

MOTORCYCLE

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touring  trailing

TRIP TEST: BIG ROAD BIKE CHOOSE-OFF

TRAIL TEST: 10 DUAL-PURPOSE 250's

TRICKS ON ROADSIDE TROUBLE-SHOOTING

INSURANCE/CUSTOMS/LEGISLATION

DAYTONA IN DEPTH/DICK MANN PROFILE

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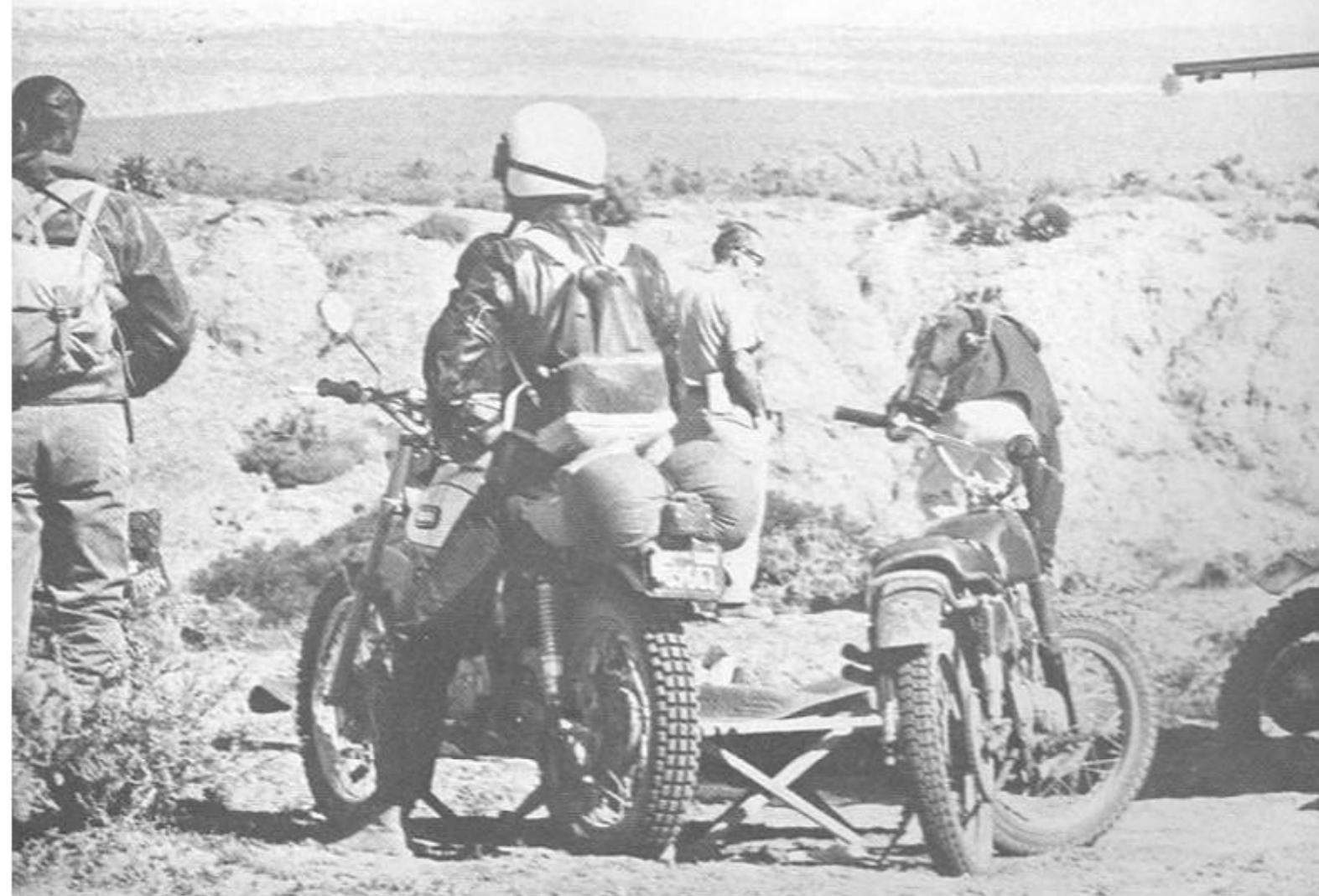
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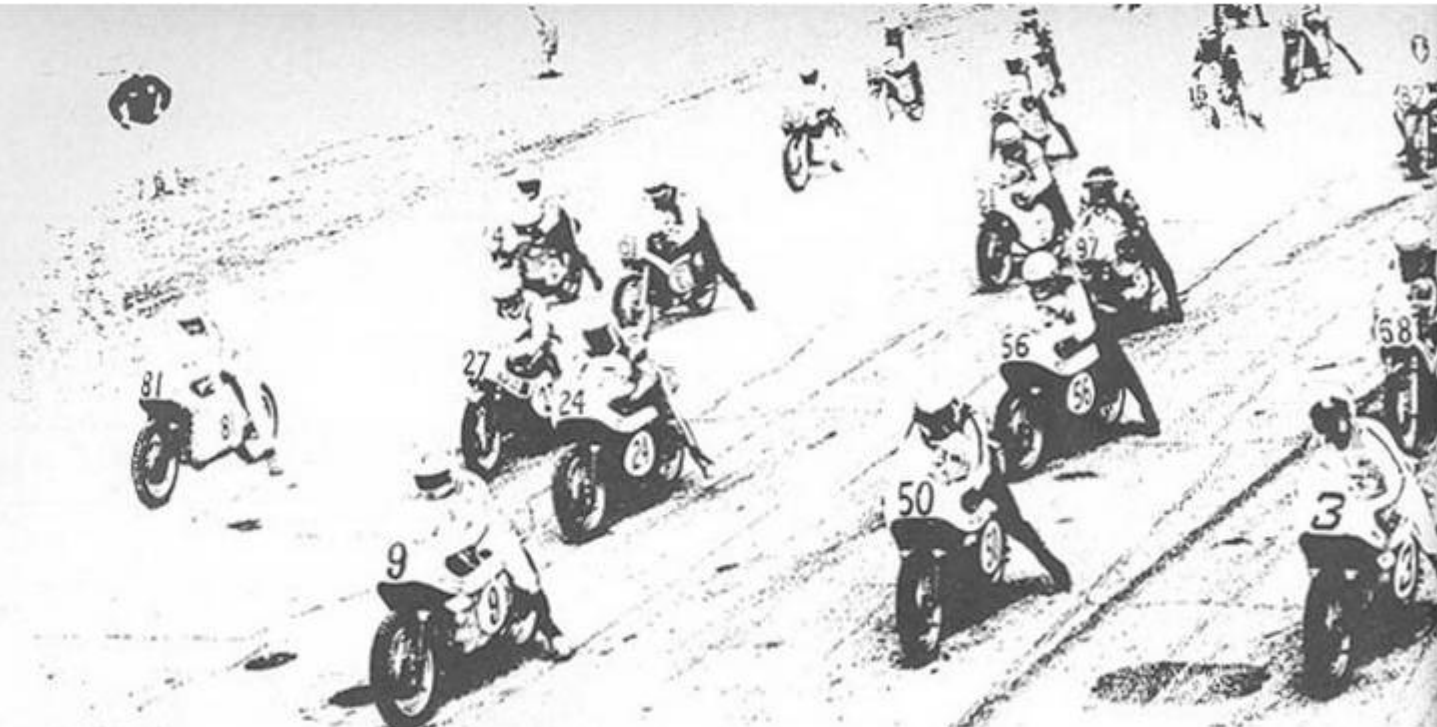
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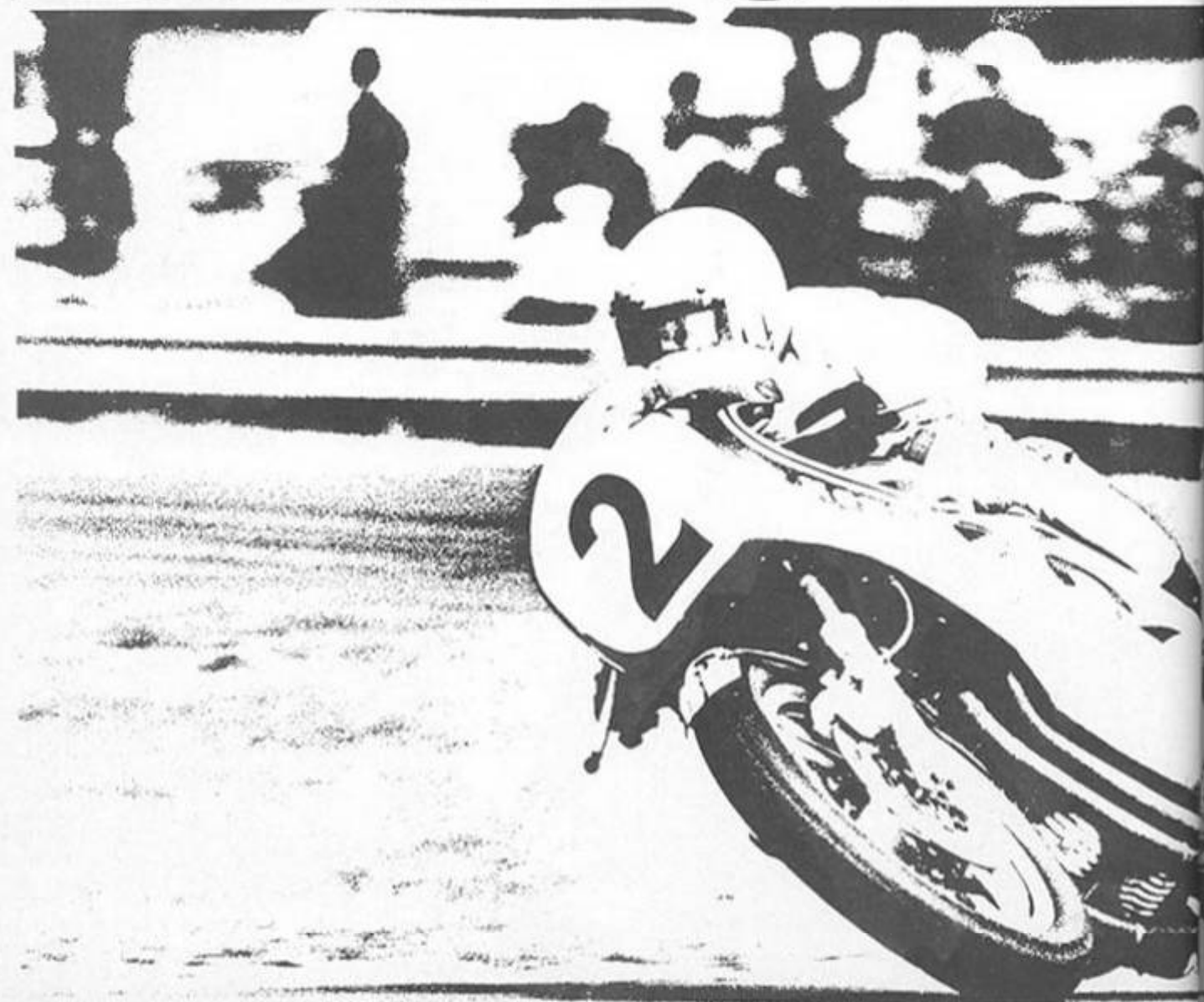
COVER

The call of the open road is best answered by a ride
with a group of fellow motorcyclists. Larry
Willett's cover photography tells it all.





DAYTONA





'70

the year of first's

THE FIRST TIME FOR 750's.
THE FIRST TIME EUROPE'S BEST COMPETED.
THE FIRST TIME HONDA COMPETED.
THE FIRST TIME HONDA WON. by Tony Murphy

Prospects for the 1970 Daytona to be one of the best races ever were given a big boost late in 1969 when the American Motorcycle Association upped the displacement limit to 750cc. This let in all of the newly introduced super-bikes such as the four-cylinder Honda, the three-cylinder BSA's and Triumphs and the new overhead-valve 750 Harley-Davidsons. Whether the respective factories participated or not, there were bound to be some swift, privately entered 750cc machines.

Months prior to the actual race, rumors circulated about a big factory effort by Triumph and BSA as well as Honda. After an unsuccessful attempt in 1967, Honda had stayed clear of American racing and had even tapered their European program to a virtual standstill. Harley-Davidson had an overhead-valve version of their very successful side-valve KR model, that—since it incorporated many features of the larger, and long-proven Sportster—should be a definite threat. Suzuki surprised everyone in 1969 with their 500cc twin by managing to keep up in the speed department while suffering few if any failures. Yamaha had not been so fortunate. Their 350's were fast enough but seldom stayed together for the entire race. On top of that, they were handed an even greater displacement disadvantage with the '70 rules.

The few weeks just before the race provided some added interest as the entries rolled in. In addition to the usual American riders, there were a dozen or more foreigners. Kel Carruthers, the 1969 250cc World Champion entered a pair of Yamahas, and the legendary Mike Hailwood, world

champion no less than nine times, would be aboard one of the factory-entered BSA three's. Ralph Bryans, another ex-world champion, Rod Gould, Tommy Robb, Jack Findlay, Ginger Molloy, Bill Smith and Tony Smith, names that were usually confined to the British and European race reports, were listed in the Daytona program. In addition, the evening short track races held in conjunction with the road races found 1969 World Champion speedway rider Ivan Mauger, and many-times champion Barry Briggs entered.

Many saw the possibility of the age-old controversy as to whether the Europeans are better, or vice versa, than the Americans being settled once and for all. At last, the best foreign road racers would meet the best Americans on a common ground on equal equipment. Gary Nixon, two-time national champion, and probably the best, if not the most spectacular, American road racer, would be on a Triumph triple while Mike Hailwood would be aboard an identical machine powered by the BSA version of the near-identical engine. These two would likely provide the best comparison because of their similar equipment. Other riders such as Cal Rayborn on a factory Harley-Davidson and Dick Mann on the four-cylinder Honda would be difficult to accurately compare because of the variable of equipment. It was unlikely that machines encompassing entirely different engineering concepts would have the same handling and braking characteristics as the BSA of Hailwood, let alone the same speed. They might be faster or slower, better or worse handling, have better or worse brakes

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and a dozen other differences that would confuse an accurate comparison of the riders' abilities. But Nixon's and Hailwood's machines came off the same drawing board, and the only external differences was the Triumph being painted blue and the BSA red. If a comparison was to be made, these two were the ones to watch.

Other controversial subjects might be settled, too. Now that everyone could run a 750cc machine, the displacement advantage that Harley-Davidson had had for a number of years was gone. However, in its place, the two-strokes were given a handicap inasmuch as the largest available is a 500cc Suzuki or Kawasaki, the 350cc Yamahas being forced to compete using a machine less than half the size of the largest four-strokes. With so many of these Yamahas in the hands of private owners, nearly 200 of them, there was talk of a separate 350cc class in the future. Not a bad idea when one considers the number of 350cc two-strokes available and the lack of incentive to race one against the faster 750's.

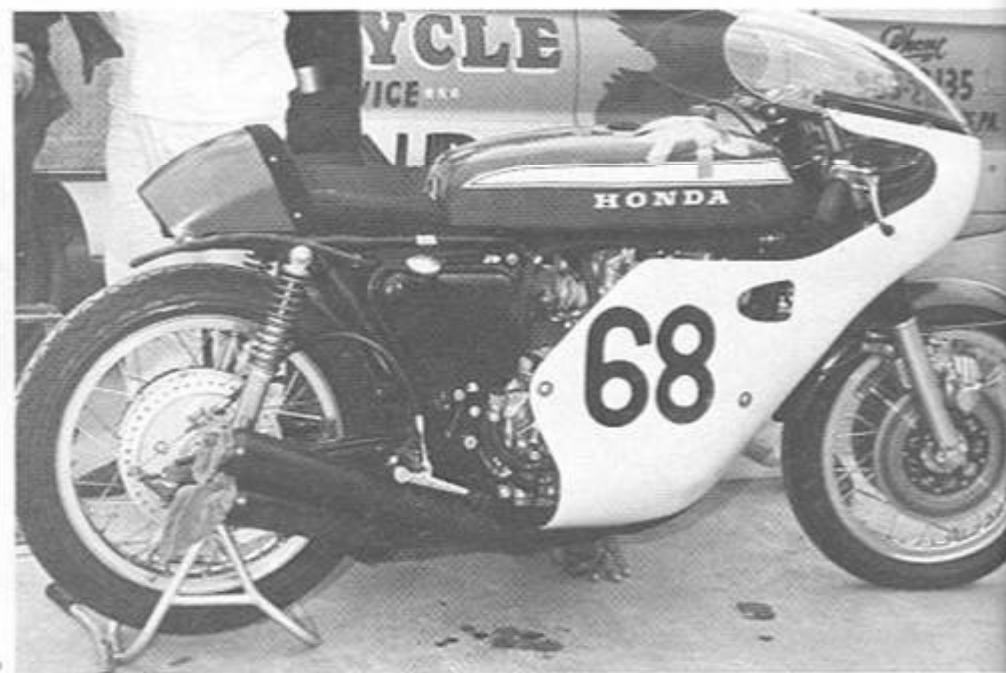
Of the 500cc two-strokes, Suzuki looked to have the best chance. Kawasaki had a brand-new production racer based on their Mach III street machine, but it was untried in competition and might logically be expected to present some reliability problems in such a long grind its first time out. Suzuki had been to Daytona before, and had managed to finish second in the '69 race, so they were a good bet to go the distance.

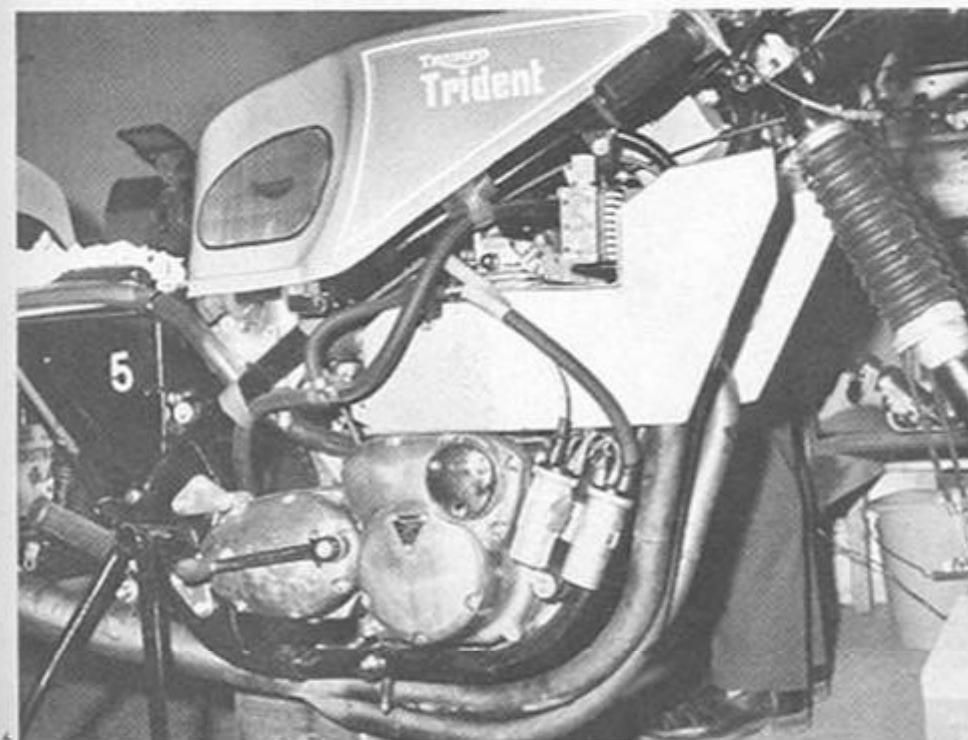
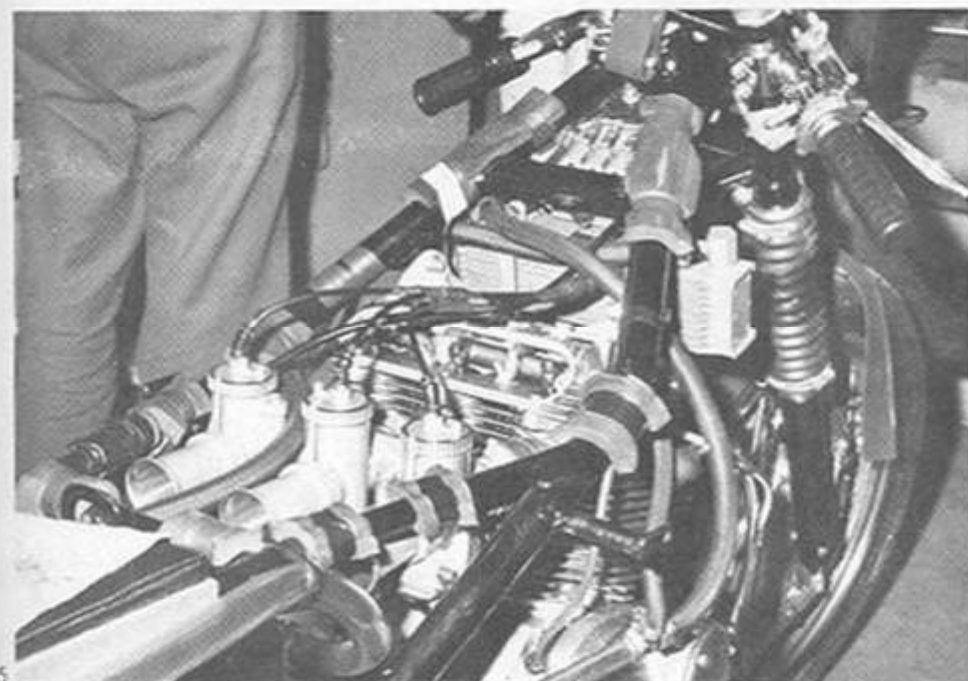
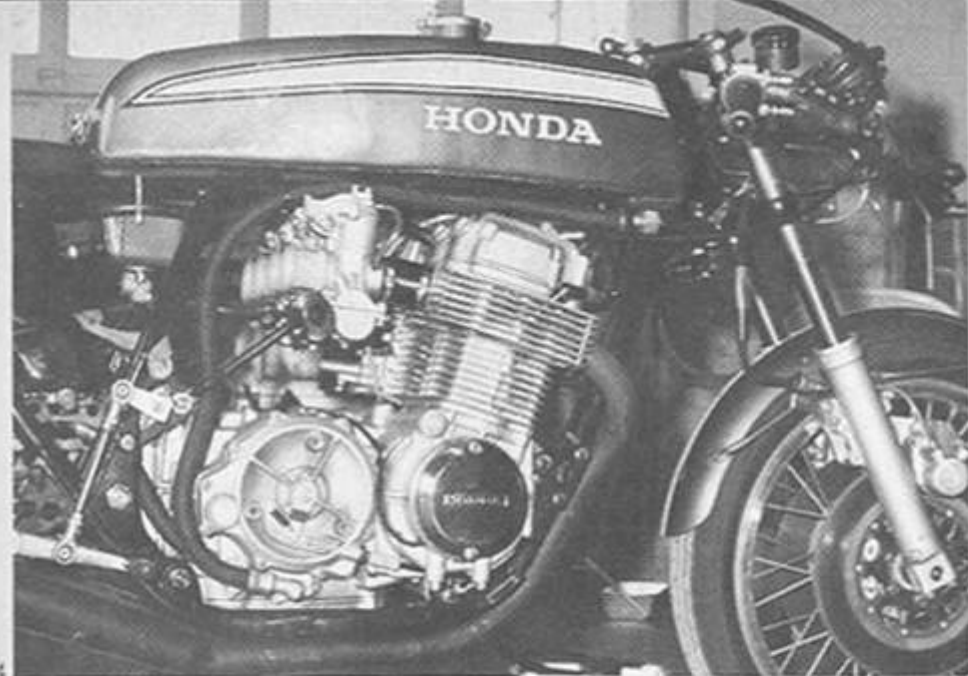
The Triumph-BSA boys were quite serious about winning, and the quality of their equipment said just that. The machines were immaculate, and as professional an effort as ever launched at Daytona. In a bid to get the machines as light as possible, to handle well and provide enough ground clearance, all of the standard parts except the engine and the front forks were discarded.

Special frames made of Reynolds 531 tubing surround the engine assembly to make it compact and rigid. Starting at the steering head the double loop rails run down and under the engine in normal fashion. Behind the engine they bend upwards around the swinging arm pivot and then head directly forward to the steering head. A sub-frame of smaller-diameter tubing extends back to provide a place for the rider to sit, and a mount for the rear damper units.

Up front, modified standard front forks hold an 18-inch front wheel that appears to be 80% brake. The latest four leading-shoe Fontana unit was apparently more than adequate according to riders' reports. In the rear is an 18-inch wheel with a hydraulic disc brake on one side and the drive sprocket on the other.

The engines, modified to produce 3





over 80 hp are fed by three 1-3/16 Amal GP carburetors and have three exhaust pipes which meet in one common megaphone that lets out a scream like you've never heard before. Everything is neat and professional, and fits snugly inside a fiberglass fairing that was developed in a Royal Air Force wind tunnel. The huge tail on the seat is evidence of the tunnel tests since a few years ago when Harley-Davidson spent some time, and a couple of bucks, on streamlining they too showed up with large seat backs.

About the Triumph-BSA garage were scattered spares that were more evidence that they meant business. Among their party were representatives of the Dunlop Tire Company, Lucas electrical experts and even the engineer who headed up the wind tunnel program. If any changes were necessary to get more speed out of the triples, the people were there who could do it. But—as they found out early in the week—they had the speed; they needed more reliability.

And they weren't alone. Over in the Honda garage they were having similar problems. Early in the week Ralph Bryans had been clocked at over 160 mph, but they couldn't get the bikes around the race track as fast as their then-slower rivals. Nixon and Hallwood were scorching the track with record-breaking lap times while the Honda boys could not get under the lap speeds of last year's winner. But anyone who knew of Honda's racing background was not discounting them.

A look at their machines told you they meant business. The beautifully prepared fours actually used a modified standard frame and were probably the only machines at Daytona that used a street front brake. They

1. Gene "Burrito" Romero gets some words of encouragement from his mechanic, Pat Owens. Gene qualified Triumph Trident on the pole and rode it to second place in race.

2. It might look special, but all the pieces of this machine are available from American Honda. A real do-it-yourself racer, it closely resembles factory bikes.

3. A closer look at Dick Mann's winning Honda reveals a red-line of 9500 rpm and an oil pressure gauge. Mann claimed he never had to use maximum revs in race.

4. With the exception of the rough-looking crankcase and cambox castings, items like front brake, forks and frame are from street bike. Paint jobs were metallic bronze.

5. Triumph frames were far from street-looking, although engines were close to stock. Three Amal 1-3/16 carburetors supplied fuel, exhaust used 3 into 1 megaphone.

6. Front forks, oil cooler and ignition coils were off street bike, but that's about all. Alloy ducting forced cooling air through cylinders but Nixon's still had piston blow.

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lifted the front disc jobs right off their road version of the four. As a precaution they bolted one on both sides of the front wheel; but it speaks well for them that they have a street bike brake good enough to stop a 160 mph racer.

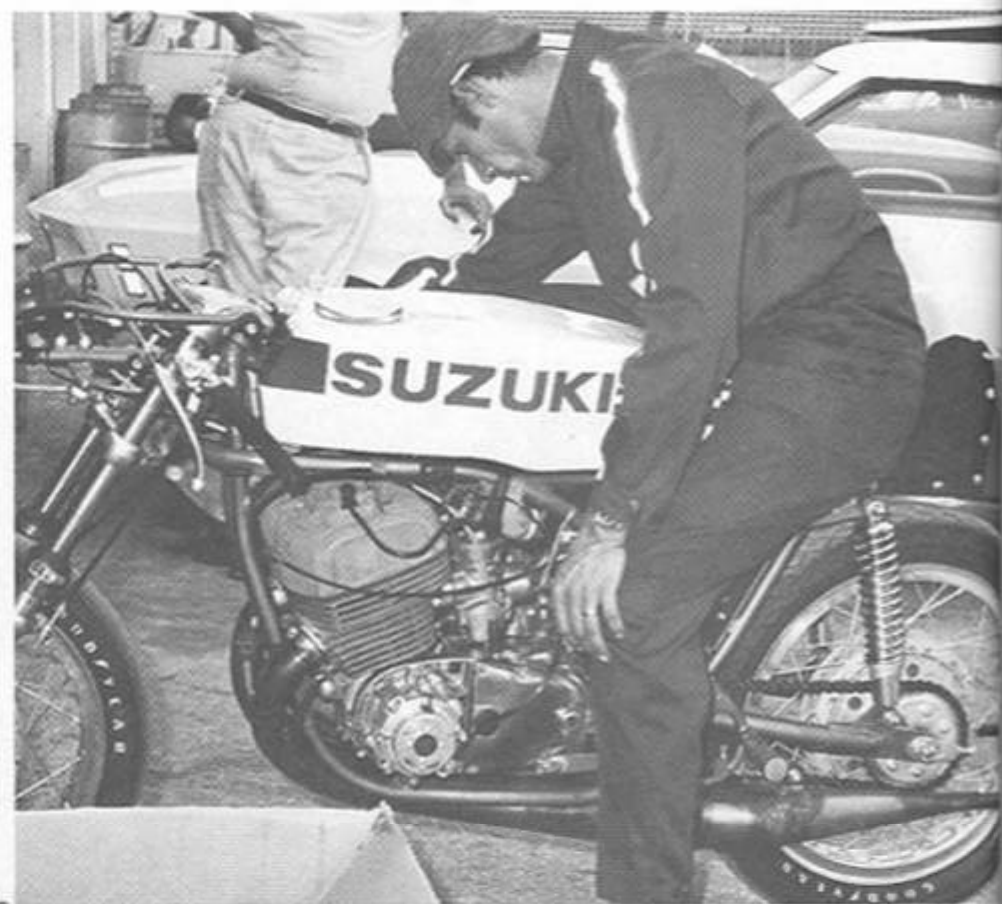
The engines had been equipped with an oil cooler, but externally they looked like any other four. In fact, a couple of dealers had modified standard machines with a kit available from Honda, and the only visible difference from the factory versions was the paint job. Factory bikes were bronze, while the kit pieces are red. There did seem to be a little difference in performance, with the factory bikes having a slight edge.

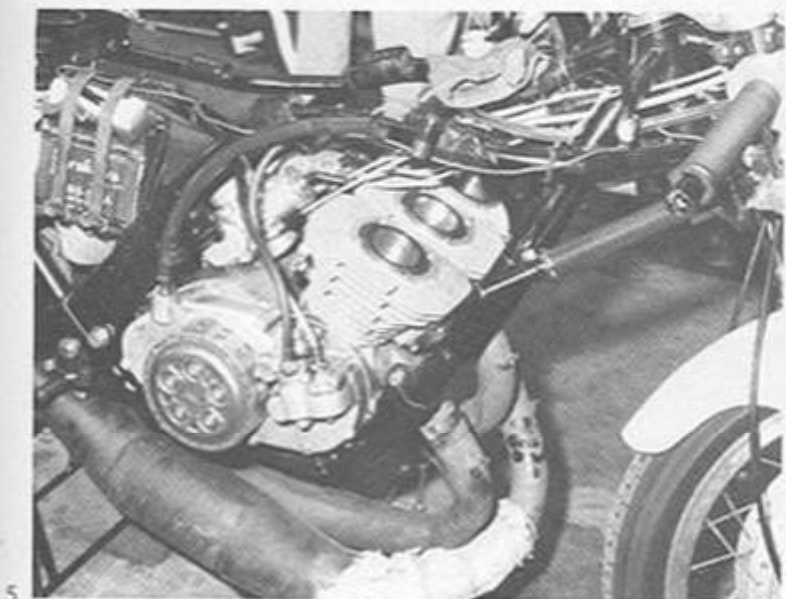
Rumor had it the biggest problem they were having was getting the throttles to shut off when slowing for corners. For some reason, the slides in the carburetors would not drop all the way down when the engine was running, and the riders were a little nervous at the prospect of having them stick wide open. Then too, the machines were very heavy and hard to navigate in traffic. Where the more nimble two-strokes could zip in and out of the smallest spaces, the Hondas and to some extent the Triumph and BSA's, could not change direction nearly as quickly.

By mid-week a pattern had definitely been established. The Hondas were by far the best accelerating machines on the track but gave away a little on top speed to the Triumphs and BSA's. The triples were all being timed at around 160 mph, while only the Honda of Ralph Bryans had reached that speed. On the infield section the triples seemed a little more manageable than the big Hondas but were hard-pressed to keep up with the smaller and lighter two-strokes.

Top speeds of the two-strokes were no better than the 155 mph recorded last year, but lap times of some of the faster riders were on par with those turned in by Hailwood and Nixon. Mann's Honda was the only one of the four entered getting around in what could be considered competitive times by mid-week, but old hands at Daytona were not surprised—Mann could put anything with wheels right up front with the leaders.

Until Wednesday's qualifying runs, no sign could be seen of Harley-Davidson. When they did arrive, the long faces gave a clue to the problems they were encountering. After a winter of testing, some bugs still remained, and although the whole Harley crew was in Daytona, they were still working on their machines. Rumor had it that they were seizing pistons, while others felt that they were in good shape in the reliability department but needed some more miles per hour to get in the hunt. Fastest Harley qualifier was Bart Markel at 147





1. "Mike the Bike" Hailwood came out of retirement to ride BSA Rocket 3. He was in contention until BSA sputtered to a stop on tenth lap.

2. Team Suzuki rider Ron Grant put smaller 500cc twin up front by half-way point only to run out of gas and fry engine. Bike is one of smallest in AMA competition.

3. Twin-carbureted 750cc overhead valve Harley-Davidsons were plagued with problems all week. Serpentine-like exhaust pipe is necessary to get both pipes the same length.

4. Tuner of the week was Californian Don Vesco. A competent rider, this year he chose to tune for World Champ Kel Carruthers, came home with 250cc win and fastest two-stroke qualifier at over 151 mph.

5. Surprise of the week were the new 500cc Kawasaki production racers. They ran fast, they lasted, and won more money for their pilots than any other machine in any class.

6. Based on the successful Mach III street machine, the racing version had a special frame and forks and outlasted many older, well tested machines. Should be continual threat.

mph, a good 10 miles per hour down on Romero's Triumph and slower than 13 others. In fact, Triumph, BSA, Honda, and the smaller Yamahas, Suzukis and Kawasakis had all turned in better qualifying times than the fastest Harley.

A little Sherlock Holmes work turned up some answers. Harley was definitely having cooling problems. An abundance of pistons scattered about their garage, and last minute modifications being made to their wind-tunnel-developed Wixom fairings to duct more air around the cylinders, was evidence enough. By race day the special high compression pistons that were giving all the trouble were replaced by welded-up stock versions in an effort to eliminate the continual scuffing. Then for reasons that even Harley was at a loss to explain, they started breaking valves.

Their lack of speed over last year's machines was probably due more to the short time they had to tune the bikes at the racetrack, than the design of their new overhead valve engine, for they were quick to admit that the new engine had considerably more muscle than the old reliable flathead. But that old, reliable, obsolete flathead had the last laugh. Walt Fulton's ex-factory model outlasted all the overhead models for a well

deserved sixth place.

After two years of knocking on the door in the big class with only a 350, Yamaha appeared to be out of the running with the competition on 750's. By far the fastest Yamaha (fifth fastest qualifier and fastest two-stroke) was that ridden by current 250cc World Champion, Kel Carruthers from Australia. The 350, and the 250 with which Carruthers won the 250cc combined race, were owned and tuned by Californian Don Vesco. Ironically, Rod Gould had arranged the rides for Carruthers, and had to settle for second place behind him in the 250 race.

Over in the Suzuki pits, all was not going well. The top speed of their 500cc twins was not as fast as the year before when they had finished second, and their 1970 250's were no quicker either. Apparently they had some engines that were faster, but they were concerned over the reliability. By race time they must have used at least one of the "good" engines since Ron Grant's machine had improved considerably over its qualifying speed of 147 earlier in the week. Grant put his Suzuki right up at the front in the early laps and was well in the lead after Hailwood stopped and Nixon dropped off the pace. Had his Suzuki not run out of gas a lap

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before it was due to pit, the outcome of the race could have well been a different story. But that's racing.

Kawasaki was an unknown quantity until Friday's Amateur race. The new three-cylinder racers had shown good speed all week, topped off with Rusty Bradley qualifying at over 149 mph. When he won the Amateur race with a 100-mph average, the possibility of a Kawasaki winning the 200-mile race became apparent. They did have one problem — fuel consumption. Bradley had to stop for fuel in his winning 100-mile ride, which meant at least two stops for the thirsty triples in the 200-miler. With the majority of the competition needing only one stop, this put about a 30-second handicap on all the Kawasaki riders.

All of the Kawasakis competing at Daytona were privately entered. Factory personnel were present with a large supply of parts and willing to help any rider who needed assistance. Rather than spend the vast sums of money needed to maintain a factory team, Kawasaki chose instead to offer competitive machines for sale and then add incentive to the private riders by paying generous bonuses for winning. Rusty Bradley won \$800 prize money for winning the 100-mile Amateur race, but picked up another \$5000 from Kawasaki. Had a Kawasaki won the 200-mile race it would have been worth \$10,000 to the winning rider. Based on their first outing at Daytona, it looks as though Kawasaki could well be paying out a lot of this money before the season is over.

With all the rumors floating around, and the 160-mph-plus trap times being recorded, the race would have to be pretty good not to be an anti-climax to the week's activities. A hint at what was to come could well have been the 250cc combined race held on Saturday. Although Yamaha dominated, the first three positions were filled by foreign riders. World champion Kel Carruthers scorched around the track for a record-setting 100-mile speed of over 98 mph. Second man home was Englishman Rod Gould, with Canada's Yvon du Hamel, the winner of this event for the last two years, finishing third. The only "Yank" to keep up with their rapid pace was Gary Nixon, but his Yamaha skidded to a stop with a seized engine soon after the start. Much credit is due to Carruthers who had never before been to Daytona and had never before ridden a two-stroke. He caught on to both very quickly, and one wonders how well he will go when he gets more familiar with the Yamaha.

SHORT TRACK RACES

As though there isn't enough activity at the speedway, on Friday and Saturday night the spectators add to their exhaustion by rushing over to

the short track races. You have to rush since inevitably there are turn-away crowds. Last year the proceedings were given some added color by the presence of Barry Briggs, four-times world speedway champion, a sport that is quite similar to American short track racing. This year he was joined by the current champion of this international sport, Ivan Mauger (pronounced Major) from New Zealand. Briggs rode a Yamaha 250, while Mauger was Kawasaki-mounted.

Both of the foreign stars have a completely different riding technique than the Americans, and to suit this technique they have very different-looking machines. The engines are the same as ours, but the frames and forks would look more at home on a bicycle.

As Briggs explained it, "Your machines are built for the straights, ours are built for the corners." The American riders rush down the straightaway, coast into the corner and then turn the power on to come out. Briggs and Mauger don't ever shut the power off. As they approach the corner they throw the machine sideways, move forwards almost standing above the gas tank, and power around the corner in a big broadside. Unfortunately, the two styles conflict. The riders kept getting in each others' way as their respective lines around the corner intersected. When all alone, either Briggs or Mauger could ride around the track without ever shutting the power off. But in traffic they had problems — problems that would not have existed if everybody rode as they do. Or if they rode as the Americans do. As Mauger quipped in the pits, "The only similarity between your dirt track racing and ours, is that we both turn left."

But in spite of the difference in technique, both the visitors put on a show that had the spectators screaming for more. Plagued by bad luck the second year in a row, neither of them managed to make the Main Events although both won heat races. After the Main Event on Saturday night, a match race between the two foreigners and two Americans—Keith Mashburn, who had won the Main Event, and Larry Palmgren — was the highlight of the short track program. After leading three of the four laps, Mashburn was passed by Briggs in a spectacular full-bore slide that had a rooster tail from his back wheel bombarding the spectators. Both say they will be back, and it's a sure bet that all those spectators will, too.

200 MILES TO GO

Race day anywhere in the world for any kind of race is the same. It has a quiet undercurrent of excitement that is hard to describe. The riders who know they can win are drawn deep within themselves, contemplating the struggle ahead. They speak very little, always find something to do to

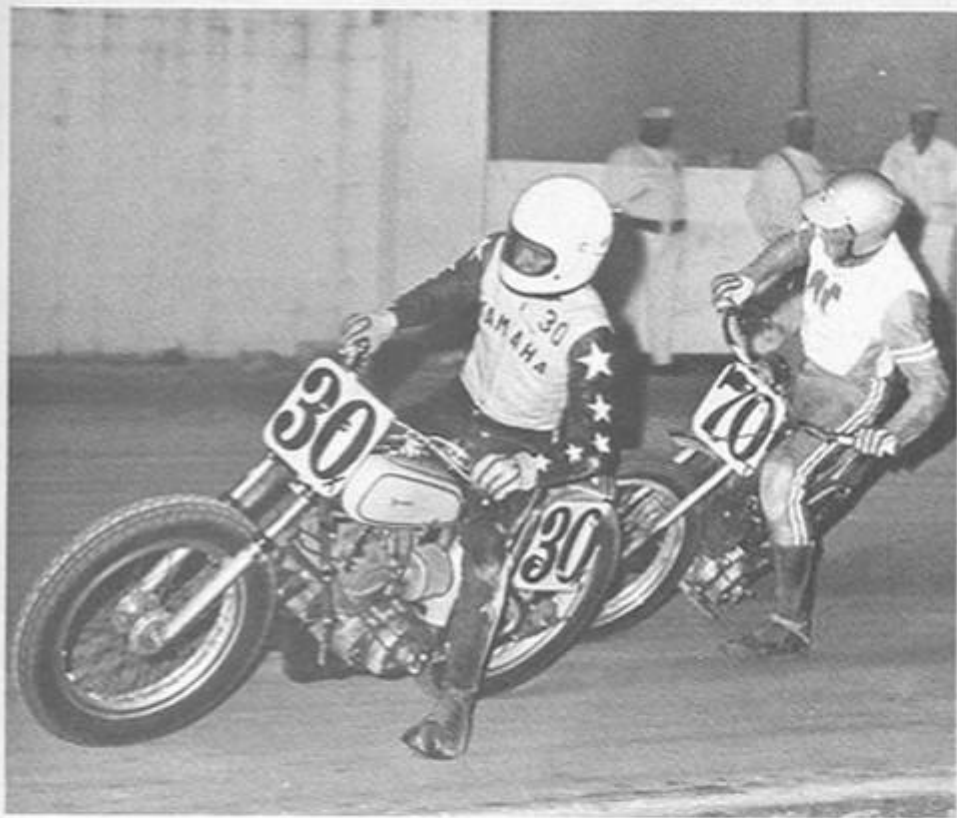


keep their hands busy, and stare at the ground. Many are reluctant to talk about the upcoming race, others find some relief from the tension by talking to their competitors and assuring themselves that they too are nervous. Goggles get cleaned more often than they have been all week, and the most unimportant items on the machine must be checked as though the race depended on them. It is all nerves; and they all feel the same way.

The front row had been decided during Wednesday's time trials around the big oval. The Triumph of Gene Romero, road tested elsewhere in this issue, averaged 157.342 mph to take the pole position. Sitting alongside was Mike Hailwood on a BSA with a speed of 152.905, Gary Nixon was next with 152.827, and then the Honda of Dick Mann with a speed of 152.671; 250cc winner Kel Carruthers filled out the row with his Yamaha at 151.719.

Lap times during the week had shown that Hailwood and Nixon were about the fastest, but Mann had turned in some laps very close to them. Romero was down a little in spite of his very fast qualifying time, while in the first few rows there were several riders who had lapped as fast as Mann. It was probably going to be close for a while at least.

On the first lap around the big oval, before dropping down onto the road course, the Honda screamed away from everybody. As they entered the infield, Mann still held the lead but the Triumphs of Nixon and Romero and the BSA of Hailwood were right on his back wheel. Through the infield the triples gained on the Honda and by lap two Nixon and Hailwood slipped by, Romero having



2



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6



7

1. Between them, these three men have won a total of 16 world championships. Hailwood, center, visits with Speedway stars, Barry Briggs, left, and Ivan Mauger. None won a main event at Daytona.

2. Young Keith Mashburn, No. 30, won Saturday's main event, but had to take second to Briggs in a special match race. Short track races were among best of the whole week.

3. Just minutes before the start, Romero, Nixon and Hailwood talk things over. Hailwood was well liked by all and added true world importance to the annual event. He hopes to come back again.

4. While the big factory teams had their own garages, the "poor" private owners had to make do with whatever they could find.

5. That concerned guy having problems with his Yamaha was a lot happier a little later. Young Jerry Christopher got his 250 together and easily won Novice event. He's a comer, watch out Amateurs!

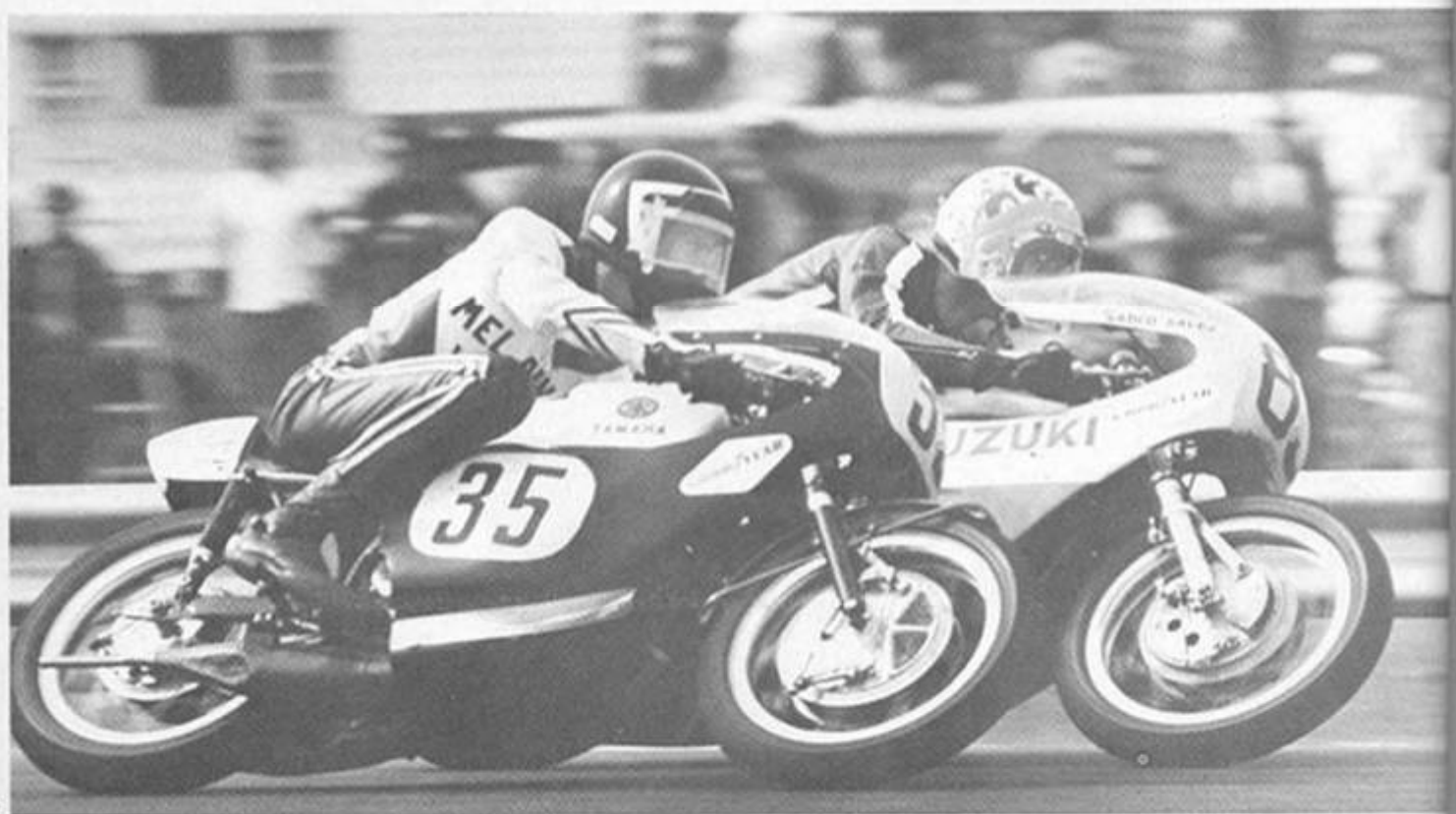
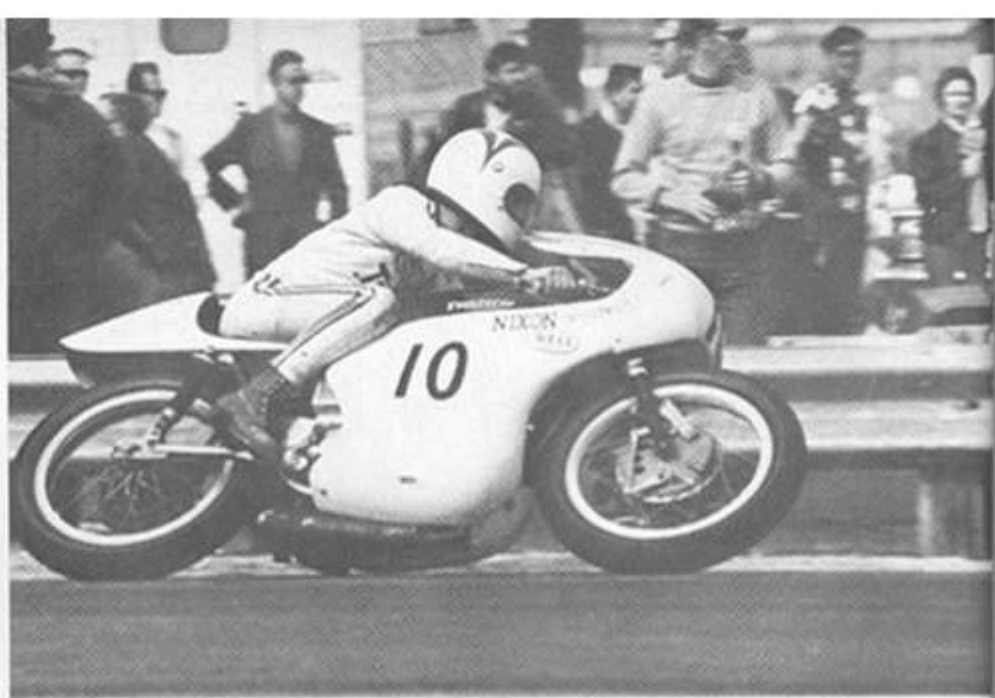
6. No. 75, Kel Carruthers, set fast time in lightweight event, then went on to win it. No. 81, Steve McLaughlin, son of famous rider, John McLaughlin, was fast 250 Amateur.

7. Rusty Bradley scored first-ever win for a Mach III racer and took home \$5000 bonus from Kawasaki.

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run off the road in his hectic rush to the front through the twisty infield. He stayed on board and rejoined the race, but as the race drew to a close it became apparent that his little excursion onto the grass might have cost him the win. At the finish he was a scant ten seconds behind the winner and gaining. He lost more time than that getting back into the race.

For a half-dozen laps Nixon, Hailwood and Mann were up front, followed closely by Ron Grant's Suzuki, Carruthers', Yamaha and the new OHV Harley-Davidson of last year's winner Cal Rayborn. Then Grant was past Mann and leading. Nixon passed him back, so did Hailwood — then Grant was in front again, all three of them pulling away from Mann. But



Hailwood's BSA sputtered to a stop, and Nixon and Grant found themselves with a three-second lead on Mann, who in turn was a few seconds ahead of Carruthers and Rayborn. Finally Nixon slowed and Grant pulled well into the lead — a lead that was short-lived however, as his super-fast Suzuki ran out of gas and seized a piston. Nixon's Triumph was sputtering but still going strong. Mann was catching him. Then Nixon disappeared completely and the Honda of Mann had only to maintain its hot pace the remaining 90-odd miles to come home a winner.

This was to be harder than it sounded. All of the other Hondas were already out of the race and the leading one was not sounding nearly as healthy as it had in the early laps. Lap times showed that Mann was not as fast as he had been earlier, but at that time there was no one within striking distance so he could well have been taking it easy. As the laps rolled by, Romero got closer. Then closer. To the extent that Honda team manager Bob Hansen was keeping Mann informed via blackboard of his diminishing lead. It was 25 seconds, then 22 seconds, then 18 seconds. As the laps progressed, those in the pits were making mental calculations as to how long it would take Romero to catch the ailing Honda at the rate he was gaining.

With three laps to go, Romero was within 14 seconds. But Mann has been racing for more than a little while. He too was making mental calculations of how long it would take Ro-



mero to catch him and had a little more in hand than people might have suspected. Romero kept up the same pace, but Mann increased his a little. Fourteen seconds is a long time, but a mistake on Mann's part could eat it up in a hurry. In spite of the obvious pressure, he managed to press the Honda around a second or so quicker and crossed the line with a comfortable ten-second-plus lead over Romero.

Back in third spot a race had developed between Canadian Yvon du Hamel and Triumph team rider Don Castro. The little Canadian had to overcome a ten-second starting disadvantage due to the staggered three-grid starting system that the AMA had instituted as a safety measure, and the fact the du Hamel had not qualified and had to start in the last row. However, he caught the Triumph and when it appeared he would soon pass it, he pitted for a new spark plug. There were but three laps to go and a plug had literally come out of the head. It was still attached to the plug wire, but had unscrewed itself. With a new one installed, he got back onto the track in fourth position and stayed there.

So it was over. Honda first, Triumph second and third and a Yamaha fourth. It had been a race only for a short time. After the 100-mile mark it became a reliability contest with the majority of the potential winners watching the race from the pits. Few had picked Mann to do anything but turn in a spectacular-as-usual ride, but there he sat in victory lane. The excitement that had been generated earlier in the week by the obvious all-out efforts on the part of the major manufacturers had fizzled as one by one their machines retired. The question of who is better than who was answered for some, but is still in doubt for others. Could the Europeans beat us? Did we beat their best? The question remains.

HOW DID IT HAPPEN?

How could the efforts of so many manufacturers end in failure? Does the high attrition rate reflect on the quality of the road machines from the particular manufacturers? Many will probably think so, but they will be wrong. Disregarding the fact that Daytona Speedway is one of the most demanding courses on the engines in



the world, the manufacturers had less than six months to prepare new, untried racers to conform to the new 750cc limit. In that short time they had to design, build, test and—hopefully — perfect 165-mph machines based on existing street machines which were relatively new themselves. Add to this the requirement of running 200 miles at an average speed over 100 mph, and it is surprising that any finished at all.

Virtually all of the failures that occurred were the result of insufficient time to test the new machines. In a race as important as Daytona, any failure is a major catastrophe. When the failure is actually as minor as a bolt breaking or a carburetor vibrating loose, it is doubly painful for the manufacturer since it is something that bears little relation to the quality of the motorcycle and relates only to the need for more development time. The public, however, sees only the fact that brand X finished and brand Z didn't.

This whole state of affairs has been brought about by the fact that the sport has grown faster than the organization that controls it, the American Motorcycle Association. Not so

1. Gary Nixon's protege, Gary Fisher, rode "Nixon Enterprises" Triumph to second place in Amateur event. Youngster shows great promise.

2. Californian Don Emde and Canadian James Allen do battle in the 100-mile Amateur event. Emde wound up with sixth place finish.

3. There is lots more to do at Daytona than watch the races. The famous beach sand is so hard that cars use it to get from one end of town to the other. Speed limit—10 mph during the day; 15 mph at night.

4. Enduro riders get their fill too. The annual Alligator Enduro takes them through Florida swampland just like you see in the movies. Snakes, alligators and everything.

5. Nixon, Grant, Hailwood, Mann and a trailing Carruthers peel off into the first turn. For many laps they were this close together, with Nixon usually at the fore.

6. Yamaha 350 vs. Harley 750. When the leaders slowly pulled away, Carruthers and Rayborn got into a race of their own. By the half-way mark both machines had retired with engine problems.

7. Main Street is the gathering place of all those spectators that rode to the race. Machines of every description line the curbs. It's a custom-lovers' paradise.

DAYTONA '70

long ago, the rider's owned, maintained and rode their own machines. In fact, the rules required that the rider show proof of ownership. Today, few of the riders own the machines they ride or do any work on them whatsoever. The competing factories have mechanics to do that and all the rider need do is to show up at the race and ride the machine.

This in itself is not bad since it raises the rider into the category of a true professional athlete. However, the competing factories represent such a part of the racing picture, particularly in road racing, that the AMA has been reluctant to discourage their participating. This has led, inevitably, to specification confrontations that more often than not have been resolved by fitting the rules to the machines, rather than vice versa, and in many cases sidestepping the rules altogether. Again, this in itself is not bad, since progress often requires modifications to rules that become outdated. Many of the controversial rules still exist, but are enforced only with private individuals, the factories being allowed to sidestep them. Compounding these inequities is the fact that the rules for the upcoming racing season have in the past been made in November of the preceding year. With the Daytona race being held in March, this makes it extremely difficult for the factories to conform to a major change, and impossible for the private owner. Therefore, we find the factories competing with untried machines and the private riders stuck with last year's machinery. Witness the results of Daytona '70.

This has hopefully been rectified for the future with the AMA giving manufacturers a full year before any major rule changes will take effect. It does little for the private rider since he is one step behind the manufacturers who must make parts available in order that he may use them. The factories can use anything they like, but private riders can only use parts that the factory says are OK to use. This puts the private individual out of the picture when it comes to competing against the factory specials unless, as is the case with a few, the parts are made readily available.

If the factories choose not to make parts available, the AMA enforces the rules against the private rider. As an example of what could happen, we can look again at the Triumphs and BSAs entered by the factory at Daytona. There were six machines. All had special frames, wheels, gas tanks and five-speed transmissions. They were legal since Triumph and BSA submitted these parts as per AMA rules. However, if an individual built his own frame, wheels, gas tank and five-speed transmission, for his own personal Triumph or BSA, he could not use it in AMA racing unless Tri-



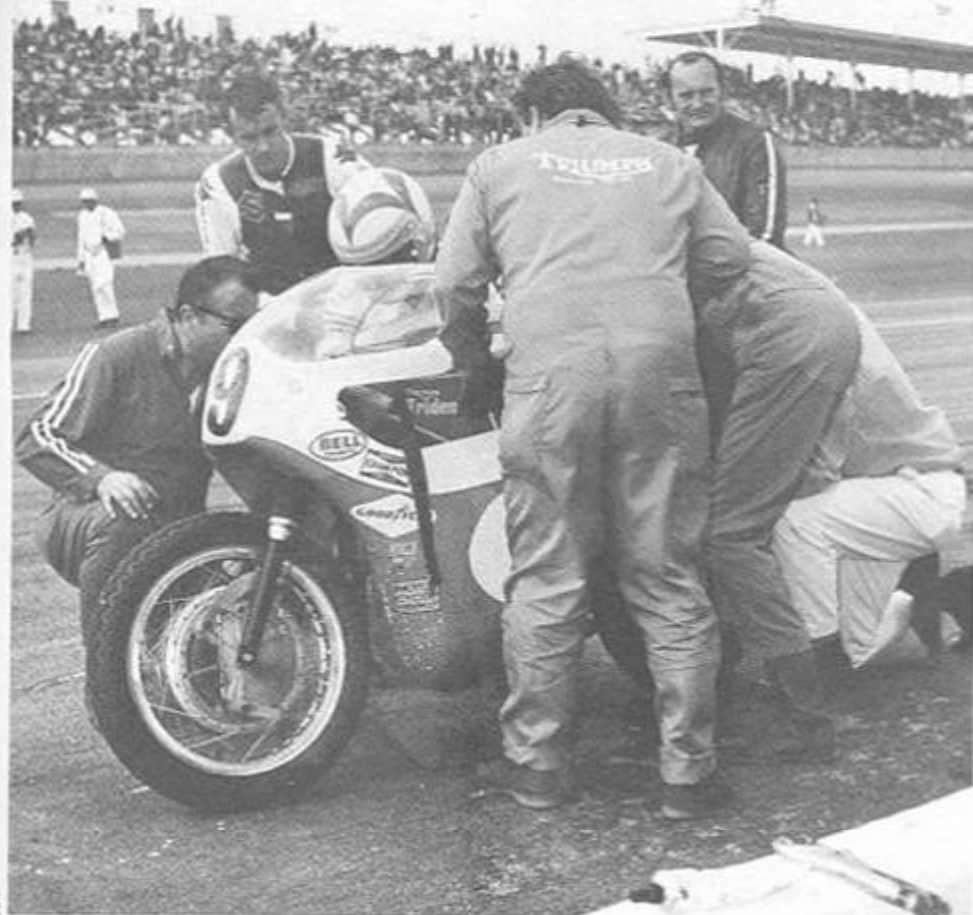
umph and BSA told the AMA that it was all right to do so. Fortunately, Triumph and BSA are very good in encouraging private individuals and have authorized such items in the past, but if they decided that they didn't like a particular design they could prevent it from being used in AMA racing with one of their engines. If they gave the OK, and the machine was approved and the owner then decided he would like to replace the engine with some other brand, he would have to go through the whole thing again with the manufacturer of the new engine.

For many years, Honda was reluctant to allow any changes to any of their machines. If you raced a Honda in the AMA, you raced with Honda frames, Honda brakes, Honda gas tank and Honda everything. Safety considerations finally had them approve different brakes, but still only the brakes that they decided were adequate. With the success of their 750cc four at Daytona, they have announced the availability of a kit that includes all the engine and chassis parts that are needed to convert a street machine into a racer.

Suzuki has been very successful in road racing, but none of the machinery that they use is available. An individual can buy the forks and brakes, since these are made by Ceriani in Italy, but the frame, and many of the parts of the engine are just not ob-

tainable. The AMA rule book states, "It is the objective of the Competition Congress to approve only such models as are available in the United States through normal commercial channels in adequate quantities to supply customer requirements, thus ensuring that competition motorcycles can be readily acquired." Unfortunately, this very admirable intent is nullified elsewhere by several rules that allow various items to be used if . . . "they are endorsed by the manufacturer." No reference is made to the quantities that must be made available and therefore we see special components made by the factories, endorsed by them, but used only on machines that they themselves enter.

Endorsement of components applies to all items except the engine. In this respect, the rules are spelled out quite clearly and yet they, too, go unenforced: ". . . manufacturers' crankcase, cylinder and cylinder heads from the approved model must be used." Few use them on the factory specials, and what is more the AMA will not examine the machines for violations of this rule unless someone protests. Protests must be made within 30 minutes after the race has been run and must be made by a fellow competitor — but this fellow competitor is probably riding a machine that violates some rule or another in its own right. Needless to say, there are few protests among the top run-



ners since a counter-protest could be embarrassing.

And so it goes. The machines deviate more and more from the concept of modified street machines. Factory-owned entries have greatly widened the performance gap between themselves and the private owner, and the private owner first loses races — then loses interest in road racing altogether. The manufacturers get labeled cheaters because of their machines — machines which are the way they are because of the vicious circle that is allowed to exist by the governing officials. Were the rules enforced, the manufacturers would be just as happy, perhaps happier, than they are now because they would not have to spend the vast sums that are necessary to build machines that bend the rules just a shade more each year. Racing would still be exciting.

These problems exist mainly in the area of road racing; dirt track racing still offers the private rider a chance of winning. The same rules still apply, but the important ingredients of a successful dirt track machine are not as many, or as costly, as those needed for road racing. The winning machines are just as sophisticated as the fiberglass-enshrouded road racers, but are much more specialized. They don't need multi-speed gearboxes, huge brakes and the ability to run for 200 miles at a time.

What can be done? Many things.

Any time one criticizes an existing method of doing things he should be prepared to offer alternatives. We have some. First, and the simplest would be to enforce the rules as they now exist. If this cannot be done, for lack of manpower, political reasons or whatever, change the rules. If this is to be done, let's pattern the rules after an entirely new concept that will give the private individual the same freedom in design as the factories have.

For one thing, forget about engine displacement providing that the engine originated in a motorcycle. The 750's will run nearly 170 mph now, so what would they have to fear from a bigger-engined racer? Even with a bigger engine the machine would still have to stop and turn as well as go fast. Another step forward would be to eliminate the "manufacturer-approved" clause covering frames and forks and things, and provide a technical inspection team — as the car racers do — qualified to determine if something is safe to use. Let safety be the guideline, not whether or not it is approved by a particular manufacturer. Let the good old American ingenuity be turned toward making advancements in racing rather than getting around the obsolete rules.

With these freedoms, a lot of weird experiments would surely show up. But their success, or lack of it, would



determine their merit. No matter how big the engine, or how unconventional the motorcycle in general, if it didn't win, it would disappear.

And more likely than not, the same machines that are winning now, would still be winning. What would be accomplished, however, is the return of the private tuners to professional racing. When machines that you could buy were winning AMA races, there were many private contributions to motorcycle development. Today, there are no more Tom Siftons, Tim Withams, C. R. Axtells, Gary Brays or Bob Hansens. The winner's circle photographs of today's races are crowded with factory-owned machines, factory-employed mechanics and factory-paid riders. The privateer has gone, and won't be back until he stands a chance of winning.

1. For the first time in many years, several brands of machines raced for the lead. Of these five, only the No. 2 Honda of Mann finished—1st.

2. One by one the new overhead valve Harley-Davidsons dropped out. This one, an "obsolete" side valve model, was ridden to sixth place by ex-Harley teamster, Walt Fulton, Jr.

3. When the No. 9 Triumph pitted, Dick Mann inherited a comfortable lead. Here, Ron Grant and Mike Hailwood, both leaders at one time, prepare to console the latest first-place drop-out—Gary Nixon.

4. When the Honda was torn down for inspection, mechanics turned pale. The camchain tensioner had disappeared, and it was anybody's guess how much farther the bike would have gone. 200 miles was enough.

5. The best thing Mann saw until he got the checkered flag, was this sign from pit boss Bob Hansen. Position 1, plus 14 seconds.