Comments on Notification of Inquiry, ET Docket No. 13-84
August 6, 2013

FCC and To Whom it may Concern:

I am writing to you about my radiation exposure. In 1996 I had a home built. I was working for the same company for twenty six years, at this time. In 1999, I started feeling vibrations in my home, some so strong that it shook me out of the bed in the early morning hours. I started having severe migraine type headaches, nose bleeds, concentration difficulties, aches in my muscles and joints, dizziness, nausea to name some. I went to see my physician, nothing found and also an M.R.I., nothing found. I underwent psychological testing which was normal and showed I was in high percent of being honest, lucid and forthright. My dog, Sadie became ill, vomiting and stomach problems, usually vomiting between 2:30- 3:00 am. I had to leave my home, the noise, vibrations and illness drove me out. I had to retire early from my job, which I liked. Many other residents were suffering as myself. This has been a horrible experience for us. I believe electromagnetic radiations are the cause for these problems. The current laws are not protecting the population. Incrementally, the population is being affected from the pollution. I have enclosed three newspaper articles to validate my complaints.

Sincerely,

Diane C. Anton

Diane C. Anton

Diane Anton lived in Kokomo, Indiana when this happened.

A SKEPTICAL FORCE
'Star Wars' fans wary of new episode, **J1**



BACK IN THE GAME
Frank Robinson enjoys return as manager, **C1**



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THE PLAIN DEALER

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SUNDAY, MAY 12, 2002

Constant hum rattles lives in Indiana town

BRIAN ALBRECHT
Plain Dealer Reporter

KOKOMO, IND. — Fear ripples in silent, invisible waves in this small factory town surrounded by green horizons of corn.

People say pulses of low-frequency sound are pounding neighborhoods with an unseen fist; making them hurt, making them sick.

They say their houses crack and vibrate from the same mysterious force that drives spikes of pain through their eyes and ears, bones and joints; churns their guts in bouts of diarrhea and nausea; robs them of sleep and nearly their sanity; wakens their children in the middle of the night with bloody noses.

Truck driver Billy Kellems says there are days when he can sit on his back patio and watch dead leaves dance on the ground, "cracking and popping like butter in a skillet."

Postal worker Scott Wenger wearily recites a long list of health problems that have sapped the life from his family, sighing, "Once, we actually used to smile and laugh, have fun and feel like doing things."

They, and others in this city north of Indianapolis, blame a phenomenon called "the Kokomo Hum."

It's a catchy title, though somewhat of a misnomer.

There *is* a nearly continuous noise that can be heard in some parts of town; a muted rumble that sounds like a train or truck engine idling in the distance, or the muffled roar of a far-off furnace.

Yet what you can't hear accompanying this noise — a sound beyond the range of human hearing — is what really hurts, according to residents who say they have been sickened by this force during the last three years.

SEE KOKOMO | **A6**

KOKOMO

FROM A1

Constant hum upsets lives in Indiana town

The number of complaints reached a point last month where the city authorized $100,000 for investigating the mystery, despite the small number of people who say they're affected (about 100 in a community of 47,000), and the skepticism of some residents about this expenditure and whether the hum exists.

But for those who say they've endured the hum, that $100,000 offers a glimmer of hope. "At least the city is finally acknowledging that there may be something to it," says Scott Wenger's wife, Penny.

"It's legit. It makes sense, and it's here."

Investigation abroad

Actually, it's almost everywhere. Low-frequency, or infrasound, waves are those falling below 20 hertz (humans can hear sounds from 20-20,000 hertz) and can are capable of traveling thousands of miles.

They can be generated naturally by earthquakes, avalanches, waterfalls, volcanic explosions, hurricanes and tornadoes. Whales and elephants use infrasound to communicate, and the low-frequency pitch accompanying a tiger's roar can temporarily paralyze its prey.

Man-made infrasound is produced by explosions, or large machinery including power-generating plants. Infrasound-detection technology is used to monitor violations of nuclear test ban treaties.

The possible effect of infrasound on human health has been investigated abroad for many years, prompting creation of such groups as the Low-Frequency Noise Sufferers Association in England.

But Dr. Scott Masten, staff scientist at the National Institutes of Environmental Health Sciences, cautions that lab tests may not apply to a communitywide infrasound problem — of which few have been documented. Two of the more widely reported cases of unidentified low-frequency "hums" blamed for inflicting health problems have been in Scotland and Taos, N.M.

In 1999, the hum came to Kokomo — named for a Miami Indian chief and the self-described "city of firsts," for the first commercially constructed automobile, pneumatic rubber tire, canned tomato juice, push-button car radio and "Old Ben," the world's largest steer (4,270 pounds), whose mounted carcass is displayed in a local park.

Today, this factory/farm tradition continues in a city dominated by such industries as a huge DaimlerChrysler transmission plant, the world headquarters of the Delco division of Delphi Automotive, and Haynes International, maker of high-performance alloys for jet engines and power turbines.

Folks who work and live in the town are "pretty much level-headed, salt-of-the-earth people," says Lisa Hurt Kozarovich, who has written a series of stories about the hum for the Kokomo Tribune.

"That's probably why they're having a difficult time with this [hum], because it is something strange and unusual," she says. "They can't see it, smell it or touch it, so it raises questions like, 'How can a noise make you sick?' "

To those living with the hum, how it occurs doesn't matter as much as when it will end.

Since the hum started three years ago, Maria McDaniel said, she and her husband, Billy Kellems, 36, and two sons, ages 11 and 17, have suffered sleeplessness, headaches, diarrhea, nausea, aching joints and nerves rubbed raw.

The noise and vibrations are stronger at night but diminish on weekends, leaving them irritable and disoriented, like a bad hangover, McDaniel, also 36, says.

Certain parts of the house are affected, with continuous cracking and nails vibrating from walls in some areas, feelings of dizziness and vertigo in others. "Don't sit in that chair," Kellems, warns a visitor. "Nobody sits in that chair anymore. Anybody who does has to go to the bathroom five minutes later."

And yet the worst part about the hum, Kellems says, is wondering, "What's it doing to you when you *can't* sense it?"

About a mile east of their house, much the same sicknesses and aches have plagued Penny and Scott Wenger and their four children, ages 5 through 18. Scott Wenger, 43, describes the debilitating effect of the hum as "like standing under a fluorescent light that's flickering, about ready to go out. It just gets on your nerves."

Wenger and others who say they're affected by the hum tell of TVs and household appliances turning themselves on and off, light bulbs frequently burning out or exploding, and cell phones malfunctioning.

Wenger says he's had the house checked for gas leaks, radon, sewer gas, carbon monoxide and black mold. All tests were negative.

Medical tests also have become a way of life for some families. Evelyn Floyd, 45, estimates that she has spent nearly $8,000 beyond insurance coverage on examinations and medications for pain and depression caused by the hum.

She and her husband, Tom, 37, moved to a new house after she was gripped in her own, personal earthquake in 1999 — "a sudden vibration, shooting up my legs and spine, that shook me like a rag doll." She says it left her with lingering ailments including muscle cramps, headaches and loss of memory.

The move didn't help. She says she still hears the sound, feels the invisible pressure, and her husband can't shake a constant ringing in his ears.

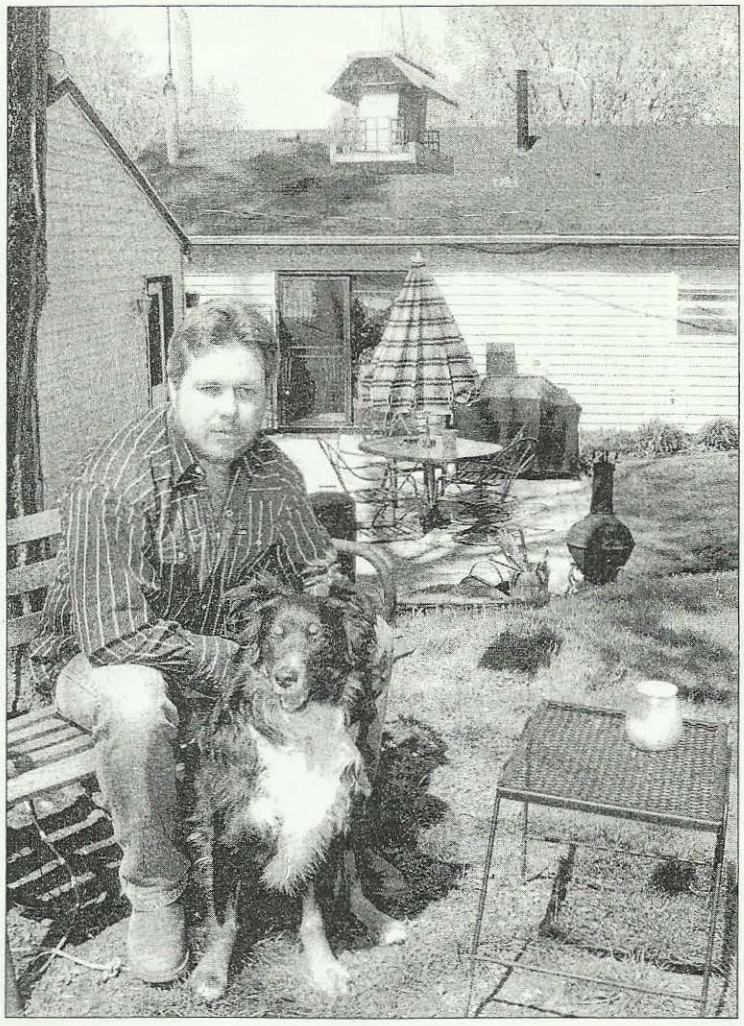
"Some people look at you like you're nuts. It makes me mad," Floyd says. "I am *not* a fruitcake. I am *not* nuts."

It's a familiar reaction to Diane Anton, 51, who has waged an aggressive campaign for public awareness and government investigation of the hum. She even hired private engineering firms to test for infrasound at her house. Those tests indicated that a nearby factory could be the source of the sound.

Initially, the response of residents and officials to her campaign was frustrating, Anton says. "Everyone was trying to say I wasn't normal, that I was just hearing or feeling things that weren't there, questioning my mental health," she says.

In late 1999, her headaches, nosebleeds, aching joints and chronic diarrhea became too much to handle. After working for 30 years at Delco, Anton took early retirement and moved to South Bend, about 90 miles from Kokomo. "I feel better here than I did there," she says.

She left behind the house she had built in 1996; her $200,000 "dream house." It now sits empty and abandoned. It isn't for sale. "I can't do that to anybody else. My conscience won't allow me," she says. "Would *you* like to be the one I sold it to?"



PHOTOGRAPHS BY TOM STRICKLAND | ASSOCIATED PRESS

Billy Kellems once enjoyed relaxing on his back patio, listening to the birds and crickets. Nowadays, all he hears and feels is the hum, and "you can't ever relax, 'cause you never get used to it."



THE PLAIN DEALER



A mysterious noise dubbed the "Kokomo hum" has plagued this small Indiana town for the past three years. Some residents blame the vibration of low-frequency sound waves for inflicting ailments including sleeplessness, headaches, joint pains, nausea and diarrhea.

Government inaction

The government intervention that Anton pushed so hard to get has been hindered by a lack of funds, expertise and equipment, officials say.

"This is a phenomenon beyond our expertise," says Kris Conyers, the County Health Department administrator. "We don't have anything to put our hands on, no data that says this is a problem and what's causing it."

An Indiana State Department of Health report in 2000 regarding Anton's complaints found a sound "not considered normal for residential neighborhoods," and said the factory identified by Anton's consultants could be a source.

But the report also concluded that there was no evidence to link the sound with anyone's health problems.

Subsequent state Health Department requests for federal investigation of the hum went nowhere. Both the Centers for Disease Control and Prevention and U.S. Environmental Protection Agency could offer no help.

Kokomo's recent authorization of $100,000 to study the hum represents both a financial and philosophical commitment, according to Ken Ferries, city attorney. By authorizing the money, "the city accepts that there is something worth looking into," he says.

"The outcome could be, yes, there is a problem, or it could turn out to be nothing," he says. "I think folks would like to know, once and for all."

Some have already made up their minds. A recent contributor to the Kokomo Tribune's "Sound Off" column wrote: "I can't believe the mayor is going to spend $100,000 to appoint a committee or someone to study the so-called mysterious hum that residents say is causing them health problems. . . . What a waste of money."

That isn't an uncommon sentiment, says Kozarovich, local writer. "It's a problem because most people don't hear it at their homes and find it hard to believe," she says. "Some people say they [noise sufferers] are just looking to sue somebody."

"They can't see it, smell it or touch it, so it raises questions like, 'How can a noise make you sick?' "

Lisa Hurt Kozarovich,

freelance writer

More tolerance

Though not necessarily the same situation in terms of a health mystery, Kokomo is the community that in the mid-1980s made Ryan White — who contracted AIDS from his treatment for hemophilia — the national poster boy for AIDS prejudice and intolerance.

The 15-year-old was banned from public school, someone fired a bullet through the Whites' front window, and when the family ate in restaurants, their plates and silverware were thrown out.

Nowadays, however, many residents are considerably more tolerant of those who say they have been afflicted by the hum. Residents who haven't heard it nevertheless empathize with those who say they have.

Teresa Hudson, 43, who helps run a convenience store in the same area of town where several of the noise complaints originate, says some of her customers talk about having similar health problems. "They're mirroring the same symptoms, and what they're experiencing is *not* just in their imagination," she says.

Those who hear and feel the hum say their numbers would be greater if others like them weren't reluctant to come forward. They say there's a fear of being ridiculed or criticized; or of lawsuits that could be brought by sound-sufferers against local employers, costing jobs in this strong union town.

Billy Kellems denies seeking financial gain from his family's plight. "It's not about a lawsuit. Keep your damn money. Just give me back my happiness," he says.

So why not just move?

It's a common question, Kellems says. But he and his wife believe the problem isn't unique to Kokomo, and this is as good a place as any to make a stand. "Kokomo is known as the city of firsts, so why not be the first to figure out what's going on?" he says. "If that's our motto, let's live by it."

Yet he and others wonder just what kind of community they will wind up with as a result of the hum.

"Is this going to keep our children from being able to have kids?" asks Scott Wenger. "Is this going to be a community so burned out from lack of sleep that it'll go nuts?"

The future is as uncertain as the present. For the moment, they can only endure and hope that someday the hum will end.

As Kellems says, "Right now, hope is all we got."

For information about noise pollution, the Noise Pollution Clearinghouse has a list of Web sites at: www.nonoise.org

Contact Brian Albrecht at:
balbrecht@plaind.com, 216-999-4853

Radio waves may cause Kokomo hum

■ A small sub-study suggests cell phone towers, radio stations may be sources.

By JOY DANISON
Tribune staff writer

Low-frequency and infrasonic sounds traced to industrial equipment at Haynes International and DaimlerChrysler Corp. may be the cause of local residents' health problems.

But area cell phone towers and radio stations might also be to blame.

That's the suggestion of retired physicist Bill Curry, owner of Glen Ellyn, Ill.-based EMSciTek Consulting Company.

As part of his 10-month investigation into the mystery of the Kokomo hum, acoustics expert Jim Cowan of Cambridge, Mass.-based Acentech hired Curry to conduct a small sub-study on electromagnetic radiation in the local area.

SOUND HEALTH?

Specifically, Cowan wanted to know whether such radiation might be another cause of local residents' symptoms.

COMING SUNDAY

- City wants follow-up to see if equipment remediation helps hum sufferers.

Curry's results became public for the first time last week when Cowan submitted his final written report on the hum study to Kokomo city officials. Though the electromagnetic study is largely inconclusive, it does point to another environmental phenomenon that might be making local residents sick.

Hum ...

▲ Continued from page A1

In May, Curry visited Kokomo to conduct measurements at four locations, including at homes on Terrace Drive, South Lewis Street, Superior Street and Sussex on Berkley. At two of the locations, residents heard a high-pitched sound. At the other two, residents heard a low-pitched noise.

Curry said his measurements showed radio frequency radiation at each of the four homes. The radiation could be traced to radio frequency signals generated by local cell phone towers and radio stations.

None of the radiation levels measured exceeded limits established by the Federal Communications Commission, Curry said. The levels also fell below the current threshold for microwave hearing, he said.

But the sources of the electromagnetic radiation involve cell phone signals, some of which have complex pulsing patterns, Curry said. Some research suggests that because of the complexity of these pulsing patterns, the radiation generated may affect human health at lower levels, he said.

"If we are restricted to the conventional model of microwave hearing, no," electro-

patterns of these sources that this changes the way microwave hearing should be looked at, then I guess all bets are off...

"That is a question that needs to be looked at," Curry said.

Cowan cautioned that Curry's study is small and hardly comprehensive. He pointed out that the study involved only four locations in Kokomo and that some of the theories it relies on – particularly that low levels of electromagnetic radiation may affect human health – are unproven and highly debated among scientists.

Curry's study does, however, highlight the need for more research on the matter, Cowan said, just as his own study points to the need for more research into how long-term exposure to low levels of low-frequency sound and infrasound affects human health.

"Each of us did measure something and each of us did point to specific sources, however ... there is no concrete data that supports the levels we measured are a problem, no concrete documented evidence that these levels are not a problem," Cowan said.

"We each identified something, [but] whether it has the potential to cause what these people are experiencing, that's something that other studies

▼ See HUM | Page A10

KOKOMO TRIBUNE
SATURDAY, NOV. 8, 2003

Curry, who holds degrees in physics and a doctorate degree in electrical engineering, spent much of his 40-year career working for the U.S. Air Force or in private labs that contracted with the military. One of his many projects included helping to develop a beam that could detect a real nuclear bomb from a decoy during the Ronald Reagan-era Star Wars program.

In his retirement, Curry also became interested in radio frequency radiation, a type of electromagnetic radiation. He is particularly interested in the radiation generated by cell phones and other modern technology and the effect that radiation may have on human health.

Curry said he was approached by Cowan to conduct the study in Kokomo because Cowan wondered if microwave hearing might be a potential cause of the Kokomo hum.

In theory, scientists believe sufficient levels of radio frequency radiation may cause low-frequency brain waves to resonate, thus creating a booming sensation or sound in a person's head, Curry said. Symptoms such as headaches, nausea and aggravated insomnia have also been associated with microwave hearing, he said.

We welcome **"Letters to the Editor"** on any topic of general interest. The Kokomo Tribune reserves the right to edit all letters for grammar, brevity, good taste and libel. All letters must be signed with the full name and address of the author and a daytime telephone number so authorship can be verified.

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■ This page designed by Mike Byers

LETTERS

Health officials were sarcastic

In regard to the Indiana Department of Health report concerning the conversation I had with Hans Messersmith and Rex Bowser, many facts were inaccurate and untrue.

Initially I had reported to them that I had been feeling intense pressures and vibrations in my home, and that I had been literally jolted out of my bed at approximately 2:30 a.m. When I reported feeling these intense vibrations and pressures in the early morning hours and hearing the humming within my home, Bowser and Messersmith laughed and sarcastically asked if I had looked to see if a meteor had landed in my yard.

My increasing health problems are no laughing matter. Since 1999 I have been experiencing painful headaches, sleep disturbances, aches in bones and joints, memory and concentration difficulties, pressures and ringing in my ears, to name a few.

I also expressed concern about a large sonic boom heard in the fall of 1999 that shook the ground for miles.

From my own ongoing experience and increasingly bad health symptoms, I believe this low-frequency noise pollution has been damaging health in Kokomo for close to three years and will continue to damage people until public servants take seriously the gravity of this situation.

We, the citizens and taxpayers, need testing from qualified engineers to identify and stop the source of low-frequency pollution; and we need emergency medical help from our government as soon as possible.

Maureen Christie
Kokomo

For assistance with using ECFS, please contact the ECFS Help Desk at 202-418-0193 or via email at ECFSHelp@fcc.gov.

Filing Detail

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