

BLACK MAGIC AND THE SUPER GEEZER

On the Road

“It’s fun to visit the high bucks racers now and then,” says Terry. Following their successful tests and crime prevention, at China Lake, they’ve wasted no time heading for Sonoma, where a major sanctioned race will take place this weekend. Everyone’s excited, especially TK and Celeste, but for some reason Terry feels the need to have a reason for the trip, “We need to pick up some new slicks, this new fuel system seems to burn ’em off real quick.”

“And it’s a chance to say hi to the guys we used to race against,” adds Nitro, remembering the days of running fuel dragsters and funny cars. “Most of these guys are all right.”

“Yeah,” agrees Terry, “except for Bo.”

Sonoma Drag Strip

When they arrive at the drag strip the people at the gate recognize Terry and Nitro in the Bikester rig and wave them through into the pits, where they park, not too far from where Bo Barns and his crew are working on his dragster along side his trailer. Nitro seems more than a little amused.

“You parked here on purpose,” says Nitro.

“Nah,” says Terry, “it was the only place to park.”

But Nitro knows better. Terry and Bo always like to needle each other whenever they have a chance and, sure enough, as soon as Bo Barns sees the Bikester truck roll to a stop, he’s on the way over.

“Come to see some real racing?” asks Bo.

“Anytime,” retorts Terry. “I can be at the starting line in 20 minutes to race you.”

“That thing you call ‘SuperBike’ is so dangerous they won’t even let you race it here,” replies Bo.

Terry makes chicken noises and flaps his arms like wings in Bo’s direction. Everybody laughs, including Bo’s crew, and Bo storms off. After taking a lot of good natured ribbing about being a crime fighter and a superhero, Terry decides to go over to the tire trailer to see about a new supply of slicks. It seems that *everybody* has seen the video of the drug bust, which has been running over and over on television. Nitro wanders off to visit with the other racers, and TK tags along to meet some of his heroes.

Promoter

Seeing the interaction between Terry and Bo gives Celeste an idea and she heads for the timing tower. Once there, Celeste bluffs her way upstairs to where the track officials are and starts talking. She finds they listen to her quite closely after seeing her on the news as a “drug busting superhero”.

Terry returns to the trailer an hour later to find Celeste is already there. She can’t wait to tell Terry that the track has agreed to put on an end of the season match race between Terry and Bo Barns. One race, winner take all, so the purse depends on how many people come to the race, and

Celeste has some ideas as to how to pack the place. It will be the biggest race of the year.

Terry is cranked. He thinks, "This is great! Finally a chance to put Bo in his place."

Nitro and TK return and hear the news about the match race against Bo, and they're all for it. It will be the highlight of the year. As a coming attraction, Terry decides to give the crowd a free exhibition run and Nitro unloads SuperBike to get it ready.

Most of the other racers haven't seen SuperBike before and all agree: "It's scary!" When they see Nitro pouring fuel into the tank out of a Perrier bottle, they just shake their heads.

"We just like to spoil old 'Supe' now and then," says Nitro laughing. It never occurs to them that it *is* actually Perrier water that Nitro is pouring into the fuel tank. TK just giggles. When they bring SuperBike up to the starting line to run, pretty much all of the other racers including Bo Barns, are there to watch.

Terry is in his element; he loves an audience. Nitro plugs in the starter and looks at Terry. Terry nods his head and Nitro hits the starter button. The engine roars to life, and everybody around the starting line jumps back. It's louder than any engine they've ever heard.

The tire people have given them a new type slick to try out so Terry does a monster burn out, totally burying the starting line and everyone standing around it in billows of tire smoke.

Then Terry carefully stages at the starting line and waits for the green light. Some of the crowd notices the exhaust, which strangely enough looks almost like steam, but the bike is so loud and the burnout was so spectacular, that they don't really think about it.

Then the light turns green and Terry launches hard, doing a two foot wheel stand, which is as high as the wheelie bars will allow. The front end stays off the ground all the way down the track, while leaving just enough tire smoke.

"Whoa!" thinks Terry, "this dude's pulling like crazy, this new system of Nitro and TK's really does the job", and he eases off a bit before the finish; he doesn't want to scare Bo away. Terry wants that match race and the chance to finally shut Bo up.

Next Stop: L. A.

Terry is driving as they head south toward LA. Nitro and TK are huddled over the computer figuring out something or other, while Celeste sits in front in the passenger's seat going through a pile of papers, and discussing them with Terry.

It turns out that Celeste has been very busy while they were at Sonoma. She's lined up at least two other match races besides the big race with Bo Barns. She also has a couple of potential sponsor deals cooking.

Terry is amazed; he hasn't been able to get much sponsor interest since they stopped racing at the major sanctioned races and started match racing. It looks like he doesn't just have a match race promoter. She's a manager and an agent, too.

Celeste glows when she hears Terry say that. She's worked so hard waiting tables the last two years, she had almost forgotten she could do anything else.

"It's not that hard," says Celeste, "With your face all over the national news, the sponsors are kicking the door down."

But Terry knows better; he knows how hard it is to get potential sponsors to even talk to you. He's impressed. "No tobacco or beer sponsors," says Terry.

"No way," answers Celeste, "We don't need those guys." In fact, she has already talked to the "D.A.R.E. To Keep Kids Off Drugs" people about doing an anti-drug television spot.

Terry's hot for that. "Let's shoot it as soon as possible," he says.

Behind them, TK and Nitro are engrossed in the computer and the calculations on a pad in front of Nitro. He still doesn't quite trust computers -- he suspects they can take your soul away.

However, he's got to admit: TK can do some really trick stuff with one. Between TK's scientific and computer wizardry and Nitro's mechanical knowledge, plus the information they are accumulating from the onboard computer on SuperBike, they should soon be able to put together an H²O-S system that they can test on a regular vehicle on the street. They need to pile some miles on it to see if this system is really going to work well, and be dependable over the long haul.

TK thinks he's getting Nitro interested in the 'Save Mankind From Air Pollution' thing, although Nitro gruffly says, "It's a tree-hugger kind of thing, and it's totally Greenie".

Rest Stop

Celeste is sitting at the table in the hospitality suite area of the trailer with Terry and Nitro. Terry is struggling with the books, and Celeste offers to see if she can help. After taking a quick look at the Bikester books, Celeste just shakes her head, and says, "What a mess."

"I guess we just aren't into paper work," says Terry defensively.

"No excuse," replies Celeste rather harshly. "You're losing a lot of money by not keeping track of this business and running it correctly." Terry and Nitro look at each other and don't know quite what to say; they had never really thought of it as a business. They just thought they were going racing.

Celeste continues: "Among other things, it looks like you paid almost twice as much in taxes as you had to last year."

"How did you figure that out?" asks Terry.

"Two years of bookkeeping and tax preparation courses," she answers.

Celeste once again surprises Terry. "Some kind of Wonder Woman," he mumbles. Nitro just chuckles.

Black Magic

When they're in LA, Terry and Nitro usually stop for a couple of days at the Black Magic Engine and Machine shop where they can build new race engines, pick up parts, and generally just catch up with the latest racing news and gossip.

Quite a few of the touring racers stop here, and for some it's as close to home as anything gets, they're on the road all year. Many have their mail delivered here and pick it up when they're in town or have it forwarded to wherever they are racing. As soon as the truck and trailer are parked and plugged in to a camper hook up, Terry ambles off to visit with everybody while Nitro and TK head directly for the shop.

Nitro wants to go through SuperBike's engine while they're here and TK is going to help. TK is definitely cranked up about this! There's a huge mall three blocks up the street and Celeste is heading straight for it. After all the months she's been living in the sticks, she needs some "Mall Time".

By early afternoon the race engine has been completely torn down, inspected, and any parts that were worn have either been found in the parts department or ordered. Nitro is quite impressed with TK, who proves to be a natural mechanic. The parts that are ordered won't come in until tomorrow, and they can't put the engine back together without them, so they have some free time.

Nitro suggests they run out to El Segundo to the Sun Tool Company surplus yard and dig around a little. TK's eyes light up, "All right! A hunt for more H²O-S parts." They borrow a Black Magic shop van and head out the freeway.

Sun Tool Surplus Yard

Arriving at the Sun Tool building and yard, they find the place very quiet. Nitro immediately notices that the boxes and materials that were stacked up outside the building are gone, and there's a property for sale sign with sold! across it on the fence. But the gate is wide open so they drive in.

Inside the yard, Nitro parks, and unloads TK's wheelchair. Once inside the building, they find that it's not totally empty. There's still some stuff left, but the area where the P-51 engine and the H²O-S parts were is totally cleaned out.

“Old Jim”

In the dusty engineering office, amongst stacks of boxes and files, they find a somewhat eccentric clerk. He proudly tells them that he's worked for Sun Tool for over 50 years. His shirt says 'Jim' on it, so they assume that is his name. Nitro thinks, “Oh great, a gummer.”

But he soon discovers that Jim Truesdale is quite sharp. He was an engineer at Sun Tool since the 40's, and seems to remember everything he ever did there. After they closed the shop they kept him on to sort out what was left because he just didn't want to retire, and he knew his way around the place.

But when TK asks him about the H²O-S project, he suddenly becomes old and confused. Then he notices TK's Bikester T-shirt and starts asking racing questions. It turns out that Jim's hobby when he was a young engineer was drag racing, back when organized drag racing was just starting. He used to race at places like Santa Ana and Riverside. This old guy is something else!

Nitro can't believe it, somebody who's been around racing even longer than he has. Soon Nitro and Jim are talking a mile a minute about racing in “the good old days”. TK is soaking it all up because it was way before his time. By now Nitro and Jim have discovered they have mutual friends, and when the conversation turns back towards the H²O-S system Jim has decided that Nitro and TK are O.K.

Jim doesn't trust the Atlas Company any more than TK, even though he works for them until Sun Tool is totally closed. After that, he's retired, whether he likes it or not.

Jim's Secret

He has found some information on the project that he put aside. It seems that Jim has many of the same feelings about what this system could do in the fight against air pollution as TK does, (and, secretly, Nitro has too). In fact, it turns out that as a junior engineer Jim worked on the project. He grabs three sodas from an antique looking pop machine and digs out a small file folder of papers that he had hidden under his desk.

Jim calls the project the oxygen extractor because part of the process was to extract the oxygen from the water leaving hydrogen. Now TK understands why some of the parts were marked H²O-E instead of H²O-S; the 'E' stood for extractor.

When they tell Jim that they actually have the system working, he is astounded. The project had been a priority for almost two years but they could never get it to work more than a few very brief seconds. When the project was stopped for lack of government funding, he was on the engineering team that was working on turning it into a long running dependable system. Nitro and TK look at each other. They tell Jim that's the same point they are at right now.

“Well,” says Jim, opening the folder and displaying a pitifully small pile of papers, “this is all the information I could find here,” pointing to the piles of boxes marked Sun Tool Engineering Records, “but I've still got a lot up here,” he says pointing at his head.

Two hours later, they are still talking when Nitro looks at his watch. Terry has made reservations

for them at his favorite restaurant in LA. He has something he wants to talk to Celeste and TK about. Nitro knows what it is and he isn't going to say anything and spoil the surprise, but he knows Terry will be uptight if they aren't back in time. Jim agrees to come down to LA to see them on Saturday. In fact, he can't wait to see the race bike and the H²O-S system they've put together.

A Find

On the way out to the truck, Nitro spies something in a corner, partially under a tarp, and has to go over and look at it. Jim uncovers it, and both Nitro's and TK's eyes get big when they see it. "I've been saving this for somebody like you guys," he says, "It's yours."

After getting their unbelievable find loaded in the van, they are on the freeway heading back to LA to meet up with Terry and Celeste for dinner. "Terry always gets grumpy when I drag things back like this," Nitro says, gesturing over his shoulder at their cargo. "He gets cranky because the stuff fills up the trailer, but this time we'll be home in a couple of weeks and we can unload it."

"Home?" questions TK, "I didn't know you and Terry had any home besides the truck and trailer."

"Oh sure," replies Nitro, "It's not the Hilton, but it's a good place to keep our stuff."

"Oh," says TK.

He sees all of this coming to an end, back to living in a mobile home somewhere, while Celeste works waiting on tables. Bummer, oh well, if there's one thing TK has learned, it's how to deal with life.

Nitro looks over and sees the look on TK's face and adds, "It's up north, by the ocean. You'll like it." Nitro has let the cat out of the bag, but he didn't want to see TK unhappy. He asks TK not to spoil the surprise. TK says he won't tell Celeste, but it's going to be hard to keep quiet. They get back to the trailer just in time to get cleaned up and go to dinner.

Dinner and a Deal

"Want meat!" says Nitro, after Celeste has ordered the veggie plate and TK has ordered his traditional Swiss cheeseburger with Miracle Whip.

"Yuck!" says Celeste, "How can he stand those? That's all he eats." TK replies, "No it isn't. I eat Tater Tots, too."

Terry settles for the seafood platter. He points over at Nitro and says to the waitress, "You better bring him a steak; a big one!"

After a great dinner everyone is sitting around talking. TK, mixing his comments with mouthfuls of homemade peach pie and ice cream. It seems that TK not only eats Swiss cheeseburgers with Miracle Whip and Tater Tots, he also likes dessert.

Terry presents his and Nitro's offer to Celeste: she and TK will become full time members of the race team. Celeste can take care of booking races, bookkeeping and taxes, and be the agent/ manager of the operation. She can handle endorsements and deal with the sponsors, things that Terry and Nitro don't seem to be able to pull off at all.

"The pay will be good," says Terry, "and there will be a trust fund included to make sure that TK gets the best education possible."

"Besides," Nitro interjects, "I need the kid, I don't know how to run the computer."

"You will be full partners in the team," adds Terry.

"All right!" exclaims TK, "BIKESTERS!"

Celeste just reaches across the table and shakes hands with Terry and Nitro. "Deal," she says.

After Dinner Rocket

In the excitement of going to dinner and the business deal they worked out, Nitro and TK haven't quite got around to telling Terry about the big score at the surplus yard. Now it's time to face the music.

Nitro starts out, "You know, Terry, how TK and I went to Sun Tool today?"

"OK, what did you drag back this time?" asks Terry.

"It's really neat!" TK adds excitedly.

Nitro opens up the back of the van while Terry and Celeste stand there, waiting. The van is packed full. Terry looks in and recognizes an ominous shape. "A rocket!" he exclaims.

"Six thousand pounds of thrust," says Nitro, "And it was free!"

"What's the rest of this?" questions Terry.

"A bunch of other neat stuff Jim gave us," answers TK. "Turbines and things. He will tell us all about them when he's here on Saturday."

"Jim?" asks Terry.

"He's a smart old geezer down at Sun Tool," answers Nitro.

"He's *ultra* smart" adds TK, "And he's not a geezer!"

"A rocket," thinks Terry, "Hmm."

Kids

TK and Nitro spend all day Friday fitting new parts and putting the race engine back together. They also make some changes in the spare engine to make it more compatible with the H²O-S system. Celeste is busy putting together a new Bikester bookkeeping system on the computer. Terry's day is mostly taken up talking, especially with kids, who seem to be coming around constantly.

Celeste marvels at the fact that Terry never gets tired of the kids, whose ages run all the way from four or five years old to kids driving cars. Terry jokes around with them and gives out posters, autographs, and a lot of free Bikester tee-shirts. Nitro visits with them too, when he has the time.

Celeste knows that this is a poor part of town, and many of these kids have nothing. Just to talk to somebody like Terry is really a big deal. Terry always tries to give their self-esteem a boost when he talks to them. He knows it doesn't require much to help a kid get going in the right direction.

Super Geezer

The next morning, the gang is having orange juice and scones when they hear a car with a very snarly sounding engine drive up. Looking outside they find it's Jim Truesdale in a mean looking candy blue Cobra roadster, with mag wheels and very wide tires.

"An old geezer, you say," comments Terry to Nitro.

"A very fast old geezer," replies Nitro.

"Neat car," says TK as Jim walks up. "What's it got in it?" They go over to the Cobra.

"A supercharged 427 Ford," says Jim, opening the hood.

"Trick suspension," notes Nitro, looking underneath the car.

"Built it myself," says Jim. "The body's fiberglass and I did everything else."

"It's beautiful," adds Celeste.

"My wife told me I should find something to do when I retire," says Jim, "so I built this thing, but I still haven't retired."

Terry thinks, "This guy's OK."

Just then, one of the older machinists from Black Magic walks over to look at the Cobra and recognizes Jim, who immediately remembers him. It turns out that drag racing wasn't just Jim's hobby years ago. He's a bit of a legend, and was one of the first guys to drive a fuel dragster, a wild dude in his day.

Wizard

"Well, let's see what you've got," says Jim after making plans to get together with his old buddy. SuperBike is out alongside the trailer. Nitro pulls off the cover, and Jim marvels at a true engineering masterpiece, a huge hemi V-8 in a motorcycle.

"Amazing," says Jim who, as an engineer, definitely appreciates Nitro's work. Within a few minutes Jim, Nitro, and TK are huddled over the H₂O-S system, with Terry involved whenever the crowd of kids that seem to always be around him eases off for awhile. Jim astounds them by knowing the technical names for all of the parts in the separator and injector. Nitro and TK had been making up names for the parts as they went along, since they had no manual to tell them what any of the parts are called.

Jim's memory is something else. He quickly disassembles the unit and explains things about the system that they didn't understand, and how to make adjustments to make it work even better.

Nitro and TK just look at each other and say, "Wizard!" in unison.

"No," says Jim, "I'm not a wizard. It's just that in over 50 years of engineering this was the project that meant the most to me. It was also the one we didn't get to finish, so I've always thought about it. Here, I'll show you something."

Jim takes apart the housing in the center of the separator and takes out a disc made out of a strange ceramic material. TK and Nitro have never been able to figure out what that stuff was. Jim holds the disc up so they can look at it very closely, and along the edge there are the initials 'JT', and the year 1945. Both TK and Nitro immediately know those are Jim's initials.

"Definitely the Wizard!" says TK.

Nitro nods in agreement. Jim just laughs and goes on to explain to them about the disc. Jim's field in engineering besides mechanical is ceramics. In fact, he was one of the first ceramic engineers.

"The major problem in the development of the Hydrogen Oxygen Separator," Jim continues, "was finding the proper medium to force the water through at the extremely high pressure necessary to achieve the molecular separation required to produce the oxygenated hydrogen fuel that is the end product." Developing ceramics that would do the job without being blown to pieces or immediately worn away by the pressure became the assignment of the team of scientists and engineers that Jim was on.

He then points out to them how rapidly the disc that he had taken out of the unit on SuperBike was wearing after just a couple of runs. As he talks, Jim walks over to his car and brings back a box about the size of a case of soda and a blue address book. Opening the box, he takes out another hydrogen separator disc. The box is packed full of them.

"I've had these since 1945," he says, "They're out of the last batch we made and they are the best we came up with, probably a hundred times better than the early one in the bike."

TK picks one up and looks at it, "Cool."

There's a P-51 Mustang Fighter plane embossed on it. "The system was being developed mainly for the P-51," explains Jim, "so I kind of dressed up the last batch. There were 50 boxes of them, but I only have the one, I haven't been able to trace the others, but I think they were sold as surplus in the late 40's. We were very close to developing a ceramic that would last much longer, making the system usable in P-51's and eventually practical for everyday transportation. Then the project was

ended and they took all the records and formulas. I've lost touch with the others who were on the team over the years."

"The last addresses I have for them are in this book," he says, holding up the blue address book, "Perhaps some of them can be traced down using your computer and the internet. If the team could be reassembled I'm sure we could finish the development of the ceramic separation medium."

TK copies down the names and addresses. The subject then turns to the rocket engine, and soon the three of them are involved in a very technical discussion that ends up with TK and Jim running computations and theory on the computer while Nitro presents them with ideas and drawings.

Suddenly they all look at each other and say, "I think this will work."

"I have books and access to the computer programs that you need," Jim tells TK, "Why don't all of you come out to my place for dinner in the next few days and I'll get the stuff together." They make a date for the following Tuesday.

PR

Celeste has decided that along with her other duties she's also going to be the Bikester public relations department. She arranges a visit to a local school on Monday for the Bikesters. They visit with the kids, show them SuperBike, and give them autographed posters.

Even the normally rather anti-social Nitro loosens up a little around the kids, and TK is in heaven, he gets to be "Super Kid!" Afterwards they go to a children's hospital. A sobering experience, but it makes the kids' day. By the time they leave, it's quite late, and every kid in the place has a Bikester tee shirt autographed by all four of them and both the kids and the Bikesters have had a good time. TK has done time in these places, and he knows what it means to have visitors.

Tuesday

In the morning they get the truck and trailer all packed up and ready to go. Celeste has arranged a Match Race against the National Funny Car Champion

Dangerous Dan Jones on the coming Saturday night in Phoenix. The day after that, Sunday, they have a Grunger Race to run in Albuquerque, New Mexico. It's going to be a busy weekend and they have to leave for Phoenix first thing Wednesday morning.

After they are finished organizing and loading all the racing gear, they borrow the Black Magic van and head out the Santa Ana freeway to Jim's place.

At Jim's House

After a great barbecue with Jim and his family, including three grandchildren that Terry ends up entertaining, Celeste visits with Jim's wife, daughter, and son-in-law while TK and Nitro go with Jim into his study.

There he gathers up a stack of books and a box of computer discs with the information and programs he has promised. Jim and TK become involved in a very complex discussion on aerodynamics which soon goes to far into mathematical theory to keep Nitro's interest and he goes back out by the pool to visit with everyone else. Too soon, it's getting late, and they have to leave early the next morning for Arizona. They say their good-byes and TK makes arrangements with Jim to keep in touch by computer.

"Jim is a super brain," says TK when they are back on the freeway, "He designed some of the systems on the Space Shuttle."

Terry perks up. He's always been crazy about flying. "What parts did he work on?" he asks. "Flight surfaces and systems," TK answers.

Terry looks over at the pile of books that Jim gave TK, noticing that the one on top is on aerodynamics.

"Very interesting," thinks Terry.

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