



TO Mr. Maurice Olley **ADDRESS** Research & Development Section
FROM Mr. Z. Arkus-Duntov **ADDRESS** Research & Development Section
SUBJECT Thoughts Pertaining to Youth, **DATE** December 16, 1953
Hot Rodders and Chevrolet

The hot rod movement and interest in things connected with hop-up and speed is still growing. As an indication: the publications devoted to hot-rodding and hop-upping of which some half-dozen have a very large circulation and are distributed nationally, did not exist some 6 years ago.

From cover to cover, they are all full of Fords. This is not surprising then that the majority of hot-rodders are eating, sleeping and dreaming modified Fords. They know Ford parts from stem to stern better than the Ford people themselves.

A young man buying a magazine for the first time immediately becomes introduced to Ford. It is reasonable to assume that when hot-rodders or hot-rod influenced persons buy transportation, they buy Fords. As they progress in age and income, they graduate from jalopies, to second hand Fords, then to new Fords.

Should we consider that it would be desirable to make these youths Chevrolet-minded? I think that we are in a position to carry out successful attempt. However, there are many factors against us -

1. Loyalty and experience with Ford.
2. Hop-up industry is geared to Ford.
3. The law of numbers - thousands are and will be working on Fords for active competition.
4. Appearance of Ford overhead V-8, now one year ahead of us.

When a superior line of G.M. V-8's appeared, there were remarkably few attempts to develop these and none too successful. Also, the appearance of the V-8 Chrysler was met with reluctance even though the successes of Arduin-Fords conditioned them to acceptance of Firepower.

This year is the first one in which isolated Chrysler developments met with success. The Bonneville records are divided between Arduin-Fords and Chryslers.

In the non acceptance of G.M. V-8's, and very slow beginning of acceptance of Chryslers, cost must have played a part.

Like all people, hot-rodgers are attracted by novelty. However, bitter experience taught them that new development is costly and long and therefore are extremely conservative. From my observation, it takes an advanced hot-rodder some three years to stumble toward the successful development of a new design. Overhead Fords will be in this state in 1956-1957.

The slide rule potential of our RPO V-8 engine is extremely high but to let things run their natural course will put us one year behind and then not too many will pick up Chevrolet for development.

It seems that unless by some action the odds and the time factor are not overcome, Ford will continue to dominate the thinking of this group. One factor which can largely overcome the handicap would be the availability of ready engineered parts for high output.

If the use of the Chevrolet engine will be made easy and the very first attempts will be crowned with success, the appeal of the new will take hold and not having the stigma of expensiveness like the Cadillac or Chrysler, a swing to Chevrolet may be anticipated. This means the development of a range of special parts - camshafts, valves, springs, manifolds, pistons and such which will be made available to the public.

The association of Chevrolet with hot rods, speeds and such is probably inadmissible, but possibly the existence of the Corvette provides the loop hole. If the special parts are carried as RPO items for the Corvette, they undoubtedly will be recognized by the hot rodders as the very parts they were looking for to hop up the Chevy.

If it is desirable or not to associate the Corvette with speed, I am not qualified to say, but I do know that in 1954, sports car enthusiasts will get hold of Corvettes and whether we like it or not, will race it. Most frequent statement from this group is "we will put a Cadillac in it". They are going to, and I think this is not good! Most likely they will meet with Allard trouble - that is, breaking sooner or later, mostly sooner, everything between the flywheel and road wheels.

In 1955, with V-8 engine, if unaided, they will be still outclassed. The market-wise negligible number of cars purchased for competition attracts public attention and publicity out of proportion to their number. Since we cannot prevent the people from racing Corvettes, maybe it is better to help them to do a good job at it.

To make good in this field, the RPO parts must pertain not only to the engine but to the chassis components as well. Engineering-wise, development

Thoughts Pertaining to Youth,
Hot Rodders and Chevrolet

December 16, 1953
page 3

of these RPO items, as far as the chassis concerned, does not fall out of line with some of the planned activity of our group. Use of light alloys, brake development - composite drums, disc and such - are on the agenda of the Research and Development group already.

As I stated above, V-8 RPO engine has a high power potential - it is hard to beat inches, but having only 80% of cubic inches, it has 96% of square inches of piston area of the Cadillac. In my estimation, the power output comparable to the Cadillac can be obtained not exceeding 270 ft.lb. of torque at any point. (323 ft.lb. of Cadillac)*. The task of making power train reliable is therefore easier.

The thoughts are offered for what they are worth - one man's thinking aloud on the subject.

Z. Arkus-Duntov
Z. Arkus-Duntov

ZAD:hs

* The comparison pertains to a special type of Cadillac