

California Makes A Stand for Photoelectric Smoke Alarms

"If everybody in the country would install these (photoelectric smoke alarms) . . . we would probably save about a thousand lives a year."



Gordon Simpkinson
Acting Fire Marshal
Palo Alto, California, USA

Page 5

"I call for the immediate removal of the fraudulent, "[deadly](#)" ionization so-called smoke alarm from all stores and homes in America before more people are needlessly maimed or killed."



Chief Marc McGinn
Albany, California, USA

Page 3

Contents

Albany Makes A Stand: Albany City Council & Staff	2.
San Francisco Chronicle - 15 August, 2010: 'Raising Alarm for Fire Safety'	3.
San Francisco Chronicle - 03 November, 2010: 'Palo Alto Rethinks Rules on Types of Smoke Alarms	5.
Palo Alto Makes A Stand: Extracts from Palo Alto Fire Department's website	6.
Albany Makes A Stand: Extracts from the World Fire Safety Foundation's website	7.
Albany's Public Awareness Communication: Spreading the message	9.
More Information: Further reading for the public and fire fighters	10.

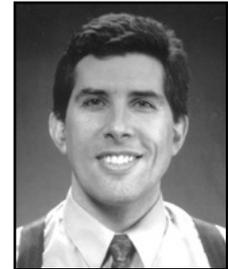
Albany City Council & Staff



Joanne Wile
Mayor

"This is the most important safety issue our City Council has addressed and I am hoping representatives of cities across the state will follow our example."

"As an elected official we have an obligation to establish ordinances that will help to inform consumers and ensure lifesaving photoelectric smoke detection technology will be present in all homes."



Farid Javandel
Vice Mayor



Marge Atkinson
Council Member

"When I talked to the Chief I believe his experience has determined most deaths occur during sleeping hours from smoldering fires and photoelectric smoke alarms are superior at detecting this type of fire."

"I support this 100%. This is one of the important things you can do that is really going to save some lives . . . for now we should protect our citizens."



Robert Lieber
Council Member



Peggy Thomsen
Council Member

"This ordinance mandates the photoelectric. . . . If technology can be developed that's even better I'm sure that they will bring that to us."

Note: Quotes relate to Ordinance 2010-06 mandating photoelectric smoke alarms in the City of Albany. Ordinance document and staff reports are available as templates for use by other councils [Here >>>](#)

Albany City Staff



Jeff Bond
City Planner

Aleisha Melford
FD Secretary

Jackie Bucholz
City Clerk

Kim Denton
City Treasurer

Marc McGinn
Fire Chief

Dave Henderson
Building Official

PHOTOELECTRIC - You Can Count On It!

Sunday, August 15, 2010

San Francisco Chronicle

California's Best Large Newspaper AS RATED BY THE CALIFORNIA NEWSPAPER PUBLISHERS ASSOCIATION | 63¢

TOP OF THE NEWS

Sporting Green
 • **Giants in a thriller:** S.F. comes from behind to tie in the 9th, then beats San Diego 2-1 in 10 innings. **B1**

• **Smoking Power:** Eubank and Davis each died on Aug. 16. Research shows they were actually violent twins. **B1**

Home
 • **No budget to expand? Think redesign.** **L1**

Style
 • **'Haul video' fad:** Shopaholics post their sprees on YouTube. **N1**

Bay Area
 • **Willie Brown:** Going easy over America's Cup possibility. **F1**

• **The Plunge:** Historic construction project in Sausalito. **F1**

Business
 • **Expert warns:** Oil Spill may be a local lead job: The U.S. has only a huge trade gap. **B6**

Travel
 • **Seville:** Big history — but a passion for the present. **M1**

Food
 • **Kitchen shocker:** Woman teaches her man to cook in one month. **K1**

BANKING

Judge hits Wells Fargo on 'tricks' to boost fees

By Robert Selva
CHRONICLE STAFF WRITER

Banking regulators might expect to be lulled by a federal judge's decision that Wells Fargo and other charges both to their accounts, but it's unlikely they would expect the judge to find the bank guilty of "tricks" to boost fees. A federal judge ruled last week that Wells Fargo's California account holders are owed \$10 million.

Last week, U.S. District Judge William Alsup concluded that Wells Fargo's "tricks" — various and other evidence proved that the bank made the bank's decision to reduce account holders' fees "in a way that was not fair, honest or in good faith."

Alsup said the bank's "tricks" included its "various and other evidence proved that the bank made the bank's decision to reduce account holders' fees "in a way that was not fair, honest or in good faith."

CAMPAIGN 2010



Empirically presiding over a protective Home may not save Nancy Pelosi's job as speaker.

With economy in doldrums, Pelosi's speakership on the line

By Carolyn Lockhead
CHRONICLE STAFF WRITER

WASHINGTON — It is a sign of how bad things are for Democrats that House Speaker Nancy Pelosi's best shot at keeping her job — even November is to lose an election — is to lose an election in Congress.

If the Republicans would take control of the chamber, and Pelosi would lose the gavel to Republican leader John Boehner and almost certainly face a coup.

"Pelosi's operation is doing everything it can to protect its members, but they're facing a very severe headwind."

David Blumenthal, Chief Political Reporter

Control of the House is "on the bubble," said Larry Sabato, director of the University of Virginia Center for Politics.

PROTECTION

Raising alarm for fire safety

Chief in Albany urges switching homes' detectors

By Kevin Fagan
CHRONICLE STAFF WRITER

Albany Fire Chief Marc McGinn says most smoke alarms in American homes are nearly useless and put residents in danger — so he's on a crusade to get them all swapped out for a cheap, better alternative.

Switching fire alarms could save about 1,500 lives a year, he believes, but the chief faces a mighty task to get the nationwide change he thinks is so badly needed.

Last month, McGinn persuaded the Albany City Council to become the first U.S. city to require every new building to use the kind of smoke alarm he recommends. Vermont has instituted a similar requirement.

That leaves 49 other states and thousands of cities to go. The obstacles: the primary manufacturer of smoke alarms and the two national agencies that regulate the devices.

"I don't care how hard I have to work to get this done."

Albany Fire Chief Marc McGinn

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"I don't care how hard I have to work to get this done."

Alarms continues on A12



Kevin Fagan
 SFC Journalist

Radio Interview

Within hours of the Chronicle being published, Chronicle reporter Kevin Fagan was interviewed on San Francisco's KCBS radio:

"The Fire Chief in Albany says most homes in the Bay area and the rest of the country, don't have the right smoke alarms and it's costing lives. Chronicle reporter Kevin Fagan writes about it in today's paper and joins us on the KCBS news line . . ."

Hear the radio interview [here >>>](#)

Continued . . .

FROM THE COVER

Fire chief calls for switching smoke alarms

Alarms from page A1

to stir the pot, this is the most important fire safety issue of our time," the 55-year-old McGinn said. "People are dying and being disfigured by fire every day we wait, and I just can't stand to think about that."

The issue boils down to the two main types of fire alarms sold in America: ionization alarms and photoelectric alarms. The first type is bad, McGinn says.

The two alarms look nearly identical: They're the white circles of plastic most folks are familiar with, and 96 percent of American homes have at least one kind.

2 types of alarms

An ionization alarm contains a tiny amount of radioactive material to set up an ionization chamber that creates an electric current. When the current is disturbed by smoke, the alarm sounds. It costs about \$10.

A photoelectric alarm, in contrast, contains a small beam of light. When smoke disturbs that beam, the alarm sounds. It costs about \$15.

The difference has to do with how smoke from different fires moves through the air and what is in that smoke.

For example, an overcooked dinner may produce small particles of smoke that waft through the air. The ionization alarm is sensitive to those tiny flecks, prompting false alarms. The photoelectric alarm can tell better when there isn't enough smoke to be a dangerous fire.

On the other end of the spectrum is the smoldering fire, which produces bigger particles. Those aren't as easily detected by the ionization alarm until the smolder becomes flames that produce the smaller particles.

Virtually all residential homes with smoke alarms have the ionization type, and virtually all commercial buildings have the photoelectric types, according to several studies.

McGinn — armed with a cluster of independent research conducted since the 1970s when the alarms hit the

market and governments began urging everyone to get them — says the ionization alarms are so inferior to the photoelectric alarms that they are "deadly." Unlike photoelectrics, ionizations were built primarily as flame detectors, he says — and people need warning long before a fire gets to the flame stage so they can flee, avoid fatal smoke inhalation or even react to squelch the blaze.

"Ionization alarms are the ones that go off when you burn your toast, and they can be so annoying that nearly a quarter of the people who own them turn them off," McGinn said.

"But even more important, they go off a lot slower than photoelectrics, and by the time you hear them it can be too late.

"We absolutely have to get rid of them."

Urging the switch

McGinn was inspired to his crusade four years ago when he happened upon a report on the two types of alarms. He wound up at the website of the World Fire Safety Foundation, an Australian nonprofit organization that advocates the switchover to photoelectric alarms. The group's site is stuffed with statistics and reports showing that ionization alarms go off more than 15 minutes later than photoelectrics in many fires, and sometimes not at all.

McGinn said he pulled Albany Fire Marshal Brian Crudo into his office and exclaimed: "Look at this. We're in trouble."

He called foundation co-founder Adrian Butler in Australia, and by the end of the conversation, he'd decided he had to raise the alarm about alarms.

One of the reports that convinced McGinn was written at Texas A&M University in 2003. It showed that ionization detectors take 15 minutes longer or more than photoelectric ones to detect smoldering fires. Those are particularly deadly because they often start while people are asleep and kill them with smoke before they can react. About 90 percent of U.S. homes at the time contained



Michael Macor / The Chronicle

Albany Fire Chief Marc McGinn is crusading to replace ionization smoke alarms, which he says are nearly useless and put homeowners in danger, with photoelectric smoke detectors.

ionization alarms, the university said.

The Barre (Vt.) Fire Department did an experiment in 2006 that showed a photoelectric alarm went off in 11 minutes, while the ionization alarm sounded after 1 hour and 6 minutes.

A 1980 report by a subcommittee of the International Association of Fire Chiefs concluded that, "because most home fires start from a smoldering source," the subcommittee "can take no other course but to recommend the installation of photoelectric detectors."

"We've been doing this for 10 years, and I've talked to few people with as much energy as Marc McGinn," Butler said in a phone interview. "We never give up because all these people keep dying, and I can tell he feels the same way."

Lives to be saved?

Statistics from organizations including the National Fire Protection Association and the U.S. Fire Administration show that 3,000 people die every year in home fires. Two-thirds of those deaths occurred in homes where smoke alarms were either not present or not working. About 22 percent of U.S. fire alarms are disconnected — most by people irritated at false alarms. The disconnected alarms are virtually all ionization alarms.

Based on those statistics, McGinn estimates that if photoelectrics were used nationally instead of ionization alarms, the number of fire deaths could

be cut at least by half to about 1,500. That's because the photoelectrics would not only be more effective, but they also wouldn't be disconnected as nuisances, he said.

"We cannot afford to not make this switch," he said.

City Council convinced

McGinn's research culminated at the Albany City Council meeting on July 19, when he presented his evidence and the council voted unanimously to require that all new buildings, including homes, in the 17,000-person city have only photoelectric alarms. Any buildings that receive upgrades costing more than \$5,000, plus all apartment units, also fall under this law.

"I was surprised to learn about all this," Councilwoman Marge Atkinson said. "Who knows about this? Who even knows there are two kinds of alarms? It's pretty serious.

"It's exciting, in a way. I mean, we're just little Albany and we're taking this big step. But no one wasn't ready to back our chief up. We all came to the same conclusion after hearing everything."

Also at the council meeting were representatives of Kidde, the nation's biggest maker of smoke alarms, and Underwriters Laboratories, which establishes the standards for the nation's smoke alarms. They both argued that there is nothing wrong with ionization alarms, and noted that they can detect actual flames quicker than photoelectric alarms.

Both organizations have

recommended for several years that homes use a dual alarm containing both ionization and photoelectric technology. They are joined in that recommendation by the National Fire Protection Association, which sets national standards for installing alarms.

McGinn opposes the dual alarms because they still contain ionization.

"I trust that the fire chief in Albany has the citizens' safety at heart," said John Drengeburt, consumer safety director for Underwriters Laboratories, in Illinois. "These guys are heroes and they want to save lives. But the people who come to our standards meetings haven't told us we need to change the standards."

That will change, if McGinn has his way.

The fire chief patterned much of his ordinance request after the law in Vermont, which went into effect last year at the behest of firefighters, and now he is determined to go statewide. He will be urging a switch to photoelectric alarms in a presentation at next month's annual conference of the California Fire Chiefs Association, where he will be joined by two men from Ohio who lost daughters to fire and have made it their life's work to ban ionization alarms.

"This is going to have to be a very big change," McGinn said. "But I think if we can get California to do it, the rest of the country will follow."

E-mail Kevin Fagan at kfagan@sfgchronicle.com.

Palo Alto Rethinks Rules on Types of Smoke Alarms

Kevin Fagan, Chronicle Staff Writer
Wednesday, November 3, 2010

Palo Alto is close to becoming the second city in the country to restrict the most common type of smoke alarm and require its lesser-known counterpart to be installed in new construction - and there may be more cities following suit.

Palo Alto's fire officials crafted the proposal after hearing about Albany Fire Chief Marc McGinn's campaign against common ionization smoke detectors. McGinn considers the detectors to be practically useless for preventing the most dangerous fires, and he persuaded the Albany City Council in July to require that people use the photoelectric type.

The Palo Alto City Council will consider doing essentially the same thing Monday, with some slight adjustments.

Photoelectric alarms detect smoke once it has crossed a small beam of light. Ionization detectors contain a tiny bit of radioactive material that creates an electric current, and once that current is disturbed by smoke, the alarm sounds.

The trouble with ionization alarms, McGinn - and now, Palo Alto fire officials - contend, is that they are triggered too readily by non-dangerous materials, such as steam from showers or smoke from a stove. This sends out so many false alarms that many people disable them.

Photoelectric detectors have been shown in several tests, including one at Texas A&M University in 2003, to be less prone to false alarms and to detect dangerous, smoldering fires much sooner than ionization devices.

'Safest way'

"We've become convinced that this is the safest way to go," said acting Palo Alto Fire Marshal Gordon Simpkinson. "We looked at what Chief McGinn did, and came up with our version. I think it can save lives.

"It's almost unheard of for a fast-burning fire to kill people in their sleep," Simpkinson said. "It's the smoldering kind that usually kills that way. And photoelectric detectors are just better for that kind of fire."

There has been no opposition publicly voiced to the proposed ordinance in Palo Alto. The city's website has already been updated to urge people "in all dwellings" to switch to photoelectric alarms, and fire officials have been urging the switch in public education appearances.

The ordinance, which would take effect Jan. 1, would require that only photoelectric devices be used within 20 feet of a bathroom or kitchen. Outside of that radius, combination alarms could be used, but not solely ionization alarms.

The two types of alarm look nearly identical from the outside. However, photoelectric devices come with a "P" printed on the bottom and cost about \$15, and ionization alarms carry an "I" on the bottom and cost about \$10.

Not pleased

Businesses that make ionization detectors, and the main

agencies that oversee them, are not pleased by efforts like those in Albany and Palo Alto, or in Vermont and Massachusetts, the two states that also restrict the use of ionization devices.

Virtually all homes that use smoke detectors have the ionization type, and virtually all commercial buildings with detectors use photoelectric alarms.

Both types of alarms serve useful functions, said John Drengenbert, consumer safety director for Underwriters Laboratories, which establishes standards for the nation's smoke alarms. And just because ionization detectors pick up a flaming fire quicker and photoelectric alarms are a bit better for smoldering blazes doesn't mean anyone should discard one in favor of the other, he said.

"They both will work, and they both still sound the alarm," Drengenbert said. "And so we say if you really want the maximum protection, get an alarm that is a combination of both."

Kidde, the nation's biggest maker of smoke alarms, also recommends that consumers get combination alarms with both ionization and photoelectric features. So does the National Fire Protection Association, which sets [U.S.](#) standards for installing alarms.

Task force

However, Albany's McGinn, fire officials in Vermont and Massachusetts and the World Fire Safety Foundation, an Australian nonprofit, all concluded that photoelectric detectors are the best option. The state Fire Marshal's Office, at the urging of the California Fire Chiefs Association, is forming a task force to explore whether state regulations should mandate photoelectric alarms.

The panel will consist of at least 15 people, including representatives of firefighting organizations, industrial producers and oversight agencies, said Daniel Berlant, state fire marshal spokesman. The first meeting is in December.

"This is most definitely an important issue to look at," Berlant said. "We want all stakeholders and scientific data involved."

McGinn says he won't stop until every city and state has an ionization-restricting ordinance. He added that since he gave a presentation to the Fire Chiefs Association's annual meeting in September, "officials in several cities have privately told me that they are now considering going with photoelectrics."

"I've had engineers, electrical contractors and so many other people call me and say they never knew there was such a difference in the technology of the alarms," McGinn said. "This is very important. We're trying to save lives here."

[Extracted page C-1, San Francisco Chronicle 04 Nov, 2010](#)

Extract from 'Palo Alto Fire Department' [Webpage](#) . . .



An Important Notice Regarding Home Smoke Alarms



Palo Alto homeowners need to be aware of possible hazards associated with ionization smoke alarms. The Palo Alto Fire Department web page includes a link to a helpful brochure at:

www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=24811

Field tests conducted by the International Association of Fire Chiefs, Texas A&M University and major smoke alarm manufacturers have documented significant deficiencies in the field performance of ionization smoke alarms. Iowa, Maine, Massachusetts and Vermont have already adopted regulations mandating photoelectric smoke alarms to some degree. In California, the cities of Albany and Cathedral City have adopted photoelectric alarm regulations.

The Palo Alto Fire Department recommends the immediate replacement of ionization smoke alarms with photoelectric units for all dwellings in the City. **How do photoelectric alarms detect smoke?** Photoelectric alarms use a beam of light to detect visible smoke particles passing through a sample chamber. Photoelectric alarms are far less prone to nuisance activation. Photoelectric alarms react slower to rapidly growing fires than ionization alarms, but laboratory and field tests have shown that photoelectric smoke alarms provide adequate warning for all types of fires and have been shown to be far less likely to be deactivated by occupants.

. . . continued

Extracted 04 Nov, 2010 from Palo Alto Fire Departments website. The complete page at:
www.CityOfPaloAlto.org/depts/fir/news/details.asp?NewsID=1660&TargetID=99

Extract from 'Albany Makes a Stand' [Webpage](#) 1 of 2 . . .

Albany, California, USA

The World Fire Safety Foundation

home action afac **albany** cbs combocon evidence ffs films firefighters hook iafc iaaff nist sa safe uc ul

San Francisco Chronicle

15 August, 2010 Front Page Story [Here >>>](#)



Firefighter/Paramedics James Sanders & Brett Schlueter

ALBANY CALIFORNIA MAKES A STAND



Joanne Wile
Mayor

"This is the most important safety issue our City Council has addressed and I am hoping representatives of cities across the state will follow our example."



"Who even knows there are two kinds of alarms? . . . We all came to the same conclusion after hearing everything."

extract San Francisco Chronicle, 15 August, 2010



Marge Atkinson
Council Member

The 'David vs Goliath' story behind Albany's stand to protect its Citizens

[More >>>](#)

Chief McGinn explains the dangerous defects inherent in ionization alarms and the safe photoelectric alternatives



After Chief McGinn's presentation, the Council voted unanimously to pass the first reading of the proposed smoke alarm ordinance.

Why don't UL listed ionization 'smoke' alarms activate in a room full of smoke? UL's John Drenenberg: "I really don't know"



Despite a concerted effort by UL, Kidde and others, Albany City Council voted an emphatic 5-0 in favour of photoelectric smoke alarms.

**Underwriters Laboratories (UL)
Ionization Smoke Alarm Testing Exposed**

How Safe are Products Bearing the UL Mark?

Why are People Dying in Fires With Working UL Listed Smoke Alarms?

Read the Award-Winning Washington Post Exposé [Here >>>](#)

Smoke Alarms

Why are people dying in fires with working Smoke Alarms?

Seminar June 28, 2010

See Dean Dennis' & Doug Turnbulls' University of Cincinnati Presentation

UNIVERSITY OF CINCINNATI [Here >>>](#)

UL Representative, Howard Hopper F.P.E.:

"There are some fire officials around that have seen the videos that you have seen and these we would call them more of demonstrations."



Dr Don B Russell, PhD, Texas A & M University:

"The smoke was there - it was scientifically measured on both sides of the smoke detectors, it is clearly thick and those smoke detectors weren't going off . . . Their (UL's) science isn't any good. . ."



Richard Patton, F.P.E.

Chairman, World's First Fire Detection Code:

"This is the test for the smouldering fire at Underwriters Laboratories. They put ponderosa pines sticks on a hot plate, heat it to 700 degrees, create a type of smoke that will set the detector off. So they have a false test for the smouldering fire test . . . This is why we have the confusion. . ."



Chief Marc McGinn

A Message from Albany Fire Chief, Marc McGinn

I encourage all Fire Chiefs, Fire Marshals, and Fire Officials to use any or all information as it pertains to the Albany Fire Department's Staff Reports and City of Albany Fire Prevention Ordinance (below). We have all taken an oath, whether implied or expressed, to protect the lives of our citizens by employing the best fire prevention methods known and available.

Without a shadow of a doubt, this Ordinance will surely provide the best fire protection to your community. I want to thank the World Fire Safety Foundation (WFSF) for providing me with all the research information. Moreover, the WFSF put me in contact with nationally renowned Fire Protection Engineer, [Richard Patton](#); and the two Ohio fathers, [Dean Dennis and Doug Turnbull](#) who tragically lost their daughters in separate house fires due to the failure of ionization alarms.

These three men attended the Albany City Council Meeting's second reading of the Ordinance when they heard UL and Kidde were going to attend in attempt to try and block the Ordinance. Richard, Dean, and Doug assisted me in passing this paramount ordinance with an emphatic 5-0 vote from Council. This was a team effort and would not have been possible without their attendance, the WFSF's research, and everyone's encouragement.

Marc McGinn, Albany (CA) Fire Chief, 1992 - present

Chief McGinn's Closing Statement to the Albany City Council is: [Here >>>](#)

Public Awareness Communication - Overview



Driver Side

Signwriting

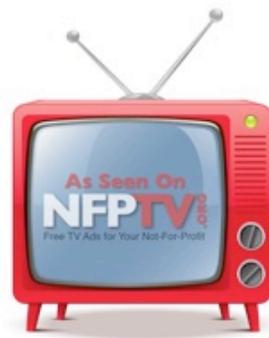
pages 5-6

Passenger Side



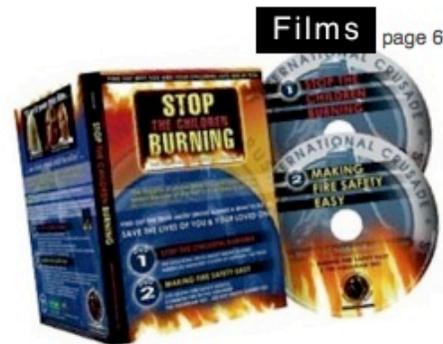
Door-Hangers

page 4



TV Advertising

page 7



Films

page 6

TShirts

Note: This Public Awareness Communication (PAC) advises the public about photoelectric smoke alarms and is designed for use by any Fire Department.

Customizable templates will soon be available for all artwork.

Ideas/feedback welcome and appreciated (see last page).



PHOTOELECTRIC - You Can Count On It!

Albany's Public Awareness Communication

Advising the public about photoelectric smoke alarms

[Here >>>](#)

Are You Protecting Your Family?



Smoke Alarm Type:

	Photoelectric	Ionization
Environment:	100% Safe	Radioactive
False Alarms:	Few	Frequent
Failure Rate:	Low	High
Located:	Commercial Buildings	Almost Every Home
Price:	Affordable	Affordable

For more information: www.theWFSF.org/compare

For Fire Fighters . . .

UNIVERSITY OF Cincinnati **Smoke Detector Seminar**
College of Engineering & Applied Sciences

ALUMNI ASSOCIATION

Fire Chiefs Round Table

The World Fire Safety Foundation thanks the University of Cincinnati for permission to reproduce this video

University of Cincinnati, Ohio, USA Department of Fire Science Videos

What type of smoke detector/alarms should Fire Departments recommend to the public - ionization, photoelectric or dual?

theWFSF.org/uc