# Yamaha News

- Yamaha XT500 riders fight their way on! ('81 "Paris-Dakar" Rally)
- Multicolored pages '81 TZ production racers & '81 YZ production motocrossers
- What do you look for in a bike? Indonesian & Thai reporters cover the new Yamaha RX-S in Japan.
- Always-growing Yamaha Power Products



# Ume (Japanese plum) blossoms

Ume blossoms, which come originally from China, belong to the rose family. They can be seen everywhere in Japan. The Japanese people have long been fond of these blossoms for their lovely

fond of these blossoms for their lovely appearance and sweet fragrance. The buds begin to unfold early in February when it is still bitterly cold. Each blossom has five tiny pedals which are white or tinged pink. Exposing themselves to the cold wind, they are a reminder to us that spring is coming. It is in a poetic state of mind that the Japanese people view these early Ume blossoms. Many a lover of nature including the Imperial Court people have composed their poems about the beautiful.

couning the imperial Court people have composed their poems about the beauty of these blossoms over the centuries. The fruits (Prunus Mume) are pickled and used for food. Their juice is also widely used as medicine, dyes, etc.

# Yamaha goes full go-ahead towards a new goal!

# —Yearly production of 3 million bikes

Motorcycles have already established a widespread reputation as handy, inexpensive and speedy vehicles. They are selling very well all over the world despite the unfavorable climate of international economy due to the serious shortage of oil. At this time, the best way of expanding our market is to develop and offer new quality products which meet diversified customer needs better than ever before. It is with great pleasure that we announce that last year our motorcycle production recorded a remarkable 30% increase over the previous year, as the '80 range found success with a great number of customers throughout the world. In some markets supply could not keep pace with the upsurging demand and a number of orders were kept backlogged! Now, an all-out effort is being concentrated on increasing our production capacity to 3 million bikes per annum.

Photo: The production line of the XV series which is making a name for itself in the big bike market - taken at the Iwata Main Plant on February 6.



aha's new power! V-twin XV750 and XV1000 (TR1)



Firing test. The 75° V-twin engine and its unique exhaust. The capacitor discharge ignition system undergoes its final adjustment

# Yamaha Research and Development Center

- Construction is underway
- A modern building with 8 stories above ground plus one floor underground
- The new neucleus of technical research and development sections
- Operation will start within the year

(see page 2 for more details)





- · A racing section for technical research & development
- Renewed determination

(see pages 5 & 8 for more details)

# New Yamaha Research & Development Center

'81 line-up, which are introduced on the market one after another, feature much of Yamaha's advanced technology.

The new Research & Development Center, which is under construction on the site continuous to that of the main office building, in Iwata, will start its important operation within the year, serving as a nucleus for the technical research and

All the research and development staff of Yamaha will be grouped here, to create a better system of their work on the basis of more intensive and systematic cooperation with the staff of all plants, laboratories and other work divisions of Yamaha concerned. The new Center will be an ultra-modern 8-storyed building

with one underground floor. Various

puter aided design system (C.A.D.) will greatly help to increase the efficiency of new product development. Thus all superior capabilities and ultra-modern facilities will be united to further elevate the level of product quality, which will be a new milestone in the progress of Yamaha technology.

# One million stepthrough bikes!

From Iwata: Back in 1977, Yamaha in troduced its first full stepthrough type 50 cc bike, the Passol in an effort to create a new bike market especially in Japan. The new model was noted for its superb handling ease, chic, attractive style and better fuel economy. These advantages appealed greatly to lots of women who had not ridden a bike but wished to have some carefree vehicle for use as a kind of life convenience. Thus over 170,000 bikes were sold even within the year, setting a new sales record in Japan.

The Passol was followed by a similar but upgraded model, the Passola in 1978. The latter also made a strong impact on the Japanese bike market, which gave another strong stimulus to the growth of stepthrough type 50 cc bike market in Japan. Ever since, the sales of these bikes have continued to increase at an even greater rate, which has accounted greatly for the advent of a new light moped age in

Now these models are indisputably the best sellers in their class in Japan while they are steadily expanding their market

The aggregate production of these bikes has already exceeded the one million tained within such a short period of time. As reported already, these bikes are assembled by woman employees at the lwata main plant.

Yamaha held a ceremony in celebration of their big record when the 1,000,000th bike rolled off the line on Feb. 11.

The one million mark has just been



# H. Mikkola and K. Iwao give special training to Yamaha motocross riders in Latin America



Heiki Mikkola speaking before

"Bring out the best performance of a machine!"

The aim of this Yamaha Motocross School in Brazil was to train Motocross teams of Latin American countries and to give rudimentary lessons to beginnerriders in Brazil. The schooling consisted of nine-day event programs and it gained full backing from the Yamaha Motor do

In Latin American countries motorcycle sports have become very popular recently. In many of these countries, national Heiki Mikkola ("Ironman Mikkola"), former 500cc Motocross World Champion, and Kazutoshi Iwao, a special instructor of the Yamaha Motocross School, flew to Brazil to train young South American potential champions who gathered at the Interlagos Motocross course in Sao Paulo.

championship races are regularly held and provides a big topic for conversation among lots of people. This enthusiasm for motorcycle sports have become so strong that it now contributes greatly to the popularization of motorcycles themsel-

In recent years, as the performance of motorcycles has improved year by year, the importance of improving driving-skills of riders has also increased and many people concerned have come to express their hope for motocross schooling courses like this. Therefore the first program of this schooling - special training to motocross team - attracted much interest in many countries and 23 riders chosen from Brazil, Bolivia, Paraguay, Urguay, Argentina, Colombia, Costa Rica and Guatemala, Portugal as well participated in this training.

This first program was seven consecutive day lessons and it consisted of 1) one day of lecture, 2) four days of practices for training skills, 3) one day of training in trial races and 4) one day of full-fledged races. Seventeen YZ125's and eight YZ250's

were used for this purpose.

The first day lecture course included questions and answers on riding techniques, special shows of motocross films and inspection of courses. Practices for training skills were divided into two parts

repeated practices of foundamental techniques and practices of applied

techniques. With H. Mikkola lecturing on technical theories and with Kazutoshi Iwao demostrating model riding, this schooling had high-level contents. Even machine maintenance in trial races was included in it.

# "Widely publicised through mass

H. Mikkola won Motocross World GP 500cc Championship both in 1977 and in 1978 and then helped the Yamaha racing team as coacher in the 1980 season. His activities are well known in Brazil as w Partly because H. Mikkola and Kazutosh lwao were two main instructors in these courses, this "motocross schooling" attracted considerable attention of mass media in Brazil and it was widely reported by television, radio, newspapers and magazines. Mr. E. Gogliano, president of Confederação Brasileira de Motociclismo, also showed strong interest in this event and maintained friendly cooperation with

'Placar'', an influential Brazilian sports magazine, reported this "Yamaha Motocross School" in a three-page article, quoting H. Mikkola's and Kazutoshi Iwao's words -- " ceaseless practices, intelligence, precision, and fundamental talent: these are essential to win in motocross races".

MOTOCROSS Disciplina, inteligencia precisao: virtudes fundamentals pl vencer no motocross, segundo os campeoes Mikkola e Kazutoshi.

The second program of this motocross schooling was for beginner-riders. Its two-day training was held on the same motocross course of Interlagos. Naturally this program was centered on fundamen tal techniques of off-road riding.

After this motocross schooling, special instructor Mr. Kazutoshi Iwao went to San tos City and gave lessons to the users of al techniques of off-road riding.

#### 'Yamaha Motocross School in Cyprus"

azutoshi lwao organized three "Yamaha Nicosia areas in Cyprus at the request of Andreas Samourides, a Yamaha importer. These training events were for both beginners and experts.

Cyprus, with 1,700 km² area and a population of 500,000, is situated on the Mediterranean Sea. In November, 1979, the Cyprus Motorcycle Federation was formed there and in 1980 12 motocross races were organized, with one race every

Against this background off-road models like DT series have become increasingly popular and Andreas Samourides decided to sponsor "Motocross School" in on to promote motorcycle sports and DT models. Mr. Kazutoshi Iwao, accompanied by Andreas Samourides, met Mr. Simos Kokinis, president of C.M.F., and exchanged views with him on promotion of motorcycle sports.

At this meeting, Mr. Iwao provided knowhow on management of motocross races, especially course-selection, making of highlight points, running of races, rider's manner and planning for spectators. That satisfied Mr. Kokinis.



# XS1100P for **Dubai Police**



From Dubai: Yamaha Importer Yousuf Yamaha's new XS1100P police bikes to the Dubai Police in the hope that it would be of use in police operation.

Kassim M. Al Hassan, Director of Yousuf Habib Al Yousuf, handed over the keys of the first Yamaha XS1100 police bike to ajor Saeed Khalfan of the Dubai Police. Pictures of this presentation ceremony appearing in the local press helped to spread the brandname of Yamaha

# An Unmanned XS650!



Right! It's an unmanned XS650. In fact, this is a copy of a magazine insert made by Yamaha Motor Canada, last summer. Do you want to know how the XS650 came out? Of course, it was all right. It stopped quite safely. Look at the following photo, and you'll see how the trick was done.

This is how the XS650 was controlled. The open car on the left is a special one used to stabilize the camera, so as to get a low angle shot and reduce vibration. This was a project that required plenty of work, but the planners are proud of it. There was such a big response that they are still getting requests for copies of the inserts from consumers and dealers.



# Yamaha snowmobiles on top of the world

From Norway: It is said that there are about 50% more snowmobiles than the number of people living on the Spitsbergen islands, Norway. Little wonder! Snowmobiling is the only and favored pastime there.

In between the mountain peaks one can swing full speed from one softly sloping valley into another on hard packed snow and smooth underground with deep blue gletschers to admire and frozen sea to cross. It is a snowmobile freaks paradise. It is not without danger though, one always has to be on his guard for surprises as well as for the many icebears roving around the country hunting for

# Former student of Yamaha Motocross School does it well

From Dubai: Motocross is very popular among young people as it is in other countries.

The other day, Ken Robinson rode his Yamaha 465 home to victory in the Interchoice motocross championship at the Old Al Nasr Studium. This was the first time that Ken raced the powerful 465cc two-stroke Yamaha, just imported from Japan, and he was immensely pleased to have won the competition.

Following up was Lou Fielack on a Yamaha 250 in second place. There was also a Hyatt Regency Trophy Race. This was also won by Ken Robinson, followed by Lou Fielack, which caused a great sensation among motorcycle fans.

Ken Robinson, incidentally, is one of the graduates of the Yamaha Motocross School held in Dubai in September, 1979 and was recognized as a rider of great promise by special instructor, Kazutoshi



food in spring.

No wonder the local snowmobilers want the best machines available today reliable and fast YAMAHAs. They are lucky, for apart from finding their ideal machines, there is a local engineer organizing all important parts availability as well as giving excellent service. With his wife and their son, the Paulsen's set up the YAMAHA distributorship with such success that the great majority of sleds are YAMAHAs. Their workshop was the first and still the best nearest to the North Pole.

The weekend trips undertaken are long ones and since there are no gas stations everyone has to take with him sufficient gasoline (ca. 260 liters) food, sleeping bags, gun, lube oil etc. on a trailer. For this the sleds have to be reinforced and need guick action two hitches apart from other modifications such as clutches and gear ratios. It is understandable that stresses on the frames are enormeous.

If machines of other brands join in the trip, which seldom happens, its always the YAMAHAs which must pull the heaviest loaded trailer.

That sled consumes so little and yet there is so much reserve power that it is logic that they have to do the meanest job. Furthermore even then they easily keep up with the highest speed, sustained for many hours" goes the argument.

The Laps, spread over the northern part of Norway, Sweden, Finland and even Russia are nomads with the difference that the animal (reindeer, a bigger brother of the caribou) leads man and not the other way round.

For only the animal knows where to find food in this frozen area and man has to follow the big reindeer flocks wherever they go. In old times this was done afoot with the unavoilable loss of the young ones when they got astray.

Today they use snowmobiles and one can say are real professionals. They have developed such a skill in judgement of the area they have to go through that one is surprised at their ability to go through ter-rain considered impassable by experts. Laps almost live on their machines, 10,000 km (6,000 miles) during a winterseason is a good medium.

Many do 10,000 miles (16,000 km). No





Snowmobiling is the only and favored pastime in this region

time for sevice, only the crudest repairs. It is go or no go. Therefore they take YAMAHA. For these people who must go through everything, pulling behind them on a trailer their family, tepee (tent) and gear or a couple of injured reindeer, the extended track model was developed. This was such a success that YAMAHAs because of their reliability and newly increased traction quickly took over a market usualy covered by other wide

The YAMAHA ET340T truly is a versatile machine. It retains the speed and agility, balance and handling of the standard model and at the same time offers superior tradition and climbing ability which combined with an increased load on the handy luggage rack and tremendous pulling power is the answer for all those who set their standards so high as the professional Laps. One must realize it simply is impossible to do repairs in the bitter cold of FINMARK WIDA with anual temperatures of -45 degrees Centigrade with nobody around for hundred miles. All alone.

And although it is true that they are a very tough people, sleeping outside at subzero temperatures there is a limit. They cannot afford breakdowns.

Now that distances covered are so much bigger they must totally relay on their

For them YAMAHA indeed is the best.

No wonder local snowmobilers reliable and fast Yamahas.



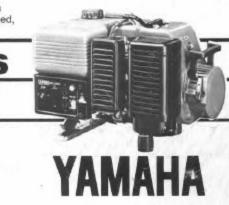
Unless you're now handling Yamaha generators, your sales aren't as high as hey could be. Studies have shown that bikers and boaters are both prime markets for portable generators. Plus, there's that huge potential of commercial users who have long been the major buyers of such products. In addition to the quality and value the Yamaha name implies, these portable generators are attractive on their own. They offer a remendous range of advanced features

and they are more than competitive in terms of price. There's also a bigger selection. Models for any conceivable need. Two-stroke and four-stroke versions. Even a special edition for recharging batteries. The EFC series, for exam ple, is an economical, compact line specifically designed for semi-permanent installations. They are especially attraccampers and boats. Like other Yamaha

reliable Yamaha engines, direct generato drive, foolproof safety systems and special systems to keep them running guleter longer. For details on the complete Yamaha generator line and our exciting dealership program, write to the Power Products Sales Department. It's a sure way to start generating new sales.

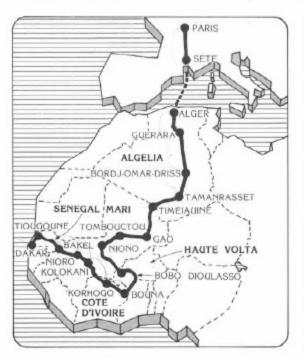
# **A Powerful New Sales Opportunity**





# SPORTS NEWS

# '81 "Paris-Dakar" Rally Yamaha XT500 riders fight their way on!





Sonauto Yamaha won 9 sections (5 by

Bacou, 3 by Merel, 1 by Pineau), a private

Yamaha won 1 section, Auriol-BMW 3,

and Honda France 5 (3 by Vassard, 1 by

Third successful Yamaha rider was Chris-

tian Becker who placed 9th on a Belgian

D'leteren entered XT500 despite a very

The XT riders who were entered by

Hostettler (Switzerland) and Inter Motor

Eight XT500's were eventually in the 25

finishers, together with one XT250 ridden

Netherlands (Holland) also did it well.

RACING

Desheulles, 1 by Rigoni)

had injury on his left elbow.

by a lady.

A number of Yamaha XT500 riders highlighted the '81 Paris to Dakar Rally which was one of the most gruelling endurance events in the world.

About 100 desert specialists took part in the '81 event which was staged over a distance of 10,000km from Paris to Dakar, Senegal, North Africa for the period from Jan. 1 through Jan. 20 but only 25 managed to finish with Frenchman Hubert Auriol (works BMW 800), the winner. Serge Bacou on a Sonauto Yamaha-entered XT500 finished second about 3 hours behind the winner. Third spot was taken by M. Merel on another Sonauto-entered XT500.

# Many strong teams

The '81 Paris to Dakar Rally attracted many strong teams, either direct from factories or via importers. German BMW was strongly represented with three complete factory 800 twins (developed on the basis of the new GS800) and supported by two semi-factory bikes. Honda Japan had supplied factory engines to Honda France, which entered five machines in the event. Austrian KTM also tried its chance, with 4 powerful bikes prepared by the factory and the French importer. Yamaha was also well represented with the XT500 teams which were entered by Sonauto and other European importers. In addition, enthusiastic privateers who rode their XT500 or XT250 machines, took part in the event.

The rally was very very hard for all the competitors. Quickly, Auriol and his 800cc bike became the masters of this ral-



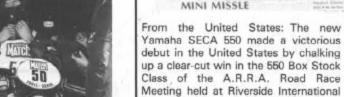
ly, but the Sonauto Yamaha XTs fighted as much as they could, but bad luck and misfortune hit the blue Yamahas. The team brought only 2 bikes to the goal, with French riders Bacou and Merel. One must say that Auriol and his factory BMW deserved obviously their brilliant win, but Bacou and Merel tried it hard to get the victory. So many mishaps, however, prevented both Bacou and Merel from forging ahead of Auriol.

#### Yamaha XT500 is still a queen of the desert!

The rally was about 10,000km long, and had two types of sections: "normal" sections which were not timed, and special sections (timed sections). The final results calculated the total of the 18 timed sections (the first two timed sections being run in France).

The 18 timed sections were won by:

- Merel (Sonauto XT)
- 2/ Pineau (Sonauto XT) 3/ Rigoni (Honda France)
- 4/ Montage (Yamaha XT250)
- 5/ Auriol (factory BMW)
- Desheulles (Honda France)
- Merel (Sonauto XT)
- 8/ Auriol (factory BMW) 9/ Bacou (Sonauto XT)
- 10/ Bacou (Sonauto XT)
- Vassard (Honda France) 12/ Bacou (Sonauto XT)
- Merel (Sonauto XT)
- 14/ Vassard (Honda France)
- 15/ Bacou (Sonauto XT)
- 16/ Vassard (Honda France)
- 17/ Auriol (factory BMW) 18/ Bacou (Sonauto XT)



Raceway on December 7, 1980. Since national release of this model had not yet been accomplished, the machine and rider (John Glover) were not eligible to points.

The superior acceleration of the Yamaha was evident even at the start of the race. The SECA, which started from a last row, had already climbed to third spot by the first turn. By the end of the openng lap the machine had snatched the

lead from a Kawasaki machine. On lap three. John slowed down and let the Kawasaki go ahead, which made the race more exciting.

DEALER STAGES MOTOCROSS

FINAL RESULTS

10. C. Martin Honda 250XLS 67h 29m 07s Other Yamaha finishers were: 11 Courtols (XT500), 17. JL. D'Espagne (Yamaha XT500), 19. M. de Cortanze (XT250), 20. H. Mori (XT500), 23. Paineau (XT500) and 24. O.

54h 41m 32s 56h 39m 59s

60h 55m 30s

62h 27m 55s

M. Auriol BMW800

G. Francu KTM420

Vilsange (XT500)

SECA 550 makes a victorious debut!

S. Bacou Yamaha XT500
 M. Merel Yamaha XT500
 J. P. Fenouil BMW800

A. Padou Honda 500XR

P. Vassard Honda 500 C. Becker Yamaha XT500

In only one lap, the Yamaha regained the lead and went on to increase its ad vantage over the Kawasaki, After all, the Yamaha finished first about 10 seconds ahead of the Kawasaki. The official results did not list the SECA 550 as the winner but everyone at the track knew which machine was the fastest. The machine was clocked at 1' 41" for one

The fastest lap time ever recorded by a 550cc machine!

# Yamaha's firm belief

YAMAHA RACE PROGRAM FOR 1981

Now Yamaha's race program for 1981 is announced in its entire aspect. It covers both road racing and motocross world championships, as well as all AMA motocross championships, on an even larger scale than ever before, which represents Yamaha's per-

sistently positive attitude

toward race activities.

As you know, Yamaha makes it a corporate principle to continue its brisk race activities worldwide with the firm belief that these activities must serve as a mobile technical laboratory or departent for motorcycles, bringing a great store of precious technical data essential to the improvement of production models in both performance and quality. while they will greatly help to promote the spread of sound motor

technological innovations include revolutionary energy-saving engine systems, such as the Y.E.I.S. (Yamaha Energy Induction System) and the Y.P.V.S. (Yamaha Power Valve System) which have already been adopted in some of the production models. On the other hand, motorcycle racing is getting popular as a sound motor sport all over the world. World championship road racing and motocross are, without doubt, the highest and the most exciting spectators events of motorcycle sports where a number of top professionals unfold a manly drama with their incredibly fast racers ridden to the limits of man's skill and machine's perfor-

For example, the latest race-bred

# 1980 was one of the most fruitful vears for Yamaha. American superstar "King" Kenny clinched the most prestigious 500cc road racing world championship title for the third consecutive year. Sidecar and 350cc titles were also won by Yamaha riders. In the United States the late Patrick Pons (Frenchman) won the Daytona 200, one of the most

# World championship road racing

# A fantastic combination!

glamorous road races in the world, thus bringing Yamaha the ninth consecutive victory.

This year "King" Kenny will ride an '81 YZR500 factory racer to make a stronger bid for his fourth crown. Barry Sheene, who is under contract with British

Yamaha importer, will also use a brilliant race achievements, is innew YZR500 factory racer. In connection with this, all necessary factory support will be offered to him throughout the '81 season.

As you know, Barry clinched the 500cc title in 1976 and 1977. He, who is the sole active rider granted the title of "Sir" for his disputably one of the greatest riders ever. This year both superstars will make up the Yamaha 500cc team. What a fantastic combination!

Furthermore, four importer entered riders will ride proven TZ500 production racers in the 500cc series.

# Road racing lineup

	_		9								
Kenny Roberts (USA)				 . ,			 				500cc class
· Barry Sheene (Great Britain)				 			 				500cc class
· Christian Sarron (France)				 			 				500cc class
· Boet van Dulmen (Holland) .				 			 				500cc class
· Michel Frutschi (Switzerland)				 							500cc class
Marc Fontan (France)				 							500cc class

Nationality: USA Date of birth: Dec. 31, 1951, 29 years Height: 168 cm Veight: 53 kg ibbies: Trail riding, fishing, horse riding, etc.

1965: Made a debut in a local race. 1969: Won Oregon 100cc Road Race

1971: Won AMA Junior Championship 1972: Ranked 4th in AMA Expert Class. 1973: Won AMA Grand National Cham-

1970: Won AMA Novice Class Chan

1974: Won AMA Grand National Cham-1975: Placed 2nd in AMA Grand National

1976: Placed 3rd in AMA Grand national Championship. 1977: Placed 4th in AMA Grand National

1978: Won 500cc Road Racing World

1979: Won 500cc Road Racing World Championship. 1980: Won 500cc Road Racing World

Barry Sheene

onality: Great Britain of birth: Nov. 9, 1950, 30 years Hobbies: Helicopter and aeroplane

Race career: 1973 to 1978: Won Super Bike Race in

1977: Won 500cc Road Racing World Championship. 1978: Placed 2nd in 500cc Road Racing World Char

Placed 3rd in 500cc Road Racing World Championship.

Christian Sarron

Race career: 1973: Placed 3rd in F750 World Cham-

1979: Placed 7th in F750 World Cham

World Championship. 1980: Rode a Yamaha TZ500 in 500cc

Placed 11th in 500cc Road Racing

Road Racing World Championship

Nationality: France

1980: Rode a Yamaha TZ500 in 500cc



# Boet van Dulmen



Placed 2nd in 350cc road racing

#### 1976: Placed 7th in Bol d'Or 24-hour en-Finished 4th in 500cc class of Road durance race. 1977: Took part in 350cc Road Racing Racing World Championship World Championship. Placed 2nd in Bol d'Or 24-hour en-Placed 14th in 500cc Road Racing 1978: Placed 16th in F750 World Cham-

pionship. 1979: Placed 2nd in F750 World Cham-

pionship, and 5th in 350cc Road Racing World Championship.

1980: Took part in 500cc Road Racing



# Michel Frutschi



Nationality: Switzerland Date of birth: Jan. 6, 1963, 28 years Hobbies: Ski, movies, cooking, etc.

 April 26
 May 3 Austrian GP (Salzburgring: solo 125, 350, 500 & sidecar) West German GP (Hockenheim: all classes incl. sidecar)

Yugoslavian GP (Rijeka: solo 50, 125, 350 & 500)
Spanish GP (Jarama: solo 50, 125, 250 & sidecar)
French GP (Circuit not decided: solo 125, 250, 500 & sidecar)

Belgian GP (Circuit not decided: solo 50, 250, 500 & sidecar) · July 5

Dutch GP (Assen: all classes incl. sidecar)

San Marino GP (Irrolli not decided; solo 50, 250, 250, 250 & sidecar)
San Marino GP (Imola: solo 50, 125, 250 & sidecar)
British GP (Silverstone: solo 125, 250, 350, 500 & sidecar)
Finnish GP (Imatra: solo 125, 250, 500 & sidecar)
Swedish GP (Anderstorp: solo 125, 250, 500 & sidecar)
Czechoslovakian GP (Brno: solo 50, 250, 350 & sidecar)

Championship. Placed 6th in 500cc Road Racing

Nationality: Holland Date of birth: Sept. 4, 1948, 32 years Family: Wife & one daughter Hobbies: Ski, wind surfing, etc.

1979: Won 500cc class of Road Racing World Chempionship Finnish GP. Won Dutch round of F750 World

# Marc Fontan

Date of birth: Oct. 20, 1956, 24 years

Hobbies: Ski, water ski, music, movies, etc.

1976: Won Tour de Rally France. 1977: Won Production racing Nation

1978: Took part in European Champion

ship endurance races. 1979: Placed 6th in F750 World Cham-Placed 2nd in Le Mans 24-hour en

durance race. 1980: Placed 2nd in Endurance Racing World Championship. Placed 5th in Daytona 200.

# Road Racing World Championship Grand Prix

Italian GP (Monza: all solo classes)

Here is the '81 Yamaha TZ range consisting of the TZ500, the TZ250 and the TZ125 which have been developed through many years of Yamaha's most successful GP race activities. They are powerful and reliable enough to claim many more wins than any other machines.

# TZ500

The '81 TZ500 is even greater in its race performance. The powerful 2-stroke engine has the patented new #0 cutaway carburetors while retaining all proven technical advantages including the Y.P.V.S. (Yamaha Power Valve System).

The chassis is also improved with specific emphasis being given to higher rigidity in the frame assembly. This has greatly improved both maneuverability and reliability.

#### Main technical features

The Y.P.V.S. is a unique exhaust timing adjuster which functions to help maintain the smooth delivery of power output over the entire range of speeds. The system has a simple, built-in construction incorporating a special balancer weight which works in response to a change in engine speed. The momentum of this balancer weight and centrifugal force automatically adjust exhaust timing.

Fitted with four patented #0 cutaway carburetors, the water-cooled parallel 4-cylinder engine is highly responsive. The new carburetor keeps the level of fuel raised to the level of the injection nozzle even when the throttle valve is fully closed. This helps to make the engine most responsive under any riding conditions. This represents a new level in Yamaha's advanced motorcycle technology.

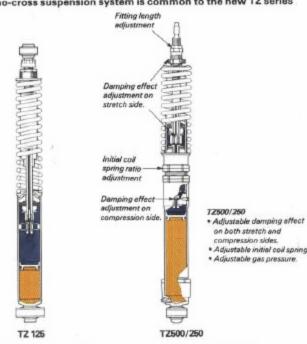
The system on the '81 TZ500 features an entirely-new shock absorber developed from that on the works machine. This has further improved the already proven effect of the Mono-cross rear suspension system, resulting in higher handling reliability and stability in combination with the increased rigidity of the frame.

On the newly designed shock absorber, damping effect can be adjusted separately on stretch and compression sides. The optimum damping effect can be obtained for many different riding conditions, enabling the rider to negotiate varied track conditions more smoothly and successfully. This also increases the total race performance of the machine. In addition, the new shock absorber retains all the proven advantages, such as initial coil spring ratio adjustment, gas pressure adustment, temperature adjustment for efficient hydraulic valving, fitting length adjustment, etc. The cylinder body is made of lightweight, better heat dissipating aluminum.

# TZ250

The new TZ250 is designed and built with a firmer will to win. It has attained another new level in power output, handling stability and reliability, machine weight and aerodynamic features. It will give rise to fresh sport enthusiasm among yong, active motorcyclists all over the world.

Mono-cross suspension system is common to the new TZ series



# Main technical features

The compact 2-stroke water-cooled in-line twin engine is about 5kg lighter than its predecessor, even with the Y.P.V.S. and oil pump. This represents Yamaha's advanced design method. The 56 × 50.7mm oversquare type cylinder features the Y.P.V.S. (Yamaha Power Valve System), a unique exhaust timing adjuster which functions to help maintain the smooth delivery of power output over the entire range

Transfer ports are enlarged to increase scavenging efficiency. This also helps to improve the smooth delivery of power output. The carburetor has also a patented #O cutaway throttle valve helping to make the engine ideally responsive to every throttle operation.

The water pump on the water-cooled engine, Y.P.V.S. governor, forced lubrication oil pump for transmission gears, etc. are fitted to the chassis as separate assembly units. This allows easier maintenance.

Chassis design is also totally renewed to make up a true 250cc dominator. The lightweight doublecradle frame is made of specially treated steel with increased rigidity. At the same time front and rear suspensions are improved in their performance, thus helping to increase handling stability and reliability. Cowling shape is also changed for better aerodynamic features so that total race performance is increased. The proven Mono-cross suspension system incorporates a newly designed shock absorber which has been developed from Yamaha's advanced racer technology. On this absorber, damping effect can be adjusted separately on stretch and compres-

sion sides thus allowing the rider

to select the most suitable damping

effect under many different riding

conditions.

# TZ125

The Yamaha TZ125 has been one of the best available production racers for those who wish to start their race career in a serious manner. The '81 model features a number of noteworthy improvements made to the engine and chassis for higher race performance.

## Main technical features

The 2-storoke single piston valve engine features the smoother development of power output, with improvements made to the cylinder and exhaust system.

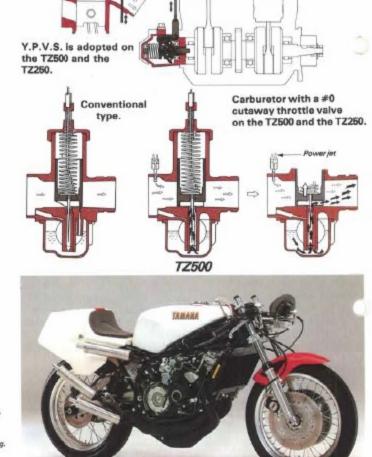
Along with the increased performance of the engine, the 6-speed transmission has well-selected gear ratios. Close-ratio first and second gears prove to be very useful.

Front fork's inner tube is increased a

step farther in thickness for higher rigidity. Specific emphasis is given to the improvement of damping effect. These changes result in higher handling stability and reliability. Improvements have been made to the construction of a damping valve on the proven Mono-cross suspension. Now damping effect can be adjusted separately on stretch and compression sides and total suspension effect is increased, helping to improve handling stability and reliabili-

ty. In connection with increased rigidity of the front fork, rear arm length is increased by 40mm with better front and rear load distribution in mind, so that handling stability and reliability are improved.

The rear hydraulic disc brake features an opposed piston type callper Instead of a swing type. Piston size is also increased, these changes ensure higher braking performance. Seat position is set farther rearward so that it results in a better riding position and ideally balanced weight distribution in connection with the height of fuel tank, positions of handlegrips, and cowl setting.



\*Engine: water-cooled, 2-stroke piston valve 4-cylinder with YPVS \*Displacement; 499cc \*Bore × stroke: 56 × 50.7mm \*Compression ratio 7.9: 1 \*Max. power output: over 110PS (10,600rpm plus) \*Max. torque: 7.7kg-m (10,250rpm plus) \*Carburgtor; 4-Mikumi; VM34 \*Ignition: C.D.I. \*Lubrication: Pre-mix \*Radiator capacity: 2,3 ltf. \*Transaction: 6-speed gearbox \*Seat height: 780mm \*Wheelbase: 1,365mm \*Dry weight: 138kg (with cowling) \*Front tire: 3.25-18-4PR \*Rear tire: 4,00/5.75-18-4PR

## 77250



\*Engine: water-cooled, 2-stroke piston valve twin with YPVS \*Displacement: 249cc \*Bore × stroke: 56 × 50.7mm \*Compression ratio 7.9: 1 \*Max. power output: over 55PS (11,000rpm) \*Max. torque: 3.6kg-m plus (10,750rpm) \*Carburetor: 2-Mikuni VM36 \*Ignition: C.D.I. \*Lubrication: Pre-mix \*Radiator capacity: 1.2 lit. \*Transmission: 6-speed gearbox \*Seat height: 750mm \*Wheelbase: 1,320mm \*Dry weight: 106kg (with cowling) \*Front tire: 3.00/3.75-18-4PR \*Rear tire: 3.75/5.00-18-4PR

## TZ125



\*Engine: water-cooled, 2-stroke piston valve single \*Displacement: 123cc \*Bore × stroke: 56 × 50mm \*Compression ratio 7.9: 1 \*Max. power output: over 31PS (12,000rpm) \*Max. torque: 1.85kg-m plus (12,000rpm) \*Carburetor: 1-Mikuni VM34 \*Ignition: C.D.I. \*Lubrication: Pre-mix \*Radiator capacity: 0.6 lit. \*Transmission: 6-speed gearbox \*Seat height: 690mm \*Wheelbase: 1,245mm \*Dry weight: 75kg (with cowling) \*Front tire: 2.50-18-4PR \*Rear tire: 2.50-18-4PR

#### YZ465



Engine: 2-stroke single • Displacement: 465cc • Bore × stroke: 85 × 82mm • Compression ratio: 7.0: 1 • Max. power output: 52hp (7,000rpm) • Max. torque: 5.75kg-m (6,000rpm) • Carburetor: 1-Mikuni VM38 • Ignition: C.D.I. • Starting: kick • Lubrication: pre-mix • Transmission: 5-speed gearbox • Seat height: 950mm • Wheelbase: 1,480mm • Dry weight: 104kg • Front tire: 3.00-21 • Rear tire: 5.10-18

#### YZ250



Engine: 2-stroke single \* Displacement: 246cc \* Bore × stroke: 70 × 64mm \* Compression ratio: 8.1: 1 \* Max. power output: 41hp (10,500rpm) \* Max. torque: 3.8kg-m (7,000rpm) \* Carburetor: 1-Mikuni VM38 \* Ignition: C.D.I. \* Starting: kick \* Lubrication: gra-nik \* Transmission: 5-speed gearbox \* Seat height: 950mm \* Wheelbase: 1,480mm \* Dry weight: 95kg \* Front tire: 3.00-21 \* Rear tire: 5.10-18

## YZ125LC



Engine: 2-stroke single • Displacement: 123cc • Bore × stroke: 56 × 50mm • Compression ratio: 8.5 : 1 • Max. power output: 30.0hp (10,500rpm) • Max. torque: 2.04kg-m (10,000rpm) • Carburetor: 1-Mikuni VM32SS • Ignition: C.D.I. • Starting: kick • Lubrication: pre-mix • Transmission: 6-speed gearbox • Seat height: 945mm • Wheelbase: 1.450mm • Dry weight: 89kg • Front tire: 3.00-21 • Rear tire: 4.00-18

# YZ80



Engine: 2-stroke single • Displacement: 79cc • Bore × stroke: 49 × 42mm • Compression ratio: 7.1: 1 • Max. power output: 17hp (11,500rpm) • Max. torque: 1.06kg-m (11,000rpm) • Carburetor: 1-Mikuni VM26SS • Ignition: C.D.I. • Starting: kick • Lubrication: pre-mix • Transmission: 6-speed gearbox • Seat height: 760mm • Wheelbase: 1,205mm • Dry weight: 60kg • Front tire: 2.75-17 • Rear tire: 4.10-14

# EVEN MORE COMPETI-TIVE THAN EVER!

A very good news for all motocross fans! Yamaha's world-renowned YZ range is even more competitive for 1981. The YZ465, the largest of the YZ line-up, is reputed to be the most competitive bike that a privateer can buy. The YZ250 has a number of very important improvements including the Y.E.I.S. The YZ125 features a liquid-cooling system developed from that on Yamaha's GP-winning works machine. The YZ80 is a full-fledged race machine with measurably increased performance and durability. Now let's take a closer look at the '81 Yamaha YZ range.

# The water-cooled YZM125

# 

# YZ465

This is Yamaha's biggest, strongest production motocrosser. Power is exciting and durability is superior, thus resulting in top reliability on a competition track.

The '81 YZ465 features a lot of technical innovations on its chassis design.

One of the main improvements is its ing alignment with new caster and trail design. In connection with this, suspension performance is also greatly increased. Front fork's inner tube size is enlarged for higher rigidity while it features a piston slide function utilizing DU metals, thus holding friction to a minimum. The amount of damper oil is also increased for better damping effect. On the Mono-cross suspension, damping effect is 30-stage adjustable instead of 22 stages, thus enabling the rider to cope with widely varying surface conditions in a much more efficient manner. This has greatly improved total suspension efficiency, benefiting steering abilities and ensuring higer race performance on a bumpy competition track.

In addition, frame's gusset plate is made of high-tensile steel to increase both rigidity and strength. Total assembly weight is also reduced. Handlegrip pattern is also renewed for surer gripping. Shorter levers with separate type holders allowing easier maintenance prove to be another advantage in racing.

Drive chain's tension roller is made of rubber more durable than nylon. All these improvements have made

# YZ250

The '81 YZ250 features a most exciting new technology, the Yamaha Energy Induction System (Y.E.I.S.). This is an entirely-new kind of energy saving system which functions to increase power output especially over the range of low-to-medium speeds. In direct connection with the adoption of this new system, transfer port timing is also altered while air cleaner and expansion chamber type muffler are redesigned so that the delivery of power output is totally improved. In addition, chassis design is overall upgraded in accodance with the

power output is totally improved. In addition, chassis design is overall upgraded in accodance with the standards of the YZ465, thus increasing its race performance to the full. Front fork's inner tube size is enlarged to 43ø for higher rigidity. The inner tube features a piston slide function utilizing DU metals so that friction between inner and outer tubes may be held to a minimum. The amount of damper oil is also increased for better damping effect, thereby improving total suspension efficiency.

In connection with such improved frame design, Yamaha's world-renowned Mono-cross suspension is also redesigned. On this system, damping effect is 30-stage adjustable, thus allowing the rider to cope with widely varying surface conditions in a much more efficient manner.

# YZ125LC

Back in 1975, the water-cooled YZM125 works machine made its sensational debut on a motocross track, representing Yamaha's lead in this domain and giving rise to a tendency where other manufacturers became enthusiastic about the development of their own water-cooled engines following Yamaha.

The water-cooled engine has a lot of exclusive advantages. First, the water-cooling system prevents engine performance from being badly affected by heat. Thus the engine keeps its high, dependable performance even during the latter half stage of racing.

stage of racing.
On the newly designed water-cooling system, the compact, lightweight alumi. radiator is mounted in front of the steering head. The handle crown, steering head pipe and frame's downward tube make up the water passage. This unique layout allows simpler water horse arrangement and smoother steering operation. The radiator duct is built in one piece with a number plate so that cooling efficiency is further increas-

keeping pace with such improved performance, chassis design is entirely renewed and suspension effect is greatly raised so that the new machine may increase its race performance to a maximum when ridden hard at near full throttle.

In short, the new YZ125LC is a true replica of the works machine. Weighing only 89kg, it is built just to run faster than any other machines on a motocross track!

# YZ80

The race-proven 2-stroke "Torque Induction" engine features a radial-finned cylinder head which assures better heat dissipation. The cylinder, the piston and the crankcase are all redesigned as well. These improvements have increased the race performance and durability of the engine.

A new expansion chamber type muffler is located on the left side for better intake and exhaust efficiency.

The 6-speed transmission has a new clutch release mechanism which proves to be very useful for surer gearchange operation on a bumpy competition track.

The capacitor discharge ignition system, which is virtually maintenance-free, gives a more dependable, hotter spark at all times.

The semi-double cradle tubular frame is light yet rigid. This is a scaled-down replica of that used on Yamaha's GP-winning motocross

The longer front fork holds an increased amount of damper oil and an air pressure adjusting valve on top makes it easy for the rider to adjust the damping for many different riding conditions. Rear suspension is by Yamaha's highly successful management statem.

# YAMAHA RACE PROGRAM FOR 1981

# World championship motocross

The world championship motocross lineup is also strengthened to cover the 125cc, 250cc and 500cc classes as follows:

#### Motocross lineup

Marc Velkeneers (Belgium)			,	, ,								125cc class
Jacky Vimond (France)												
Dave Watson (Great Britain	1										. :	250cc class
Neil Hudson (Great Britain)												
Hakan Carlqvist (Sweden) .												
Andre Vromans (Belgium) .												

All riders are under contract with Yamaha Motor N.V. in Amsterdam. Holland, excepting Jacky Vimond who has contracted Sonauto,

Date of birth: Jan. 14, 1957, 23 years

1978: Placed 5th in 250cc World Cham-

1979: Placed 2nd in 250cc World Cham-

Hakan Carlqvist

Date of birth: Jan. 15, 1964, 26 years

Hobbies: Aeroplane piloting, tennis, etc.

1978: Chalked up his first GP win in

1979: Won 250cc World Championship

machine in 250cc World Cham-

Took part in 250cc World Championship as a works Husqvarna

Spain, Placed 7th in 250cc World

Placed 3rd in 500cc World Cham

pionship. Won Swedish National

He played ice hockey profes

sionally in Sweden until 1971,

Andre Vromans

# Marc Velkeneers



Race career: 1975: Made a debut in National Cham-Won 10 junior class races.

1976: Took part in 250cc National Cham-

pionship. 1978: Won 125cc National Champion-

ship. 1979: Placed 2nd in 125cc World Cham-

pionship. Belgian GP, and 3rd in West Ger-1980: Took part in all the rounds of 125cc World Championship and placed 5th in final ranking.



Date of birth: July 18, 1961, 19 years

1977: Made a debut in National Championship. Won 10 races. 1978: Won French junior class (125cc)

Championship. 1979: Won French 125cc Championship. 1980: Won French 125cc Championship

# Dave Watson



ationality: Great Britain Date of birth: Jan. 31, 1961, 19 years

1976: Rode a VZ125 in schoolbox

1974: Won Belgian National Championmotocross in Northern Ireland. 1980: Took part in under-21-years-old European Championship.

The family moved to Gloucester,

when Watson was 16 years old.

Neil Hudson

ship. 1975: Won under-21-years-old European Championship. 1977: Placed 11th in 500cc World Cham-Took part in Motocross des Na-Placed 5th in British National

pionship. 1978: Placed 7th in 500cc World Championship. Placed 7th in 500cc World Cham-

pionship. Ranked 2nd in 500cc Belgian National Championship. Placed 4th in 500cc World Championship. Won Belgian National Champion-

Date of birth: Nov. 11, 1955, 25 years

Made a debut in a local race.

# **AMA championship motocross**

In the United States Yamaha Motor Corporation, USA will enter its powerful teams in all the classes of the AMA championship motocross as follows:

# AMA lineup

 Bob Hannah AMA 250cc, Super Bowl (Supercross) and Trans USA Series Rick Burgett
 Broc Glover
 Mike Bell AMA 250cc, Super Bowl (Supercross) and Trans USA Series AMA 500cc, Super Bowl (Supercross) and Trans USA Series AMA 500cc, Super Bowl (Supercross) and Trans USA Series Donnie Cantaloup AMA 125cc. Super Bowl (Supercross) and Trans USA Series

Nationality: USA

Date of birth: May 16, 1960, 20 years

Hobbies: Running, water ski, dune

1974: Made a debut in a local amateue

1975: Finished 3rd in Los Angeles high

school motocross. 1976: Placed 2nd in AMA 125cc Cham-

1977: Won AMA 125cc Championship

1978: Won AMA 125 cc Championship.

Placed 2nd in AMA 125cc Cham-

pionship. Placed 5th in Supercross Cham-

pionship, and 2nd in Trans USA

1979: Won AMA 125cc Championship.

buggy driving, etc.

# Bob Hannah

Scott Burnworth
 Erik Kehoe



Hobbies: Hunting, trail riding, aeroplane

1974: Won junior 250cc race in Califor-

1975: Took part in 10 club meetings.

California, winning 18 races.
1976: Won AMA 125cc Championship. Placed 6th in AMA 250cc Championship. 1977: Won Supercross Championship

Placed 3rd in AMA 125cc Championship, 7th in 250cc Champion-ship, and 2nd in 500cc Champion ship. Placed 2nd in Trans AMA

Championship. 1978: Won Supercross, AMA 250cc and Trans AMA Championships.

1979: Won Supercross and AMA 250cc Championships. 1980: Placed 3rd in Trans USA Cham-

# Rick Burgett



Nationality: USA Date of birth: May 31, 1956, 24 years Hobbies: Ski, water ski, etc.

1970: Made a debut in a local amateur

1971: Won 125cc and 250cc Champion-

ships in Portland, Oregon. 1974: Finished 8th in open class motocross, Calif. 1975: Placed 9th in Trans AMA Cham-

1976: Placed 7th in AMA 250cc Championship, and 6th in AMA 500cc

1977: Placed 13th in AMA 250cc Cham-1978: Won AMA 500cc Championship.

ced 12th in AMA 500cc Cham

pionship. 1980: Placed 4th in AMA 500cc Cham-

# Broc Glover



# 1979: Placed 3rd in Supercross Cham-

1978: Placed 6th in Supercross Cham-

Placed 2nd in AMA 500cc Cham-

pionship, and 2nd in Trans USA Championship. Placed 2nd in AMA 250cc Cham

# Donnie Cantaloupi



Nationality: USA Date of birth: Dec. 9, 1960, 20 years Hobbies: Ski, water ski, basketball, baseball, etc.

1973: Made a debut in a local race. 1974: Won mini-bike championship in !

1978: Won CMC 125cc championship. Placed 2nd in golden state cham-

1979: Placed 5th in AMA 125cc cham-

Date of birth: Jan. 24, 1963, 18 years Hobbies: Trail riding, football, water ski,

980: Placed 6th in AMA 125cc Cha

# Mike Bell Scott Burnworth



Date of birth: Aug. 8, 1957, 23 years Hobbies: Tennis, ski, etc. nace career: 1972: Made a debut in a local junior race.

class Championship.

1974: Won CMC National Championship.

Nationality: USA Date of birth: Sept. 28, 1964, 16 years Race career: 1979: Won AMA mini-bike Champion-

Nationality: USA

1980: Won AMA mini-bike Champion-

Great Britain

West Germany America

# World Championship Grand Prix

June 21

July 5 July 26

125cc clas	8
March 29	Italy
April 5	Holland
April 12	Austria
April 26	West Gen
May 3	France
May 24	Yugoslavi
May 31	Poland
July 5	Switzerlar
July 19	America
August 2	Finland
	49

Nationality: USA

April 5 May 3

**AMA 125cc** 

Mar. 29 Apr. 5 Apr. 12 May 3 Jun. 28

500cc class May 31 June 14 France June 21 July 5 July 19 July 26 Great Britain Holland Luxembourg

# AMA championship motocross

	s (Trans USA) Anaheim CA.	
	Seattle, WA.	
	Atlanta, CA.	
	Daytona Beach, FL.	
Mar. 13-14	Houston, TX.	
Apr. 25-26	Pontiac, MI.	
May 10	Kansas City, MO.	
Jul. 12	Los Angeles, CA.	
Sept. 20	Lexington, OH.	
Sept. 27	Buchanan, MI.	
Oct. 4	Atlanta, CA.	
Oct. 11	Unadilla, NY.	
Oct. 18	Sears Point, CA.	
Oct. 24	San Diego, CA. IS	uper

Sacramento, CA. Saddleback, CA.

AMA 250cc Mar. 29 Apr. 5 Apr. 12 May 3 May 17 Saddleback, CA. Sonora, CA. Atlanta, CA. Southwick, MA. Mt. Morris, PA. Castle Rock, CO. AMA 500c

Southwick, MA. Mt. Morris, PA. May 17 May 24 St. Petersburg, FL Castle Rock, CO.

# What do **YOU** look for in a bike?

Important Factors in Motorcycle Brand Selection

A very interesting article appeared in a Yamaha Communicator issued recently by U. S. Yamaha. Introduced here is the eticle, a piece of market research titled The Most Important Factors In Motorcycle Brand Selection", comprising of two charts and a commentary.

# Marketing Research Important Factors In Motorcycle Brand Selection

According to our latest research, this year, as in the past, the most important factors in motorcycle brand selection in general among both owners and nonowners are dependability/reliability, appearance/style and performance. In addition, price comes through as an important factor among non-owners.

Dependability/reliability and performance are among the most important factors regardless of type of bike to be purchased. Style is important for street bikes for

both owners and non-owners, and for enduros among owners. Among nonowners, price is an important factor

The following tables present the most frequently mentioned important factors in motorcycle selection for both owners and non-owners intending to buy and also by type of bike intended to buy.

As the article points out, price is one of the most important factors in motorcycle brand selection for non-owners. Although factors vary in different countries, you may be able to find some useful sales hints in these charts with regard to your approach to prospective buyers. With competition models like motocrossers and trial bikes the most important point for non-owners is brand reputation. Of course, the important thing in motorcycle racing is to win and so. Yamaha's untiring efforts toward achieving victory are in-

#### THE MOST IMPORTANT FACTORS IN MOTORCYCLE BRAND SELECTION (% Mentioning Either as 1st, 2nd or 3rd Most Important)

		Owners		144	Non-Owners	-
	1978	1979	1980	1978	1979	1980
Dependability/reliability	41%	39%	41%	29%	38%	419
Appearance or style	35	37	41	32	30	36
Performance	28	34	24	28	35	27
Handling	27	25	17	24	23	13
Easy owner repair/maintenance	11	9	7	10	13	13
Quality of workmenship	11	16	14	10	16	15
Comfort	13	16	12	12	11	15
Price.	19	17	14	16	20	24
Smoothness/low vibration	7	6	9	4	9	6
Technical features	3	6	7	3	5	4
Engine size in cc's	7	20	16	10	17	16
Brand reputation	11	6	9	5	7	13
Dealer service/helpful	8	6	5	6	6	- 6
Maceleration of states at the states at	12	13	10	12	11	7
A occleration Low bold of maintenance	3	3	4	7	4	- 6
Four-stroke engine	4	3	5	5	3	5
Suspension system	7	6	6	7	2	2
Racing capabilities	5	2	3	2	3	2
Gas missage	3	10	19	6	20	17
BASE*	210	193	188	241	246	254

# THE MOST IMPORTANT FACTORS IN MOTORCYCLE BRAND SELECTION (% Mentioning Either as 1st, 2nd or 3rd Most Important)

			/Winers			NON-DWITE	rs .
	Street	Trial	Endure	Motocross/ Trials	Street	Trial/ Enduro	Motocross/ Trials
Dependability/reliability	40%	40%	39%	45%	40%	45%	24%
Appearance or style	47	37	49	24	40	26	24
Performance:	23	20	24	42	30	14	29
Handling	16	17	17	27	12	22	- 6
Easy owner/maintenance	5	20	7	3	10	26	6
Quality of workmanship	12	3	17	24	15	18	24
Comfort	13	7	12	_	16	13	-
rice	13	20	15	15	27	9	18
Smoothness/low vibration	9	10	5	9	6	3	6
Technical features	8	7	7	- 6	4	3	6
Engine size in cc's	16	10	15	9	15	20	18
Brand reputation	8	10	5	12	11	13	41
Dealer service/helpful	6	- 1	2	3	6	4	6
Acceleration	7	7	12	15	5	13	18
Low cost of maintenance	5	10	2	3	4	11	6
Four-stroke engine	7	3	2	-	4	6	6
Suspension system	3	13	10	12	2	-	12
Racing capabilities	3	-	-	6	2	-	18
Gas mileoge	19	17	22	12	18	11	18
BASE*	129	30	41	33	186	45	17

# **Contributions wanted**

We at the Editorial Room of Yamaha News are always looking forward to having you supply us with various editorial materials so that we can make Yamaha News more instrumental to your usiness. Any sort of news or information would be highly appreciated if it is about Yamaha. Newspaper or magazine clippings will also serve to help us. Please attach some photos, colored or

black white to your news or information wherever possible. At the same time, we like you to clarify the following points:

Where

· Who

· Why (for what purpose)

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Shizuoka-ken (Japan) Tel: IWATA 05383-2-1111 Telex: IWATA 4263 751 YAMAHA J Cable: YAMAHA MOTOR IWATA

# SAFE RIDING **PSYCHOLOGY**

# Are you "seeing correctly" when you drive?

1. "Mistaking one thing for another" The same object can be seen in many different ways.

2. The world you see and the world

You already know that in the case of driving vehicle 80% of the sense information involved is visual information.

Let's take a closer look into "seeing correctly" in this issure.

# 3. Oversight

One tends to sense only what he wants to see or hear.

The large majority of stimuli are cut

Various information from the external world, such as "an oncoming vehicle", "a pedestrian standing near a crossing", "a traffic sign", etc. are transmitted to the brain by way of the sense organs.

But stimuli are not always sensed or accepted.



There are also stimuli which people

can not feel. The large majority of stimuli are constantly being cut out by our sense organs. Most small sounds, objects, movements as well as ordinary colors and shapes, are filtered out somewhere between the eyes and ears, and the brain and they are never perceived. Also, impulses from the corners of our field of vision are usually cut out.



Brilliant colors and loud noises are picked up as strong

# How we choose our stimuli depends on our psychological condition.

Even among those colors, shapes and sounds that stimulate our sense organs, not all of them are picked up by our consciousness. They are cut out at the psychological level.

For example, the driver of a two-wheeled vehicle must constantly pay attention to the condition of the road and the traffic. However, if the driver is thirsty, his attention may be diverted by a sign, advertizing some refreshing drink. Depending on the psychological condition of the viewer, the external world can take on completely different appearances.

"Looking carefully", this is the basic requirement of safe driving.

Even when you are just starting blankly stimuli are passing through the eyes lens and hitting the retina, but this can not be called on "looking carefully" for the things essential to driving, then you can not be ensured of safe driving



ailing to realize that the car in front of you is braking, is a

While driving the important thing is to never allow an "oversight", by always being on the "lookout"

# "The way to look"

When your attention becomes too concentrated you don't recognize other things.

Looking with care is essential. Allow ing your attention to be drawn to one olace is a mistake.

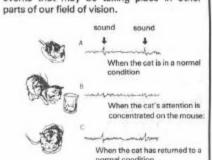
While you are driving, the situation around you is always changing. This information is constantly reaching your eyes and ears in the form of stimuli. From these various stimuli you must select the ones which are essential for safe driving. When you allow your attention to become concentrated on one place you become blind and deaf, for that moment to the stimuli coming from anywhere else.

It is important to always keep yourself receptive to the possibility of changes occurring around you. Otherwise you will miss essen



It is dangerous to let your attention be drawn to only on

When you let your attention becomconcentrated on one place, you create a blank spot in your field of perception. There is a famous experiment in which an electrode was placed in the ear of a cat to record its auditory reactions to sounds When a clicking sound was made for the cat hear the electrode recorded that the cat had recognized the sound. Then a mouse was shown to the cat and while its attention was drawn to the mouse the same clicking sound was repeated. This time, however, the electrode didn't record the same reaction of recognition of the sound by the cat. This proves that when the attention is concern trated in one place stimuli from other areas are cut out and are not perceived. Human beings are the same way. We should also recognize that there is a good possibility that when our gaze is fixed on one point, the brain sometimes fails to make us recognize



events that may be taking place in other

Concentrate your attention on driving

While driving you must basically be concerned with the road situation and the other traffic. Letting your attention be distracted by a beautiful woman by the roadside is an unforgiveable mistake. Also, allowing yourself become lost in thoughts or worries will be the cause of problems related to unattentive

When driving a vehicle, your attention must



Nationality: Great Britain

generating a large quantity of electrici-

maintenance free as it uses the first in-

tegrated circuit ever adopted in this

class. These improvements have im-

proved the efficiency of battery charg-

burnt out by high-tension electricity.

The square type speedometer and

\*first upgraded equipment ever adopted

in this class. Night illumination is of a

transmitted light type which is very ef-

· Flasher lamp stays are of a popular flexi-

fective and gorgeous.

tachometer are large sized. They are the

ng while they prevent bulbs from being

The regulator is virtually

tions including pillion riding.

both maneuverability and stability. The

riding position enables the rider to take

the most natural posture for comfortable

sports riding. The handy grabbar is stan-

dard equipment which is very useful for

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The newly designed double-cradle tubular Both front and rear brakes which are manufactured in Thailand, are of a frame is strong and rigid. The rear 130mm drum type. They feature excellent cushion is of a reciprocating damper type. water-and-dustproof characteristics. The The rate of spring can be adjusted in five different stages for different riding condibrake arm has a brake lining wear indicator. The rear brakes of Indonesian The front fork also has an adequate make also has the above features. The Thailand model employs a full-cover type cushion stroke which helps to improve

**Indonesian and Thai Reporters** 

**Cover the Noteworthy** 

Visit Yamaha's Head Office to

YAMAHA RICA MODEL

Style is truly exciting. Equipment are

upgraded. Performance is unmatched in this class. These are major sales points of the RX-S. (Thailand model)



The RX-S will arouse a fresh 100cc

From Iwata: Yamaha Motor Co., Ltd. has recently developed the Yamaha RX-S, a new high-powered motorcycle intended for users in Southeast Asia and given full particulars of it. Prior to its sale in Indonesia and Thailand, Yamaha, in reply to the requests of motorcycle journalists in those countries, announced to them the purposes of developing this model and its technical features at its head office in Iwata, Shizuoka Prefecture, and offered them opportunities for having first-hand trial rides at the Yamaha course.

By the best possible use of Yamaha's latest technology, the RX-S has been designed as an upgraded version of the RX-100, or "something better than 100", which is now enjoying an overwhelming popularity in ASEAN nations, such as Thailand, Indonesia, Malaysia and Singapore, and in South American countries, such as Colmbia, Venezuela and Argentina. For example, the Yamaha Energy Induction System (Y.E.I.S.), a revolutionary energy-saving system, is adopted in this model for the first time on a mass-production basis. Careful and extensive local tests had also been conducted repeatedly. This model may be said to be the most powerful motorcycle in the 100cc category, so that it has naturally been attracting the keen attention of Southeastern journalists, leading to their own collection of data at Yamaha's head office

Reporters who recently visited Yamaha Motor Co. to cover the RX-S consisted of four Thai reporters of Motorcycle &





Magazine, Mobile Magazine and Mutiara Magazine, and they gathered news in the course of three days.

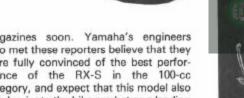
The results of their attentive news gathering will be published in the respective

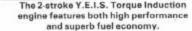
magazines soon. Yamaha's engineers who met these reporters believe that they were fully convinced of the best perforcategory, and expect that this model also will dominate the bike market as a leading



Indonesian and Thailand reporters being explained the aim of developing







machine which succeeds "something bet-

Total length 5.245km, longest stretch

ter than 100." The technical features of the RX-S are as follows:

Managing Director Takehiko Hasegawa in charge of the Engineering Division (left) and Director Tsuyoshi

Konomi (right) in charge of Overseas Operations, who explain Yamaha's corporate policy to make contributions to the society through offering quality products.

## **Excellent features** of the RX-S

With the Y.E.I.S., latest fruit of Yamaha's advanced engine technology, the RX-S is noted for its higher and more dependable performance over the range of high speeds as well as over the range of lowto-medium speeds, by making the best of the advantages of the proven 2-stroke 'Torque Induction" system. The newly designed engine features both high power and fuel economy. The frame with improved suspension systems ensure superb maneuverability and stability for different riding conditions, for which the RX-100 is already well known. The style is finely sporty with a number of upgraded equipment.

The fuel tank has a key-lock type cap. Its ball lock mechanism prevents the fly from leaking out of the tank even when the bike falls down.

Both fenders, headlamp stay, muffler stay, rear cushion cover, grabbar, etc., are all chrome plated, which helps to elevate the quality image of this model. The Autolube oil tank has an easy-to-see indicator. The steering lock works in linkage with the ignition switch. Steering

can be easily locked in either right or left

ble type. Taillamps and side reflectors are large sized for safer riding. . The AC generator is capable of

# Power-unit

The RX-S is the production model to adopt the Y.E.I.S. in its powerful 2-stroke Torque Induction engine, Its max, power output is unmatched in the 100cc class. Fuel economy is also improved.

The C.D.I. lanition system, which ensures positive ignition at all times, is virtually maintenance free. The life of an ignition plug is also extended. The newlydesigned hooded cylinder head dissipates heat better to meet the engine's higher performance. The 5-speed transmission has an improved shift mechanism. Every

# Always-growing

# YAMAHA POWER PRODUCTS DIVISION

Yamaha's Power Products Division's line of portable generators, multipurpose engines and water pumps are rapidly growing in popularity Following are reports that have reach and Yamaha's home office from erveral countries showing the steady growth of each market.

# Sales are expected to increase 11 times over a three-year period

From Nigeria: The sole importer of Yamaha Power Products in this country is, John Holt Company, Ltd. Yamaco Division (Managing Director: Mr. Allanson, General Manager: Mr. Rea) with its head offices in Ikeja near the capital city of Lagos. Two years ago this company' sales totalled 3 thousand units. In cor trast, this year's sales of the alread popular generators, the increasing popular high quality water pumps, as we as multi-purpose engines to be used grinders and compressors, is expected t crease of 11 times the figure two years

This type of market growth of course owes a lot to the high quality and high performance features of our products, but also it is invariably a result of a positive sales network. Nigeria, with a population of 83,000,000, boasts the gest human resources of any country in Africa. For this reason alone the demand for electrical products is hard to keep up with, with the demand for generators especially great. Yamaco Division with its ain offices serving as sales base in the outhwestern part of the country, has also planned to establish a northern sales base in Kaduna and an eastern sales base in Aba that will enable them to create a speedy supply system not only for their mainstay motorcycle business but also for electrical products of which the power products will be the main items in the Electrical Appliance stores which they plan to open as a part of their solid sales network. In addition to the planning and building of this sales network, in April of ast year they held a Service/Sales campaign which gave a big stimulus to the

Last year for the first time ever a Yamaha Power Products Division Dealers Convention was held in Nigeria. After that, during the period from October to December the Japan Trip Sales Contest was conducted. be three top Dealers from that contest are expected to visit Yamaha's home of-

# **Expanding their market** smoothly

From Yemen Arab Republic: The Jumaan Trading & Industrial Corp. (Mr. M.A. Jumaan, President), known as one of the leading enterprises in Yemen Arab Republic, is presently enjoying the smooth growth of its sales volume of



Portable generators serve as a handy power source for a Yamaha movies show thus increasing the PR effect of the brandname and quality product features.

Yamaha Power Products, Yemen Arab Republic, with a population of 8 million, is a country with a topography consisting mainly of desert and mountainous areas reaching over 2,000 meters in elevation, where electrical power and water supply are obvious problems. For these reasons alone people count on generators to a degree. Jumaan Trading & Industrial Corp. with its home offices in the capital San 'a is making every effort to expand the use of power products such as generators, throughout the country, takng into consideration the environment of each region in an effort to bring a higher standard of living with durable consumer goods. Due to the high brand image of Yamaha products their market is expan-

## South America is also showing signs of a sales war

In the countries of Central and South America times are beginning to look good for Yamaha Power Products. For this market it is still small scale, but in Paraguay (Autopar Comercial S.A.), and Uruguay (Limberg Moriera) are expecting a more than 20% sales increase, and in the future by means of properly planned and equipped sales networks, effective advertising and planning for the expansion of sales we are expecting to see the steady expansion of this market. In this respect one company which has a particularly excellent business policy is the Colombian Importer Eduardo Londono E Hijos Sucs. Ltda. President John Londono and his superior staff show organization at its fullest as they coordinate their Advertizing Division with sales and service activities toward the expansion of sales.

From Colombia: The Eduardo Londono E Hijos Sucs. Ltda, which has expanded its enterprises to include outboard motors under its Yamaha Marine Division, and Power Products, last October held a grand scale Dealers Convention at the Inter-Continental Hotel in Medellin where the home offices are located. In atttendance at this convention were 65 representatives of 50 subsidiary dealerships. The subjects of discussion included guidance on the proper handling of goods, sales policy, optimum stock of as well as parts and accessories. Advertising, Service etc. By the use of lectures, slides and movies they painted a picture of what a through business organization should be, and it proved to be an inspiring experience for all in attendance.

Colombia is a country with many rivers of abundant water supply where outboard motors, multi-purpose engines, water pumps for irrigation can be of use, as well as being a mountainous country with regions where electrical generators are needed. All in all it is a market with great

# The multi-purpose engine; an integral part of daily life

From Thailand: General Manager Mr. Prapat Ketmong Koi is the man in charge of the Power Products Division of Siam Yamaha. Last year, working from the bed of a truck, he made the rounds of the various regions of Thailand in such a powerful sales promotion effort that in one stroke increased their strategic sales locations by 2.4 times increasing the portable generator sales by 3.5 times and the multipurpose engine sales by 2.3 times. Then on the momentum of that effort he has set a sales target for this year which is up another 30%

Generators are used for home lighting, battery charging, and as a power source for fishing-luring lights, while the multi-



the general public







purpose engines are used as power for water transportation, sprayers, lawn mowers, air compressors, water pumps etc., all uses that are integral parts of the peoples' daily life. In the future multipurpose engines are sure to increase in life as well.

# Strengthening ties with

From Malaysia: Mr. Liaw Sche Chan, manager in charge of over 100 dealerships for the Lee Engineering Sdn. Bhd. which last year had an annual sales total of 1000 generators and 3000 multi-purpose engines, has set his sights on a sales goal for this year of 3000 generators and 5000 multi-purpose engines. Through his close tie-up with the individual dealerships he has been able to follow a policy of appeal ing to the customers through such projects as demonstrations, newspaper advertisements, and "Night Fairs". Along with these types of sales promotion activities he is also holding essential training courses for the individual dealers on shop display and sales techniques as occasion





Distribution and Processing of Fishery Products
Distribución y procesamiento de productos pesqueros



A great number of multicolored photos give a clear picture of fishery distribution system in Japan.

Sophisticated fish illustrations add another dimension to Fishery in Japan Vol. 2.



The combination of photos and illustrations affords a better understanding of fishery processing.

YAMAHA PERENTANA

The golden treasury of fishery products distribution & processing

Yamaha is continuing its extensive service and promotion activities for the mechanization of non-powered boats which will contribute to the modernization of fisheries. The new booklet has been compiled as part of these activities.

"Fishery in Japan Vol. 2" is completed as a sequel to "Fishery in Japan Vol. 1" which was published several years ago. In Vol. 2 the distribution system of various fresh aquatic products and many different kinds of processing methods are introduced while various fishing methods and gear used in coastal small-scale fisheries were illustrated in Vol. 1.

The new booklet is compiled as the digest of Japan's unique fishery distribution system and modern processing techniques applicable to various fish species and processing purposes, giving a clear picture of these important industries. We hope that the booklet will provide a good guide for those nations where only traditional methods or techniques are available and for those people who wish to learn more about advanced methods or techniques, or who are engaged in this line of work. Its coverage is very extensive as

#### 1. THE DISTRIBUTION System Peculiar to Japan Distribution Channel

- The Catch
   Status of Fish When Landed
- Transportation of the Catch to Consuming Districts
- Storage in Refrigerators
- · Consignment Distribution at Landing Ports
- Fish Processing Industries
   Functions of Fish Markets in Consuming
- Containers to Transport the Fish
- Fish Retailers and Final Consumers

# 2 THE PROCESSING Purpose of Fishery Processing Kinds of Fishery Processing

Techniques in Ice, Cold and Freeze

- Maintaining the Freshness
  Methods of Various Storages
  Pretreatment for Freezing
- · Technical Problems in Fish Processing · Preparing of Frozen Fish in the Home

#### Outline of Fish Processing Methods Present Status of the Fishery Processing Industry

- Fishery Processing by Fish Species
- **Dried Products**
- Salted and Dried Products
- Salted Products
- Boiled and Dried Products Fushi (Dried and Hardened Loins)
- . Namari-Bushi (Half Dried Loin of
- Skipjack) Smoked Products
   Kamaboko (Fish Paste Products)

- Hanpen and Satsuma-Age (Fish Paste Products)
- Fish Ham and Fish Sausage
- Canned Products
- Tsukudani (Seasoned Products)
- Shiokara (Seasoned Products)
   Tsukemono (Seasoned Products)
- Chinmi (Seasoned Products)
   Ready to Cook Food
- Feedstuff and Fertilizer

# 3. INTRODUCTION TO YAMAHA PRODUCTS

(Appendix) Statistical Data

# Specifications

No. of pages: 72 Size: 363 × 255 mm, multicolored printing (4 colors).

No. of photos used: 351, together with a number of illustrations and diagrams. Language: Bilingual (English & Spanish); English and French version is also available in the near future.

# Appendix (Statistical Data)

No. of pages: 4 Size: 359 × 254 mm, two-color printing; a number of illustrations, diagrams and tables are used.

Language: English



13-2-10-0



# Traditional specialities!

- Sweden -

Swedish woodwork has long been reputed for its unmatched excellence. Here is one of the best examples of it. Take a look at this SR500. A Scandinavian searobber (Viking) sitting astride the bike is made of wood. The smokescreened headlamp cowl, fuel tank,

side covers, side bag, dragon-shaped front fender and eye-catching rear fender are all made of wood as well. What a woderful work!

(The photo was received by the editorial staff of Yamaha News, without information concerning the artist and owner of this bike.)

