

WHY I CALL IT MURDER

The marketing of a defective fire detection device, incorrectly called a “smoke” detector, with deliberately falsified performance claims has resulted in an estimated 75,000 wrongful fire deaths over a four decade period. There is no doubt that the smoke detector fraud has been more deadly than all the serial killers of the 20th century combined. And, what is especially disturbing is that the very organizations that the public trusted to protect them were deeply involved in the fraud. All decent people must find it beyond comprehension how major business organizations would be willing to sacrifice tens of thousands of lives to profit from the marketing of a device which, when brand new with fresh battery, would fail to perform in accordance with the published performance claims just about one hundred percent of the time. What possessed these business leaders to lie so blatantly and deceive so many to make money selling a phony smoke detector?

FEDERAL APPEALS COURT CONFIRMS THAT THE DEVICE IS A KILLER

The United States Court of Appeals, Second Circuit (City of New York) in the case of Hackert vs. First Alert, Inc. and Standard Brands, Inc. (No. 06-4387-cv) dated, January 1, 2008 held that the ionization type smoke detector was “**defectively designed**” and “**a legal cause of deaths**”. All ionization type smoke detectors are of similar design and all are not capable of detecting real (visible) smoke and frequently remain silent as deadly conditions develop in a home.

WHY THE DEVICE IS NOT A TRUE SMOKE DETECTOR

When the device was first introduced in the United States as a fire detector it was named a Product of Combustion (POC) detector, **not** a smoke detector. No doubt the manufacturers knew it would **not** detect smoke (visible combustion particulate). The device usually contains one microcurie of Americium 241. This is a radioactive material that emits 37,000 Alpha particles (nuclei of the Helium atom) every second. The Helium atom is the second smallest atom and as it knocks electrons off air molecules it creates an electric current across the detection chamber. When a particulate produced by a fire or otherwise (consisting of an incredibly large number of incredibly small particles - a billion or two per cubic inch will do) enters the detection chamber, the current flow created by the radioactive emissions will be reduced and an alarm sounds. But, particles small enough and numerous enough to interfere with the 37,000 helium nuclei being emitted each second are far below the visibility range of the human eye. **Visible** particulate (smoke) from combustion is made up of particles that are “mountain size” in comparison to the helium nuclei that must be affected to create an alarm. Hence, the general rule is if **you** can see smoke the ionization type “smoke” detector **cannot** see it. Sometimes a fire will deliver to the detector the billions upon billions of atomic sized particles that are required to cause an alarm to sound while also producing enough large (visible) particles. Then it **appears** that (visible) smoke is causing it to sound. Of course, when the manufacturers wanted to sell the device as a “smoke” detector, they used “the right kind” of demonstration fires to deceive the observers.

PERFORMANCE LIES THAT DECEIVED FIRE OFFICIALS AND THE PUBLIC

AS THEY APPEARED WITHIN THE NFPA FIRE JOURNAL 1965-1981

Beginning during the mid 1960s and through 1981, advertisements appeared frequently within the NFPA *Fire Journal* claiming that the ionization device would react to all four designated “stages” of a fire from **Incipient** (chemical decomposition due to heat but no smoke or flames yet) through **Smoldering**, **Visible Flame** and finally the **High Heat** stage. Here are some of the direct quotes from some of these ads. Needless to say, all who were concerned with protecting lives in homes were impressed with the claims that the device would warn even before an actual fire developed.

PYR-A LARM (a subsidiary of Baker Industries); September 1965: “FASTEST Fire and Smoke Detection Available. Only PYR-A-LARM reacts immediately to the invisible products of combustion **before** there is visible smoke, heat or flame.”

BRK Electronics; July 1966: “Three minutes are worth a dozen fire engines. The BRK Electronic Fire Detector gives an alarm MINUTES, HOURS; even DAYS earlier . . . Before there is smoke, before there is fire . . . the BRK fire detector picks up invisible gases of combustion and triggers an alarm . . . And it does it without using radioactive material.” (*Actually the device did contain radioactive material.*)

BRK Electronics, Inc.; July, 1967: “I smell smoke. (Picture of bloodhound wearing fire chief hat) The BRK fire detector senses the invisible products of combustion that precedes actual fire and smoke.”

Kidde; November, 1968: “Is a little smoke any cause for alarm? You bet your business it is. Because a little smoke means a little fire. And we all know little fires grow big, fast as blazes. Well, Kidde makes a device that smells smoke and yells fire long before anything gets hot. (Even when the smoke is invisible.)”

Firemark (Division of Rixson, Inc.); March, 1969: “before visible smoke or fire - - - FIREMARK’S new FM-1600 Ionization Fire Detector will sense products of combustion and instantly respond.”

Honeywell Automation; July, 1969: “Honeywell engineers break the pattern. New, low-voltage, ionization fire detector senses combustion before the smoke appears. It senses products of combustion so small they’re invisible. Those you can’t even smell. That’s why UL listed it at *all* levels of sensitivity.”

Fire Lite, Kidde, Bliss Gamewell, Faraday, Simplex, The Autocall Company, and Unelco Limited; July 1969: “FIGHT FIRE . . . the easy way . . . before it starts! Fire Alert Ionization SMOKE DETECTORS – for Positive, Early Sensing of FIRE in its Incipient Stage.”

SmokeGuard (Statitrol Corporation); May 1972: “COMFORTING (picture of baby with a blanket) but hardly a life saver. Remember your old security blanket? Personal Comforting. Statitrol has a brand new “security blanket” that helps protect your home and family against the dangers of fire. It’s amazing how such a small addition to your home can give so much protection. Operating on the ionization principal, SmokeGuard senses danger – sounds a warning – gives you time to react – before you can even see or smell it.”

Honeywell, The Automation Company; July 1972: “Here’s an early warning system that lets you do something about fire . . . while there is still time on your side. The new detectors see “unseen” particles of combustion . . . in a fire’s *incipient* stage. The stage when you can do something about it! . . . before smoke, flames and heat build up. Before sprinklers are activated. When this system sounds off, you can do something about it.”

PYR-A-LARM (a subsidiary of Baker Industries); May 1973: “Pyr-A-Larm’s reputation was developed through engineering and technology. We developed the original ionization detector.”

Environment/one Corporation, (nev-r-fire detector); May, 1974: “It’s not a pacemaker. But it’s just as important to life – it’s part of the Incipient Fire Detection System – the newest concept and major breakthrough giving the earliest warning of impending danger at the **INCIPIENT** stage of a fire. Early enough so action can be taken to save life and property.”

BRK Electronics; September, 1974: “What a beautiful way to save lives! As smart as it looks, the electronics inside are even smarter. The ionization chamber and solid state circuitry are designed to detect products of combustion in all four stages of a fire – from the earliest (or incipient) stage to the smoke, flame and high heat stages.”

PYR-A-LARM (A subsidiary of Baker Industries); May, 1976: “Working on the principal of ionization, the Guardian can sound the alarm before you can smell smoke or notice heat or flames.”

Environment One; May, 1981: “Stop a fire before it’s a fire. Space-age system warns of fires before they ignite. Most fire detectors warn too late – after they have begun to smoke, smolder or burn. But now the Incipient Fire Detector (IFD) from Environment/One can detect pre-ignition conditions as well as fires. Alerts you when potentially flammable materials begin to overheat.”

THE LIES THAT KILLED TEN THOUSAND CHILDREN

These are the lies that killed ten thousand children. And the lies caused injuries and maiming to at least 50 thousand additional children. But the full harm inflicted on society is beyond calculating. There have been lost parents, lost siblings, months long hospital stays, pain and sorrow beyond bearing, surgeries to somewhat repair destroyed faces, lost assets, lost incomes, lost homes, lost heirlooms, bankruptcies, humiliation and even suicides in the wake of the fire devastations. And what makes it most intolerable is that those we trusted to protect us betrayed us. Because the lies and the four decades of cover-up were so effective, honest and reliable fire detectors (that would have all but eliminated fire deaths) were fire code eliminated from service in the home.

THE “SMOKE” DETECTOR CANNOT WARN OF A SMOLDERING FIRE

When the manufacturers claimed that the device would sound an alarm **before** smoke or flames appeared, obviously the implication was that it would definitely be sounding when smoke finally did appear. Therefore, the ads (backed by the UL Label) were guaranteeing to the consumer that the device would warn early when a **smoldering** fire developed caused by a cigarette on bedding or in the crevice of a sofa. However, the failure rate of that “instantaneous” device was so high that by the early 1970s the authorities knew that something was very wrong. So, beginning in 1974 a government funded test program called the Dunes Tests was initiated. These tests, employing real fires in real homes, were intended to evaluate the performances of fire detectors including the ionization device. During Phase 1 of the Dunes Tests (40 live fire tests) there were 18 tests involving **smoldering** type fires. The smoldering fires created potentially

deadly levels of smoke and toxic gases but virtually no heat. During Phase 1 there were 162 opportunities for installed ionization type smoke detectors to detect these potentially deadly fires as advertised. Zero ionization detectors sounded inside five minutes, one sounded within 10 minutes and only 28 operated within 30 minutes (**an 83 percent failure rate if failure to detect a smoky fire within a half hour would be considered a failure**). However, during the two phases of the Dunes Tests (76 fire tests during 1974-1976) three of the four test engineers were employees of UL. Of course, after about ten years of selling the defective device with a UL “certification”, the publicizing of these facts probably would have resulted in legal actions for wrongful deaths against UL. The true results of the tests program were concealed. At night, when all are asleep, a smoldering type fire can gradually create a deadly environment of thick visible (blinding) smoke and toxic gases, some of which are even deadlier than CO in lesser concentrations. It is the toxic gases, not smoke, that kills. But smoke can trap the victims and the combustion gases will kill.

THE DEVICE IS NOT SATISFACTORY PROTECTION FOR FLAMING FIRES

The ionization type so called smoke detector **is** capable of detecting the invisible, near atomic sized combustion particles produced by a **hot flaming fire**. But is it a **reliable** detector of the flaming fire? The answer is . . . **NO!** The fire that is flaming from the start will often doubles in size every minute. Black smoke at ten times the temperature of boiling water can be making the exit paths untenable in less than five minutes. A fast and reliable warning device is essential if life is to be saved in a home. On December 1, 1958 a fire occurred within the Lady of Angels School in Chicago. Thick smoke blocked the exits so fast that many young children and their teachers were trapped within their classrooms. Before the firefighters could rescue them 95 perished. Following that fire the Los Angeles Fire Department ran live fire tests in a real (retired) school to determine what level of smoke (light reduction per foot) would prevent travel through it to safety. The conclusion was that **when smoke rose above 4 percent** (40 percent reduction in visibility in ten feet, 80 percent in 20 feet) **the exit path would be considered unsafe to travel**. So, when testing the so called ionization device at UL **the smoke is allowed to go as high as 37 percent** (nine times the recommended limit) while passing the tests. Then the manufacturer may imprint the UL Logo on the device which will convince the consumer that it will save the kids when a fire occurs in the home. As previously stated, my calculations based on NFPA and federal loss data indicates that at least ten thousand dead children proved that the UL Logo is a marketing aid for a fraud.

FIRE IS A BUSINESS MOST PROFITABLE

Fire generates about two hundred billion dollars a year in sales and government expenditures. Fire is a business. The businesses that profit from fire need fires just as surely as the oil business needs automobiles. The two regulatory organizations that control the entry to the fire marketplace have been in control of the market for more than a hundred years. Both the NFPA and UL survive as controllers of the marketplace because organizations that profit from or otherwise benefit from fire support them. The two hundred and more fire codes that are enforced by the local and state fire officials are written by Code Committees of the NFPA. In turn, these committees predominantly consist of voting representatives from the very organizations that benefit from fire. The codes serve the organizations that write the codes, not necessarily the people. That is why a phony smoke detector replaced honest fire detectors that were in the code when the ionization device was first promoted. Also, that is why the fire sprinkler industry has been able to create NFPA codes that overprice fire sprinkler systems by up to ten times causing most buildings to be built devoid of sprinklers.. That is why the half hour and one hour fire rated compartments in nursing homes, apartment houses and motels often fail to contain the initial “one compartment” fire for even the five or ten minutes prior to the arrival of the firefighters. That is why high rise elevators are taken out of service, often condemning those trapped on upper floors to die, when a lower floor is burning. Rather than designing elevators to be safe exiting systems, the industry has avoided responsibility and potential liability by removing them from service when the building is burning. It is money, not humanity, that influences the testing at UL; and the writing of the NFPA codes that takes place in the four star hotels in distant cities.

PUBLIC DENIED REAL FIRE SAFETY

There are two solutions to fire that would reduce fire deaths by at least 90 percent. The reality is that when a family becomes aware of a fire in the home almost as soon as it initiates there is time to promptly extinguish it or to leave safely. Fire deaths occur because a **flaming** fire is allowed to grow large and deadly or a **smoldering** fire is allowed to create a toxic environment **BEFORE** discovery or warning. The NFPA/UL administrations have had a hundred years of free rein for controlling the multi-billion dollar fire marketplace. This control of a multi-billion dollar market place ended up as a bonanza for the profiteers of fire and a total disaster for the public. Fire testing and rigged fire codes have prevented the marketing of properly engineered low cost-available water sprinkler systems for homes. Such systems could perform well with the 5 to 15 gpm usually available in a home. But tests were rigged and falsified to impose a 40 gpm, impossible to achieve economically, criteria for home systems. (That, however, is another story.) **With available and reliable fire detectors an early warning of a house fire would be a 99.9 percent guarantee rather than a perhaps 17 percent guarantee with the present phony “smoke” detectors.** Proper protection will be a **photoelectric type (real) smoke detector** for **smoldering** fires and **heat detectors** for **flaming** fires. But the NFPA/UL market control system has prevented the marketing of the superior protection systems.

THE SMOKE DETECTOR FRAUD WAS ORGANIZATIONAL MURDER

The marketing of the ionization device was originally promoted with the false claim that it would warn of fire, **smoldering** or **flaming**, **“before smoke or flames appeared”** In time most fire department officials throughout the nation believed the lies. They began to promote the device and even petitioned the legislatures to adopt the NFPA code that was mandating the sale of the device. By 1974 when the Dunes Tests were run the fire chiefs were locked into the ionization type smoke detector as being the “essential” safety device in the home. After the Dunes Tests were run during 1974, which confirmed that the device was close to useless, the engineers in charge falsified the test report to hide the truth. But many officials had witnessed the testing and the truth was known to many. When I received a copy of the report I did not proceed far before I realized the report was as phony as the device being tested. During 1976 I published and distributed my report, **The Smoke Detector Fraud** which revealed the corruption. But it was extremely difficult for one man to overcome the power of the regulatory system. From that time onward, despite my continued efforts to get the truth out, the NFPA/UL team with the cooperation corrupt fire bureaucrats within the National Institute of Standards and Technology (NIST), were able to keep a lid on the fraud. The greater the number of fire deaths due to the phony smoke detector, the greater the incentive to hide the truth. To my knowledge not one of the offending organizations (that submitted falsified performance advertisements to the NFPA) ever corrected their initial devious and fraudulent claims. Therefore, I believe that all involved committed crimes worthy of the designation of **criminal fraud- second degree murder**. See the web sites below for videos of recent **honest** fire tests and information confirming the seriousness of the fraud.

www.Firecrusade.com • www.SmokeAlarmDisclosure.org
www.wthr.com • www.newschannel5.com • www.BarreCityFire.org

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