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## Boom Cars

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By

*jack*

– April 13, 2006 Posted in: [Journalism \(http://www.jackboulware.com/category/writing/journalism\)](http://www.jackboulware.com/category/writing/journalism), [Writing \(http://www.jackboulware.com/category/writing\)](http://www.jackboulware.com/category/writing)

Anational circuit of car-stereo competitions determines which car has the loudest sound system. “The Beast,” a modified 175-decibel Ford Bronco owned by a grandmotherly schoolteacher from Phoenix, prepares to regain the title of World’s Loudest Car. Includes a “bassing” cruise through West Palm Beach, setting off car alarms.



[http://www.jackboulware.com/wp-content/uploads/gates\\_beast.jpg](http://www.jackboulware.com/wp-content/uploads/gates_beast.jpg) **Feel the Noise**

**In the belly of “The Beast,” behind pressure-sealed doors and a blastproof windshield 3 inches thick, lies a 48-speaker, 175-decibel, 48,000-watt sound system eight times louder than a 747. Get ready to Rumble.**

The sound threshold for pain is 125 decibels. A rock concert maxes out at 130 decibels. The roar of a jet aircraft, one of the loudest sounds in the everyday world, measures about 150. If you walked up to a 747 at maximum thrust and stuck your head inside an engine, the noise would blast through your eardrums and fry the tiny cilia lining your auditory canal. You’d go deaf in an instant, but that would be the least of it – the force of the sound waves would liquefy your bowels, and you would die in a puddle of your own diarrhea.

For the past few months, inside a Phoenix warehouse that is strictly off-limits to outsiders, a crew has been customizing a Ford Bronco with a car stereo designed to pump out a whopping 175 decibels. Sound intensity is measured on a logarithmic scale – power doubles once for every three additional decibels – so that means the Bronco’s 48,000-watt system will be eight times louder than a 747. Obviously, this is not the typical bass-booming joyrider that cruises America’s streets, collecting noise-pollution tickets and annoying people at stoplights. This Bronco is a highly modified, volume-maxing war machine whose sound levels are so heinous that no living person will ever be allowed to sit inside for a full-blast listen. It’s called, appropriately enough, “the Beast.”

The Beast is as strange a vehicle as you're likely to see. A remote control works the volume levels from the outside, where it's safe. The windshield is 3 inches thick, to prevent it from blowing out. Pneumatic pistons pull the doors shut with thousands of pounds of pressure, maintaining an airtight seal and stopping them from flying open. The body panels have been stiffened to keep them from crumpling under the force of the beat. The stock bench seat has been replaced with two custom bucket seats, fitted so far forward that the vehicle must be driven with your knees nearly at chin level. Behind the seats is a floor-to-ceiling wall of speaker cones. There is so much extra weight from the reinforcements and the dozens of batteries powering the sound system that the vehicle's top speed is about 30 mph – anything faster and the brakes might fail. The gas tank has been downsized to hold merely five gallons and the steering wheel is vestigial, 8 inches across, because this car doesn't go anywhere except up a trailer ramp. The Beast is designed for one purpose only – to be the loudest thing on four wheels.

Over the past 10 years, a peculiar new car culture has sprung up whose acolytes live to produce extreme levels of noise that seem almost insane. The US now boasts three primary governing bodies that organize car-audio competitions, each with its own rules and judges. The International Auto Sound Challenge Association (IASCA) is the oldest, followed by the United States Autosound Competition (USAC), and dB Drag Racing, a themed offshoot of IASCA. Together the three groups sponsor more than 2,000 annual events and attract some 20,000 competitors.

This "sport" is much like rodeo or dirt-track auto racing in that everybody competes in the same league; a weekend warrior with a little extra cash for his stereo system will go up against corporate-sponsored show cars. But although thousands of trophies are awarded each year, nobody makes a living at it. The high season spans April to November, culminating in each organization's world finals, which are all held within a few weeks of one another. Special-interest magazines – including Car Stereo Review, 12 Volt News, Auto Sound & Security, Carsound, and Automedia – chronicle the scene, as do Web sites like [mobileaudio.com](http://mobileaudio.com) and [SoundDomain.com](http://SoundDomain.com).

In this world, the Beast is a grand old champion that these days finds itself in an unfamiliar place: the comeback trail. The Beast was conceived and built by the most recognized name in the woofer-car subculture: a 64-year-old retired schoolteacher from Phoenix named Alma Gates. Gates and the Beast ruled the circuit for a couple of seasons, but she was beaten at the 1998 dB Drag world finals. The current car-stereo king, at 170.1 decibels, is L&M Electronics, a team from Wintersville, Ohio. Gates and the Bronco disappeared for a while, but they haven't quit the sport. Under her guidance, a full-time crew of four has spent most of the last 12 months tearing the truck down and rebuilding it from the ground up. This month, the Beast will emerge from its hibernation like an angry boom-bass grizzly bear roaring out of its cave, bristling with subwoofers and seeking revenge. As it muscles its way through the pack toward the final competitions, fans are going ballistic, promoters are selling tickets, and rivals are growing worried. Can the sport's first legitimate superstar again triumph with the world's loudest car? Or will the Beast suffer humiliating defeat, and slink back home to face a long, lonely winter?

Navigating the byzantine world of car audio is impossible without a guide, and so Alma Gates has agreed to introduce me to some of its rank-and-file. Our first stop is a custom car show in Key Biscayne, Florida, one of the hottest states on the boom-car circuit. The bikers and young males with buzz cuts seem as if they'd spend their leisure time robbing liquor stores and cooking up meth in a bathtub. But they don't; they're into cars. Walking with Gates through this crowd is like hanging out with my grandmother – that is, if my grandmother knew a lot about decibels, subwoofers, bars, and strip clubs. Gates' father worked in construction, and her

husband owns a trucking and recycling company. She has been surrounded by tools, dirt, and vehicles with big tires her entire life. Customized speakers and amps aren't that much of a stretch.

She isn't competing today, so she has time to explain the competitive car-audio scene as we stroll past a display of lowriders. There are two types of trials – SQ, or sound quality, where the stereo's overall fidelity is assessed, and SPL, or sound pressure level, where the only criterion is the amount of sheer noise a car can pump out. Not surprisingly, the Beast competes in SPL.

Judges from the IASCA, the sponsor of today's event, sit in the shade under a tent. In the SPL competition, a microphone is placed inside each car, and the driver pops in a CD of test tones. The stereo cranks up and emits what sounds like a very loud burp. That's it. A large sign displays the decibel reading.

This goes on for car after car. Jose Perez, of Miami, registers 152.8 decibels and wins the day's SPL event. But the most exciting thing here, by a long shot, is Alma. We've been at the show for only a few minutes, and she's already attracting attention. Judges and car-electronics dealers come up to say hello, and the younger kids linger like lieges of the court, waiting for the proper moment to offer up a humble "Hello, Mrs. Gates." Regardless of age, the same question is asked: What's up with the Bronco? She hands out postcards of the Beast and patiently explains that the truck is in the shop.

She's a sweet, no-nonsense, gray-haired Muhammad Ali. She doesn't have her title anymore, but she's still the champ. Since the Bronco's debut in 1996, Gates has acted as the unofficial ambassador of car audio, attending car shows from coast to coast, chatting up competitors, manufacturers, dealers, and, most important, the kids who meet her online. And like Ali, she feels endowed with a higher purpose. If kids start competing in car audio, they're less likely to be on the streets and getting into trouble. A bit of the schoolteacher still remains under the tough-talking granny exterior.

"I feel like I've earned a lot of respect from these kids," Gates says. "I've always listened to them. The majority are very, very good people. The one thing I've noticed over the years is that other people don't listen to them."

Many fans are astonished to see her in person. One contestant, Pamela Kurtz, who works days as a Dade County police detective, knows Gates from magazine articles. In a scene made up mostly of pimply young gearhead males and their girlfriends, a 64-year-old woman is its most recognizable face. Kurtz points and squeals.

"I'm so excited. I can't believe it's her. That's why I'm here!"

She approaches Gates, the two discuss speakers and whatnot, and then Kurtz runs off to tell her friends about it. Gates turns to me and says, "That's what makes this crazy thing so exciting. That little car of hers won't ever be the same."

Becoming the pied piper of car audio was the last thing Alma Gates expected to do in her golden years. She got involved in all this, she says, in an attempt to reconnect with her teenage son, Patrick, now 23. In 1993, he introduced Alma to the competition scene – Patrick had been losing badly – and Mom jumped into the game with the sort of challenge a competitive parent would lay on a hapless Little Leaguer: "Do you want to win?"

The winners of these competitions tend to be professional installers. It costs a minimum of \$2,000 to buy just a basic set of components: superpowerful speakers and amps from companies that specialize in extreme car audio. Two of the biggest names in the business are Rockford Fosgate, based in Phoenix, and JL,

headquartered in Miramar, Florida. If a competitor shows great promise, often an audio company will sponsor them by providing free equipment. But in the end, the brand name alone won't win an SPL competition. What separates the winners from the losers is how the space inside a car is exploited: It comes down to the art of the install.

Gates hired an expert team for the Bronco's first installation – the bill totaled more than \$80,000. "I didn't know much about car audio," she recalls, "but I knew how to keep a set of books." The system was unprecedented: 46 flat-piston, 10-inch subwoofers and 24 amplifiers at 1,200 watts each. Most competitors had been using a dozen or so 15-inch woofers. Forty-six speakers was, well, ridiculous.

At the 1996 IASCA world finals in Greenville, South Carolina, people laughed at Alma and Patrick's audacity. They had barely finished the installation, a complete overhaul, and didn't even have time to paint the truck before they tied it to a flatbed for the drive out. Who was this woman and her son with an ugly, primer-covered Bronco? In an industry where presentation is everything, where guys spend every waking moment shaping and customizing cars to the point of perfection, this looked like something you'd take fishing. What's more, the rear shock absorbers had already failed from the extra weight; there were two-by-fours jammed above the rear axle to keep the back end from collapsing.

Nonetheless, in its very first competition, the Bronco hit its tone with a brutal 163.9 decibels, shattering the previous record of 157.9. The next day, it broke its own record, topping out at 164.9. The Gateses were new to competition; they had no idea they were winning.

"I heard rumors that there was a truck doing 165," remembers Patrick, "and we were like, 'Oh God, we're gonna get our ass beat.' And then we found out it's this Bronco, an old lady, and her asshole kid!"

They took home the title, world record in hand. The Bronco was now the best of the best. A Florida musician named Neil Case – aka the Bass Mekanik – was one of the first to seize on the vehicle's image for its marketing potential. The Mekanik specializes in low-frequency bass music that sounds best on SPL car-audio systems, but his music didn't really take off until he started featuring Alma and Patrick's hoss on his CD covers. "Alma put a face to the bass," says Case. "Before her, no one stood out. Magazine ads were just photos of speakers and amps."

The Bronco triumphed again in 1997 with a 169.4-decibel blast, prompting a Canadian publicist to nickname it the Beast. But in 1998 it lost at the finals in a decision that the Gateses feel wasn't entirely fair. The Beast was too loud for the judges' microphone, so to get a reading, they turned down the volume on their system. Other contestants, using the same microphone, then proceeded to beat them with higher decibel scores. Alma and Patrick are sportsmanlike about the outcome, and refuse to badmouth anyone, but it's clear they feel that if the mike had been functioning properly, the Beast would have won.

It was a good run, and promoters around the country were begging them for appearances. Crowds gathered around the Beast at car shows, watching as young girls climbed inside its cab for a demonstration. Even at less than maximum volume, the blast of sound pressure would blow the girls' hair up and out, making them look like they stuck a finger in a light socket. Whenever Team Gates rolled up to an event with the Beast, which traveled in its own customized 18-wheeler, Alma and Patrick were treated like royalty – at one event, Alma was even crowned the queen of dB Drag.

If Alma is the queen, Patrick is the crown prince. And like his mother, he's a quick-witted type A – he hates to lose at anything. Together they became Team Gates: a good-cop/bad-cop pairing of the rational mom and her

hotheaded son. One British publication neatly captured the essence of Team Gates by convincing Alma to pose for a photo, smiling and flipping her middle finger. Alma wryly refers to the shot as computer-manipulated, but her son thinks otherwise. "She calls it superimposed," says Patrick. "I call it three glasses of wine."

The beast's fame started to spread out of the insulated world of car-audio connoisseurs. In March 1997, a scientist named Ara Manukian, the president of the Analytical Research Systems Laboratory in Gainesville, Florida, heard about the car and was intrigued by its potential for destruction. Science has long toyed with the deadly potential of air pressure and sound. During World War II, Nazi engineers prototyped a revolutionary sonic "cannon," which fired a shock wave strong enough to bring down a plane. Today, the US Department of Defense is testing acoustic rifles that can stun and even kill soldiers. Manukian, however, was looking for a sonic instrument that could kill bugs.

"Insects don't have ears," he explains, "but I think that if you hit the right resonant frequency, you could cause cellular disruptions, or an applied force of pounds per square inch that could crush them." Alma Gates agreed to drive down to Gainesville, offering the Beast for use in Manukian's experiments. A local car-audio company volunteered its parking lot as a "lab." Next thing Gates knew, the scene had turned into an outdoor barbecue-cum-insect testing ground.

Manukian selected a variety of crop-damaging pests for the informal study, including beetles, weevils, and the 3-inch long tobacco hornworm. The bugs were placed in Ziploc bags and sealed inside the Bronco. The Beast blasted groups of bugs in 30-second bursts, trying different frequencies for different species. On the first burst, nobody knew exactly what to expect.

The hard-shell beetles were most resistant to the high-decibel barrage, stunned into catatonia but with no exterior damage, and after 30 minutes all of them came to. As a pesticide, says Manukian, sound appears to be most effective against hornworms. "They had their frass, which is basically their shit, all over the place. Their saliva was all out of their mouths. Everything that could come out of their rectums did. Everything that could come out of their mouths did. It looked like someone stepped on them," he explains.

"It was a very unpleasant sight," says Andrew Dowell, an electronics dealer who was also present. "They were not very happy."

Alma Gates is more matter-of-fact about the tests. "They imploded," she recalls, describing the carnage. "That was fun."

I'm with Gates at another car-audio competition, this time in Tucson. We're at another judges' tent, and another vehicle sounds off for an official decibel reading. After the score is posted, the driver cranks up his music loud enough to rattle the license plate, and then burns rubber back onto the thoroughfare. He's driving a shiny black SUV with a load of girls. The peel-out is practically a requirement.

According to Wayne Harris, a pioneer of the sport and president of the dB Drag organization, the average contestant is a "22-year-old single guy who lives in a trailer home." This definitely describes the demographic at the Tucson event, which is sponsored by the United States Autosound Competition. Arizona townies lean against their cars, bragging about their systems. They remind me of guys in my high school who always tinkered with their engines, and I realize that this is the same clique. Engines are more computerized and harder to work on now, so they've just moved to stereos.

One kid opens the back of his Jeep Cherokee and brags about his rig: "Four JL 10s, with a 2-ohm bridge. Each speaker has its own chamber."

"I got 16 W6 8s, from JL," counters the owner of a Chevy. "Two 1,100 A-squared Rockford amps, 1,000 watts apiece. The smaller speakers are Boston Pro, all around."

Gates and I unload cases of Gatorade from her Ford Expedition. She packed them before driving down to this event because she thought it would be nice to bring the kids something to drink. Again, she's not competing, she's just making an appearance to show her support. We set the Gatorade next to a table filled with dozens of gleaming trophies. At the end of the competition several will remain, because there are more trophies than contestants. Most everybody walks away a winner. It keeps the audiohounds coming back and encourages them to buy more equipment.

As Gates signs autographs and chats with the kiddies, I notice a young guy across the parking lot, wearing a jester's hat and droopy shorts. His name is Lonnie Tharp, and he's shirtless and barefoot – he looks like he just climbed out of a swimming hole. Five trophies are arranged on the pavement in front of his rusty Ford Escort. Setting down his beer, he lifts the hatchback to show off the system – a dinged-up two-woofer cabinet tossed into the back. He's blasted his speakers so loudly that they've melted around the edges.

"I fixed it with a two-part epoxy mix," he says. "The manufacturer said I can't get a refund 'cause I don't have the receipt."

Tharp lives just outside Phoenix and works nights at a home-improvement outlet. He won his first competition last February and has been hooked ever since. His personal record is 143.7 decibels. He's been contacted by a manufacturer to discuss a sponsorship, but nothing's definite yet.

"This is just fun," he says, glancing at a teenage girl who's lighting a cigarette. "Have a few drinks, shoot the shit."

This, then, must be what Gates was talking about. Perhaps car audio does keep the kids out of trouble by teaching them to be responsible.

Then again, maybe not. Somebody points out the neon sign across the parking lot, advertising a strip club called Curves Cabaret.

Tharp takes a long guzzle of beer. "The hell with going back to Phoenix," he yells to nobody in particular. "We're goin' to Curves!"

Gates would prefer if I also saw the artistic side of the sport, and so she takes me to see the work of David "Fishman" Rivera, a legendary mad genius in the world of audio installers. Fishman incorporates the radical prankster aesthetic of Ed "Big Daddy" Roth's 1960s dune buggies and updates it for car-stereo design. Competitions aren't won with design, but Fishman's creations are so original and beautiful, he's carved out a niche, and it's made him famous. We're in his shop back in Miramar, Florida, 30 miles north of Miami. He gestures to a half-finished van. "Go ahead – open the door and check it out."

The interior cockpit has been completely reconstructed with silver fiberglass; smooth, rounded, and futuristic. It looks like the command deck of a spaceship, as designed by H. R. Giger. Somewhere inside, Gates informs me, is a fish tank.

Nine years ago, Rivera built an aquarium inside a Toyota, and it managed to win the IASCA world championships. The audiophile press dubbed him “Fishman,” and fish tanks became his signature. Every car he customizes now gets a fish tank somewhere – in a door panel, under a hood, in a trunk. At car shows, excited kids crowd around his vehicles, pointing at the goldfish swimming inside. Occasionally he displays a car that isn’t yet finished: “The kids look at me, and they ask, ‘Where’s the fish tank?’”

In the midst of telling me all this, Fishman abruptly stops and thinks for a moment. “You want to hear something weird? I’m allergic to seafood. I almost died from eating shrimp one time.”

I ask him if the fish in his tanks die from sonic bombardment, exploding like hornworms, but he just keeps on talking. Later, Gates pulls me aside and whispers, “I don’t think they live very long.”

Originally from Puerto Rico, Fishman is a big, bald, bug-eyed guy who talks nonstop, hands and body constantly in motion. Everything about him seems cranked up to 11. He builds his creations as he goes, with no sketches or blueprints.

“I just want it to be different,” he almost shouts, getting even more worked up. “It’s the vision. Sometimes I’m stuck for a week. Nothing comes.

I lie in bed thinking about it, I get up in the middle of the night, thinking, ‘How crazy can I get this time?’”

Gates smiles. It’s the smile of a patient schoolmarm familiar with the antics of rowdy students.

I can’t find the fishbowl. So Fishman takes me around to the rear of the van and opens it to reveal two big speakers that look like eyes. Underneath the eyes is a place for the amplifiers and another set of speakers. There’s a cylindrical cabinet, and yet another set of doors. He explains that when it’s finished, everything will be completely motorized. With the flick of a switch, both sets of rear doors will swing wide, the amplifier rack will extend out of the vehicle like a giant robotic tongue, and the cylindrical cabinet will open to expose the fish.

“Motorization is what keeps people’s attention. That’s the key.”

Most customers can’t afford Fishman’s fees to trick out a car – \$45,000 and up – so he works mainly with car-audio manufacturers. Once he even installed a car stereo in a Jet-Ski.

“It’s their money,” he shrugs. “They wanna show off their toys.”

Unlike most installers, who carefully measure and test the sound of their designs, Fishman pays little attention to the audio quality.

“This is a fabrication facility. I fabricate. I make it look good. I don’t know how to make it sound good!”

After the endless car talk, I need to get away from the show car scene for a night to see how it looks from the street. The Bass Mekanik hooks me up with a guy named DJ Billy E, who has a big bass van. When Gates finds out, she laughs. She knows Billy – they’ve gotten drunk together – and she drops hints that I’m going to spend the night in jail.

Billy E lives in a condo on a golf course in Jupiter, Florida, Burt Reynolds’ hometown. The first thing he says to me after I arrive is, “Do you think this article will help me get a girlfriend?”

Billy E hits the remote on his garage and the door rises, revealing a low-slung, electric-blue Chevy Astro van with darkened windows. It's vaguely evil-looking. Tonight we're going bassing.

The van is a former demo vehicle for the Orion car-audio company, and it still has the original installation from the manufacturer. Although it's the DJ's everyday transportation, he enters it in SPL competitions and has won a handful of trophies. We hop into the captain's-chair-style seats and hit the road. He's pushing 5,000 watts of amplification through nine 15-inch woofers, which he says can hit 158 decibels without a problem. "I do it to get chicks," he says as we pull into traffic. "You know you get respect."

He starts explaining a number he calls the QC factor. The QC factor? "The QC factor," asserts Billy E. In the mid-1990s, audio installers at spring break in Daytona Beach conducted informal tests inside a Honda Accord boom-car. The goal was to determine if a frequency existed that would send a woman inside a bass vehicle into spontaneous orgasm. After testing more than 50 female volunteers, the QC Factor was found to be precisely 33 Hz.

We head toward West Palm Beach, listening to Eminem at low volume. As a musician and producer, Billy E has collaborated on 40 records. He says his first memory of bass music was listening to LL Cool J through a 10,000-watt system of 20 woofers. "As soon as I heard that, it was over. It sounded like a fat man hyperventilating into a paper bag."

Eager to crank up the system, he hands me a set of earplugs. "Let's hear some bump."

I stick the plugs in, and he hits the burp button, a red switch on the center console. It's difficult to describe what happens next. The noise sounds like "BRRROONNNKKKK!" The vehicle vibrates like a jackhammer, but much lower and deeper. I feel air blowing the back of my hair, and my body starts to rise out of the seat. My pant legs are flapping. Everything in the car is rattling like crazy, and I realize my vision is blurred as my face pulls back taut against my skull. The only reaction left is to laugh out loud. I look over at Billy E gripping the steering wheel, squinting and grinning maniacally. He lets up on the button, and the chaos stops.

"If you're drinking a Coke, your throat will shut." I'm amazed I can actually hear his voice. "It's like being underwater. Your ears don't ring; they're just muted. After a day, everything opens up again," he says.

He never uses plugs. He says high frequencies, not the lows, damage the ears. Like most SPL competitors, his system is bottom-heavy, consisting mostly of subwoofers. My ears aren't ringing much at all. I felt the blast much more in my body. To some degree, he's right about the damage. According to OSHA findings on noise in the workplace, highs are much more dangerous than lows. But it's also illegal to expose American employees to anything above 140 decibels. So we're still rebels after all.

We approach Clematis Street, a heavily trafficked commercial strip of West Palm Beach, lined with restaurants and clubs. This is old money, as opposed to nouveau riche South Beach. These people drive sensible, expensive cars. And they all have car alarms. Which is why we're here.

Billy E puts a CD in the changer, slows down, and glides past an upscale oyster bar. He hits the burp button. BRRROONNNKKKK! Pedestrians and parking valets look up at the noise. We wait a moment, and then hear the distinctive yelp of a Viper car alarm. He smiles.

We crisscross the area, strafing the streets with 150-decibel blasts, triggering two or three car alarms per block. The variety of warning sounds is amazing. Some car alarms make a chirping noise, others wail; occasionally headlights will flash.

“There’s a lot of cops out tonight,” Billy E says. “That’s about all we want to do with that.” As we speed away from the carnage, the cacophony of alarms gradually recedes. They sound like the cries of wounded animals.

I wonder how this compares with the Beast.

“Her truck is like 20 of my vans,” he says. “That’s the loudest thing I’ve ever heard. It raised the bar. When you build a car that loud, other people start to see the dream, and they want to build it, too.”

On the way home, Billy E follows close behind a young blonde woman in a red compact. He looks at me and gives her a blast. BRRROONNNKKKKK! The driver turns her head and scowls.

“I call it the doggie-style look. When they look back like that. ‘Cause she knows. She feels it in her little crotch there.” We tail the girl for a few more blocks, with Billy E hitting the burp button, until finally she takes an abrupt left off the street.

Billy E watches her drive away and shrugs. “She didn’t want any more of that.”

Back in Phoenix, Alma Gates explains that to discourage car-audio spies from getting a look at the Beast during the rebuilding process, she has taken pains to keep the truck well hidden. “You’re the first person outside of the crew to see this,” she says.

She opens a roll-up door on the side of an industrial building and ushers me into the sanctum of Team Gates. We’re greeted by a boom box version of “Take It on the Run” by REO Speedwagon. Framed posters of the Beast hang on a wall. A row of trophies begins at the door and extends halfway down the length of the building, some as tall as I am. A speedboat sits in one corner, alongside the official Team Gates golf cart. One room houses a Corvette, a Volvo, and a Honda, with an Explorer and a Mustang in the midst of installations. There’s a complete wood and fiberglass shop in a backroom; saws and tools line the walls, and dust carpets the floor.

In the front room sits the infamous Beast, silver and ghostly. The bumpers, doors, and windshield have been stripped. Apart from the wheels and chassis, not much else remains that looks like a truck.

Half the secret to winning a car-audio competition lies in damping out vibration. One way to do this is to get all your friends to lie on top of the vehicle, holding it down with their bodies during the sound-burp. Other competitors pour concrete into the beds of their vans. Team Gates does the job with steel plate and sheets of a specialized sound-deadening rubber called Dynamat that’s stuffed into the body panels.

“It’s basically a 16,000-pound go-cart,” explains Scott Owens, a car-stereo expert who is supervising the installation.

Owens shows me the remote control used to activate the Beast from outside the vehicle. It fires the head unit, which is what car-audio specialists call the CD player. He picks up a 40-pound, square subwoofer, and explains that each speaker will have its own amplifier. Thirty 8-volt marine batteries will power the system.

“A single hit, or burp – which lasts about a second and a half – will draw anywhere between 10,000 and 15,000 amps,” says Owens. “That’s enough power to run a small radio station.”

“Our slogan is ‘Brute force and ignorance,’” says Gates. “If it blows up, it blows up.”

The last time the Beast competed, it held 64 speakers in two U-shaped racks. When sound waves bounce around a car, certain “hot spots” inside the cabin will sound louder than others. Team Gates discovered that with its old design, in which some woofers directly faced one another, the sound actually canceled itself out in areas. This year, the Beast will be using a mere 48 speakers. However, the actual volume of air that the Gateses will be able to displace will be more. They will be angled in V-shaped racks, thus avoiding the sound-cancellation problem. A computer will time each speaker down to the millisecond in order to create a hot spot on the windshield, 13 inches from the passenger door. That’s where the microphone is placed in official competitions.

Decibel readings taken from a single speaker look good, but it’s currently impossible to test the entire installation, because the new amplifiers and the rest of the speakers have been late to arrive. Just as it did in 1996 and 1997, the Beast will miss the regular season, making its entrance during the final competitions this month, and the beginning of the next.

In the two years during which the Bronco has been out of commission, there’s been a whisper of idle gossip. People have said that the truck’s performance was a fluke, and that Alma and Patrick won only because they had money to burn. Alma Gates has had nothing but kind words for everyone during the time I’ve been with her, but when I ask her about her critics, she shoots me a look. “Team Gates is gonna kick their asses,” she says, nodding. “We will win.”

(This first [appeared \(http://www.wired.com/wired/archive/8.10/stereocar.html\)](http://www.wired.com/wired/archive/8.10/stereocar.html) in Wired magazine.)



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**XHTML:** You can use these tags: <a href="" title=""> <abbr title=""> <acronym title=""> <b> <blockquote cite=""> <cite> <code> <del datetime=""> <em> <i> <q cite=""> <strike> <strong>



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