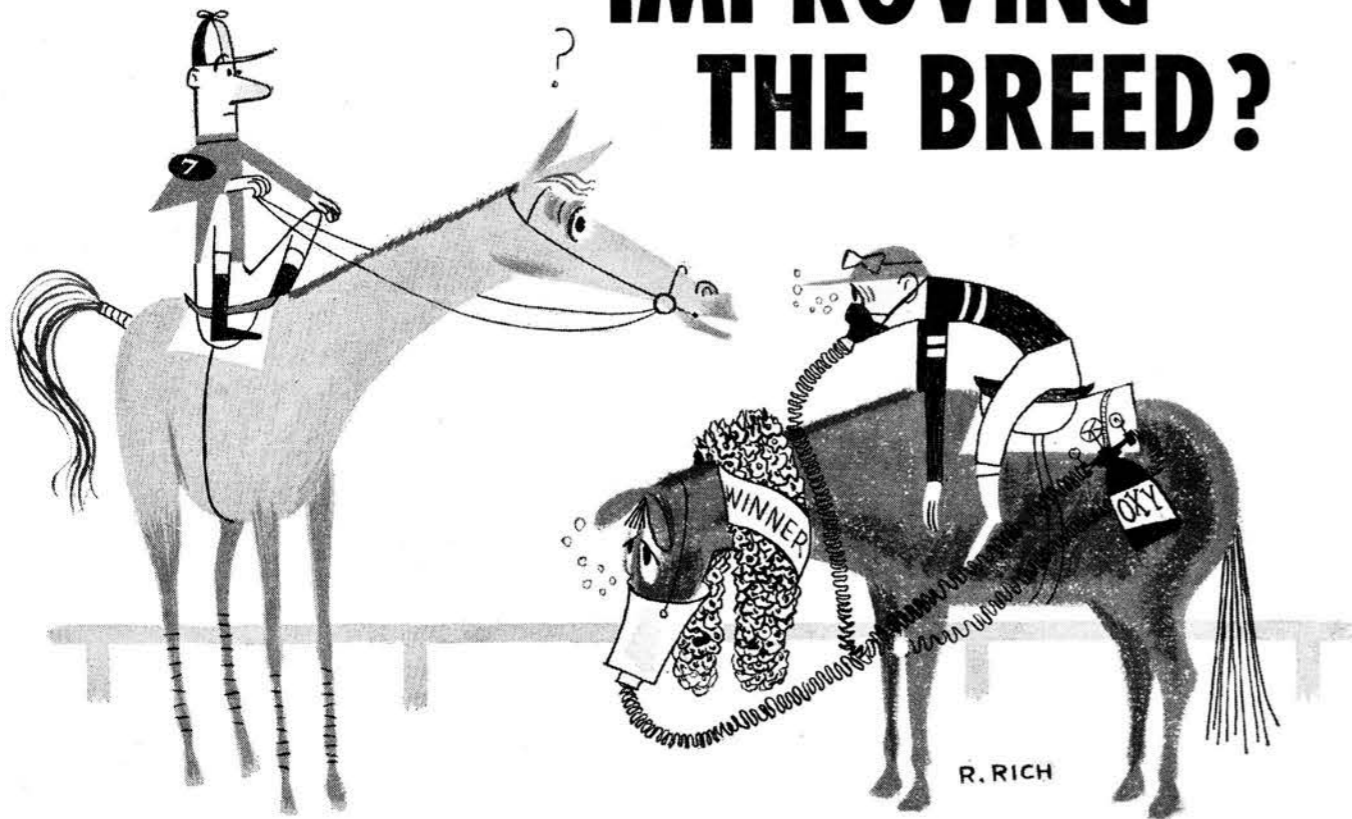


IMPROVING THE BREED?



BARNEY NAVARRO SAYS—"WHY LET A RACE THAT USED TO BE A CONTEST BETWEEN MECHANICS BECOME ONE RUN BY THE MASTERS OF CHEMISTRY?"

WILL the next Indianapolis 500 mile race be run with gasoline? Will gasoline be the only allowable fuel? At any rate we racing enthusiasts hope so.

For many years we have patiently listened to the shallow explanation that the "500" is a proving ground for America's automotive engineers. In a very slight degree this may still be true but, as a whole,

the gulf separating Detroit from Indianapolis is many times greater than the two hundred some odd miles of their geographic relationship.

In the past few years the information gained from the "big race" has gone into making next year's race faster and faster. Can anyone name any *revolutionary improvements in passenger cars* as a result? Mechanical developments of the competing racing cars are highly specialized for one purpose; and, even though they make it possible for the cars to negotiate the track at higher speeds, they are undesirable in a passenger car. Even the possibility that the race can be used as a tire test is extremely doubtful because of the great difference between racing and passenger car tire materials.

In recent years an even greater perversion of purpose has been taking place in the realm of fuel. Until this year very little has been said about the fact that gasoline doesn't power the roaring power plants of many of the cars. This could be partially due to the fact that it is rather embarrassing for the oil companies to advertise oil only and not gasoline with the products used in the winning car.

Alcohol has been popular as a fuel for many years due to the fact that it adds approximately 10% to the power output

of an engine. Not to be neglected is the fact that cooling problems are greatly reduced with its use due to its high latent heat of evaporation. This characteristic causes it to absorb great quantities of heat from engines which might otherwise run too hot in long races.

To Joe Doaks, the boy having difficulty squeezing that last mile or two per hour to make the program, alcohol was the answer. A 10% boost in horsepower could be obtained without tearing down the engine and hopping it up. All that was necessary was a change in carburetion, possibly plugs and some 199 proof fuel in the fuel tank. Of course, later on, Joe wasn't the only boy using alky. He pointed the way to the rest that needed a few extra horses. Soon everyone was back on even terms using alcohol to qualify instead of gasoline. The next logical step was to use alky in the race instead of just limiting its use to qualifying. A few purists naturally stuck to gasoline and some of them with superior knowledge could outdo the alky burners but this condition wasn't permanent. When the top brains with the top cars joined the alcohol parade the purist's cause immediately became futile.

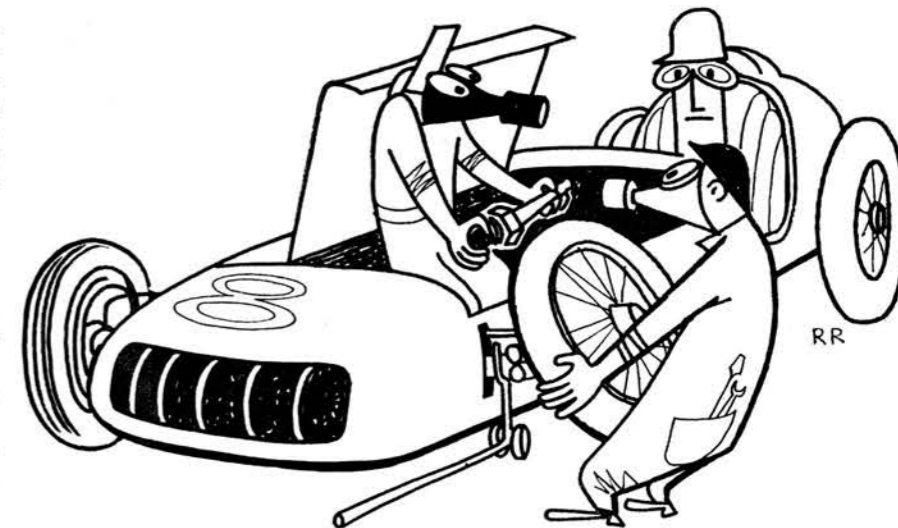
Chemical horsepower regrettably didn't end with the mere use of alcohol. The next step was to employ the explosives that the

model airplane and model race car enthusiasts have been using these many years. These horsepower chemists of the model world have obtained power outputs per cubic inch from their miniature engines that compare favorably with their supercharged big brothers. Of course there is always a catch to such easily obtained results. In this case, it's the cost of the required chemicals. A few thimblefuls to operate a model wouldn't "break" anyone, but try and pay the bill for a big thirsty Offenhauser engine. The retail price of nitromethane, the most popular additive, ranges between four and five dollars per gallon. Needless to say the power hungry car owners didn't let the high cost of the fancy additives stop them. With so much prize money at stake who's going to complain about burning five dollars worth of fuel every time the car circles the track. Of course some rash spender could use a concoction that the Hot Rodders use to obtain 400 horsepower from Ford V8's and his fuel bill could amount to \$50.00 per lap. Silly, isn't it, but it can happen if the rules are left unchanged.

The Indianapolis Race has always been pointed out as a proving ground for Detroit. Many axioms to illustrate this belief have flowed from the lips of those that support the theory. It's even been compared to horse racing, inasmuch as the phrase, "to improve the breed" has been applied. Sometimes those very words are used and other times the intent is there but stated in a different manner.

At this point a very basic comparison between a horse and a race car should be in order. It is commonly known that both burn fuel, one hay, oats and oxygen and the other some inflammable liquid and oxygen. It is also commonly known that old dobbin can be made to perform a bit better if his standard diet of hay and oats is supplemented with a stimulant such as strychnine. Even better results could be obtained if dobbin was fitted with an oxygen mask and a couple of oxygen bottles strapped to the saddle. This chemical supercharging process might make it possible to lop 10 or 15 seconds off the existing mile record. The only hitch to this brainstorm lies in the fact that the men that race horses take that improving the breed "business" seriously. One look at the oxygen rig by the track stewards would probably put an end to your horse racing career.

If horses must race on a standard diet, why not automobiles? Why let a race that used to be a contest between mechanics change to one between chemists? Our family passenger car will NEVER be supplied with nitromethane as a standard fuel no matter what some dreamers may assert. Gasoline will remain the most practical fuel until turbines become popular. Then we will probably switch to fuel oil. If part of the justification for auto racing is an honest endeavor to "improve the breed," then a switch to gasoline



should meet with no objections whatever. If, "improving the breed" can be interpreted to mean new developments for ALL ENGINES, the use of gasoline in racing engines might make the developments useful to your family car.

Up to this point the fuel situation has been discussed from an ethical and practical standpoint in its relationship to the Indianapolis Race. The foregoing views might not make the slightest dent in the hard headed attitude of the alcohol and nitro advocate. But, there is one factor that is more important than prejudicial beliefs and that is sponsorship. When an oil company spends large sums of money to broadcast a race and enrich the race purse one can't expect the money to be treated as an outright gift. The milk of human kindness doesn't flow with dollar signs six numbers to the left of the decimal point in any sport.

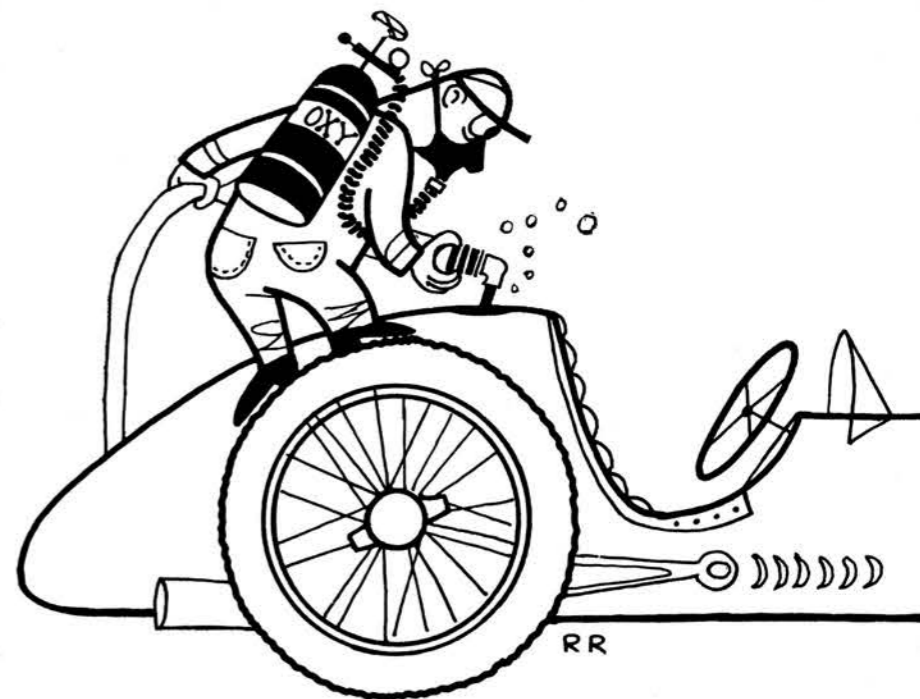
Some individuals may feel that such money is tainted but those very same people would be amazed to know what

goes on behind the scenes of every big promotion. The "500" is admittedly Auto Racing's biggest promotion and as such must depend to a great degree on "working the angles." Financial assistance helps greatly to make the race a success, so why not be realistic about it? If the rules committee weighs all of the evidence when it establishes a policy for the 1954 race, it will probably give some serious thought to the possible benefits derived from cooperation with the oil interests.

Rumor has it that the rules will be changed so that nitromethane and kindred nitro additives will be banned next year. This opinion has been expressed for two reasons: slower speeds would result which would improve safety, and drivers would no longer have to breathe the toxic fumes produced by the burning of the nitrates. Many drivers get sick or become fatigued after inhaling these fumes.

If a reduction in speed is considered necessary, and steps are to be taken in

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price of the new car. Eventually new-car sales will slump drastically, too.

When, and if, that happens a new era of vicious competition will probably develop. Manufacturers would return to the yearly model change, engine, chassis and body improvements would be more frequent and radical than they now are. Even in today's comparatively mild competition there is a good chance that the three-year life span of body dies may be cut to two years. All that is required is for one of the Big Three to break the accepted cycle.

Detroit is facing 1954 with a little less of the breezy confidence of the previous post war years, mostly because of the ailing used-car market. Otherwise, conditions are about the same as in the past few years. There will be a few new V-8s, some new bodies, and minor alterations in transmissions, suspension systems and chassis. Nothing radical, nothing to compare with Cadillac's introduction of the ohv V-8 in 1949 or Studebaker's 1953 continental body. The publicity guns will boom like atomic cannons, the auto shows will be better than ever. To the customer, however, there will be no price relief, just more expensive gadgets and more expensive horsepower. Which seems to be just the way the auto buying public wants it.

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that direction, a further step to gasoline shouldn't be disastrous. Suppose every one does go a little slower, they will still be on even terms and competition will be even more keen. Future refinements will bring speeds up to their present level eventually, but the trend won't be to the impractical range as soon.

Hot rodding, although looked down upon by the Indianapolis clique, has progressed far ahead of the "brick yard" with regards to fuel development. This has been true for many reasons, but foremost is the fact that the use of additives at the "500" has been an individual effort. In other words, its use has been governed by the individual car crew's knowledge of the fuel mixing potentialities.

Last year, 32 of the 33 cars at Indianapolis used one type of engine so it is easy to see that there is no competition between manufacturers at the "brick yard." If the competition were as keen there as it is in hot rodding, there is no telling what the result would be—maybe 150 mile per hour qualifying speeds would have been common this year.

Maybe the rules committee won't see the light in time to create a new policy for the 1954 race, but the change is inevitable and will eventually take place. Pressure from the oil companies and many other interests will make it imperative. Let's hope that they don't wait until the horse is stolen to lock the barn door.



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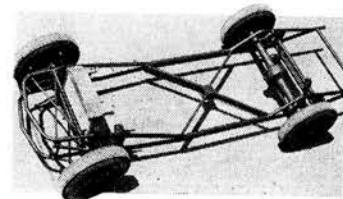
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