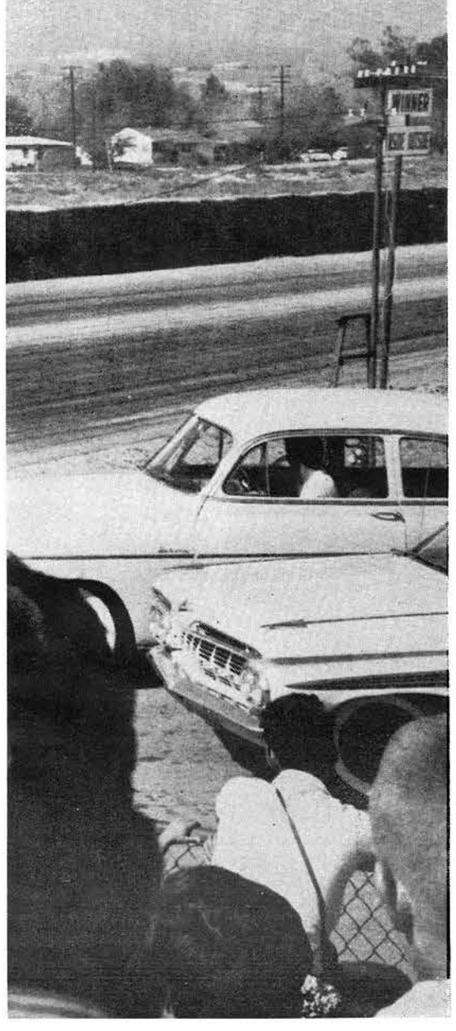
STOCK CAR DRAG RACING

What are Detroit's hottest cars? Thousands of drivers put them to the test every weekend



by John Lawlor

EVERY week end, America's hottest stock cars compete with each other for acceleration honors. At drag strips all over the country, the fastest factory versions of the Chevrolet, Ford, Plymouth, Pontiac and other popular makes are paired off to race from standing starts to the highest speeds they can reach in a quarter-mile.

The results of these contests reveal far more than the winners of a few trophies. Gathered together from several strips, they form the greatest mass of evidence in existence on stock car performance. Other forms of competition may demonstrate economy, endurance, roadability or top speed, but the drags provide significant information on acceleration, a performance factor that interests a vast number of people and is most useful in traffic and highway driving. And it is reliable information, because drag racing is truly amateur, with a minimum of the professional trickery that clouds the results of other types of stock car competition.

The drags are especially valuable as further proof of relative performance figures reported in road tests by MOTOR LIFE and other magazines. The tremendous number of cars competing makes possible a broad comparison of acceleration by various makes and models.

Compilation of the latest figures reveals some surprising changes from previous years.

Ford has stormed back into drag racing prominence with its latest model, setting new records for cars with manual transmissions. The previous acceleration champion, Chevrolet, still holds the most class records of any make but is beginning to lose the top matches.

Pontiac, when it appears with a stick shift, often beats Chevrolet and threatens Ford. However, its most consistent success has been in the automatic transmission classes. Its major competitor here is Plymouth, joined this year by Dodge's new Dart.

Except for Pontiac, these are all the low-priced, full-sized makes. Just a few years ago, before really hot engines were available in lighter cars, it was the high-powered, expensive jobs that dominated at the drag strips,

AVERAGE QUARTER-MILE SPEEDS (In mph) FOR FOUR FASTEST MAKES

	1957	1958	1959	1960	AVG. FOR MAKE
Chevrolet	92.4	91.8	95.1	92.2	92.7
Ford	91.2	89.7	87.6	96.7	91.3
Plymouth	86.5	91.2	93.0	93.6	91.1
Pontiac	90.1	91.5	94.2	91.8	91.9
Average for Year	90.0	91.0	92.5	93.6	

Figures are averages of best stock class speeds at finish of quarter-mile, as reported by 14 drag strips in various parts of the nation. Chevrolet and Ford have recorded their best class performances with manual transmissions while Plymouth and Pontiac have recorded their best with automatics. Consequently, averages have been computed on such a basis; Chevrolet and Ford speeds are for cars with manuals, Plymouth and Pontiac with automatics.

BEST SPEEDS REPORTED BY INDIVIDUAL MAKES

MAKE	YEAR AND CLASS	SPEED
Ford	'60 — SS	105.50 mph
Pontiac	'59 — SS	102.62
Chevrolet	'59 — SS	101.60
Plymouth	'60 — SS*	98.60
Dodge (Dart)	'60 — SS*	97.82
Chrysler (300-F)	'60 — SS*	92.00
Buick	'60 — AS*	87.50
Oldsmobile	'56 — BS*	86.12

*Automatic Transmission

These are the only late model stocks appearing regularly at most drag strips. Others have not recorded speeds consistently or frequently enough to provide reliable figures.

notably Buick, Chrysler, Oldsmobile and the bigger Studebaker.

Speeds at the end of the quarter-mile, rather than elapsed times, form the basis for these comparisons. The elapsed time, the number of seconds a car takes to cover the quarter-mile, is important in all-out dragster competition but does not vary greatly in any specific stock class. The hottest Chevrolet, Ford, Plymouth and Pontiac, for example, all have consistent e.t.'s between 14 and 16 seconds.

Some strips, in fact, do not even record e.t.'s for stocks, though they actually use them to determine winners of elimination matches, when two or more cars compete at one time.

To obtain reliable figures, the best speeds for each of the fastest makes and models were compiled from drag strips in Alabama, Arizona, Arkansas, California, Florida, Louisiana, New Mexico, Oklahoma, Rhode Island and Virginia. Overall averages were determined and absolute maximums noted. Accompanying charts list the more significant of these speeds, though they do not include all that were used to compute averages.

Among manual transmission cars, the 1960 Ford topped the list with a 105.50-mph maximum reported speed, but its 96.70-mph average was beaten by the 1959 Pontiac's 99.50 mph. The latter scored a maximum of 102.62 mph.

Chevrolet also relied on its 1959 model for its best times, an average of 95.10 mph and a maximum of 101.60 mph. This particular speed, however, was not a strip record; it had already been surpassed by a new Ford.

In automatic transmission competition, the 1959 Pontiac was again a winner with an average of 94.20 mph and a maximum of 99.01 mph. Close behind were the 1960 Plymouth and Dodge Dart, averaging 93.60 and 94.07 mph and reaching maximums of 98.60 and 97.82 mph, respectively. No new Plymouths were among the record holders, though a Dart was.

Pontiac and Chevrolet both did better in 1959 form than 1960 because the hottest versions of the new models have been in short supply. If and when they do appear in numbers, they should be just as fast as the 1959's; basically, they are the same cars.

Besides establishing just what cars are currently the hottest at the drags, the tabulated figures reveal clearly the patterns of performance development among the popular makes during the last few years.

Ford has accomplished more than a comeback; it has completely reversed its performance trend. Until this year, the make has actually been slower every year since 1957.

The secret of its new success is, of course, its 360-hp engine. With this, the car has become a major contender for the first time since the supercharged 300-hp models of 1957, which recorded an average of 91.20 mph. In 1958, a bigger engine of equal horsepower replaced the blown unit but did not have the same kind of response. The average dropped to 89.70 mph. Then, last year, a heavier body with the same maximum of 300 hp cut it still further to 87.60 mph. Compared with these figures, the 1960 Ford's performance is particularly remarkable.

Chevrolet's great advantage has been a wide range of engine choices, especially in the 1959 model, that enables it to compete with hope of success against almost any other manual transmission car.

A top performer ever since it introduced its V-8 engine, Chevrolet became really sensational with the fuel-injected 283-hp model of 1957, which had a quarter-mile average of 92.40 mph. The 1958 model, like the Ford of the same year, was slightly slower. With a heavier body and a bigger 280-hp engine replacing the fuel injection unit, the average was reduced to 91.80 mph. Then, in 1959, a tremendous range of engine options, including 320-hp and 335-hp units and complemented by a four-speed transmission, made Chevrolet the dream car of drag racing.

This year, Chevrolet has trimmed the number of powerplants but the hottest ones are still listed. The two most powerful are

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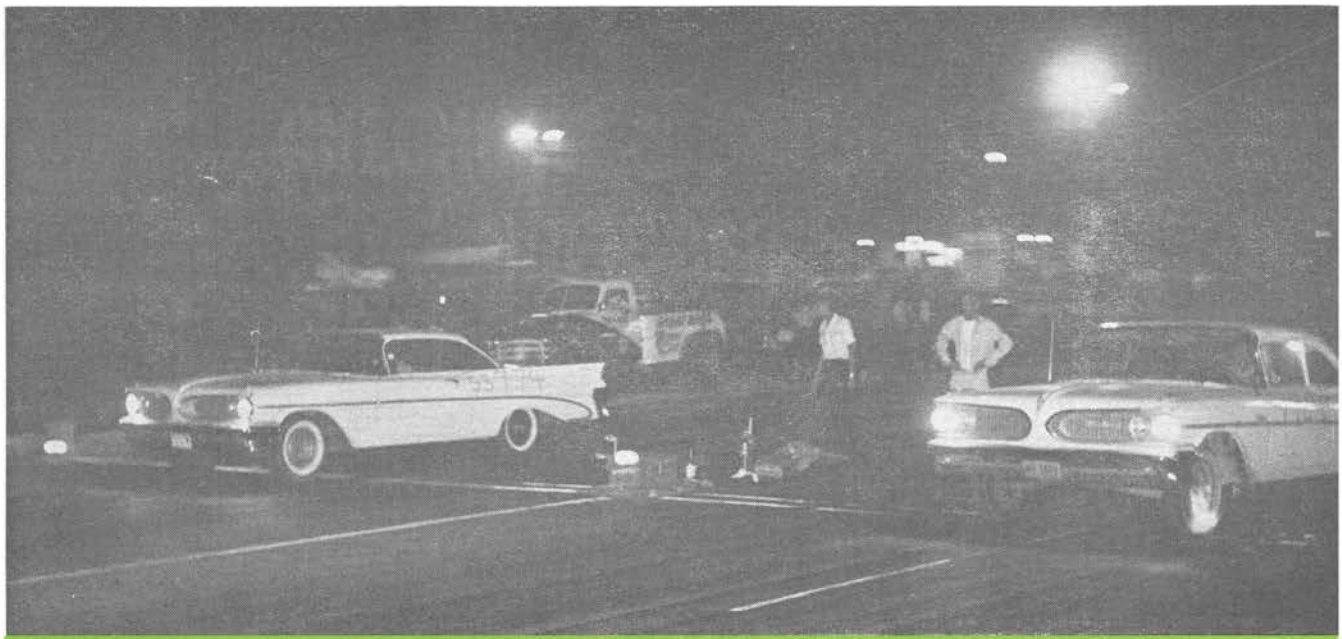

SUPER STOCK CLASS RECORD HOLDERS AT TYPICAL DRAG STRIPS

DRAG STRIP	MANUAL		AUTOMATIC	
Dothan, Alabama	'60 Ford	96.35		
Chandler, Arizona	'59 Pontiac	102.62	'59 Pontiac	99.01
Little Rock, Arkansas	'59 Chevrolet	96.78	'59 Pontiac	98.63
Cotati, California	'59 Chevrolet	95.44	'59 Pontiac	95.94
Fremont, California	'60 Ford	95.94		
Half Moon Bay, California	'60 Ford	101.91	'59 Pontiac	96.50
San Fernando, California	'58 Chevrolet	96.88	'59 Plymouth	95.06
Taft, California	'59 Chevrolet	96.76	'58 Chevrolet	90.90
Davie, Florida	'60 Ford	105.50		
Opelousas, Louisiana	'59 Pontiac	99.44	'59 Pontiac	94.14
Hobbs, New Mexico	'60 Ford	93.94		
Oklahoma City, Oklahoma	'59 Chevrolet	95.13	'59 Pontiac	90.72
Charlestown, Rhode Island	'59 Pontiac	96.40		
Petersburg, Virginia	'58 Chevrolet	98.40	'60 Dodge	97.82

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not available with automatic transmissions, which is the reason the make has achieved its most significant victories in stick shift racing.

Pontiac is the only make which has been consistently successful with either manual or automatic gearing. Stick shift Pontiacs, however, are not as common as hot Fords and Chevrolets and do not appear in the records as often.

But automatic ones certainly do. From the 317-hp option of 1957, averaging 90.10 mph, to today's 348-hp model, Pontiac has been almost unbeatable among the automatics. It improved in 1958, when a 330-hp engine raised its average to 91.50 mph. This was supplemented in 1959 by a 345-hp unit that has powered the current automatic record holders at most strips. The 1960 versions of both engines each have three more horsepower, but have made very few appearances in competition. As a result, the latest Pontiac is 2.40 mph slower in average speed than last year's.

Plymouth performance has improved steadily since 1957 but, competing against mighty Pontiac in the automatic classes, it has only a few strip records to show for it. The GM make almost always manages to be faster for the simple reason that it has had more horsepower in its top offerings.

The 290-hp 1957 Plymouth reached the end of the quarter-mile at an average speed of 86.50 mph. The most powerful 1958 and 1959 versions had the same engine output, 305 hp, but an increase in displacement provided greater torque at lower rpm. As a result, average speed was boosted from 91.20 mph in 1958 to 93.00 mph in 1959.

With a choice of two 330-hp engines, the new Plymouth is the hottest yet, though its average still falls just below that of the 1959 Pontiac.

This year, Plymouth has an alter ego in Dodge's new Dart. The two cars offer the same 330-hp ram induction engine in a body shell of approximately the same weight, so their quarter-mile speeds are almost equal.

Surprisingly, earlier Dodges do not show up in any of the results. The 1959 D-500 matched Pontiac's 345 hp, but not its quarter-mile performance. It had no victories to its credit at any of the strips consulted.

So far, these comparisons have been on an absolute basis. A distinction has been made throughout between cars with manual transmissions and those with automatics, but a really fair analysis of drag racing performance must consider more than this.

To equalize stock car competition, events are run according to specific classes. These can be determined any one of several ways, but the most effective and most widely used is that of the National Hot Rod Association, which groups cars according to the ratio between their shipping weights and advertised horsepowers. A total of seven classes is derived this way, though only the top four involve the hotter late model cars, "Super," "A," "B" and "C" stock.

Other methods, used by regional associations or individual strip operators, are based on such factors as individual make, year of manufacture, engine displacement, type of carburetion and so forth. One strip, active last season in Pennsylvania, found enough variables for 58 separate classes!

Most of the strips contacted followed NHRA rules and they are the logical standard to use here.

One of the charts shows the best speeds reported in the top four NHRA classes, together with the specific weight-to-power ratios for each. Another shows the complete NHRA classification for the 1959 Chevrolet Impala, one of the most popular and successful cars in drag racing.

A close look at the results on a class basis shows several details that alter conclusions.

The hot 1960 Ford can compete in only one class, manual

CLASS		MANUAL		AUTOMATIC	
Super Stock	SS (0 to 12.59 lbs./hp)	'60 Ford	105.50 mph	'59 Pontiac	99.01 mph
"A" Stock	AS (12.60 to 14.99 lbs./hp)	'59 Chevrolet	97.40	'58 Plymouth	92.70
"B" Stock	BS (15.00 to 16.99 lbs./hp)	'58 Chevrolet	92.08	'59 Chevrolet	89.40
"C" Stock	CS (17.00 to 20.99 lbs./hp)	'55 Chevrolet	84.11	'55 Pontiac	84.19

THE NATIONAL HOT ROD ASSOCIATION CLASSIFICATION FORMULA IS OFFICIAL SHIPPING WEIGHT, AS LISTED IN NATIONAL AUTOMOBILE DEALERS' ASSOCIATION USED CAR GUIDE, DIVIDED BY ADVERTISED HORSEPOWER. ADDITIONAL WEIGHT ALLOWANCE IS MADE FOR LARGER ENGINES AND AUTOMATIC TRANSMISSIONS BUT NOT FOR OVERDRIVES, RADIOS, HEATERS, ETC.

TYPICAL NHRA CLASS BREAKDOWN – 1959 CHEVROLET IMPALA

ENGINE	BODY	MANUAL CLASS	AUTOMATIC CLASS
348-cubic-inch V-8			
335-hp	All	SS	
320-hp	All	SS	
305-hp	All	AS	AS
280-hp	All	AS	AS
250-hp	All but hardtop coupe with manual transmission	BS	BS
	Hardtop coupe with manual transmission	AS	
283-cubic-inch V-8			
290-hp	All but hardtop coupe and four-door sedan	AS	
	Hardtop coupe and four-door sedan	SS	
270-hp	All	AS	
250-hp	All but hardtop coupe with automatic transmission	AS	BS
	Hardtop coupe with automatic transmission		AS
245-hp	All but four-door sedan with automatic transmission	AS	AS
	Four-door sedan with automatic transmission		BS
230-hp	All	BS	BS
185-hp	All	CS	CS
235-cubic-inch Six			
135-hp	All	ES	ES

Chart applies to Impala only. Slight weight differences cause some Biscayne and Bel Air body types to be classified differently.

Super Stock. With just its one high-powered engine option, the extent of its drag racing success is limited. The 360-hp is not available with an automatic transmission and Ford offers no powerplants suitable for serious competition in the lower classes, manual or automatic.

Chevrolet represents just the opposite extreme. Its variety of engine options allows it to compete in several different classes, as the Impala classification chart shows. Despite Ford's new domination of the Super Stocks, Chevrolet can still hold its own in the other stick-shift classes and even score an occasional victory among the lower-powered automatics.

As a stick Super Stock, Pontiac appears to be one of the most underrated cars. When it has appeared with a manual transmission, it has done very well, but it has not acquired the popularity of Chevrolet or Ford as a competitor in this category.

Pontiac's automatic supremacy shows up mainly in the Super Stock category, though several strips reported the make as a record holder in the lesser classes as well.

Neither Plymouth nor Dodge are consistently successful as Super Stocks. According to the figures reported, each had an overall automatic record at an individual strip but neither has had anything like Pontiac's success.

But Plymouth does show up well in "A" Stock competition. Several strips reported the 1959 model particularly as the "A" record holder.

To sum it all up, Ford definitely appears the one to beat this year, at least if word does not get around about the hottest stick shift Pontiac. The latter should continue to be the top automatic make, though with less of a margin than before with the ram inducted Plymouth and Dodge in contention. These may even fool a few Pontiac owners before the season is over.

Chevrolet no longer rates as the very top car, but it must get first place for overall performance. And, if Messrs. Cole and Duntov have been paying attention to current drag activities, it may be back on top again soon.

In other words, Chevrolet enthusiasts can at least console themselves with that battle cry of frustrated sports enthusiasts everywhere, "Wait 'til next year!" •