Leading the Blind

Engineer Bill Gerrey builds devices to help other sightless people navigate the world. He's not looking for miracles, just a few small victories.

>> by Mark Athitakis
The Lioness in Winter
At age 72, Ann Theresa Calvello, the Roller Derby Queen, is the subject of a movie — and as salty as ever. By Silke Tudor

Leading the Blind
Engineer Bill Gerrey builds devices to help other sightless people navigate the world. He's not looking for miracles, just a few small victories. By Mark Athitakis

Hello, Gorgeous
What is it about Barbra Streisand that still fascinates audiences? Simply Barbra and the rerelease of Funny Girl offer clues. By Lisa Hom

Savage Love
To Seth Watkins, the San Francisco HIV prevention educator who is HIV-positive but doesn't practice safe sex: You're a moron. By Dan Savage
Engineer Bill Gerrey builds devices to help other sightless people navigate the world. He's not looking for miracles, just a few small victories.

By Mark Athitakis
Photographs by Anthony Pidgeon
ill Gerrey is going home, but first he’s going shopping. He tells the cabbie to drop him off near a produce stand a few blocks from his Lower Haight home. The cabbie, eager to assist a blind fare, helps Gerrey out of the back seat and leads him to the sidewalk. From there, Gerrey begins the slow process of getting around, as his cane feels out some steps leading into an apartment building. Almost there. He guides himself a few more feet forward, and his right side collides with a dumpster. Closer. Finally, his hands feel a basket of cantaloupes. There.

The cabbie doesn’t notice this small trek; he’s already in the car, turned around and tearing toward downtown. But he’s thinking about this blindness thing, and at a stoplight he muses out loud, “I can’t imagine what it would be like, living with that.”

Bill Gerrey lives with it constantly. He has been blind since infancy, but blindness is also his job: For more than 30 years, he has worked as an engineer at the Smith-Kettlewell Eye Research Institute, which studies vision-related issues. Gerrey’s work concentrates on mobility and independent living, and over the years he has created and built dozens of devices to help blind people get around or to assist them in their jobs. In theory, engineers like Bill Gerrey shouldn’t be necessary today. Between the Americans With Disabilities Act, private industry, and charitable organizations, blind people are better supported than ever. In theory. But there are lots of holes to be filled, small groups of underserved people — which is where Gerrey comes in. And, simply put, nobody is going to understand what a blind person needs better than a blind man.

The impact of what he does, however, can be wide-ranging. Gerrey played a leading role in the creation of Talking Signs, a hand-held technology that announces information — such as room numbers or street names — so that blind users can better navigate buildings and intersections. Today it is used on street corners, buses, and buildings throughout San Francisco and around the world, and that fact has a lot to do with what happened to Gerrey one night 22 years ago, when he lost his cane and wandered the city for four hours in the middle of the night.

In more shameless moments, some people will refer to Gerrey with that hoary cliche “miracle worker.” But in truth, Gerrey prefers working on the small stuff. None of the dozens of things he has helped design — stuff that beeps and squawks and chirps and vibrates, sometimes built for just one person — has saved lives, or cured blindness. “Saving lives” and “cures” are tiny prayers people say when they wish the problem would go away. For Gerrey, there’s just an understanding that blind people want to do something, not a Pollyanna conviction that they can do anything.

The cab driver, however, can’t get his head around it all — the idea of living in a blind world, let alone creating in it. “Maybe someday they’ll invent something,” he says, gesturing toward his head as if inserting a magical device into his eye socket.

Maybe. Someday. But sitting around waiting for miracles to happen is no way to live, for a blind man or anybody else.

The elevator door opens at the fourth floor of the Smith-Kettlewell Eye Research Institute, and right away, there is Bill Gerrey. He is holding a Talking Signs receiver, a palm-size box with a button and a speaker. He’s a tall, 54-year-old man, stout and balding. His voice has a deep lilt to it. "I can’t imagine what it would be like, living with that.”

Gerrey lives with it constantly. He has been blind since infancy, but blindness is also his job: For more than 30 years, he has worked as an engineer at the Smith-Kettlewell Eye Research Institute, which studies vision-related issues. Gerrey's work concentrates on mobility and independent living, and over the years he has created and built dozens of devices to help blind people get around or to assist them in their jobs. In theory, engineers like Bill Gerrey shouldn’t be necessary today. Between the Americans With Disabilities Act, private industry, and charitable organizations, blind people are better supported than ever. In theory. But there are lots of holes to be filled, small groups of underserved people — which is where Gerrey comes in. And, simply put, nobody is going to understand what a blind person needs better than a blind man.

The impact of what he does, however, can be wide-ranging. Gerrey played a leading role in the creation of Talking Signs, a hand-held technology that announces information — such as room numbers or street names — so that blind users can better navigate buildings and intersections. Today it is used on street corners, buses, and buildings throughout San Francisco and around the world, and that fact has a lot to do with what happened to Gerrey one night 22 years ago, when he lost his cane and wandered the city for four hours in the middle of the night.

In more shameless moments, some people will refer to Gerrey with that hoary cliche “miracle worker.” But in truth, Gerrey prefers working on the small stuff. None of the dozens of things he has helped design — stuff that beeps and squawks and chirps and vibrates, sometimes built for just one person — has saved lives, or cured blindness. “Saving lives” and “cures” are tiny prayers people say when they wish the problem would go away. For Gerrey, there’s just an understanding that blind people want to do something, not a Pollyanna conviction that they can do anything.

The cab driver, however, can’t get his head around it all — the idea of living in a blind world, let alone creating in it. “Maybe someday they’ll invent something,” he says, gesturing toward his head as if inserting a magical device into his eye socket.

Maybe. Someday. But sitting around waiting for miracles to happen is no way to live, for a blind man or anybody else.

The elevator door opens at the fourth floor of the Smith-Kettlewell Eye Research Institute, and right away, there is Bill Gerrey. He is holding a Talking Signs receiver, a palm-size box with a button and a speaker. He’s a tall, 54-year-old man, stout and balding. His voice has a deep lilt to it. He has a tendency to break into song on occasion; saying “Hi” takes about five seconds and three syllables.

Gerrey doesn’t actually need the receiver; he just wants to show it off. Walking down the hall—continued on page 29
The lab looks like a Radio Shack supply closet, and not a particularly well-maintained one at that. "We destroy myths here," says Fowle. "And one of those myths is that blind people are organized."

Bill Gerrey, in the clutter of his laboratory.

Bill Gerrey continued from page 27

way, a push of the button announces what's on your left or right, depending on which way you're pointing. Eventually, in a tinsy voice with a vague Southern accent, the receiver announces, "Room 425. Vocational Rehabilitation Engineering Laboratory. William Gerrey. Thomas Fowle."

"Bill" and "Tom" are just fine, though, and "vocational rehabilitation engineering" is a fancy way of saying they build things that help blind people get around and do the sort of jobs they want to do. They're both eager to show off what they've produced, though it takes a while. That's partially because things simply move at a slower pace with blind folks; Bill and Tom spend a lot of time feeling around for things. If you need to run into something to know where it is in the future, so be it. But the main reason things take a while is that the place is a mess. The floor is cluttered with chairs. A desk in the center of the lab is piled high with manuals and the beginnings of a vibrating alarm clock gadget for a deaf-blind user. Oscilloscopes, voltage testers, soldering guns, and a row of solid-state measuring devices fill two workbenches on opposite sides of the room; there's a talking Braille cash register, and not a particularly well-maintained one at that.

"We destroy myths here," says Fowle, feeling in his office for a talking tape measure he has worked on. "And one of those myths is that blind people are organized."

The Smith-Kettlewell Eye Research Institute is housed in a four-story building in Pacific Heights. It has studied vision since the '60s, and since the '70s has been a government facility. In 1973, federal mandates created research hubs devoted to various disabilities. Today there are 15 Rehabilitation Education Research Centers, or RERCs; each is devoted to a specific issue such as aging, prosthetics, hearing, telecommunications, and, at Smith-Kettlewell, vision.

Gerrey and Fowle are two of a handful of engineers who work on devices for the blind. Over the course of an afternoon, they show off several of their inventions: beeping carpenter's levels, stud finders, and tape measures; and clacking "echo- location" devices that allow a blind person to orient himself by the sounds bouncing off nearby walls and objects.

At any given time, they are both working on about half a dozen projects, together or separately. Some are demanded by the grants Smith-Kettlewell has received; some are requested by people who write or call; and some are just pet projects they've been tinkering with for a while. Their relationship is built on a competitive interest in outdoing each other, and it stretches back to their childhood. Gerrey first met Fowle at a Berkeley school for the blind, and one of the first things Fowle said was a boast about his ability to tune pianos.

Dr. Arthur Jampolsky, the co-founder and co-executive director of Smith-Kettlewell, points out a subtle but essential difference between the two. "Bill is the person who says anything is possible, and Tom is the counter. They balance each other."

Fowle doesn't quite like that reputation. "It's just that I don't jump up and down every time somebody has a new whiz-bang to push," he says. "I'm not a pushover. I'm hard to sell. I have a right to be that, and a responsibility to be that."

It's hard not to notice that Gerrey and Fowle don't face each other much. They'll tease each other, Fowle has to confess that Gerrey has pulled off some pretty amazing tricks in his time, not the least of which is teaching himself how to solder. Soldering is an essential skill for anybody working in electronics. It's also a dangerous undertaking: tips of soldering irons can reach temperatures of 750 degrees. Gerrey does it through what you might call precision guesstimation: He feels around the circuit he's working on, identifies the parts involved, and mentally locks in their location. From there, knowing the "landmarks" around the device, he can trust himself enough with the hot iron to make an educated guess about how far he's moving it, or where. It's slow going, but it's fumble-free. Working on a radio power supply he's opened up, Gerrey feels out the wires he wants connected with his left hand and feels for the soldering iron with his right. Holding the tip against the metal corner of the power supply for a moment, he considers the distance, and eventually fuses the wires together.

In the annals of great achievements of blind persons, it may not be as sexy as piloting a boat or doing stunts in an airplane. But it's one less thing you need to rely on someone else for. And when Fowle heard Gerrey could do it, he was incredulous — and seduced enough to come work at Smith-Kettlewell. As it happens, Fowle can pilot a boat — he is an avid sailor — and has done stunts in an airplane. With the assistance of a sighted person, he can take the controls and orient himself. Once, Gerrey joined him on a boating trip a few years ago, but that won't be happening again; that day, Fowle was turning extremely tight circles with a motorboat in the bay, and Gerrey was praying he'd get back to solid ground in one piece.

"You scared the hell out of me," Gerrey says, calling out from his office.

"Oh, drink a little of your own blood sometime," Fowle calls out from his. "It won't hurt you."

It's true that the other has stepped out for a moment. And while they've spent 20 years in a lab teasing each other, Fowle has to confess that Gerrey has pulled off some pretty amazing tricks in his time, not the least of which is teaching himself how to solder. Soldering is an essential skill for anybody working in electronics. Gerrey first met Fowle at a Berkeley school for the blind, and one of the first things Fowle don't face each other much. They'll tease each other, Fowle has to confess that Gerrey has pulled off some pretty amazing tricks in his time, not the least of which is teaching himself how to solder. Soldering is an essential skill for anybody working in electronics. Gerrey does it through what you might call precision guesstimation: He feels around the circuit he's working on, identifies the parts involved, and mentally locks in their location. From there, knowing the "landmarks" around the device, he can trust himself enough with the hot iron to make an educated guess about how far he's moving it, or where. It's slow going, but it's fumble-free. Working on a radio power supply he's opened up, Gerrey feels out the wires he wants connected with his left hand and feels for the soldering iron with his right. Holding the tip against the metal corner of the power supply for a moment, he considers the distance, and eventually fuses the wires together.

In the annals of great achievements of blind persons, it may not be as sexy as piloting a boat or doing stunts in an airplane. But it's one less thing you need to rely on someone else for. And when Fowle heard Gerrey could do it, he was incredulous — and seduced enough to come work at Smith-Kettlewell. As it happens, Fowle can pilot a boat — he is an avid sailor — and has done stunts in an airplane. With the assistance of a sighted person, he can take the controls and orient himself. Once, Gerrey joined him on a boating trip a few years ago, but that won't be happening again; that day, Fowle was turning extremely tight circles with a motorboat in the bay, and Gerrey was praying he'd get back to solid ground in one piece.

"You scared the hell out of me," Gerrey says, calling out from his office.

"Oh, drink a little of your own blood sometime," Fowle calls out from his. "It won't hurt you."

It's true that the
Gerrey and Fowle show off several of their inventions: beeping carpenter’s levels, stud finders, and tape measures; and clacking “echolocation” devices that allow a blind person to orient himself by the sounds bouncing off nearby walls and objects.

Ken Rossi in his Santa Rosa home. Gerrey has observed Rossi for his wheelchair research.

projects Gerrey and Fowle have worked on are small things—how many blind carpenters are there anyway? But that’s precisely the point. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.

“Many of these products are based on the premise that ‘if I’ve got this, I’ve got that.’” Gerrey says. “It’s not like that. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.

“‘If I’ve got this, I’ve got that.’ It’s not like that. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.

“‘If I’ve got this, I’ve got that.’ It’s not like that. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.

“‘If I’ve got this, I’ve got that.’ It’s not like that. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.

“‘If I’ve got this, I’ve got that.’ It’s not like that. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.

“‘If I’ve got this, I’ve got that.’ It’s not like that. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.

“‘If I’ve got this, I’ve got that.’ It’s not like that. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.

“‘If I’ve got this, I’ve got that.’ It’s not like that. What blind people need most are simple ways to negotiate the everyday world. As one of Smith-Kettlewell’s clients points out, being blind in America is easier today than it was even 10 years ago, thanks to such things as the Americans With Disabilities Act and medical advances that can improve the sight of some blind people. Yet of the approximately 1 million Americans who are legally blind, 70 percent are unemployed, according to the U.S. Department of Labor. And 50 percent of those who are working consider themselves underemployed, often performing clerical jobs at disability agencies.
person — or person who works with the blind — should flat memorize it,” Tom Fowle says. Here’s how it ended:

Blindness is a darn nuisance. It forces us to do things in different ways, and we are never “completely independent” in the strict sense of the word. Yet the inability to see is often outweighed by the trials by fire to which we are sometimes put, to gain acceptance in pursuing our natural inclinations.

I urge you to let this blind student test his mettle in the school of engineering. No matter how it turns out, his future career decisions will be based on a legitimate investigation of his strengths and weaknesses. In the meantime, you and I have burdens of our own. Let us not don someone else’s unnecessarily.

Fowle eventually earned his electrical engineering degree in 1971 from Cal Poly San Luis Obispo, and he went to work at Smith-Kettlewell shortly after. He doesn’t rant about the Cooper Union incident much; it’s something that happened, yet another case of prejudice, and after a while you learn to have a sense of humor about it. Fowle and Fowle have collected a sort of “greatest hits” of snappy comebacks. For every talking car salesman’s level there’s a cane prototype that was supposed to expand like a pocket telescope but didn’t work; for every refrigerator repair gadget there’s a Dexter, which was supposed to be a portable robotic hand that could perform finger-spelling to communicate with deaf-blind people. In reality, the prototype weighed 70 pounds and required three fans to cool it.

“And God help you if any of those fans broke down,” recalls Fowle. “Flame city.”

People tend to look at a blind man a certain way. You can almost see the motors turning in their brains as they glance furtively at Bill Gerrey walking down Fillmore Street. I shouldn’t look, it’s not polite. But I’m curious. Besides, it’s not like he can tell. Oh, that’s mean. OK, now I’ve looked. Don’t look. Look. Don’t look.

And, so, in the course of three blocks from Smith-Kettlewell to a sub shop where he’s picking up lunch, Bill Gerrey induces a dozen or so private moments of anxious looking-not-looking. Along the way he points out some of the local scenery. The cafe on the corner of Fillmore and Clay where he and a few other Smith-Kettlewell engineers first created the Talking Signs technology back in 1979. One block farther, the folks at the restaurant La Mediterranee have seen Gerrey walk by so often that they’ve installed a Talking Signs transmitter in the window. Gerrey has found San Francisco to be one of the better cities to get around in (Washingotn, D.C., is hell,” he says. “All those traffic circles”). Talking Signs has helped with some of that, and if Gerrey wanted to he could be a little boastful about it. There was a time when he used to feel arrogant about his accomplishments. But not anymore.

“I didn’t like him at all when I first met him,” Monica Schaaf, his wife of 23 years, explained one recent evening sitting in their spacious kitchen. “I thought he was a loudmouth and a jerk. He thought he was so funny.” Gerrey, sitting across the table, didn’t protest the claim. Schaaf is blind as well, and they both knew that having a relationship would be difficult.

Gerrey’s self-image has a lot to do with the technology of Talking Signs, and Talking Signs has a lot to do with what happened to Gerrey late one night in 1979. Leaving a jazz club in the Fillmore, his cane quickly got “swallowed up” in a row of construction barriers. Doriented, he began wandering up and down hills, listening for the sound of cars going both ways — a sign of a main thoroughfare and the likelihood of a pay phone, or somebody to ask directions of. After running into a few creepily disoriented people, he eventually found somebody to tell him he was on the corner of Polk and California.

He’d gone 25 blocks in four hours.

Gerrey and people who know him pull that story by heart. “I was 30 years old, sure,” he responded. “I woke up in the morning, and it’s so black I hardly know I’m awake. I put on my black clothes, kiss my black wife, drink my black coffee, and eat my toast, which is always black.” Gerrey and his blind-school classmates would get condescending compliments about how nicely they dressed, and they’d respond with a lengthy fiction about the three-hour ordeal they went through just to get a shirt on. Fowle recalls a friend’s response to the man who was impudent enough not only to ask if a blind man had sex, but how: “What do you do? Use a flashlight?”

That attitude spills over into the laboratory; both admit that a certain lack of tact is usually mentioned in their annual reviews. “Every year they say I’m getting better, though,” Gerrey laughs. After 30 years, you’d think I’d be so good they wouldn’t have to mention it, right?”

But the two play an important role at Smith-Kettlewell. “Here’s how it goes,” says Bill Cran dall, a Smith-Kettlewell scientist. “An engineer will spend days and days laying in bed, dreaming and designing a great system that’s going to have revolutionary implications for blind people. He comes and talks to Bill and Tom, and they tell him that in 1967 they evaluated such a device and they found the following shortcomings.” About three times a year some...

It’s true that the projects Gerrey and Fowle have worked on are small things — how many blind carpenters are there anyway? But that’s precisely the point. What blind people need most are simple ways to negotiate the everyday world.

Rossi at home with his friend Jesse Encinas. Rossi’s paintings hang on the walls.
part of the story that rarely gets mentioned is that Gerry was, as he puts it, "stinking drunk" that night, which was not an uncommon occurrence.

There's no point story about Bill Gerrey drinking to escape the misery of blindness. "People say you don't drink for a reason, you just drink," says Gerrey. "I think I have a very chronic self-destructive streak. I don't know where I got it from. It was just a way for me to say ... "I'm not here. Knock on the door, but Bill Gerrey's not here." He began to slow down his drinking after 1991, when he suffered from a knee infection and was diagnosed with Type 2 diabetes. "The kind you get when you're old, fat, and drunk," as Gerrey puts it. The incident threatened to place him in a wheelchair.

Gerrey says he's been "in recovery" for the past 2 1/2 years. "We have the ability to talk ourselves into the damndest things," he says. "I was able to persevere through years of, if not failure, then modest success. Soldering in order to use that fan part of my brain to adapt, messing with tools that are 750 degrees without burning myself, and making things that are rather neatly put together. It's a neat brain. I can't go around being sorry about what I did to it."

Bill Gerrey is starting a project to improve mobility for blind people in wheelchairs, so he pays a lot of attention to Ken Rossi these days. Rossi is 38, blind, uses a wheelchair, and is pretty handy with a computer-generated machine gun.

Rossi lives in a sleepy section of Santa Rosa, in an apartment graced with a few of his paintings, mostly of mountain vistas and citiescapes. The centerpiece of his living room is his computer, and he's a fan of shoot-em-up games like Duke Nukem and Unreal, whose stereo sound quality is so good he can effectively maneuver through the screen's cavernous sci-fi mazes just by listening. Trial and error helps too. "I've played it so many times I know where to shoot," says Rossi, firing at some giant dragonflies.

Rossi was blinded at an early age by glaucoma; in his senior year of high school, a sensory motor disorder in his legs required the wheelchair. What's interesting to Gerrey about Rossi is how easily he gets around with two disabilities. Offering a tour of his neighborhood, Rossi grabs his cane, wheels himself out the door, and rolls down the driveway of his apartment complex onto the sidewalk. His cane is alternately a scanning device so good he can effectively maneuver through the screen's cavernous sci-fi mazes just by listening. Trial and error helps too. "I've played it so many times I just know where to shoot," he says, firing at some giant dragonflies.

Gerrey made a beeline for a corner of Smith-Kettlewell's offices, but he will play a few bars on his cornet if it's early enough and he knows he's not bothering anybody. And every Wednesday afternoon, when Smith-Kettlewell shuts down for snacks in the kitchen and pingpong games in the rec room, Gerrey is called on to bring the entertainment. That usually means his phonograph player and a stack of 78s, handed down from his father. Last week it was the '50s doo-wop quartet the Ink Spots; this week it's selections from Fats Waller, the great early jazz pianist. In a walk-in closet I really liked because there were shelves and stuff on the shelves I really liked. My favorite things were radios and phonographs, and those were the devices related to me that she used to torment me. His dreams today aren't nearly so painful. "I've been having some lovely ones about player pianos recently," he says.

Sure, blind people dream. "Old Freud says you're old, fat, and drunk," as Gerrey puts it. "This is the only effort I know of in its kind," says Rosen. "Traveling safely is the hottest issue right now, and the field is desperate for some kind of answer."

The enormity of the task scares Gerrey a bit—it's the biggest project he's ever taken on. But then, he's usually scared. "I've always been completely unsure and insecure about everything. It's not as bad as a sick feeling, waking up in the morning and saying, 'Jesus, what am I gonna do?' But I never had a solid idea of what I should be doing. In a way, that's worked to my advantage. I have a blank enough slate that if something looks interesting, I can take a swing at it."

Bill Gerrey continued from page 31

Have you ever seen poached salmon with dill sauce get transmitted over a computer?