Performance Secret

The European auto press gave Audi's luxury-sport model RS6 rave reviews for its perfect combination of sporty handling and comfortable ride. And a big part of the secret behind the RS6's ride is the Yamaha technology in the revolutionary "DRC" suspension it mounts.



The ride of the RS6 is a driver's dream

Rolling out Yamaha suspension technology



High-performance, non-electronic suspension debuts

The RS6 is the second of a series of ultraperformance models developed through a collaboration between Audi and Quattro that began with the already released RS4, a model that quickly won a reputation among European drivers as a "4-door Porsche Turbo." One of the features that sets the new RS6 apart from the RS4 is the DRC suspension, which is in fact the latest version of a suspension technology Yamaha has been developing for years.

What makes this Yamaha-developed suspension unique is the way it achieves ideal relative functioning of the shock absorbers without using electronic control systems. This is done by connecting the hydraulic systems of the left and right shock

At the 2002 Geneva International Motor Show, Audi's new top-of-the-line luxury-sport model RS6 stole the spotlight. The secret behind this new model's high-performance ride was not just the 450 hp engine and full-time 4-wheel drive but also an entirely new type of suspension. Developed by Yamaha Motor Co., Ltd. (YMC) and called the "DRC" for Dynamic Ride Control, it provides an unprecedented combination of handling performance and ride comfort.

absorbers and introducing a "DRC Valve" that functions to smoothly suppress the vehicle's right-left

smoothly suppress the venicle's right-left body roll while at the same time greatly improving the road-surface contact of the tires. The result is an outstanding marriage of riding comfort and handling stability.

In the original DRC suspension system, the left and right shock absorbers of the front and rear were connected separately, whereas in the new "X" format DRC, four shocks are connected by means of an "X" configuration connecting the right rear shock with the left front shock and the left rear with the right front. The two DRC valves positioned in the central units at the "X" function to add supplementary damping force in the form of appropriate amounts of hydraulic fluid sent to the respective shock absorbers in accordance with the difference in the speed of their

damping stroke. This added damping force serves to provide improved control of the rolling and pitching of the vehicle that occurs during cornering, etc.

Automotive journalists have raved about the new Audi's ride, saying things like its cornering performance defies all automotive engineering until now and marveling at how stable the changes in vehicle attitude are. Others have praised the refined handling response that gives the driver an outstanding sense of control, while also describing a new level of high-speed stability that even makes it possible to take your hands off the wheel at 250 km/h. There have also been articles commenting on how little roll there is even when maneuvering the nearly two-ton car at high speeds, and how good the sense of road grip from all four tires is.



The Audi RS6 mounts Yamaha suspension technology



Mr. Suzuki, who was in charge of analyzing of data gained from tests

Yamaha Motor's research and development of automobile engines goes back to the 1950s and has led to an outstanding record of supplying highperformance

engines to makers like Toyota and Ford. As a more recent branch of Yamaha automotive research and development, work on automobile suspensions has been going on since the '90s.

Mr. Kazuo Suzuki of YMC's AM (Automotive) Operations spoke to *Yamaha News* about the aims of these R&D efforts: "We asked ourselves, What can be done to enable the driver to enjoy the performance of the engine even more? What is necessary to enable an even greater joy of driving? It was the challenge of finding the next big advance. What we decided to focus on was the suspension, and our R&D work has been going on for more than ten years now."

Yamaha's automobile engine and component technologies

Yamaha developed its first automobile engine in 1959, a 1.6-liter DOHC 2-valve engine. In 1965, YMC collaborated with Toyota on the development of the "Toyota 2000GT." This was followed by technological assistance from Yamaha for the "Toyota 1600GT" in 1967 and a joint development of the "Toyota 7" racing car in 1969.

Since 1970, Yamaha Motor's AM Operations has worked mainly on the development, and supply of automobile engines, beginning with the development, manufacture and supply of DOHC engines to Toyota, and expanding to include the supply of V6 and V8 engines to Ford from 1981–2001.

Besides engines for production automobiles, Yamaha Motor has also served as an engine supplier for F1 racing teams over a period of eight years beginning in 1989. During these eight years, Yamaha powered machines ran in a total of 116 F1 races, and the world was shown the tremendous potential of these engines in performances lead by a 2nd place finish in the Hungary GP of 1997.



UP FRONT

Trial development with the Audi FF cars

The DRC suspension on the Audi RS6 has now won a sparkling reputation in the automobile industry, and the development history behind it is an interesting story. "The structure of our original DRC suspension was not well suited to most of the FF models with their horizontal engines and the space limitations created by their strut-type front suspensions. But, we had an Audi A4 that we had acquired for test purposes and its unique configuration built around a vertical engine and multi-link suspension had inspired one of our engineers to suggest that we try fitting it with the DRC suspension to test its performance," recalls Mr. Kouji Sakai of the AM Operations.

That was the beginning of the project that would eventually lead to the adoption of the DRC on the RS6. It started out as a completely independent Yamaha project based on a very Yamaha challenge in pursuit of a higher level of driving enjoyment. And eventually it would lead to the development of a revolutionary new technology.

"The Audi A4 and the DRC suspension turned out to be a great match that brought a very neutral handling quality despite the Audi FF cars' inherent tendency toward under-steering. When we saw from our tests that the pressure that normally goes to the wheels on the outside of a turn was being distributed to the in-side wheels to the degree that it was producing well-balanced wear patterns on the tires, we knew we had a suspension that would work on the FF cars," says Mr. Sakai.

Based on the A4 test results, Yamaha's



Mr. Sakai, who was the invent or of DRC and in charge of basic design of the DRC suspension



Mr. Harada, who was in charge of developing the basic performance and riding qualities of the DPC suspension



Development staff at Yamaha's Fukuroi test course

engineers began exchanging information on successive tests with the Audi technical staff through the Tokyo technical office of the Volkswagen Group. But, despite cooperation from Audi that led to prototypes using a number of Audi models, this "unconventional" suspension that didn't depend on electronic control technologies didn't become a regular feature of any model.

This led the Yamaha staff to change their thinking. Despite its proven performance, they abandoned the DRC suspension in favor of the "X" format DRC, with its even clearer structural character. "We supplied Audi with prototypes mounting the horizontally aligned DRC suspension for tests but they never came back to us with a decisive answer that they wanted the system. But, when we got them to test a prototype mounting the further evolved "X" format DRC suspension they were clearly impressed with its performance and we started talking about using it on the RS4. As it turned out, however, the RS4 was already too near release to give us enough time to mount our suspension, so it was decided to mount it on the RS6," explains Mr. Toyoji Harada, who was one of the engineers working on the project.

Yamaha's innovative suspension

Once the decision was made to use the

Yamaha suspension on the RS6, final development efforts began at full pitch. "To tell the truth, we were working on a very tight schedule. We had just three months to finalize the settings. Because the process of finalizing the shapes and dimensions of the parts was based on input about the subjective perceptions of the test drivers, it was a complex task. But we had our years of research and test data to build on, so we were eventually able to meet our production deadline," recalls Mr. Harada.

"In the automotive industry, most engineers ask to see the hard data, things like unit strength, damping capacity, wavelength characteristics, etc. Certainly that kind of data is important, but at Yamaha we do not rely only on quantitative data. We believe that human sensory perceptions are the most important measure of all, because in the end it is people who are at the wheel. So, we develop for drivability, not numbers, and we evaluate results in actual driving tests. That is why we had Audi's test drivers come to our Fukuroi test course a number of times, as well as running tests in Germany at the Nurburgring track," says Mr. Sakai.

A lot of the credit also goes to Yamaha's test driver, former racing star Shinji Katayama. "There are many factors involved in a suspension. Some of these can be quantified, but with others just



Mr. Katayama, who is a test driver and a former motorcycle GP rider



Katayama riding on the YZR500 in his carrer

getting the right numbers is often not enough to achieve the kind of basic performance and feeling that will bring real satisfaction to the customer. In our driving tests we were fine-tuning a number of elements that don't meet the eye, like gas pressure, anti-cavitation measures for the hydraulic fluid, the initial settings, the positioning of the central units and the front-rear ratio distribution.

The real work of this kind of development project is getting down those fine nuances that don't show up in the numbers alone. In this way it is very similar to working with a motorcycle. I love working with Yamaha engineers because they understand the importance

of this fine human-evaluation aspect," says Mr. Katayama. As a Yamaha factory rider, Mr. Katayama won the 250cc title in the All Japan Road Racing Championships on the YZR250 and also competed in the World GP

on the YZR500.

Repeated tests of the DRC suspensionmounted Audi RS6 at the Fukuroi and Nurburgring courses brought the sys-

tem to completion. Production of the shock absorbers was done at APA in Spain, the affiliated factory of Yamaha's development partner Kayaba. Meanwhile, Yamaha set up a mass-production line for manufacturing the DRC unit that is the true heart of the system.

The final testing of the

production model was done at Nurburgring. The course at Nurburgring is famous as a testing ground used by most of the world's sports car makers, and when Audi's test driver finished his first test run with the new production model he said: "The suspension is wonderful. It is sure to be a big sales point for this car." From 2002, this Audi RS6 with the DRC suspension has been running the public roads of Europe, marking an important milestone in the 10-year history of Yamaha automobile suspension research and development.



Audi on the Yamaha test course

Structure of the original DRC (left) / "X" format DRC on the RS6 systems Front left shock Front right shock Front left shock Front right shock absorbě Central Rear left shock Rear left shock Rear right shock absorber Rear right shock Functional process of the DRC Pressurized Pressurized Free piston Free piston Hvdraulio Hydrauli Hydraulid fluid Hydraulic fluid ← : Hydraulic fluid flow Hydraulic fluid flow

The DRC suspension functions not only to achieve a comfortable ride with a relatively small amount of cushioning force in cases like when both wheels hit a depression in the road, but also functions to stabilize the car body against lateral "rolling" motion by adding a suitable amount of extra damping force and shock absorbing force at times such as cornering, when the patterns of depressions and bumps in the road are different for the left and right wheels, or in the case of strong cross winds. In this way, it is possible for the DRC system to provide both a comfortable ride and outstanding handling stability.

The original DRC suspension is one that laterally connects the two shock absorbers of the rear wheels and the front wheels separately, while the further evolved DRC suspension on the RS6 connects the four shocks in an "X" format.

Answering customer needs in diverse



The roots of today's Yamaha Distributors go back to the year 1961, when Yamaha Motor was looking for a company to sell Yamaha motorcycles in South Africa. At the time, the British makes dominated in South Africa, while Yamaha was still a little-known brand. They did find one small motorcycle shop in Durban, however, whose owner, Charlie Young, believed in the future of rotary valve two-stroke motorcycles, which is exactly what Yamaha had in its 125cc YA3. The YMC staff left a sample at his premises. Later Charlie started importing and distributing Yamaha's 150cc YF. The success of this first model led to the acquisition of the Yamaha Marine franchise in 1969. The first Yamaha outboard engine available in our country was only a 3.5 hp air-cooled model. In 1979 the need for electricity in the rural areas had grown, and we imported the first Yamaha generators to South Africa. In 1981 the McCarthy Group, acquired Charlie Young (Pty) Ltd. and changed the name to Young Yamaha. McCarthy provided the much-needed financial backing to further expand and develop the dealer network. Mr. Young served for another 5 years to ensure continuity at Yamaha.

Steady expansion of product lines

Yamaha Distributors have been South Africa's distributor of Yamaha Motor products for more than 40 years. Starting with motorcycles, the company expanded its line as YMC and its product line grew, eventually adding Yamaha ATVs, outboard motors, electric generators, marine engines, WaveRunners and golf cars. Later, Yama-

> ha Distributors expanded to include boat packages, lawnmowersand sporting goods and musical instruments from Yamaha Corporation.

Our reporter: Communications Officer

We achieved No. 1 market share

motorcycles in 1984 and have maintained that position ever since. In the marine department we have held top share since 1980. Our current market share in motorcycles is 33% and we command over 50% in marine products. One must realize that



John Robertson, MD of Yamaha Distributors (left) with Barry Robinson, Marketing Manager of Balanced Audio

the size of markets in the Republic of South Africa is rather small compared to other world markets. In South Africa, annual demand of approximately 15,000 motorcycles is split among 26 brands, while approximately 5,000 outboard engines are sold annually.

Strength in diversification

It was our continued success with Yamaha's motor and marine products that led to the



Global Music's impressive showroom in Johan-

approach by Yamaha Corporation (YC) to take over the musical instrument distribution from another company. This followed with the take-over of Universal Music in 1993. To avoid dual distribution and confusion in the market, we also acquired the Yamaha part of the business from Tradelius. We now trade YC music products under the banner of Global Music, with head offices in Johannesburg.

All this means that we are the importers and distributors of all Yamaha brand products in South Africa, making us a rather unique company in many ways.

We also have an accessory company AMP, which is the importer and distributor of a number of world-renowned marine and



Jake van Zyl is an avid fishermen who decided to exchange a commercial fishing vessel for a Yamaha PWC, and he shows the catch!

markets

motorcycle accessory lines. AMP has their offices and warehouse in Johannesburg, where dedicated staff work to keep dealers around the country supplied.

Because of the different markets we serve, Yamaha Distributors are essentially a group of business units, achieving economy from shared support services in administration, warehousing, technical support and shipping, as well as the benefits of marketing a



Yamaha Distributors, the exclusive South African importer of Yamaha products, cemented an ongoing relationship with the Botswana Police Services (BPS) when they officially handed over 18 motorcycles to the

common brand.

Unique and far-flung markets

Yamaha Distributors operate as exclusive Yamaha distributor in South Africa, as well as in Botswana, Swaziland and Namibia. Through diversification, we have also expanded our territory into Mozambique and Zambia. In addition entrusted by YMC, we service another 14 Sub-Saharan countries including Angola, Burundi, Kenya, the DRC and Tanzania to name a few as a depot for spare parts.



The AMID show is the highlight in the motorcycle enthusiast's calendar. It features all the importers and distributors of motorcycles and ATVs in South Africa. The public is given opportunity to ride the latest and greatest models

service some 400 dealers, through our warehousing



We distribute products

through a network of

national, specialized

dealers for each prod-

uct category. In all we

South African Superbike Champion Russel Wood is a huge favourite of the young and old alike, as seen here signing autographs

and distribution resources at our premises in Pinetown, near the port of Durban. We believe that the strength of our dealer network in relation to competitive brands, as well as excellent product from Yamaha, has been the key to our success.

However, the markets we operate in are constantly changing, and we have to constantly work to satisfy the needs of our customers. In the process, we are also continuously investigating the possibility of introducing new products.

There are also a number of products that we have developed and now build locally ourselves using Yamaha engines, such as hammermills for the grinding of grains, basic lawnmowers, pumps, fire-fighting equipment, generators and welders.

In order to achieve growth in outboard engine sales, we are providing the customers with competitive deals by concentrating on "boat packages." Through tie-ups with local boat builders, we are in a position where we can now distribute a full range of attractive boats, each complete with a Yamaha outboard on the back!

Promotional success through



The 2002 SA Superbike Champion Russel Wood also leads the 2003 season on board his YZF- $\rm R6$

race participation

We at Yamaha Distributors believe that racing is an important promotional opportunity not to be missed and we are involved in sponsorships with some of South Africa's most recognized companies. Our Autopage Yamaha Superbike team which races on the 2003 YZF-R6 features Russel Wood, the amazing 13-time South African Superbike Champion. We also have other talented riders, and the Yamaha Support Team, "First Technology Yamaha" complement our efforts to dominate the superbike scene locally.



The 2003 Red Yamaha MX team

In our motocross program, we have selected 12 talented riders to compete on the national and regional motocross circuits as members of the "Red Yamaha MX team." Our sponsor is a youth fashion range of clothing brand, "Red." The same company also sponsors our personal watercraft team and a freestyle motocross team using YZ250 machines. One member of our PWC team is previous world champion, Ricky Sneddon, who has been loyal to Yamaha for many years.

From our Marine department, we are constantly involved in fishing competitions and tournaments, where we maintain a high level of visibility. Yamaha feature as the main sponsor in many of the biggest fishing tournaments in South Africa, including the Umhlanga Ski-boat competition, the Billfish 500 (both saltwater), the Loskop 3 Species and the Inanda Bass Classic (fresh water). We also have a presence in the Trans Agulhas ski-boat race and the Bayto-Bay challenge for semi-rigid boats, to name but a few.

Building on success

Taking all our successes into consideration, there is no doubt that Yamaha Distributors SA will continue from strength to strength in the years to come, satisfying the everchanging needs of our complex and diversified market. We believe that we have the privilege of being the oldest distributor of Yamaha products outside Japan.

The heart of our business is the Yamaha brand, and our people. We have a vast spread of quality products and dedicated Yamaha enthusiasts managing our business units. With enthusiasm, drive and passion we are constantly looking for ways to improve, through

the appropriate use of technology and the development of our people.



An integral part of our success: dedicat

This Is My Country



South Africa

Country name: Republic of South Africa
Administrative capital: Pretoria
Parliamentary capital: Cape Town
Judicial Capital: Bloemfontein
Area: 1,219,090 sq.km.
Population: 44,6 million
GDP: Rand 975 bil.
Currency: Rand

The Land and Its Environment

Occupying the southern tip of the African continent, the Republic of South Africa is a land of great natural beauty and variety, from the lush green coastal plains of the east and south to the Namib and Kalahari deserts in the west and north, from the rolling hills of the central highlands that cover two-thirds of the country's land area to the snow-capped peaks of the Drakensberg range. Foliage ranges from arid and semi-arid savannah to high forests and tropical mangrove swamps. Wildlife is also abundant in the country's more than 300 wildlife and nature preserves.

The climate is mild much of the year throughout the country, with swimming possible year-round on the eastern coasts near Durban, which are warmed by the Indian Ocean currents. But in the southern hemisphere winter (May to August) it can be quite cool on the southern coasts near the Cape or the higher inland plateau areas like around Johannesburg. Annual rainfall varies greatly from about 850mm along the east



Gold pouring in Johannesburg



The Baobab is a tree unique to African savannah



Diamond mining in Kimberley, Northern Cape



Park. Africa is a wildlife paradise

Labor Population and Percentages by Industry (age 15~65)

	%
Agriculture, etc.	12.1
Mining	4.8
Manufacturing	13.8
Electricity, gas, etc.	1.5
Construction	5.0
Wholesale and retailing	24.8
Transportation, etc.	4.9
Finance	8.1
Community, social	7.5
Household labor	9.4
Others	8.2

Based on National Census 2001

coast to 50mm or less in the west. Perhaps what characterizes the South African climate more than anything is

the abundance of sunshine throughout most of the year that encourages an outdoor lifestyle and love of sports the South Africans are famous for. South Africa's major cities include Johannesburg, the City of Gold, which is the country's cosmopolitan and dynamic economic center. Cape Town, the Mother City of South Africa where European traders first settled, is one of the most attractive tourism destinations in the world today, while Durban, on the east coast, has become an international conference venue.

A Multiethnic Nation

The ethnic makeup of the South African population today is as diverse as the country's landscapes, comprised of roughly 77.7% black African, 10.2% European, 8.9% mixed blood (traditionally called colored in South Africa) and 2.4% other Asian ethnic groups. As a result, the South African constitution recognizes 11 different official languages, with Zulu, Xhosa, Afrikaans, Sepedi and English being the languages spoken by the largest ethnic groups.

This diversity owes to a long history of immigration. Among the first to come were Dutch and Portugese traders who landed in the Cape Town area, inhabited at the time by the peaceful Khoikhoi (Hottentot) and San (Bushmen) tribes. Other waves of immigration came in the form of Malay slaves and Indian indentured laborers to work the plantations established to provision the ships of the Dutch East Indian Company. From Europe, the Dutch were followed by German and French Huguenot immigrants.

A Unique Mix of Cultures

The cultural contributions of all these peoples are seen in the unique South African cuisine of today. The Malay slaves brought their spicy cooking style that is perhaps the best-known South African style of cooking. Indian immigrants made curry another important national dish. The French Huguenots established vinevards and started a tradition that makes the country one of the most acclaimed wine producers in the world today. One of the big contributions of the German immigrants was sausage making, and the extra fat boerewors sausage of today, made usually of beef, pork, coriander and other spices, is an essential part of the braai barbeque that is a popular fixture in South African life. Equally important in the country's diet are the many maise and vegetable dishes and the variety of biltong, or dried meat, deriving from the culinary traditions of the native South Africans. Visitors to the country's major cities will find that the diversity of cuisines enjoyed by South Africans today also includes Chinese, Japanese, Indian, Portugese



An aerial view of Cape Town

and French restaurants.

More so than in the country's cuisine perhaps, the contribution of the country's black African population has been greatest in the areas of music and art in today's South African culture. Every type of music that has been imported over the centuries has been assimilated and given a distinctively South African flavor, as have many of the musical instruments, like the three or four stringed ramkie guitar styled originally from the instruments of the Malabar slaves. The European re-discovery of African traditional sculpture and painting led by such influential figures as Pablo Picasso has also been a boon to local artists, who now receive worldwide attention.

Toward a Common Goal

Although the history of South Africa has been one marked by ethnic strife ever since the first European settlers began arriving in the Cape area about 300 years ago, the dismantling of the apartheid segregationist policies that began in 1990, followed by the implementation of universal suffrage and the election of the country's first black African legislature and



South African cuisine combines the best of many ethnic foods brought by immigrants over the years

President, Nelson Mandela, in 1991, have transformed South Africa into a symbol of peaceful resolution of racial problems. Although there is still a long road ahead toward achieving true economic and educational equality, the people of South Africa are now working together with a common dream of a better life for all.

Traffic laws			
Minimum age for driver's license		18	
Minimum age for motorcycle license		16 for up to 125cc	
Motorcycle license classes		A (for up to 125cc, minimum age 16) A1 (125cc and above, minimum age 18)	
Minimum age for boat license		No formal law, but an acceptable age of 16 and older	
Cost of living		Common image of Yamaha products in South Africa	
Average lunch	R50.00	Excellent quality, value for money,	
Cup of coffee	R8.95	trustworthy, exciting	
Bus fare (Single trip)	R6.50	Products that come to mind with the name YAMAHA	
Gasoline (1 liter)	Average R4.03 for unleaded petrol, R3.95 for diesel and R4.08 for lead- ed petrol	Motorcycles, outboard motors, WaveRunners, ATV's, golf cars, musical instruments, audio and audio visual products.	
		National hero	
		Nelson Mandela	

MotoGP series opens with focus on YZR-M1 potential

The 2003 World Championship Road Racing series got off to a hot and incidentfilled start with the Japan GP on April 6. In the pinnacle MotoGP class the four Japanese makers and two Italian makers all brought 4-stroke race machines to the competition. And, when the preliminaries were over, 22 of the 24 machines on the starting grid for the final were 4-strokes, making this season the true start of the re-oriented MotoGP class. The first race of the season was won by defending champ V. Rossi (Honda) who took the lead in lap five. Meanwhile, five riders competed on the Yamaha 4-stroke YZR-M1 (C. Checa, N. Abe, A. Barros, O. Jacque and S. Nakano) and all of them finished in the points, led by a gutsy 8th-place finish by Barros (Gauloises Yamaha Team) despite a knee injury sustained in practice.

One of the focuses of attention on the paddock at Suzuka was the new fairing on the YZR-M1 machines of Barros and Checa. With a sharper, more aggressive look, this new fairing has a narrower width in the front mask and is characterized by its unique flexible air intake and the strong lines of its rear seat cowl. The hand-made short type titanium exhaust pipe helps maximize the effect of the newly designed aerodynamic cowling.

In round two, the South Africa GP, the YZR-M1 showed its solid competitive potential as the Yamaha riders improved



Barros on the YZR-M1 with new fairing in the Japan GP

on their first round performances. Norick Abe, substituting for the Fortuna Yamaha Team's injured Marco Melandri raced into 5th position from 18th place on the grid and held that spot until the final lap, when an electronic glitch caused him to drop to 8th. A recovering Barros moved up steadily through the pack after a cautious start to finish 5th, while Checa finished 9th. after running 7th for much of the race.

As the 16-round series enters the important European rounds, all eyes will be watching to see the competitiveness of the YZR-M1 machine honed even further, while the Yamaha riders push for their first

podium finishes.

Back in Japan, Abe has also been working on the development of a new YZR-M1 prototype. This spec variation features an under-seat exhaust system designed to increase power output while also providing greater design freedom, especially for the rear arm assembly. Another feature is a design that connects the two rear suspension dampers up to the highest point on the chassis in an attempt to bring out the full flexibility potential of the lightweight alloys used.



Checa on the YZR-M1 in the South Africa GP



The Tragic Demise of a Racing Star

On April 20, Daijirou Kato (aged 26) was pronounced dead at the hospital where he had been lying unconscious from serious injuries sustained when his motorcycle crashed in the race at the Suzuka Circuit on April 6. This tragic news is received with deep sorrow by his family and is a serious blow to fans of motor sports all over the world. May his soul rest in peace.



Japan

Officials from Saudi Arabia's Ministry of Interior Visit Yamaha



The visitor's commented that they were impressed with Yamaha's quality standards

n December 23 and 24 of last year, 4 officials from Saudi Arabia's Ministry of Interior, which oversees the country's traffic police, visited Yamaha Motor Co., Ltd. (YMC) along with 2 representatives from the country's YMC importer. This visit was arranged as a result of a request for a first-hand look at the manufacturing technology and quality control systems of the company, which supplies police bikes for the country's traffic police. After a tour of the 1st Iwata factory and various facilities, the visitors enjoyed a pleasant discussion with President Hasegawa and Managing Director Kajikawa. From Michiyuki Ishida, Overseas Market Development Operations, YMC

Thailand

Environmental Management Program Launched for Asia



Mr. Akutagawa, General Manager of YMC's Environmental Affairs Division explains the Yamaha group's environmental policies

he Yamaha group's first Asian Environmental Conference was held on Jan. 17 at a hotel in Bangkok. Attended by Managing Director Oshio, head of YMC's Asian Headquarters, and managers from the Yamaha bases in India, Indonesia, Malaysia, Pakistan, Thailand and Vietnam, this important meeting launched an integrated environmental management program for the Yamaha group in Asia. Yamaha recognizes

the vital role that a global corporation must play in tackling the problems that threaten the world environment today, and in order to work together as a group

with integrated environmental management policies and programs, the global Yamaha group has been divided into six major regional blocks to deal comprehensively with environmental issues. Among these, the Asian block with its concentration of manufacturing bases bears an important responsibility and



The conference gathered 25 representatives from the Asian Yamaha bases

the environmental programs that were launched at this conference carry great significance for the future.

The conference ended with the confirmation of a "Bangkok Protocol" that was read by Mr. Iio, the president of Yamaha Motor Asian Center Co., Ltd. It includes promises that all Yamaha group companies will (1) comply with the regulations regarding proper handling and disposal of chemical substances (PRTR substances) that impact the environment, not only for its own country but the countries to which it exports, (2) contribute to the worldwide need to reduce $\rm CO_2$ emissions and (3) strive to win ISO14001 certification in all areas of our corporate activities.

From Jun Sayama, Environmental Affairs Div., YMC

Vietnam

5th Anniversary Celebration Highlights YMVN Growth

host of dignitaries including Vietnam's Vice Minister of Industry and the Vice Minister of Planning & Investment, the Minister of the Japanese Embassy in Vietnam and YMC's President Toru Hasegawa were on hand to help Yamaha Motor

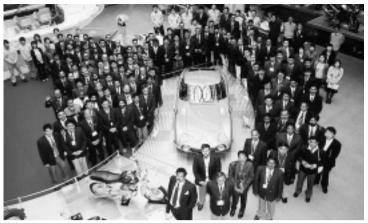


Vietnam Co., Ltd. (YMVN) celebrate the 5th anniversary of its founding on March 7 at the new factory building in Hanoi City. The ceremony began with a speech by YMVN's President Takeda and followed with the screening of a video tracing the history of the company's first five years. The Vice Minister of Planning & Investment then presented YMVN with a award for its achievements in contributing to the country's industrialization. Next, all the guests were given a tour of the company's new forging factory scheduled to go into operation in June. YMVN already has a lot to celebrate, for in its short history YMVN has succeeded in boosting its motorcycle production from 500 units of one model per month to 15,000 units of three models a month. The tremendous momentum of this rapid growth was felt by everyone in attendance at this gala anniversary ceremony. From Yoshitaka Atsumi, Manager of Marketing Div., YMVN, Vietnam

Top Indian Dealers Enjoy Japan Trip

rom March 4 to 9, a grand tour of 120 Yamaha dealers from across India and staff from Yamaha Motor India Private Ltd. visited Japan to enjoy early spring sightseeing and a tour of the Yamaha Motor head-quarters in Iwata. The dealers, who had been selected for the trip on the basis of outstanding sales results during a special campaign in 2002, arrived at the YMC headquarters on the 7th and were given tours of the Communication Plaza and the 1st and 5th Iwata factories, where Yamaha motorcycles and other products are manufactured. After the tours the Indian dealers had clearly learned a lot of new facts about Yamaha's global operations and the corporate philosophies behind the proud Yamaha quality. Several dealers commented that they will be able to put the things they learned on this trip to good use back in their home market. With its population of one billion people, India is sure to become one of the world's most important motorcycle markets.





The Indian dealers have big expectations for the future of their market

Indonesia

New Yamaha Z Racing Team in Victorious Debut



The new Yamaha Z racing Team won its debut race

ndonesia's sole Yamaha distributor PT. Yamaha Motor Kencana Indonesia (YMKI) has been actively

promoting motor sports since 1990 and many national level racing stars have emerged from its Yamaha Sunday Race and Yamaha Cup programs. Now the company has launched a new racing team to further promote motor sports and the Yamaha brand in Indonesia. The new Yamaha Z Racing Team made its debut on March 16 at the 2nd round of the National Road Race Championship series in the important 110cc 4-stroke class with a modified version of the Yamaha Jupiter Z. Though the competition is intense in this class, the team won its debut race. Yamaha Motor Kencana accredits the team' success to a well balanced combination of great product, team management and skilled mechanics all striving together for perfection. Expectations are high for more great success in the future.

From Bambang Asmarabudi, Assistant General Manager of Promotion Department, YMKI, Indonesia



Yamaha Promotes Australian Surf Life Savers



Britt Collie and Hayley Bateup battle to the line in the Yamaha women's open ski race

Yamaha Motor Australia Pty Ltd. (YMA) sponsors Surf Life Saving Australia (SLSA), the volunteer body that helps keep Australia's beaches safe all year round. But the SLSA is more than simply a life saving organization. Being Australian, SLSA members love sport and love to compete in the annual Surf Life Saving Championships.

Each year more than 7,000 SLSA members gather in one of the world's biggest competitor events, known affectionately as "The Aussies." A 3km stretch of Queensland beach was this year's venue for over 100 different events with entries from over 200 surf clubs from around Australia. Yamaha sponsored two of the highest profile

Yamaha sponsored two of the highest profile events (the men's and women's open ski races)

Editor's note

The Australian Championships is considered to be the jewel in the crown of the surf life saving season, with competitors often referring to an Australian Championships Gold Medal as the ultimate victory.

The Australian Championships were first conducted at Bondi Beach in 1915 between a mere 9 surf clubs, since then the Championships have grown to be one of Australia's largest sporting competitions.

Clint Robinson takes his 31st career gold medal in the Yamaha men's open ski race

and national television captured every moment as the competitors went head to head.

The competitors list read like a "Who's Who" of sport featuring names such as three-time kayak Olympian Clint Robinson, world ski champion Nathan Baggaley, Olympic sprint hopeful Rebecca Irwin, cruiserweight boxing champion Simon Paterson, current Ironman and Ironwoman champions Ky Hurst and Kristy Munroe and, competing in her last event, surf sport legend Karla Gilbert.

Clint Robinson won the Yamaha open men's single ski gold medal by a small margin, which marked the Olympic kayak competitor's 31st Australian gold medal of his career. Maroochydore's Britt Collie clashed with Hayley Bateup in the thrilling finale of the Yamaha women's event with the victory going to Collie by a hair's breadth.

YMA provides outboard motors, WaveRunners and ATVs for life saving application and plans to become more involved with Surf Live Saving Australia in the future.

From Sean Hawker, Advertising and PR Co-ordinator, YMA, Australia

India

Meetings Chart Course for Growth in 2003

amaha Motor India (YMI) recently held two important meetings for its managers and dealer representatives. The 2nd All Managers Meet was held on January 24, 2003 in Surajpur to share the company's plans and achievements and inculcate a feeling of togetherness among the employees of the company. YMI's CEO Mr. M. Shibuya, who chaired the event, reviewed the overall organizational performance for the year 2002 and defined the direction for 2003. He also shared the organizational vision of creating and sustaining a profitable business in India through strong Yamaha brand identity. The Marketing Action Plan was presented by Mr. R. R. Prasad (Associate Vice President — Marketing) and the Manufacturing Group Action Plan by Mr. M. J. Singh (Senior Vice President — Manufacturing). Mr. S. K. Taneja (Executive Director) urged the participants to organize themselves as an unbeatable team with a firm belief in Quality and Ethical Practices. This meeting promises to be instrumental in steering the efforts of all employees to achievement of common goals.

A few days earlier, on January 21, the 2nd National Dealer Council was held in New Delhi. The Council concept was initiated in August 2002 to help YMI and



YMI Mr. Taneja (left) and CEO Mr. Shibuya, chaired the Manager's Meet.

dealers work together for mutual success. The Council comprises eight dealer representatives on a rotating basis and concentrates on strengthening policy implementation and product feedback between YMI and the dealers.

The next Dealer Council Meet, scheduled for June 2003, will be a crucial step in synchronizing efforts with dealers for mutual prosperity and growth.

From Preeti Dalal, Assistant Manager Corporate Planning, YMI, India

Japan

Thai Yamaha Dealers chill out with snow sports!

tour of 32 representatives from 20 Yamaha dealerships around Thailand arrived in Japan on February 3 on the "Thai Yamaha Excellent Dealer Trip 2003." Early February is the height of the Japanese winter and the dealers from tropical Thailand got a rare chance to try out some snow sports when they visited the Yamaha Resort Kiroro on Japan's northern island of Hokkaido. Some tried their hand at skiing while others were content to enjoy snowmobile rides through the silvery countryside. The tour also included a trip to Tokyo's Akihabara shopping district, famous for its big crowds of shoppers looking for bargains at the big discount stores handling electronics and appliances. Thailand is a fast-growing motorcycle market and the new relationships these dealers build with the Yamaha Motor Co., Ltd. staff in Japan are sure to be the foundation for greater cooperation in growing the motorcycle business in Thailand in the future.

From Masaki Honda, Southeast Business Div., YMC



Honduras

Yamaha Dealership Owner Elected President

he Central American country of Honduras is an agricultural nation with a population of 6.3 million. The country's new President, Mr. Ricardo Maduro, who was just inaugurated in January 2002, is also the president of one of the country's leading Yamaha dealerships, ULTRAMOTOR S.A. The dealership began doing business with Yamaha some 30 years ago and has grown to become one of the most successful in Central America. President Maduro recently invited three representatives of YMC's Overseas Market Development Operations (OMDO) to the Presidential Mansion and in the meeting commented that he and his colleagues have learned much over the years in working with overseas corporations like Yamaha Motor. He also said that he wants to use that experience to work toward efficient and rapid development of his country.

From Hatsuo Onozawa, Area Marketing Div., OMDO, YMC



At the residential Mansion, the three OMDO representatives flank President Maduro (center) and Mr. Frank Paz, General Manager of ULTRAMOTOR S.A.



Philippines

Making Even Greater Leaps Forward in 2003



The "STX" equipped with a sidecar is often seen on the streets

n the Philippines, where 2-stroke motorcycles are mainstream and domestic environmental concerns are on the rise, YMC newly introduced two 4-stroke models last year. These models are the "STX," made by Yamaha Motor India Private Ltd. (YMI), and the "Crypton," made in China by Chongqing Jianshe-Yamaha Motor Co., Ltd. Due to aggressive sales expansion efforts on the part of Norkis Trading Co., Inc. the importer in the Philippines, manufacturing and sales numbers for both models have increased and were the driving force in the company's achieving a 33 percent market share, number one in the entire domestic market, in December of last year. For 2003, the company plans to introduce new models and pursue even more sales expansion strategies to further increase sales.

Trial Competition has a New Heroine!

he success of trial competitors using "SY250" machines mounting a Yamaha Trial engine on a Scorpa chassis has been spreading to countries around the world, but few have attracted as much attention in Japan as a 17-year-old teenage girl named Mariko Hagiwara. In late March at the second round of Japan National Trial Championship International B Class competition held in Kyushu, Mariko became the first female ever to win a round of this

After coming 2nd in the first lap of the trial course, she took the lead in lap two and went on to hold her lead through lap three to finish with 41 deduction points and 13 cleans. Mariko's father and sister are also Trial competitors and she seemed to take her victory in stride, admitting only half disbelief and half relief after her win. It looks like the increasingly popular Trial scene has a bright new star.



Mariko Hagiwara is a rising star on her Yamaha powered Trial bike



Many owners and developers involved in the project gathered together

he "TOYOTA 2000GT Fair" was held under clear skies at Yamaha's Fukuroi Test Course and Tsumagoi on February 15. The 2000GT, developed as a result of collaboration between TOYOTA MOTOR CORP. and YMC in 1966, was the first full-fledged Japanese sports car and is loved by many enthusiasts worldwide today. This "2000GT Fair" was designed as a place for owners or people who were involved in the development of the vehicle to get together, and in addition to 29 vehicles brought by owners, one 2000GT from the Communication Plaza display collection, one brought from the TOYOTA museum which was used by James Bond in the movie "You Only Live Twice," as well as one



Well-maintained vehicles look much newer than their 35 years as they run the course

32 vehicles gather on the Yamaha course at "TOYOTA 2000GT Fair"

used in speed trials, were brought together, bringing the total to 32. At the Yamaha Test Course, GT2000 owners and past development staff were allowed to make runs around the track and talked enthusiastically about the experience.

YMC Chairman, Takehiko Hasegawa, who as the head of the automotive division at the time was in charge of the project, commented, "All the passion from that time has been revived here today. For Yamaha, the 2000GT was a car developed practically from scratch by a team of people around 30 years old. We want to keep this experience fresh in our minds as we continually move on to new challenges."





The conference dinner raised \$12,000 for surf life saving

Stephen Gall displays ATV capabilities at the dealer conference

The Yamaha dealer conference finale



Australia

Australian Dealer Conference Best Yet

amaha Motor Australia Pty Ltd. (YMA) staged its biggest and best ever bi-annual dealer conference in Sydney on Feb. 21 and 22. Some 700 Yamaha people from around Australia were invited to witness a spectacular evening water show on Sydney's Darling Harbour that showcased YMA's range of boats, outboard motors and PWCs.

The following day conference delegates and dealers were invited to the National Institute of Dramatic Arts for a conference to learn about

Yamaha's upcoming plans and the latest products. In addition the recently introduced YMA owned finance company Yamaha Motor Finance was highlighted along with a new business management software system (Revolution) designed to make their work easier.

That evening delegates were entertained with a display of Yamaha's entire product range in the surroundings of Fox film studios followed by dinner and a live show involving 50 motorcycles and ATVs. The entertainment was themed around Mad Max to reflect YMA's involvement with world

famous Aussie actor, Mel Gibson's latest feature film *Mad Max 4*. During the dinner \$12,000 was raised for Surf Life Saving, YMA's new business partner and registered charity.

Many delegates proclaimed this year's event to be the best yet and left the conference fully primed to sell and promote Yamaha for 2003 and beyond. Now the pressure is on YMA to make the next dealer conference even better....

From Sean Hawker, Advertising and PR Co-ordinator, YMA, Australia

Peru

Yamaha Riding School for the State Police

s an effort to offer more and better service to our clients and the community, Yamaha Motor del Peru S.A. (YMDP) organized a riding school for the Peruvian Police last December. Thanks to the kind collaboration of Colonel Raúl Díaz Romero and Major Oscar Demarini of the Peru National Police (PNP), the Yamaha Riding School (YRS) course was attended by 50 participants from the different mobile squadrons of the traffic police, the marine police and the Presidential escort sqadron.

The YRS was directed by Yamaha's official instructor, Mr. Hidenobu Toh, who over four days shared his experience and knowledge of driving skills with future instructors of the National Police. Among the police attending the school sessions where ones who even use the Yamaha XV250P police bike, and they were able to gain fuller appreciation of the added power and high performance of this model for use in police duties.

At YMDP, we plan to hold more programs of this type for the traffic police so they can carry on contributing to the security in our country.

From Claudia Salazar, Marketing Coordinator, YMDP, Peru



Mr. Toh (center) and some of the satisfied YRS participants

Japan

MotoGP rider Shinya Nakano presents the "Yamaha Nice Ride Fund" to support guide dog training



From left Shinya Nakano, Japan Guide Dog Association Kanagawa Training Center's Ms. Horie, a guide dog Rob and Executive Director Kanai.

n 1989, Yamaha established the "Yamaha Nice Ride Fund" campaign and for 14 years this fund has been making annual contributions to support the training of guide dogs for the visually challenged. Proceeds from the fund for 2002 were recently presented to the Japan Guide Dog

Association in a ceremony on Wednesday, March 26 at the Kanagawa Training Center in Yokohama, Kanagawa Prefecture.

The funds were presented by Yamaha MotoGP rider Shinya Nakano (D'ANTIN YAMAHA TEAM), who has been involved in this project for 5 years, to Mr. Hisao Kanai, Executive Director of the association. In 2002, the amount of \(\frac{\pma}{9}\)85,902 was raised for the fund from activities at bike shops and events throughout Japan. In addition, Shinya Nakano personally donated an additional \(\frac{\pma}{5}\)500,000 to the fund which brought the total amount for 2002 to \(\frac{\pma}{1}\),485,902. A total of \(\frac{\pma}{4}\)48,111,448 (over US\(\frac{\pma}{4}\)40,000) has been contributed in the 14 years since the fund's inception.

Sri Lanka

Brand strategy is focus of 1st South Asian Summit

Over the four days from March 13 to 16 representatives from five countries gathered in Colombo, Sri Lanka for the Yamaha Motor Co., Ltd.-organized 1st Yamaha South Asian OM Summit. The distributors included represented Bangladesh's Karnaphuli Limited, India's George Maijo company, the Maldives' Alia Investment (Pvt) Ltd., Pakistan's International Business Centre and Business & Engi-

neering Trends and the host country's Associated Motor (Lanka) Co., Ltd. The Summit was held with the aim of bringing together for the first time the companies of South Asia and awarding the first-generation corporate leaders, whose sales efforts for Yamaha products have brought outstanding results over the years, while making sure that the secondgeneration successor who will lead their companies from now on share a common brand strategy and



The representatives from five countries strengthened group bonds by exchanging market information and deepening understanding of the Yamaha brand strategy

appreciation of Yamaha's unique corporate DNA. The Summit agenda included exchanges of information between the companies, presentations of new products and discussions of a unified brand strategy for the South Asian markets. This included a review of the history of the Yamaha brand and reconfirmation that brand equity is a valuable asset that is built not only by the manufacturer but the whole Yamaha family, including the importers and distributors in each country.

Another big focus of attention for the participating distributors were the two new Yamaha outboard



motor models EK9.9 and EK15, both enduro models designed especially to stand up to the tough use conditions in Asia and with vastly improved fuel economy.

One of the Summit participants, the young president of India's George Maijo company, Mr. Maijo Joseph, said he especially identified with the presentation of the brand slogan "Touching Your Heart" and the importance of its meaning to his company's business policy, which is based on respect for people and the environment. He added that touching people's hearts is what he wishes to do more than anything in his work. Like the other participants, he expressed his appreciation for such a meaningful summit and the way it shows Yamaha's commitment to South Asia.





In Sri Lanka, host country for the 1st South Asian Summit, Yamaha marine products are well known for their reliability in both the fishing and leisure markets

Brazil

German globe-trotter visits YMDB on his Yamaha Ténéré

rom March 18 to 21, Mika Kuhn, a civil engineer from Bohum, Germany, stopped in Brazil's largest city, Sao Paulo, the latest sojourn on a 4-year, 34-country tour around the world on a Yamaha Ténéré. One of the main reasons for the stop was to visit the home offices of Yamaha Motor Do Brasil Ltda.(YMDB) to get a well-deserved overhaul for his Ténéré. Since Mika left his home Germany on May 1, 1999, his reliable 1997 model Yamaha had taken him across Europe, into Russia, down to Istanbul and across the Straights of Bosporus into the Middle East, where he visited Egypt and Iran before heading east into India, Nepal and north across the



Outside the Sao Paulo home offices with

Himalayas to Mongolia. From there he had toured Japan, Southeast Asia and Australia before crossing the Pacific to South America. After arriving in Brazil on August $2002, \quad Mika \quad had \quad \overline{\mbox{\scriptsize Mika}} \ \ \mbox{\scriptsize departed his home in Ger-}$ gone on to tour



many four years ago

most of South America before returning to Sao Paulo. While waiting for the overhaul on his Ténéré, he was given a XTZ125, YMDB's proud new model, to tour the city. He told his hosts how much he liked the bike and the friendly people of Brazil, as well as the beautiful natural environment he has discovered around the country. After touring North America and Africa, Mika plans to return to his job in Germany and settle down with a new Yamaha TDM900. Of all the bikes he has owned, Mika says Yamahas are the only ones he has never had any mechanical trouble with.

From Shigeki Shimizu, Marketing Planning Div., YMDB, Brazil



Yamaha's New Concept: A Jet-Propulsion Runabout



'amaha's new-concept runabout SR230 made a big splash this February at the Miami Boat Show in the USA, where it won the National Marine Manufacturers Association (NMMA) "Innovation Award." This 23-foot boat with its environmentfriendly 4-stroke power and innovative transom design was chosen best of class in the highly competitive Runabout Category by judges of Boating Writers International. What makes this model so unique and attractive is not just the smooth, powerful ride delivered by its jet-propulsion system powered by twin 140-hp 4-cylinder, 20-valve, DOHC, 998cc engines, but also the efficient use of space that the jet system makes possible, creating room for a spacious cockpit and a stern swimming platform that expands the owner's marine recreation possibilities. This exciting new model went on sale in the U.S. market in April.

In the U.S. family-use boat market, the largest demand is for runabout type



models with their accent on pleasurable cruising with plenty of comfortable seating space. A wide variety of designs are available in this important category in sizes ranging from 15 to 26 ft., with the 18 to 23 ft. classes being the most popular. The most important qualities that customers ask for in these runabouts are "seat comfort," "good handling in choppy waters" and "cockpit space," and many boaters have been waiting for a next generation of models with these qualities. In terms of power systems, today's customers are keen on the advantages of jet propulsion with its good acceleration, capability to run in shallow waters and the additional usable stern space it opens up.

To answer all these demands, Yamaha designed its new SR230 as a jet propulsion runabout powered by two compact high-performance marine engines specially developed for its famed WaveRunner PWCs.

Of course, it wouldn't be a next-generation runabout if it weren't environment-friendly, and the SR230 certainly is. The low-noise, low-emissions performance of its power units clears both the

EPA2006 and California's strict 2-Star CARB emissions standards. As for the key jet-propulsion system, the SR230 adopts twin 155mm Hyper-Flow jet pumps paired with high-performance stainless steel 3-blade impellers. These twin pumps give this model the running performance and acceleration people want, while also enabling a spacious cockpit design and flowing body line through the stern. The end product is a completely new embodiment of the concept of "Family Fun on the Water."



