOST OF PROJECTS

For Marc Fischer, miniaturization and quality go hand in hand. His actions pursue a single objective: to be the best manufacturer on the market. Mr. Fischer's projects, which he discussed with *Double Chevron*, are a perfect illustration of this philosophy.

The Norev museum

Working on the principle that it would be illogical to make collector's cars without being a collector, Marc Fischer and his faithful assistant Philippe Pelazzo regularly buy miniature cars, on a scale of 1:43. Temporarily housed on shelves or in showcases, the cars will soon be transferred to the room set aside for them. However, the museum will initially be private.

The Norev environment

Following the trend in miniature trains sold with accessories, Marc Fischer is soon to launch a range of shops and garages for his miniature cars. The products will illustrate two periods, the pre-war period with the Traction Avant 22 and the 1940s/1950s. This is because Norev does not just sell cars but a whole era.

The Norev club

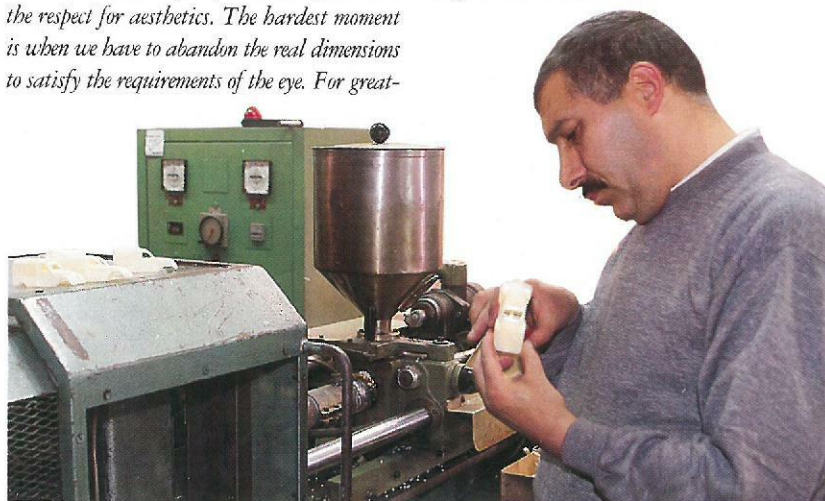
The more miniatures Norev produces, the greater the number of collectors. The management of Norev receives regular requests for the creation of a Norev club. The idea has gained ground but the firm has not yet had time to take action in this area.

to make sure that the finished product is perfect.

Together, they will make the best decision. Further, every three months, the tool operators receive the model of their choice as a gift. For Marc Fischer, "human know-how is essential since the main difficulty in making a model lies in achieving a balance between the respect for the real form and the respect for aesthetics. The hardest moment is when we have to abandon the real dimensions to satisfy the requirements of the eye. For great-

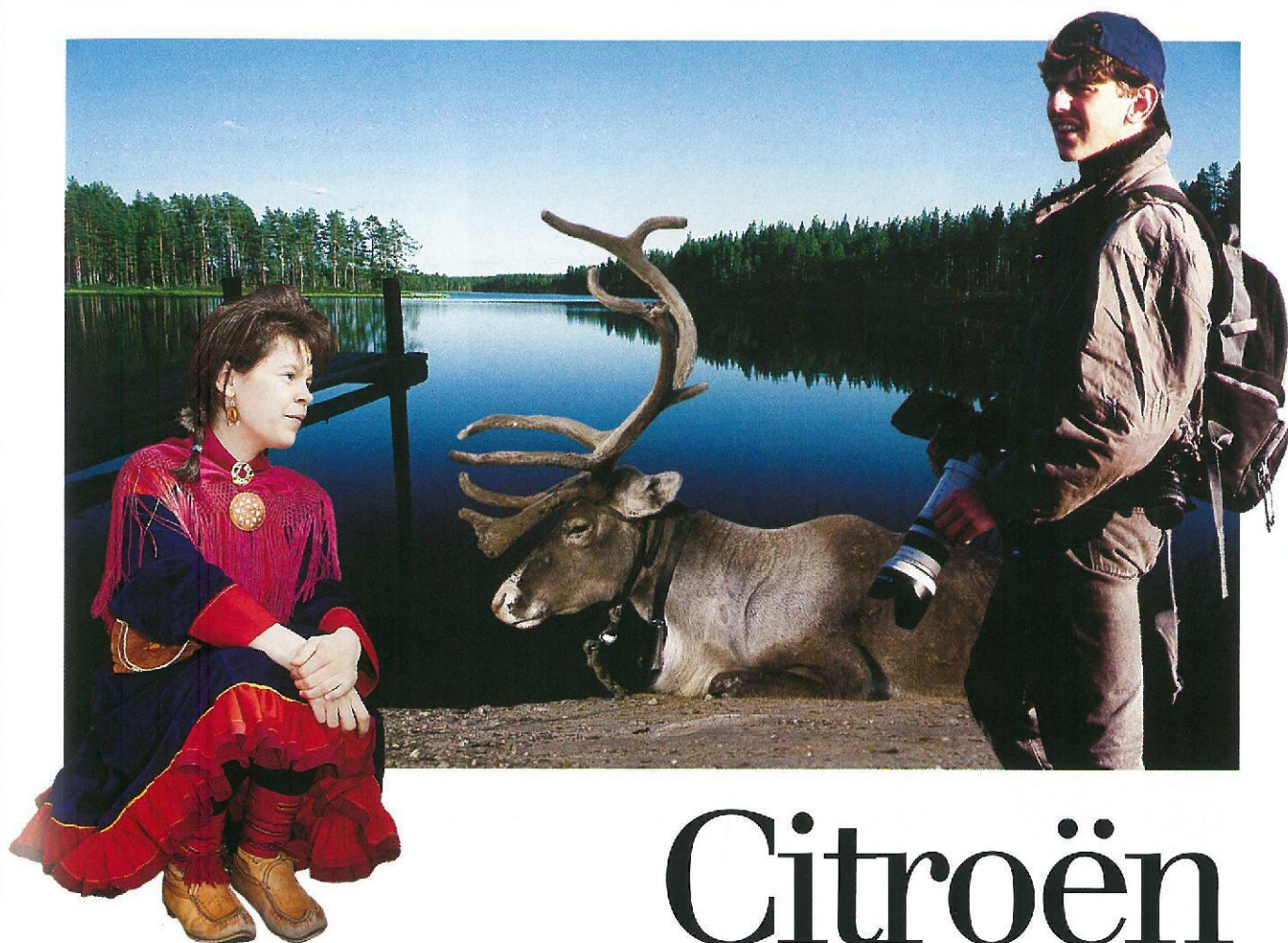
er realism, we use life-size cars rather than plans as our models. Miniaturization is an artist's job requiring rigour, skill and patience. For the radiator grill of the "22" for example, we made an initial mould that served as the prototype for the final mould. It took us several months to find the ideal solution. But the result is really satisfying". With the backing of his skilled and

closely knit team, Marc Fischer has no worries about the future. In answer to those who criticize Norev's selling prices, he replies: "A Norev car is expensive but worth the price. The solidity of our toy cars proves it: they work even if you step on them. And as for the collector's cars, the quality of the finish is ample justification for the price".



Moreover, Marc Fischer is not lacking in projects for the future (see box).

His dearest wish, however, is to produce a miniature version of Citroën's latest model: the Evasion people-carrier. Watch this space.



Citroën heads north

DURING THE MONTH OF AUGUST, 120 ADVENTUROUS SOULS LEFT PARIS IN A CONVOY OF FIVE CITROËN ZXs, TWO EVASIONS AND A JUMPER ON THE SEVENTH AUTO-PHOTO RALLY. DESTINATION: NORDKAPP, NORWAY. BY THE TIME THEY ARRIVED, THE VEHICLES HAD COVERED 12,200 KM OF ROAD AND TRACK.

Citroën Communication played a key role in the seventh Auto-Photo rally from Paris to Nordkapp, an event where speed does not count. The department launched a contest to find the best photo-illustrated report on the rally. In this issue of *Double Chevron*, we publish the best article as well as a number of impressions collected from the participants, whose average age was around 20.

Paris-Nordkapp

The Paris-Nordkapp rally is a 12,200 km long adventure over the fabulous roads and tracks of Scandinavia. The destination is Nordkapp, the northernmost point of Europe. The event is a

combination car-and-photo rally which encourages a cross-cultural discovery of Scandinavia.

In addition to driving skills (there are daily check points), the rally requires photographic talent (participants submit four photos per week, which are judged by professionals) and journalistic ability. The Paris-Nordkapp rally is a month full of surprises, excitement and tribulations which are the source of unforgettable memories.

8 August

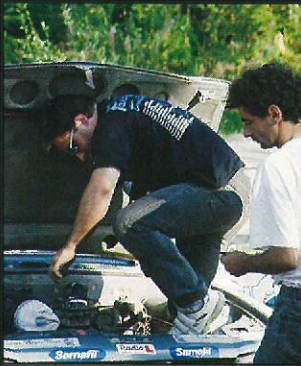
Hankasalmi / Möykkilämpera, 340 km, 5 hours
A picturesque old road leads us to Möykkilämpera, a lost corner of the world. We are in the heart of nature. The track meanders through forests, winds up and





around hills and crosses lakes. We meet Arne and Kirsti, an old couple, forgotten by time. Here, everything is real. We immerse ourselves with pleasure in the Scandinavian atmosphere. Our arrival is an excuse for a party and we celebrate with a cup of black coffee and "pankaka", a sort of doughnut which tickles our taste buds, which are tired of our daily fare. An old cabin behind a clump of trees offers us the pleasure of a rustic sauna, next to the bathroom, as tradition would have it. In the garden, a rusty old swing completes our total relaxation.

A TOUGH JOB!



Dominique and Christophe, the rally's doctors, and Yves and Claude, the mechanics, are not likely to forget the seventh Auto-Photo rally from Paris to Nordkapp in a hurry. The four, like all the organisers of the rally, were volunteers. Together, they provided medical and mechanical assistance for some 200 participants. Not always the easiest of tasks... Every single day of the rally,

Dominique and Yves drove the highways and byways looking for lost or broken down cars. They usually arrived at the bivouac just as everyone was preparing to leave on the next leg.

As a result, they had to cope with fatigue and lack of sleep while trying to stay alert. Their ZX Estate, although loaded down with spare parts, medicines, bandages and syringes, still provided enough room for a cat-nap while they waited at the roadside for the last competitors to pass by. Dominique is used to emergencies, since she works for SOS Médecins, a round-the-clock medical service, during the rest of the year.

"There were no major problems. Most of the time we just dealt with colds, sprains and backaches due to poor road conditions and fatigue. Each leg of the rally was 400 km long, and the participants were driving production cars. The toughest part was climbing to Nordkapp from Rovaniemi. After the checkpoint at Napapiiri, on the Arctic Circle (Santa's Village!), we began night driving - or rather dusk driving! The roads in Lapland were really tough. That was when Yves became the one in demand, and not me. He had to help the cars that were having trouble with the terrain," explains Dominique Rubion.

"Christophe, the other doctor, had to do minor surgery one time at 5:00 in the morning in the middle of a swarm of Finnish mosquitoes!"



11 August

Rovaniemi / Angeli, 460 km, first night leg, 7 hours

In Napapiiri, we discover the house of Father Christmas. Hundreds of tourists place their presents in the old elf's capable hands until Christmas Eve. Then the gifts leave the north stamped by Father Christmas, a source of great excitement for children of all ages. Later, with Auntie Yo (in team 11), we discover a good spot to set up camp on the edge of a field near a lake. Tonight, the sky puts on a magic light show - this must be the famous midnight sun. Photos are taken and we are awestruck. But then a local farmer on his tractor roughly sends us on our way. We quickly pack up and head out in search of another spot to sleep tonight.

12 August

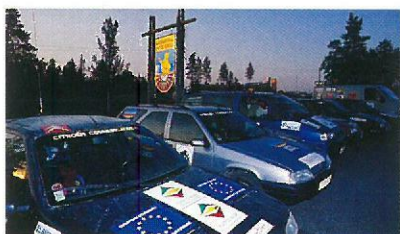
Angeli / Kalfjord / Nordkapp, 325 km, 5 hours plus 45 minutes by ferry

Disaster strikes - a flat tyre. We work at top speed to change it. Then, just around a bend in the road, we are struck by the spectacular view of a herd of reindeer grazing in the shallows of the North Sea. They are taking advantage of the low tide to munch on fluorescent green lichen, a rare treat. We take off our shoes and socks and

wade in after them, trying for the photo of the week. We take another ferry to Mageroya Island, the northernmost point of Europe. We experience the midnight sun, where night is as bright as day... when myth becomes reality and we feel that we have truly come to the edge of the world. We realize that the Earth truly is round; the clouds seem to swoop down on us, and the sea curves on the horizon.

14 August

Leppäjarvi / Jukkasjärvi, 345 km, night leg, 24 hours with the Evasion and the TV crew



9:00 am: It is cold this morning - just 6°C. I take advantage of the Mediason radio crew's generator to type my report on Arne and Kirsti. The morning fog is still lingering over the fjord when Anne begins our interview.

11:00 am: We leave one of the most comfortable campsites of the trip. The Evasion becomes a work area. Thierry films the first sequences on a sandy stretch.

5:00 pm: We stop to immortalise some of the most beautiful scenery we have ever seen. Laurent gets down to the business of

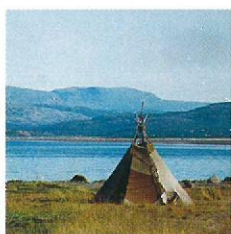
taking the best photo of the day, in pastel colours.

7:00 pm: We arrive at the check point and a light rain begins to fall. Our umbrella doubles as an awning to protect us as we wolf down an improvised meal.

9:00 pm: We're lost and it is still raining. Brice takes stock of the situation: he calculates our petrol consumption, the distance travelled and the average speed in the Evasion.

Based on his calculations, we decide to turn back.

11:00 pm: The weather clears and we



take some night photos. Laurent sets up his tripod in front of the Evasion's headlights to improve exposure.

3:00 am: The sun comes up, and we stop our cars for a moment. The silence of the dense forest is broken by the distant howling of wolves. The moment is suddenly magical.

4:00 am: We make it back to camp. All our companions are asleep, wrapped up against the cold of the early morning. We quickly set up our tents and settle in for a very short night's sleep.



15 August

Jukkasjärvi / Vinje 500 km, 7 hours plus 25 minutes by ferry

Cold weather arrived too early to this part of the world. The Lofoten islands are the domain of killer whales and penguins, and the largest natural bird sanctuary in the world. We have a free day to drink in the beauty of this land, where snow blends with the North Sea and the mountains join with the waves. Here we find blueberries and ferns adorned with the dried carcasses of sea urchin. They have a salty taste. The road twists and turns along the shore line.

THE LAND OF TROLLS



"Before Norway existed as a country, that long, narrow spit of land was in fact a huge glacier. As the climate warmed up, the glacier shifted northwards; and as it moved, human settlers moved up from the south. They named the new lands "the Northern Way" or Norway, and they called themselves Nordmen. They took possession of the land, believing that they were its first inhabitants. But it wasn't long before they discovered that the new country was inhabited by strange creatures called trolls that lived in darkness, in the midst of the mountains and forests. According to legend, trolls could not stand the light of day, so, before daybreak, they had to return to the mountains or they would be turned into stone."

Team 26
Virginie Pradon and Agnès Bou

THE JOLLY JUMPER GOES TO THE END OF THE WORLD



A three-man team from Mediason International was in charge of live radio coverage of the Paris-Nordkapp rally. They converted their Citroën Jumper 1.9D into a radio studio to help them. The rally provided the Mediason International team with an intriguing challenge: how to publicise the rally and remain on the air whatever the location or weather conditions. The team relied on a Citroën Jumper, which Jean-Claude and Emmanuel Begassat

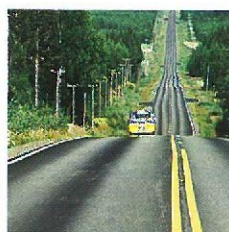
converted into a sound studio. The main difficulty lay in fixing the equipment to existing anchoring points. Weight distribution was another headache. The rear axle unit bore most of the weight: two mixing consoles and a variety of audio equipment. The cab was separated from the radio studio by a partition so that it could be used as an interview room for live transmissions. After four months of preparation, the re-jigged Citroën Jumper, dubbed the "Jolly Jumper" by the Mediason team, was ready. Yet Raphaël Cousseau, Emmanuel Begassat and Laurent Salles were uncertain as to how the Jolly Jumper would react carrying two tonnes of equipment. On 30 August they had their answer when they returned to Paris ahead of the rally drivers. They had completed their mission and covered 12,200 km without a single mechanical hitch. Whether speeding along German autobahns, tackling the trails of the Thousand Lakes region in Finland or climbing hills with 16% gradients in Norway, the Jumper's reliability, flexibility and sturdiness were impressive. The Mediason International team transmitted live for Radio France International, Europe 1 and France Info, regaling listeners with their reports and tales of their Nordic adventures.

Laurent Salles
Mediason International

The landscape is magnificent. We visit a fishing village where the men are unloading their catches of cod. Stretched out on a rock, I consider collecting provisions for dinner. The tide is bountiful and I fill my bags with shellfish, whelk... and blueberries, as a topping for a special dinner of pancakes.

22 August

Bimo / Spiterstulen, 52 km, 1 hour 15 minutes
We drive along the banks of deep-green fjords, which are fed by never-ending snowfall. At the end of our day's drive, we come to the Jotunheimen mountains. Today, we climb the Galdhøpiggen, the highest mountain in Norway. The peak is 2,469 m, or, given the latitude, the equivalent of climbing 3,500 m in France. Our ascent is difficult, but since it is worth two check

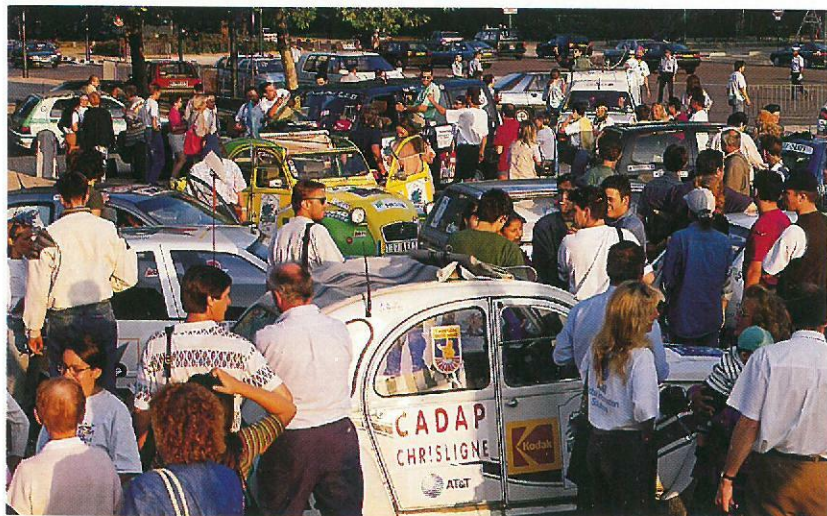


points, we push onward. Our expedition takes 2 hours and 50 minutes, in the rain at first, then in the snow. At the top, we are greeted by fog, but our personal satisfaction makes up for the lack of a view. The descent is just as difficult, through mud and over slippery rocks. We recover in a warm mountain cabin with a relaxing sauna, a delicious meal of mushrooms gathered during the day, and play with lemmings, charming little animals that are quite friendly.

28 August

Romo / Amsterdam, 700 km, 8 hours
We get a surrealist view along the beach at Romo, which seems to stretch into infinity. I get a thrill of excitement at the wheel of our car as I drink in our last unforgettable sunset. All our emotions are aroused. Now is not the time to think, but simply to feel. And at the same time, I am already a little nostalgic as I think of our return to Paris.

Florence Dibon



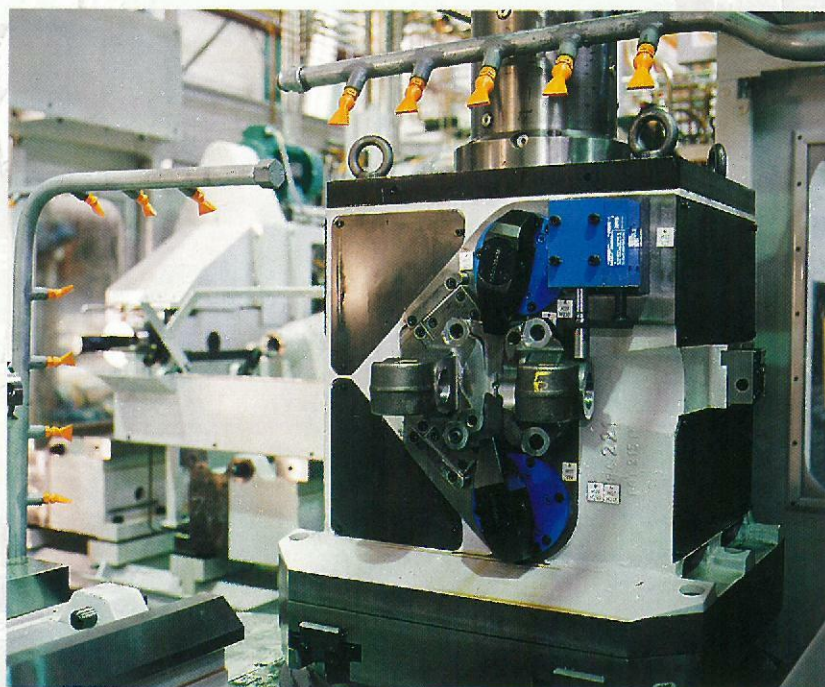
Scemm

The key to competitiveness

CITROËN'S SAINT-ÉTIENNE SUBSIDIARY DESIGNS AND MANUFACTURES THE MACHINES AND TOOLS USED BY THE PRODUCTION UNITS TO PRODUCE MECHANICAL AND BODY PARTS FOR THE GROUP'S CARS.

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A VARIED CUSTOMER ROSTER

**Clients within the PSA
Peugeot Citroën Group:**
Citroën Caen, Citroën Rennes,
SMAE, Peugeot Mulhouse,
Peugeot Sochaux

External clients:
Caterpillar, Ford, Renault
Véhicules Industriels, John
Deere, Austin Rover, CESA

Worldwide reach:
China, Germany, Japan,
Poland, Portugal, South
Africa, Spain, USA

Société de Construction d'Équipements, de Mécanisations et de Machines (Scemm) has been selling its products on the international market for a number of years. Among Scemm's recent successes outside the group was an order for a flexible line from Renault Véhicules Industriels (RVI), which was recently delivered to RVI's Vénissieux plant. Scemm won the contract in the face of stiff competition from a number of other firms, including Renault Automation. It's no mean feat to win an order from a customer that has a subsidiary in the same line of business as yourself. That contract, like others with Caterpillar, Ford, John Deere and Austin Rover, was not won by luck. Thanks to its modular and flexible lines, reliable standard components, speed of design and manufacture, competitive prices and experience as a supplier to PSA Peugeot Citroën, Scemm has been able to conquer new markets while continuing to serve its clients within the Group.

"At present, around 20% of our sales (FF448m in 1993) are with outside clients. Our aim is to increase this figure to 30% in the short term," explains Didier Blanchard, Scemm's director. Scemm has an overriding ambition with respect to both its internal and external clients:

to be the top European manufacturer of capital goods in its field. The company produces special-purpose equipment, transfer machines, machinery for flexible workshops and units and medium-sized stamping tools.

To reach its goal, Scemm can rely on its skill in mechanical design and engineering, its experience and global vision of computer integrated manufacturing and an organization which emphasises the



overlapping of various phases (identification of client requirements, development and quality testing, delivery and client assistance).

A pragmatic approach

Scemm's dual focus is reflected in two product lines: special machinery, units and workshops (85% of sales) and stamping tools (15%).

In both areas, the principles of project organization and management are the same. In the first area, the R&D department intervenes well before orders are received from the customer. Olivier Vidal, the head of the department, states that the gestation cycle for new projects is generally between one and two years. For each innovation, a prototype is built and tested; our aim is to ensure a reliable finished product that can be integrated immediately into our existing machinery. Furthermore, this is where we design the standard components that go into our machine subassemblies (most of the time, we produce simple components like feed tables, spindles and multi-spindle casings that can cope with daily production rates of between 1,000 and 4,000 workpieces. We also develop standard modules suitable for production rates of between 400 and 1,000 parts per day. The most advanced models are Axor, Flexor, Vector and Quatuor.

One of Scemm's key strengths is its ability to standardize mechanical components so as to form versatile, upgradeable subassemblies—rather like Lego blocks. A subassembly is composed of a feed table or a spindle or a multi-spindle casing.

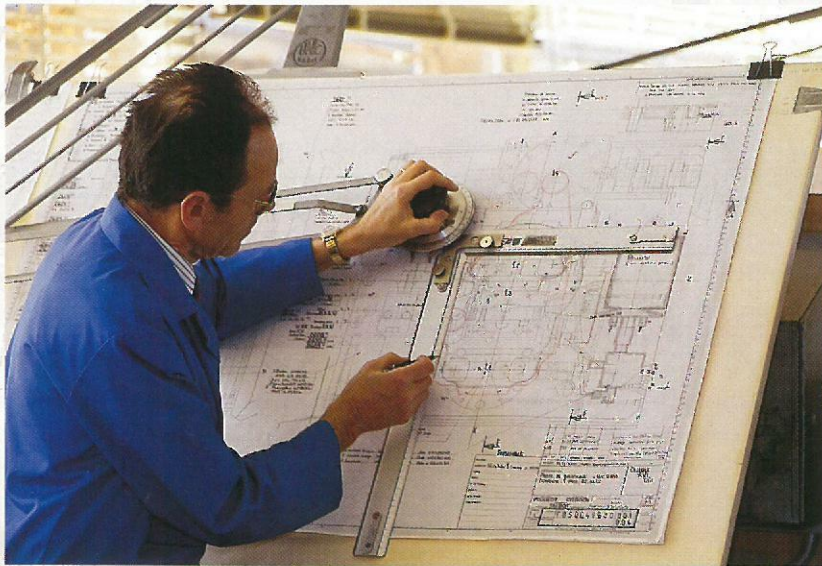
Another example of the capacity for

innovation of Scemm's engineers is the development of spindles mounted on fluid-film bearings: so-called "water spindles". These are composed of a small number of components in order to eliminate the heating and space problems of traditional spindles. (The spindle is the shaft that supports the machining tool.) The bearings are lubricated with filtered cutting fluid, a design solution that offers a number of advantages: the workpiece and the spindles are kept at the same temperature, machining accuracy is improved and maintenance is simplified. The Flexor is a good example of how the company innovates with standard modules. It is composed of a turret-type machining module, a table with one or two computer controlled axes, which can be incorporated into a transfer line or flexible cell, and an automated multi-spindle casing magazine. The remarkable feature of the Flexor is that, owing to an innovative system of cams, all these functions are provided by two motors instead of the usual four. This makes it possible to improve reliability and cut costs. Similarly, auto-

HARVESTING THE FRUITS OF TOTAL QUALITY

Ten years ago, Scemm introduced a Total Quality policy. This year, the company's efforts were rewarded with three citations. Last spring, Scemm received the "Flamme" award from Citroën's quality circle convention. In July, it became the first French industrial company in its sector and one of the first in Europe to obtain ISO 9001 certification. Furthermore, in October 1994, the company was nominated for an award in the EFQM European quality competition. These awards did not come by chance. From initial research and development to after-sales, Scemm constantly works to improve customer satisfaction. To Scemm, quality means two things: cutting leadtimes in conformity with the Product Development Charter, and scaling down investment commitments for PSA Peugeot Citroën, its main client. In order to reach its goals for improvement, Scemm has recently set up a self-assessment programme based on EFQM criteria. This system measures the company's strengths and areas for improvement, and enables the company to draw up action plans on the basis of the findings. Among the strategies that have been inspired by the system are the development of the after-sales service and customer feedback monitoring, simultaneous project engineering and the definition of standard modules before orders are placed (see main article). Another product of the system is the "bare essentials" philosophy as applied to machine design. This was motivated by a desire to get back to more pragmatic technical concepts, which are more competitive and better suited to customer requirements.





METAL-STAMPING: THE TOOLS OF THE TRADE

Scemm has created a separate production sector for its stamping tool design and manufacturing activity. Here, the company produces follow-on and stamping tools for medium-sized structural parts (i.e. not body parts). This activity accounts for 15% of turnover, with the remaining 85% being generated in the machinery and flexible line sector.

Nevertheless, Scemm plays an important role in the launch of new vehicles because of its expertise with sheet metal. Its experience is also broad enough to attract clients outside the PSA Peugeot Citroën Group, a goal that is consistent with the company's policy of global sales offensive. Although the activity itself is different, the organization and project management principles remain the same. In other words, the design, preparation, machining and assembly phases overlap.

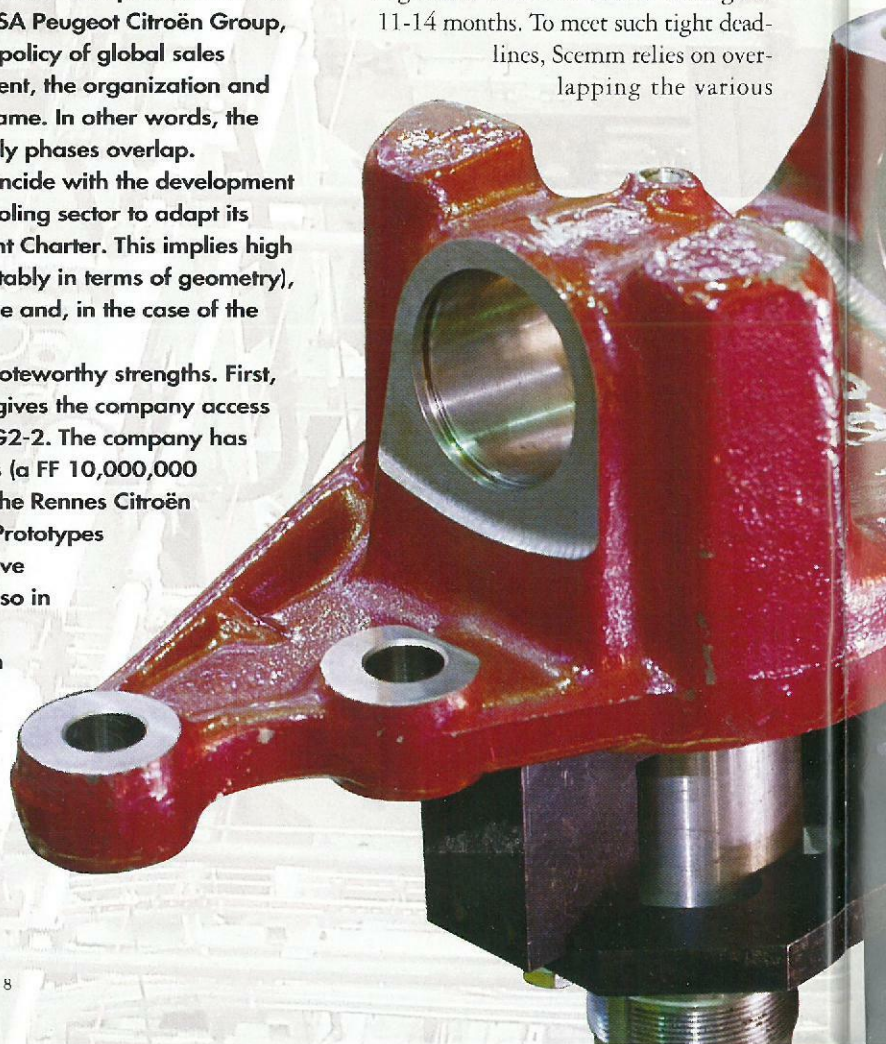
The launch of a number of tool ranges to coincide with the development of a new vehicle is an opportunity for the Tooling sector to adapt its working methods to the Product Development Charter. This implies high levels of performance in terms of quality (notably in terms of geometry), schedules and costs. This is a major challenge and, in the case of the Xantia, involved cutting leadtimes by 20%.

The stamping tools sector has a number of noteworthy strengths. First, its presses have been modernized, and this gives the company access to the market for larger ranges such as the G2-2. The company has also installed a 650 tonne Erfut double press (a FF 10,000,000 investment) together with two presses from the Rennes Citroën plant. At the same time, it has developed a Prototypes activity and implemented a process to improve customer feedback monitoring. Efforts are also in progress to simplify the ranges in the early stages. By applying CAD/CAM techniques in order to optimize critical parameters such as cutting speed and quality control, the company has gained a place on the leading edge of modern metalworking technology.

matic control of the magazine and the unloading of casings onto the turret means that production lines that use this type of machine are more flexible than conventional units. In addition to the R&D department, the engineering office has a Mechanics department and an Automation department, which design special machinery and flexible workshops to customer specifications. All the teams work closely with each other and with the Production Engineering and Industrial Equipment division. A flexible and efficient CAD/CAM system allows the departments to exchange data with the client, which helps to save time during the modelling and simulation phases. Project reviews involving representatives from the workshop, the operations planning department and the aftersales department are organised at each stage of the design process in order to encourage constructive criticism.

Rigorous methods

The process of designing and producing a new machine lasts an average of 11-14 months. To meet such tight deadlines, Scemm relies on overlapping the various



phases of design and production as well as on standardizing its components. While the design phase is still in progress, the launch phase gets underway. The components are machined and put together to form subassemblies, which are in turn assembled to produce the finished machine. The first process takes place in a special workshop equipped with a variety of numerically controlled machines. The second process involves the assembly of basic components (spindles, bearings, gaskets, casings, jacks, electric motors, sensors, etc.) to form



subassemblies, which will be used to fabricate the finished machine. Each process involves a corresponding level of integrated quality control. The components

are tested for reliability and performance, and the results are carefully recorded so as to ensure traceability in the event of a malfunction. This is the reason for the wealth of equipment to be found in the workshop, including a measurement centre, air conditioned rooms with three-dimensional measurement machines, a clean-room for bearing assembly, physical and chemical materials testing laboratories and spindle test benches. At the same time, self-inspection procedures are followed throughout the production process. In Scemm's huge 5,000 m² hangar, the subassemblies are assembled into machines or complete lines. During this operation, the machine management programs are tested on a simulator in order to speed up the fine adjustment process.

Once it has been assembled, the machine is tested under real-life conditions. This is where Scemm puts its know-how as a systems designer to work in order to create the final product. The finished machines are then disassembled and shipped for turnkey delivery to the customer.

The hangar is also the place where the observer becomes aware of the extent to which project management relies on methodical organization. A transfer machine or flexible workshop can measure as much as thirty or forty metres in length. This is the case of the highly flexible machining line that produces truck wheel spindles for RVI.

The line is composed of three sections - milling, lathe work and finishing - and can produce 250 parts per day. Five types of spindle will be machined on the line, or 32 variations in all.

To satisfy RVI's requirements, Scemm immediately set up a ten-man team comprising a project leader and a representative from each department (Engineering, Machining, Planning, Purchasing, Assembly,

Quality, etc.). With a RVI representative on site we were able to work even more closely with RVI, points out Maurice Bruel, an automation

SCEMM: CORPORATE PROFILE

Start-up: Founded in 1917, Scemm started by producing armaments and aero-engines. The company's tradition of precision engineering and reliability date from that time.

Location: Saint-Etienne, France, 15 kilometres from the airport and 2hrs 45 mins from Paris by high speed train (TGV)

Area: 50,000 m² of land, 30,000 m² of buildings

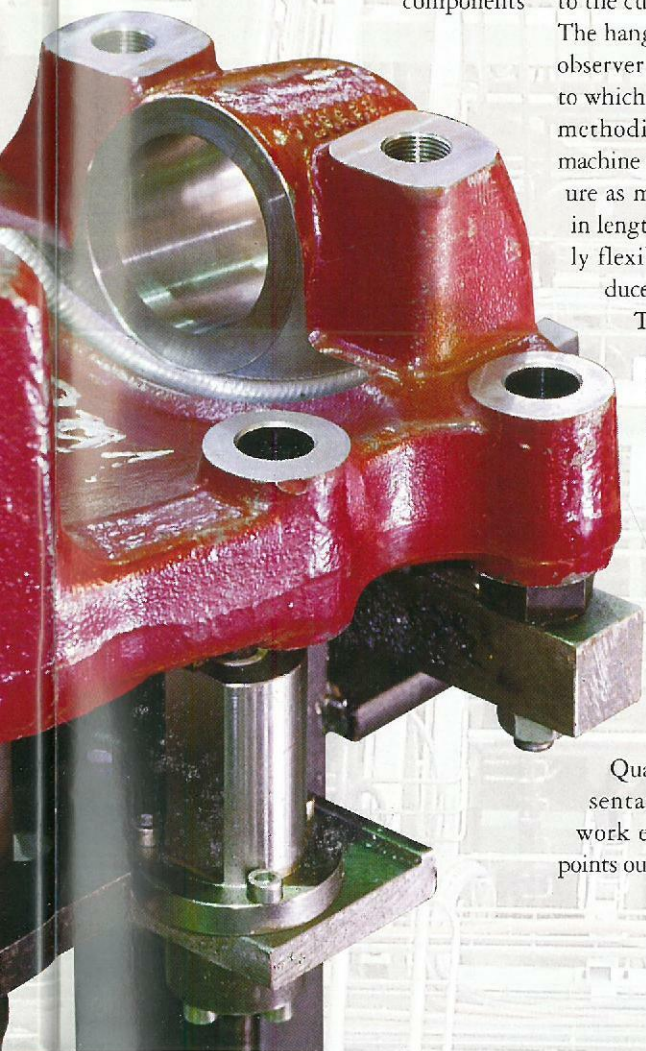
Activity: Design and manufacture of special-purpose machinery, transfer machines, flexible workshops and units, and medium-size stamping tools (two sectors of production: mechanical and body parts)

Turnover: FF 448m in 1993

Workforce: 614, including 68 engineers and professional staff

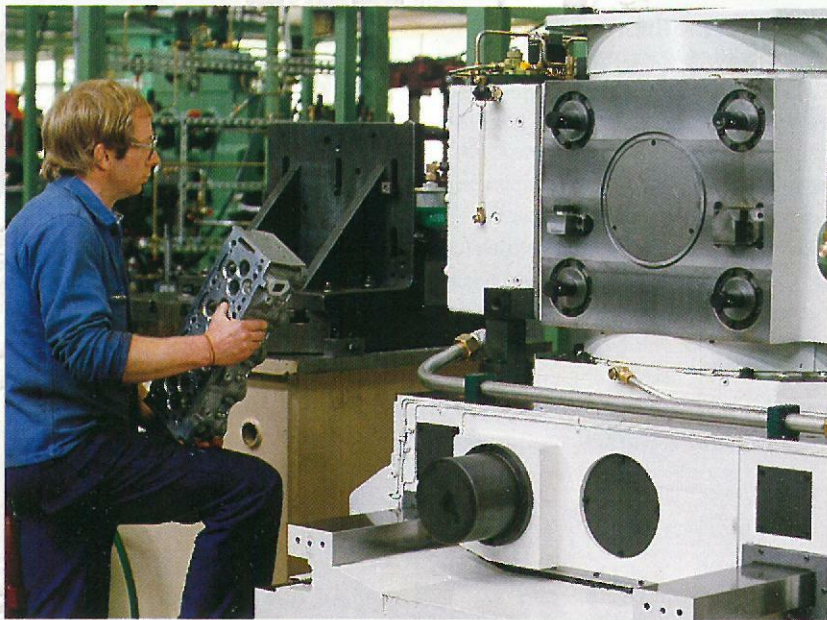
Employee participation training: 1,139 suggestions made last year, and 13,500 hours of training this year

Quality awards: "Flamme" from the Citroën quality circle convention, ISO 9001 certification from the French Quality Assurance Association, and finalist in the EFQM competition (European Total Quality Award)



A JOINT VENTURE FOR PLANT PRODUCTION TOOLING

Scemm is a wholly owned subsidiary of Citroën and one of the five industrial units of Peugeot Citroën Industrie (PCI), a joint-venture specialized in the design and production of capital goods for the Group. The venture also includes Constructions Mécaniques de Meudon (CMM), Constructions Mécaniques de Rennes (CMR), Constructions Mécaniques de Sochaux (CMS) and Société d'Outillage Général Appliqué aux Moules et Modèles (Sogamm) in Stains.



Plug and play

Scemm's products are not handed over to the end user until a battery of tests and trials have been successfully performed. Already at the design stage, the subassemblies undergo FMECA validation studies (Failure Modes, their Effects and Criticality Analysis) in collaboration with the client. And during the final verification stage, all the operating parameters (cycle times, etc.) are checked along with part quality and machine repeatability and capability. Once these checks have been completed, the assemblies are dismantled, shipped and reassembled on the client's premises. Naturally, ease of disassembly and transport are taken into consideration in the design brief. However, Scemm's job does not end with delivery. The client's production and maintenance staff have to be given the necessary training and the machines must be started up and monitored until they are running at full capacity.

Aftersales service is another area of personnel involvement. Within hours of receiving a call for servicing or repairs, Scemm's operatives are up and ready to take fast action on site. They do not take the usual summer holidays either, taking advantage of clients' annual monthly shut-down to perform any necessary maintenance or modernisation work.

In technology-intensive sectors, professionalism is at a premium.

Scemm personnel will have followed a total of 13,500 hours of training in 1994, representing 3.5% of the wage bill. Moreover, 98% of the workforce is composed of engineers, technicians and skilled workers.

Safety, too, is a vital concern. For the past four years, there have been no industrial accidents involving sick leave at Scemm. Last but not least, a key figure: 1,139 suggestions were collected in 1993, with almost two-thirds of personnel participating in the scheme.

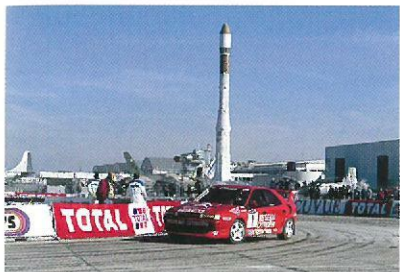
Didier Counas

specialist with the Engineering department. Philippe Ollier was also involved in the RVI project and is thoroughly familiar with teamwork. He is in charge of the electrical systems and fine adjustment of the transfer machines. And before that, he was the project leader for a gear case machining line at the SMAE plant at Metz-Borny, the PSA Peugeot Citroën subsidiary specializing in gear housings. "Thanks to the close links we forged from the outset with the DETA (the group's automotive research division), the DMEI (Production Engineering division) and also with our suppliers, we were able to optimize our production solutions while the parts were still being defined," explains Philippe Ollier.

The fall-out from the RVI project took the form of a second research phase for the manufacture of gear cases for future engines. Thus, as a part or component evolves, the company relies on customer feedback to improve the performance of its machines.



Xantia 4x4 Turbo, 1994 French cross-country rally champion



Making a splash in its first year of automotive competition, the Xantia 4X4 Turbo carried Jean-Luc Pailler to his fourth consecutive victory as rally champion of France. The Xantia took the lead straight away at its debut event at Faleyras, thanks to the skill of the Brittany-born driver. With the last event at Bourget, Jean-Luc Pailler finished the season in style.

Citroën: Dedicated to education

September was back-to-school time, and this year, Citroën sent a video to the career counselling services in all of France's technical schools. Entitled "Citroën Enseignement" (Citroën education), the video comprises fifteen films presenting the marque's technologies, organization, production resources and training. Every year, Citroën plans to send a new video showing recent developments.

Paris Grand Prix 1994

As part of the festivities celebrating Citroën's 75th anniversary year, the Marque sponsored the Paris Grand Prix 1994.

The race took place from 8 to 10 September on a 15,000 km route from Amsterdam to Paris and back to Amsterdam. One hundred twenty cars, all over 20 years old participated, including three Traction Avants, one SM and eight DSs.

Citroën won the Automakers' Cup because five DSs were among the top twenty finalists.

Nicolas Rondet wins the 1994 AX Citroën French Cup

On 23 October, the Nîmes-Ledenon track hosted the final test in the Citroën-Total-Michelin-Facom AX French Cup 1994. The competition is open to amateur and semi-professional drivers alike. Forty drivers took from the starting line for a highly exciting skirmish. When the dust settled after a gruelling race, Christophe Porcher was winner of the event and Nicolas Rondet took first place overall, becoming the winner of the 1994 edition of the AX French Cup. David Senente won the "Premier Chevron", a class reserved for drivers who have held their motor racing licence for less than a year.



Bulgaria: 120 Citroëns for the Ministry of Health

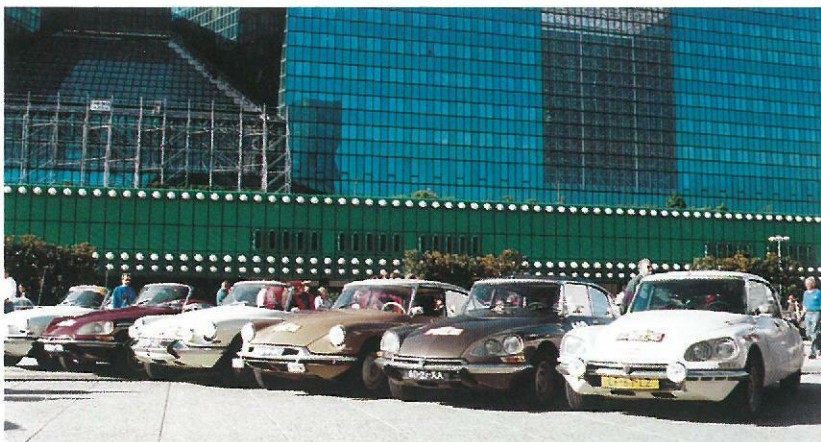
The Bulgarian Ministry of Health signed an accord in early 1994 with the importer Citroën Avto Motor to buy 90 Jumper ambulances and 30 ZXs for use in the health care sector. The agreement was made with the financial support of Phare, an EU programme to help central and



eastern European countries overhaul their economic and political systems. Citroën's ability to offer a competitive product (the vans are being converted by Cimos, Citroën's partner in Slovenia) and the marque's strong network in Bulgaria were two of the key factors that helped Citroën win the contract. Twenty-four Jumpers and 10 ZXs were delivered in mid October to a representative of the Citroën importer in Burgas. The other 86 vehicles will be delivered in January 95.

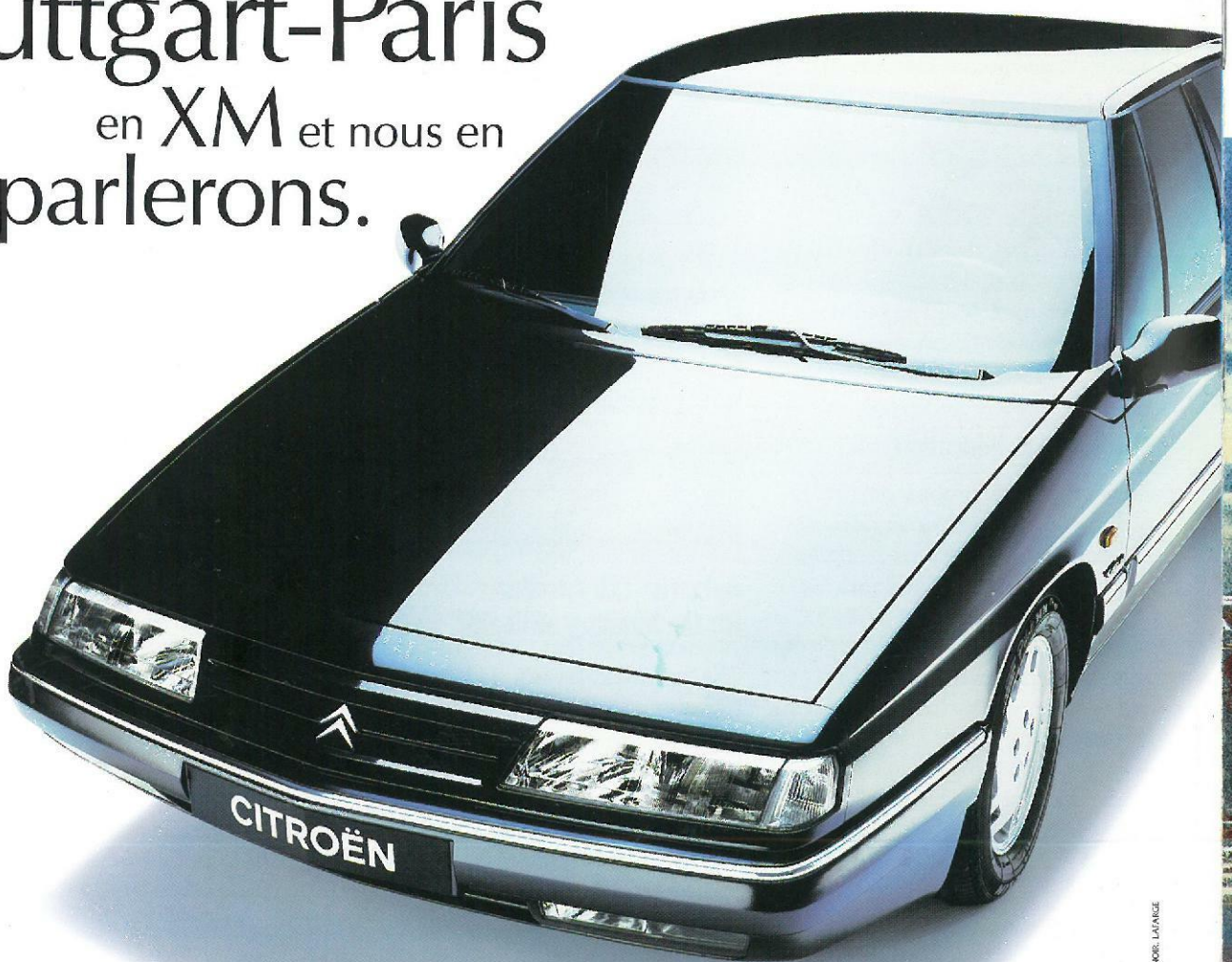
Citroën Hispania: transparently honest

Citroën Hispania was awarded the title of the "most transparent private company of the year" by the "Economy" sections of 56 representatives of the Spanish media, including daily newspapers, radio stations, agencies and television stations. Reflecting the credibility of the information given by Citroën, the prize has a special value. "Transparency is gaining in value. It is a form of social justification and the best system of self-inspection that you could hope for." So writes José Garcia Abad, editor of the economic weekly *Nuevo Lunes*.





Si vous pensez
 que seuls nos amis
 d'Outre-Rhin
 ont l'apanage des voitures
 Haut de gamme,
 faites Paris-Munich
 Stuttgart-Paris
 en XM et nous en
 reparlerons.



* EURO RSCG / SOLEX LENOIR LAFARGE

Xm

En redessinant la nouvelle XM nous en avons profité pour enrichir la gamme des motorisations. Avec son 2,5 l turbo diesel (130 ch*) ou son 2 l 16 V essence (135 ch**) la nouvelle XM confère à son conducteur, dans un silence feutré, puissance et maîtrise. Confortablement installé devant une planche de bord totalement repensée, tous vos gestes et manœuvres seront facilités par une ergonomie intelligente.

Et si vous décidez d'aller faire un petit tour au bord du Rhin, sachez que Sehr Schön et Sehr Gut, veulent dire très belle et très bien. *94,5 kW à 4300 tr/mn. Consommations normes CEE : 5,1 l à 90 km/h, 6,8 l à 120 km/h, 9,2 l en ville. **97,4 kW à 5500 tr/mn. Consommations normes CEE : 5,7 l à 90 km/h, 7,4 l à 120 km/h, 11,2 l en ville. 3615 Citroën. Informations clientèle : (1) 40.45.45.44. Modèle présenté : XM finition Exclusive. AM 95.

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