

# "MR. SPEED"

## STRIKES AGAIN

*That Record Man Mickey Thompson grabs twelve new world acceleration titles for the standing start kilometer and mile with one car and three engines*

Text and photos by GRIFF BORGESON

On February 2, 1958, Cal Rice blazed up and down March AFB's 13,300-foot straightaway in the *HOT ROD Magazine Special* to make rodding and racing history. With just 343 cubic inches of Doug Hartelt-built, GMC-blown Chrysler, Rice blasted the supposedly unbeatable records that had been set by a German Auto Union 21 years before. USAC timing made Rice's performance recognized throughout the world.

Motor racing's international governing body, the FIA of Paris, has its own special way of handling acceleration records: Elapsed time is all-important and top speed means nothing. The German elapsed time for the kilometer—the shortest record distance recognized by the FIA—was 19.08 seconds, which equals an *average* speed from standstill to the end of the  $\frac{1}{10}$ -mile trap of 117.3 mph. Rice pruned these figures for fair with an 18.10 e.t. and an average of 123.56 mph. In addition to being a new absolute World's Record, Rice's two-way average over the kilo gave him the International and National Class B records, as determined by his engine's displacement.

These records had stood for two years when, last spring, Mickey Thompson decided to make them his own. Having a goodly number of Pontiac Tempest engines left over from his Land Speed Record project he decided to attack most of the big acceleration records in sight. The stock Tempest has a bore of 4.0625, a stroke of 3.75 and a displacement of 389 cubic inches. For the World's Unlimited Class and for Class A (over 488 cubic inches) he bored an engine out to 4.125 and stroked it seven-eighths, for a total of 503 cubes. For Class B (305 to 488 cubic inches) he left the bore alone and stroked the crank a quarter, getting 415 cubic inches. And for Class C (kilo record held by Ed Cortopassi in *The Glass Slipper* in 19.21 seconds) he used a '56 Pontiac block with a 3.94 bore. For this one he destroyed a '55 Pontiac steel crank to 3 inches, arriving at a total of 293 cubes.

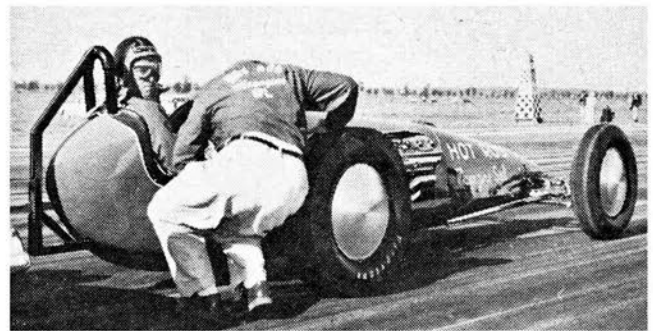
Mick equipped these engines with on-top GMC 6-71's run by a straight-forward and simple chain drive designed by Noel Timney of Long Beach. He machined his own light alloy connecting rods from billet stock, used Vertex mags, Isky cams, Grant forged pistons and Hilborn injection. Balancing the little Class C engine proved to be a mean problem. It was solved by Autotronic Balancing of Long Beach, who made up special flywheels for both the front and rear ends of the crankshaft. The engines were tuned on the new engine dynamometer at Mickey Thompson Enterprises (soon to be in the speed equipment business) to give the ample outputs shown in the data table.

For a vehicle in which to accelerate longer and quicker than anyone in history has been able to, Mick chose a Dragmaster chassis with Halibrand spot brakes, rear axle center section and mag wheels. For high-speed stopping he went to Deist Drag

Chutes who provided a 16-foot ribbon parachute. For reduction of wind drag he built a somewhat lumpy aluminum shell which enclosed all but the front wheels and portions of the front axle. He painted the car the same pale blue as his LSR *Challenger 1* and named it *Assault 1*.

Mick made arrangements for the use, once more, of the long runway at March AFB. This is not done easily but, fortunately, the Air Force (a) has a practical and patriotic interest in seeing American prestige heightened internationally and (b) has a practical interest in hot-rodding as a prime producer of sorely-needed skills. Permission was granted, the course was surveyed and, in the small hours of May 14, USAC's timing equipment was set up.

At dawn, under skies that remained leaden throughout the day, Mickey made his first southbound start with the C engine. Humidity had skyrocketed overnight and he turned out and returned to the pit area to re-jet. At 6:45 a.m. he burned off

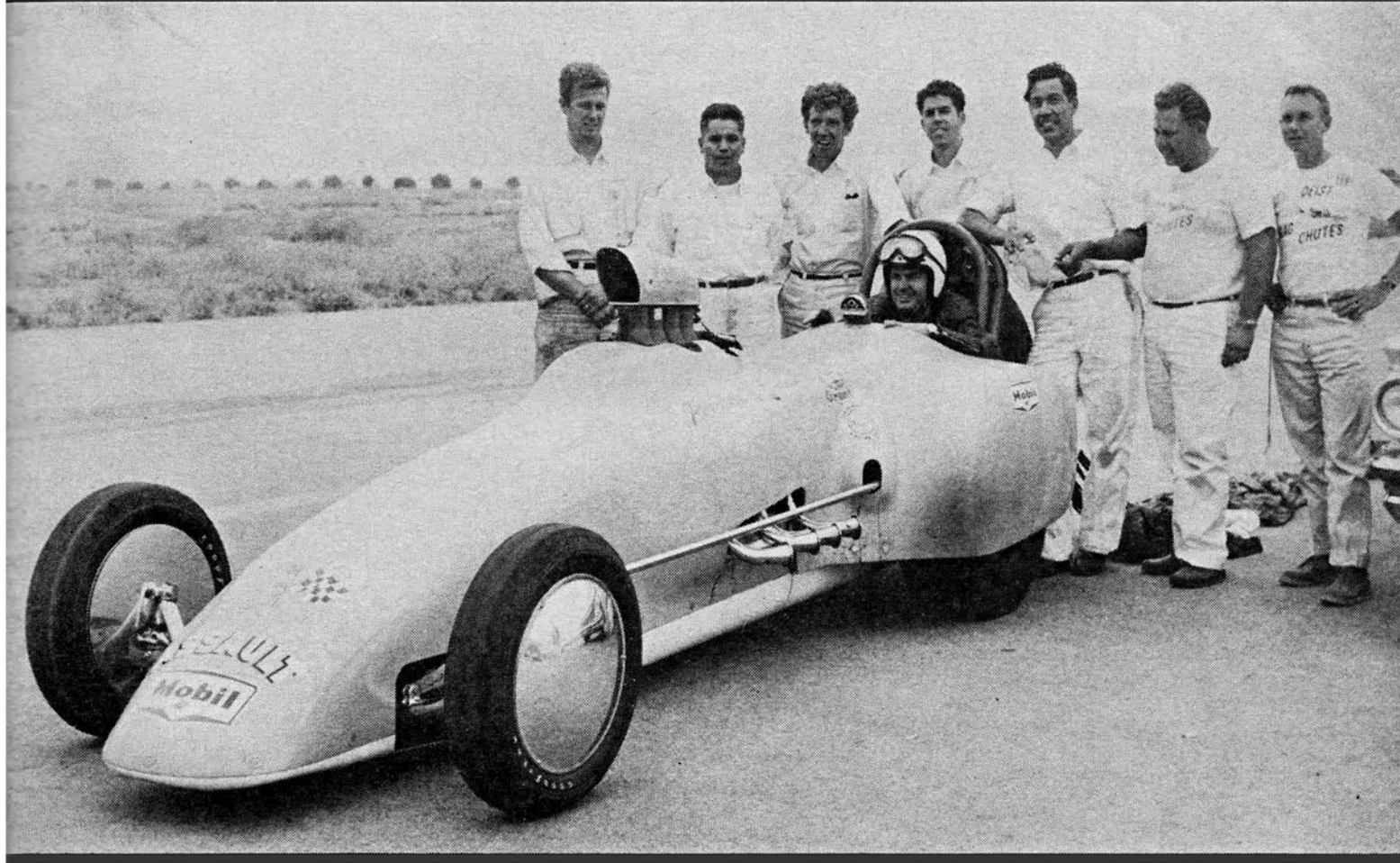


*Newest of land speed kings to be de-throned by Thompson was Calvin Rice, also a hot rodder, who used blown Chrysler engine.*

the line and covered the kilo in an e.t. that was well under the record. He came storming back (two-way averages are required for FIA and USAC records) even more strongly when, two-thirds of the way down the course, a wrist pin broke, the piston jammed and the engine locked up. He declutched and coasted through the light beam 1.5 mph slower than Cortopassi's record. A lousy way to start the day.

Mick had planned to work up to the big engine but, in the light of his luck, he decided to alter the pattern and make an immediate stab at the absolute record. His pit crew, headed by Darrell Droke, was splendidly efficient. They had rehearsed

*(Continued on page 40)*



*TOP—Deist drag chute is used to slow the dragster. Halibrand caliper disc brakes brought car in from sub-150 mph speeds.*

*ABOVE—The crew that got the job done. Leaning on roll bar is LSR veteran Mel Noriega; Jim Deist, second from right, is the man who rigs the chute for speed runs.*

*RIGHT—Mick's exhaust shakes March AFB pavement. He never revved on the line more than 5 seconds before leaving.*

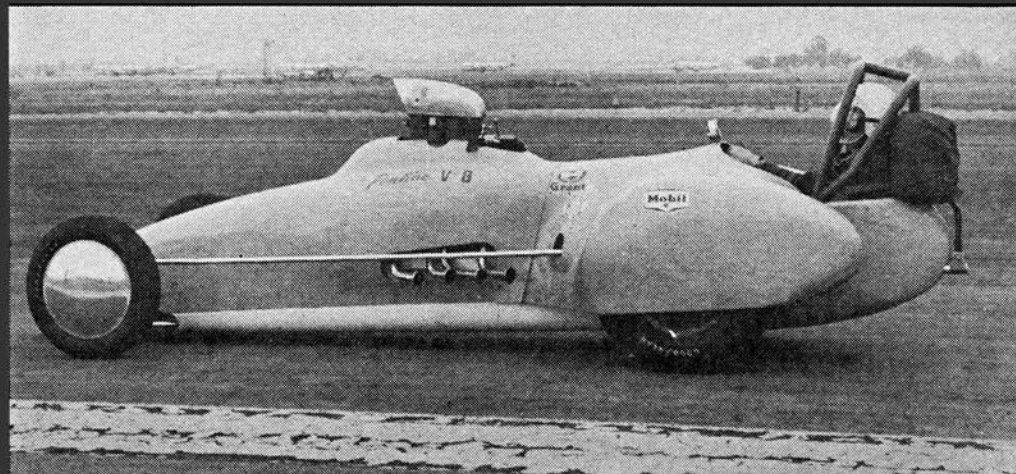


PHOTO BY MOBIL OIL COMPANY

## NEW STANDING START RECORDS SET BY MICKEY THOMPSON MARCH AIR FORCE BASE, RIVERSIDE, CALIF., MAY 14, 1960

(Subject to FIA Confirmation)

Distance	Previous Holder	Car	Year	Secs.	MPH Avg.	New Record Secs.	New Record MPH
<b>WORLD'S UNLIMITED CLASS</b>							
1 km	Calvin Rice	HRM Special	'58	18.10	123.56	16.82	132.94
1 mi	Bernd Rosemeyer	Auto Union	'37	25.96	138.7	24.12	149.23
<b>AMERICAN NATIONAL UNLIMITED CLASS</b>							
1 km	Calvin Rice	HRM Special	'58	18.10	123.56	16.82	132.94
1 mi	Ralph de Palma	Packard 905	'19	38.83	92.71	24.12	149.23
<b>INTERNATIONAL CLASS A (over 488 cu. in., 8000 cc)</b>							
1 km	John Cobb	Napier Railton	'33	25.27	88.52	16.82	132.94
1 mi	John Cobb	Napier Railton	'33	35.11	102.52	24.12	149.23
<b>AMERICAN NATIONAL CLASS A</b>							
1 km	No prior record					16.82	132.94
1 mi	Ralph de Palma	Packard 905	'19	38.83	92.71	24.12	149.23
<b>INTERNATIONAL CLASS B (305-488 cu. in., 5000-8000 cc)</b>							
1 km	Calvin Rice	HRM Special	'58	18.10	123.56	16.85	132.71
1 mi	Bernd Rosemeyer	Auto Union	'37	25.96	138.7	24.01	149.93
<b>AMERICAN NATIONAL CLASS B</b>							
1 km	Calvin Rice	HRM Special	'58	18.10	123.56	16.85	132.71
1 mi	Chuck Daigh	1957 Ford	'56	42.84	84.02	24.01	149.93

### "MR. SPEED" STRIKES AGAIN continued

engine swapping until they had it down to a smoothly automatic 90-minute routine. This time they had the C engine out and the A engine in in 86 minutes. A push start fired it up and, as it got up to operating temperature in the pit, its eardrum-rupturing thunder left no doubt the horsepower was there to do the job.

At 9:07 Mickey peeled off in a cloud of dense blue smoke. The March Field strip is a rough brute and Mick was off and on the throttle all the way as the car bounced and fishtailed over the bumps. But he covered the standing-start kilo faster than any man ever had.

Now that he had a fairly clear idea of what he was in for Mickey made up his mind to go after the mile records as well as after those for the shorter distance. At 9:41 he hurtled north, chopping the two-way e.t. for the kilo from 18.10 to 16.82 and making his first pass over the mile. At 10:11 he returned over the mile and knocked the absolute record for that distance from 25.96 to 24.12.

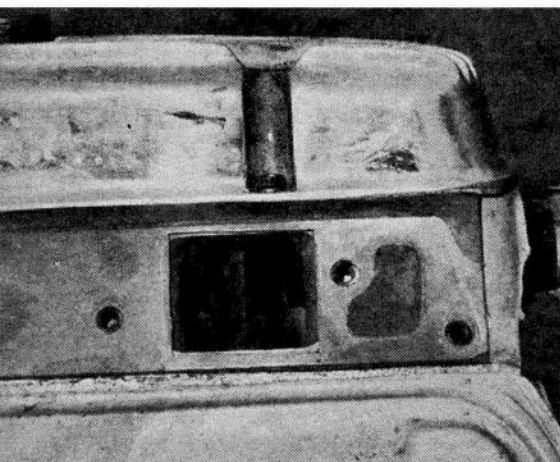
This was some of the hairiest motoring you'd ever want to see. At one point, it was possible to see a good foot of daylight—maybe closer to two—under all four of the car's tires at once. Two complete sets of rear axle bolts were sheared

and had to be replaced—an unprecedented thing. It was a tribute to the Dragmaster chassis that it took the punishment. Ductile mild steel rather than rigid chrome moly probably was a factor in this absorption of intense stresses.

In these three runs Thompson had collected eight new records: the World's Unlimited for the two distances, American Unlimited, International Class A and American National Class A. Again the hoist went over the car and the big engine was snatched out, to be replaced by the Class C mill.

The first run with this engine was a bad one since the clutch facing began to let go and a head gasket blew half way down the course. So out came the engine once more; the necessary parts were replaced and the car was ready to run again in 82 minutes. Again Mick only shot for the kilo on his first pass, then mopped up the mile record on the next two runs. The table shows how well he did. When USAC's Joe Petrali arrived in the pit Mick said, "What did I turn? About 150?" Petrali said, "Your two-way average was 149.93 mph."

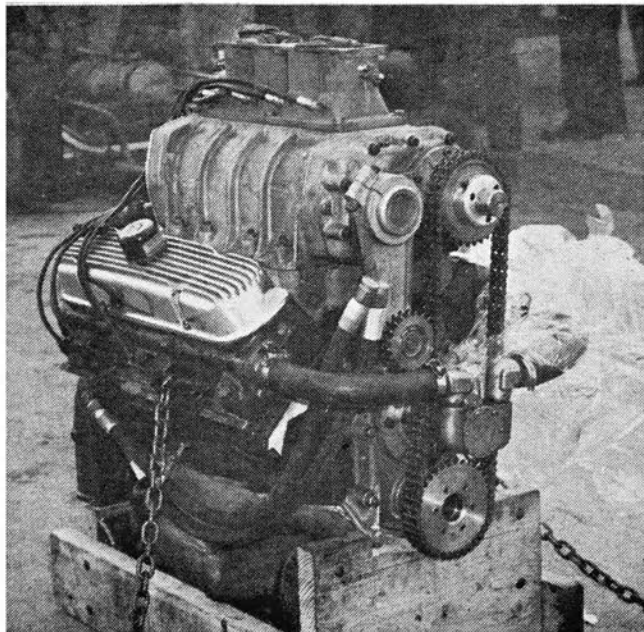
This was no lucky guess on Mickey's part; speed is his business and he's an expert at it. After witnessing Athol



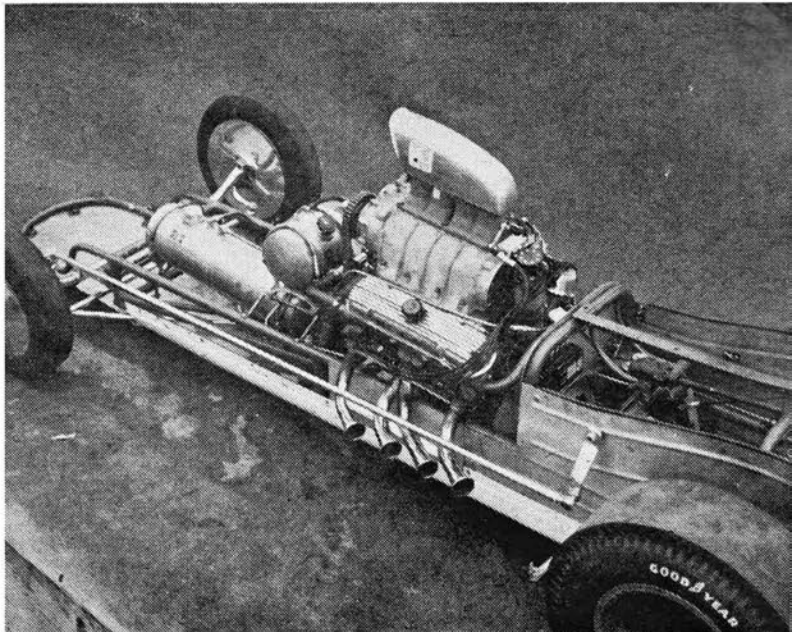
*TOP—Mick grins after honest day's work as USAC's Joe Petrali (former motorcycle speed champ himself) spells out results.*

*CENTER—The division between hogged-out intake ports was ground to a razor's edge. Pontiac V8's were run exclusively.*

*BOTTOM—In spite of a rough course and cross-winds, Mick's foot was never light. Clutch coughed on first run with B engine. 7.00x15 Goodyear is 10 ins. wide.*



The 412 cube Class B engine awaits its tour of duty as Thompson crew makes one of their fast engine swaps in under 90 mins.



Skeleton of the Dragmaster chassis is pretty well shown above. Identical engine blocks made those fast engine swaps possible.

Graham's 320 mph run at Bonneville I discussed it with Mickey. "How many wheels does he drive through?" he asked. Two, I told him. "Well, I don't care how much horsepower he has," Mick said. "With two-wheel drive he won't get above 345." A couple of weeks later Graham went 344.

As the record table shows, horsepower was the least of Mickey's problems in his standing kilo and mile runs. In fact, he went faster and quicker in the mile with the Class B engine than he did with the 21 per cent larger Class A engine.

Naturally, traction was the big bug and it was not helped by the roughness of the course. Another factor that did not help *Assault I's* stability was a crosswind of about ten mph which, bearing against the slab-sided shell, must have complicated handling.

Goodyear's experimental slicks performed well and soon may become commercially available. The restricted, oval cross-section casing construction that was used for Thompson's LSR tires lends itself ideally to drag-slick construction. It's impressive that there was no hint of

tread separation in these heavy-tread tires in spite of the long duration of their high-speed punishment, as compared with quarter-mile usage.

Mickey Thompson holds the following World's Unlimited Records: for the flying-start five kilometers, five miles, ten kilometers, ten miles and for the standing-start kilometer and mile. There's just one record that has eluded him and that he wants above all the rest. Between August 14 and 20th on the Bonneville salt he'll make his second big try for that one—the absolute LSR.

### MICKEY THOMPSON "ASSAULT I" DATA

#### Class A Engine

Bore	4.125
Stroke	4.625
Displacement	502.8
Compression Ratio	11 to one
Blower Drive Ratio	1.18 to one
Fuel	Methanol
Brake Horsepower	846

#### Class B Engine

Bore	4.0625
Stroke	4.00
Displacement	414.8
Compression Ratio	10.25 to one
Blower Drive Ratio	1.10 to one
Fuel	25% Nitromethane
Brake Horsepower	710

#### Class C Engine

Bore	3.9405
Stroke	3.00
Displacement	292.7
Compression Ratio	10 to one
Blower Drive Ratio	One to one
Fuel	25% Nitromethane
Brake Horsepower	640

#### General:

Engines	Pontiac Tempest
Pistons & Rings	Grant
Spark Plugs	Champion
Ignition	Hunt Scintilla Vertex
Carburetion	Hilborn Injection
Camshafts	Iskenderian
Bearings	Pontiac
Clutch	Schiefer Multiple-disc
Transmission	High Gear Only
Blowers	GMC 6-71
Fuel	Mobil Racing Fuel
Oil	Mobil SAE 40
Chassis	Dragmaster
Wheelbase	103 in.
Tread	F: 48 in.; R: 38 in.
Suspension	F: torsion bar; R: solid
Rear Axle	Hailbrand-Ford
Rear Axle Ratio	2.70 to one
Brakes	Halibrand-Cagle at rear
Parachute	Deist Drag Chute, 16 ft.
Wheels	Halibrand
Tires	R: Goodyear 8.20x15 slick F: Goodyear 5.00/5.20x15 Sports Car Special