

YAMAHA MOTOR CO., LTD.

MARCH 1, 2004 ENGLISH

# Yamaha News

No. 2

BIMONTHLY



## The New Leader of the Pack!

When Yamaha's engineers set out to build the new 2004 YZF-R1, they didn't settle for just fine-tuning a good thing.

They started all over with an awesome new engine and a sleek, high-tech body and then tamed it into a highly controllable pack-beater.

# Engineers' view of the new technologies and concepts

The 1000cc super-sport model YZF-R1 is the dream bike of motorcycle fans the world over, and it is Yamaha's flagship model in many ways.

After its release in Europe and other markets in 1998, the R1 quickly became the No. 1 seller in the 1000cc class. What set it apart was its generous helping of GP race technologies and Yamaha's super-compact engine design know-how. Fans loved its killer combination of responsive handling that set a whole new standard for the super-sport liter bike class and its character as a "super cornering machine."

The YZF-R1's success brought similar models from the other makers, and today some 20 models compete in this class. This competition brought urgency to the "evolution" of the R1 in its biennial model changes. *Yamaha News* talked to the team of top engineers whose mission it was to make a good thing even better with the design of the 2004 model YZF-R1.

## Returning to the R1 origins

*Q: What ideas did you begin the new R1's development project with?*

Yasuhira: We set our sights high. Our aim was to use the latest technologies to create a sensation like the original YZF-R1 six years ago. We were out to create a machine that surpasses the expectations of the users and brings the special excitement that we at Yamaha call *Kando*.

*Q: What was the initial project concept?*

Yasuhira: In Europe today, needs in this class are expanding to include (1) users who want performance and functions first, (2) users who look to the styling and (3) users who want a practical machine. So, with the new R1 we set out to take the already famous R1 cornering performance to a new level. Our guiding concept was a "beautiful, exciting super sport machine that wins the title of fastest in secondary road riding." Of course,

that meant it had to have truly beautiful styling, too.

*Q: What did the actual development begin with?*

Yasuhira: In order to make sure that the entire team would be working in the same direction, we first went to Europe to study the real market needs and ride with the users there and listen to their expectations. We also went to the famous Isle of Man course, which can be considered the birthplace of motor sports.

*Q: Where else did you go in Europe?*

Tanaka: We rode at Isle of Man and at Donington in Britain, on mountain roads in Spain and France and also on the German autobahn. We also went out of our way to find roads with bad asphalt, plenty of seams and slippery surfaces, too.

*Q: What are the roads like on the Isle of Man?*

Tanaka: There are a lot of straight sections with intermittent curves, so



# YZF-R1

it can be quite dangerous. When you actually ride there you experience the way that local riders enjoy these difficult curves.

*Q: Did those experiences influence the new machine's direction?*

Koike: It helped give us a clear image of how we should take the famous R1 cornering performance to the next level and develop the engine to give you as much power as you want in every situation. We decided to take on the challenge of achieving a big boost in engine performance and reaching an entirely new dimension in 1000cc performance. And, we had to make it look great too.

*Q: What specific goals did you set?*

Koike: One of our goals was to build a machine with the performance potential to win at the Isle of Man. That meant an engine with the best performance, a chassis to handle it and the control necessary to bring out the full performance potential. In short, our goal was "full power and full control."

*Q: Were 172 horsepower and a weight of 172 kilograms your specific goals?*

Koike: In part, but reaching spec numbers is not the same as reaching goals. What's important is that the final machine be fun and really

exciting to ride. That is what the YZF-R1 is all about.

## The engine development

*Q: Did you start from zero with the engine development?*

Fujiwara: Yes. We started from zero with the mission of getting definitive power. While a V-4 was one of our options, we chose the in-line-4, but with a conviction to go beyond the pattern of just taking the predecessor to a new level of maturation. So, we chose a big-bore and a closed-deck type cylinder head, FS (Fracture Splitting) connecting rods and the first forced-air induction fuel injection system ever on a Yamaha 1000cc model. The challenge was to build in the highest power output ever, while also making the engine more compact and lightweight than ever before.

*Q: Did you get high output from the early prototypes?*

Tsuruya: The first prototype we mounted on a chassis and ran at the Yamaha test course amazed me with its power. The acceleration from 200

km/h was unbelievable. Sometimes you have to work hard to get power out of a new engine, but this time there was power to spare. In fact, we test riders felt there was so much power that we cautioned the engineers not to ride it at first. If you accelerated too hard out of the turns the rear wheel would spin and you could be in



The development project this time went far beyond a mere maturation of the existing R1

real trouble! (laughs).

*Q: So did you have to tame the engine some?*

Tsuruya: That's right. Our mission was not to just let this awesome power loose, but to temper it into a power unit that provided highly controllable performance.

## A "Rider First" policy

*Q: Was the sub-throttle type fuel injection (FI) system the key to that controllability?*

Fujiwara: The balance of the FI system is essential to highly controllable performance. The suction piston type FI system used on the 3rd generation YZF-R1 is basically a system that responds to the amount of intake air the engine demands. We chose the sub-throttle type FI this time to develop a system that responds to the amount of intake air the rider wants. It's a "Rider First" concept.



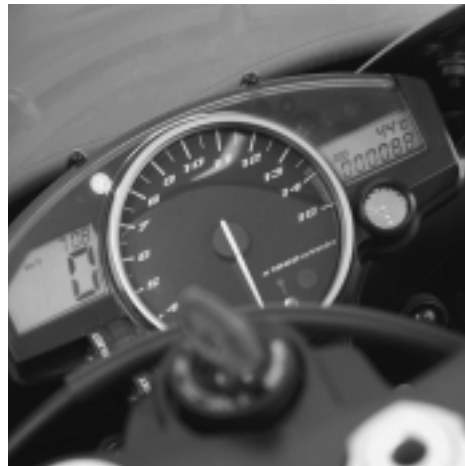
The New R1 Project Leader and department Project Chiefs. From front left, Akihiko Yasuhira (Product Planning), Akira Tanaka (Test Development Dept.), Hideki Fujiwara (Engine Development Dept., Design) Tomohiro Tsuruya (Test Development Dept.), Yoshikazu Koike (Project Leader). Second row, from left, Mitsuhiro Ogino (Body Development Dept., Component Development), Toyoshi Nishida (Body Development Dept., Design)

*Q: What does that involve specifically?*

Ogino: As the engine revs higher the air intake passage opens up wider. But, in the high rpm range you also develop a pulse and you don't always need that much air. We believed that if you could adjust for that, you could get high power that is also very controllable.

*Q: How does that work in terms of the system mechanism?*

Ogino: You take the information from the system sensors and program the



ECU with mapping developed to optimize the intake through two throttle valves for each cylinder. We developed the mapping so that we got the power we wanted when we wanted it, without excessive power.

*Q: You increased the capacity of the ECU too, didn't you?*

Ogino: We upped it from a 16- to a 32-bit unit, which greatly increased the processing speed. Until now there was at least a 3-second time lag for adjustments from full-closed to full-open throttle, but we succeeded in reducing the lag to near zero. The other makers also use ECUs to control their FI systems, but at Yamaha we always place final importance on how the system actually feels to the human sensibilities of the rider.

## A thoroughbred with MotoGP technology

*Q: What led to the development of what you call the new "Victory" frame?*

Tanaka: Up until now, we developed the R1 models for honest, and direct response to the rider's actions. This time, with the big boost in engine power, we wanted to develop handling response that is even more precise in reflecting the rider's actions, especially when entering a curve. The important thing is vertical, or longitudinal rigidity. Generally speaking, when braking or entering a curve there is a good amount of longitudinal stress on the frame. If you achieve good longitudinal rigidity that translates into a sense of stability that lets you enjoy a feeling of sharp handling. And many YZF-R1 customers ride on circuits and race, so we have to take those needs into consideration too. That's why we couldn't just make this frame an extension of our past format.

*Q: In other words, the frame was not just the next evolution of the existing one.*

Nishida: Until now the frame concept was one of enclosing the engine in a box. With the new frame it is like the engine is held in a framework that is close to being two straight lines. This is a completely new concept that we got from talks with the staff working on Yamaha's YZR-M1 MotoGP racer.

*Q: And that gave you the rigidity you wanted?*

Tsuruya: At first we didn't know if raising the longitudinal rigidity would really make for a better ride on public roads, so we had two pro-

totypes made, one with a big increase in rigidity and another with just a small increase. The result was a unanimous vote for the big increase. The performance was really exciting. The final balance we chose was 2.5 times greater longitudinal rigidity.

*Q: Did any other new ideas go into the frame?*

Nishida: The concept behind the first R1 frame was a balancing of the longitudinal, lateral and torsional rigidity, while the 2nd generation R1 frame focused on analyzing where the centers of stress were and the 3rd generation frame on what distortions of the frame occurred in actual riding. This time we added one more dimension, a kind of "joint" concept. Two bamboo poles will have the same flexibility if they are of the same thickness and length. But bamboo has joints, and if the spacing of



the joints is different, the way it flexes will also be different.

*Q: And has this made a significant difference in the ride?*

Tsuruya: Absolutely. But this is by no means a hard-edged machine. It also has a very comfortable ride with low vibration and good overall balance. It's so comfortable in fact that you will want to go touring on it.

## The attraction of the total package



The new engine adopts a closed-deck cylinder that enables an especially high compression ratio



MotoGP rider "Norick" Abe is clearly pleased with the new YZF-R1. Project Leader Koike was surprised and thrilled when Norick said, "This will be a perfect machine for practicing to ride the YZR-M1 factory machine."

**Q: Looking back on the development project for the new YZF-R1 what stands out most?**

Koike: Until now the R1 was developed as a total machine where the engine and chassis design staff worked closely together to get a perfect balance. But this time I think you could say that the two design teams were striving for ideal designs for the engine and chassis, and then we succeeded in bringing the two together.

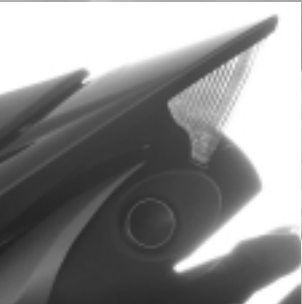
**Q: In the end, has the handling of the R1 really changed?**

Tanaka: Up through the third generation R1 handling was the big theme.

At Yamaha we have pride in being the maker that builds machines with great handling. With this machine I believe we have reached a new pinnacle. Its new engine has vastly improved performance and power you can really enjoy. We have also built in great drivability, braking performance and optimum shift feeling and handling qualities.

**Q: Finally, what are this machine's biggest sales points?**

Fujiwara: Just recently I got one of the production machines out on the test course for some laps and I can tell you, this is a bike that will make you rediscover the joy of motorcycling! It is really exciting. Take one for a ride, it will be an experience you won't forget!



# Quality Products for the People of



Our contributor: Jawaid Yakoob, General Manager Marketing, DYL

## One of the oldest Yamaha joint ventures

It was in 1976 that Yamaha Motor Co., Ltd. formed a joint venture company in collaboration with a well reputed business and industrial group in Pakistan known as the Dawood Group of Companies. Taking the Dawood and Yamaha names, this new joint venture company was named Dawood Yamaha Limited (DYL). From its early years, DYL has had comprehensive facilities for both the production and marketing of Yamaha brand motorcycles in Pakistan, and it has long been referred to as the oldest joint venture company that Yamaha Motor has outside Japan. Similar to other developing countries in the South Asian region, the lower-and middle-income population of Pakistan

depends heavily on affordable motorcycles of smaller displacement, ranging from 70cc up to the 100cc and 125cc classes. These motorcycles are used primarily for conveyance and transportation purposes and they are being used mainly for commuting to work, everyday personal use and a variety of other business and commercial transportation needs. These users include everyone from small businessmen, shopkeepers and company sales



The CNC Flexible Machining Centre

people to farmers and students. Yamaha is considered one of the favorite brands among the Pakistani motorcycle users, and Dawood Yamaha has been known until now as the undisputed leader in the 2-stroke motorcycle market in Pakistan.

## Our Corporate Mission

As a company, Dawood Yamaha has set for itself the corporate mission of becoming a leading motorcycle manufacturer in Pakistan by providing quality products and after-sale service that wins the highest customer satisfaction. Our corporate objectives are (1) to provide products to



A modern testing lab facility

meet the needs of the market, (2) to meet customer expectations regarding our products by supplying proper services and parts facilities, (3) to produce products that meet the international standards of Yamaha, (4) to provide meaningful returns to our shareholders and (5) to be a good corporate citizen in our society.

## Contributing to Pakistan's industry

As a manufacturer of Yamaha brand motorcycles, DYL is contributing to the Pakistani economy and has won the approval of the Pakistan Engineering



Young staff at DYL



The DYL Assembly Plant



DYL staff at the head office in Karachi

Development Board for public sector assistance. In addition to making a huge investment in plant facilities, machinery and equipment for assembling our Yamaha motorcycles, DYL has also made large

# Pakistan

investments toward the manufacture of parts and components in order to achieve a high level of local supply of quality parts. The company today boasts modern facilities for sheet metal parts stamping, welding, die casting, heat treatment and shell mold casting as well as gear and shaft manufacturing. What's more, all of these manufacturing facilities have received international certification under quality standards like ISO 9002.

This process of large-scale investment for the localization of parts and components has brought with it an important transfer of technology that now enables DYL to manufacture high value-added products while also helping to build our country's engineering base. The training our engineers have undergone has enabled a substantial absorption of mass production technologies that are contributing to Pakistani industry. DYL now has over 80 outside suppliers who are supplying us with quality parts for use in our motorcycles. This has further strengthened the engineering base and know-how transfer to the parts industry.

Besides this technology transfer, Dawood Yamaha is also contributing in the important area of job creation. Our investments in local manufacturing have directly created a very significant number of job opportunities for engineers, professionals, skilled and semiskilled workers, and an equal number indirectly in the form of jobs at dealerships, local mechanics and a number of others associated with the company and Yamaha motorcycle business in general. When all this is considered, the number of jobs we have helped create runs into the thousands.

## Our dealer network and after-sale service

Dawood Yamaha Limited has set up a network of dealerships country-wide that are being administered as a comprehensive network by our Regional Offices in order to maintain the best relationship with customers and to live up to the expectations of the Yamaha users. At present this network consists of nearly

200 dealers involved in sales, 600 service dealers and around 120 spare parts dealers all over the country. In cooperation with this network we also conduct a series of service campaigns to make sure



Yamaha Star Shops Seminar

that our highly valued customers are taken care of fully.

Beginning in 1997, we launched an innovative program of exclusive warranty service at select dealers called "Star Shops," and in a short span of time our Star Shop network has been expanded to 51 shops nationwide. The main objective of this program is to provide warranty service at the doorsteps of our valued Yamaha Customers. Regular training seminars and upgrading of these shops is an important feature of the DYL marketing plan.



Yamaha Technical Academy participants

## The final goal is Total Customer Satisfaction

To provide the utmost satisfaction through caring for its customers, DYL has implemented service concepts based on Yamaha's "One to One Service" concepts. To enhance the knowledge base of the technicians and mechanics who work

on Yamaha motorcycles throughout Pakistan, we arrange regular training programs and technical sessions under the umbrella of YTA (Yamaha Technical Academy), which is being conducted in various cities around the country. Through these policies, we intend to satisfy the customers as well as the people around them.

Various other social service activities like a Yamaha motorcycle rally on Pakistan Independence day, various forms of user-oriented entertainment, sports and musical events are also being promoted and sponsored by DYL on a regular basis. Aggressive sales promotion techniques such as leasing facilities and a Nationwide Dealers Shop Renovation Project are also being adopted with the final end of promoting sales in ways that also increase customer satisfaction. Joint Promotions with large multinationals and

local companies like Shell Pakistan, Pakistan State Oil and others are being carried out on a regular basis.

As Dawood Yamaha is involved in the manufacturing of high quality

products for its customers, product quality remains one of our company's top priorities. And, in the future DYL intends to build on its reputation as a socially and environmentally responsible company while continuing our efforts to provide the people of Pakistan with affordable, quality Yamaha motorcycles, both for the growth of the company and the national economy.



Two wheelers are now commonly seen on roads of Pakistan for commuting

# This Is My Country



## Pakistan

**Country Name:** Pakistan  
**Capital City:** Islamabad  
**Area:** 803,640 sq km  
**Population:** 140,500,000  
**GDP:** \$70 billions  
**Currency:** Pakistani Rupee

### Country of rich history and cultural diversity

The area of present-day Pakistan was the cradle of the earliest known civilization of South Asia, the Indus Valley civilization (2500 BC). Pakistan, a land of pure heritage, gained independence from British rule on 14 August 1947, when India was divided as a result of a successful freedom struggle by the Muslim population. In the course of its long history dating back to 400 BC, only nine large and small empires had ruled in the subcontinent. Of these, four (Mauryan, Tughluk, Mughal and British) ruled vast areas. In the years preceding 1947, western India made a united effort to free itself from the central authority of Delhi and established an independent state under the leadership of Mohammad Ali Jinnah, the father of the Pakistan nation.

### Geography and Climate

Pakistan covers an area of 778, 720 sq km of land and 25, 220 sq km of water and a total land boundary of 6,774 km which borders 2,430 km with Afghanistan, 523 km with China, 2,912 km with India and 909 km with Iran. Pakistan also has a 1,046-km coastline on the Arabian Sea that is rich in marine life.

The north and west are mountainous land and plateaus while the remaining area is the level Indus plain in the east. Pakistan has great extremes of elevation, from sea level on the Arabian Sea Coast to the highest point of K2 in the Himalayas at 8611 m.

The availability of water for agriculture is extremely important in Pakistan. The Jehlum, Chennab, Ravi, Beas and Sutlaj rivers are the major tributaries of the Great Indus River, which flows from the scenic beauty of the northwest to the Indian Ocean, covering a long distance through the Himalayas and out-flowing the majority of its reserves to the plains of Pakistan, where agriculture flourishes.

Overall, Pakistan's climate is continental. Since rainfall is insufficient for the country's needs, dam and reser-



Karachi, the largest city of Pakistan



Lahore Fort of the Mughal era is situated in the Province of Punjab



Frano near Skardo Pass in the North West Province

voirs such as Tarbela, Mangla and others have been created to meet the country's water needs.

### Proud people with diverse languages

The people of Pakistan are ethnically diverse, tracing their roots to many different origins, largely because the country lies in an area that was invaded repeatedly during its long history. Migrations of Muslims from India since 1947 and refugees from Afghanistan since the 1980s have significantly changed the demographics of certain areas of the country. The people of Pakistan come from ethnic stocks such as Dravidian, Indo-Aryan, Greek, Scythian, Hun, Arab, Mongol, Persian, and Afghan.

The majority of Pakistan's population lives in rural areas and the country is striving hard to strengthen its education systems. Due to the country's multifaceted cultural origins, the variety of languages spoken adds to provincial diversity. Urdu is the national language, while English is the official language for legal and government offices.

### Economy and Exports

Like most developing countries, Pakistan is confronted with the problems of rapid population growth, sizable budget deficits, and heavy dependence on foreign aid and loans.

Heading into the 21st century, Pakistani leaders have a chance to seize the moment in order to modify and build a sound social and economic order that may steer the nation to a more durable path of progress. Today, a high-powered Privatization Commission encourages privatization in the public-sector industries.

About 28% of Pakistan's total land area is cultivated. Agriculture and related activities, including fishing, engage 47% of the workforce and provide 26% of the GDP. The chief cash crops are cotton, with textile yarn and fabrics producing more than one-half of export earnings, and rice.

The country's main exports in the textile industry include all types of raw cotton yarn, fabrics, garments, silk and synthetic textiles. Other exports include rice, leather products, sporting goods, carpets and wool, surgical instruments and petroleum products. Developing export categories which show promise for the future are fisheries, fruit, vegetables and wheat, engineering goods, poultry, IT software and services, gems and jewelry and chemicals.

### Pakistan in today's world

The start of the 21st century has brought social and political changes for Pakistan. Democracy's growing prevalence has boosted the confidence of foreign and local investors, and easier terms and scheduling of payments are now available for debt financing and providing funding to Pakistan. Though the country still faces difficulties in many areas, the future looks bright as the nation's leaders implement progressive policies. At the same time, Pakistan continues to be committed as a true and sincere global citizen, participating in various international agreements in areas like biodiversity, climate change, desertification, endangered species environment modification, hazardous wastes, maritime law, marine dumping, ozone layer protection, and ship pollution of wetlands.



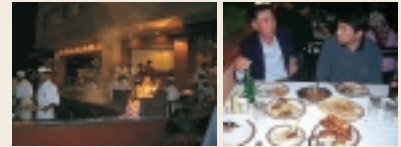
The highest point, Mount K-2 (8611m)

### Facing the challenges of the future

Pakistan today is rapidly gearing up to face the challenges of the future. The government has taken steps to eliminate problems by scientific means. A network of highways and roads is being constructed and soon will extend around the country. Extensive NGO work has almost eradicated diseases like polio and government programs have been introduced to improve issues like literacy.

To better meet the country's needs in the areas of food and water supply, Pakistan's government has decided to build new dams and reservoirs, which will help in irrigating more land and generating more agriculture and jobs for the rural population. Pakistan gives special emphasis to science and technology as major concerns for development.

**Favorite foods:** One of the most popular Pakistani dishes is chicken tikka, a charcoal baked dish with chili spices. The photos are from the famous "BBQ Tonight" restaurant in Pakistan's largest city, Karachi



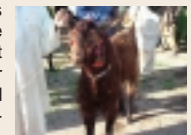
Enjoying chicken Tikka

**Favorite scenic spots:** Mohenjo Daro is a prehistoric site developed around 4000 B.C. The residential quarters show a remarkably high level of civilization.



Mohenjo Daro

**Fascinating Festivals:** The Eid festival amazes many foreign visitors to Pakistan. Coming after the month-long Ramazan fast, the festival celebrates the completion of the fast. It is the custom at Eid to offer a cow or goat as a sacrifice and deliver the meat to relatives or the needy.



A decorated goat to be sold for sacrifice



Ms. Vaniza Ahmed is one of Pakistan's famous fashion models

**What is in vogue in Pakistan:** Recently, things like mobile phones, the Internet and cable TV are quickly becoming popular, especially in the urban areas. These media give people information about foreign trends and are bringing changes in areas like women's fashions.



# AMA Supercross opens with Yamaha sweep!



From left, Vuillemin, Reed, Ferry at the opening round

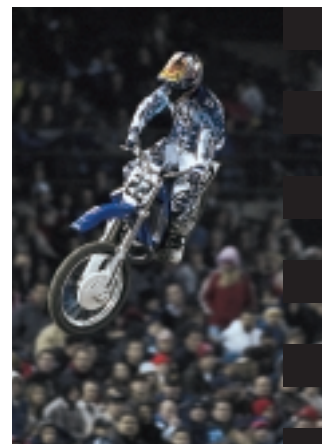
The 2004 AMA Supercross season in the U.S. opened on January 3 at Anaheim Stadium in California in what turned out to be a banner day for Yamaha, as Chad Reed (Australia), David Vuillemin (France) and Tim Ferry (USA) of the Yamaha Factory Race Team finished 1, 2, 3 riding the YZ250 to the first Yamaha podium sweep in five years.

The 16-round season that runs almost every Saturday until May with breaks

only for holidays like Easter, has been competed on the West Coast through round six in recent years. Again this year the season opener was held at the Anaheim Stadium near Los Angeles, home of the Anaheim Angels baseball team. At round 2 in Phoenix, Arizona, Reed finished 2nd and Ferry 5th, while Vuillemin worked back from a tail-end start to place 7th. At round 3 at Anaheim and round 4 at San Diego, Reed scored

two more brilliant wins with Vuillemin following close in 3rd. As for Ferry, a wrist injury sustained in practice kept him out of rounds 3 and 4.

While Ferry tended his wounds, Reed and Vuillemin carried the Yamaha flag in brilliant form. Already people are talking about Reed as the man to beat this year, and the fans love him. As of the end of round 7, Reed stands in 1st place in the season ranking with Vuillemin in 4th place. It may well be that Reed clinches the title before the final round at Las Vegas on May 1. In any case, this is going to be a great season for Yamaha fans.

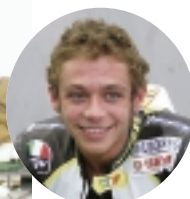


Chad Reed and his YZ250 at the second round

# Yamaha MotoGP team hits the test track



Rossi will ride the YZR-M1 beginning this season



Preparations are going well for the start of the 2004 MotoGP season on April 18, and the Yamaha team riders began their track test schedule in good form. Riding for Yamaha's factory team, the Gauloises Fortuna Yamaha Team, this year are Carlos Checa (Spain) and defending MotoGP champion Valentino Rossi (Italy), while Marco Melandri (Italy) and Norifumi "Norick" Abe (Japan) will ride for the privately owned Fortuna Gauloises Tech 3 Team. All four of these riders will compete on the Yamaha YZR-M1.

The four Yamaha riders undertook their first track tests over three days beginning on January 24 at the Sepang circuit in

Malaysia. For Rossi, it was his first time on the YZR-M1, and everyone was anxious to see how it would go. The answer came on the third day of the tests when he set a new personal record for the Sepang course of 2 min. 2.75 sec., using his same unique hang-from-the-tank style. Afterwards, Rossi commented: "We did

some good work. The time we made was good for a first test, but tire and chassis settings were the main aim here. I've really enjoyed my first three days with Yamaha. I'm very happy. There's still work to do on the engine and we'll carry on with that, but overall things have been good." That sounds like good news for Yamaha fans for the coming MotoGP season.



From left, Checa, Rossi, Melandri, Norick

# WORLD TOPICS

We always welcome your contributions.  
Write to Chief Editor Maki Yamaguchi of the PR Division,  
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Indonesia

## Champion Crowned in 1st YAMAHA ASEAN CUP 2003



20,000 people gathered at the circuit near Jakarta for the grand opening of the first ASEAN CUP 2003

**O**n December 7, 2003, a new chapter was opened in the nascent motor sports scene of Southeast Asia as qualifying riders from Indonesia, Malaysia and Thailand gathered at the PRJ-Jakarta circuit outside of the Indonesian capital to compete for the title of No. 1 in the ASEAN region in the "YAMAHA ASEAN CUP 2003." Planned and organized under the leadership of YMC's Mr. Tsuyoshi Yano with cooperation from Yamaha's Indonesian partner, PT. Yamaha Motor Kencana Indonesia (YMKI), the "YAMAHA ASEAN CUP 2003" was the first ASEAN region championship race event ever. In all, 20 riders from Indonesia and 10 each from Malaysia and Thailand, all of whom had won qualifying races in their own countries, battled for the ASEAN crown in the type of hot competition that one-make races are known for.

"The Yamaha T110 used in this YAMAHA ASEAN CUP is a 4-stroke model sold widely throughout the ASEAN region, under the 'Jupiter Z' name in the Indonesian market, the 'Legenda' name in Malaysia and the 'Spark Z' name in Thailand," comments Mr. Yano. "For a long time, 2-stroke models were the core of our business here in Southeast Asia, but now the market is shifting rapidly and it is the 4-strokes that will be the market leaders from now on. That means we have to move quickly to shift our focus, too. As part of the strategy for this shift, we want to build the image of our 4-stroke models in the region by expanding the scale of the one-make races that we have been involved in until now in the different countries."

Of course, brand strategy is not the only motivation behind the YAMAHA ASEAN CUP. Today, the ASEAN region is one of the largest and fastest growing motorcycle markets in the



The winner of the Novice class was 11-year-old boy wonder Doni Tata Pradita (representing Indonesia). Doni's dream is to become a MotoGP rider like Norick

world, and a primary mission of the CUP races is to promote the spread of motor sports in this high-potential market. That is why Yamaha invited MotoGP riders Norick Abe and Naoki Matsudo to Indonesia for this event to hold coaching clinics to teach the participants the techniques of circuit racing and help nurture a new generation of race riders.

With the successful conclusion of this first YAMAHA ASEAN CUP 2003, plans call for the CUP championship event to expand next year and beyond with the addition of participants from other ASEAN countries like the Philippines and Singapore. Yamaha's Malaysian partner Hong Leong Yamaha Distributors Sdn. Bhd. (HLYD) will host next year's event in Malaysia.



MotoGP riders Norick Abe and Naoki Matsudo appeared as guest instructors at the event's riding clinic



Mr. Kadek Mantrajya (#84, representing Indonesia) won the Expert class and the title of the first ASEAN Champion



## 2-wheel-drive Yamaha is sensation of the 2004 Dakar rally

The Dakar rally is known as one of the world's toughest motor vehicle races, and this year's 26th holding was one of the toughest in the rally's history, lasting 18 days and covering more than 11,000 kilometers.

On Jan. 18, David Frétygné of the Yamaha Motor France Ipone team arrived at the goal in the Senegal capital, Dakar, amidst wild cheers from the spectators riding the revolutionary 2-wheel-drive Yamaha WR450F 2-Trac.

Despite a displacement of just 450cc, Frétygné outran other makers' factory machines in the larger 660cc and 950cc classes to finish an amazing 7th overall and capture the 450cc class crown by a big margin.

One of the secrets behind Frétygné's success was the 2-wheel-drive system of his WR450F 2-Trac machine developed jointly by Yamaha Motor Co., Ltd. (YMC) and Ohlins. The system employs a hydraulic motor in the front wheel hub that is activated by pressure from a hydraulic pump in response to the degree of spin occurring at the rear wheel. This added front-wheel pull makes a big difference in traction in conditions like deep sand and opens up new riding potential, making it the focus of big attention.

The development of the system was begun by Yamaha and Ohlins in 1985, with the first real prototype completed in 1998. The following year it made

its race debut on the TT600R at the UAE Desert Challenge. With continuing development, Yamaha Motor France's President Jean-Claude Olivier himself rode along with Frétygné on machines mounting

this system to victories in the 2002 and 2003 Shamrock Rally in Morocco. For this year's Dakar rally, Yamaha Motor France and Yamaha Motor Europe N.V. further developed the system's reliability and durability, and its technological excellence has now been proven before a worldwide audience on the tough Dakar course.

This revolutionary 2-wheel-drive system will be available to customers in Europe as a limited-edition kit for the WR450F in 2004. By applying Yamaha ingenuity and new technologies aimed at bringing new excitement to our customers in ways that are different from any other maker, Yamaha has once again opened up a whole new world of 2-wheel riding excitement.

*From YMENV/YMF*

### David Frétygné Speaks

It was my dream from childhood to some day compete in the Dakar rally. YMF's President Olivier gave me this chance and the motivation to set a target and overcome all obstacles on the way to the goal. The Yamaha brand image is closely tied to the Dakar rally and I am excited to now be a part of it. The WR 2-Trac may have a small engine, but it is a fun machine to ride. I learned a lot this time, and next time I want to go for the overall win.

### President Olivier Speaks

This 2-Trac technology that has been in development since 1985 has now opened a big door at the Dakar rally to stand on the world stage. David has done a great job with his talent and powers of judgment, even while working on the machine development. Once 40% of the machines in the Dakar were Yamahas, and now there are only a few. But this year's achievement has once again brought the Yamaha name back into the Dakar impressively, and I am convinced that we have given the customers new dreams and expectations.



David Frétygné and the YMF team celebrate victory at Dakar



The 2-wheel drive system dramatically boosts traction in deep sand and the like



The 2-wheel-drive WR450F 2-Trac

## YRS shows how Yamaha backs its products

The West African country of Cameroon became the latest in the growing number of African nations that depend on reliable Yamaha police bikes. Late last year the local Yamaha distributor, CAMI, supplied the Cameroon government with an order of XJ900P police-outfitted motorcycles. Then, over the two days of November 12 and 13, that delivery was followed up by a YRS (Yamaha Riding School) course in the capital, Yaounde, to instruct 67 officers from the military police (Gendarmarie National), national police and the Ministry of

Transportation who will be using the new police bikes. Organized by the local Yamaha representative, Mr. Christophe Geindreau, and with Mr. Vincent Cassar as the YRS instructor, this course taught the participants not only the fundamentals of safe and sound riding technique but also how to perform the regular machine checks and maintenance necessary to keep the machines always ready for duty.

This event was reported in the local newspapers, giving the public a high-profile example of the Yamaha spirit of full after-sale service.



*From Hiroshi Setogawa, OMDO, YMC*

France

## New CW50 rolled out to make Yamaha/MBK No. 1 at 50cc



YMC's President Toru Hasegawa (third from right) was among the dignitaries at the tape cut for MBK's New CW50

The gala ceremony held at the MBK factory in St. Quentin, France, on December 12, 2003 to commemorate the start of production for the "New CW50" scooter, clearly showed the company's big expectations for this new version of its popular 50cc scooter. Among the dignitaries participating in the tape cut was YMC's President Hasegawa from Japan.

Ever since its release in 1989 as the MBK "Booster" and the Yamaha "BW'S," the CW50 has enjoyed exceptional popularity as a lifestyle item among Europe's younger generation with its sturdy but stylish body and go-anywhere big tires. Its continuing popularity has brought production to a grand total of more than 600,000 units. With the New CW50, Yamaha's European manufacturing base for smaller motorcycles and outboard motors, MBK, hopes to cement its position as the No. 1 maker of 50cc scooters in Europe.

*From Toshiya Kawano, MBK, France*

UAE

## Leading Middle East Distributor Celebrates 50th Anniversary

The Yamaha land and marine distributor for the United Arab Emirates, AL YOUSUF MOTORS L. L. C., which has been doing business with Yamaha for 40 years, celebrated its 50th anniversary on December 15 last year with a grand ceremony attended by distinguished representatives of the government of the Emirate of Dubai and numerous industry affiliates. At the ceremony YMC representatives were presented with an award of appreciation for the company's contribution to the local business community.

Representing Yamaha at the event were ME Company President, Mr. Shinya Sato, OMDO Senior General Manager, Mr. Noritaka Shibata and related staff. AL YOUSUF is the largest Yamaha distributor in the Middle East and handles a full line of Yamaha main products; motorcycles, ATVs, outboard motors, WaveRunners, power products and golf cars.

*From Michiyuki Ishida, OMDO, YMC*



ME Company President, Mr. Sato, receiving the award

Taiwan

## New Vino gets a stylish launch

On January 16, a press introduction event was held for the "New Vino," a new version of Yamaha's popular "fashion scooter" Vino that mounts for the first time a newly developed 4-stroke engine. To best match the product image and the prime target demographic, the venue



Sweet Stefanie Sun starred at the lively Vino press event

chosen for the event was a fashionable live-performance club in the capital city, Taipei, and the staging of the product presentation was done in the style of a fashion show. On hand to liven the launch by singing the theme song from the Vino TV commercials in which she stars was the popular singer Stefanie Sun.

The attendance at the event far exceeded expectations, with about 150 journalists. In fact, many of the journalists praised the great match between the images of the New Vino and Ms. Sun and the added advertising effect it should bring. Others commented that this was the best new-product launch event they had seen. Announcements had already been made that the New Vino will go on sale in Taiwan in late February and in Japan at the end of March, and from the reactions at this launch event it is clear that this is the model all eyes are on.

*From Katsuhiko Honmaru, YMT, Taiwan*

Italy

## Belgarda becomes Yamaha Motor Italia

On January 14, 2004, a press conference was held at the Milano Stock Exchange to announce the official name change for the Yamaha distributor in Italy from Societa Belgarda S.P.A. to Yamaha Motor Italia S.P.A. and to explain the new unification of the Yamaha brand in Italy. This move was taken to further consolidate Yamaha brand equity and user loyalty around the Yamaha name in the increasingly competitive Italian market.



President Takahashi speaks to the large gathering of magazine, newspaper and TV journalists

The new official company name is Yamaha Motor Italia S.P.A. (YMIT), and under the new brand unification program, former MBK dealers will now be absorbed into the Yamaha dealer network. This move will increase the number of dealerships handling Yamaha brand products to roughly 350 nationwide.

Meanwhile, a new marketing policy is being initiated to promote retail sales, under which the motorcycle and scooter divisions will conduct separate marketing programs aimed at different user profiles in order to better match the actual Italian market conditions.

The highly successful press conference gathered some 80 representatives not only from the motorcycle press but also general magazine and newspaper journalists in addition to TV coverage. The new company's president, Mr. Yoshihiko Takahashi addressed the press and received questions in Italian, in what turned out to be a very lively press event showing big expectations for the company's future.

*From Masaya Watanabe, YMIT, Italy*

Argentina

## Fresh start for Yamaha Motor Argentina at new premises

In November 2003, Yamaha Motor Argentina S.A. (YMARG) moved to new premises in Buenos Aires, as part of its restructuring in the wake of the economic crisis that swept the country in 2001 and 2002. The attractive new premises in a busy commercial area of the city have been designed to also serve as a model showroom and service center for the "YSP" (Yamaha Sports Plaza dealership) program that YMARG will now be promoting throughout Argentina.

When the severe economic crisis struck in 2001, demand dropped a devastating 90% in YMARG's main product categories, forcing a restructuring and reorienting of the company. While some of the main competitors withdrew from certain sectors of the market to concentrate on the larger business and commercial transport sectors, the determined YMARG team quickly identified the newly opened sectors and reoriented its product strategy to concentrate on the full Yamaha range of motocross models, sport models like the YZF-R1, touring models like the TDM900 and sport and utility ATVs, as well as the full range of Yamaha outboard motors and WaveRunners. This strategy has proved successful and the company ended 2003 on a strong note. Supporting this new orientation will be the YSP shop concept that YMARG will begin implementing among its network of some 60 dealers nationwide.

Officially opened with a ceremony on Nov. 7, the model showroom at the company's new premises greets customers with an attractive interior and displays designed to convey a mix of technology and sophistication. There is also a coffee bar and a TV monitor showing domestic and overseas Yamaha promotional videos. The reaction to the new showroom has been very positive.

*From Pablo Hlebszevitch, General Manager, YMARG, Argentina*



The new YMARG home office includes a model YSP showroom

Japan

## YMKI's Main Dealers Visit Japan

Over a eight-day period from November 1 to 8 last year, PT. Yamaha Motor Kencana Indonesia (YMKI) treated its major dealers to a tour of Japan. Being the first such trip in eleven years, it was a large tour of 59 people, including representatives from 23 of Indonesia's leading motorcycle dealerships and YMKI staff. One of the highlights of the trip was a visit to the Tokyo Motor Show, where the dealers deepened their understanding of Yamaha's corporate directions and state-of-the-art technologies in such important new fields as electric vehicles.

In addition to sightseeing and shopping in Tokyo and later in Hakone and Kyoto, the dealers were welcomed by a large number of Yamaha employees at YMC's headquarters in Iwata, where they toured the main factories and Communication Plaza on Nov. 4. At the welcoming party held for them that night, YMC President Hasegawa thanked the dealers for their important contribu-



(From right) Indonesian Yamaha dealer Mr. Harifin from Jakarta, Mitsui & Co., Ltd. General Manager, Mr. Imura, YIMM President, Mr. Takahashi, YMC's President Hasegawa and a dealer Mr. Herry from Makassar opened a keg of sake together

tion in helping Yamaha Motor achieve consolidated sales of over a trillion yen worldwide for the first time ever. In another speech, Senior Managing Director Kajikawa asked for the dealers continued cooperation in building the Yamaha brand image and promoting sales of the new automatic transmission models that are an important part of Yamaha's marketing policy for Indonesia. Thanks greatly to the efforts of these dealers, Yamaha's 2003 motorcycle sales in Indonesia reached 570,000 units, while recovering a market share of 20%.

*From Wataru Endo, Motorcycle Operations, YMC*

The Netherlands

## YMENV Web Site Wins Golden Award

In the 2003 World Media Festival in Hamburg, Germany, the Golden Award in the category for Best Product Presentation was given to Creative Action Holland for their design of the



Mr. Robert Landman (left) of YMENV, Mr. Herman van Oldenmark, Creative Action Holland Director (center) and Mr. Mochizuki (right) of YMC PR holding the award plaque

powered two wheeler (PTW) section of the Yamaha Motor Europe N.V. (YMENV) Web site.

Among the entries from 24 countries, the international panel of judges found the YMENV Web site outstanding in a number of areas including navigation, speed, target group definition, continuity and user friendliness.

With an average 1.2 million visitors every month, Creative Action Holland Director, Mr. Herman van Oldenmark, commented that the success of the YMENV Web site was attributed to it being "refreshing, renewing and full of the correct target group information." Visitors enjoy the site because the product presentations go beyond the usual specifications, etc., to include image and lifestyle elements that create a unique world around each product. Microsites are also created for new models to effectively communicate the excitement of the Yamaha world in stylish ways.

*From Robert Landman, PTW Marketing and Sales Div., YMENV, the Netherlands*

Japan

## OMDO service training held in Japan

OMDO Service Training for 2003 was held in Japan over a five-day period from September 22 to 26.

Service staff personnel at dealerships from ten countries in Africa, the South Pacific, Central Asia and Central America were joined for the first time by senior volunteers from the Japan International Cooperation Agency to make a total of 17 participants who took part in the five-day program. These participants received technical training that centered on the large-size 4-stroke F150A and F225A outboard motors.

The schedule for the five days was packed tight with technical lectures that included practical training, and thanks to the inclusion of hands-on training under actual use conditions on the water, all the participants learned skills that can be put into practice right away. While the range of OMDO activities is focused almost completely on developing countries, there is significant interest everywhere in these outboard motors that are friendlier to the environment. After the participants return to their countries, they will serve the important role of instructors at dealerships where training clinics will be held for local mechanics.

*From Minoru Fukuda, OMDO, YMC*

The participants responded enthusiastically to the training



## Yamaha triumphant in Colombia once more!

Colombia distributor Industria Colombiana De Motocicletas Yamaha S.A. (Incolmotos) is proud to announce that its motocross team "Team Yamaha - Pirelli" has been crowned the Motocross National Champion for 2003 in the 85cc, 125cc and 250cc classes.

Right from the start, the Yamaha Pirelli Team had consolidated itself as the Colombian leader in all major categories of motocross. Battling through a total of six national rounds, its riders confirmed the excellent combination between them and Yamaha's racing machines.

For the coming 2004 season, the Yamaha Pirelli Team will have all their top riders including Juan David Posada, who won his eighth consecutive national championship, competing to keep their titles. With such a formidable team, Yamaha will once more have the winning brand in Colombia.

From Andres Gomez, Marketing Dept., Incolmotos, Colombia



From right, 125cc national champion Sebastian Vélez, 250cc rider Pablo Salazar, 85cc national champion Jhonny Hernández, 250cc national champion Juan David Posada, 125cc rider Esteban Posada

## WORLD TOPICS

Contribute articles to  
Yamaha News!

We are always looking for interesting and timely stories from the worldwide Yamaha family. Write to Chief Editor (Ms.) Maki Yamaguchi of the PR Div., Yamaha Motor Co., Ltd. 2500 Shingai, Iwata, Shizuoka 438-8501 Japan, email: yamaguchima@yamaha-motor.co.jp

## Boat production begins under technical assistance agreement

On December 5 of last year, Nicaragua became the fourth Latin American country after Colombia, Mexico and the Dominican Republic to begin production of FRP boats under a technical assistance agreement with Yamaha Motor Co., Ltd. (YMC). Despite having long coastlines on both the Pacific Ocean and the Caribbean Sea and the largest continental shelf area of any Central American country with excellent fishery resources, long years of civil war and economic sanctions that continued until 1990 left the Nicaraguan fishery industry underdeveloped, with an estimated 3,000 unmotorized wooden boats still in use today. And, though local makers have begun producing FRP boats to replace these, many are lacking in quality and design. In order to remedy this situation and contribute to the future growth of fishery in Nicaragua, the local Yamaha distributor, Casa Pellas Group, entered into a technical assistance agreement with YMC last June to begin the production of quality Yamaha-design FRP boats for this small but growing market.

Soon after the first boat was completed under the supervision of YMC Boat Operations staff in December, some 60 industry guests and dignitaries including government ministers and top officials and the Japanese ambassador, Mr. Mitsuhiro Kagami, gathered to celebrate the christening at Lake Nicaragua and witness a water test of the boat's sink-proof design. With its abundant fishery resources, expectations are high for the development of the fishery industry here in Nicaragua along with an outboard motor market.

From Osamu Kobayashi, OMDO, YMC



This boat was christened *Consuelo*, the name of the wife of Casa Pellas president, Mr. Silvio Pellas, which means comfort and consolation in Spanish

## Over Four Thousand Children Enter Yamaha Painting Contest

From July to the end of October 2003, the 15th Annual Yamaha Children's Waterside Painting Contest drew some 4,022 entries from elementary and nursery school students around Japan. This brought the total number of paintings submitted since 1989 to over 83,122. Again this year, the themes that entrants chose from were: "The Beautiful Sea" (protection of the environment), "The Working Sea" (for

example fishing ports) and "The Sea is Fun" (marine recreation).

On November 25th a panel of nine judges chaired by the well respected Japanese painter, Mr. Kazuo Kudo, gathered at the

Tokyo offices of YMC for the difficult task of deciding the winners for the 2003 contest. Afterwards, Mr. Kudo commented that this year's contest saw a lot of "original and individually rich" pieces of work. After first narrowing the choices down to 420 paintings, the panel selected winners in the upper elementary, lower elementary, and nursery school categories. The four top awards included the Japanese Minister of Education and Science Prize, which went to 2nd grader Harutaka Yasuda of Ehime Pref., the Minister of Land, Infrastructure and Transport Prize won by 2nd grader Akinari Wakita of Osaka, the Minister of Environment Prize won by 5-year-old Izumi Matsuda of Chiba Pref., and the Director General of the Fisheries Agency Prize won by 3rd grader Yuki Nishiyama of Kanagawa Pref.



The Japanese Minister of Education and Science Prize went to a Japanese boy for his painting *Tankentai* (Expedition)

# Yamaha Marine Technology on the Cutting Edge



The Yamaha booth with its displays of six boats, WaveRunners, outboard motors and more, arranged under the theme "The Sea – One-of-a-kind Weekends"



A WaveRunner ride gave even little visitors a virtual experience of the thrill of PWC riding

Boat." This method injects urethane under high pressure between FRP panels to produce an integrated 3-layer construction of FRP and high-density urethane foam to provide greatly increased buoyancy compared to conventional materials. This gives the hull sufficient buoyancy to prevent it from sinking even if the hull is ruptured. Development is now underway toward a production model that will be an entirely new-concept fishing boat with a trailerable design.

Another concept model on display that showed off Yamaha's state-of-the-art technology is a UMV (Unmanned Marine Vehicle). In 2001, Yamaha Motor Co., Ltd. (YMC) developed and put into

practical use the "Kan Chan," an autonomous navigation, low-speed, seagoing UMV for carrying automated meteorological/oceanographic equipment systems. The new concept model is a higher-speed UMV with potential for use in surveys of dangerous water areas, like over seafloor volcanoes, or for water-quality surveys. Using YMC's autonomous navigation technologies developed for our autonomous-flight unmanned helicopters, this UMV achieves high-precision autonomous unmanned navigation and remote-control operation at speeds of up to 40 knots with automatic functions to accommodate changing wind and wave conditions.

The 43rd Tokyo International Boat Show that opened at the Makuhari Messe exhibition center near Tokyo on February 5 gave Yamaha a prime opportunity to show off its latest technologies and corporate strength as a comprehensive marine manufacturer. Over the show's four-day run, the Yamaha booth was the center of visitor attention with its displays of Yamaha outboard motors and WaveRunners, as well as new models from the popular domestic-market Yamaha brand powerboats. Like in other parts of the world, Japanese boaters are increasingly concerned about protecting the marine environment, which explains why there were always crowds around the display of seven models from

Yamaha's lineup of lightweight, compact design 4-stroke outboards, including the top-of-the-line-F225A, with cleaner exhaust and lower noise. At the same time, to answer the needs of users who want the light weight, compactness and power of a 2-stroke plus environment-friendly emissions, Yamaha offers 2-strokes like the Z240 displayed in this show, which features the exclusive HPDI (High Pressure Direct Injection) fuel injection system that achieves greatly improved fuel economy and cleaner exhaust that clears by large margins the emissions standards set by the U.S. EPA for the year 2006.

Also on view was a new boat construction technology developed by Yamaha based on the guidelines for "Ecoboats" introduced last year by Japan's Ministry of Land, Transportation and Infrastructure. This new Yamaha-exclusive foam construction method, called "FOAMAP," was on display in a special exhibition model of a "16-ft. Trailerable



Visitors marveled at the UMV concept model capable of high-precision autonomous unmanned navigation at speeds of up to 40 knots



The popular Yamaha outboard motors stood at the center of the booth

# RSVector ER, a new kind of trailbreaker



Two years have passed since Yamaha released the revolutionary RX-1 as the first true performance snowmobile powered by a 4-stroke engine. Never one to let the excitement cool, Yamaha now announces the spring 2004 release of an entirely new 4-stroke snowmobile, the “RSVector ER.” Developed for a high-level balance of power, handling and comfort, this new model is Yamaha’s 2nd-generation 4-stroke performance sled.

While the RX-1 mounted a 4-cylinder engine developed directly from the Yamaha YZF-R1 supersport motorcycle, the new “RSVector ER” takes as its base the 4-cylinder engine of the European market model FJR1300 motorcycle re-designed into a liquid-cooled 3-cylinder power unit. Meanwhile, the chassis adopts a lightweight design that brings the total sled weight on line with the 2-stroke models of the same class. The result is the power and handling that enables aggressive performance riding.

One look at the body design tells you that this is a whole new machine. First of all, the rear silencer assembly was given a more compact design with a look that says “high performance” in a light and agile image. The compact design of the rear end has also opened up more foot space at the rear of the step to allow for more aggressive riding action.

The RSVector ER will be offered in three impressive color schemes, a block-pattern blue modeled after the racing colors of the Yamaha USA teams with stripe graphics on the upper surface of the body, a red in the image of American muscle cars and a silver with a mechanical image in combination with a flare pattern exemplifying the popular custom designs in an appealingly modern arrangement.

As for the performance ride, a key compo-

nent is the new lightweight, long-travel suspension with quick adjustment mechanism.

The track features an aggressive pattern belt with 1.25-inch lugs for optimum acceleration and high-speed performance. Among the many other new features are a redesigned seat, wider footboards and impressive blue headlights.

And the new RSVector ER will not be alone. Joining it with the same basic engine and chassis will be two variation models with select spec changes. The “RSRage” will be outfitted as a potent “all-round sport” model designed to handle any kind of snow and trail conditions. Meanwhile, the “RSVenture TF” version adopts a 151-inch track with 1.25-inch lugs, a suspension readily adjustable to accommodate a transom passenger, plus an adjustable seat arrangement to provide greater comfort in tandem touring. These new designs are Yamaha’s idea of how to really enjoy the snow.