

A Stronger Identity '84



President Hideto Eguchi

Since 1983, when Hideto Eguchi assumed the presidency of Yamaha, virtually the entire industrial establishment has been struggling to cope with the recessionary times. The motorcycle industry has certainly not escaped the effects of these no-growth years. But this recession can now be seen as a passing one for the motorcycle industry; the structure of the economy is still sound and better times lie ahead. Shortly after being named president,

Mr. Eguchi called for renewed confidence in Yamaha and the future. "We must not be pessimistic," he said in his inaugural address, "rather we must place trust in our worldwide reputation for quality and performance. We have built a solid foundation over the years, and by cooperating with one another we can certainly build on it in the years to come."

The immediate past has certainly been difficult. But Yamaha has now carried out the basic reforms necessary to cope with the changed times and looks forward with renewed confidence to a progressive and more fruitful 1984. In the coming year the company intends to continue its revitalization program and take the kinds of strong, concerted actions needed to prepare for the better days ahead. In his New Year's address, President Eguchi outlined some of his hopes and goals for the next twelve months:

This is the year in which we will consolidate the base we have built to make Yamaha a stronger and more fruitful company. This will require great efforts on all our parts, and as we work hard this year I would like for all of us to keep the following points



President Eguchi inspecting an assembly line

in mind.

1. We must continue our dedicated effort to create top-quality products, each with an individual spirit of its own. By doing this we will also be improving and strengthening the Yamaha image.
2. We must switch emphasis from a policy of volume sales to one which provides opportunities for all members of the Yamaha family, including importers and dealers, to profit to the fullest.
3. We must remain the most dealer-oriented and customer-conscious maker in the business, and become even more "family" oriented than before.
4. We must always show our vitality to the public by continuing to develop an organization with a bright, clear and dynamic corporate personality.
5. We must try even harder to grasp the trends of our times, and then

translate our perceptions into the kinds of products, management structures and organizational policies we need and our age demands.

Of course, all of us accept the need to realize these goals. But to actually accomplish them will take a truly dedicated effort. I will do my utmost best to meet the challenges of the coming year, and I humbly ask for your support and cooperation.



On the beginning day of operation President does honor to those employees who have made excellent IPC (Improvement of Personal Capacity) proposals.



President Eguchi congratulating young employees for having attained manhood or womanhood (at the age of 20).

562 PROPOSALS ARE ADOPTED WITHIN A YEAR



Mr. S. Oguri

Winning the individual category of the Improvement Proposal System for two years consecutively

This year, on the beginning day of operation Mr. Shinkichi Oguri was commended for the best results in the individual category of the 1983 Improvement Proposal System. Mr.

Oguri is one of the most ardent proposal makers and won the individual category for the second consecutive year. Within 1983 he made a far greater number of improvement pro-

posals than any other employees, 562 of which were adopted! This was an amazing new record ever set by an individual. "Whenever I find something unsatisfactory while working, I gaze at it for five minutes", says Mr. Oguri, "It's the start of my improvement attempt. Anything unsatisfactory or inconvenient in our workshop must be eliminated by any means. When it is located, I take notes for later study and analyzation."

"I make it a rule to realize 50 improvements each month", he continues, "I do every possible effort to

attain a target. I neglect none of my planned improvements, however minor it may look. I believe that a great improvement can be achieved only on the basis of a heap of many minor improvements as an old proverb says - Many a little makes a mickle". It is really encouraging that his achievements are arousing the fresh enthusiasm of improvement proposal making among lots of other employees who wish to increase work efficiency and reduce production cost, thus contributing to the improvement of Yamaha's corporate activities.

The 1984 Yamaha motorcycle line-up is enjoying a very bright prospect in all major markets of Europe with a sales season drawing near. Tremendous popularity the new line-up is gaining even before it is actually launched on the market is reflected in the results of the annual "Bike of the Year" contests sponsored by Europe's well-known motorcycle journals like Motor Cycle News (Great Britain), Moto Revue (France) and Motorrad in West Germany. Especially in the Moto Revue-sponsored contest the RD500LC won the on-road bike category while the XT600 Ténéré was voted best in the off-road bike category.

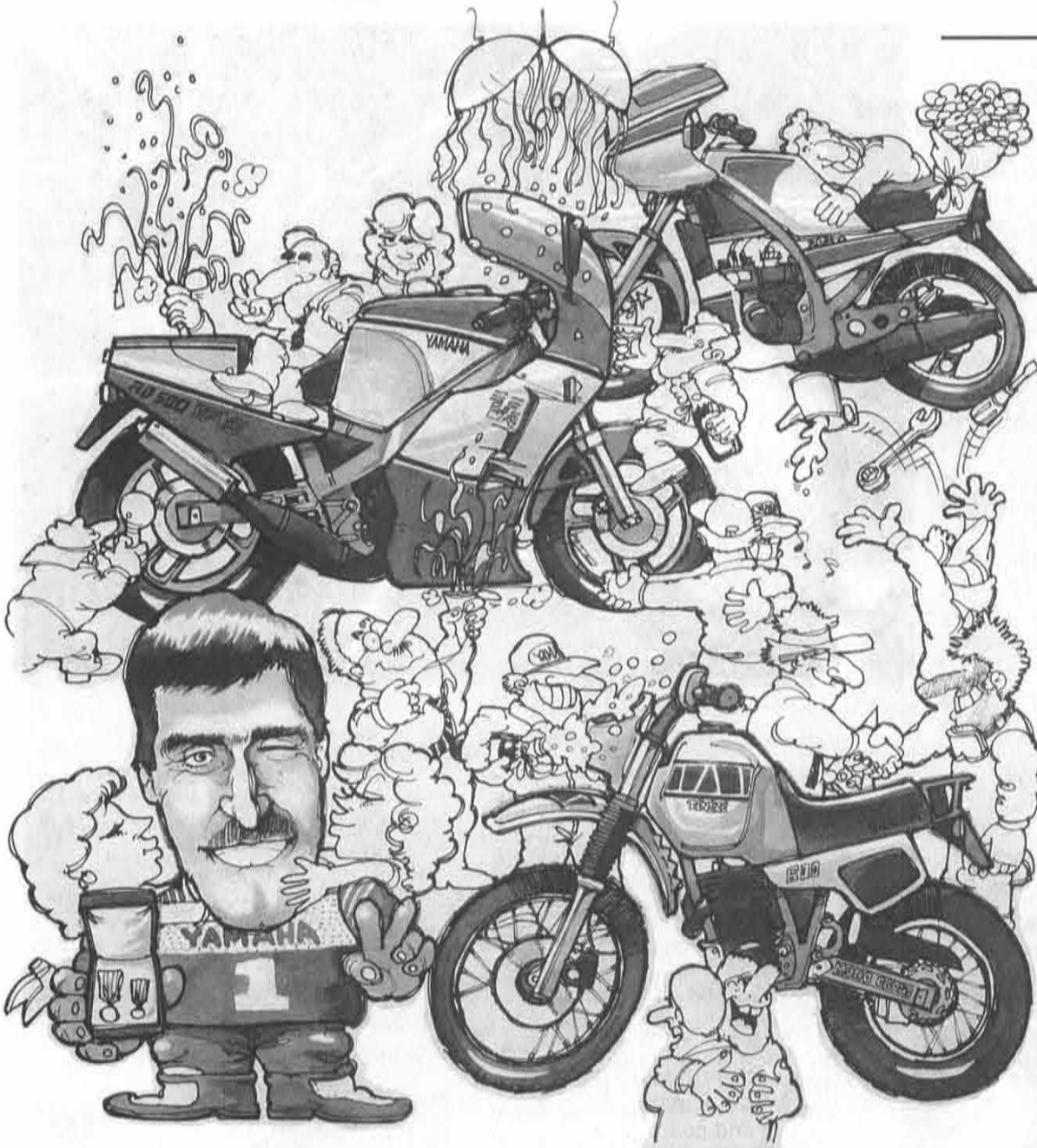
others..... The almost same thing can be said of the success of the XT600 Ténéré in the off-road bike category. The contest saw a close three-way competition between the XT600 Ténéré, the CR480 (Honda) and the XLV750 (Honda). Especially, the CR480 proved itself to be a far tougher rival to the Yamaha than the other Honda. The Yamaha became the eventual winner by very slender margins (21% to 20%) mainly because its superior competition performance bred from the success in

RD350LC retains number one position

Yamaha RD350LC was voted best bike in the 251 to 600cc category of the world renowned motorcycle popularity contest

called "Machine of the Year" sponsored by Motor Cycle News. RD350LC has retained number one position in the middleweight class for the third consecutive year. The original RD350LC was truly a great machine and a number of new modifications introduced for 1983 has made this model keep pace with the times.

Bravo YAMAHA!



Sports journalists select "Carla" as "Man of the Year"

Hakan Carlqvist received the highest rated gold medal in Sweden for his World 500cc Motocross Championship crown 1983. It was the big morning daily paper Svenska Dagbladet that honored Carla with this most prestigious award for sports achievements in Sweden during the year. The Svenska Dagbladet gold medal award is rated as the very top achievement a sportsman can reach in Sweden and the publicity for this event and appointment is fantastic both in the media and on television. This award system has become one of the most popular annual events in Sweden since it began in 1925. On the day succeeding the announcement of the winner not only sports journals, but also a great number of daily papers devote much space to reporting it as a nationwide news. Carla was selected as Man of the Year by the grand jury consisting of twelve people of whom two came from the morning paper while the other ten were representatives of the various Swedish sporting

organisations. Of the 148 votes that were received in this voting, Carla's name was on 141 lists with a total score of 1,187 points. He was selected "first and top man" on 57 of the voting lists. Hakan won ahead of tennis super star Mats Wilander who totalled a mere 838 points which made Carla's victory even greater in value. It was, in fact, the most spectacular and overwhelming win ever seen in the voting's 39-year-old history. And never before has there been so many names to choose from: in all there were 16 contestants for the title. The people who got the award before were all superstars like Bjorn Borg, tennis player and Ingemar Stenmark, skier. The only time this award was ever given to motor sports men before came in 1961 when Sten Lundin and Ove Fundin, the World Champions in motocross and speedway, respectively received the medal. It is therefore with utmost pleasure for motorcycle world, too that Hakan Carlqvist's winning this award will really establish him as one of all time greats in Sweden's sports history. It's not too much to say that every Swedish sportsman dreams of this honor and new winner Carla says "I'm very happy to receive this superb award since it is only the second time in history that this goes to a motor sports man. I know that Bjorn Borg and Ingemar Stenmark have received this medal twice and they are the only ones who doubled the Svenska Dagbladet gold medal award during its nearly 60 year old history. So, I shall now do my best to win another title and maybe again be selected for the yearly award from Svenska Dagbladet, though I will have to have a big headache of high-rate tax payment."

RD500LC and XT600 Ténéré win the "Bike of the Year"

—Moto Revue (France)—

Overwhelming!

The RD500LC, designed and engineered as a real GP machine replica for the road, is already acknowledged as the new world leader in the field of high-performance supersports bikes. In the contest this model beat the Honda RS500 by big margins (27% to 21%). RD500LC's overwhelming victory holds up a true mirror to the existing state of sports enthusiasm in France. The RD500LC, the ultimate 2-stroke road machine developed from King Kenny's GP-winning YZR500, comes up with everything that strikes a chord of feeling in the hearts of sports enthusiasts - the compact, lightweight V-4 2-stroke engine, the computer-controlled Yamaha Power Valve System (YPVS), a unique oiling system, precise, predictable handling of the machine with rising rate Monocross rear suspension, antidive front forks, triple large-diameter disc brakes, a frame-mounted racer style faying and many

the most punishing Paris-Dakar desert rally was more appealing to French off-road sports enthusiasts.

RD500LC named as the best in the 500cc category

—Motorrad (West Germany)—

The Yamaha RD500LC became the most popular bike in the 500cc category of the popularity contest given by Motorrad, West German's most influential bike magazine with the largest circulation, while it ranked third in the overall placings (first, BMW K100 RS; second, Honda VF1000R). The RD500LC won 36,892 votes against 7,040 gained by the nearest 500cc rival Honda VF500 FII. This means that the RD500LC is establishing itself as an unchallenged leader in this category. The RD500LC with the V-4 2-stroke 90ps engine hits a top speed of 200km or more. It is accepted as a determined challenge to another new level of motorcycle technology. Design concepts exclusive to this model are calling forth a strong response among lots of high-performance road bike fans in West Germany.



Newspaper clippings giving prominent coverage to Carla.



"King" Kenny Roberts in 1984

GP fans have been impatient to know King Kenny's future plan since the 1983 title battle was brought to a very dramatic end. It has undoubtedly been the greatest off-season topic of conversation how King Kenny would decide on the course of action for 1984. Now his plans have been finalized for 1984 as follows: Kenny Roberts announced on December 22, 1983 that he would not be competing for the 1984 500cc world championship. It was also announced that he has been named as Senior Consultant to Yamaha Motor Corp. U.S.A. He will be aiding Yamaha in the research and development of its products, as well as providing marketing and promotional assistance to the company.



"I've enjoyed my years in Grand Prix racing, but the heavy schedule has prevented me from spending enough time with my family and from pursuing other interests. One area I really want to put some effort into is helping expand interest in all types of motorcycling. We need to develop ways to get more people enthused about, and involved with, our sport. It's no secret the

entire industry has been in the doldrums, in part because people have forgotten, or never know, just how much fun riding bikes can be. I want to help spread that word and get more people up on two wheels", said Roberts.

In his last year of world championship competition Roberts won six races and became the first rider to ever achieve that many season wins without taking the series championship. He finished second in 1983, missing the title by just two points. "The 1983 season was one of the hardest, but the organization of the Yamaha Marlboro Team under Giacomo Agostini made it a highpoint in my career so far." As part of Roberts new association with Yamaha U.S.A. he will be appearing at a limited number of races in the United States and

Europe. No final decisions have been made yet in regard to any specific appearances. As a Senior Consultant to Yamaha, Roberts will provide input for the company in regard to the design of its high performance street motorcycles. He will now be working more closely not only with the U.S. arm of Yamaha, but also with designers and engineers in Yamaha to translate his understanding of engine and chassis design into products for street riders and enthusiasts. In addition, he will provide advice to Yamaha race teams, not only in the United States, but on a worldwide basis. Roberts' specific activities in this regard are still in the planning phase. However, the company has made clear its commitment to utilize Roberts' expertise to maximize the effectiveness of the company's competition program in 1984.



desert racer in the second season of its debut. Included in the Yamaha line was the SR250 made by Spanish SEMSA in technical tie-up with Yamaha Motor.



Enthusiasts surrounding the RD500LC even right before the closing time.



Lots of visitors listening to Yamaha model commentaries.

From Editorial Room

Asking for your Cooperation

We want to make Yamaha News a paper that serves your needs

Yamaha News presently has a circulation of 20,000 in English and 6,000 each in our Spanish and French editions, which are sent to readers all over the world. That means that when we put together our issues of Yamaha News we have to consider the needs and interests of all these countries. Of course, we have to consider differences of custom and life style, we even have consider the fact that the seasons are reversed for our readers in the northern and southern hemispheres. In spite of these differences, there is one thing that all of our readers have in common. All are members of the Yamaha Family, and in this regard we all share a common interest. It goes without saying that if you consider all of the different countries and the different races involved there are an endless number of differences, but when broken down into groups according to the size of company or shop, types of goods handled and types of clientele served, we begin to see a lot of similarities as well. It would be practically impossible to publish a Yamaha News that satisfied all of our readers 100%, but we, the staff of Yamaha News, want to do everything we can to make our papers as useful and interesting to our readers as possible. This is why we always look forward to the contributions you send to Yamaha News. Send us photos and explanations of events such as sales campaigns and sales promotion activities that have taken place in your area. We will be happy to receive any news you have, concerning your shop, your staff, local events, market trends, etc. The information you send us may prove to be of great value to another of our readers, just as the information someone else has sent may spark an idea that you can apply to your own business.

New business goals confirmed

Yamaha dealer meeting in Nürnberg



From left to right: Mr. Onozawa, Mr. White (new managing director), Mr. M. Wimmer, Mr. Azeike (president of German Mitsui Machinery), Mr. Toyama, Mr. Kajikawa and Mr. Kurten (a well-known sports announcer serving as meeting master).

The Yamaha dealer meeting held late in 1983 in Nürnberg, West Germany was attended by 750 people from 450 Yamaha motorcycle shops, together with the representatives from Yamaha Motor N.V. and German Mitsui Machinery. In addition, European Enduro Champion Eddy Hau and 250cc GP road race rider Martin Wimmer (placed 6th in 1983) were also present. During this meeting Mr. Muller White, new general manager of German Mitsui Machinery was introduced to the dealers. General presentation took a form of dialogue between Mr. White and the meeting master. In this presentation Mr. White emphasized the importance of closer cooperation between Yamaha, Mitsui Machinery and all dealers, in the light of the existing state of business. This received very positive responses from all

people present. Mr. White, who is a well-known service and parts expert with very extensive and accurate knowledge of pro-



Exhibition of new models. Refreshments are served. A band concert and shooting game entertain the dealers.

ducts and market trends, is sure to give full play to his superior ability for his new assignment. The Nürnberg meeting was followed by similar meetings held in six other cities, introducing new models and confirming new business goals by looking far ahead into market trends.

XT600 and IT200 unveiled in Italy

Milan Motor Cycle Show

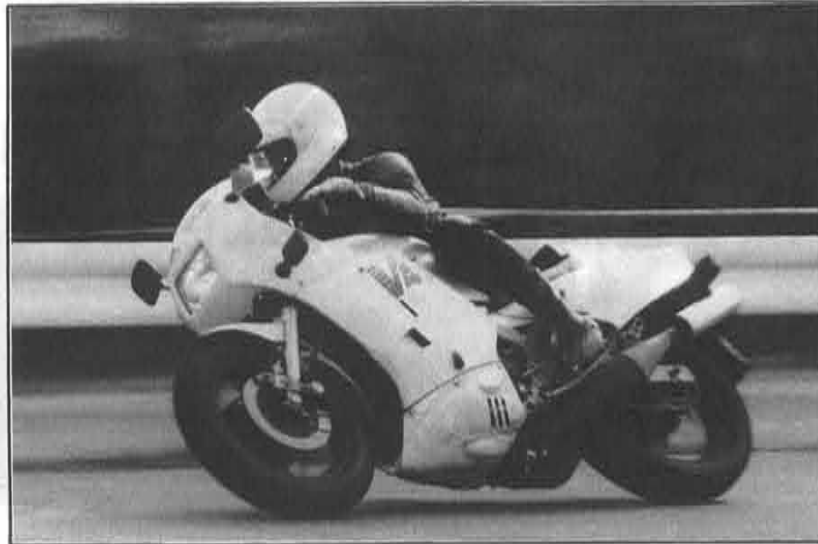
The 1984 Yamaha full line which created a big sensation during the Paris Motor Show, received the same kind of enthusiastic responses from lots of visitors when it was introduced at the Milan Motor Cycle Show held late in 1983. The Milan Motor Cycle Show is reputed to be one of the most popular events of the kind. It's another showcase for world motorcycle industries. It was felt that the show of 1983 became extremely alive with a greater number of exciting new models being introduced by all major motorcycle manufacturers especially Italian manufacturers like Moto Guzzi, Laverda, Ducati, Cagiva, etc. The 1984 Yamaha full line also grabbed the show spotlight, including the fantastic 2-stroke V-4 RD500LC and all-new 4-stroke superbike FJ1100. In addition, the XT600 and IT200 made their European debut in this show, thus overjoying European off-road fans. The XT600 Ténéré, a special Paris-Dakar rally model, was also exhibited. This model established an unmatched reputation as a high-performance



XT600 makes its European debut.

Yamaha technology in the spotlight

**A GP
racer replica
for the road**



Riding on and on What a striking resemblance to the YZR500! Acceleration is truly exciting and dynamic.



Testing is repeated over and over again. The RD500LC will soon make its debut as the new flagship of the RD line.

RD500LC comes up with all-new technological

As you may notice, motorcycle technology, especially in the field of high-performance supersports, has made such rapid advances within a very short time in response to the needs of changing times, thus giving birth to a number of quality models including the all-new supersports RD500LC with more of long proven racer technology. This model has created a worldwide sensation even before it is launched on the market. It has been voted best in several "Bike of the Year" contests promoted by Europe's influential motorcycle magazines and journals.

The RD500LC is called a replica of "King" Kenny's GP-winning YZR500 because of its unmatched technological superiority in 2-stroke supersports field. It may be taken as a good illustration of new technological concepts that Yamaha is adopting for its motorcycles of tomorrow.

Such tremendous responses are attributable to the fact that the RD500LC based on Yamaha's long proven racer technology has not only satisfied the needs of changing times, but also embodied the dream of high-performance enthusiasts.

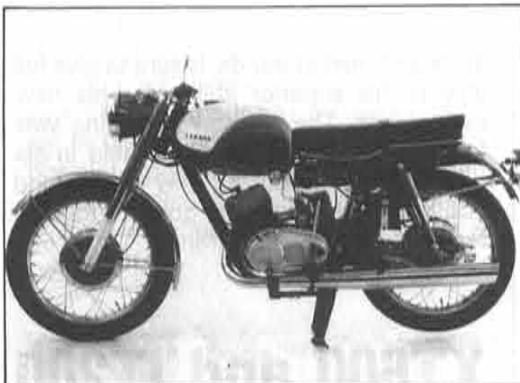
Race-bred technology

Yamaha has long and consistently followed its motorcycle research and development principle that the race track should be a serious testground for new technological features to be fed back into production bikes.

As you know, the 2-stroke twin RD series has a close technological link with the 250 YDS that was reputed to be the first real supersports bike ever built in Japan. This lineage can even be traced back to Yamaha's first road sports 250cc YD1 while at the same time giving an account of YD-A/B racer designs.

In other words, the first racing machine was developed based on a production model with the aim of testing new technological features essential to the improvement of the latter through aggressive participation in racing. Yamaha did not hesitate to adopt the new race-proven features into the development of a better production bike which would in turn provide a technological base for the development of a more competitive racing machine.

Race activities and production model improvement have been closely connected



The first real supersports built in Japan - YDS-1

with each other until now we see the latest RD series coming out with more of the foremost racer technology. Let's take a look at a technological link between Yamaha production racers including the TD1 and Yamaha 2-stroke supersports bikes including the latest RD/LC series. This will make it easier to understand an inseparable connection between race activities and production model improvement.

The YDS-1 was developed based on the YD-A/B racers, which showed outstanding performance in the Asama Volcano Race, Japan's first big speed event held in the late 50's and in the 1958 Catalina Island GP in the United States.

The YDS-1 was improved to become the YDS-2 from which Yamaha's first production racer TD1 was developed. The TD1 provided an important technological base for the development of the TD2 and 350cc TR2. This production racer lineage was closely related to the progressive development of supersports bikes, that is, from the YDS-2, through the YDS-3, to the 350cc R1.

Similarly, the TD3 and TR3, which were as competitive as works machines of other brands, were developed based on improved supersports bikes, the DX250 and RX350 respectively.

Greater consideration was given to production model improvement over race activities until a water-cooled engine was newly developed. From then on, race activities were given greater emphasis, thus giving birth to the TZ250 and TZ350 from which the latest RD/LC series has been developed. The latest TZ series also features more of the most advanced works racer development technology, including an improved liquid-cooling system, better

handling chassis construction, etc.

As mentioned earlier, Yamaha considers the race track as an extremely important testground for its racer technology.

For Yamaha race activities and production model improvement are something like two sides of the same coin and their inseparable connection has continued to realize high performance and high quality in all production models.

Until now Yamaha's aggressive and successful race activities have achieved a lot of significant technological improvements.

These included the Yamaha-original rotary disc induction system, a revolutionary 2-stroke lubrication system "Autolube", a reed valve/7-port "Torque Induction" system and CDI system, as well as YEIS, YPVS, liquid-cooling system, Mono-cross suspension and wide lateral frame design concept, all bred from leading works racer technology. This proven research and development principle has also been applied to the development of the new RD500LC and no supersports bike has ever featured more GP racer technology than this model. The RD500LC is designed and built to be a replica of the world renowned YZR500 racer.

The heart of this model is the engine. The RD500LC is the first production bike to come out with an exciting 2-stroke V-4 engine, following the layout of the GP-winning YZR500 racer.

The box section main frame tubes are widely spaced to lower the position of a large-sized fuel tank. The 16-inch front wheel, chamber-type mufflers and a full racing style fairing help to give a specially aggressive look to this model. All these features make this supersports model bear an amazingly close resemblance to the YZR500. But it is not these individual features as much as Yamaha's basic concept itself that has realized the inseparable technological link between the YZR500 and the RD500LC. The latter has been developed in pursuit of the ultimate in supersports performance based on brilliant technological achievements by the YZR500. For this reason the RD500LC can be called a GP racer replica for the road. From this view point it is not too much to say that the RD500LC is a good embodiment of the new technological concepts that Yamaha is adopting for its motorcycles of tomorrow.

It's built to run !

The RD500LC represents the ultimate in supersports machinery. First, it is characterized by the super-precise handling of the chassis. The wheelbase is no longer than that of a 350cc bike, and the use of correspondingly compact and lightweight component parts has achieved an ideal centralization of weight mass, making it possible to obtain the lowest possible center of gravity. From this point alone the RD500LC can be called a GP racer replica for the road.

The RD500LC allows pillion riding as a street-legal machine but the real bonus comes from the superbly balanced, precise handling of the chassis as compact as a 350cc bike, yet with much more power potential.

The essence of this supersports bike lies in the full enjoyment of high-speed riding without a passenger. For example, a full fairing becomes effective as a wind protector only when the rider is prone, showing that it is designed and constructed just in favor of high speed performance.

The same can be said of a V-4 engine design. In this design the width of the engine can be reduced and the center of gravity can be lowered. The V-4 engine is as narrow as a twin engine, allowing the ideal centralization of weight mass, while securing deeper lean angles with a lowered center of gravity.

All-new V-4 engine

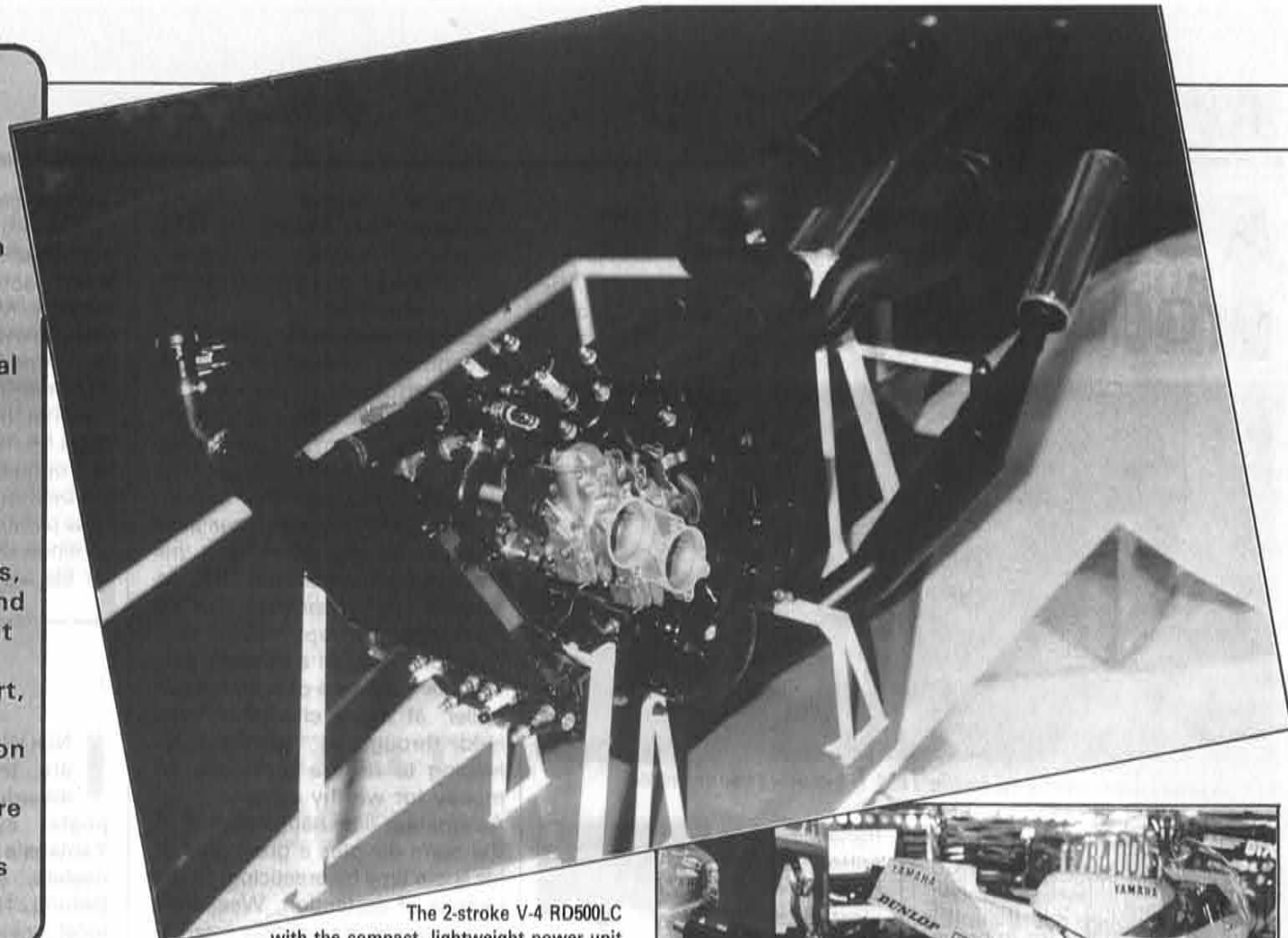
The V-4 engine on the RD500LC is a new departure from the conventional V-4 design.

The two banks of cylinders are set at the narrowest feasible angle (50-degrees), with the piping of intake and liquid-cooling systems being arranged within the V space, to make the whole unit as compact as possible, while helping to obtain the shortest possible wheelbase. Any vibration is smoothed out by a two-weight balancer very effectively.

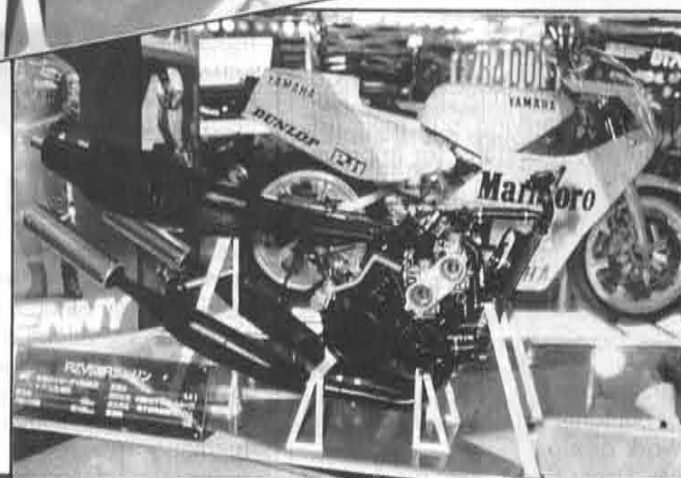
Aimed at achieving the lowest possible center of gravity, the front cylinders are arranged almost horizontally. The use of middle-sized spark plugs and an ultra-thin radiator fan motor is suited to an extremely limited space.

Each of the twin-cylinder blocks has its own crankshaft. The power from these crankshafts is taken to the transmission via

The last few years have seen remarkable advances made in the field of motorcycle technology. Many of the technologically conflicting factors, the solution of which was formerly given up for almost impossible, have already been overcome. For example, even if an engine brings both high power and fuel economy, it is no longer anything special, it is now expected as a standard feature. Today the engine must be designed and built with the ideal combination of these seemingly conflicting factors in mind. In the midst of today's hot technological competition we must avoid adhering to an easygoing idea that a powerful engine can never be an economical engine. Motorcycle users, especially high-performance enthusiasts, are becoming more value conscious, with keener critical eyes for the performance and quality of a product. With these facts in mind, it is important to note that racer technology is getting more attention than ever before. In short, all the performance details of current racing machines are providing the technological base on which supersports bikes of immediate future should be developed, while in the past they were designed and engineered along developmental lines aimed at projected technological standards for three or four years in the future.



The 2-stroke V-4 RD500LC with the compact, lightweight power unit and the lowered center of gravity marks a new era in the development of Yamaha technology.



The power unit features more of Yamaha's long proven racer technology. Everyone considers the RD500LC to be a real replica of the YZR500.

concepts

the primary reduction gear. The engine needs no idling shaft for taking the power from the front and rear cylinders.

In addition, the newly designed transmission allows for an overlap layout of the counter shaft and drive shaft so that the size of the whole power unit is greatly reduced with its total weight being decreased.

A trochoid oil pump is mounted low down in the newly designed transmission case to pressure-lubricate the shafts and gears, thus decreasing the amount of oil consumed and preventing power loss due to oil churning. This is also a race-bred system. The engine also employs a unique oiling system. Yamaha's famous "Autolube" system on this model utilizes a YPVS servo-motor which is linked to the oil pump and senses engine revolutions so that the amount of oil is metered more precisely. This improvement has come from a concept that the oil tank must be as compact as possible without decreasing the oiling performance.

This advanced oiling technology is exclusive to the RD500LC.

The oil tank is no larger than that of a 350cc bike. It needs no oftener refilling than that of the RD350LC for the maximum of oil economy.

The YZR500 features a rotary disc valve intake system but on the RD500LC a piston reed valve intake system is adopted for the front cylinders and a crankcase reed valve intake system for the rear cylinders. By so doing, Yamaha has avoided the design complexity of an intake system for this production model, while at the same time achieving optimum matching to the power development characteristics of the RD500LC, which differ from those of the YZR500 due to the altered exhaust system layout.

When the intake system is laid out within the V space, the exhaust system inevitably branches off into two parts, front and rear. The size and shape of the system must also be altered, causing a delicate change in power development characteristics.

In this situation Yamaha's way of thinking is that the RD500LC can be considered as having two separate twin-cylinder engines and trying to achieve the best possible balancing of these two engines is more practical than adopting the same type of intake system as the YZR500.

The primary reduction mechanism which

takes the power from the two crankshafts features a combination of friction gears to effectively prevent "backlash" noise for extra-quiet operation.

In addition, the balancer shaft is laid out in the space between the front and rear crankshafts. The balancer mechanism on the RD500LC is very effective to smooth out any vibration, thus lessening the load on the frame so that its total weight is reduced. The balancer mechanism is a gear driven single-shaft two-weight type.

In this V-4 engine each weight is capable of suppressing the vibration equivalent to 100cc, thus making it possible to adopt such a compact, lightweight chassis design.

No compromise is allowed!

The racing machine is built to run. It is second to none in high-speed performance. There is a growing tendency that most race-bred performance characteristics, including even exhaust sound, find their way straight into production models.

The racing machine, therefore, must play a more and more important role as a running laboratory.

The racing machine allows for greater freedom of design because it needs no street-legal equipment such as lights, air cleaner and battery, while the production road-going bike must be designed and engineered in compliance with all applicable laws and regulations.

How to coordinate all the street-legal equipment with race-bred technology in a production bike - this work is not so easy as it may look. In developing a racer-based production bike the design and engineering of various street-legal equipment must be considered as important as the actual adoption of as much race-bred technology as possible.

The former often proves to be a crucial factor in the general evaluation of a production bike. Seen from the above viewpoint, the design and engineering excellence of the new RD500LC is self-evident.

The powerful new V-4 engine is mounted on a compact chassis with the shortened wheelbase no longer than that of a 350cc class bike. This is the embodiment of how hard Yamaha has strived to achieve a new high in design and engineering excellence. The construction of the box section main frame tubes is the very picture of

"dynamism". It is rigid and strong enough to meet the big power potential of the new V-4 engine. The use of gusset plates is held to a bare minimum in the frame construction with the smallest possible number of welded joints. The newly designed balancer mechanism smooths out vibration, making it possible to adopt the rigid mounting system. It also helps to increase the rigidity of overall frame construction, thus contributing to the improvement of handling characteristics.

In addition, other chassis components, which have much to do with the improvement of handling characteristics, including the suspension, wheels, tires and brakes, have also been newly designed to meet the power development characteristics of the new V-4 engine, such as a wide power band and exciting acceleration performance over the entire speed range. This shows that the know-how of the GP-winning YZR500 is fully featured in the RD500LC.

For example, both tires are V-rated for ultra-high speed use. The brakes are the large, ventilated anti-fade triple discs. The front wheel follows current racing practice and is of 16-inch diameter. This small-diameter wheel allows quick, super-smooth high-speed machine handling even in tricky situations like an S-type bend.

It has a larger outside diameter equivalent to 17 inches. The front wheel including its steering alignment features an advanced design that resists or smooths out the shock or impact received from the road surface. This also follows YZR500 practice. The Yamaha-original C.A.D. (computer aided design) has made the wheel as lightweight and rigid as possible. In addition, the drive chain line is set with the use of wider-section racing tires in mind.

Another of the most significant features of the RD500LC is the bottom link type rising-rate Mono-cross suspension system. The single De Carbon-type shock absorber used in this system is positioned horizontally below the engine, resulting in the ideal centralization of weight mass and the lowest possible center of gravity.

Keeping pace with the improved rear suspension system, the front fork has sturdy 36mm stanchions. The rigidity and strength of the front fork have also been increased to meet the high-performance 16" front wheel. An adjustable anti-dive system prevents the nose-dive effect and

ensures better steering even during hard braking.

RD500LC marks a new era in the development of Yamaha technology

The RD500LC, called a GP racer replica for the road, bears an amazingly close resemblance to the YZR500. The former has been developed based on the latter. They share much of the foremost racer technology. But they should be quite different in nature, after all. It is here that the germ of all-new technological concepts has been cultivated. In designing the new RD500LC Yamaha has consistently followed the racer replica theme at the same time that equally strong emphasis has been given to the quality and performance of street-legal equipment that a normal road-going sports bike should have. How to make these conflicting factors compatible in this ultimate supersports bike - this has been a crucial point. Yamaha has allowed no easygoing compromise to intervene with design. The shortened wheelbase is a good example. It is no longer than that of a 350cc class bike, showing that the RD500LC is built to run, not as a conventional road bike but as a superbly-fast but tractable supersports. A full racing style fairing is designed to reduce the wind resistance to a minimum when the rider is taking a prone position, although it provides little wind protection for his normal sitting position. This also follows current racing practice.

The engine is kick started. The kick crank can be pushed down folded. Then the pedal is erected and kicked down off the fairing. This design makes it possible to adopt the narrowest possible fairing. The coefficient of wind resistance is reduced to 0.3.

The RD500LC, with more of what the GP racer has, is sure to set new standards in supersports performance and quality, while at the same time providing a new technological base for a more powerful and reliable racing machine which will in turn spur the development of an even higher performance supersports bike, and also other high performance, high quality machines.

Grass track racing



Original mopeds are race-modified in their own ways. Can you know one from another?

INDONESIA: Indonesia is among the most enthusiastic motorcycle sports countries in Southeast Asia. In this country a new competition category has recently grown in popularity. This category is called "grass track racing" which is open to amateur riders. A track is prepared on a convenient-sized green field, allowing a number of amateur riders to take part in racing with their own machines. Grass track racing provides the unique ways that those riders can enjoy speed competition more safely and inexpensively than in motocross or road racing.

Around Bundung in Java two or three grass track race meetings take place each month and in each meeting 5 to 8 races are run from 10:00 till 17:00, attracting a large audience estimated at 3,000 to 5,000.

The meeting covers various competition categories such as moped, sports bike, trials machine and motocrosser but the main part is undoubtedly moped racing in which race-modified 50cc mopeds compete for speed superiority. The Yamaha V80 is the most successful model in this racing. The grassy track with some ups and downs looks like a motocross cir-

cuit and participants must prepare and modify their machines with actual surface conditions in mind. Recently, at the strong request of local organizing dealers Mr. Kazutoshi Iwao, Yamaha's special instructor trained amateur riders in advanced off-road riding techniques and correct machine maintenance during his one-month stay in Bundung.

The meeting is usually sponsored by local dealers, parts shops and oil shops. These sponsors offer trophies and prize money for race winners. On the day of racing various stall-type restaurants are opened around the track, giving another recreation to local people of few pleasures. This tendency is seen not only in Bundung, but also in many other areas. Grass track racing is a kind of goodwill social gathering, rather than a mere sports meeting.

Apart from professional or semi-professional, Indonesian amateur riders are very enthusiastic about enjoying motorcycle riding in their own ways and Yamaha-original off-road training is very favorably received by them. The training also proves a very effective means of public relations aimed at lots of would-be grass track race riders.



Ten "Bond" bikes get together!

TOKYO: Sean Connery has stepped back into the limelight as James Bond after an 11 year absence in the extremely popular "007" series.

Sean Connery "James Bond" thrills and excites us with his superhuman actions in the latest movies titled "Never Say Never Again" recently released worldwide. In his life-and-death combat with enemies, he has, as usual, a good command of various wonderful weapons including a specially-equipped Yamaha XJ650 Turbo.

This is not the first time a Yamaha bike has been used as a "007"

vehicle weapon. Another "James Bond" once used a Yamaha XT500 in the previous movies of the series but the XJ650T ridden by Sean Connery "James Bond" provides more highlight action scenes.

"Never Say Never Again" was released on Dec.10 in Tokyo and 10 "Bond" bikes with 10 riders all putting on a Bond makeup were lined up in front of a big theatre at the shopping and entertainment district of Tokyo. This was a good attraction for the newly released movies, as well as a very effective PR exercise for the Yamaha XJ650T.

Extending the Yamaha outboard market

SINGAPORE: Supratechnic (PTE) Ltd., sole distributor of Yamaha outboards in Singapore, are actively taking part in various powerboat events organized by the Singapore Powerboat Association in which the company have gained membership as part of their extensive sales promotion program. The associa-

tion is the only organization of its kind approved by the Singapore Sports Council and participation in SPA-organized events proves very effective in promoting the spread of the brandname of Yamaha.



Yamaha police bikes for Delhi Police

INDIA: Escorts Ltd. in technical tie-up with Yamaha are producing RD350-based police bikes at their factory. These bikes are renowned for their high performance and outstanding maneuverability. 70 bikes were already delivered to Calcutta Police. Late in 1983 Delhi Police also received the first batch of 10 bikes which were specially built to meet the

changing needs of law enforcement agency in the Capital. On Nov. 18, 1983 the bikes were presented by Mr. S.D.S. Mongia, Senior Vice-President of Escorts, to Commissioner of Police S. Tandon at a function held at the Police Headquarters. Other polices have also made an inquiry to the company for these police bikes.



Yamaha-McDonald tie-up in Japan

TOKYO: A Yamaha-McDonald joint sales promotion which was recently carried out in Tokyo in the same way as in Germany, was brought to a far greater success than expected.

Seven Yamaha dealers in the western part of Tokyo tied up with seven McDonald restaurants in the same area for a 3-day Yamaha scooter sales promotion campaign. A Yamaha corner displaying a range of new scooters for spot sale was provided in each McDonald restaurant. This method was very effective in making the image of Yamaha scooters more impressive to lots of visitors by making it overlap with an already-familiar image of McDonald commodity. The three-day cam-

paign program was given much variety, including a lottery, road-safety quiz, janken game (paper-scissors-stone game), etc. The customers at McDonald's cover a wide range of ages, thus increasing the market penetrating effect of Yamaha scooters.



An amazingly tough Yamaha carries 300kg puls one person

INDONESIA: As you know, Yamaha bikes offer a very wide range of applicability. They are used in a number of different ways all over the world, bringing both pleasure and convenience to people's lives. For example, Yamaha bikes prove themselves to be most reliable workhorses for lots of Indonesian farmers, and introduced here is a Yamaha DT100 used in a coffee plantation in the Lumpung district of Sumatra. This district presents an extreme complexity of topography including highlands, basins, valleys, rivers and lakes. Coffee which is produced on highlands must be transported to a distant commercial port. The transporter must tackle all kinds of punishing terrain conditions all the way, even trudging a mountain path and crossing a river using a ferry boat. It is rather a hard work for everyone and it is here that the Yamaha Trail DT100 shows its real ability. The DT100, loaded with three coffee bags, weighing 100kg each, plus one person in the rear, goes on and on, negotiating various rough conditions smoothly and dependably. That's truly its speciality! "What a durable bike my DT100 is!" says the transporter, "It is capable of making several double-trips a day. But for this bike, my work would be almost too much to stand".



Looking to more pleasure with Yamaha



THAILAND: Yamaha outboards which have won wide acceptance as powerful, dependable workhorses, are fast extending the range of applicability to the pleasure field as well. (taken at a beach resort)

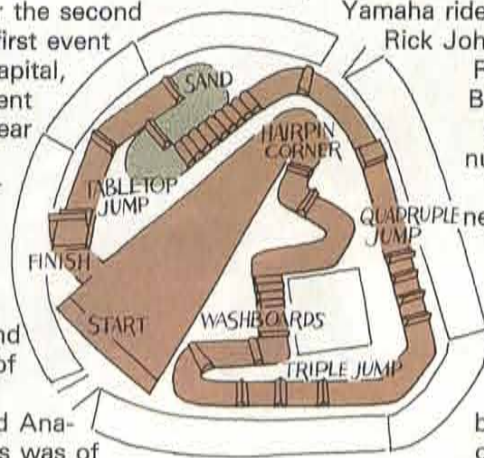
CHEERS for the YAMAHA RIDERS

Supercross is fast becoming the new rage. Lots of fans are flocking to the race courses. The reason for supercross's amazing popularity lies in part in the fact that, unlike motocross, the fans don't need to trudge through the dust and mud to get to the courses. Transportation to the course is convenient, there are refreshment stands and toilet facilities, and because the race takes place within a stadium the fans can watch the entire race from one vantage point. In addition to this, unlike the "serious" racing of world championship motocross, supercross riders emphasize the



thrilling side of motocross by performing showy stunts and riding technique for the enjoyment of the fans. In other words, supercross caters to the fans by being both a thrilling and a convenient sport to watch. Officially, supercross is a 250cc class international event authorized by the FIM. In America, the center of supercross racing, there is an established race series that includes 12 races over the period of a year,

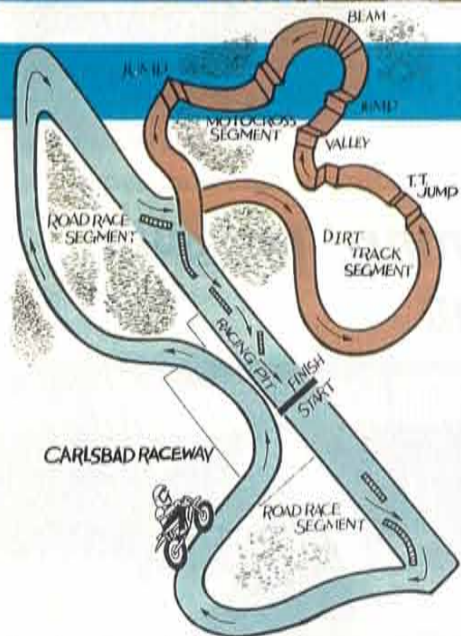
occupying an important place on the AMA sports calendar. Inspired by the success of this sport in America, similar events have been held sporadically in Australia, Europe and Japan, with great success. There are even plans for a first supercross event to be held in India this year. At the end of last year a supercross event was held in Japan for the second time. While the first event was held in Japan's capital, Tokyo, the second event was held, this time, near Kyoto the center of Western Japan, under the sponsorship of Kyoto's KBS Television and the Western Japan Motorcycle Sports Association, and with the cooperation of the City of Otsu, the Kyoto Newspaper, and Anaheim Productions. This was of course an FIM/MFJ authorized event, and featured 13 American riders including Broc Glover, Rick Johnson, Warren Reid, Goat Breaker, Steve Martin and Jeff Ward. The course was set up in the Ojiyama Baseball Stadium, which was filled to capacity by motorcycle fans almost as soon as the



gates opened. The riders drew cheers and applause from the delighted crowd as they skillfully negotiated the 600 meter course including hairpin turns, washboards, a triple jump, quadruple jump, sand and tabletop jumps. Some fans were so absorbed in watching the riders that they forgot applauding altogether. By the end of the day six Yamaha riders had placed in the top ten, with the first four places all going to Yamaha riders, namely the winner Rick Johnson, followed by W. Reid, B. Glover and K. Bowen. The number of supercross fans continues to grow everytime an event is held in a new country. The number of fans turning out for these events seems to be telling us that motorcycle sports are every bit as popular as baseball, soccer and all the other spectator sports.

FINAL RESULT

1. Rick Johnson Yamaha
2. Warren Reid Yamaha
3. Broc Glover Yamaha
4. Keith Bowen Yamaha
5. Jeff Ward Kawasaki
6. Goat Breker Honda
7. Steve Martin Honda
8. Jim Holley Yamaha
9. Mike Fisher Honda
10. Radney Smith Yamaha



The 5th Annual Superbikers U.S.A.

Eddie Wins on a YZ490!

Yamaha's 500cc road race GP rider does it



starts on the road segment, proceeds to the dirt segment and then finally to the motocross segment, after which the same course is repeated a given number of times. Concerning restrictions on the types of machines used, the engine must be 2 cylinders or less with a displacement of no more than 500cc for 2-stroke production motocrossers or 750cc for 4-strokes. There are no restrictions regarding the type of frame used. The racers who compete in the championship heat are chosen by means of preliminary heats in each of the three separate categories, road, dirt and motocross, with the top three finishers in each category going on to the championship heat along with three riders chosen by means of a consolation round, making a total of 12 riders in the final heat. The riders who made the final heat included moto-

crossers Danny Chandler, A. Malherbe, B. Glover, R. Johnson and E. Geboers; from the dirt racers, M. Fay, Don Chandler, A. Jorgensen and B. Schubert; from the road racers, S. Wise, F. Michael and Eddie Lawson. It was a field of top stars that probably no other race could match. As far as the machines were concerned, there were seven 2-strokes and five 4-strokes. The championship heat turned out to be Lawson's race right from the start. During his specialty, the road and dirt segments, he opened up a big lead over to second place bike, and coming off the tabletop jump and into the motocross segment of the course he showed that he could match anyone for skill on the motocross as well, as he rode on to victory unchallenged. Eddie was very much pleased to win a long-coveted title. In the past four runnings of the Superbikers, all four winners had been motocrossers. This year Eddie, on his Yamaha YZ490, became the first road racer to win the Superbikers title. Other than the addition of disc brakes to both the front and rear wheels and setting the rear

sprocket in the high gear position, there were almost no modifications made to his YZ490. With his show of outstanding technique in all three segments, road, dirt, and motocross Eddie surely won the admiration of all the spectators. In the same way, the outstanding performance and dependability shown by the YZ490 on all three surfaces, with almost no modifications, surely convinced a lot of people once again about the kind of quality that stands behind the Yamaha brand.

FINAL RESULT

1. Eddie Lawson Yamaha (road)
2. Danny Chandler Honda (motocross)
3. Broc Glover Yamaha (motocross)
4. Andre Malherbe Honda (motocross)
5. Eric Geboers Suzuki (dirt)
6. B. Schubert Rotax (dirt)
7. Rick Johnson Yamaha (motocross)
8. F. Michael Honda (road)
9. M. Fay Honda (dirt)
10. Dong Chandler Honda

Shortly after the end of last year's GP season, the 5th "Superbikers" race was held at America's Carlsbad Raceway, with Eddie Lawson emerging as the winner. By now everyone knows about Eddie, but there are probably a large number of our readers who do not know about "Superbikers". Superbikers is fast becoming one of the biggest motorcycle event in America. It is an event that brings together all of the excitement of road, dirt and motocross racing in one events because it is held on a circuit that includes all three of these surfaces. As the diagram shows, the race