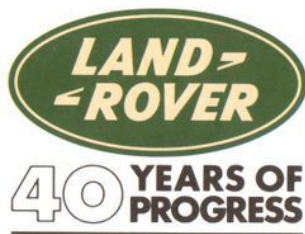
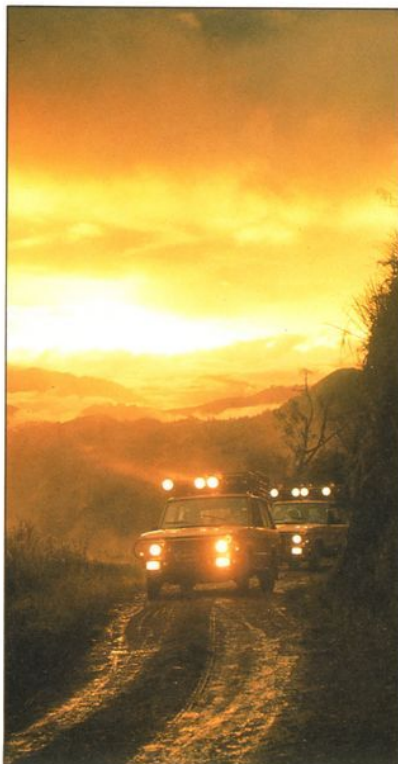




40 YEARS OF
PROGRESS

LAND ROVER 40 YEARS OF PROGRESS



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LAND ROVER BEGINNINGS

IN MANY WAYS, 1948 WAS A YEAR of new beginnings. British Rail and the electricity industry were both nationalised; the National Health Service was formed; and the Land Rover was launched.

In fact, the origins of the Land Rover could be said to reach back to the end of the War in 1945. At that time, the Rover was facing major problems. The company had taken over the 'shadow' factory at Solihull in which they had been building aero engines. This provided 1 million square feet of manufacturing space.

Against that, however, was the fact that steel was rationed and the system of allocating steel favoured successful exporting companies. Unfortunately, Rover had never even built a left hand drive car. They had, it was true, set up an Export Sales Department in 1945, but they could hardly be described as export minded.

As a result, the company's allocation of steel was just enough to build 1,100 cars a year. This was against plans that had been laid for production of 15,000 to 20,000 cars a year.

Yet the company still had a huge factory on its hands, a large workforce and needed something to keep it going until steel supplies improved.

The Directors were convinced that this was a short term problem and so they set about looking for a short term solution.

At the time, Maurice Wilkes, the company's Chief Designer, had a farm in Anglesey. Like many others in his position, he had bought an ex-army Jeep to use on the farm. It was useful, but spare parts were difficult to obtain and he knew the vehicle would have to be scrapped before long.

Maurice Wilkes realised that he had no alternative but to buy another Jeep simply because there was no competitor for it. This led him, along with his brother, Spencer Wilkes who was Managing Director of Rover, to realise that there was a gap in the market.

If Maurice needed a vehicle like a Jeep that would be more reliable and for which spares were readily



available, surely there would be others like him? Perhaps, they thought, a vehicle could be developed that would meet that need? They decided to develop the idea to see if it was feasible.

The basic concept for the new vehicle was laid out by Gordon Bashford, a designer who had joined Rover as an office boy in 1930. Faced with the problem of designing a successor to the Jeep, Gordon Bashford did the obvious thing. He went to a War Department surplus vehicle dump in the Cotswolds and bought two Jeeps. They were brought back to Solihull where their strengths and weaknesses were analysed. Once that had been done, the job of designing the new vehicle could begin.

Every designer has to work within constraints of one sort or another. Those imposed on the Land Rover design team, however, must have seemed crippling.

They had to produce a vehicle that would be better than the Jeep, but in doing that, they had to use as many existing components as possible. This was to keep the costs of tooling to a

Spencer Wilkes (sitting) with his brother Maurice (standing) who is said to have had the idea for the Land Rover on his Anglesey farm.

minimum. They also had to avoid using sheet steel and the body had to be hand formed because there was no money for press tools.

Even so, the new vehicle was to be intensely practical from the start. It had a sturdy, simple chassis onto which was mounted an engine from a pre-war Rover 10. The mechanical components of the gearbox and the front and rear axles were all from existing cars too, although the key to Land Rover's success, the transfer box, was new.

The first prototype had permanent four wheel drive, low and high range gears and provision for winches and power take-offs.

The bodywork was rudimentary, to say the least, with no weather protection and no doors. It was, however, made of aluminium alloy

rather than steel and so escaped the stringent rationing.

But perhaps the most unusual feature of that first prototype was that the driver's seat and steering wheel were in the middle of the vehicle although later prototypes placed the driver in the regular position on one side of the cab.

The initial idea seems to have been to produce a vehicle that could be both a tractor and a car. That perhaps explains the odd position of the steering wheel on the first prototype, although there was an additional reason. If the driving position was in the centre, then the Land Rover could be sold in exactly the same form all over the World.

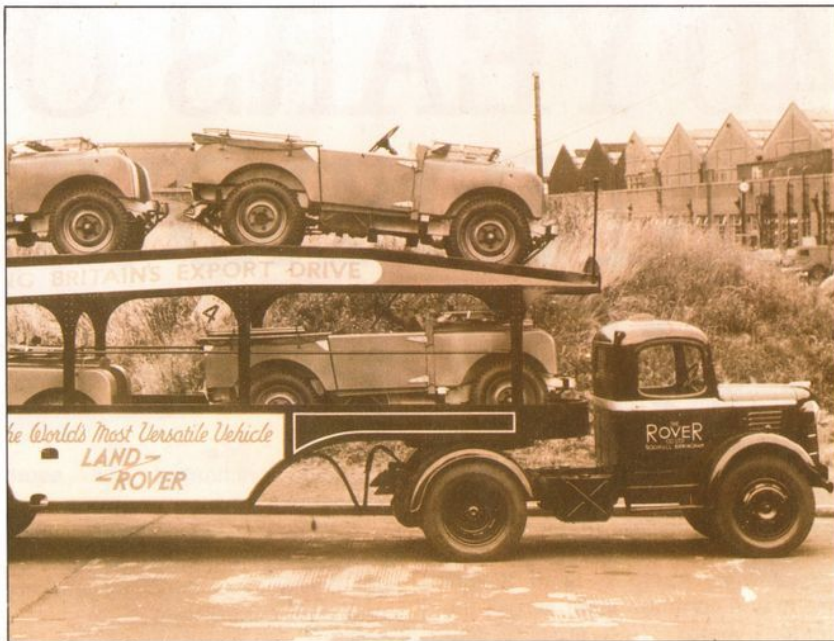
But the comparison with a tractor does explain why there was relatively little load space at the beginning. After all, there was none on a tractor and so even if a Land Rover could only carry a bale of hay, it was an improvement on a tractor.

The first prototype was running by the end of the summer of 1947 and work began on another 50 pilot build vehicles. In fact, only 48 of these were completed and only 25 of those would be built by the time the Land Rover was announced.

The Board had approved the project in September 1947 and in December, the Government announced that the company could have enough steel to build 1,000 Land Rovers a year. The company had forecast that they could sell 5,000 a year, but the allowance was better than nothing.

The Land Rover was announced to the World at the Amsterdam motor show in April 1948, some time before the company was ready to begin manufacture.

Early prototypes were tested on farmland around the factory.



This was common practice at the time. Car manufacturers would often announce a vehicle that existed only in prototype form, sometimes without even an engine. This allowed them to gauge public reaction before committing to the considerable expenditure involved in starting production.

Sometimes, more than a year would elapse between the announcement of a new car and the first deliveries. In the case of Land Rover, the first deliveries were made in July. Between then and the end of the financial year, only 48 were released to customers.

This must have been frustrating for both would be buyers and the company. Reaction to the Land Rover was very good, although customers were determined that some of the items originally intended as extras, such as doors, should be standard.

These early customers paid £450 for the basic Land Rover at a time when average wages were £408 a year.

Left hand drive vehicles loaded, waiting for the journey to the docks.

Today, prices of new Land Rovers start at around £9,000 while the average wage is around £10,000 a year. By comparison, then, a Land Rover is even better value today than it was in 1948.

It is misleading, however, to make direct comparisons of the two vehicles because that first Land Rover was just the starting point. In the 40 years since it was announced, the Land Rover has undergone major developments.

The body is recognisably related to the 1948 model, but the modern Land Rover is a totally different vehicle. The technology that lies under the aluminium skin is of the eighties while the overall vehicle is designed to meet the needs of today's customers.

The World has changed and the Land Rover had changed with it ●



40 YEARS ON – LAND ROVER TODAY

IN THE FORTY YEARS SINCE THE Land Rover was announced, it has been extensively developed and this has doubtless contributed to its considerable success. Land Rovers are now a common sight across the World, both in areas with sophisticated road networks and in countries where roads are few and far between.

Over the past ten years, significant advances have been made both in the technology of the company's products and in the way the organisation is managed.

Land Rover Limited was formed in 1978, a move that placed the future of the company in the hands of the managers who were responsible for its day to day operation. When the company was formed, the major markets for Land Rover were still in the Middle East, Africa and the Far East. This was a situation that had

remained unchanged for some considerable time.

However, by the time Tony Gilroy moved in as Managing Director in 1983, it was clear that new markets would have to be found.

The view within Land Rover at that time was that these markets were likely to suffer as a result of World economic developments. Falling oil revenues, the rising value of the dollar and increasing interest rates were almost certain to affect Land Rover markets. Customers, even Governments, would not be able to afford new, imported vehicles. Given that these markets represented the majority of the company's business, the outlook was serious.

It was decided to carry out a far ranging review of the Land Rover business. As Mr Gilroy explains, "We had to ask ourselves how we were going to live with a business where we had been focussing on Africa, the Middle East and the Far East and where the prospects for economic recovery were very remote."

The answers to that question were, necessarily complex. If the company's major markets were declining, then growth had to be found from others. This meant that Land Rover and Range Rover had to become more successful in Europe and Australia. It also meant that the company had to attack the World's biggest market for motor vehicles – North America.

At the same time, the company had to become more efficient. There were 13 factories, all involved in making Land Rovers and Range Rovers. Transporters carrying components between them covered a million miles every year. Clearly, this did not add any value to the product and was one example of inefficiency in the manufacturing operation.

Fortunately, there was a ready-made solution to hand. The factory where the Rover 3500 saloons (code named SD1) had been built was on the Solihull site and had lain unused since 1981. Land Rover bought the factory in January 1984 and by the following Autumn, had cleared it, ready for the transfer of 22,000 manufacturing operations from other sites.

During the move, every process was assessed in a search for improved efficiency. It was a major undertaking that called for much improved communications. "When you're going to move 3,500 people as we did, you have to explain to everybody why you're doing it," says Mr Gilroy. "Remember, we weren't just asking them to move their jobs, we were asking them to change their working practices quite dramatically."

The company itself was having to change, too, investing in new technology at a remarkable rate. 35 miles of broadband cabling was installed to link 1,500 new computer terminals across the Solihull site. Designers and engineers began to benefit from the advantages of

Tony Gilroy, Managing Director of Land Rover Ltd. (left).





The new One Ten range ready for launch in Dubai in 1984.

Computer Aided Design. Computer aided manufacture and robotics became a part of daily life in the factory.

But the changes had to go further. If Land Rover was to be able to sell into the developed markets as successfully as it needed to, then it had to become more responsive to market demands. This involved a close examination of the product range.

In the past, it had often been said that the company could build Land Rovers for years without ever building two exactly the same. This spoke volumes for the versatility of the vehicle, but, in the business environment of the eighties, it made the task of forecasting demand well-nigh impossible.

As Tony Gilroy explains: "If you have too many derivatives, it makes it very difficult to forecast the components you need early enough for your suppliers to bring them in so that you can build the vehicle on time. In fact, it made it so difficult that we just weren't getting it right."

In order to reduce the time lag between a customer ordering a

vehicle and taking delivery, a wide ranging review of demand was carried out. The result was a core model strategy. This dramatically reduced the number of Land Rover derivatives with consequent improvements in delivery times. "We've reduced the lead time from order to delivery by months in some cases," states Mr Gilroy.

The move into Europe brought other changes to the products. Land Rover was made more refined with the Station Wagon gaining more sound insulation, power steering and a turbo charged diesel engine.

Range Rover was changed too. "We identified a tremendous demand for Range Rover in Europe," explains Mr Gilroy, "but we weren't tapping it because we had no diesel engine for it." There had been plans to produce a diesel version of the V8 engine, but it was decided to go to a specialist diesel supplier instead. Even then, it was not a case of taking a standard engine. Virtually every component had to be modified to meet Land Rover's strict criteria.

The diesel Range Rover was launched in 1986 and shortly afterwards broke 27 speed and endurance records.

With improvements to the product range well under way, attention shifted to developing the

dealer network. The aim was to improve the standards of service provided to the company's customers. In France and Italy this meant reducing the number of dealers by 50%.

The effect of this was to improve the business performance of the remaining dealers. They were then able to invest more money in enhanced facilities and so were able to provide a better service to customers. The result was that sales in those two countries have risen by over 50%.

Increased sales are being achieved throughout the rest of Europe too. Over the past five years, sales of Range Rover in Europe are up by 86% while Land Rover sales are up by 44%. So considerable progress has been made in securing Land Rover's position, although everyone agrees that the task is not complete yet.

Tony Gilroy is very clear about what the company has to do in the future. "Our future is down to us learning to respond even more quickly to our customers," he explains. "We have to respond more quickly than our competition and we have to do it with a greater focus. And we have to respond in a way that demonstrates that there is real integrity in what we're doing. People have to believe in what we're doing" ●

BUILT-IN QUALITY

EACH MONDAY MORNING, AN unusual ceremony takes place at the Land Rover factory. Every new employee who is about to start work in the manufacturing area meets Terry Morgan, Production Operations Director.

The recruits have been carefully chosen before being offered jobs, because the building of Land Rovers and Range Rovers depends on skilled people at every stage. Mr Morgan chooses these Monday morning encounters to explain that the quality of the finished product depends on the people who make it.

"We must not confuse durability with quality," he explains and while he talks, it is clear that the drive for improved quality has been at the back of many of the changes that have taken place in the factory over recent years.

Mr Morgan took up his present job less than two years ago and now oversees the whole of the manufacturing process from his spartan office buried among the factory buildings at Lode Lane.

He points out that Land Rover, in particular, is a complicated product by motor industry standards because the

company offers so many different specifications. These have been reduced since 1983 as part of the rationalisation process, but there are still enough variations to make the output of the average car factory seem simple by comparison.

One effect of the rationalisation was to bring virtually the whole of the manufacturing process together at the Lode Lane factory. The result is a highly integrated facility and that has brought a number of benefits.

The company has to carry lower stocks of components now and that has meant a much more efficient operation. Reducing stocks in this way has released money for investment in new plant and equipment instead of being tied up in vast quantities of components.

The people who work in the different areas also find it easier to identify with the finished product. Such identification was much more difficult when they were working in factories spread across the Midlands.

At the same time as fostering this identification with the vehicles that roll out of the factory, Mr Morgan is committed to building what he refers to as a supplier/customer relationship between different departments.

The goal towards which he is working is for each department to be regarded as a supplier and for the next

department in the manufacturing process to be the customer. The objective is to produce even higher quality standards throughout the factory and to emphasise that everyone is a supplier to the next department in the manufacturing sequence.

To bring that fact into even sharper focus, every vehicle on the assembly lines carries a windscreen sticker that says, "Remember, the customer pays your wages."

Many of the changes that have taken place over recent years have been aimed, at least in part, at developing a new attitude throughout the factory. At the same time, there has been considerable investment in new equipment and new technology.

"In terms of technology, one of the most important areas for us is information," explains Mr Morgan. "What's going on? What problems have we got? How many have we done? What's the quality like? Gathering, analysing and distributing information is as important to us as Computer Aided Design and advanced manufacturing techniques."

As if to emphasise the point, a new computer terminal sits on a table facing his desk. The multi-coloured display keeps track of events in the paint shop automatically. By pressing a few keys, Mr Morgan can see exactly what is going on in the paint shop, in production terms.

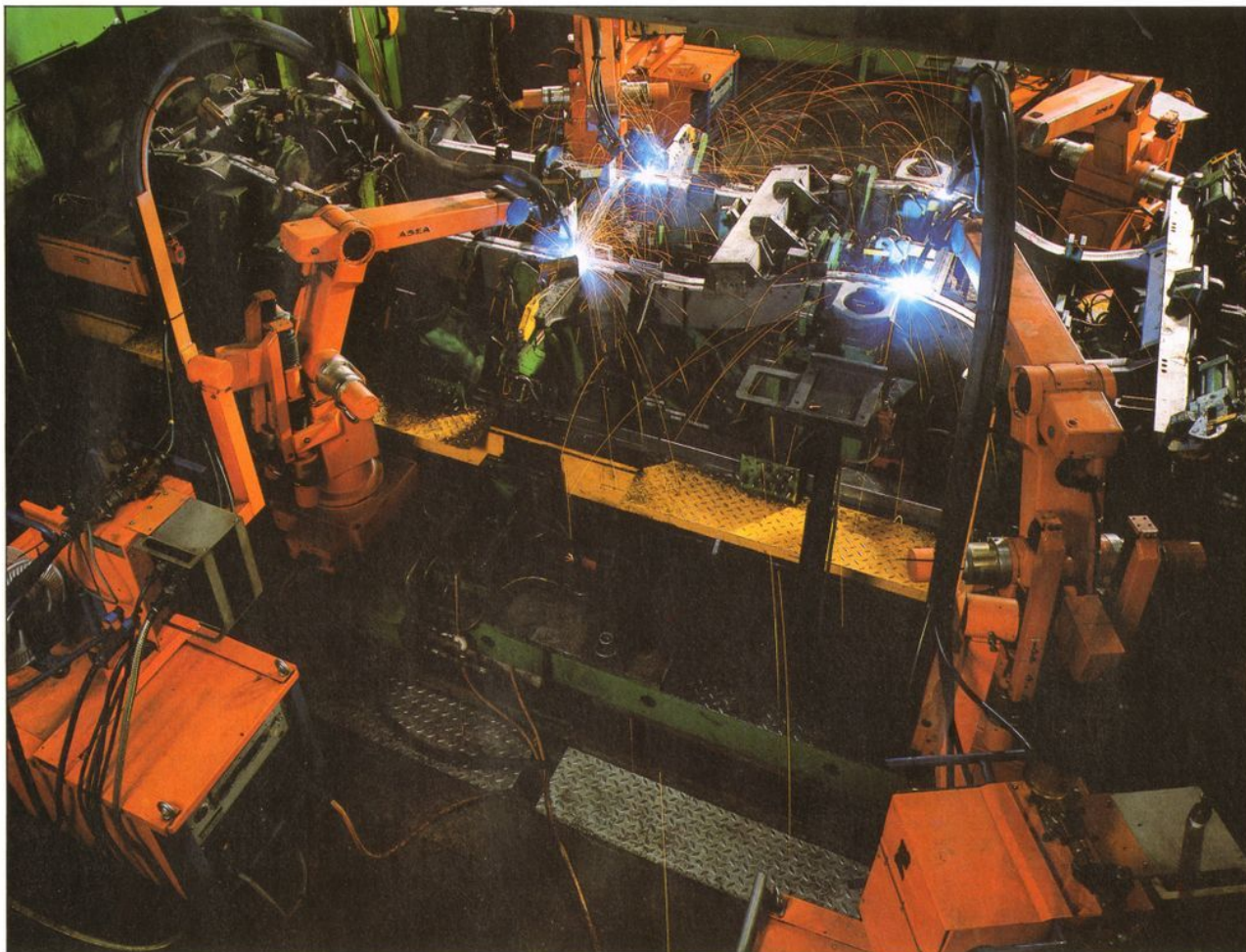
He demonstrates the system with evident pleasure, but he is at pains to emphasise that computers are not confined to information gathering and distribution. Computers are now fulfilling increasingly important roles in design and manufacturing. As an example, Mr Morgan points to the new generation of Computer Numerical Control (CNC) machine tools now in use.

They are a vast improvement over the traditional equipment because they are much more flexible in the range of operations that can be completed on them. This means that the manufacturing area can be more responsive to change.

In engine assembly, robot carriers

"Everyone here knows that we all have to take responsibility for quality."





follow guide wires buried in the floor to take the engines from assembly point to assembly point, depending on the specification of the engine being built. Robot welding systems have been introduced for chassis manufacture too and work is in hand on developing robot applications elsewhere in the plant.

But while computers and robots help the company to achieve improved efficiency, they are also an important factor in the achievement of improved standards of build quality. A robot welding machine, for example, will weld every chassis to exactly the same tolerances every time.

Even so, the quality standards have to be checked continuously. Every engine is run on a test bed to make sure that it meets the design specifications before being installed in a vehicle. Every chassis is checked after each stage of manufacture and the card that records the checking is retained at the factory.

At every stage, quality checks are carried out and the final vehicle is checked again before it is released for delivery. This final inspection provides

Automated chassis manufacture using computer controlled robots.

an index known in the factory as Customer Quality Rating (CQR) and the title gives an indication to the emphasis in the process.

In the motor industry, it is very easy for a manufacturer to carry out a final inspection to make sure that each vehicle has been built to its design tolerances without thinking about whether or not it meets the customers' expectations. At Land Rover, the emphasis is very different. "Obviously we check to make sure that every vehicle is within tolerances," explains Mr Morgan, "but we also place a heavy emphasis on what the customer wants from the vehicle."

The CQR is produced on the basis of the number of faults every customer would complain about, faults that some would complain about and faults that are noticeable to an inspector looking for such things. Needless to say, any faults found are rectified before the vehicle leaves the

factory.

To back up the CQR, a Customer Quality Tracking Study (CQTS) is carried out. This involves contacting a proportion of customers by telephone during the second month of ownership. During the calls, which are made by professional researchers, detailed questionnaires are completed. Each one takes between 30 and 45 minutes.

The survey is designed to establish customers' opinions of the vehicle and the company's dealers. Statistical analyses of the research are provided for senior management, while detailed results are fed back into the factory for appropriate action. The programme is now well-established in Britain and has been extended to Australia and the USA.

But everyone in the company is aware that CQR and CQTS can only ever be confirmation that all the manufacturing operations have been carried out correctly. "Everyone here knows that we all have to take responsibility for quality," says Mr Morgan. "It's just not good enough to leave it to inspectors and rectifiers. We all have to get it right first time" ●

A NEW IMAGE

EVERY CAR MANUFACTURER relies very heavily on a network of franchised dealers. These are the people who are actually in daily contact with the customers, selling to them, delivering their new cars and providing regular servicing. It follows, then, that relationships between the manufacturer and the customers are heavily influenced by the dealers' actions.

The key to success in building those relationships lies in dealers having the right facilities, knowledge and attitudes. To some extent, all of those rely on the dealer being able to earn a reasonable level of profit from the franchise that he represents.

If that cannot be done, then he will not be able to invest in new facilities. He will probably be less able to afford to send sales and workshop staff on training courses and it is likely that he will not have a particularly strong commitment to the manufacturer's products.

For Land Rover, one of the main goals since the formation of the company as a separate entity has been to develop the dealer network. In

doing this, the aim was not only to make sure that dealers have the right facilities, but also to make sure that their employees know and understand the products. As John Cunnane, Land Rover's UK Sales Director put it, "We're looking for people who are committed to providing a dedicated service to our customers. This has involved a detailed review of the dealer network over a number of years."

In 1978, there were 950 Land Rover dealers selling less than 8,000 vehicles in total, some more successfully than others.

By 1982, the number of dealers had been dramatically reduced, a move that more than trebled the average number of vehicles sold by each franchised holder. This is a trend that has continued as the dealer network has been refined over the years. Today, there are 160 Main Dealers providing an improved and committed level of service to even more customers.

John Cunnane explains; "Our overall strategy has been to develop a franchise dealer network committed to providing levels of service consistent with our customers' rightful expectations. We build a quality product and our customers expect similar standards of quality from our dealers."

He admits, however, that the

diversity of customers for Land Rover products provides a particular challenge. Whilst a Land Rover is very much a working vehicle, Range Rovers are competing for sales with other luxury cars. Indeed, Range Rover is now the second best selling luxury vehicle in Britain.

Customers for both Land Rover and Range Rover, however, expect specialised attention and the company is helping dealers provide this. Indeed, within the next eighteen months, there will be 60 new dealer showrooms opening. These will be purpose designed centres dedicated to the sale and servicing of Land Rover Limited products.

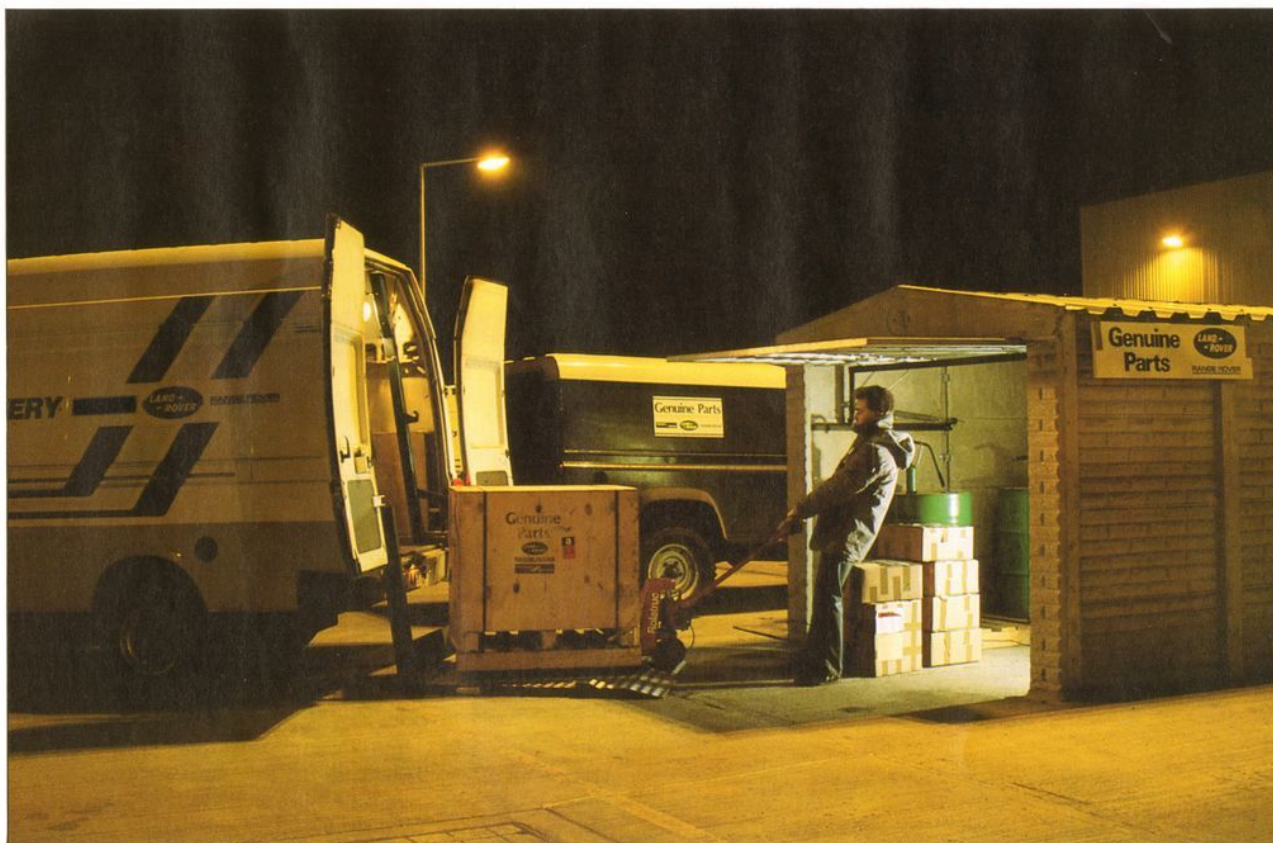
Each will be carefully designed to meet the needs of a very specific and demanding market. "You have to understand your customer very well if you're going to be able to provide the best support services," explains John Cunnane.

In order to provide those services, Land Rover dealers now work to a set of clearly defined standards in all areas of their businesses. As a result, customers going to a Land Rover dealer today can rely on being able to talk to knowledgeable sales and service staff who are able to call on a comprehensive range of support services.

For Land Rover, one of the most

A Land Rover Centre is dedicated exclusively to serving the needs of Land Rover and Range Rover customers.





Parts ordered by 4.30pm are delivered by 7.00am next day.

important areas is the supply of spare parts. This is the responsibility of Land Rover Parts Ltd. and Managing Director, Alan Simpson explains that the aim here is to satisfy demand for parts quickly. "We expect dealers to be able to cope with the majority of service work out of their own stocks of parts," he says.

Inevitably, however, there will be occasions when a dealer does not carry the relevant part, perhaps because it is for an old vehicle.

That is the time when the dealer can call on a remarkable service operated by Land Rover Parts. Each dealer has a computer that is linked to the Land Rover Parts Ltd head office. This can be used to place an order for an urgently needed part and provided the order is placed by 4.30pm, the part will be delivered by 7.00am the next day.

The hub of the parts distribution system is a 600,000 square foot warehouse at Desford, Leicestershire. 30,000 parts are carried in stock, some of them relating to Land Rovers made 25 years ago.

Looking after owners of older

Land Rovers is very important, according to Alan Simpson who points out that the company is obliged to carry parts for 10 years after they were last used in production.

Even so, he explains that the company does better than that. "We would never turn a customer away, no matter how old his vehicle is," he says. "I can't guarantee always to have the part in stock, but we'll always do our best to help."

Land Rover Parts has a world-wide responsibility, working through local importers in most cases. However, in America where the Range Rover is now sold, parts distribution is through a warehouse in Memphis, Tennessee. Here, too, there is an overnight emergency parts supply service, although this can be supplemented from the UK when necessary. If an American dealer needs a part urgently, Land Rover Parts can deliver it direct within 48 hours from Desford.

The efficiency of the parts operation depends on the computer system. Indeed, nearly 80% of employees at the Land Rover Parts headquarters rely on the company's computer installation in their jobs. There are 125 terminals in the building with land line links to the warehouse at Desford.

Over the next few months, the

system is being changed in order to incorporate benefits that have been made possible by the latest developments in computer technology and programming. But Alan Simpson is very clear about the reasons for this and all the other developments being implemented by the company.

He explains that the company's clear objective is to have the best parts supply network in the World. He sees this as an integral part of the development of Land Rover for the future. This reflects the recognition within the company that the parts and service departments of a dealer are every bit as important as the sales department.

The reason is very clear. While a customer may buy a vehicle from the showroom once every few years, that same customer, covering an average annual mileage, will visit the parts and service departments twice a year for normal servicing.

This leads Land Rover people like Alan Simpson to place a heavy emphasis on the role of parts and service departments. "People talk about after sales service," he says. "We like to think of it as between sales service."

To some, that may sound like a minor change of emphasis, but to Land Rover, it's vitally important. ●

SOMETHING SPECIAL

EVER SINCE THE EARLY DAYS of the Land Rover, the potential for special variations on the theme has been obvious. In the early days, the company developed a standard fire appliance. This was followed by workshops, ambulances and a range of variants designed for farmers.

Since 1985, production of specials has been handled through Special Vehicle Operations (SVO) which acts almost as a separate business within Land Rover Limited. Roland Maturi is Director of SVO and presides over a small, but flexible workshop in the Solihull factory.

They can take a project from defining a customer's needs through design, construction, plating and taxing.

The nearest to a standard vehicle made by SVO is the Quadtec. This box body range forms the basis for anything from a mobile workshop to a kitchen, a police/communications unit or a video production facility.

Quadtecs were originally designed in modular form for fitting to 127 inch Land Rovers. "The height we

Cuthbertsons of Biggar created the tracked Land Rover.



When Land Rover took to the rails, it was capable of hauling up to 60 tons.

knew gave us stability," recalls Roland Maturi. "The length was the maximum overhang we were prepared to go for and the width was set for stability purposes. The trick then was to mount it as low to the chassis as we could. Within those constraints, we offer the customer whatever he wants."

A prime example of the way in which the design can be used was the vehicle produced for Band Aid. A complete workshop was fitted into the body with the capability of repairing truck chassis frames, axles and gearboxes. The aim was to put as

There have been Land Rover fire engines since the earliest days. This current vehicle is based on a One Two Seven chassis.

many damaged trucks as possible back on the road to bring food into the drought stricken areas of Ethiopia.

More common applications are vehicles for fire services, electricity boards, water authorities and other public sector organisations requiring special equipment to be carried across country to remote areas.

But whatever the purpose of the vehicle, Roland Maturi is determined to achieve the highest quality standards. "We go for out and out quality," he states. "The quality of the fittings we use is of the highest standard. The quality of the finish is there and the serviceability is there."

With customers ranging from industrial organisations to Heads of State, quality is obviously of major importance. In the past, SVO has produced Land Rovers fitted with Range Rover seating for VIP passengers while at least one had a platform for Royal review.

These appear to be the exceptions, however, since most of the work of SVO is involved with producing very practical vehicles. To make sure that the designs are as practical as possible, SVO staff check on vehicles in use.

"When we get repeat business, there's no point in repeating something if it can be improved," says Roland Maturi. "So we go back to make sure that what we did last time was right, that it works and that it goes on working. And really, that's what it's all about. Providing the right vehicle for the job" ●



TWO WEEKS FOR A LIFETIME

GRAHAM SILVERS, LAND Rover's Manager of Vehicle Engineering, is a man with a mission. He leads a team of engineers who have the task of testing to destruction every new component for Land Rovers and Range Rovers. They also test production parts to make sure that manufacturing standards are maintained.

"We can test everything from an ignition switch to a complete vehicle," he explains. "We test every component at every stage from initial concept to full production."

The Vehicle Engineering department is packed with advanced technology that is used in the test programmes. Some of it is designed to test small components. On the other hand, there is the four poster rig which will take a complete vehicle.

"We can fit a vehicle with up to 32 sensors," explains Graham Silvers, "and then we drive it over a stretch of test track. The information from the sensors is recorded on tape and then a computer is used to reproduce the effects of the road surface in the laboratory."

The computer controls four electro-hydraulic rams, one for each wheel. By moving the rams up and down, it is possible to re-create the effects of an African road or a stretch of Belgian pavé indefinitely. "Two weeks on that rig is equivalent to the

The electro-hydraulic rig is controlled by a computer that can re-create road conditions from anywhere in the World.



Two weeks on the four poster rig is equivalent to the structural design life of the vehicle.

structural design life of the vehicle," says Graham Silvers.

But the important feature of the rig is that the test can be accurately reproduced time after time. There are no variations of weather or driver and so the engineers know that if they make a series of modifications, each one can be tested under exactly the same conditions.

Computers control another test rig that was designed especially for Land Rover. It checks the efficiency of radiators and oil coolers. These are mounted on the rig where pre-heated oil or water is fed into them under the appropriate pressure, while fans reproduce the cooling effect of air on the road. The computer monitors temperatures so that engineers can see the effects of design changes.

"It's the repeatability of the test that's important," explains Graham Silvers. "Because we know how efficient one radiator was under test conditions, we can find out with

absolute certainty whether or not a new design is better."

In another part of the department, climatic tests are carried out in sealed cabinets. "We can go from minus 40 degrees celsius to plus 150 degrees," says Graham Silvers. "We can test components in 90 per cent humidity, in salt spray areas and in mud baths. In fact, we can re-create any environmental conditions that our vehicles are likely to meet."

In one corner of the laboratory, a complete chassis is being twisted as it would be on roads in the Australian Outback. Elsewhere, a new seat is undergoing the 90 per cent humidity test. Once that is complete, it will be subjected to the cold climate test. A new design of radiator is being vibrated as it would if it was fitted to a test vehicle while heated water is fed through under pressure. The whole test is controlled by a computer to reproduce driving cycles.

In every part of the department, the engineers are carefully destroying components. "Our job is to offer a service to the designers," explains Graham Silvers. "They want to know that they've got their designs right. We can tell them when they have" ●

A THOROUGHLY MODERN RANGE

FORTY YEARS ON, LAND ROVER is even better – more comfortable; more economical; more efficient; easier to drive; easier to maintain.

Today's Land Rover is the result of forty years of dedicated development.

And above all, Land Rover is versatile.

There is a choice of three wheelbases – Ninety, One Ten and One Two Seven.

There is a choice of three body styles for the Ninety; four for the One Ten; several for the One Two Seven.

As for engines, choose between a 2.5 litre petrol, 2.5 litre diesel turbo or 3.5 litre V8 petrol. Fleet customers are



also able to specify a 2.5 litre, naturally aspirated diesel. Each engine delivers all the power Land Rover needs...on the motorway or across the mountains.

Every Land Rover has permanent four wheel drive for maximum traction and safety.

Every Land Rover has a five speed gearbox, with high range for normal

road use and low range to cope with the more difficult off road conditions.

The suspension is based on the system developed for the Range Rover. Coil springs all round, greater comfort, improved handling and a smoother ride. The One Ten County Station Wagon even has levelled suspension.

And there is a range of options to make each Land Rover even better suited to individual circumstances.

At the top of the Land Rover range, the County Station Wagons are available in both Ninety and One Ten forms, both very comprehensively equipped.

County Cloth Seats, floor and roof trim, tinted glass, heated rear window with wash/wipe, sun hatch and stereo radio/cassette are all fitted as standard.

The Ninety also has a centre, lockable cubby box and styled wheels, while the One Ten has an additional, centre seat in place of the cubby box.

Options include a towing pack, power assisted steering and air conditioning.

The Land Rover range...nothing can match it.

Land Rover – the best four by four by far ●



Off Road and 4 Wheel Drive.

"For serious 4x4 users, there's no substitute for the real thing. Land Rovers are the toughest of the lot..."
(August 1988)

The Field.

"It (Land Rover) is excellent for off-road use and suitable as a long-term, hard-working vehicle."
(July 1988)

Money Pulse Magazine.

"Land Rover gives you prestige in a stylish workhorse."
(June 1988)

Farming News.

"The new turbo diesel Land Rover pick-up David Stabler drives is unbeatable as a workhorse he says..."
(June 3 1988)



A RANGE ROVER IS UNIQUE. No other luxury car can match its versatility. No other vehicle can combine sumptuous comfort with the off-road capability that is an integral part of a Range Rover.

The heart of it all is a rugged, dependable, box-section chassis. It provides rigidity for cross country work or alternatively, in line with manufacturer's recommendations, for towing loads of up to 4 tonnes; protection for the fuel tank and the electrical wiring.

Long travel coil springs afford a beautifully comfortable ride at the

Car.

"The Range Rover remains the best and most stylish all-purpose vehicle in the world. Also the most enjoyable to drive and, if you care, the best to be seen in." (January 1988)

same time as allowing the Range Rover to soak up spine jarring shocks off road. The suspension system also includes a self-energising ride-levelling unit to keep the body level, even when it is fully loaded or towing.

The well-proven V8 engine delivers all the power needed for towing or climbing mountain sides. With petrol injection, it is also more economical and provides better performance.

The alternative is the intercooled, turbocharged diesel engine that combines powerful performance with the economy expected of an advanced diesel power unit.

Power is delivered to the permanent four wheel drive system through either a five speed manual gearbox or a four speed automatic. And of course, both have the unique transfer box to provide an unbeatable low gear range.

The lightweight alloy body is practical and durable... large windows provide an unparalleled view from the commanding driving position.

Inside, the Range Rover is unashamedly luxurious.

The Field.

"...Range Rover is still king of the four-wheel drives..." (July 1988)

Motoring Weekly.

"As large luxury cars go, Range Rover is in a class of its own." (July 8 1988)

Company Digest.

"...it (Range Rover) is a car that can do virtually anything and go just about anywhere." (June 1988)

The orthopaedically-designed front seats are upholstered in velour or Connolly hide in the Vogue SE. On four door models, the front seats are height adjustable.

Rear seats are asymmetrically

split, for greater versatility.

Deep pile carpeting covers the floors, removable in seconds for journeys into muddy tracts.

There can be no doubt that the specification of the Range Rover is impressive. From the four door

NW Business Monthly.

"...the Range Rover is a splendid vehicle... for anyone contemplating the good life in the country and who... needs comfortable and sophisticated town transport." (July 1988)

Turbo D to the superbly well-equipped Vogue SE, each Range Rover is very clearly a luxury car.

When the range of options is added, it is obvious that every need has been anticipated.

Yet there is one aspect of the Range Rover that cannot appear on any specification list. One characteristic that sets it apart from other luxury cars.

Range Rover has a charisma, a style, a panache that just cannot be matched. It is unique in looking exactly right in any setting from the sophistication of Whitehall to the arid reaches of the Arizona desert. Wherever it goes, a Range Rover is obviously at home.

Range Rover - a car without equal ●

ENTER THE RANGE ROVER

FROM THE VERY BEGINNING, it was obvious that there was a market for a luxury version of the Land Rover. The first attempt to produce such a vehicle was seen in 1952 and was called the Road Rover. This was followed by a Series II version of the same vehicle in 1956, but the Road Rover was really no more than a rather large station wagon. It had two wheel drive and was based on a car. By 1959, the project had been dropped.

By the end of the sixties, however, the idea of a luxury Land Rover had been revived. Impetus was added to the concept by research that showed an enormous demand for four wheel drive leisure vehicles, particularly in the USA. This came together with a number of other factors to create the conditions that were perfect for the design of the new vehicle.

The first of these was the acquisition by the company of the rights to manufacture a compact V8 engine that had been designed by General Motors in America. The engine was extensively developed at Solihull and was found to provide enormous reserves of power at low engine speeds.

The second development was the suspension system that had been designed for the Rover 2000. This was proving to be very effective in off road

Two ideas for Range Rover styling were shown on one quarter scale clay model.



competitions and it was clear that the same system could be used to make the new vehicle more comfortable.

Design work had been going on for some time and two prototypes were running by the end of 1967. These were surprisingly close to the final versions, both in styling and engineering terms. They had two door bodies, a split tailgate, the V8 engine matched to a four speed gearbox that had a transfer box to provide the extra-low gear range, permanent four wheel drive and disc brakes all round.

Up to that point, the styling had been done by the Engineering Department. It was handed over to the Styling Department who began work on the vehicle that was to be launched as the Range Rover.

In the event, very little needed to be done because the Range Rover already had an attractive, functional appearance. By the Easter of 1969, pre-

The Range Rover before it was handed to the Styling Department.

production prototypes were being built by hand and these were the vehicles that were used for testing.

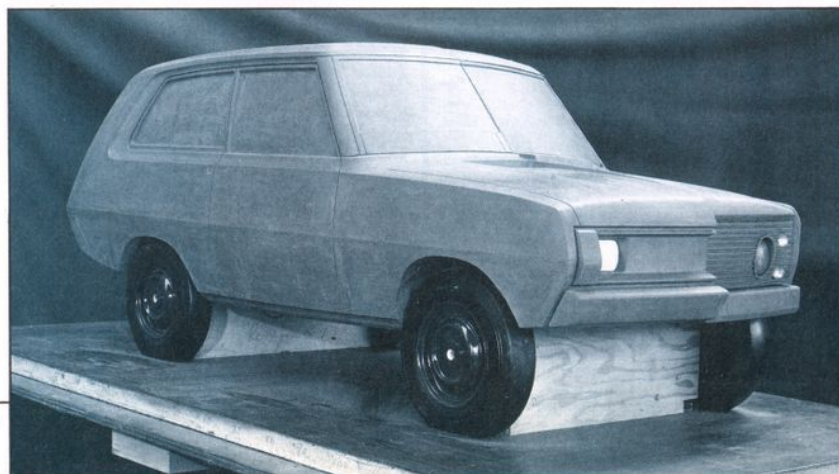
Two were taken to the Sahara for hot weather testing. Others were put through punishing schedules in the USA, while cold weather testing was carried out in Canada and Finland.

The Range Rover was eventually launched on June 17 1970 at a price of £1,998.

Those early vehicles were still, to a large extent, luxurious alternatives for the Land Rover. As a result, the interior trim was very functional. Seat facings were plastic and the floor was covered with rubber mats. The absence of deep sills at the sides of the vehicle meant that a hose could be turned on the interior to wash mud and dirt out.

Perhaps it was that very functionality that appealed from the start. At the 1970 Motor Show a Range Rover chassis was exhibited with sections cut away and motorized so that visitors could see how it operated. This was tremendously popular as were the two driveable chassis that were used for publicity purposes in later years.

The following year, the Dewar Trophy was awarded to the company for outstanding British technical





After styling had modified the design, Range Rover was tested with badges designed to fool observers.

achievement in the automotive world in designing and producing the Range Rover. A Range Rover was placed on display at the Louvre in Paris as an example of modern sculpture and Range Rovers began to appear at the Royal Mews where they were extensively used. All the time, people were queuing to buy Range Rovers.

Some wanted a variation on the original design and had specialist converters produce a startling range of modifications. Convertibles for hunting in the Middle East, 6 wheel station wagons for estate work in Britain, 6 wheel versions for use as high speed fire engines on airfields, the variety of modifications was limited only by imagination and money. There was even a modified Range Rover produced for the use of the Pope.

The Range Rover of today is clearly a sophisticated luxury vehicle. The flagship of the range is the Vogue SE, which has Connolly hide seats, a power-operated sunroof, burr walnut door cappings, air conditioning, electrically adjustable seats, power operated and heated door mirrors, electrically operated windows, a sophisticated stereo system... indeed, everything that a demanding customer wants from a luxury car.

Even so, every Range Rover is still an extremely practical vehicle. The SE can climb to the top of a mountain with as much ease as any previous Range Rover. Underneath the deep pile carpets lie rubber mats for owners who want to go shooting on the moors but who want to keep their carpets clean. One might almost say that the Range Rover is a Jekyll and Hyde of a vehicle, equally at home in Park Lane or on a Scottish moor. ●

CROSSING THE ATLANTIC

THE IDEA OF EXPORTING LAND

Rover products to America is far from new. Land Rovers were sold in the USA during the late sixties and early seventies and various companies have put forward proposals to import and market Range Rovers in more recent years.

None of those offers were taken up. Instead, Land Rover executives decided to assess the market for themselves. In order to gain some idea of potential demand and to better understand what changes would have to be made to the vehicle, detailed research was carried out from 1982.

It showed conclusively that there was a market for Range Rover in America which is, after all, the world's largest market for four wheel drive vehicles. However, the research also showed that there was no direct equivalent to the Range Rover. There were, it was true, a large number of sports/utility vehicles, but the Range Rover was better equipped and therefore more expensive than those.

In fact, the anticipated selling price would place Range Rover in competition with cars that are normally referred to as The European High Group. These are luxury

imported saloons from companies such as Jaguar, BMW and Mercedes, all of which are competitors for Range Rover in other markets.

It became obvious that a new market sector would have to be carved out for Range Rover. It would fit between the sports/utility vehicles and European High Group cars, combining many of the features of both sectors.

The research also showed that the Range Rover would have to be further developed to meet the special needs of the American market. These covered both legislative demands such as emissions regulations and consumer preferences.

In order to meet these needs, a development programme was implemented. This, along with the costs of setting up the importing organisation and the dealer network was to cost several million dollars, but in a market where over three quarters

Range Rover of North America headquarters was opened by Princess Alexandra in 1986.



LAND ROVER 40 YEARS OF PROGRESS

of a million sports/utility vehicles were sold in 1986, the price was judged to be a good investment for the future.

In the event, only two major developments were needed. The first was the fitting of electronic fuel injection to the V8 engine. This was to help pave the way for the emission control equipment that would have to be fitted.

In addition to that, a four speed automatic gearbox was introduced along with a number of other modifications to meet the demands of American customers.

While this development work was under way, attention turned to the way that it would be imported and to the dealers that would sell it.

The company faced a number of choices in deciding how to import the Range Rover. It could appoint an independent company; set up a joint operation; or form its own, wholly-owned subsidiary.

John Sewell, Sales and Marketing Director of Land Rover, explains: "We decided that the only way we could control the business properly and ensure that we fully met customer expectations was to set up our own, wholly-owned importing company."

This was to be called Range Rover of North America (RRNA) and Charles R. Hughes, who had 17 years



experience in selling prestigious imported and American cars in the USA, was recruited as President of the new company in January 1986.

Charles Hughes was faced with the major challenge of building a network of dealers from scratch and creating the company structure to support them.

By the following October, the company's new headquarters building in Lanham, near Washington was ready for opening. Princess Alexandra, accompanied by her husband, the Honourable Angus Ogilvy and the new British Ambassador, Sir Antony Acland, performed the ceremony.

That was a major step forward for RRNA, but even more important work was already under way – the appointment of the company's dealer network.

The first part of this process involved placing advertisements in specialist magazines. They pulled in over 900 applications for franchises although RRNA was actually looking for only 60 dealers in the beginning.

Each of the applicants had to be carefully checked and other possible dealers found. Charles Hughes points out that the dealers' attitudes to customer service were of paramount importance. "Our specific criteria for selection placed great emphasis on their service reputation," he recalls. "If a dealer didn't have an independently researched, outstanding service reputation, we just ruled them out there and then."

It was a tough policy, but it was vital in a market where customers are very conscious of service standards and very critical if they fall below expectations.

The applications were whittled down until there were only three possibilities for each of the sales territories that had been identified. Then RRNA staff, driving a Range Rover, visited each candidate. Many of the dealers had travelled to Europe and thus knew the Range Rover, although some were seeing it for the first time. Whether or not they had seen it before, the visits provided an

This Florida Range Rover dealer is one of 60 who met the stringent requirements laid down for American dealers.

opportunity for a detailed appraisal of the vehicle.

Before the final choice was made, Charles Hughes visited the dealers personally, a move that impressed the candidates enormously. Presidents of car companies do not usually go to the trouble of visiting every new dealer.

But it was an indication of the importance of selecting the right dealers. Much was demanded of them. For example, each was expected to send a mechanic to the Land Rover factory at Solihull for training.

But the dealers also knew that they had outstanding support from RRNA. A nationwide vehicle recovery service was introduced and a parts distribution system was set up, operating out of Memphis.

Every Range Rover dealer is linked by computer to the warehouse and parts ordered by computer will be with any dealer in less than 24 hours. Given the vast spread of those dealers, from New York to Los Angeles and points in between, that is a considerable achievement.

By the time that the Range Rover went on sale on March 16 1987, there were 36 dealers. The sales forecast for the first year was 3,000 vehicles, although it was exceeded by more than 10%. This was in a year when sales of The European High Group cars fell by 13%.

After the first 12 months of sales, the number of dealers had grown to 60 and the Range Rover was being hailed as the 'in' vehicle in publications as diverse as USA Today, Playboy and New York Magazine.

Range Rover is now well established and widely respected in America. As Bill Baker, RRNA's Director of Corporate Communications puts it, "We've clearly established a market niche as the best dual purpose vehicle. We're the benchmark and I think we'll continue to hold that position" ●

Range Rover was launched in the USA in 1987.



THE HOUSEBRICK JUNGLE

ON A POCKET OF LAND DEEP in the heart of suburban Solihull lies a jungle. The stagnant pools and patches of deep, swampy ground are disturbed from time to time by a deep throated growl as yet another visitor to the Land Rover factory sees how the company's products cope with the distinctly unpleasant conditions.

This jungle has been specially created and is carefully maintained for the purpose of demonstrating Land Rovers and Range Rovers. The members of the company's demonstration team seem to regard the jungle with as much affection as they do their Land Rovers.

Team leader is Roger Crathorne who took over responsibility for demonstrations in 1978. He explains that the jungle has to be maintained if it is to provide an effective demonstration area. "Once every two years we have to sling a few housebricks about," he says, although the casual attitude belies a professionalism that is evident in everything the team does.

Land Rover began serious demonstrations around 35 years ago for the very good reason that the Land Rover then, as now, needs to be demonstrated in its off-road environment by someone who knows how to use it. Only then will prospective customers have any real understanding of the potential of the vehicle.

"The message we're trying to get across is how easy our vehicles are to drive off road and how safe they are," explains Roger Crathorne. There is no doubt that the goal is achieved, although sometimes, passengers tend to be understandably nervous.

As he traverses a slope that must reach around one in three at its steepest point, he is driven to admit that "...this is the area that most people don't like, when you're on a side tilt." In



reality, though, the nervousness is brought on by the illogicality of any vehicle being able to do what the Land Rover does with ease. In some ways it is a little like watching a Jumbo jet take off. Every instinct says it should not be possible, but it happens just the same.

During the course of a year, up to 10,000 people will experience the Solihull Jungle, although during Motor Show alone, 6,000 guests will see it from the passenger seat.

But this forms only one part of the demonstration team's activities. Familiarisation courses are run for major customers whose employees use Land Rovers off road. "If a man is given a Land Rover to carry his box of tools to the top of a mountain to service a generator or a transmitter station, it's no use if he can't get up there," explains Roger Crathorne. "So an important part of our business is to make sure that he knows how to operate the vehicle properly."

Inevitably, there is far more demand for these courses than the company can meet, although a high proportion of requests seem to come from people who are simply fascinated by the vehicle. Where an

The Land Rover demonstration team. Between them, they have nearly 100 years of Land Rover demonstration behind them.

understanding of how to use it is important to people in their jobs, the team try to provide some degree of familiarisation. Sometimes, this means going to the customer because he is using Land Rovers in unusual terrain.

But the demonstration drivers are used to every situation because they have all been in the team for so long. The longest serving member is Don Green who has been demonstrating for 26 years. In total the 7 team members have nearly 100 years of Land Rover demonstration behind them.

It is an impressive record, but Brian Pearson explains the reason he is happy to carry on doing the job. "It's a fantastic feeling to have faith in the product you're dealing with," he says. "If you're on form, the vehicle speaks for itself." What better testimonial could any manufacturer want? ●

KNIGHTSBRIDGE WAS NEVER LIKE THIS!

EVERY YEAR, A GROUP OF people who must surely be certified masochists, are flown to some remote, tropical spot where they are provided with Land Rovers or Range Rovers. They are then pointed at a tract of jungle and sent off on a 17 day excursion through conditions that would tax the abilities of a mule, let alone a motor vehicle. Not only do they do this for fun, but there is fierce competition for the privilege. The event is the Camel Trophy.

The Trophyists, as they are known, have already come through a long sequence of trials before they even reach the starting point. There were more than 250,000 entrants, representing 12 countries for the 1988 event. Only 24 of these were successful.

The original entry list is whittled down with regional and national selection tests in each of the competing countries. By December,

In 1985, it was so wet in Borneo that the competitors could cover only one mile a day at times.



the numbers have been reduced to manageable proportions and the survivors arrive at Eastnor Castle in Hertfordshire for the final selection process. This involves three days of training and assessment.

Day one is fairly simple with a tour of the Land Rover factory followed by sessions on fire fighting and first aid, bridge building and servicing a Land Rover when it is up to its axles in mud.

Day two brings instruction from the Land Rover demonstration team drivers. Their task is to make sure that the participants know how to handle the vehicles, but the Solihull men allow some surprises. "I've never understood why people insist on opening the driver's door when they've got stuck in a pool with water

Jungle traffic jam on the Camel Trophy.

half way up the door," explained one.

On the final day, there are more driving sessions along with a special task. In the evening, the names of the chosen few are read out. Their jubilation is balanced by the despondency of the others.

The Camel Trophy began in 1980 with a 1,000 mile trip along the Transamazonia highway in Brazil. It was described as "...12 days of hell...". That was enough to attract thousands of potential participants for the subsequent expeditions that have all used Land Rovers or Range Rovers. Since then, the event has been run, in

Sumatra, Papua New Guinea, Zaire, Brazil, Borneo, Australia, Madagascar and Sulawesi.

Preparations are now in hand for the Camel Trophy '89 which returns to the Amazonian jungle of Brazil for the tenth anniversary of this event.

John Russell, Marketing Director of Land Rover explains that there is a serious purpose behind the event. "The Camel Trophy always leaves something of lasting benefit behind," he says. "It may be that there was a track where the Camel Trophy vehicles go and it's become overgrown. The contestants open it up again. They build bridges that are left for the local population and provide medical help. That aspect of the event is very important."

But while Camel Trophy contestants sometimes struggle to cover a mile a day, the Paris-Dakar Rally calls for drivers and machines capable of sustained high speed, largely over desert tracks.

In the past, the event has covered 7,500 miles, taken 3 weeks and attracted a motley collection of motorised transport. Some hardy souls have covered it on motorbikes. Others used heavily modified trucks. An increasing number have driven specially developed cars. In the past, the Solihull team have used Land Rovers, although in recent years, the company's drivers have gone into

The Camel Trophy went to Brazil in 1984 - and it was wet!



battle with modified Range Rovers.

Viewed from the front, the vehicles are obviously Range Rovers, although the bodywork is made of Kevlar and weighs less than 80lbs. The engines are modified to provide more power. As a result, on a flat road, the vehicles are reckoned to be capable of 145 miles an hour, although that is not always an advantage. Malcolm Smith drove one of the Range Rovers in the 1988 Rally and he explains that speed is relative. "There are times when 30 miles an hour is high speed for the terrain," he says. "Other times, we'll be doing 100 miles an hour for hours at a stretch."

Malcolm Smith is no stranger to this type of event, having competed in

The teams were provided with Range Rovers for the 1987 Camel Trophy in Madagascar.

a number of off-road races in America. He acknowledges that the Paris-Dakar is "...fairly rough," although he adds that the length of the Rally makes it a supreme test of vehicles. "I was really amazed with the longevity of the Range Rover," he recalls.

Range Rovers have actually won the event twice and in 1988 Patrick Tambay came 3rd, Malcolm Smith was 4th, while another Range Rover came home in 5th place.

Paris-Dakar is, in fact, only one of a number of international rallies that make up Land Rover's competitions calendar. In Dubai, the Masafi Rally lasts for two unbroken days of competition.

The rally attracts entrants from all over the Middle East, many of them driving Land Rovers. Indeed, Land Rovers tend to dominate this rally and have won it on numerous occasions. The most recent success was in 1988 when Suhail Khalifa led the way in his Land Rover. No less than 7 other Land Rovers finished in the top ten places that year.

For Land Rover, there are sound commercial reasons for all of these events. But what of the competitors? Why do they willingly undergo the extreme discomfort of either a Camel Trophy or a Paris-Dakar? Perhaps it is best not to ask. Somebody is bound to say they do it for fun. Perhaps it is merely that different people have a different definition of fun? ●

TO THE ENDS OF THE EARTH

FOR SOME YEARS, LAND ROVER published a slim booklet entitled 'A Guide to Land Rover Expeditions'. Copies are sent out in response to the steady stream of letters asking if Land Rover Limited would like to sponsor an expedition.

It is a measure of the reputation of the company's products that, for nearly 40 years, no expedition has seemed complete without at least one Land Rover. The first of a long line of intrepid travellers was Colonel Leblanc who had bought a Land Rover in 1949. He promptly took it with him on an expedition to Abyssinia (now Ethiopia).

Colonel Leblanc was to become a sort of roving ambassador for the factory throughout Africa and the Middle East during the fifties. Since his time, there have been many expeditions all over the World using Land Rovers and Range Rovers. One of the most famous was the British Trans-Americas Expedition.

Led by Major (now Colonel) John Blashford-Snell MBE, the expedition was intended to draw attention to the need to complete the Pan American Highway. The aim was to drive two Range Rovers from Alaska to Cape Horn, a route that took in the Darien Gap in Central America. At the time, no motor vehicles had ever crossed the Darien Gap.

The expedition set out in December 1971 and reached the jungles and swamps of Darien in January 1972. Here the full team of 64 British and American men and women assembled with 70 servicemen from Panama and Colombia. The following 99 days were spent hacking a route through the jungle and driving, winching, rafting and hauling the two specially prepared Range Rovers from one obstacle to the next.

The expedition came to a successful conclusion on June 9th 1972 when Captain Jeremy Groves of the 17/21st Lancers sent a radio message announcing that the vehicles had reached the Cape Horn area.

The Trans-Americas expedition was undoubtedly a major achievement, but in 1979, Sir Ranulph

Fiennes set out on an even longer journey. The Transglobe Expedition was intended to achieve one goal - the circumnavigation of the globe, passing through both the North and South Poles. The project was described by the Expedition's Patron, Prince Charles as "...mad but marvellous."

Ranulph Fiennes is a very experienced professional explorer. Indeed, the Guinness Book of Records describes him as the World's greatest explorer and he is very clear about the reasons that he chose Land Rovers for Transglobe. "They're very robust," he explains. "They don't need any great technical expertise to repair and there's very little you can't do with them if you have the knack."

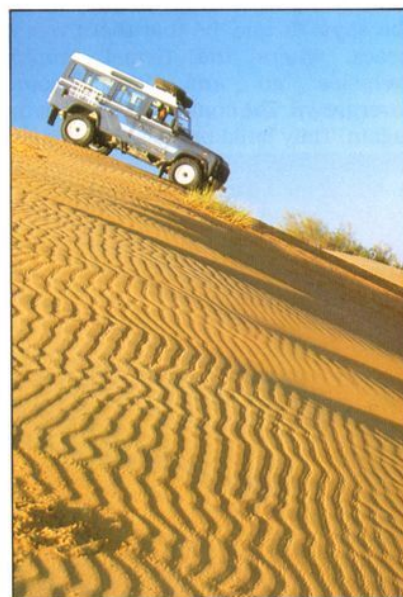
Colonel Blashford-Snell explains that he has completed nearly 40 expeditions. "If vehicles are involved, I've always used Land Rovers," he says.

But there is no need to be a pith-helmeted spiritual descendent of Livingstone to be able to enjoy expeditions, according to Ken Slavin.

Ken undertakes expeditions himself as well as ferrying Land Rovers to remote parts of Africa for a wide variety of aid agencies.

According to Mr. Slavin, a significant number of schools run expeditions, a development that he applauds. "It's a great experience for the kids and there are now some groups who are taking handicapped

The British Trans-Americas Expedition resulted in the first crossing of the Darien Gap in motor vehicles.



Land Rover in the Middle East as part of the Royal Geographical Society Oman Wahiba Sands Project.

kids on expeditions. It's a wonderful experience for them."

But while potential expedition leaders' thoughts probably turn automatically to Africa and the Sahara in particular, the groups that have approached Ken Slavin for help have wider horizons. Two groups have recently gone to New Zealand and he is currently working with three groups destined for Russia.

And Ken Slavin, like other explorers, is a man who will drive to the ends of the Earth if it sounds like fun ●



OF HORSES AND BALLOONS

ENORMOUS CHANGES HAVE taken place at Land Rover during the last ten years. The company has become more modern and efficient. Its products are more refined and in tune with market demands.

Once those changes began to be seen, however, the company had to make sure that potential customers were made aware of them. Obviously advertising was a significant factor in that task, but it could never be the complete answer. The markets for Land Rover and Range Rover are too specialised for advertising to be sufficient on its own.

The question of how the advertising should be supported was already exercising the minds of Land Rover's marketing people in 1979. They knew that the most obvious way of supplementing it was sponsorship, but if that was to be effective, the activities being sponsored would have to be very carefully chosen.

By a fortunate co-incidence, at the same time as the debate was going on about sponsorship, Captain Mark

Phillips was looking for support for his team of eventing horses. Eventing was one of the activities that had been considered by the company and so Land Rover discussed a proposal with Captain Phillips and the Range Rover Team was created.

"I was looking for a sponsor," explains Captain Phillips. "I heard that Land Rover was looking to get into equestrian sponsorship. It was a British company and a company that I could readily associate with both through my military and horticultural connections. In that way, it was then, and has been since, a very satisfactory arrangement."

The Range Rover Team consists of 6 horses, all of which are used in one day and three day eventing. This is a particularly gruelling form of equestrian sport which has a very distinct following. It was that following that Land Rover wanted to reach through the sponsorship because the people who follow eventing are likely to be customers for Range Rover.

The involvement goes beyond sponsoring the Team, however. As Captain Phillips explains, "The company sponsors young rider training throughout the year. They give a number of riding bursaries and a scholarship for the leading young rider every year."

The Team has become a major feature of the company's sponsorship programme. That programme has expanded over the years and now takes in a wide variety of activities from the Range Rover Driving Academy in Germany to clay pigeon shooting and point-to-point racing and golf tournaments in Britain.

Ken James is the man responsible for co-ordinating the programme at Land Rover. He explains that the company chooses its sponsorship activities very carefully. "We look for promotional opportunities where our vehicles can have a close link," he says. "We aren't really interested in events where you could use any car. It has to be something where the right vehicle for the job is a Land Rover or a Range Rover."



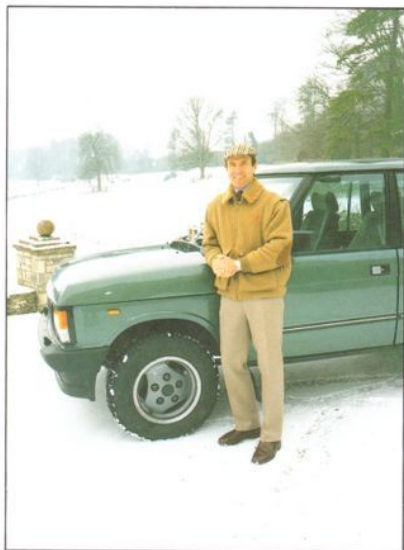
One of three specially equipped Land Rovers provided for the Virgin Atlantic Challenge.

A prime example of a sponsorship activity in which a Land Rover was the only suitable vehicle was the Virgin Trans-Atlantic Balloon Challenge. The project involved an enormous amount of behind the scenes activity and Land Rover was very heavily involved.

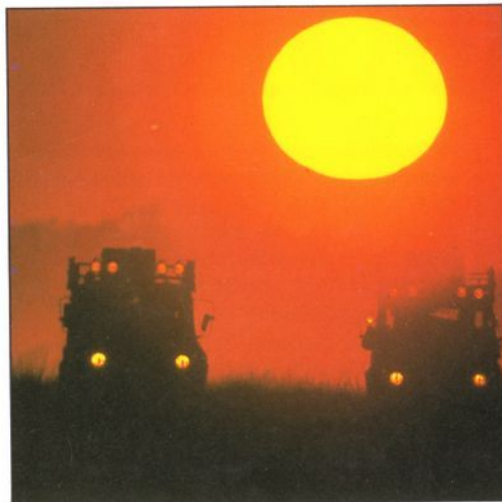
In addition to Range Rovers, the company provided three specially equipped Land Rovers. Each was based on a One Ten fitted with a Quadtec body from the company's Special Vehicle Operations division. One was equipped as a mobile workshop, the second as a communications centre while the third was the launch platform.

"The Virgin Trans-Atlantic Balloon Challenge was a perfect opportunity for us," explains Ken James. "It was an event that was bound to attract a lot of publicity and their needs could really only be properly met by specially equipped Land Rovers."

But, whether the project involves balloons or horses, it is all a long way from the days when the BBC had to coin the term "land car" in order to avoid saying Land Rover on air. Today, even the BBC has accepted the inevitable. The only word to properly describe the best off road vehicles are Land Rover and Range Rover ●



Captain Mark Phillips who manages the Range Rover eventing team.



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TO HER MAJESTY THE QUEEN
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