

Royal Enfield Motorcycles in the
U.S.A. and Canada.

Report on visit to Distributors
by Mr. R.E. Thomas.

1969

The purpose of this visit was to meet distributors, dealers and customers and discuss with them any troubles they had experienced with Royal Enfield motorcycles. At the same time I was to enquire what parts were generally required to give the Interceptor a better performance and how these could be made available as speed kits making it possible for the customer to convert the standard machine to suite his particular needs. As this was my first visit to America I was very interested in all aspects of motorcycling, how Royal Enfield machines compared with other makes and what was the trend of motorcycle design for the future.

ITINERARY

September 8th arrive in Boston, Mass - Avellino.
September 10th Shillingford & Sons, Bristol, Penna.
September 14th Shores Motors, Detroit.
September 17th Floyd Clymer Motorcycles, Los Angeles.
September 23rd Alberta Cycle & Motor Co, Edmonton.
September 24th Gateway Cycle & Motors Ltd, Winnipeg.
September 26th Firth Motorcycles, Toronto.
September 27th Left Toronto at 8 p.m. arriving in London early Sunday morning September 28th.

Motorcycle Sales & Service Inc.

I arrived at Boston on Monday evening September 8th. During my short stay here the weather was poor - heavy rain most of the time - and very few motorcyclists called at Sam Avellino's shop. I was given no opportunity to meet any dealers therefore my conversations were with Sam and his two sons only. They criticised the performance of the Interceptor - mainly the 1968 model - although some Series II models appear to have low maximum speeds also. The machine which was the subject of Mr. Nightingale's telephone call was sold by Avellino to a Mr. Patterer but had been re-sold to Francis A. Grindle at Bucksport Maine, this was some 500 miles from Boston and too far away to visit in the time available.

Shillingford and Sons.

At Bristol, Pennsylvania, Elmer Shillingford had arranged for dealers to meet me at Shillingford's premises on Thursday September the 11th and Friday September 12th. They were all very keen and thought the Series II machine a big improvement over the 1968 model. A lot of good points emerged from the discussions; all dealers thought we should give some support to competitive events. Tom Prophy in particular was keen to build a special machine for scrambling using a Metisse frame and R.E. engine/gearbox unit. It will have a standard Enfield tank and be known as a Royal Enfield; Gene Shillingford supported this. Jim and Tony Foley were two young enthusiastic dealers and Gene promised them a free trip to England if they sold sixty R.E.'s during the next twelve months; the boys

thought this was possible. I believed Gene might extend this offer to other dealers. This method of sales promotion is used by all the Japanese motorcycle manufacturers and is a big incentive to dealers. We need more ideas like this.

Shores Motorcycles.

I moved on to Detroit on Saturday evening and spent the next day with Joe Schotthoefer and his family at Motorcycle Trial up in the "Thumb" of Michigan. Sixty machines, mostly 250's and under, took part in the Trial and a large number of spectators came on motorcycles. I was disappointed to find that out of approximately 120 motorcycles not one was a Royal Enfield. This was a good opportunity to meet American motorcyclists and after talking to several I ended the day feeling I had learned something of what they wanted.

/model

On Monday I visited Joe's store room and had conversations with several dealers. Most were reasonably satisfied with the latest/except that again the clutch and gearbox came in for a lot of criticism. One dealer in particular, named Marlin Berg of Inter Continental Sales was extremely critical of the 1968 model and gave me a very uncomfortable two hours as he read out a list of faults which must have included every kind of trouble we have ever experienced. Marlin sold 50 Series I models in 1968 and only 5 Series II models in 1969. Here I think is a good example of how we have suffered this year as a result of the poor quality machines we turned out the previous year. This dealer had so many troubles with 1968 machines that he was trying not to sell 1969 models for fear of having more troubles next year. This is very unfortunate as we have a much improved model this year.

The next day I accompanied Joe to Marlin's shop in the coloured quarter of Detroit. The windows were protected by expanded metal, the rear of the premises surrounded by barbed wire and the very tough neighbourhood explains somewhat the high percentage of troubles he gets. During my visit a customer known as "Troop" brought his Series II model in and complained of a noise in the rear hub - Troop was a coloured gentleman wearing a chrome plate German storm-troopers helmet. On examining the hub the noise was found to be due to the three cush-drive studs breaking away from the large washer, a thing I have never heard of before. Whilst the machine was in the shop we inspected the clutch and this was worn badly enough to need a replacement. However, one was not available and this led to a criticism of our spares deliveries. Joe requested that spares be sent direct to Detroit Airport instead of by India Airlines which go to New York.

In spite of Marlin Berg's animosity when first we met, we parted good friends. He is a good salesman and I would like to see him trying to sell Enfield's again. I suggested that he needs to build up the service side of his business to keep up with the sales side and I promised him I would do all I could to encourage the firm to help him with replacement clutches in order to keep the 1968 Enfield's out of his workshop.

Floyd Clymer Motorcycles.

On the afternoon of Wednesday, 17th September I arrived in Los Angeles and went straight to Floyd Clymer's

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premises. I had been there only a few minutes when a potential customer came in to inspect the Royal Enfield in the showroom. He more or less had made his mind up before coming in that he wanted an Enfield and I was able to give him some technical information and a bit of sales talk to leave him in/doubt that he must have one. He liked the all chrome look of the machine and the rugged looking engine, but the main attraction was that there were so few Enfield's about! I didn't care much for that reason.

The main topic for discussion with Clymer's stoemen was spares and their prices. Jim Donohue complained about poor delivery, for instance he put in an order on February 3rd this year and received the goods on September the 8th. One consignment on Note EWO2241 dated 11th July 1969, Waybill No. 67493, flight No. AF1391 never turned up and was believed to be in a warehouse in Paris! They did not know that spares books and workshop manuals were available for the Series II model although we have had them in stock for months.

Elmer Shillingford has recently produced a new spares price list and all distributors seem to use this. Some prices are very much too high, example - Bonded Clutch Plate 8.75 dollars, (a replacement plate made by Barnett sells at 4.20 dollars), Clutch Sprocket Bearing 15.50 dollars, Petrol Tank 120 dollars, Filler Cap 4.10 dollars.

Clymer arranged for me to visit several dealers in Los Angeles and San Diego and one of his staff - Paul Maurin - took me around in the firms Volkswagen. Barry Tillman of Sports Center, Los Angeles remembered the 1958 Apache - his would reach 101 mph in 1/4 mile, which is better than the current model will do - but these tales of the past are very often exaggerated. He complained about the price of spares and had one customer who was charged 30 dollars for an Enfield piston who caused such a disturbance in his shop that he had to be asked to leave.

At Shell Motors, Lynwood we met Shell Thuet who is reckoned to be one of the best tuners of Royal Enfield motor-cycles in the States. Like most tuners, Shell was not prepared to give away many secrets - he wanted his machines to stay faster than the opositions. However, he gave me some useful information and a set of valve springs and collars to try. He has a dynamometer in his workshop and his racing Series I engine turns out 50 BHP at 5,200 RPM and 58 1/2 BHP at 7,900 RPM, at the back wheel (I wish I had a dynamometer!).

Shell did not make many complaints, clutches and gearbox mostly and oil from breathers. He makes up a baffle easily made from washers and fits this inside the breather tube, then re-routing the tube to lead towards the rear chain. We have tried this but have not found it gives any improvement. He complained of tight fitting rear wheel bearings and it turned out that he buys replacment bearings in America and is not getting the correct grade (i.e. 3dot clearance).

Thursday evening was spent at Don Sliger's house where we sat enthralled by the tales of Bonneville Salt Flats told by Don and his wife. He has spent an immense amount of time and

money getting the Enfield to^{per} form as well as it does. He is one of these amateur mechanics who really are professionals. I promised him a new engine for further record breaking attempts.

On Friday we visited more dealers in Los Angeles but they are not selling many Enfields and therefore I could not gather much information. In fact, interest in Enfields seem to be very luke warm. As in England most salesman rely on the product selling itself e.g. good advertising by the manufacturer and competition successes. The customer usually knows what he wants before going to the shop and there is no reason for the dealer to sell him a different machine - unless the dealer has had a lot of trouble with a particular make.

In the evening I enjoyed watching motorcycle racing from the press box at the Ascot half mile race track. Three Enfields were running, two twins and a 500cc single, all several years old. Sammy Tanner, one of the stars on this track was on a twin cylinder Enfield. He led for a while in one race but ended up half way down the field. For most of the season he has done very well on 500cc single cylinder Enfield and prefers it to the twin cylinder machine. In the official programme, Enfield still hold two track records in Expert class - these were made in 1963 and 1964. Winning a few races at this track with a machine using the latest Interceptor engine would be better publicity than six months advertising the American motorcycle journals.

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Paul and I flew to San Diego early Saturday morning returning the same evening. There are two Enfield dealers in this town who are very unfriendly towards one another. The trouble started when San Diego Yamaha had a customer return an Enfield with some fault which they could not rectify. They are new Enfield dealers and admitted that their knowledge of four stroke engines was not yet very great (they mainly sell Yamaha's). Clymer arranged for the machine to be examined and repaired by Tatro Machine, the second dealer, who now says he has not been suitably paid for the job. Tatro also complained that San Diego Yamaha were undercutting his prices and went as far as protesting to some Authority who sent an investigator to San Diego Yamaha. And that is how the matter rested at the time we were there.

We visited Tatro machine first, Douglas Tatro is very talkative and gave me the impression of being a younger addition of "Sam the Bandit". He charges 10 dollars an hour labour and gets as much for his spares as he can. He is building up a very nice workshop and, unlike most dealers, concentrates on repairs rather than sales. I found him very friendly and helpful.

San Diego Yamaha is a much larger shop than Tatro Machine and employs several salesman and mechanics. It is run by two partners, Bob Anderson and Gill Illescas. While we were there two Enfields came in with similar trouble, a tapping sound coming from the region of the crank case. We checked tappets and adjusted the primary chain on one and the noise was still there. It was past closing time we could do no more - I believe the noise was caused by a loose tappet guide and I suggested they get some over size guides before stripping the engine down. Although we had not helped very much they were pleased to know that a factory representative was interested/their problems. They were hopeful of selling

more Enfields next year and had a mechanic with experience of Enfields starting on the following Monday. They were eager to learn more about our machines and suggested we run dealers schools over there as do other manufacturers.

Before I left Los Angeles, Clymer asked me to discuss with Mr. Nightingale the possibility of Enfield Precision building Indian's using machine parts sent from Italy. Apparently Tartarini is very busy building small Ital Jet machines although Clymer's real hope is that we would make them cheaper than Tartarini does. I doubt very much if this would be the case. The small Indian's are not selling well in the States, the Czechoslovakian engine is not very powerful - they are changing to the Italian build Minarelli engine. The Enfield engine Indian's have only just arrived and I believe that high price will prevent them selling in very large quantities.

Alberta Cycle & Motor Co Ltd.

I arrived in Edmonton, Canada on Tuesday September 23rd and was met by Norm Greene son of Ed Greene the proprietor. Ed's father had a motorcycle business in Folkestone back in the 20's and they moved to Canada when Ed was a young lad. The shop at Edmonton has recently been enlarged and now covers 9,000 sq. ft. with a good frontage. There is a good workshop and they have several mechanics. The new showroom will be officially opened on 15th October. They are main agents for Honda but also retail Triumph and BSA. In addition to twenty or so small capacity Honda's on show, there were two Honda 750's a BSA Three Cylinder, a Triumph Three Cylinder and a Royal Enfield in the showroom. I suggested to Ed that now Honda were making a 750 machine they might put pressure on dealers to sell only Honda's. He did not think this would happen, and if it did the dealers through their association would resist it.

Royal Enfield's sent to Alberta Cycle & Motor Co, were billed at net prices and 5% credit allowance made later. This method forces them to pay customs duty on the full amount. If discount was given in the first place they would save about 35 dollars on each machine.

They first imported Royal Enfields in 1947 and yet I was the first man from the factory to call on them. They had sold 16 Series II models and made some criticisms of our machines but generally found them well made. They have less trouble with Enfields than with Triumphs or BSA's. The availability of spares was stressed as of paramount importance. Ed Greene is planning to sell Enfields throughout the province of Alberta, setting up dealers in Calgary, Red Deer, Lethbridge and Medicine Hat.

Gateway Cycle & Motors Ltd.

This concern is run by Roy Turnock and Bob Vryenhoek, both young men. Roy is the more dominant partner, he met me at Winnipeg Airport on Wednesday evening and it was with him I spent Thursday September 25th. They have handled Enfields since 1963 and sold 20 Series II this year. Their main troubles have been stretched and broken primary chains, clutches, and heavy oil consumption, but in the main they are reasonably satisfied.

Firth Motorcycles Ltd.

Harry Firth met me at Toronto Airport on Friday September 26th and we went straight to his shop. On the journey we gave a lift to a rider who was pushing his new Triumph which had broken down with gearbox trouble (we didn't actually see a broken down Enfield - but we didn't see many Enfields anyway).

Harry was very busy and I got the feeling I was in the way. However, we spent a couple of hours at the shop which was long enough as he had few complaints to make. He had had some clutch and clutch operation troubles but was generally very pleased with Series II models.

He has sold 23 Series II models and 700 Norton Commandos this year, the Commando has sold better because of better advertising and publicity gained from successes in Production class racing in this country. He expects to sell more Enfields next year..

Notes on Technical Discussions

Motorcycle Sales & Service.

Could we make available $\frac{1}{2}$ " longer primary chain adjuster for spares use only.
Why not re-introduce the "M" type gearbox.
Re style the two gallon petrol tank - Harley Davidson Sportster was given as an example of a nice looking tank.
Tool box required - hinged seat with tools below?
A rear hand rail and carrier combined would be a good accessory.

Shillingford & Sons.

Left hand footrest hanger fouls the ground too easily.
A 1" long insulating spacer made a big improvement on a 1968 model.
Too much heat transferred to carburettors.
Elmer requires 15T lay-shaft gears HG17/15. URGENT.
Is the low top speed of many 1968 models due to ignition timing variations when the engine is running at higher speeds. There is a lot of overhang between the ignition cam and the nearest bearing compared with the distance between the two bearings.
Can Tom Brophy have a Series II bottom-half assembly to build into a scramble machine.
Check that cylinder barrels are weathered before machining.
A detachable cover at the back of chain case would make it much easier to change gearbox sprockets.
Lubrysil in gearbox gives much easier gear changes.
Try 32 m.m. carburettors, increased inlet port diameter and 19T gearbox sprocket.
Elmer requires print of schedules and to be kept up to date with modifications.
Can we make a larger engine - say 800cc!
Re-run breather tube down behind gearbox.
Some gearboxes with broken lay-shaft pinions have also had seized or broken main shaft sleeves. Is there a connection between the two - I think it is most likely. A seized up sleeve would be similar to engaging top gear when bottom gear was already engaged. Can phosphor bronze sleeve be replaced by a Glacier DU bush?

Shores Motors.

First Series II machines did not arrive until June. Did over tight timing chains cause exhaust cam shafts to seize up?
There is a risk that some machines still in boxes may not get the rocker release valves changed. This is not done until the dealer gets the machine. I impressed on everyone the importance of fitting the new type valve.
One engine, after having a new exhaust cam shaft fitted could not be assembled with the original timing chain and required a special with two extra pitches. I was assured it was not wrongly re-assembled

but I cannot believe it. I tried to get the machine in for examination but was unable to.
Oil leaks from cylinder base joint push rod tunnels.
Oil leaks from primary chain case to engine joint.
The Interceptor is 44 lbs heavier than the Triumph Bonneville.

Joe uses Colmonoy welding rod to build up badly worn clutch pushrods. This gives a hardness of 62 Rockwell without treatment.

The two smaller rear wheel bearings wear out quickly. There have been several cases of steering head bearings braking up.

Loctite the breather adaptor thread to prevent oil leakage.

Loctite rocker box cover studs into cylinder head - oil creeping up threads.

The pilot air intake plug in the mouth of Amal carburettors does not always make a good seal. Joe forces a ball into the hole to form a second plug. Could we make up some Stage I camshafts with Stage II cam forms as replacements.

Joe has used shims to lessen the amount of cam shaft end float on some Series II models.

New clutches required as replacements on 1968 models (Marlin Berg).

Cylinder head steady stud vibrates loose, replace with bolt and tab washer or some other locking method.

Ignition key fouls riders leg when kick starting.

Engines "hunt" when idling in very hot weather

Floyd Clymer Motorcycles.

Inlet port machined in too far from carburettor end - breaks into valve guide hole.

Fit oil trap in breather pipe and re-route pipe.

High compression pistons required.

Make rocker oil feed pipe union from 40 ton steel and increase diameter of groove.

Barry Tilman insists that cradle frame is necessary - not for rigidity but because other machines have cradle frames.

Excessive wear on valve stems - fit end caps to encourage valve rotation.

Use aluminium bronze valve guides with internal spiral as on Harley Davidson (I have sample).

Douglas Tatro suggests we make all running clearances in the engine too close - takes too long before an Enfield is fully run in.

Lucas batteries useless - Japanese G.S. battery the very best.

Many dealers speak highly of Torco motor oil.

Does Avon have a 3.00 x 21 High Speed Front tyre for Don Sliger.

Dealers should be supplied with assembly instruction leaflet.

Tatro complained that Service Bulletins were too technical and difficult to understand.

Weld around rear suspension brackets unsightly.

Investigate competition brake linings made by Frendo Competizione.

Tappet guides loose in two machines.

Alberta Cycle & Motor Co.

Air filter, difficult to fit.
 Footrest bar nut needs locking.
 A drain plug in the primary chain case would be appreciated.
 It would be an advantage to be able to adjust the primary chain without removing the cover.
 Inner carburettor attachment nuts inaccessible.
 Two small lay shaft pinions broken.
 A reserve fuel tap is necessary.
 Could the handle bars be serrated where clamped to the steering fork head.
 A Tank badge would give the machine more "class".
 The Italian handle bar grips as fitted to Triumphs are preferred to Amal grips.
 They will order four more machines with small tanks and high bars, and 1 machine with 4 gallon glass fibre tank (red or metal flaked) and English style handle bar to arrive end of January.

Gateway Cycles & Motors.

Excessive wear on primary chain tensioner pad - primary chain stretch very quickly - 3 or 4 cases of broken chains on 1968 models.
 Two exhaust cam shafts seized in the same Series II machine. I again stressed the importance of fitting the latest type rocker release valve. The one Enfield in the showroom still had the ball type valve fitted.
 Two Series II models - engines numbered IB 1204 & 5 - are using a lot of oil - heavy wear on valves and guides and porous cylinder heads are possible reasons.
 Rear wheel bearings need replacing after small mileage.
 Porous Series II crank cases at lower front engine bolt on timing side.
 Two machines had steering head bearings brake up.
 Use Lock nuts on carburettor fixing studs.
 Improve finish of cylinder heads.

Firth Motorcycles.

Excessive wear on clutch bearing ring.
 Excessive wear on clutch operating adjuster screws.
 Cylinder head compression seal incorrectly fitted.
 More colour on the tanks would be preferred.

Points raised by nearly every dealer.

Fit 19T gearbox sprocket (this may be because performance is not as good generally as the few machines tested by the Experimental Department - we must check shape of exhaust ports - these are fettled by hand).
 Would close ratio gears be more suitable.
 Study drawings of 1958 Apache cylinder heads W 43551 and W 43554 - this model had excellent performance.
 Clutch troubles.
 Lay shaft pinions breaking.
 Series II rocker feed oil pipes fracturing.
 High price of spares.
 Petrol tanks splitting between rear fixing pommels.

$\frac{1}{4}$ mile speeds most important.

Suggestions for Speed Equipment.

High compression pistons (10:1 with shim under barrel)
Sports cam shafts.
Lighter valves, with guides and collets.
Larger inlet valve - if possible.
32 m.m. carburettors.
Light solid aluminium push rods.
Close ratio gears.
19T and 18T gearbox sprockets.
Lightened valve rockers.
Velocity stacks.

CONCLUSION

Although I have given a long list of points raised with dealers, the serious troubles are concerned with clutch, clutch operation; lay shaft pinions breaking and oil leaks. Some of the other faults have already been corrected on later models and the rest are mostly isolated incidents and these together with the oil leaks are mainly due to bad workmanship. I am thinking of such things as loose tappet guides, poor finish on machined faces, porous cylinder heads and crank cases, poorly made steering head bearings. A lot of these troubles are in the past as far as production is concerned and quality is much better now than it was twelve months ago. When we get the new clutch and clutch operating mechanism and if we keep good quality control we shall be making a motorcycle that will compare favourably with any other on the market.

My biggest difficulties when making design changes are caused by our slow production rate. The buying office can hardly buy in smaller quantities, and would much prefer bigger quantities to keep prices reasonable, and yet our stocks of many parts can at times keep us going for twelve months or more. Machines now in boxes at distributors premises may not be sold until May 1970 and the crank case castings were probably bought at the beginning of 1969. It is very often impossible to make improvements quickly - the whole cycle of production must be speeded up, and the only answer is to produce in larger quantities.

I had hoped to meet more dealers in the U.S.A. than I did and I have got the impression that there are very few dealers who sell many Royal Enfield machines or know very much about them. I am sure that we have only just touched the fringe of the market and we need many, many more dealers, better advertising and some competition successes and we could increase sales ten fold over the next three or four years. Increased sales would allow us to reduce prices, or hold them whilst others increased, until we were more competitive in this respect. Our share of the market is so small that if it were depressed 50% it would not affect us.

According to the latest issue of Motor Cycle and Cycle Trader exports of motorcycles to Canada this year have increased by £1,600,000. Our motorcycle suffers less troubles in Canada than in the U.S.A., partly because the ambient temperatures are lower, but also I believe, because a motorcycle is used more for touring in Canada, although as more are sold they may get used for traffic light drags and the transmission will then suffer as it does in the U.S.A. The import duty charged on Japanese motorcycles makes it easier for British machines to compete on price in Canada than in the U.S.A.

Looking to the future, our plans are made for 1970 machines but we should also be planning for the 1971 season. I do not believe we should include a self starter on our standard model, the price will put us in the BMW class although we could have a deluxe version with it on.

However, we shall not have perfected a starting arrangement for the 1971 season and we can now decide on the 800cc model with re-styled tank and side panels. We have recorded a best one way speed of 123 m.p.h. with the prototype at MIRA and now it has the new clutch fitted (giving less slip?) we are reading 7,200 revs and 134 m.p.h. on the instruments. I expect the speedometer reads fast but the speed equivalent of 7,200 revs is 128 m.p.h. and this could be the true speed. We believe that we have solved the piston and oil consumption problems and are waiting for a new cylinder barrel with which to make a final test.

If we wish to announce the 800cc model next September we must issue the schedule almost immediately in order that the buying office can order the necessary materials. The drawing office is in a position to do this, with the exception of such items as piston and petrol tank brackets (to be re-styled?). I would like to see us plan for selling 2,500 motorcycles in 1971 with a build up in propaganda this next year to prepare the way.