







The present worldwide snowmobile demand is said to be about 200,000 units annually, and North America claims the lion's share of that with some 65% in the U.S. and about 25% in the Canadian market. And, in the U.S. in particular, a large part of the demand comes from people who use snowmobiles to liven up those long winter months with sports or leisure riding. Here in the U.S., about 55% of the snowmobile demand is concentrated in the three

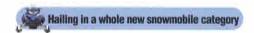


Many people love to go out touring on weekends in the winter months in the USA and Canada

northern Mid-West states of Minnesota, Wisconsin and Michigan. In this region it is very common for people to gather with their friends on the weekend to go snowmobile touring, Some people can start out from their own yards and ride on local trails, while others choose to trailer up their snowmobiles and head for prepared trails where they can enjoy longer touring, maybe with a stop at a restaurant along the way or even an overnight at a lodge.

In most regions public riding courses have been prepared and their trails are maintained by local riding clubs. Local governments support these efforts because they see snowmobiling as a healthy form of winter recreation for their citizens. And, in many areas these trails also become an important tourist industry resource in winter that local governments are anxious to promote.

In regions like these, certain public roads and roads through wooded areas are often designated as specially prepared snowmobile courses in the winter months. Many of these trails are also equipped with fuel stations to accommodate snowmobile riders. In other words, you could say that a whole snowmobiling culture has taken root in these areas.



In this North American market recent years have seen significant changes in the ways people enjoy their snowmobiles. Up until recently, sleds like Yamaha's top performance model "SRX700" have enjoyed strong popularity due to their great acceleration and high-speed performance on hard flat surfaces like frozen lakes and their handling on well groomed trails where the snow has been packed down. But, in

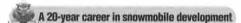






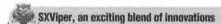
actual snowmobile riding you are not always on such flat, firm surfaces of the kind that are also called "on-road" by snowmobilers. In fact, trails often become rutted and rough with the passage of many snowmobiles on the weekends. This has led to increasing demand for models that can provide outstanding performance on rough surfaces like these and in traditional cross-country riding that is also referred to as "off-road." In other words, snowmobile fans began to ask for a new type of machine that provided the opposing qualities of fast acceleration and top-speed performance on hard snow and the power and agility necessary for cross-country running. It was in response to this call from the users that Yamaha unveiled at the beginning of this year the all new "SXViper" as a 2002 model.

"If you think of the example of on-road and off-road motorcycles, it is surely clear that inherently they are completely different types of machines. When we undertook the development project for this model we knew we were in for a very daunting but worthwhile challenge," says Engineer Masayasu Saito, snowmobile project leader from YMC's Recreational Vehicle Planning Dept, who was responsible for final coordination of the SXViper's development.



After joining Yamaha Motor in 1981, Mr. Saito worked for five years on snowmobile body design. Then, for the next 12 years he was responsible for testing and evaluation of snowmobile models in development. Finally, in 1997 Saito became a project leader for Yamaha snowmobiles with overall responsibility for all aspects of new model development. In this capacity he spends about half of the year overseas seeking out the right kinds of snow conditions for testing in frozen regions like Alaska, Europe and other parts of North America. His work is also a battle with time, as he and his team work to perfect new features and specifications. But none of the hardship he endures can compare with the joy he gets from seeing those specs turned into production models that become the pride of actual customers on the trains of the snow belts of the world.

Mr. Saito says that one of the development projects that brought him especially great satisfaction recently was the "SRX700" with its 3cylinder engine with triple exhaust pipes. American Snowmobiler magazine chose this model "Snowmobile of the Year."



Let's get back to the SXViper. Giving a snowmobile outstanding performance on rough surfaces involves first of all the right format and stroke for its suspensions and getting top per-

The extra-thin, lightweight meter panel features a large-size digital display. Also, the next-generation step-motor type tachometer adds a sporty sense SXViper's revolutionary body structure. It features an all new 700cc powerplant nestled nside a chassis with features like a **ProAction System frame** formance out of them. For the front suspension on the SXViper the "ProAction Suspension" that has proven itself on Yamaha SXViper Project Leader Saito snowmobiles was adopted. On the rear suspen-The full model changes he helped initiate in 1997 sion a new "adjustable control rod" was adoptinvolving new frames, ed. This is a suspension mechanism that incorsuspensions and porates a special spanner that makes it possible engines, represent a turning point in for users to either fine-tune the pitching control

bile history

of their rear suspension to give greater chassis stability on rough surfaces and agility in crosscountry riding, or adjust to get the optimum in weight-transfer effect to enjoy dynamic straight-line acceleration and top speed perfor-In terms of overall performance, Saito says,

"Our development team also devoted a lot of work to aspects like the machine's overall aerodynamics with the aim of bringing out maximum performance and reducing horsepower loss to an absolute minimum." One of the reslts of these efforts was the addition of a forced-air induction system to supplement the tuning improvements that were made on the engine itself.

What's more, for snowmobiles used in regions where winter temperatures can average about -15 degrees C., you naturally want to protect the riders from the cold winds. In order to achieve the optimum balance of wind protection and aerodynamic performance, Saito and his SXViper development team conduct repeated wind tunnel tests and used the data to design the shape of the cowling and other parts. At the same time they were able to design the air flow to provide outstanding wind-flow management in the engine space for more reliable and efficient engine performance. Test after test was conducted in this way to get the optimum running performance without sacrificing rider comfort. Further fine-tuning of the performance specifications was conducted in cooperation with the American staff and their feedback was sent immediately to the development team in Japan for further modifications.



Explosive popularity expected for 2002

Once the development of the SXViper was completed at the end of last year, a new type of introduction program was adopted for this very special new model. Until now, users had to wait until the snowmobile actually started before they could try out the new models. But

with the SXViper, demo models were prepared to give customers a chance to get a look at this new 2002 model during the 2001 season. In a program titled the "Yamaha SXViper Power Tour" customers were offered a chance to test ride demo models at venues across North America. At these demos, user after user came away with big smiles on their faces, not only for the performance, ride, handling, comfort and quietness of the new SXViper, but also for having been able to test-ride it this season.

Due to the high rate of Internet access in North America, Yamaha Motor USA (YMUS) not only introduced the new model on its home page but also ran a series of reports on the development project.

"Since a snowmobile is a motorized vehicle, we don't want to give in or let anyone beat us in terms of performance. At the same time we want to supply a product that exceeds people's expectations. We want to give the users something that will really surprise them! says Saito with a grin. "We want them to experience Kando. We believe the SXViper is a machine that will do just that."

Look for big excitement when the SXViper hits the snow in the 2001-02 season.





The "Yamaha SXViper Power Tour" was held at venues like snowmobile race tracks across North America. Customers were thrilled by the chance to test the actual 2002 model

Mopeds, a Vehicle for Market Expansion

■OMDO Casablanca office ■Founded: 2001 ■Location: Casablanca, Morocco

Yamaha Motor's Overseas Market Development Operations (OMDO) was established in 1992 with its head office in Hamamatsu, Shizuoka, Japan. OMDO's main focus is on marketing Yamaha products, including motorcycles, marine products and power products, in the developing nations of Africa, West Asia, the Caribbean and the South Pacific. With more than half of its activities in Africa, OMDO is now undertaking fullfledged Moped marketing in this region, and has opened a new office in Morocco to concentrate on this business.

Yamaha and the African Moped Market

In Africa, the annual demand for mopeds, 2wheeled vehicles mounting a 50cc engine along with pedals like a bicycle, is said to be about 80,000 units, and about 20,000 units of this demand is in the country of Morocco. In Morocco, these mopeds are appreciated for their affordable price and low running cost and are used mainly for commuting to school or work in urban areas and as a transporter in rural areas. In some cities, mopeds are even used for pizza delivery, too.

Because Morocco's laws allow people to ride mopeds from the age of 14, and perhaps







Mopeds are even used for pizza delivery

also because of a well established budget credit system for purchasing mopeds, this country has become one of the biggest markets in Africa. With a line-up of seven models, mopeds of the French Yamaha group company MBK's brand presently enjoy a market share of about 60% in Morocco. And, the fact that the country's Yamaha distributor, MIFA, opened a factory two years ago for CKD production of these models has further enhanced the brand's position as market leader. This success in the moped business has inspired us to expand the moped market worldwide.



From left Mr. Bonila, Mr. Lebegin, and Mr. Kuwata at the Casablanca Office

Going for a Bigger Market with Mopeds

The motorcycle markets of the world today have a combined demand of about 23 million units. Of these 23 million units, about 10 million units are supplied either by Japanese motorcycle makers or companies that are related with the Japanese manufactures by joint venture, technical assistant partnership or the like. Companies that have no relation with Japanese manufactures supply the remaining approximately 13 million units.

Motorcycles are vehicles whose prices vary greatly depending on their specifications, and the Japanese related makers like our Yamaha group companies command a strong share at the top end of the market with high performance, high-spec motorcycles.

Presently in Africa, the annual market demand for motorcycles in the high-end category stands at more than 40,000 units, and Yamaha holds nearly 50% of the market share in this category. However, as we have not concerned ourselves much with the entry-level category until now, this category



One of the MBK brand moped dealers in Morocco





These are the MBK brand mopeds introduced to the African region; the Libero, the MagMax and the Citizen. The mopeds are appreciated for their affordable price and low running cost



has seen the entry of inexpensive models made in countries like China and India that are claiming an increasingly large share of the market. Unfortunately, at the moment, Yamaha does not market enough range of motorcycles in Africa to answer demand in this sector.

As OMDO studied the market, however, we realized that there is another product that can answer the needs of many users at the entry level: mopeds. It was this realization that made OMDO decide to develop and expand its moped market throughout the entire African continent.



A New Morocco Office Leads the Effort

To realize a strategy of "Area Marketing," a type of marketing where regionally based sales representatives focus their efforts on a specific region in order to be on top of all the latest market trends and needs, OMDO has established its new Casablanca Office in

At the Casablanca Office, Mr. Didile Lebegin, a former employee of Yamaha Abidjan office, Ivory Coast and Mr. Phillip Bonila, a



MIFA's moped factory complex



An advertisement is well placed on this local bus

former MBK employee, both of whom are experts in the moped business, lead the marketing operations for the African region. The region they are responsible for is subdivided into East and West regions. Also, Mr. Kazuhiro Kuwata from OMDO's head office is now working out of YMENV in Amsterdam, the Netherlands, to support the operations of the Casablanca Office.

In the meantime, OMDO is also studying the possibilities of releasing a new moped in the future in cooperation with Yamaha Group companies around the world. With the success of the moped business in Africa, we, at OMDO sincerely hope that such actions will stimulate future Yamaha business at the entry-level end of the motorcycle market in the regions as well. And to do so, we would like to ask for the kind and ongoing support of the all Yamaha Group companies around the world.

FRANCE New pa

YMD Amsterdam (Yamaha Motor Distribu-

tion B.V.) in the Netherlands, and YMC's

Parts Operations have established a second

European parts and accessories distribution

center in Lyon, France to complement the existing one in Amsterdam, Headed by YMD

Amsterdam president Takashi Tsuchiya, the

second center commenced operations on Feb-

YMD Amsterdam was set up in 1993 as a strategic base to grow the European-made

parts business, bringing together 17 separate

importers into YMD, and despatching direct-

ly to dealers. After seven years, YMD has

achieved its original strategic goal of

decreasing stockpiles while raising service

standards, along with increasing outgoing

Still, the capacity for moving 25,000 units per

day set in 1996 was expected to rise to 40,000

New parts distribution centre

per day in 2001, so two complete shifts and other measures would be required.

Moreover, with the growth in European-made parts, they are expected to account for 60% of VMD's total stocks. Many of these local parts

YMD's total stocks. Many of these local parts are destined for southern Europe, and shipping them north to Amsterdam, then again south to their destination market was a wasteful distribution process. This situation furthered the move toward setting up a second distribution center in Lyon.

The center covers 20,000 sq.m., and will control 10% of YMD's overall distribution of mainly large, European-made parts.

In developing the new Lyon center, a new business model was used, and the new model is thought to be able to provide a balance between itself and the Amsterdam center, and to be able to be flexible in terms of operations and cost, flexibility being the basic concept for the center.

In this era of dramatic change, speed in terms of change management is of the essence. The philosophies behind the new center in Lyon are sure to influence the operations in our company moving forward.

From Kazuyoshi Ohe of YMC, Japan



The second European parts distribution center was established in Lyon, France

INDIA

freight volumes.

ruary 5, 2001.

YMEL gives to earthquake relief

General



YMEL has contributed to the earthquake relief fund to aid earthquake victims and support their basic daily needs

On January 26, 2001 the state of Ahmadabad in India was hit by a devastating earthquake. Yamaha Motor Escorts Ltd. (YMEL) has contributed to the earthquake relief fund to aid victims of the earthquake and support their basic daily needs. The contribution consists of monetary aid equivalent to the total employee wages of YMEL staff for one day, million rupees; 20 YMEL-manufactured YD125 motorcycles to assist in transportation for victims and relief activities; and 40 Yamaha generators to give power to sufferers.

YMEL President Mr. Suganuma and YMEL executives handed over their contribution to the appropriate government officials at the

YMEL Surajpur plant.

Mr. Suganuma said, "This makes me remember the damage done in Kobe, Japan, when it suffered a major earthquake in 1995, so I do understand some of the hardship the victims of this earthquake must be going through. But as was the case in Kobe, I believe they will recover with Civil and National government assistance."

Mr. Puradan, an elected Member of Parliament in Surajpur, said, "YMEL is a Japanese-affiliated company. They offered their assistance ahead of any Indian company, and we greatly appreciate that."

From Satoshi Ito of YMEL, India

YMC President Speaks on Environment

On Feb. 26, YMC's President Hasegawa gave a talk on the subject of "Motorcycles and the Environment" at the environmental agency of Shanghai.

Appearing at the invitation of Shanghai's Committee of Economic Affairs, Mr. Hasegawa spoke before an audience of over 100 officials and researchers representing agencies involved in city planning and traffic infrastructure and development, as well as representatives of the city's motorcycle industry. President Hasegawa not only spoke from his position as a motorcycle manufacturer but also made a wider appeal for motorcycles in society from a number of perspectives, such as their position in complex traffic environments, their contribution to the psychological health of users and their potential role in environ-

mental preservation.

Presently, Shanghai is one of China's fastestgrowing cities increasingly plagued with the problems of traffic jams and lack of parking space. In light of this, Mr. Hasegawa also stressed the importance of developing an integrated transportation environment that takes advantage of the different strengths of the various modes of transportation-pedestrians, bicycles, motorcycles, automobiles and public transportation.

Amidst the tightening regulations being placed on motorcycle owners in China recently, such as required license plate, this talk was an excellent chance to give city planners an increased awareness of the importance of motorcycles.



YMC's President Mr. Hasegawa gave a talk at the environmental agency of Shanghai

NETHERLANDS 2nd Yamaha Euro Tech GP

General

For the second time, YMENV organized the European Technician Grand Prix, a European contest for Yamaha motorcycle mechanics. The contest was held on November 22 and 23 last year, at the YMENV workshop and supported by the tool manufacturer Snap-on. Dealer motorcycle mechanics from seven countries who had won their national heats bide for the title of the best Service Mechanic of Europe.

After a close competition during practical troubleshooting on YZF-R1's and XV1600's, the difference was made during the written exam, which covered a lot of electrical basics and Customer Satisfaction items. The best three Euro Technician GP mechanics are Olivier Arcis of YMF, France in 1st place, Sef Lutgens of YMNLBV, the Netherlands in 2nd, and Dante Lorenzetti of Hostettler, Switzerland in 3rd.

The three winners received their awards and an invitation to the 2001 Pacific Grand Prix at Motegi, Japan during a party, where Yamaha's WSS World Champion Jorg Teuchert presented prizes, signed autographs and joined in some commemorative photographs.

And there is more news, because YMC has decided to go global with the World Technician Grand Prix which will be organized at YMC, Japan. A team of the best European Mechanics, including the best three of 2000,



will have to show what they are worth against the rest of the world in October...the story continues!

From Raymond Coolen of PTW Sales Engineering & Testing Dept, YMENV



The contest was successful and the best three mechanics won their award and an invitation to the 2001 Pacific Grand Prix at Motegi!

JAPAN

New "Chair Ski" developed for 2002 Winter Paralympics

Prefecture.



The new char ski model for the 2002 Winter Paralympics

The new chair ski model developed by the "S Project" team consisting of eight organizations and companies in which Yamaha Motor Co., Ltd (YMC) has played a leading role, has made its official debut at the 2001 Japan Paralympic Ski Competition held on March 9 at the Arai Mountain & Snow Park in Niigata

This new chair ski was developed to support the efforts of Japan's physically challenged competitors who will compete in the Alpine ski events of the 2002 Winter Paralympics, which are scheduled to take place in Salt Lake City, Utah, USA.

In its development, attention was focused on

aerodynamics, and YMC's vast know-how in the development of aerodynamic parts for our motorcycle and snowmobile race machines was put to full use in the design of an "aeroshell" made of FRP to reduce air resistance in the high-speed downhill events. This aero-shell will be adopted on the chair ski models used in the Super-G and Giant Slalom events where the fastest speeds are obtained. Tests indicate that this shell will result in reductions of air resistance of between 5 and 20% compared to the chair skis used in the 1998 Nagano Paralympics. It is also expected that the aero-shell will help keep the competitors warmer and serve a protective role in the case of falls.

JAPAN 1st YTA "Train the Trainer" seminar at YMC

From Mar. 5~8 an instructor training seminar was held for the first time at YMC in Japan for global instructors working in the Yamaha Technical Academy (YTA) program. The YTA was introduced by Yamaha Motor last August as a program aimed at improving the quality of service for Yamaha products and Customer Satisfaction worldwide by increasing the skills of servicemen through a global technical education program.

Attending the seminar at YMC's training center were 11 technical instructors from nine countries of Asia and Central & South America, including Brazil, Colombia, India, Indonesia, Malaysia, Pakistan, the Philippines and Thailand.

The YTA program has an ambitious goal: to

train instructors, dealer servicemen and service shop mechanics the world over to ensure that Yamaha customers can walk into any dealership anywhere around the globe and get the same kind of quality service that guarantees customer satisfaction.

From Kosei Ito of YMC, Japan







NEW ZEALAND YZ250F won one-through-four!

Dynamic young YZ250F rider Ben Grabham

spearheaded an historic Yamaha one-two-

three-four at the big Australian Four Day

Enduro (A4DE) meeting held at Operau in the

Waikato of New Zealand at the beginning of

February. The 19-year-old from New South

Wales won the 250cc 4-stroke class and fel-

low YZ/WR250F Yamaha riders Damian

Grabham (his older brother), Stuart Morgan

and Dene Humphrey finished second, third

Incredibly, the younger member of the

dynamic Grabham duo also finished third

overall behind event winner (and reigning

World Enduro champion) Stefan Merriman

and fourth respectively.

and second place getter (and reigning New Zealand Enduro champion) Paul Whibley.

This year's A4DE - the first to be held outside Australia - was also the first big endurance event for Yamaha's new 4-stroke engine YZ/WR250F. Big things were expected of the ultra-light / ultra-powerful new Yamaha 4-strokes and they didn't disappoint. No other machine got even close in the 250cc 4-stroke class and as well as finishing one-two-three-four in that class all four YZ/WR250F riders finished in the top ten overall - no mean achievement considering the engine capacity (winner Stefan Merriman rode a 610cc Husqvarna) of the opposition. Few other brand new

machines have proved so dominant in their first competition outing - particularly in a branch of sport as gruelling as Enduro competition.

From Perry Francis of Moller Yamaha Ltd., New Zealand



BAHRAIN Bikers ride for charity

On January 26, 2001, Yamaha's distributor in Bahrain, Kooheji Marine Centre, hosted a charity event for the local community.

The Bahrain Rugby Club and the Bahrain Bikers presented an event called "A La Carte in the Park." The festivities included a ride starting from The Diplomat Hotel to the Bahrain Rugby Club completed by over 100 bikers, and a raffle draw with lots of great prizes. After the ride, the bikers were joined by friends and family of all ages for lunch. A

special event was a soccer match between the Bahrain Bikers and the Rugby Club, which added a humorous touch to the day. The Bahrain Bikers won 4-3.

"A La Carte in the Park" is Kooheji Marine Centre's first community event for 2001, as part of their efforts to educate the public in motorcycle awareness, and possibly change any wrong perceptions of our bikers.

The event attracted sponsorship from numerous hotels and other businesses, and all proceeds from the day go to the Al Noor Charity Welfare.

From Khalid Alkhan of Kooheji Marine Centre, Bahrain



The charity event for the local community drew more than 1000 bikers

Motorcycle

Letter from proud '78 YB100 owner

Motorcycle

I have great pleasure in informing you that I purchased a motorbike, the Yamaha YB100 in 1978 in Karachi, and I am more than satisfied with the performance of my bike.

After almost 23 years, my motorbike is still in good running condition. I would like to point out that the performance of my bike is mainly due to proper maintenance and regular checks as advised

has taken care of my bike since 1980. You may be surprised to know that most of the parts including the chassis, handle bars, flasher lights, headlight, front and rear fenders, muffler, speedometer, rims, side covers, ignition switch and even footrests on the bike are the originals, which were fitted in 1978. You may even be surprised to know that the engine of my bike is still the same one originally fitted at the factory in 1978, as no repair and maintenance has been required even after completing app. 160,000 kms. Just recently only the chas-

sis had hairline cracks which I have repaired. I would like to thank you for manufacturing one of the best motorbikes for Pakistan. When I drive my old bike, it fascinates most of the people in Karachi as they do not believe that the bike I am riding is 23 years old. I am proud to have such a nice motorbike and congratulate your technicians who assisted in manufacturing this bike 23 years back. It is really fun to ride my old bike. *From Sohail Ur Rahman*

U.S.A Big success for the Weekend of Champs

by my mechanic who

Motorcycle

Daytona Bike Week 2001 in Daytona, Florida provides motorcycle fans of every discipline, from road racing and cruising to off-road, dirt track and motocross, a week of exciting riding and professional racing. For the third consecutive year, Yamaha Motor Corporation, USA (YMUS) hosted it's popular Weekend of Champions event for the estimated half-million fans in attendance from across the country.

Yamaha's "Weekend of Champions" is a gathering of current and past Yamaha champions under one tent for three days of autograph signings and give-aways, capped with a parade featuring some of the champions riding Yamaha R1 and FZ1 motorcycles and others riding in convertible cars around the famed track before

the Daytona 200 road race.

Each fan received a free poster which featured road race champions Rich Oliver, Jamie James, Randy Mamola, Steve Baker, Eddie Lawson, Don Emde, Thomas Stevens, Wayne Rainey and motocross champions Broc Glover, Gary Jones, Ernesto Fonseca, Bob Hannah, Marty Moates, Doug Henry, Mike Bell and Jeremy McGrath. Fans had the opportunity receive autographs and meet each of the champions over the three-day period. In addition, each day featured a raffle give-away to win gear donated by several of the champions. Give-aways included Randy Mamola's helmet, Eddie Lawson's gloves and Jeremy McGrath's Daytona gear.

Yamaha's display tent was near capacity over

the course of the three days and again the Weekend of Champions was a tremendous success. From Terry Beal of YMUS, USA

Fuel Control Officer, Karachi Airport



The champions rode Yamaha R1 and FZ1 motorcycles and made a parade

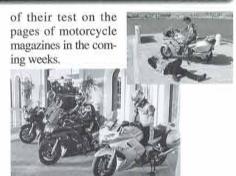
FZS1000 and FJR1300 press tests in Spain SPAIN

Over an unprecedented long schedule running from Jan. 27 to Feb. 23, Yamaha Motor Europe (YMENV) invited selected journalists from 20 countries around the world to Spain for impression tests of the Yamaha FZS1000 and FJR1300. Gathered in respective groups, the journalists were treated to a 3-day schedule of model presentations and test rides of the two models on public roads.

The courses used for the test rides were carefully chosen to enable the journalists to get a true taste of the characteristics of these two different models. Based in the Cadiz region of southwest Spain, the FJR1300 was tested over a pleasant

seaside cruising course, while the FZS1000 Fazer course took the journalists up into rhythmical winding roads in the mountains.

All the journalists went about the work of testing the two models with an eye on providing informative introductions for their magazines' readers, while also taking advantage of photographers provided by YMENV to get exciting shots of them in action on the roads. Both of these models manifest new concepts presented by Yamaha already at last year's Intermot Show in Germany and these test rides gave the journalists a chance to finally experience them for themselves. We look forward to the results



Journalists were quite impressed by the new Yamaha machines

2nd mission for Autonomous-flight Unmanned Helicopter JAPAN

Power Products

From February 13 to 15, an operations team of YMC's Aeronautic Operations, joined with specialists of the landslide disaster mitigation team of the Ministry of Land, Infrastructure



and Transport landed on the now evacuated Miyake-jima island of Japan for observations of the recent volcanic activity of Mt. Oyama with an "Autonomous-flight Spec" modification of the Yamaha "RMAX" industrial-use remote control helicopter, originally developed and marketed for agricultural use.

This special modified version of the Yamaha "RMAX" mounted GPS (Global Positioning System) equipment, attitude-control equipment, a communications modem and other instruments necessary to make it capable of fully autonomous flight from take-off and flight navigation to observation over the site, return trip and landing, all based on signals programmed on a computer at the base camp. Also, the helicopter used for this series of observation flights is equipped with an observation-use video camera, a gas meter for measuring volcanic gas and other equipment for the purpose of observing the damage occurring from mud and landslides accompanying the recent volcanic activity.

This observation project was the second for a "GPS Yamaha Autonomous-flight Unmanned Helicopter" which had also been used at the site of the erupting Mt. Usu in Hokkaido last year.

Nakazawa receives Int'l Driver of the Year

Power Products

Team Yamaha USA's snocross racing program ended at the season final, Round 11 of the WSA 2001 Worldwide Championship Snocross series held at Lake Geneva, Wisconsin on March 17 and 18.

In the Pro Open class race, Yamaha rider Yuji Nakazawa finished in 6th place while his teammate Dave Brown got 11th place. Nakazawa, just 20 years old but the champion of the Japan Snowmobile Championship last year and participating in this year's WSA Snocorss series, won high praises for his performance on the U.S. circuit from the spectators. Nakazawa finished the season with 12thplace in the overall point standing.

After the competition, the season awards banquet was held, and Nakazawa was given the International Driver of the Year. Making his speech in English, Nakazawa said "I enjoyed

competing with the top riders of the WSA this whole season. And I'd like to thank all the sponsors and the team for all their support," in front of the guests and got the warm round of applause.





Yuji Nakazawa appeared in the advertisements and got a lot of attention from fans

2001 Business Meeting Held AUSTRALIA

Marine



On February 24, Yamaha Motor Australia (YMA) hosted a business meeting attended by about 600 representatives from dealers around Australia near the famous tourist spot of Darling Harbour, Sydney. Darling Harbour is a former dockside area that has been transformed

into a major tourist site and leading convention and exhibition center.

> YMA got permission to use the harbor facilities from local authorities, and not only the dealers, but the tourists were

also delighted to see the post-meeting attractions with the new Yamaha marine products. YMA has been working hard to generate publicity that really draws the attention of people lately, and this event was part of these efforts. For the business meeting itself, YMA stressed policies for the coming season to increase sales and the new models were presented with full attention of participants. Also the next day, test rides of the new models were conducted.

From Toru Kato of YMA, Australia



Marine products displayed at Japan's major boat shows

Yamaha Motor Co., Ltd. (YMC) exhibited its Marine products at the 40th Tokyo International Boat Show held from February 9 to 12 in Tokyo, which attracted more than 122,000 visitors, and at the 16th Osaka International Boat Show held from March 2 to 4 in Osaka. The Yamaha booth, staged under the theme "The Sea is Great - Enjoy the Yamaha World," was divided into six zones displaying marine products as well as supplying information about things like marine license schools and Yamaha's rental boat club.

A Theme Zone presented four models that suggest the future of marine leisure, including the world's largest horsepower 4-stroke outboard, the "F225A" and the "Free & Wheel," a concept boat that has a built-in trailer function. A 15-ft. motorboat, this "Free & Wheel" has been fitted with wheels so it can be towed by an automobile like any trailered boat. On the water those wheels simply fold up to allow it to run like a normal motorboat, making it a new type of vehicle that goes anywhere, on land or water, and conveniently. With sporty styling, this attractive new boat offers the unbeatable convenience of not needing a marina berth or a trailer. There were also the "Sea PAS." Yamaha's proposal for a new type

There were also the "Sea PAS," Yamaha's proposal for a new type of marine vehicle that adopts the Power Assist System from the Yamaha PAS electro-hybrid bicycles, and the un-manned ocean observation craft "Kan-chan," a Yamaha-built remote control unmanned ocean atmospheric observation boat that navigates by satellite communications. The "Sea PAS" is a modern style sea







kayak that mounts Yamaha's PAS electro-hybrid bicycle technology, It can be used on leisurely picnic outings while paddling on the water or for adventuresome long-distance touring propelled by the pedal-driven propeller. The build-in outrigger appendages can be extended to give excellent stability for care-free family use and its light weight makes it car-top carryable, and no boat license is necessary. All in all the "Sea PAS" is an environment-friendly, people-friendly craft for shoreline water fun.

Meanwhile, in the Cruising Boat Zone visitors saw models like the new small-size family cruiser "23 Renaissa" just released for the Japanese market this January.

Total surface mounter production tops 10.000 mark

On February 7, IM Company, an in-house company of Yamaha Motor Co., Ltd. (YMC) topped the 10,000 mark in total surface mounter production, and a ceremony was held to celebrate this milestone at the Soude Factory. The 10,000th model to be shipped was one of the "YV100X" modular type high-speed surface mounter released in March, 1999.

As a new extension of its industrial robot operations building products to aid in the automation of our factories, YMC ventured into the surface mounter field in 1987 with the "YM4600S," a mounter of electrical parts on printed circuit boards. In 1988, YMC entered a business relationship with the European electronics maker Philips EMT for the supply of Yamaha surface mounters on an OEM basis. Presently, YMC has a long-term contract with Philips for the development, manufacture and sales of surface mounters until 2006. In April of last year, Yamaha strengthened its surface mounter operations with the founding of IM Company. In conjunction with this move a new company named "i Pulse"

Co., Ltd." was also established as an associate manufacturing and sales company to further strengthen our competitiveness and business base in the IM field.



Golf Car production tops 800,000 mark in 25th year

On February 23, Yamaha Motor Co., Ltd. (YMC) celebrated the line-off of its 800,000th Yamaha Golf Car. This momentous milestone



comes in the 25th year since Yamaha began golf car production in 1975 with its "YG292", a 2-passenger, 4-bag model powered by an air-cooled 2-stroke engine.

On this same day, the first units of the new 5-passenger electric golf car with electromagnetic guidance system, "Turf Liner Electric G17-E," came off the assembly line. This new model boasts the world's first 72-volt DC electric motor that provides powerful performance equal and even superior to gasoline models, as well as being exhaust-free and having very quiet running performance. All these qualities are expected to make this model the new standard in the industry.

Yamaha golf cars are presently manufactured at two factories, the Kakegawa factory of YMC's associated company SOQI, Inc. in Shizuoka Pref., Japan, and the factory of Yamaha Motor Manufacturing Corporation of America (YMMC) in Georgia, USA. In 2000, the Kakegawa factory produced 8,000 golf car units, while YMMC built and shipped about 40,000.

Change in Top Management

Yamaha Motor Co., Ltd. announces that the following changes in the company's top management were decided on at a special meeting of the board of directors in the morning of March 14, 2001. These changes became effective as of April 1, 2001

New position	Chairman of Board	President and	Vice President and
	of Directors	Representative Director	Representative Director
Previous position	President and	Senior Managing	Senior Managing
	Representative Director	Director	Director
Name	Takehiko Hasegawa	Toru Hasegawa	Ryuichi Yamashita

original technology and outstanding products continues as we head into the new century.
In this "High-tech Expo" section, we will introduce examples of the remarkable technologies that are the common heritage of today's Yamaha products.

The YZ250F, fastest 4-stroke Motocrosser in its class

Lighter than a 2-stroke of the same class and boasting outstanding competitiveness

Yamaha 4-stroke motocrosser makes a huge impact

L ast year, Yamaha released the all new 4-stroke motocrosser "YZ250F" that has been developed into a product adopting state-of-the-art technologies from the Yamaha "YZ426F" factory machine that won the 1999 World Championship in the 500cc class.

With the 1998 release of its revolutionary 4-stroke motocrosser "YZ400F" (followed by the "YZ426F"), Yamaha sent a breath of fresh air into the motocross world that until then had been the domain of 2-strokes. Enthusiasts especially liked the gutsy traction of this lightweight 4-stroke, and many fans began to look to it as the next-generation motocrosser.

And now, Yamaha is again, making a big impact on the motocross world with the YZ250F.

Lightweight, compact engine with strong chassis

The YZ250F was developed around the concept of creating "the fastest 4-stroke motocrosser in its class." It mounts a newly developed super-lightweight, compact engine that is light even in comparison to the existing Yamaha 2-stroke motocrosser. With a 77mm x 53.6mm bore x stroke and a high compression ratio of 12.5: 1, this engine boasts excellent power development. The three intake and two exhaust valves on this 5-valve engine are made of titanium that reduces the spring load by about 30%, thus achieving outstanding response. Other features like a plated cylinder with excellent cooling characteristics,

strong, lightweight forged aluminum piston, lightweight magnesium head cover and a low-inertia AC generator combine to give this engine outstanding performance. In addition, the new "FCR37" carburetor with built-in TPS (Throttle Position Sensor) helps achieve better response. Also, a single-axis balancer has been added to reduce vibration.

After building such an outstanding engine, a strong chassis was needed to accommodate its characteristics and maximize running perfor-



Ernesto Fonseca riding his YZ250F in the AMA Supercross series

mance. As a result, a new lightweight semidouble cradle frame made of high-tension steel tubing was developed for the YZ250F. The adoption of the same "tank-in-frame" structure as the YZ426F. using the interior of the down-tube as the oil tank in a perfect match for this dry-sump engine, enabled an increase in minimum ground clearance to 382mm (9mm more than the 2001 model YZ426F), which also improves handling stability. Shortening the wheelbase by 15mm (compared to the YZ426F) to 1,475mm also helped achieve good handling balance.





YZ250F's super-lightweight, compact liquidcooled 4-stroke DOHC 5-valve engine delivers excellent power development (top) Large-disc floating type front brake (below left) and rear suspension components are adopted from its big brother, the YZ426F (below right)

Inheriting the best from its big brother

The YZ250F has also taken full advantage of being the younger brother of the YZ426F. The same rear suspension components, including new needle bearings and lightweight aluminum spring guide that improved performance on the 2001 model YZ426F have been adopted for the YZ250F. In particular, bottoming characteristics when landing from jumps, etc., has been improved. And the adoption of the same lightweight aluminum rear arm as the YZ426F has helped achieve outstanding traction. Other features borrowed from the YZ426F are the same type of front brake with a large-diameter disc for achieving both awesome stopping power and improved operating feeling, while the new clutch lever, new-type front master cylinder and lightweight chain are also adopted.

The introduction of the YZ250F brings yet another exciting model to Yamaha's lineup of 2 & 4 stroke models. And as the 2001 racing season began, it's no wonder that the YZ250F is dominating winning circles all over the world.

Stefan Everts Back with First Win!



At the opening round of the 2001 Motocross World Championship held on March 18 at Bellpuig, Spain, the Yamaha Motocross Team and Yamaha Team AXO presented their rider line-up and machines that will compete in all three solo classes of the championship.

At a festive presentation attended by more than 100 guests, Yamaha announced the sponsorship support of Chesterfield and L&M for the coming year and introduced the five riders and bikes in their 2001 colours. For the MX500 class, Yamaha Motocross

Team field the four-time world champ, Stefan Everts, joined by his teammate Marnicq Bervoets, both on the new

> YZ500FM. Meanwhile, an Australian talent Andrew McFarlane riding the YZ426F, upproduction-based rated machine with a 2000 spec factory engine, has joined the Yamaha satellite team.

The race was a fairytale start for

Stefan Everts with the new Yamaha YZ500FM. Everts put two years of injury frustration behind him after qualifying on pole followed by a stunning victory in the 500cc class race.

It was Everts' first GP victory since August 1999, thus ending the longest win-less period in his career. Yamaha Motocross Team collegues, Bervoets and Aussie rookie McFarlane faired well also with fourth and ninth respectively.



Yamaha riders were introduced with their new machines

AMA Supercross Series

Expectations are High for McGrath

n March 24, the 11th round of the USA's 2001 AMA Supercross series was held at the Houston Astrodome in Houston, Texas. In the 250cc class, defending champion Jeremy McGrath of the Mazda Yamaha McGrath team finished 2nd on his Yamaha YZ250 while Tim Ferry of the Yamaha Motor USA Team finished 6th on the YZ426F. This result kept McGrath 2nd in the season standings and expectations high for yet another title, with five races left in the 16-round season.

Everts won the first round of the

WMX500 class with the new YZ500FM

Meanwhile, at the same event the 6th round of the 125cc class Eastern Regional series was held and the present point leader Ernesto Fonseca rode his Yamaha YZ250F to a 6th place finish to hold on to his series lead. In the same race, his teammate Justin Buckelew rode his



YZ125 to a 9th place finish to stay in 2nd position in the ranking. With just two races left in this 8-round series, the stage is set for a Yamaha title.

McGrath got second place and expectations are high for another season title



Fonseca leads in series points with his YZ250F

