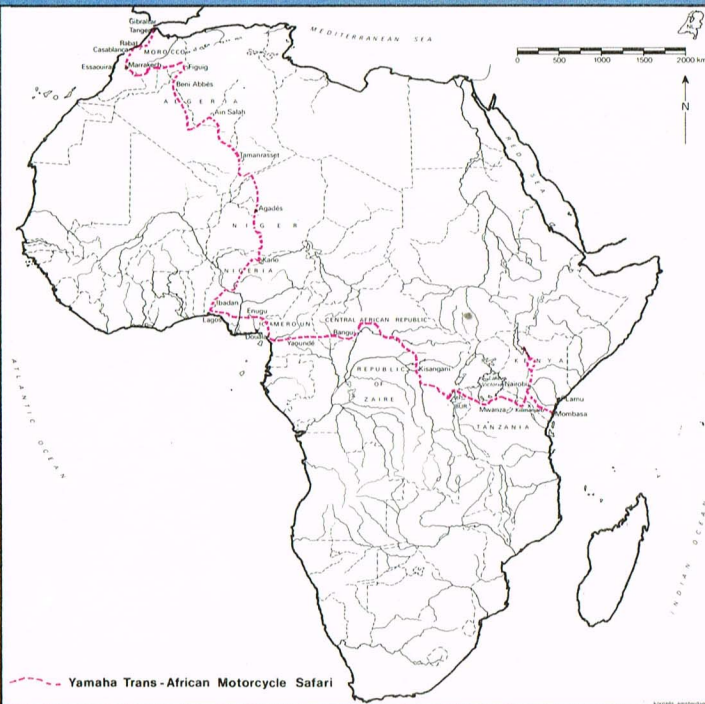


# AFRICAN JOURNEY

Part II

Last year, David Smith, a young American, left Amsterdam, Holland with a crew of six and three Yamaha DT360 enduro machines. His expedition's goal was to reach the faraway shores of Kenya via the Sahara Desert. Circuit recently received David's latest report from the town of Tamanrasset in the middle of the Sahara Desert. David wrote that his crew had dwindled to four due to illness but that the Yams were all fit and running well. His report:



On November 14 we left Fez, Morocco after a long rest and headed through the beautiful mountain passes and gorges to Oujda. We were finally on the edge of the Sahara and ready to turn South.

We crossed the border into Algeria and in the town of Bechan stocked up on fresh fruits and vegetables. We now faced what we felt was the real beginning of our adventure - the vast Sahara Desert. It was November 21, very windy with two and three foot sand drifts settling over the road and in every direction - sand!

Ploughing through the drifts on our Yamahas was easy and in Beni-Abbes we made a good camp. The next day we tested the machines on the soft Sahara sand and they performed even better than expected. For two entire mornings we rode the machines along ridges and then plunged down through the dunes and up again.

After refuelling we set off once more. The week it took us to reach Tamanrasset will be remembered by us all as hot, sandy and very tough going. The first day out from Beni-Abbes we managed to make Fort MacMahon and the fol-

lowing day we braved high winds and reached Ain Salah where the road suddenly ended.

Except for having to change the rear sprockets, which wore out quickly because we were of course running with unlubricated chains in the sand, the bikes remained mechanically perfect.

From Ain Salah to Tamanrasset is only 710 kilometres but it took us three days to reach our goal. The Mercedes, not being equipped with flotation tyres, was constantly getting stuck in the soft sand. Often we had to backtrack on the Yamahas and dig the Mercedes out. One of us got lost when he got too far ahead on the Yamaha. There was no longer any road or trail and we only found each other by riding to the top of the highest dunes and spotting the metallic shine of our bikes.

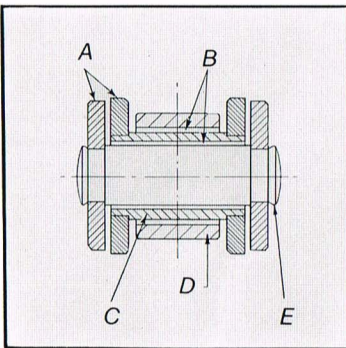
We arrived in Tamanrasset in the late afternoon covered with dust. But as we rode the three Yamahas together down the main street of this ancient mid-desert town, people first stared at us, then started cheering. Tamanrasset, we had made it!



# CIRCUIT.6



XS 650



Lubrication points for chain links. (A) Link plates (B) Hardened steel bearing surfaces and clearances for lubricant (C) Bush (D) Roller (E) Bearing pin.

## CHAINS their Adjustment, Inspection & Lubrication.

### Chain adjustment

A new chain takes a little time to bed down, and during this period will require adjustment. Correct adjustment is determined by the degree of up-and-down movement of the chain midway between the sprockets, average figures being:

Rear chain: 18 - 20 mm.  
Magneto and similar: 5 - 6 mm.  
On spring-frame machines, the rear chain tension will vary according to the position of the suspension travel. The suspension should therefore be held in the position at which the chain is tightest and the latter then adjusted to be just free at this point. If the manufacturer's instruction book gives specific details regarding this adjustment, these should be adhered to. Always re-check adjustment of any chain after final tightening of the nuts, etc.

### Chain and sprocket inspection

Chain sprockets on a new machine should be correctly aligned but malalignment may arise in use. A periodical alignment check is therefore desirable.

A straight edge across the sides of the teeth on the two sprockets should touch at four points, in any position of rotation of the sprockets. If the latter are in correct alignment, the inner plates of the chain will be slightly polished equal-

ly on their inner sides and this is not detrimental. However, if one side shows considerably more wear than the other it indicates that the shafts are not parallel (viewed from above) or not in the same plane (viewed from the back of machine). If the inner plates on both sides of the chain show real wear as opposed to polishing, particularly after a comparatively short mileage, it is probable that one sprocket is further out on its shaft than the other. This could be due, for example, to wrong assembly of the rear hub components, or incorrect rear wheel replacement.

A new chain should fit completely round the teeth with a snug fit, neither too slack nor having a tight "springy" feel. The sprocket bore must be concentric, otherwise the chain will tend to slacken and tighten as the sprockets are rotated.

With the sprocket in position, a pointer fitted adjacent to the teeth edges will detect such faults, and if any show up, the sprocket should be rejected, assuming that the wobble is not caused by a bent shaft. Failure to correct such faults will cause the chain to wear quickly and unevenly.

The standard method of coupling a chain is by a spring connecting link, which is simple and effective. On normal touring machines it is completely reliable but neverthe-

less should receive regular inspection, particularly in the case of fast roadster and sidecar machines where full power is often "turned on".

If the rider chooses to use a spring link then he should replace it at 2,000 mile intervals. The reason being that of necessity. The detachable plate on this link has to be a free fit, and under heavy load some wear must occur, thus throwing an undue proportion of the load on to the opposite (fixed) plate of the link. *It is important to note that the closed end of the spring clip must point in the direction of chain travel.*

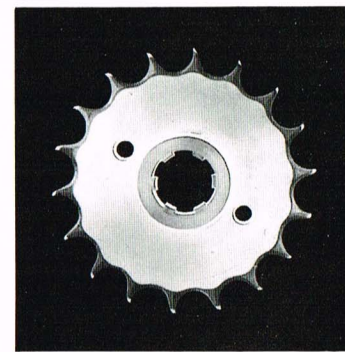
### Lubrication for chains

Every joint or "articulating point" in a chain is actually a plain bearing of steel to steel on hardened surfaces. It is essential that a film of lubricant is at all times present to prevent actual metal-to-metal contact. This film not only cuts down friction to negligible proportions, but also assists in cushioning the drive, in effect, hydraulically.

An early indication that the chain is being starved on oil is the appearance on the pins of a reddish-brown deposit, and this should be taken as a warning that there is something amiss with the lubrication.

### Rear chains

The rear driving chain nearly always runs semi-exposed.



Sprockets which are excessively worn assume a "hooked" appearance as shown above. When they are replaced, check the new ones for accuracy.

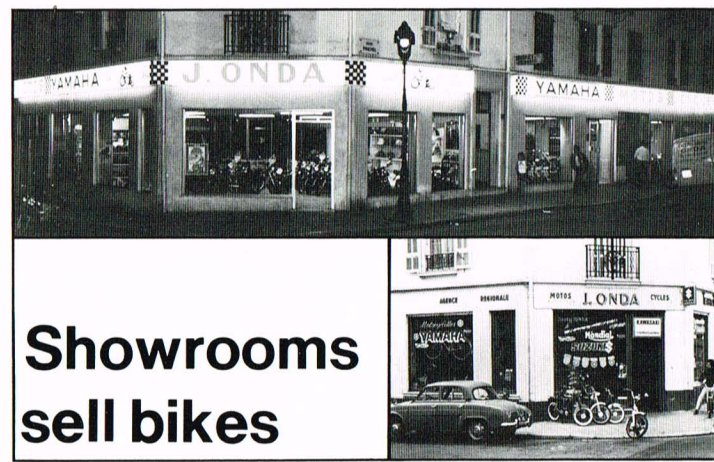
This drive runs of course at only about half of the primary chain speed, but carries a heavy bearing load (varying according to the gear engaged) which must be catered for by adequate lubrication if excessive wear and friction are to be avoided.

Periodic hand lubrication of the chain is essential to prevent premature chain wear.

For this purpose, an oilcan should be kept handy in the garage and oil applied to the chain whenever it appears to be dry. The oil should be directed, primarily, at the roller and link edges to ensure as much penetration as possible to the internal working surfaces of the chain.

### Faces of the chain

Periodically, the chain should be removed, washed and after allowing to dry off, immersed in chain lubricant which has been heated in a container until liquid. After about ten minutes, the chain is removed, allowed to cool, and the surplus grease wiped off. The chain can then be refitted to the machine after cleaning the sprockets. It should be noted that not all greases are suitable for heating to thinness without deterioration, and when purchasing the purpose for which the lubricant is required should be stated, as special types are marketed for the job.



## Showrooms sell bikes

The "showroom of the future", the remodelled Jaky Onda Motors is pictured top. Pictured below it is the old Onda Motors, an example of motorcycle shops of the past. The change has doubled Jaky's sales.

Nice, France - Two years ago, a young man and his father tore down an old garage, remodelled their workshop and today own the largest motorcycle showroom on the French Riviera.

This showpiece of motorcycle shops belongs to Jaky Onda of Onda Motors, 15 rue Trachel, Nice.

When Jaky and his father decided to rebuild Onda Motors, they wanted only one make of machine in the new showrooms. Yamaha was the best selling machine on the Riviera at the time, so the decision was easily reached.

Today Onda Motors could be called the motorcycle shop of the future because half of its 1,000 square metres is allocated for displaying machines. The other half houses a modern workshop and parts department. This combination has replaced the garage of the past.

There are two showrooms behind the large plate glass windows at Onda Motors. One is for Yamaha street machines

and the other for all Yamaha off-road machines, which include DT, motocross and trial. "Large showrooms sell bikes today", Jaky explained. "Customers prefer a large shop with a big choice of machines and lots of space to move around. They want to examine what they're buying."

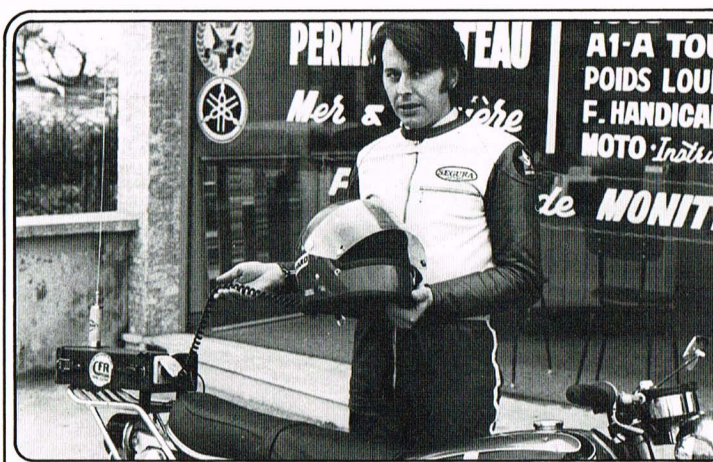
Most of Jaky's customers are young people between the ages of 16 and 35, and Onda Motors caters to them. Modern music is piped into the brightly lit showrooms and a young sales force looks after potential buyers. Twelve employees, including an attractive girl who sells accessories, make up Jaky's staff.

"We sold 400 machines last year and that was twice as many as the old shop ever did," Jaky said. "We expect to sell even more in 1975".

To boost sales, Jaky advertises in the local papers after every Yamaha Grand Prix victory, and there were many in 1974. Jaky said his customers identify with racing. In addition to sales, Onda Motors also does a brisk repair business because they specialize in Yamaha parts and service.

Onda Motors was started in 1939 by Jaky's father, who still keeps an eye on the business. The firm began selling French machines and later many other makes. Jaky began selling Yamahas in 1964 and he also started racing them soon after. He was nine time French roadracing champion before retiring.

Jaky's sales record has proved that Yamaha and a large modern showroom are a great combination for today and the future.



## THE SAFE LINE Learning to ride safely

The task of training young motorcyclists to ride and maintain their machines safely has recently been undertaken by France's leading safety organization, Prévention Routière. Located just south of Paris, at Linas Monthléry, Prévention Routière has been in the road safety business for over 25 years. Its aim is to reduce and prevent road accidents.

Since last year, Prévention Routière has been offering a special two-day motorcycle school to French youth groups. This school includes indoor lectures and outdoor riding exercises.

According to Max Tillet, chief instructor of the school, the goal of Prévention Routière is to teach young people good riding habits for their own safety and for the others who share the road.

The first day of the two-day school begins with a classroom lecture on motorcycle maintenance. This includes the importance of checking all fuel levels, cables and electrics. After this session, the students are introduced to their machines. Before they are allowed to ride, an instructor demonstrates the correct body position for riding a motorcycle. The students are then put through a series of gymkhana exercises in different sitting positions. Tillet explained that this is done to teach balance. During the remainder of the course, the students alternate between the classroom, the parking lot and the open road. They are lectured on the importance of visual clothing and daytime headlights, as well as courtesy to four-wheeled vehicles. Demonstrations by two instructors are given on brak-

ing and counter-turning, and the students should master these techniques before the end of the course.

Not far from Prévention Routière, at Ris Orangis, is another private organization involved in licensing new riders. It is called Centre Formation Routière, and is a driving school with a special branch for motorcyclists.

It was put together a year ago after Sonauto, Yamaha's French importers, loaned the driving school 12 Yamaha 200s. Centre Formation Routière then equipped the machines with two-way radios and installed earphones in crash helmets.

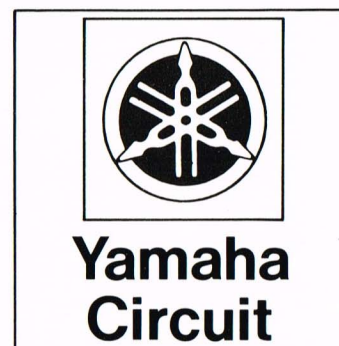
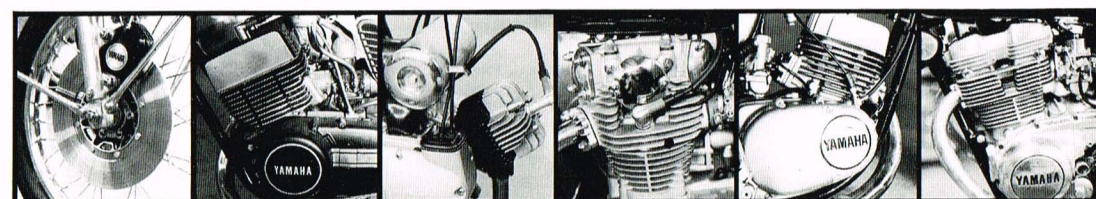
The 3-day beginners course is always given to a group of up to 10 people. The lessons begin with a slide and tape recorder lecture which explains normal motorcycle maintenance and safety.

After the lecture which includes a talk on the importance of visibility, the group meets their Yamahas. They are then instructed on how the machine works and begin learning to change gears in a parking lot. The second morning another lecture is given on safety. Then it's back to the parking lot to learn braking.

For the third and final day, the group goes out on the open road and into the busy city streets. One instructor leads and another instructor follows, correcting individual mistakes over his radio. According to chief instructor, Jean-Claude Rouger, Centre Formation Routière is the only school in France teaching new riders in this way.

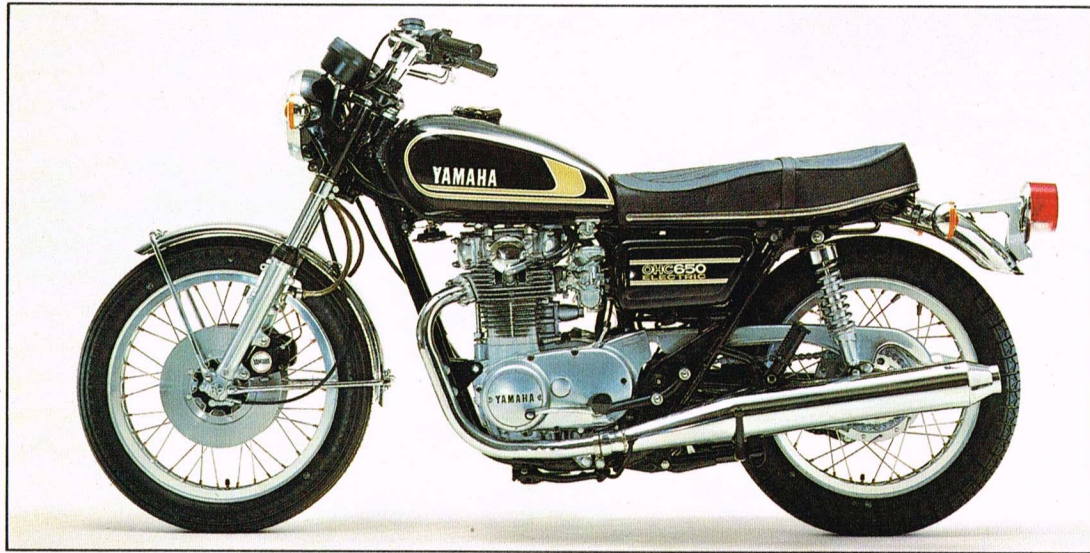
### Name the Bikes

and win an official Yamaha team jacket. The contest is open to everyone and is easy to enter. Just place your answers on a postcard along with your name, age, address and the name of the bike you ride. Send it to: Yamaha Europe NV, Box 3545, Amsterdam, Holland. Be sure to include your jacket size. Here's a hint. The machines pictured belong to Yamaha's street series. All entries should be posted no later than May 27, 1975.



April 1975

Contributions:  
Strictly Technical - Renaults Chains  
The Safe Line - Paul Butler  
Daytona - Bruce Cox,  
"Motorcycle Weekly"  
Circuit Coordinator - Rodney Gould



**XS 650**  
**Technical specifications**

<b>Performance</b>	
Top speed	179 km/h
Min. turning radius	2500 mm
<b>Engine</b>	
Type	2-cylinder, 4-stroke, air-cooled
Displacement	653 cc
Bore and stroke	75 x 74 mm
Max. power	51 HP (DIN) / 7,500 rpm
Max. torque	5.15 kg.m / 6,000 rpm
Lubrication system	Wet-sump / Eaton pump
Transmission	5-speed gearbox
<b>Dimensions</b>	
Overall length	2,210 mm
Overall width	900 mm
Overall height	1,160 mm
Wheelbase	1,435 mm
Min. ground clearance	140 mm
Fuel tank capacity	15 lit.
Caster	63°
Trail	115 mm
<b>Tyres</b>	
Front	3.25-19
Rear	4.00-18

XS 650

## New Superbike handles like a Dream, says Percy



England's veteran racer, Percy Tait, has averaged close to a thousand miles a week for the past 20 years. Percy accumulated most of those miles road testing and racing for the Triumph/BSA works team.

Because of his vast experience and knowledge in the test riding world of motorcycles, Yamaha asked Percy to help adapt their new XS-650 for the European market.

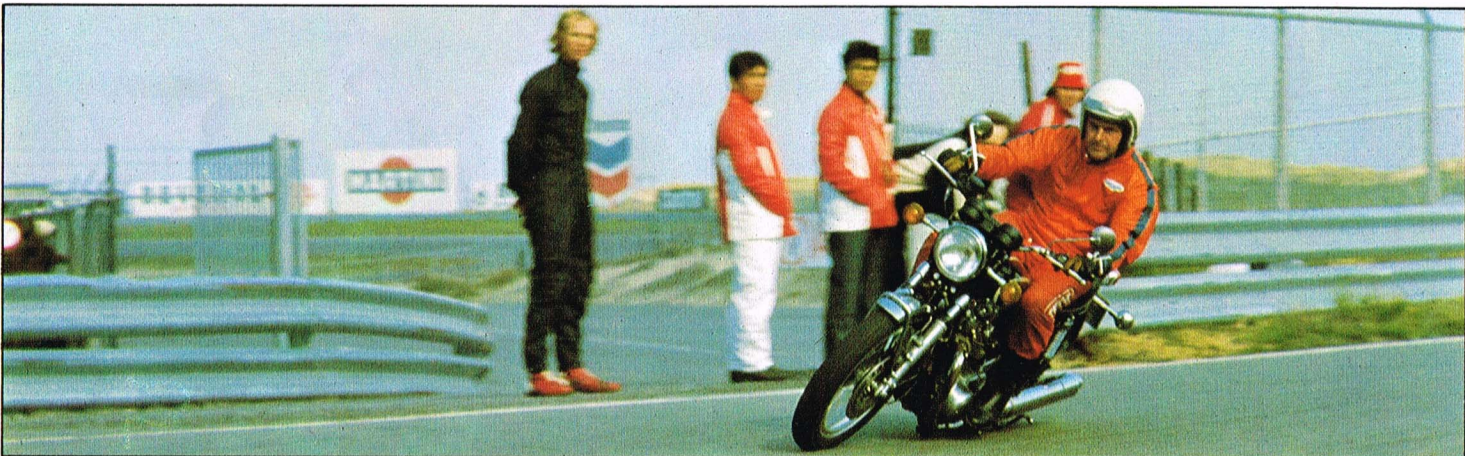
The XS-650, styled on traditional lines, has a powerful four-stroke single overhead-cam engine which boosts it into the superbike class. But thanks to development work by Percy Tait, the XS-650 has handling capabilities that exceed all other bikes of its size.

Much of the testing took place on Holland's Zandvoort Circuit, where Percy, who was joined by Kent Andersson, made valuable suggestions which resulted in improved braking and roadholding. Kent, who has been riding motorcycles since he was 11 years old (see story opposite page), said the XS-650 is built like a heavy motorcycle but is lighter and easier to ride than other superbikes.

The European version of the machine which was tested differs from the American version insofar that it has a modified swing arm and twin disc brakes which incorporate a smaller disc. The smaller disc was developed to reduce unwanted gyroscopic effect and unsprung weight. The brake callipers have also been reversed and positioned behind the front fork legs. This, Percy said, has vastly improved the machine's high speed stability.

Percy, who won't disclose his age, is a farmer in Warwickshire, England, but his first love is still racing. He has acquired Tepi Lämsivuori's ex-works 350 and 700 Yamahas and will return once again to the Grand Prix circuits. □

Kent Andersson watches Percy Tait put the XS-650 through its paces.



RS100 RS125

## Perfect for Commuters

Yamaha's two-time 125cc world champion, Kent Andersson, is probably the best known man riding a small machine today.

Kent, a tall blonde Swede who makes his home in Gothenburg, began his racing career in 1964 at the age of 21. His first machine was a 125cc Bultaco which he rode to fifth place in the Swedish championship.

In 1969, Kent, riding Yamahas, won his first Grands Prix in the 250 and 125cc classes. His victories moved him into the top ranks of the small class riders. But it wasn't until 1973 that Kent claimed his first 125cc world championship, a feat he repeated in 1974.

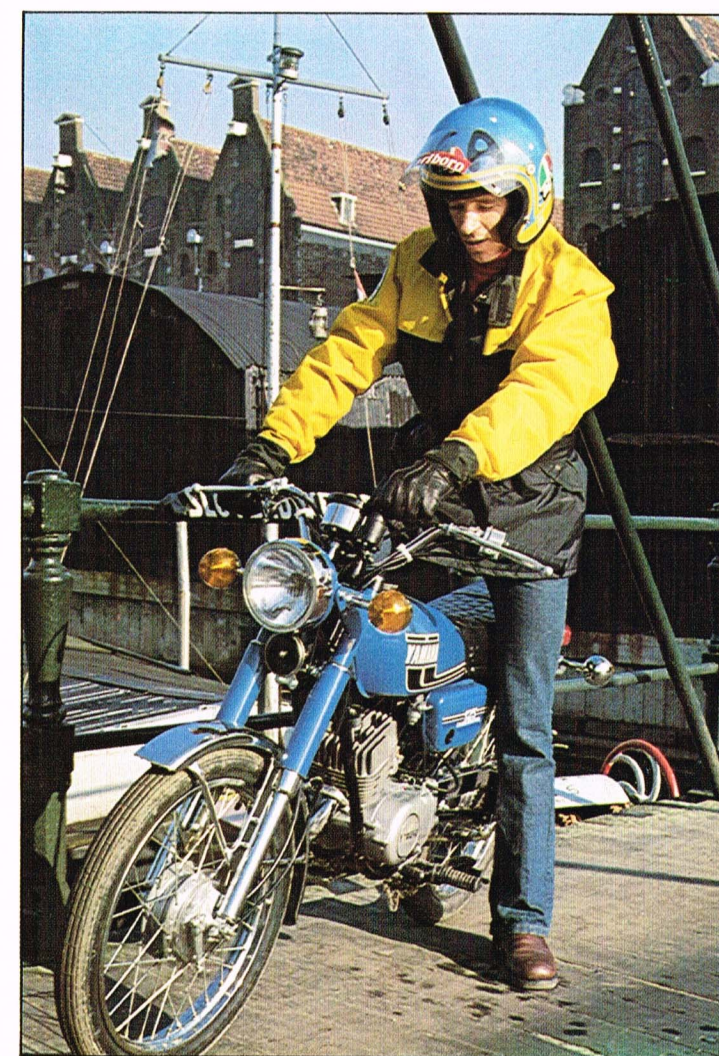
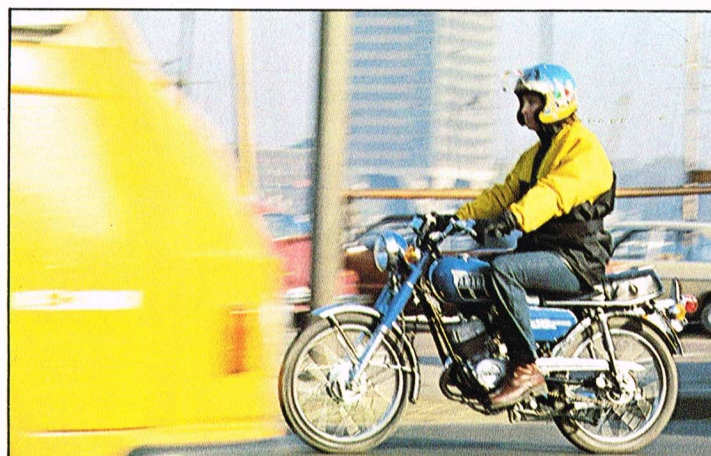
To test ride Yamaha's new RS100 and 125 bikes, CIRCUIT invited Kent to Amsterdam, a crowded city of narrow bridges and streets interlaced with ancient canals - a perfect setting for testing the RS machines.

Although designed as a commuter bike, the sporty styling of the RS puts it next to the racy-looking RD125, the machine developed from Kent's racer.

Kent reported that he found the RS bikes quicker in heavy city traffic than he had expected. Its single cylinder was not quite as explosive as the RD125's twins but it was quieter to run in town. The RS also had more torque than the RD125 at the bottom end of the power range, which gave Kent a bit more acceleration in the lower rpm's. However, he said that the RD125 had more overall horsepower.

Kent also said that the lower gearing of the RS machines, compared to the higher gearing of the RD125, made it easier to ride in traffic. Going over Amsterdam's arched bridges and stopping and starting at narrow intersections, Kent found it to be ideal.

In his final analysis, Kent said that both the RD125 and RS bikes were excellent, but it would be up to the customer to decide which machine would best suit his exact needs. □





Patrick Pons

# the PARIS SHOW...

Yamaha machines and personalities dominated the 6th Automobile and Motorcycle Racing Show held during January in Paris at the Pavillons d'Expositions.

The show's eyestopper was the world-speed recordholding streamliner of American Don Vesco which arrived by air from California.

Alongside Vesco's "cigar" stood two of the most famous machines ever built by Yamaha - the 250 and 125cc vee-4 rotary valve racers, that totally dominated world championship racing in the late 1960s. The machines were ridden by Phil Read and Bill Ivy. Now outlawed by FIM regulations, these machines are still the most powerful ever produced in their class.

Moving into personalities, showgoers were able to see Yamaha's Giacomo Agostini, who paid a surprise visit to the show. Ago's 500cc cantilever-sprung Yamaha-4 was on display on the Marlboro Cigarette Company stand, next to the McLaren Formula 1 car which Emerson Fittipaldi drove to his second world championship.

France's biggest world championship hopes, Patrick Pons and Olivier Chevalier, were also on hand along with their Yamaha TZ700 machines. Both will be sponsored this year by Sonauto, Yamaha's French importers, and the Gauloise Cigarette Company.

Patrick Pons will spearhead the French attack in road racing. He will be riding Agostini's 1974 machines in the 350 and 500 classes. □



## Motocross News

### Dutch riders meet new MX models

At a new motocross circuit just outside Amsterdam, Intermotor, Yamaha's Dutch importers, recently sponsored a "meet the new motocross and Trial DT series" for dealers and riders.

Hundreds turned out in cold but sunny weather to watch Yamaha's 500 Grand Prix riders Åke Jonsson and Jaak van Velthoven give the new motocross machines a thorough workout on the bumpy circuit. Also on and demonstrating the 1975 TY250 was Yamaha's trial expert Mick Andrews.

Last year's 125cc road racing world champion Kent Anders-

son, in Amsterdam for road tests, stopped by the circuit to try the new YZ125cc motocross machine, which turned out to be the hit of the day. Its 6-speed gearbox, more powerful engine and attractive styling made it a favourite among the riders.

Intermotor borrowed the new circuit from the Motor Club of Amsterdam, and coordinated the day's activities.

Following a photo session for the press, dealers, club members and all licenced riders were invited to test ride the bikes. This gave prospective customers a chance to try out

the new machines without first having to buy one.

The riders thoroughly enjoyed sharing the same circuit with Åke Jonsson, who turned a few fast laps in the afternoon. At the end of the day, Rins de Groot, Sales Manager of Intermotor, reported 40 firm orders for the YZ125 alone, which proves a high market potential for the 125cc class.

The success of Intermotor's "meet the new models" day sets an example of what other Yamaha dealers can do to increase the public's interest in motorcycling, while at the same time increasing sales.



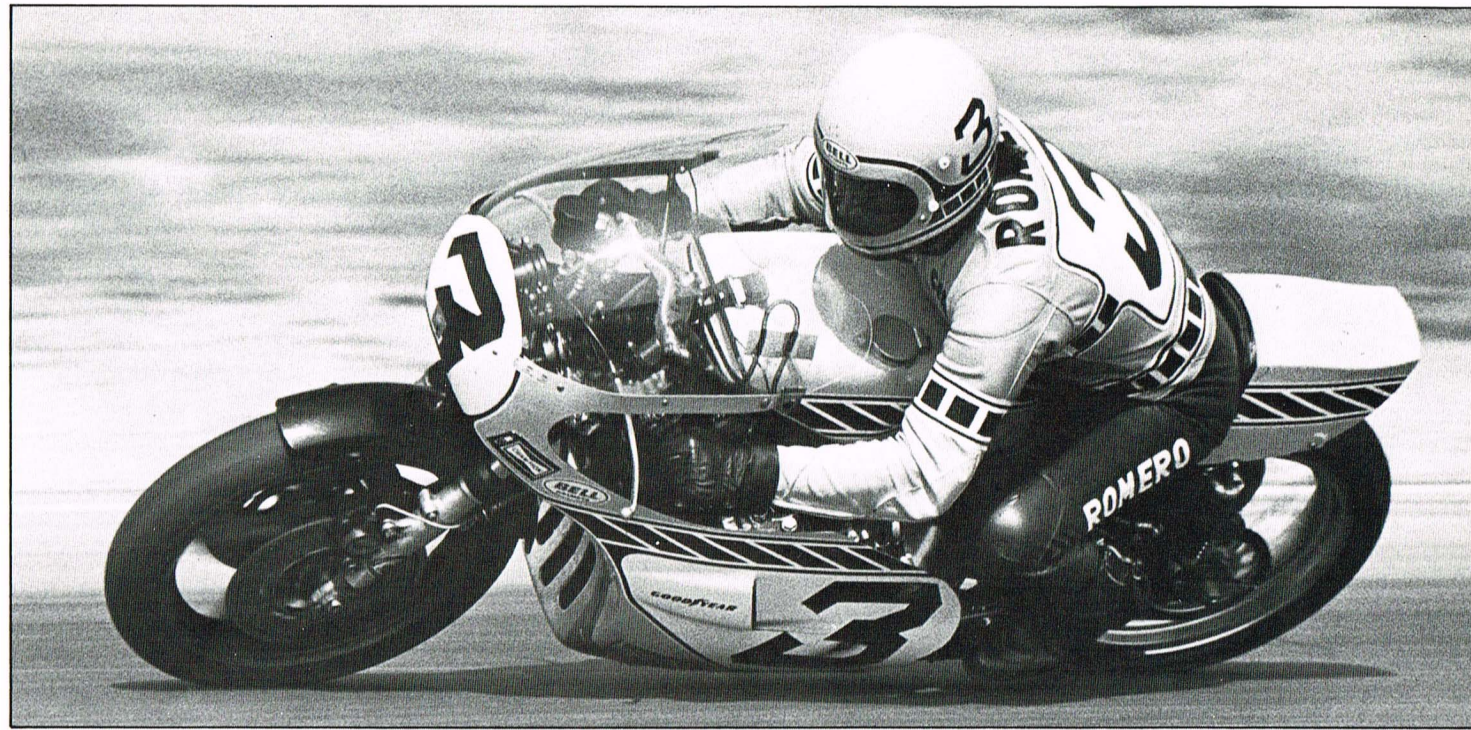
## A Cordon Rouge for Jarno

The prestigious French Cordon Rouge Trophy for auto and motorcycle films was recently awarded in Paris for "A Tribute to Saarinen".

The colour film traces the life story of the late, great "Flying Finn", Jarno Saarinen, up to his tragic death at Monza, Italy. It covers his swift rise to the top and his brilliant 1973 wins at the French and Austrian Grands Prix. Saarinen, as well as Giacomo Agostini, Phil Read and Hideo Kanaya, are shown battling

for the 500 championship throughout the film. "A Tribute to Saarinen", which was directed and edited by David Wood, head of C.H. Wood Films Ltd., includes interviews with Jarno's wife Soeli and fellow riders.

Yamaha sponsored the film and it is now available to dealers and motorcycle clubs. Those interested in obtaining the film should contact the Yamaha importers in their country. □

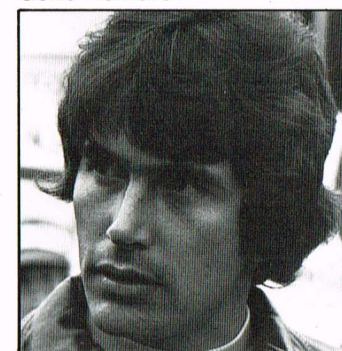


A superb ride

Gene Romero

## Romero defeats European Challenge

Daytona Beach, Florida, USA. March 9: Because of its "first of the year" position in the racing calendar, the Daytona 200 mile classic in sunny



Florida is the showcase race of the season.

Manufacturers spend the winter modifying or creating new

185-mph formula 750 racers for the 3.8 mile speedbowl. Riders who have switched camps during the off-season "musical saddles" games usually debut on their new mounts in the 200, and jetliner loads of fans from all over the United States and Europe fly in for the festivities.

For the past three years Yamaha riders have taken the major honours and the fat first place money, \$17,800 this year. Don Emde did the job in 1972 on a private 350cc bike entered by the American magazine "Motor Cycle Weekly." In 1973 the late great Jarno Saarinen rode a tactically superb race to outlast all the 750s on his 350cc water-cooled-twin and in 1974 Giacomo Agostini debuted Yamaha's 700cc-four, winning virtually unchallenged.

1975 was equally successful for Yamaha despite new water-cooled 750cc triples from Kawasaki and totally revised versions of Suzuki's three cylinder racers.

American Yamaha team rider Gene Romero opened his 1975 season with the Daytona victory. His Canadian counterpart, Steve Baker, finished second and the sensation of the race, 18-year-old Venezuelan, Johnny Cecotto, entered by the Yamaha Importer from his country, rode to third place.

Both Romero and Baker rode races that were outstanding for sheer unflappable consistency. While the drama was unfolding around them, the pair simply got on with the job at hand.

Yamaha's superstars didn't fare so well. American champion Kenny Roberts demonstrated his unquestionable skills in the early stages at a record 109 mph average but his ride came to an unfortunate end with an exploded clutch.

Giacomo Agostini, on his new 750, ran close-up in third early in the race but was slowed by a misfire. He dropped back to sixth, climbed up to third but was slowed again with a dangerously worn rear tyre and was passed by Cecotto in the final three laps.

Cecotto was the surprise of the race. He qualified third fastest but was put back of the grid to fix a sticking float and change a plug with two minutes to go. In 12 laps he shot from 65th place to seventh and continued this progress to finish an incredible third.

Also sensational was Yamaha rider Steve McLaughlin who led the race for 12 laps after Roberts' demise, then succumbed himself to pressure from Romero. McLaughlin overcooked it on a hairpin and slid off. But the plucky rider remounted and rode to sixth place minus his screen.

For Yamaha the race spelled total success with the first 16 places confirmed for them. Romero took the win at 106 mph plus leading Baker at the finish by 18 seconds. □

