OPPOSITE LOCK

BY KEVIN A. WILSON

Scouting cars a father and son can chip off the wood block

C hildren are time machines. They'll take you back 20 years or more in a flash. It happens often lately—as when, for a school science project, we found ourselves renting a documentary videotape of the 1969 Apollo 11 mission, the first moon landing. At about the same time, we were researching race car shapes that could be translated into wood.

It's that time of year, when Cub Scouts across America are busily going downhill fast with their Pinewood Derby cars. Each among tens of thousands of 7to 12-year-old boys starts with what is essentially a seven-inch long chunk of 3 x 3 pine (yes, $2\frac{1}{2} \times 2\frac{1}{2}$ inches), carves it into the shape of a (usually open-wheeled) car, attaches plastic wheels, paints it and decorates it. Then —this being a kid-parent deal—you get a bunch of Cub families together and roll these works of art down a purpose-built, multilane 32-foot-long ramp. Elimination heats. Trophies.

And heaps of fun, especially if you like to see kids bubbling over with enthusiasm. The race itself is, for them, like the Indy 500: the culmination of months of fretting and planning and working. It is, in their eyes, the big payoff; something they've been talking about, with increasing frequency, since September or so.

As simple as it sounds—and is, if you can make yourself go easy with the parental "help" so the kids can learn by doing things themselves—constructing these cars can be made into an extraordinarily complicated endeavor.

Some Cub Scout packs set it up so interested parents can build their own cars, separate from those entered by the kids. The particular wisdom of this is evident here in the Detroit area, where you hear tales of Pinewood Derby cars that have visited Big Three wind tunnels, cars whose wheels have been dynamically balanced in engine shops, kid-cars painted in the real-thing factories. Seems a little much for a \$2.25 kit that might win a trophy or ribbon.

Like I said, you hear tales, but personal experience includes nothing so exotic. Mere mortal parents, on the other hand, have over the decades tried various answers to the kids' quasi-scientific posers. Like: Where do we add the weight? (Trust us on this, although your basic high-school physics lesson says weight shouldn't matter, it does. Think friction losses, momentum, and real-world rather than theory).

So, it's a 7.0-inch long block with a 4.5-inch wheelbase: do you want the weight (max: 5 oz. overall) concentrated forward, aft, or amidships, for the shortest E.T.? Car-people parents—even the best-intentioned hands-off types—find themselves studying the implications of high vs. low



I showed him the '68 Lotus Turbine: 'Real easy to build, son. It looks like last year's winner'

polar moments, the relative locations of the centers of gravity and lateral aerodynamic pressure, and the proportion of weight carried on each of the four (plated nail) axles.

This being America, there are people who advertise in the backs of kid and parent magazines, selling booklets of tuning tips for "successful" Pinewood Derby cars. Seriously. Put a tire chock on wheels, and someone finds a way not only to race it, but to make money off of doing so.

There are, fortunately, awards for design and creativity as well as sheer speed. Thus the routine suggestion that the young Wilson cub look for a picture of a real car he might want to emulate.

His natural leaning toward sports prototypes (he's kind of hot for the looks of TWR Jags and the IMSA Nissan) had to be discouraged. It was enough of a chore last year, figuring out how he could turn a block of wood into something resembling what the kid wanted: Rick Mears' Indycar.

The answer involved a coping saw, several chisels, rasps and files, and lots of sanding. All of which worked O.K. on the one I built as a demonstrator (and gave to his younger brother to minimize sibling friction). Bilateral symmetry not being a strength of the second-grade eye, his version wasn't quite as square-rigged as the Penske team's, but the idea was there. As was yellow paint, an engine air-intake box, a pointed nose and a wing.

But it was beaten on the track by something that looked less like any sort of car so much as it resembled a flat-black doorstop with wheels. Which is part of how I was

transported back to the 1960s by a fourfoot tall, living, breathing time machine.

Returning home from a couple of days away, I was greeted at the door by an excited face telling me he'd found the car, the one he wanted to build. Copies of this magazine and its monthly competitors literally litter Wilson Keep. But that's where he got last year's car idea, and it didn't win. So, at least the way I imagine it, he sought something authoritative, something from a book. Preferably a massive book: one with serious presence. One from Dad's don't-touch-without-permission bookcase. Scanning the automotive shelves he somehow came up with ... American Cars. That the author is one Leon Mandel, he professes neither to know nor (sorry, boss) care.

After I'd told him we'd need greater woodworking skills than either of us has as yet to build the Ford GT Mark IV that first caught his eye, he was ready with a second choice. The Studebaker Special ... Powered by Novi!

A '90s kid, with a front-engine Indy car? Go figure. My guess is that the aircraft-like tailfin captured his *Top Gun*influenced imagination.

It was easy enough to guide him to the adjacent photo of the 1968 Lotus Turbine; The *Wedge*: "Real easy to build, son. It used an aircraft engine. And looks a bit like last year's Derby winner." *Sold*.

Back in '66 or so, my own entry was based on an Indy Lotus: the '65 winner, which Dad "helped" me render as a low frontal-area cigar. I remember him worrying over all the weight being in back. It was painted green, but he chose gold, rather than yellow, for the stripe (he wanted an F1 Brabham). It was bog slow, but I have never forgotten, and never stopped loving it.

What my own Wilson cub has devised looks much like a blend of the Turbine and the Novi: a doorstop, but with a fin. It's just about ready for orange paint. I watch it taking shape while trying to carve another that I hope resembles an Indy roadster.

If I can get it right, I think my dad's gonna be real tickled with it.