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SPECIAL INVESTIGATION

DID A MAJOR DEFENSE CONTRACTOR CAUSE BRAIN CANCER IN THESE KIDS?

By Sharon Lerner

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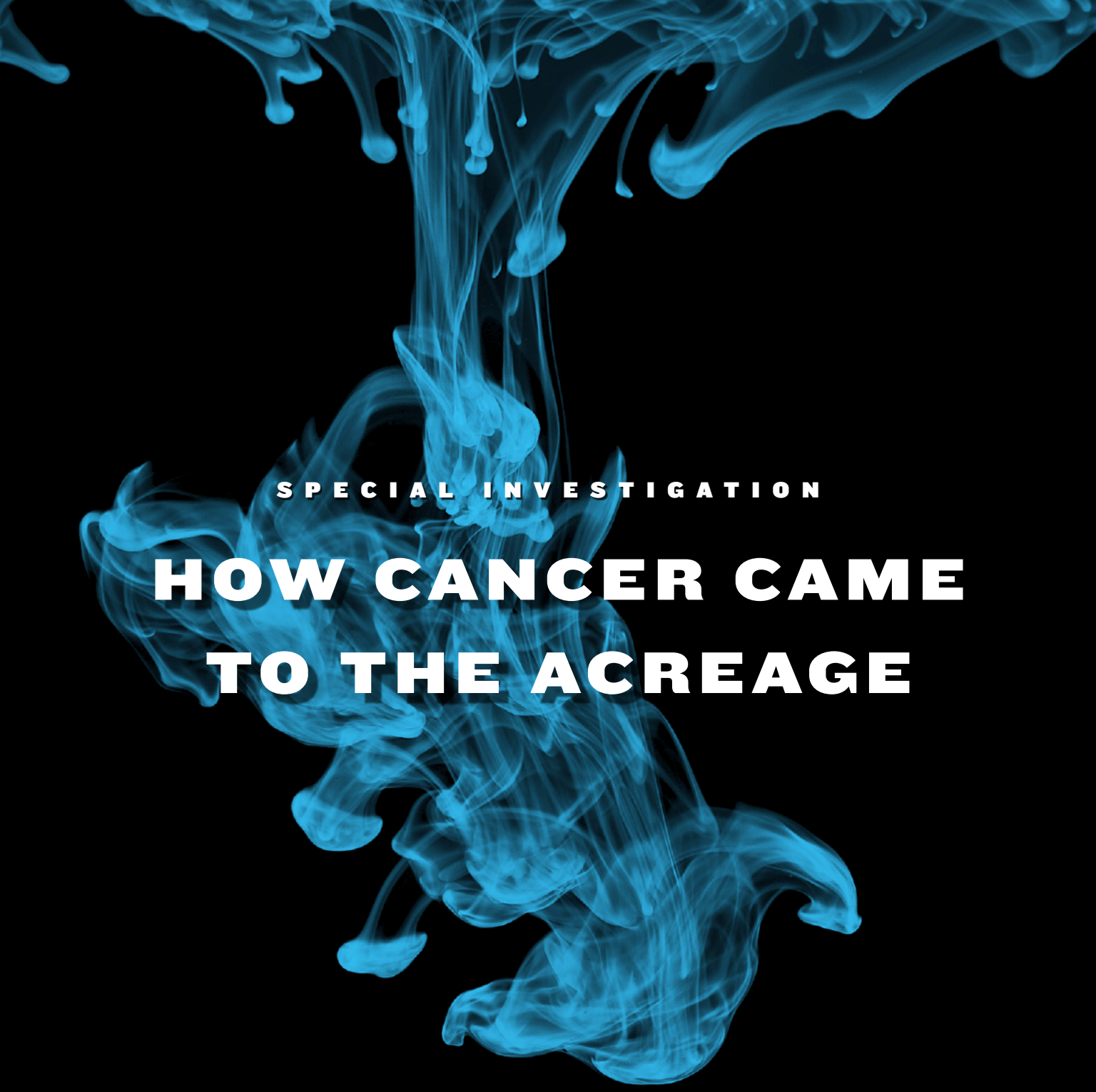

SPECIAL INVESTIGATION

HOW CANCER CAME TO THE ACREAGE

FAMILIES IN THIS SOUTH FLORIDA TOWN POINT TO TWO COMPANIES AS THE SOURCE OF THE CONTAMINATION THAT CAUSED THEIR CHILDREN'S DISEASE.

by SHARON LERNER

A PIXIELIKE GIRL WITH BIG BLUE EYES and straight brown hair, Hannah Samarripa began experiencing headaches and fatigue in the middle of eighth grade. By the time the spring dance rolled around, Hannah didn't have the strength to paint her own toenails. Her mother, Becky Samarripa, did it for her, and then drove Hannah to school and waited outside, knowing she'd be able to put in only a brief appearance. The teenager's mysterious decline continued on to limping, vomiting, incontinence and—perhaps her most disturbing symptom—occasional fits of barking laughter that sounded so strange and demonic, her father wondered whether she was on drugs. Then, in the summer before ninth grade, while her family was visiting a Civil War memorial on the coast of Alabama, Hannah collapsed.

Still, it was a full six months later, when a doctor spotted her brain tumor during an eye exam—literally seeing the growth through the lens of Hannah's eye—that the 14-year-old got the diagnosis and then the surgery that saved her life.

When Hannah got sick in 2007, her mother had no idea that, just a few blocks away in the Acreage—their lush South Florida community—other children had also suffered through the same awful symptoms. Had she known about Jessica Newfield, who was close to her daughter's age and had been ill for many months before being diagnosed; Joey Baratta, who developed two tumors before dying at age 20; or little Jenna McCann, who got sick at age 3, perhaps she'd have gotten Hannah's tumor diagnosed sooner.

But it would take all of the afflicted families years to connect the dots among their tragedies.

BILL INGRAM / *THE PALM BEACH POST*

Hannah Samarripa in 2009, when she was 15, a year after she received the diagnosis and surgery that saved her life

WHEN BECKY HEARD from her pastor that another child in their congregation had been diagnosed with a brain tumor, she reached out to the boy's parents, arranging to meet them in the waiting room of Miami Children's Hospital. While Hannah was recovering from her brain surgery, and the boy—a 5-year-old named Garrett Dunsford—was undergoing his own, the parents started talking.

At the time, neither Jennifer Dunsford nor Becky Samarripa considered that her child's illness might be part of something larger. "I figured it was a weird coincidence," says Dunsford, a sharp-witted mother of three with glasses and shoulder-length brown hair. Like Samarripa, Dunsford was consumed with her own crisis—first, Garrett's loss of the use of his left hand and arm; then, his misdiagnosis (Garrett's doctor thought he had a sore elbow); and after his brain tumor was discovered, the failure of surgery to completely remove it.

But a few months later, Dunsford learned that another student in the local elementary school had been diagnosed with a brain tumor, which made four children with brain cancer that she knew about, all living within two miles of one another. This odd fact kept troubling her, and at the suggestion of Garrett's neurologist, she e-mailed the Florida Department of Health about it. The department responded by sending forms that she was encouraged to share with anyone she encountered in the area who had cancer, asking about the specifics of their diagnoses, their ages and their addresses.

By May 2009, Jennifer Dunsford had developed a database documenting dozens of cancers in children and adults throughout the neighborhood. She had also gotten together with the mothers of other sick children, including Tracy Newfield, Becky Samar-

ripa and Kaye McCann, as well as a few concerned friends and relatives, to see how they might get to the bottom of what was going on in the Acreage. "We were moms and wives and grandmothers on a mission," remembers Newfield, who describes herself as both "this little housewife" and—as she would come to see herself over the years of struggle that followed—someone who, if necessary, could become "your worst enemy."

Less than twenty miles inland of West Palm Beach, the Acreage functions as that city's country cousin. In contrast to the smooth pavement and careful landscaping of coastal West Palm, the Acreage has a wild, almost jungly feel. Shaggy cabbage-palm and cypress trees flank the neighborhood's sandy, unpaved roads. The smallest plots are more than an acre, and many are larger, so houses are a good distance from one another. Because the Acreage is unincorporated, the city doesn't provide services—even water. Instead, most homeowners rely on private wells.

Many of the young families in the Acreage were drawn there by its relative lack of development. When she first moved to the area, Becky Samarripa was charmed by the sight of horses trotting by and people fishing in the canals that crisscrossed the neighborhood. She explains why she came: "I wanted my children to play in the dirt and enjoy nature and breathe the fresh air." Tracy Newfield also liked the community's spaciousness, which allowed ample storage for her family's boat and Jet Skis. And Joey Baratta, who moved to the Acreage with his mother and stepfather in 2004, when he was 15, spent much of his time there riding his ATV and working on his parents' land, which abutted one of the area's many canals.

Jenna McCann, too, liked the outdoors. In the fall of 2004, the little girl often played in the grass of her yard with her two dogs. During the next year, while Jenna was undergoing cancer treatment, both dogs developed tumors and died. Jenna was a strong-willed, generous and ultimately prescient child, according to her mother, Kaye. After Jenna got sick, Kaye and her husband, David, began making kid-size surgical scrub caps with cars and animals on them. When Jenna was near death, she told her mother she wanted to take her caps to the hospital so the other kids could use them after she was gone. "She knew and somehow understood and was OK with it," Kaye McCann said recently. When she died, Jenna was 4 years old.

People were shocked to hear that the community was definitely experiencing a cluster of pediatric brain tumors.

Garrett Dunsford in 2010, at age 7, two years after he was diagnosed with a brain tumor. He still struggles with the effects of his cancer.

DAMON HIGGINS / *THE PALM BEACH POST*

In June of 2009, a local reporter got hold of one of the forms Dunsford was sending around and wrote a story about her efforts. Soon after, the state announced it would undertake an official cancer-cluster investigation—a rare step, given the high expense and low likelihood of finding any statistically significant increase.

Half a year later, on a mild evening in early 2010, state officials called a town meeting at the local high school to tell the community what the investigation had found. Seminole Ridge High is a big school, and its ample, stucco-walled auditorium can hold hundreds of people, as it does for the pep rallies before Hawks games. Still, the crowd was standing-room-only on this night. As they anxiously eyed the array of health officials lined up on the stage, the Acreage's residents got the news that none of them wanted.

The Centers for Disease Control and Prevention (CDC) defines a cancer cluster as a "greater-than-expected number of cancer cases that occurs within a group of people in a geographic area over a period of time." Yet because elevated numbers of any disease can occur by chance, and because cancer is relatively rare—and it's incredibly difficult to determine if rare events occur by chance—the vast majority of investigations into suspected clusters don't confirm them.

Some in the room knew the long odds, having followed the pediatric brain-cancer scare in the neighboring town of Port St. Lucie a few years earlier. Like most other suspected clusters, that one had failed upon investigation to clear the statistical bar. So they were shocked to hear the health officials explain that the community was definitely experiencing a cluster of pediatric brain tumors, as well as elevated rates of all cancers at all ages.

Typically, each year, one in 30,000 to 40,000 children in the United States is expected to develop a brain tumor; but the Acreage, with a population of 39,000, had four pediatric brain-tumor cases between 2005 and 2007. Though the investigation turned up thirteen brain tumors in Acreage kids between 1994 and 2007, the official cluster consisted of just three girls, all of whom were diagnosed with brain cancer between 2005 and 2007. Based on the calculations in the report from the Florida Department of Health, a girl's chance of getting a brain tumor in the Acreage was five and a half times what it was in the rest of Florida. And that scary figure didn't include the four additional Acreage children who were diagnosed with brain tumors the following year, 2008.

GARY CORONADO / THE PALM BEACH POST

Acreage residents at a town meeting that health officials convened at Seminole Ridge High in 2010 to discuss the cluster investigation

Nor did it account for the fact that many of the cases were clumped in the northern part of the study area, which meant that the concentration of cancer in that particular spot was even higher there than what the Health Department had found in the larger area. Indeed, some of the children with cancer had lived just 1,000 feet from one another.

Tracy Newfield cried when she first heard the news. Becky Samarripa, too, was shaken by the cluster designation, which seemed to confirm her worst fear: that something in their surroundings was making them sick. Still, mixed in with an overwhelming sadness, Samarripa felt a sliver of hope that the Acreage was on its way to finding—and eliminating—whatever carcinogens were lurking in the environment.

Kaye McCann, also in the auditorium, was more pessimistic. Since Jenna's death in 2006, Kaye had become less trusting. That night, she found herself wondering whether health officials would ever find out what had caused her daughter's cancer—or whether they would even try.

KAYE'S DOUBTS PROVED WELL-FOUNDED JUST A few days later, when Dr. Alina Alonso, director of the Palm Beach County Health Department, told reporters that her agency wasn't planning to do any soil testing or other investigation into the causes of the cluster beyond interviewing families. Alonso emphasized the many questions about the causes of cancer: "diet soda, cellphones and microwave ovens may play a role," she said, concluding that "it doesn't seem practical or reasonable to start searching blindly." Instead, Alonso said, the health agency would focus on raising awareness of the signs and symptoms of brain cancer to increase early detection.

Alonso argues that tracking down environmental causes of cancer is not her agency's forte. When it comes to cancer, "we're more on the prevention side," she told me when I met with her in Palm Beach this past April. "That's where public health does its best job." She felt that the high number of pediatric brain tumors in the Acreage was most likely due to chance rather than any environmental cause (she also noted that the rate was no longer elevated).

Alonso was surely aware of how daunting a task it would be to pinpoint and prove the cause of the increase. In fact, by current standards, conclusively blaming a chemical culprit for a cancer cluster is so difficult that only three of 428 cluster investigations conducted in the United States since 1990 have established a link between pollution and illness.

"The epidemiological tools are too crude," explains Richard Clapp, an epidemiologist who has been involved in dozens of investigations into possible disease clusters in his career. Given the expense and labor involved, health departments are often loath even to attempt to track down the causes of clusters. "They don't walk, they *run* in the opposite direction of these kinds of things," says Clapp. "If

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they do have to do an investigation, they have to find the funds for it or have to get the Legislature to appropriate funds. Then they have to say, 'Well, we don't even know that this is cause and effect'—in which case, people feel like they got nothing."

So it's to the credit of those who pushed for a more thorough look at the Acreage—including then-Governor Charlie Crist and Senator Bill Nelson—that an investigation into the possible causes of the cluster was launched at all. The process involved, at various points, the CDC, the state and Palm Beach County departments of health, and the Florida Department of Environmental Protection (FDEP). The agencies tested water from over seventy private wells and several of the canals that ran through the area, as well as soil samples from thirty-five homes, for more than 200 chemicals.

As the results of those studies trickled out, the community found itself divided into two distinct camps. One, composed primarily of families of the children stricken with cancer, focused on the fact that the research had identified several contaminants above FDEP cleanup levels, including radium-226, benzene and a variety of other commonly occurring carcinogens. Though nothing stood out as the obvious cause, they felt such findings should have prompted further testing.

The other camp focused on the good news, such as the FDEP's pronouncement that the local drinking water was "generally good," as the letter accompanying the water-testing results put it, reassuring residents that "in general, residential property in the Acreage is safe for families to enjoy outside activities in their yards."

Much of the information released by the Health Department during this period was open to interpretation. To a lay audience, the scientific documents were indecipherable. The results of radon testing appeared as strings of letters and numbers, and the soil-testing report was essentially a 500-page compendium of test values and chemical names.

So reactions in the community were decidedly mixed when, in November 2010, with the battery of state and local studies having rendered their results, the Acreage investigation was officially closed. Many parents of the children with cancer were angry and frustrated, but other residents felt relief. Though it was unclear whether probing for answers would ever solve the cancer mystery, there was no question that all the attention to the risks of living in the Acreage had carried a steep financial cost.

"We were moms and wives and grandmothers on a mission."
—Tracy Newfield

Jessica Newfield (left), an Acreage cancer survivor, now 20, with her mother, Tracy, in 2001

RICHARD GRAULICH / *THE PALM BEACH POST*

By that time, home prices in the Acreage had fallen to about half their peak in 2006. Some of that drop was due to the nationwide crash that followed the housing bubble, but the news of the cancer cluster clearly played a role. In August, the Federal Housing Authority began advising appraisers that the cluster might affect properties in the neighborhood, a move that made it very difficult to get a mortgage there. Some who were unable to sell simply walked away from their homes.

Without a clear culprit for the cancers, some residents began blaming the families of the sick for the crisis. Tracy Newfield, who had been vocal in asking for an investigation, started receiving prank calls about the cluster and had her mailbox knocked over several times. Someone threw a rock at her house, breaking her glass porch light.

Becky Samarripa felt the hostility, too. On one occasion, her car got egged. On another, two of her children, then toddlers, were shot with a paintball gun while they played in her backyard. "None of this stuff had ever happened before," Samarripa says. "I felt like people were looking at me saying, 'She's the evil one who wants to ruin everything.'"

Much of the mudslinging took place online. Within six months of the cluster designation, five community-run websites had sprung up and just as quickly devolved into nastiness. Some online commenters went so far as to accuse the affected families of "just plain lying." As one poster put it, "Using your child's illness as a platform is repulsive."

Jen Dunsford, who created the Acreage Cancer Study website and had posted a picture of Garrett in the hospital with his head bandaged, was particularly savaged. "The Dunsfords created all this fear," resident Michelle James told *The Palm Beach Post*. Eventually, the family moved to Tennessee, but even now the comments still sting. "People said stuff like 'The Dunsfords are gold diggers, and they used their son's tumor as an excuse to go after a big company and get dollars,'" Dunsford remembers.

The entire story might have ended there, in 2010, if attorneys hadn't taken up where public-health officials left off. Erin Brockovich, who inspired the eponymous film about her fight against polluted water in California, had taken on some of the affected families as clients. And a local firm began representing several of the cases.

The Acreage suits—which now include at least thirteen individual personal-injury and wrongful-death

cases, and two class-action suits over the loss of real-estate value—are no easy moneymakers. The history of such litigation doesn't paint a hopeful picture for the plaintiffs, who include Jessica Newfield; Garrett's parents, Jennifer and Greg Dunsford; and Joyce and Bill Featherston, the mother and stepfather of Joey Baratta.

Only two personal-injury and wrongful-death lawsuits involving cancer clusters in the United States have yielded any financial reward for plaintiffs. And both were so grueling that they left the "victors" unsure whether the effort had been worth it. The suit over whether several companies had caused a cluster of leukemia cases in children in Woburn, Massachusetts, chronicled in the book (and later movie) *A Civil Action*, was incredibly lengthy, costly and labor-intensive, and the plaintiffs walked away with relatively small settlements. After years of litigation, their attorney, Jan Schlictmann, was left temporarily bankrupt, homeless and personally devastated.

The case in Toms River, New Jersey, documented in Dan Fagin's Pulitzer Prize–winning book *Toms River: A Story of Science and Salvation*, took place over ten years and was similar to the Woburn case in both its underwhelming financial payoff and the monumental public and private effort that led to it. The epidemiological investigation of the cluster took five years to conduct and cost taxpayers more than $10 million. "One of Toms River's legacies is that public-health agencies are quite uninterested in pursuing these investigations, which are very expensive, very difficult to resolve conclusively, make a lot of people angry, and make life difficult for politicians," Fagin told me.

Perhaps because of all these obstacles, in September 2011, Brockovich's firm withdrew from the Acreage case, leaving the local law firm of Searcy, Denney, Scarola, Barnhart & Shipley to represent the families of at least seven children and five adults who had developed tumors and brain cancer.

"One of Toms River's legacies is that public health agencies are quite uninterested in pursuing these investigations."
—author Dan Fagin

DEFINITIVELY PROVING THE CAUSE OF A cluster is so difficult because we live amid so many carcinogens. Unequivocally laying the blame on one often requires showing that no other was involved. "Experimental science tries to understand the relationship between x chemical and y outcome in a controlled setting," says Madeleine Scammell, an assistant professor of environmental health at the Boston University School of Public Health. "Whatever you find, there will be people who doubt the veracity of your findings because we don't live in an experimental setting, and you can never control all of the factors that might have contributed to that disease occurrence."

In the Acreage, there were many possible hazards to consider. Workers dressed in protective gear sometimes sprayed pesticides in the citrus groves that abut Seminole Ridge High, even as teenagers practiced on nearby sports fields in shorts and T-shirts. Then there were the rumors that the area had been a dumping ground before the Acreage was developed. Who knew what had been in the water that might be coming back to haunt residents? And the air was often filled with smoke, which came from both the burning of sugar cane and the fires on the banks of nearby Lake Okeechobee.

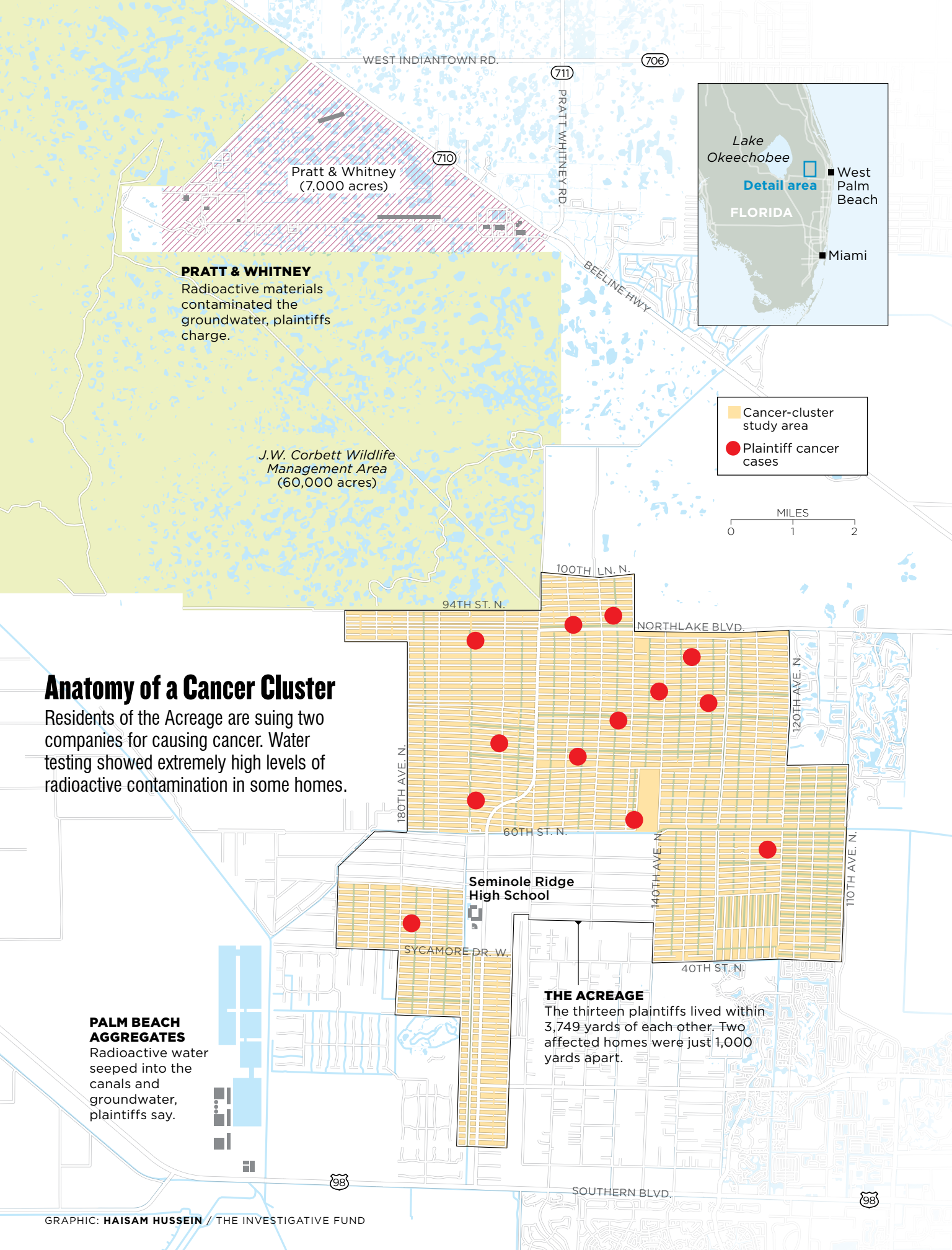
Yet to Mara Hatfield, the attorney from the local firm who spent the most time on the Acreage cases, the unusual cancer cluster was likely caused by an unusual pollutant. Hatfield, who had grown up in the area and had young children of her own, was familiar with the rumors of pollution and pesticides in the Acreage—and throughout South Florida. "There are a lot of communities down here built on that," says Hatfield. "But not a lot of communities with brain-tumor clusters."

The one kind of contamination that distinguished the Acreage, according to Hatfield, was ionizing radiation, which was not just an established cause of brain cancer but the byproduct of local industry.

Though Becky Samarripa chose not to get involved in any litigation, the radiation theory makes sense to her. The Samarripas left the Acreage in 2010. But when they

Palm Beach Aggregates, which mines limestone for road construction, is accused of contributing radiation to the groundwater in the Acreage.

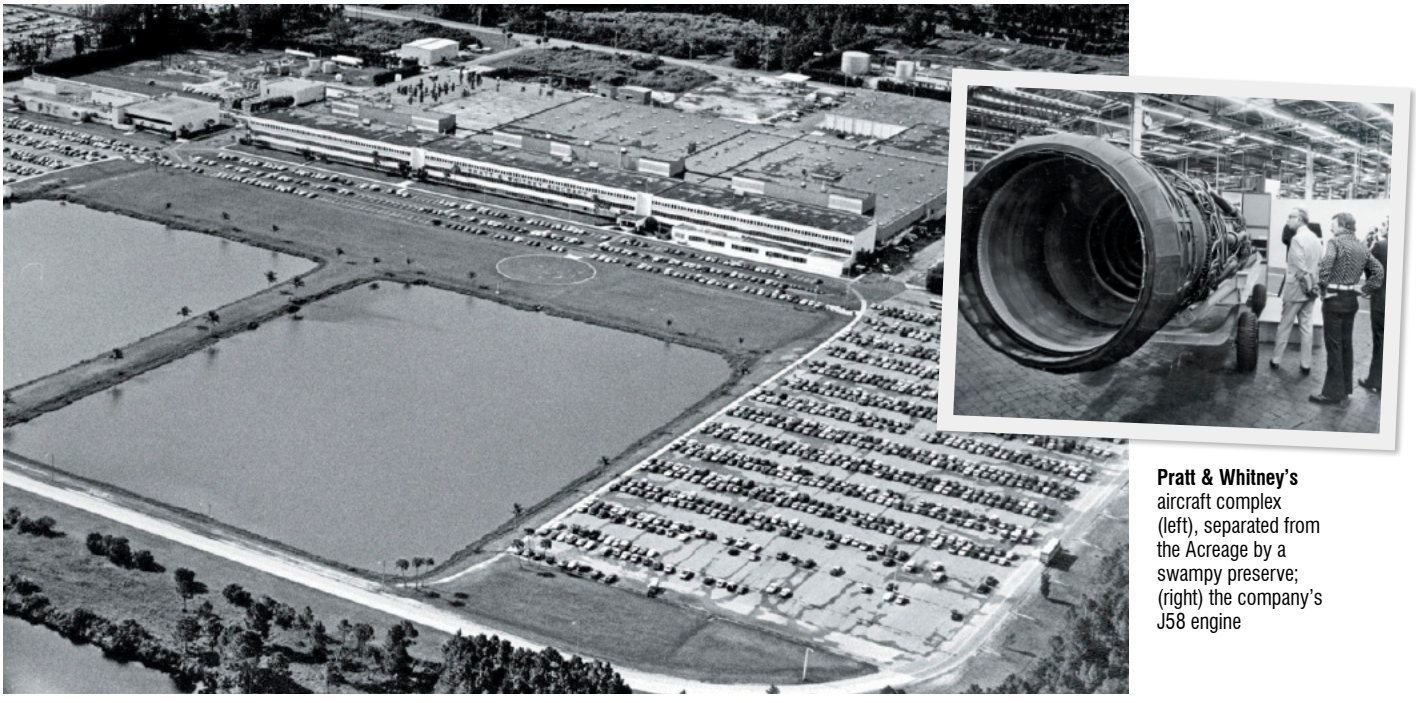
THOMAS CORDY / *THE PALM BEACH POST*



Anatomy of a Cancer Cluster

Residents of the Acreage are suing two companies for causing cancer. Water testing showed extremely high levels of radioactive contamination in some homes.

GRAPHIC: **HAISAM HUSSEIN** / THE INVESTIGATIVE FUND



Pratt & Whitney's aircraft complex (left), separated from the Acreage by a swampy preserve; (right) the company's J58 engine

lived there, Becky's husband, who worked as a customs official, wore a radiation-detecting gun belt for his job and stored it in the closet. Periodically, the belt would start beeping in the middle of the night. "After a while, we realized it was going off when our water was regenerating from our well," says Samarripa, who worried over the fact that Hannah's bedroom was closest to the well.

Hatfield and her colleagues at the law firm traced the radioactive contamination in the Acreage to two companies with operations in the area. One is the local mining company Palm Beach Aggregates, which has mined limestone for road construction for more than two decades using a dredging process that contributed naturally occurring radiation to the local water system. ("Naturally occurring" means that the radioactive substances originated in the soil, water or other natural materials, but may have been concentrated by industrial activity.) At various points, contaminated water escaped the dredging pits and seeped into the canal and groundwater in the Acreage, according to the plaintiffs' complaint.

Palm Beach Aggregates did not respond to a request for comment for this article, and in court documents has vehemently denied causing any environmental harm.

The mining company had already been caught up in a related environmental scandal. In 2003, Palm Beach Aggregates sold its used mining pits to the South Florida Water Management District, the local government agency that oversees water usage, for $217 million. The deal, which helped land two county commissioners in prison for fraud (a consultant advising the agency, it turned out, was being paid by the mining company), stipulated that Palm Beach Aggregates couldn't be held legally responsible for any contamination of water in the used pits. In its eagerness to close on the deal, Palm Beach Aggregates minimized the hazards posed by its pits and allowed the radiation problem to escalate, according to the plaintiffs' lawyers in the Acreage case.

"Pratt & Whitney's coming to this site is considered the largest single industrial accomplishment so far in Palm Beach County."

—Palm Beach County commission chairman, 1958

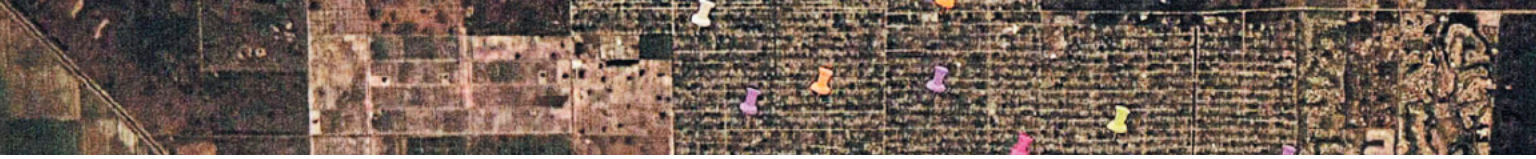
But Hatfield's radiation theory also involves the operations of another, far larger company: Pratt & Whitney, one of the "big three" airplane-engine manufacturers in the world, whose local industrial site was separated from the homes of the sick children in the Acreage by a swampy preserve.

In 2011, Hatfield's firm filed its first suit against both Palm Beach Aggregates and Pratt & Whitney, accusing the companies of creating the pollution, including radiation, that caused Joey Baratta's death.

At the opening of Pratt & Whitney's South Florida campus in 1958, the chairman of the county commission said that "Pratt & Whitney's coming to this site is considered the largest single industrial accomplishment so far in Palm Beach County." Since then, Pratt and its parent company, United Technologies, have received tens of millions of dollars in tax breaks from the county and state to encourage it to keep its operations—and jobs—in Florida.

Today, Pratt & Whitney has more than $10 billion in defense contracts, and United Technologies is the sixth-biggest Pentagon contractor. Pratt & Whitney designs and manufactures engines for airplanes, rockets and even the space shuttle. With its engines for fighter planes such as the F-22 Rap-

MIKE COLLINS / THE PALM BEACH POST



tor, Pratt & Whitney's products power air forces in twenty-two countries.

Isolation was clearly part of the reason that Pratt originally chose its location in Florida. The company's 7,000 acres of swampland are bordered on the south by a 60,000-plus-acre wildlife preserve. At least at first, the land to the south of that was uninhabited—and, since much of it was underwater, largely uninhabitable. The company was seeking privacy because some of its projects were classified. As retired engineer Robert Abernethy reminisced at a 2004 reunion of Pratt employees who had worked on the J58 engine, "In late 1957, Pratt & Whitney had two top-secret—'black'—engine projects that were to use poison fuels! Not a good idea in the middle of Connecticut… how about the middle of the Everglades?"

One of those projects, known by its code name "Suntan," was an engine to be powered by liquid hydrogen, which was later scrapped in part because of the danger of explosion. Pratt was taking other risks, too. Consider Abernethy's 2004 description of his work on the J58 engine: "We built a huge swimming pool with a tall tower to centrifuge the poison out of the exhaust." (When recently deposed by attorneys in the Acreage case, Abernethy said he had trouble recalling any "poison fuel.")

In court filings, Pratt & Whitney has denied the use of poison fuel, calling charges that it contaminated the Acreage "completely speculative." But while the company's attorneys dismissed their opponents' theories, Pratt & Whitney hasn't offered much explanation of its operations: it resisted requests to do water and soil testing on its property and declined to answer several of the opposing lawyers' questions on the grounds that they related to classified matters of national security.

So the plaintiffs' attorneys have been constructing their case based on the defense contractor's well-known history of involvement with projects that involve radioactive materials. Since so many of its operations are top secret, it is difficult to disprove the company's claims that it has never worked on nuclear planes or spacecraft in Florida. But documents from the 1960s through the '90s show that Pratt & Whitney had licenses to use at least a dozen radioactive substances, including radium D and E, thoriated nickel and cesium-137, in Florida. The plaintiffs' lawyers also unearthed company correspondence indicating that some of these radioactive materials wound up outside of their proper storage places. In court filings, Pratt & Whitney denied having any "contaminations" beyond "properly stored chemical compounds."

In fact, there is a clear documentary record, stretching across many decades, of Pratt & Whitney contaminating its Florida environs with a variety of toxic materials, both radioactive and nonradioactive. According to a 1985 Department of Environmental Regulation update, the company had soil on its property that contained PCBs—chemicals that have been linked to brain cancer—at more than 200 times the maximum level now allowed even in fenced-off, nonresidential areas. PCBs were also found in fish that swam in ponds on the company's grounds, at more than 7,000 times the safe level set by the Environmental Protection Agency (EPA) for human consumption.

Documents from the 1960s through the 1990s show the company had licenses to use at least a dozen radioactive substances in Florida.

Jet fuel, which was the suspected cause of another cancer cluster in Fallon, Nevada, may also have played a role at the Acreage. A mixture of chemicals that can cross the blood-brain barrier and cause cancer in mice, jet fuel was found at the Pratt & Whitney facility in Florida. According to a 1983 report, there were three plumes of jet fuel totaling some 53,000 gallons beneath the company's property, and a layer on top of the groundwater in certain places as well.

In 1978, the same year the Acreage Homeowners Association formed and began constructing a system of canals to make the area habitable, the company admitted to health officials that 2,000 gallons of trichloroethylene (TCE), a carcinogenic solvent, had leaked into the groundwater and surface water on its campus. After the company shut several of the wells that supplied water to its workers, it commissioned a study by the University of Miami to look into the possible health effects of the contamination. The research found that, between 1967 and 1980, the average death rate from cancer among the company's employees had shot up from 13 per 100,000 workers to 122—a roughly ninefold increase. When the study came out, a Pratt & Whitney vice president called

A canal system was constructed by the Acreage Homeowners Association beginning in 1978 to make the area habitable.

SHARON LERNER

Mara Hatfield, an attorney representing several Acreage families, explains the cancer-cluster lawsuit at a press conference in August 2013.

the university's research "full of crap," according to a report in *The Palm Beach Pos*t. Then, two years later, another study was published concluding that cancer rates among the company's workers were not elevated.

A similar back-and-forth ensued when Pratt & Whitney hired epidemiologists to investigate a possible cancer cluster in its North Haven, Connecticut, jet-engine plant, where an unusual number of workers had died from an especially lethal form of brain cancer called glioblastoma—the same kind that Joey Baratta and Debora Craig, another Acreage plaintiff, had. The company trumpeted the results of a ten-year investigation that found "no statistically significant elevations in the overall cancer rates among the workforce" throughout the state. However, though the study did not find an association with workplace exposures, it did confirm the elevated brain-cancer rate at the North Haven plant.

Throughout the 1980s, the EPA was preparing to designate Pratt & Whitney's South Florida location as a federal Superfund site, which would have required detailed public disclosure of the contamination and the various steps that would be taken to remediate it. The designation would have also alerted people in the area—and those considering moving there—to the potential for environmental danger. And, most important, it would have ensured a higher level of enforcement than the state was likely to provide.

In response, the company waged a fierce, years-long battle against the Superfund designation—and, in 1985, it won that fight.

Since then, the Florida Department of Environmental Protection has overseen the cleanup of the area, a process that has involved the removal of many tens of thousands of tons of contaminated soil and thousands of gallons of fuel from the groundwater. But the details of the process aren't public. Though the FDEP says that Pratt & Whitney is in compliance, it also says there are still twenty-five hazardous-waste sites being remediated, and the cleanup—which began in 1985—is today only 77 percent complete.

Meanwhile, the government's investigation into the Acreage cancer cluster provided some evidence for the theory that radiation was behind it. Water testing in the affected homes turned up several radioactive contaminants. Hatfield and her boss, Jack Scarola, ordered further testing of the soil and water. In August 2013, the results showed some extremely high levels of radioactive contamination, including non-naturally occurring radioactive substances—the kind that can only be produced by a man-made nuclear reaction.

To the attorneys' assertion that Pratt & Whitney was the only possible source of the radiation, Pratt's lawyers replied that it could have come from other sources, such as the Chernobyl disaster, through which nuclear radiation "has been spread world-wide."

The plaintiffs' attorneys notified both the state and county health departments of their findings in September of last year and urged them to begin larger-scale testing. Yet neither agency did so. Instead, the Palm Beach County Health Department told Hatfield to direct further contacts to its lawyer.

"Once the lawyers get involved, then the lawyers have to talk," the county's Alina Alonso explained to me.

So Hatfield and Scarola took their test results to the media. Their press conference last August yielded a few local stories, and one unintended consequence: Judge Joseph Marx, who was presiding over Joey Baratta's case, ordered the attorneys not to speak about the case with the press. He claimed that further press coverage could bias jury selection. Interviews for this article with Hatfield and her firm's plaintiffs were conducted before the gag order went into effect in September. Also citing the gag order, Pratt & Whitney declined to answer questions for this article, stating only that "Pratt & Whitney's position is documented in its court filings related to the Acreage."

"Judges tend to be extremely deferential to anything relating to national security [or] the military."

—Stephen Dycus, Vermont Law School professor

BILL INGRAM / *THE PALM BEACH POST*

There are many factors that make it easy for a company to pollute with impunity. In *Deceit and Denial: The Deadly Politics of Industrial Pollution*, historian David Rosner describes how plastics and chemical manufacturers avoided regulation in part by making their own economic interests seem synonymous with those of the country. In Pratt & Whitney's case, no fancy PR was necessary: its product is already understood to be not just airplane and rocket engines but national security itself. And being part of the defense industry carries weight not just in the court of public opinion, but also in a court of law.

"Judges tend to be, historically, extremely deferential to anything relating to national security, especially if it involves the military," says Stephen Dycus, a professor at Vermont Law School and the author of *National Defense and the Environment*. Dycus notes that it's not uncommon for defense-related companies to resist providing information because of military sensitivity, as Pratt & Whitney has done in the Acreage case.

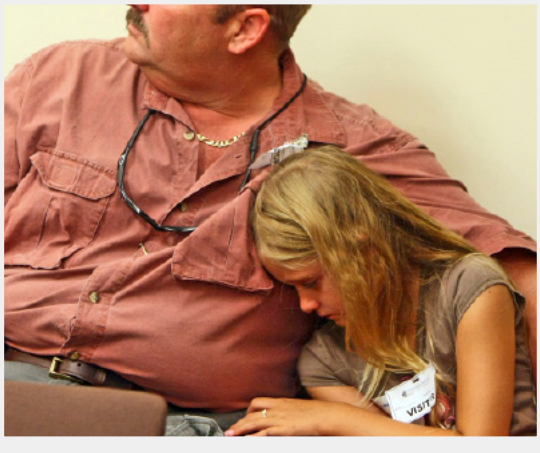
Although the Defense Department (which utilizes some 30 million acres of land) and its contractors are subject to the same environmental laws as everyone else, the difficulties of prosecuting such cases means that they can—and often do, according to Dycus—get away with contaminating the environment. This constitutes a huge problem, though one that, he says, seems to spur little outrage.

"If Al Qaeda sent a team of sleeper cells to poison our groundwater and release toxic materials into the air, people would go nuts. It would be an act of war," Dycus notes. "But if we do it to ourselves in the name of national security, in preparation for war, that seems to be sort of OK."

Pratt & Whitney has not only identified itself with the country's security but has enhanced its public image by embracing the fight against cancer and the cause of protecting the environment. It's a gold-level sponsor of the American Cancer Association's local "Relay for Life" fundraiser, and its chief executive was a vice chair of the group CEOs Against Cancer. It helped start the P2 Coalition of Palm Beach County ("P2" is short for "pollution prevention") in 1994, along with the Palm Beach County Health Department, other local businesses and the Jupiter Chamber of Commerce. P2 began as a friendly collaboration based on "the good working relationship between the regulatory community and industry," as one internal document put it. The group's efforts extend to sponsoring green-themed events, such as elementary-school poster contests on environmental topics and Earth Day "Peace Jams."

"I will never utter those two words. They drive a stake into the heart of my community."

—Michelle Damone, a local politician, when asked about the cancer cluster



Jenna McCann's father and sister at a community meeting in July 2009. Jenna died in the spring of 2006 at age 4.

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But the defense contractor and the county were less keen about publicizing contamination on the company's property. In 2000, when Pratt & Whitney was considering leaving its Florida site, it entered into discussions with Palm Beach County about selling some of its land as a site for drinking wells. But after two assessments of the plot in question found "ubiquitous" contamination, the deal quietly fell through. Though the parcel was on the part of the company's property nearest the Acreage, this never came up during the cluster investigation. (It did come up in the litigation, but the company's lawyers dismissed it as a "red herring.")

Meanwhile, Pratt & Whitney enjoys close ties with regulators. One state regulator who was involved in the process that spared the company from the Superfund designation went directly to work for Pratt & Whitney after those negotiations.

The tangle of allegiances between the company and local officials was on display in 2009, when the Acreage Community Focus Group was founded, supposedly to address residents' concerns about the cluster. Within a few months, some of the participants felt they were being pressured to stop pursuing questions about water contamination. "They wanted us to move on and say our water was fine," recalls Tracy Newfield, who was a member of the group.

Newfield's mistrust, and that of others in the group, grew when they realized that the group's chair—who seemed particularly eager to put the questions of contamination to rest—was a former Pratt & Whitney employee. "He was introduced to us as an engineer," Newfield says. "He left out the fact that he was an engineer for Pratt & Whitney." While the frustrated participants resigned in protest, another member of the group, who had expressed doubts about environmental factors in the cluster, later received a nice surprise: a letter from the Florida Department of Health commending his efforts and offering help in finding funding for his projects.

It will likely take years for the lawsuits against Pratt & Whitney to be resolved. In the meantime, after so much bitterness, the subject of the cancer cluster has become almost taboo in the Acreage. When I asked Jess Santamaria, the Palm Beach County commissioner representing the Acreage, whether there was ever a cancer cluster there, he told

me he doesn't know: "I'm not an expert." And when I called Michelle Damone, a local politician who helped set up the Acreage Community Focus Group, to discuss the cancer cluster, she told me that she will "never utter those two words," because "they drive a stake into the heart of my community."

The remaining residents of the Acreage now live with excruciating uncertainty about what caused the cancers here. "I think about it every day," says one resident, who didn't want to give her name lest she be pilloried for believing in the cluster. Even though her children are healthy, she said her life was forever changed by that announcement four years ago. "I'm usually a very rational person, but that night I put on a pair of shoes that belong to someone with OCD. Every day since, I've woken up with a pit in my stomach, worrying about my children. I think about it every time I open up the freezer and we're out of store-bought ice."

The remaining residents of the Acreage now live with excruciating uncertainty about what caused the cancers here.

This woman was one of several who told me they fought often with their husbands about leaving the Acreage. She wants so desperately to remove her children from the possible harm there that she keeps a bag packed in her bedroom and thinks about leaving daily. "I feel a panic for my kids' health. It's always with me—we're out to dinner or whatever, and you hear 'Tick, tock.'" Her husband refuses to leave, though, because they are three years from paying off their mortgage and, if they sold the house, would lose so much money that they couldn't afford to buy another.

Governor Rick Scott honors Pratt & Whitney after the company announced that it would expand its West Palm Beach facility in 2012.

For many of the families whose children developed cancer, there was simply no question of staying. The Samarripas moved to Alabama, where Hannah, now 20 and in college, is flourishing, according to her mother. Perhaps because her tumor was only partially removed by the surgery, or perhaps because she now has fluid in her skull, she still suffers from severe headaches, vomiting and peripheral eye damage. She can't see some colors and has difficulty with organization and telling time, according to her mother. But she is also a musical girl who enjoys life and loves to sing.

Garrett Dunsford, too, is both thriving and living with the ongoing health effects of his cancer. Now 12, he has auditory processing problems, memory issues and dyslexia, which were all diagnosed after his cancer. And he's particularly prone to headaches. But he also has a special outlook on life that his mother treasures—and thinks may have resulted from his trauma. "He doesn't value things at all," is how Dunsford described Garrett recently, adding that he's become the "family comforter. He'll ask for something and say, 'I appreciate that you bought me that, but let's go snuggle.' He values spending time with people."

The ordeal was also a turning point for Jennifer Dunsford. The family moved to Tennessee and sold their Acreage home through a short sale in 2011. Because of the damage to their credit, they haven't been able to buy another, Jennifer told me. But that's not her focus. "We have learned what's truly important in life, and it's definitely not a house," she says.

The McCanns left as well and are now living in the mountains of North Georgia with their two children. Kaye McCann says she doesn't miss Florida—only Jenna, who is still buried there. McCann ultimately found it too painful to be around the group of Acreage parents pursuing the cause of their children's cancer, because most of their children survived. "In one sense, I would not go through what they're going through every day of their lives, wondering if [regular testing for cancer] is going to come back positive," she says. "But on the other hand, I envy them every day of their lives." The loss of her daughter has only become harder over time. She enjoys her family, her job and her small town. "But when the low times do hit, each time it hits a little bit harder and lasts a little bit longer."

McCann knows that even if the puzzle of the Acreage cluster is finally solved, it wouldn't bring Jenna back. Still, she fervently hopes that someone can find "whatever it is that's made kids sick, stop it, and help clean it up." She is now exploring the possibility of moving Jenna's grave near their home in Georgia.

The Newfields are one of the few directly affected families to stay in the Acreage. While Jessica, now 20, is attending college, Tracy has been spearheading the creation of the Garden of Hope, a place in the Acreage where people can go to honor their loved ones who have had cancer. The Newfields also recently installed a sophisticated water-filtration system for their well, though Tracy recently discovered that Jessica had bought and stashed away bottled water.

For its part, Pratt & Whitney is staying, too. In November 2012, the company announced plans to add 230 jobs at its Florida campus over the next eight years and to invest $63 million in its facilities there. The deal is being financed with some $4.4 million in public incentives, including $3.4 million from the state and $1 million from Palm Beach County. ■

JENNIFER PODIS / *THE PALM BEACH POST*