SAM AND THE SUDDEN BLIZZARD MACHINE

By Dean Ing

Sam's sudden blizzard is history now, and like all motor racing disasters its memory is rusting out in a junkyard of legends. Some claim Sam's design was faulty. Others say the fault was mine for listening to him. Smythe, our sports car club archivist, warns that we all orbit too closely around Sam, like moths around a rally car spotlight-but Smythe's a poly sci professor, so that's got to be wrong.

I blame it on the weather. The snow came a month early and all at once and froze out our plans for late fall competition.

"Tee-boned yer slalom event, did it?" Sam grunted happily as we slumped at his fireplace.

"Black-flagged us," I admitted. I sat watching flames as Sam arranged blazing chunks of hardwood. Now, anybody can poke at a fire with a Bugatti dipstick, but Sam was feeding his fire with old trophy bases. Pretty expensive way to heat a hangar, from the standpoint of effort expended. Actually, Sam only had to heat the

living quarters in his surplus hangar, which is the only structure on his property. The rest of the place is crammed with machine tools, surplus aerospace materials, his vehicles, and his clean room, where he doesn't build racing cars. I mean, he doesn't anymore. That is, he does, but not as a business now. Sam was with Lockheed's "skunk works" until after the U-2 and SR-71 were public knowledge and then he turned to designing racing cars.

His series of fabled cars might have gone on forever had he not stolen computer time from Lockheed to make a study of racing trends. Sam took one hard scan at the printout and quit serious competition in mingled disgust and fear. In 1990, he predicts, go-carts will outgun Indy cars and dune buggies won't need wheels. Something to do with new power units, he says, with a glint in those gray granite eyes.

With all his engineering know-how and all his stolen hardware and both of his magician's hands in that hangar, Sam is roughly as important and predictable as the weather. His sudden blizzard was inevitable from the moment Sam softly rasped, as if to the fire, "You don't really have to hole up all winter, y'know."

I glared at him. "No, I could get me a sled and name it Rosebud, " I grumped. "Great sport."

"Sled; mm, yeah." Brief pregnant pause, then breech delivery: "You remember the old quarry course?"

I shivered, and not from the cold. The quarry racecourse had been outlawed after our first $% \left(1\right) =\left(1\right) +\left(1\right)$

competition event there. We had had 73 entrants, and 21 didn't finish, and 52 canny dudes found excuses not to start. Any idiot could add that up. It was a week before we got the last car hauled out of there. I reminded Sam of this.

"Yup; and if you remember, I told you not to touch it with or without gloves," Sam countered. "But with a few, ah, minor changes I just might give it a try."

[&]quot;This winter?"

He nodded.

"In thirty inches of snow?"

He hummed a snatch of "White Christmas."

"You're weird," I said. "We'd kill somebody."

"Quoth the craven," he said. "Shut up and let me think . . ."

I'm convinced now that Sam cheated; he must've been plotting the idea for a long time. He cupped his big stubby hands over one knee and smiled to himself. "Ever do any sledding?"

"Exactly once."

"Me, too. Never got used to the lack of power on the uphill straights."

"But what's that gottadowith . . . "

Sam raised a restraining hand. "Just listen," he soothed. "Take the old quarry course and run down it instead of up. Build your own frame. Use-heh, heh-any power plant you please, add steering, put a windscreen on, and be a hero at the quarry."

I gnawed my lip a moment. "Sounds simple," I hedged, "but if anybody goes off the edge-"

"He'll hit a nice cushy snowdrift instead of a bale of hay. I figure you hay raisers might find that a welcome change. Choice of power train is up to you. Wheels, chains, propeller, spikes, ducted fan, or a team of oxen if that's yer karma. Use any brake system that works at tech inspection. Sky's the limit."

Sam had something there. And it was catching; I tingled at the vision of sledding specials, specially built racers midwifed in our garages. It would be fun; hell, it could become a winter revolution: Speed Week in Springville! "Sam? Ah, would you-"

"Propose it to your club? I just did." Sam's smile seemed open, guileless. Maybe it was a leer. In any event, no pun intended, Sam's recommendation was as good as a direct order. Twenty-seven members of the club swore to build specials, and, oddly enough, many of us did. The rest, including me, gave help. I wanted to help Sam when he announced that he was building a surprise entry. I should've saved my breath.

The appointed Saturday dawned with a knifing chill in the clear sky. Snowballs flurried between early arrivals at the quarry. I checked off the conical pylons, fire extinguishers, doctor, and timing equipment, wishing we had attracted some racing journalists. The man from the local Bugle was worse than nothing; but him we had, like it or not. I fought the temptation to steal his hat for a pylon. It was already the right shape.

Scanning the entry list, I could see our first mistake was the lack of ground rules. Several guys used open propellers, one of 'em a front mounted rig that nearly blew the driver off while it was idling. He got chilblains and became an instant spectator. Another theorist put six little tires across the rear axle to get more adhesion. It worked fine on firm snow, but at the technical inspection, he gunned it and his wheels hungrily chewed a hole two-feet deep. Of course, it dropped backward into the hole like a sounding whale and killed the engine and caught fire, with the usual result. We buried the hulk under a pile of slush and went on with tech inspection.

Sam's pickup eased up the access road with a towering, tarp-shrouded lump looming over its cab. Everything got very quiet. Sam had refused us even the slightest peek at his secretive entry. Small wonder.

With his usual stolid care, Sam flipped back the tarpaulin and revealed most of his special. One of the tech inspectors screamed, saving me the trouble.

To being with, the-thing-broke all the rules or, rather, the assumptions. Everybody but Sam used heavy frames, sand filled tubes, bags of birdshot, or Corvette body parts to add weight. Sam had a gossamer birdcage frame of aluminum wrapped with quartz fiber tape. For a maniacal moment I wondered if he'd crocheted it.

Everybody with wheels used fat little studded tires, but Sam's wheel was two and a half

meters high. Towering between a rear pair of ski runners was a single viciously cleated monstrosity of magnesium, like a kulak's ferris wheel a half a meter wide. It was mounted on an axle held by that spidery tubing frame.

Nearly everybody had cart engines mounted near the wheels. Sam used a turbine powered by a liquid that he handled with something very like terror-and Sam crimps dynamite caps with his teeth. The turbine wasn't near the wheel; it was inside! Sam had bolted it to the nonrotating axle within his hellish great wheel.

If I forgot the gear teeth around the inside of the wheel, forgive me. A simple drive gear transmitted the turbine's torque to the big wheel. Studying the gear ratio, I calculated that the monster wouldn't be very quick. To be competitive, the turbine would have to run at over 50,000 rpm. Later, Sam told me his little aerospace fugitive didn't run well at 50,000. It ran much better at 500.

Thousand. Which partly explains-but I'm getting ahead of myself.

The steering mechanism was a disappointment at first (and to me, a revelation at last): a forward pair of skis, pivoted from a box on the frame ahead of the driver's location. God only knows how any driver would dare to hunker down kneeling, his fanny up to tempt those cleats, and guide that flailing juggernaut over patches of glare ice on a twisty trail near sheer drops at the quarry. To any sane driver that rig was a case of shove at first sight.

A murmur from the crowd drew me back to

the course. High on the trail, a propeller-driven sled had just started when its brakes failed. Worse, the driver was a first-timer, our only woman entrant, wife of an inept mechanic, darling daughter of a city councilman. She had never learned to drive and thought it entertaining to start with something little and cute. I exchanged nervous tics with our club treasurer, Bernie Feinbaum, but everything was fine until Turn One. It always is.

When I first spotted it, the sled was spitting snow, slowly rotating down a short straight until it was directly bass-ackwards and aimed off the cliff face. That's when Bernie crossed himself.

And down she came, idling the prop on down slopes to build up speed. A surge of backward thrust nearly stopped her at each bend. She paddled around the course in just over seven minutes.

Three more stalwarts made their runs. The converted garden tractor managed to convert a patch of ice into hot water halfway down and did not finish. My money was on a twin-tread rig until its driver saw the short straight beyond Turn Two and tromped on it. The thing did a tread-stand just long enough to barf him out, crashed down, ruptured an oil line that made weewee under one tread, and hi-hoed away overland as a free and driverless spirit until it bisected a chicken house a kilometer away.

The guy on skis, sporting five little bitty model engines with

propellers on each ski, was protested, but he tried anyhow. In deference to Sam, the printed rules stated, "The sky's the limit" prophetically-and the sitzmark artist was judged within his rights. He made his mark, all right, just past Turn Four.

During all this, Sam completed tech inspection and only once was seen actually driving his special. He had to fire it up for his braking test, and by the time the crowd leaped around to see what the ruckus was, it was over. The great thing accelerated for 60 meters on a thimbleful of fuel, with the wail of a lost soul in a sausage grinder, then reversed power in a geyser of snow. But it stopped like a Christmas tachymeter.

Sam suggested that the course be walked again, to be sure it was still open. Very few people could testify one way or the other. He also asked if he could make the tour afoot, and some fool said he could. After all, Sam wasn't competing for a trophy. His was to be a demonstration run, like a dragster at the soapbox derby. One more advantage wouldn't matter. So we thought.

Sam spent a few minutes dallying with a black box that evidently plugged into his special. Finally content, he ambled up the gentle black slope of the hill, carrying the little box. I followed at a distance.

Striding away from the start line, Sam pushed something on the box and tucked it under his arm. I watched him pace down the course, "absently" positioning himself for a fast approach to the first turn, and then I got

involved with the Bugle reporter.

The scribbler is the sort who sniffs a story with gore potential from any distance and will end up manufacting most of the story if he feels like it. "I got a list of entrants," he mused, "but durn if I recognize anybody important."

"You might as well go home," I urged. "This is just a local fun-type event; no big prizes."

"Yeah?" He gloomed after Sam, jerked his head in Sam's direction. "Who's the tough old curmudgeon walking down The Last Mile?"

I told him about the former rocket man.

Pause. "Waitaminnit. Don't I know that name from someplace?"

I was casual. "Possibly. Indy, Atlanta 500, Le Mansbut Sam doesn't crave publicity these days."

"He's public property," the pencil pusher snorted. "But he musta turned chicken in his old age; he's registered as the owner of that Rube Goldberg waterwheel, but the driver's some lunatic named Botts."

While I fought myself to keep from feeding this guy a few knuckles, a nagging doubt clung to me. Why wasn't Sam driving? Had he finally lost his nerve on a measly small-time event?

The reporter wheedled more information. He had faucet charm and turned it on and off as it suited him. "You a good of friend of good of Sam?"

"That pleasure is mine," I said.

"Maybe you can gimme some details on his, uh, whatchamacallit. The Bugle

prides itself on
accuracy." His look dared me to disbelieve it.

"Sure. Kinda hard to know where to start," I hedged, wondering if I could get away with wild inaccuracies. I invented quickly. "You could mention the desmodromic valves," I began.

"I intended to. Uh, how d'you spell it?"

"Like the inventor," I lied, warming to the game. "Herr Desmond Droemik." I spelled it out. "And you'll notice the hydrodynamic spoilers."

He was writing like mad. "Come again?"

"To spoil the hydrodynamics," I frowned, with a wisp of scorn. "And the outer-space frame, obviously. With unlimited-slip differential and . . . and a chromed roll center."

When physicists learn to chrome plate the equator, or any other imaginary line, then Sam will be able to put chrome on a roll center, which is also an imaginary line. My twinge of guilt evaporated in a warm rush of fresh fantasy. "And of course it has computer designed steering," I concluded, reaching wildly enough to grasp a great truth by the tail. But how could I know? I shrugged. "Otherwise, Sam's rig is pretty ordinary."

He cranked his spigot on for me. "Hey, you were lotsa help, fella. Maybe I could mention your name. Immortality in print!"

"Gaston Martin," I perjured, and shook his hand. Then I sloped off down the hill, whistling an innocent medley.

Sam had finished his trek before I reached bottom and was fiddling with something under his tarp. The word was spreading that Sam had

lost his nerve. Nobody could locate Botts, his driver. Sam drove up the hill by the easy back way and parked near the start line. The start official was in brief conversation with him, and we watched them wrestle a ramp from the pickup to the ice. Presently, the last serious entrant made his run; it was a conventional go-cart and expired conventionally in a deep snowdrift. By the time the driver was exhumed from his own personal avalanche, Sam had his vehicle fueled and waiting at the start line. Sure enough, Sam wasn't driving.

A chubby stranger in a sleek black coverall was strapped in place, inhumanly calm under the circumstances. During his last-minute checks, Sam was in a lively dialogue with the official. I was heartbroken that Sam could accept another driver in his place, and through my misting eyes it seemed that Sam and the official were actually arguing. I heard the muted buzz around me; everybody had a theory because nobody knew anything.

The P. A. system crackled. "THE SAMBOTT SPECIAL," it boomed; "DRIVER, R. O. BOTTS." Then, like everybody else, it fell silent.

High above us, the tiny figure of Sam made an adjustment at his power unit. A spurt of steam billowed like an omen in the frosty air. A moment later its harsh tooth-loosening wail reached us, and Sam was fooling around near the steering. I could swear the little black box was nestled there.

Sam knelt clear of the great machine, intent on the steering. The official, stamping and yelling with hands over his ears, slipped on the ice and caught himself on the controls. And engaged the drive gear and was flung into Sam, and Botts didn't bother to hit the reverse. As a matter of cold fact, Botts had no brakes.

In an instant, Sam was on his feet, running after the special; an exercise in pure loserism. The machine keened its air-raid siren song, the big wheel churning down the slope, a roostertail of snow lofting up, up, and away behind. The gasp from the crowd must've lowered ambient air pressure by five pounds; we all expected a god-awful smash at Turn One.

But the special simply laid over at an angle and disappeared around the bend. When it reappeared near Turn Tree, a cheer went up and Sam went down, having blindly run through the roostertail, into banked snow. Next came a twisty uphill stretch, and judging by the noise, the turbine was revving harder than ever. Sam abandoned his direct chase and halfclambered, half-fell straight down the embankment. It was a maneuver that would bring him to the course just past the last turn, before the timer at the finish line. I wondered if he intended to trip the damned thing, intimidate Botts, or signal him-assuming they both survived that long.

The special was surviving, but only by inches. Turn Six was a fiendish righthander of decreasing radius, bounded by the bluff on the outside and thin air on the inside. Botts would have to shut down his power long before he reached it: but Botts was not shutting down at

all. Before our bulging eyes, the machine angled toward the outside and, running flat-out, swept up the side of the bluff that followed the curve of the course. Like a trick cyclist at a carnival, Botts and the machine shrieked around the curving wall while absolutely horizontal, then shot out of the curve onto the course again.

Still accelerating.

The scream of the turbine grew nearer, higherpitched, impossibly abrasive on the ears. Sam scrambled to his feet just as the special slued around the last turn. Now there was nothing ahead of it but a straight path and a gaggle of timing people flanking the finish line. This group got one glimpse of the thundering wheel, saw it gaining speed and trailing a sevenstory roostertail of snow, and abandoned ship like cats on polished linoleum. All, that is, except for the girl at the timer who had earmuffs on and wasn't looking and will always describe the passage of Sam's special as the Sudden Blizzard of Seventy-Nine.

Sam had his windbreaker off as the thing howled past him, and in one deft swoop he threw it into the blur of the great wheel. It was, he told me later, his only hope of jamming something because there was lots more fuel to be burned and he did not own an antitank gun.

The wadded cloth was effective in its way. For an instant the wheel skipped a beat, digested the offering, then belched shreds of nylon in all directions. Something, probably a sleeve, caught in a cleat and started to beat Botts rhythmically. The special accelerated

down the straight at something over 160 kilometers an hour. Sam wiped slush from his eyes and watched, now helpless. The pounding was too much for Botts and suddenly the driver was ejected.

The Botts trajectory was simply unbelievable if you didn't know what you were watching. From the driving position of a praying Moslem, Botts rose majestically toward heaven and began to pirouette in the air to one side. Tiring of this, Botts jerked, seemed to shrug, then fell in a series of falling leaf aerobatics before hitting flat in the snow. Flatter than we knew.

The special was bumping hard now. Every bump caused a higher bounce, and

as it headed toward our parked cars the wheel steadied a few inches above the surface. Then the errant sleeve sailed away, carrying the cleat with it, and the big machine arrowed upward. It was airborne, and more so every second. The course physician sprinted after Botts, aspirin jouncing from his open bag.

The rest of us gaped at the special, daring and swooping above us in a pattern that seemed vaguely familiar. Half a minute later it rocketed away again, still higher, and began the same routine. It was then that Sam reached us.

The doctor returned flinty-eyed, holding up a rubber suit. "Where'd you hide the body;" he accused.

Sam nodded at the suit. "That's him. I just took an old scuba suit, sealed it, stuck a helmet on it, and pumped it up. I'll give it two hot patches and call you in the morning."

"You can't run a race without a driver," someone said.

"That's what the start official kept hollering," Sam responded, "and I kept explaining that my driver was really in the programming box." He squinted toward the sky. "But I wasn't finished programming it when the idiot hit the controls. The box was set to go where I had taken it before, but I didn't get a chance to program a stop."

The facts interlocked in my head. "Sam! Your driver was a robot?"

"Welcome to the machine age," Sam said dryly. "I didn't figure on my driver springing a leak, though; thought I had of Botts strapped in pretty well."

The reporter huffed up, looking grimly pleased. "What about that-that thing up there?" He pointed on high, where a contrail of steam followed a flashing silver streak. At that height it sounded like a sex-crazed mosquito. "Who's to say that iron windmill won't chew up a satellite or something?"

"I am," Sam said quietly. "I knew there'd be a low-pressure area over the wheel, but that piece of nylon created a higher differential when it bent the cleats. More lift. Now the special will go as high as thin air will let it, and then it'll run out of peroxide, and it'll keep running the same damn course I programmed until then-only skewed upwards."

The doctor, a nice guy but a bit out of his element now, shambled off, dragging the punctured scuba suit and muttering about an autopsy with Cousteau. A group of rescuers dug out the girl at the finish line. She was still at her post and only a little stunned under her mound of powder snow. She swore that Sam's machine had clocked the course in 27 seconds, roughly a 112-kilometer-an-hour average. That figured.

The reporter, still trying to promote fireworks, drew a crowd with the old citizen's arrest gambit. "You stand accused of reckless driving," he began.

"Only I wasn't driving," Sam reminded him.

"Unauthorized flying of unlicensed aircraft," he ployed. God knows, that much was true.

"If you can prove it," Sam murmured, glancing up.

"I'll impound it when it comes down. Ah, it will come down." It was a statement, but it was a question too.

"How very right you are," Sam said, glancing at his chronometer. "And it should be out of fuel shortly."

"Good." The reporter folded his arms, Fletcher Christian on the Bounty's deck, and glared into the sky. "And you should be jailed for improper construction. I know a few things, mister."

"Front page news," Sam replied. "Name one."

"You can embrittle something if you don't put the chrome on right. I read it somewhere. Right?"

Sam chewed an ebony cuticle reflectively. "It happens," he conceded.

"I thought so," snarled the reporter. "And you went and embrittled your roll center!"

Sam blinked, shook his head as if to clear it. I drew him aside and whispered how I'd had some sport with the Bugleboy, who didn't know an imaginary reference line from a breadline. Sam tried to hide the smile that was growing as he listened.

Then he called to the reporter. "You were right. Guess you'll have to write me up for that." Course workers stopped to listen. "And one other thing: the special is your impounded property, but barring wind drift, I'd say you have a problem." Sam headed for his pickup truck, cheerily shouting. "When it comes down, it will be doing roughly Mach two. Your problem is not being anywhere near where it hits, when it hits." He made a quick one fingered obeisance from his pickup. "Wear it in good health."

The quarry was innocent of human life in two minutes flat.

Sam never recovered the special, though we found a new sinkhole near the quarry later. It was too cold to dig, and anyway Sam and I were too busy. The Bugle's coverage was everything we'd hoped, and the writer of the best sarcastic letter to the editor won a place on Sam's pit crew. True to his resolve against serious competition, Sam was preparing his old Nash Metropolitan for that race where-but everybody's heard about that.