

SAFENIGHT TECHNOLOGY INC.

"the safer smoke detector network"

2121 Electric Road SW
Roanoke, Virginia 24018
(703) 989-5738

October 25, 1995

Ms. Michelle Burgess, Mechanical Engineer
United States Nuclear Regulatory Commission
#2 Wide Flint North
11555 Rockville Pike T-8f5
Rockville, MD 20852

Re: Distributor Inspection Controls V. 2

Dear Michelle:

We propose the following procedures to insure proper quality control on our distributor sampling:

- 1) Our USA located subcontractor will record per log book results of the LTPD 5% sampling for:
 - a) removable contamination - will be checked by raising the cover and measuring for leakage using a Ludlum Model 3 survey meter with pancake probe.
 - b) design conformity - structural, labels, point-of-purchase packaging will be in accordance with submitted drawings and correspondence

The log will include:

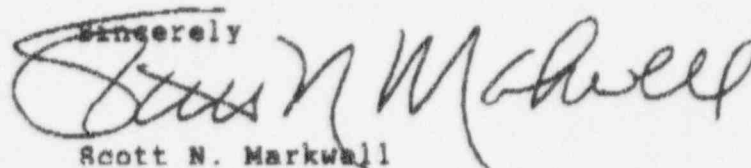
- 1) date
 - 2) a manufacturing lot identification number
 - 3) lot size
 - 4) pass/fail check-offs
 - a) removable contamination
 - b) design conformity
 - 5) detail action actually taken in event of failure
- 2) Disposition of lot - If any units within a sample are observed to be defective, the entire lot will be inspected. Failed units will be disposed of by returning the defective chamber(s) to either HomeWatch Limited or to the source and button manufacturer (NRD or Amersham)
 - 3) A copy of the test results will be sent within one week to SafeNight Corporate headquarters in Roanoke, Virginia. They will be kept on file and available for inspection here.

1/2

- 1) We will be present during the initial inspection of goods for LTPD 5% sampling to insure procedures are in place and followed.
- 5) Within the first 6 months, we will audit in person the process to insure that it is occurring.
- 6) Assuming a successful process is in place, we will audit in person at least yearly after that inspection.

I hope this suffices. Thank you.

Sincerely



Scott N. Markwall
President

SNM/ct

SAFENIGHT TECHNOLOGY INC.*"the safer smoke detector network"*

2121 Electric Road SW
Roanoke, Virginia 24018
(703) 989-5758

F A X T R A N S M I T T A L S H E E T

To: Ms. Michelle Burgess, Mechanical EngineerCompany: USNRCRegarding: Distribution V2Number of pages (including this sheet) 3From: Scott N. Markwell

11/15/95 call from Scott Marshall - DONE
~~Q~~ on clarifying what is needed on A

12/19/95 call from Scott Marshall - DONE

- ① more on what is needed in QA
- ② trying to get info from computer licenses
would like extension to 1/5 ← OK by SLB?
Susan Greene says she has forwarded it as a FOIA

Drawings: Available in Central Files

Figure 1

source holder - material?
(button)

AL, brass, SS?

page 4 (see red tab
5 from old
cette.)

②

③

④

⑦

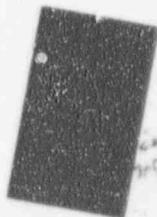
need exact dim of source cup
VS. button
NRC & Amersham

drugs do not match 100 chamber cover



X sect decm

like the NRD
source
hold drug
pg 4 (BZ8)



W/11 this is
a check of source
but the box/holder?

Note to : file

Fri 11/3/95

From: Michele L. Burgess

Re :

SafeNight Technology Meeting
Friday, November 3, 1995
8:30am, Room T-8C1

Attendees:

NRC: Steven Baggett, Douglas Broadus, Michele Burgess, Bruce Carrico, Susan Greene
Scott Markwell from SafeNight Technology, Roanoke, VA

Purpose of meeting:

To discuss outstanding issues to be resolved in SafeNight's application to distribute smoke detectors under an exempt distribution license, specifically, to address certain issues related to the safety review and issuance of the registration certificate.

Points for discussion:

1. tests for removable contamination - must use wipe test method
2. QA/QC requirements
 - removable contamination
 - must be done at U.S. contractor location, and must wipe surface of ion chamber
 - design conformity (includes check on labeling of detector/point-of-sale packaging)
 - level of detail necessary
 - design conformity on ion chamber construction
 - done at point of manufacture
 - done at smoke detector manufacturer
 - done at U.S. contractor site
 - design conformity on smoke detector construction
 - done at point of manufacture
 - done at U.S. contractor site
3. U.S. contractor
 - must perform test for removable contamination
 - must perform check on design conformity - the level of detail will be determined by the existence of any QC/auditing arrangements made with the manufacturers
4. explain the three example models: — *cover procedures/audit expectations here*
 - testing done at U.S. contractor only
 - testing done at U.S. contractor and smoke detector manufacturer
 - testing done at U.S. contractor, smoke detector manufacturer, and ion chamber manufacturer
5. address additional scenarios suggested by Mr. Markwell

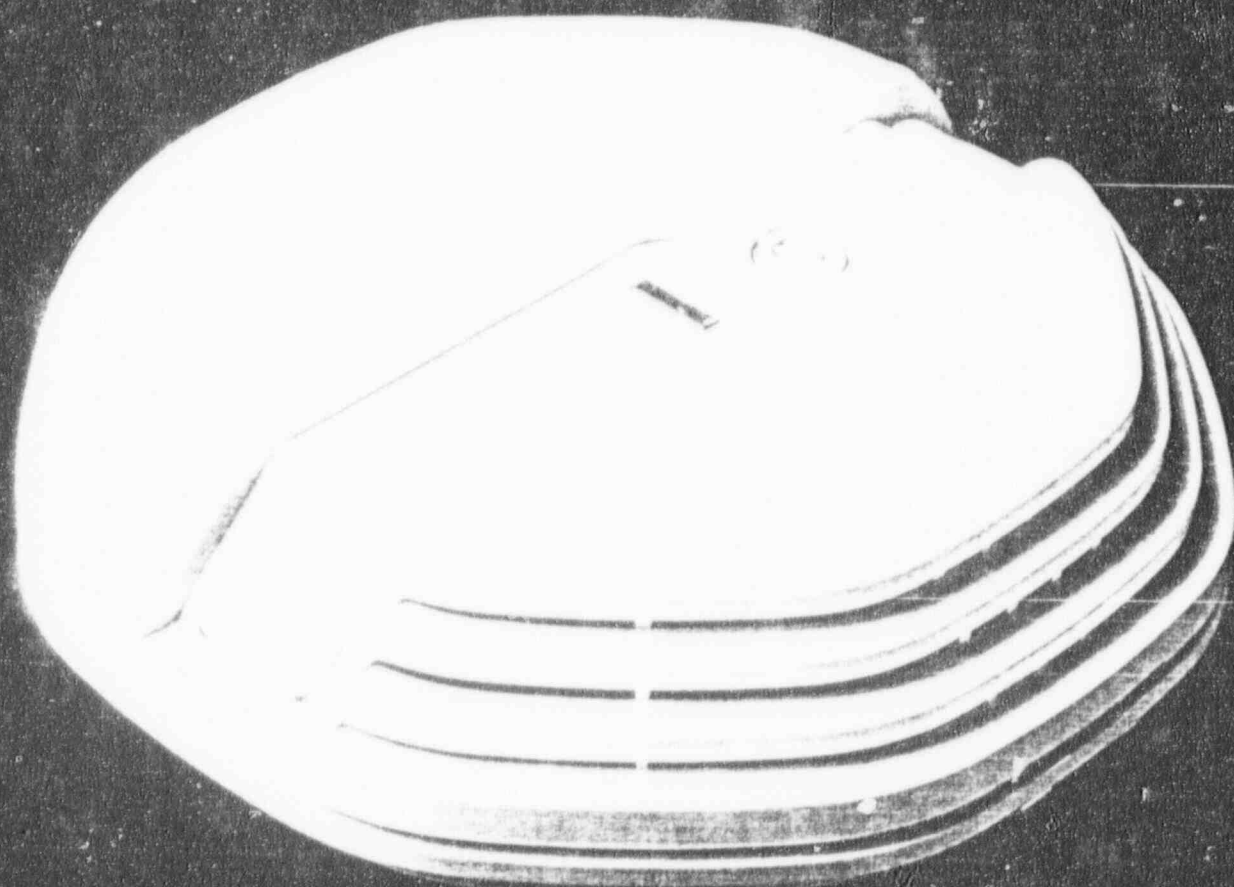
Mr. Markwell intends to resubmit the application in its entirety addressing the design specs & QA/QA requirements in a generic nature. He will call on Monday 11/6 to confirm course of action

Michele Burgess

NEW

SafeNight™

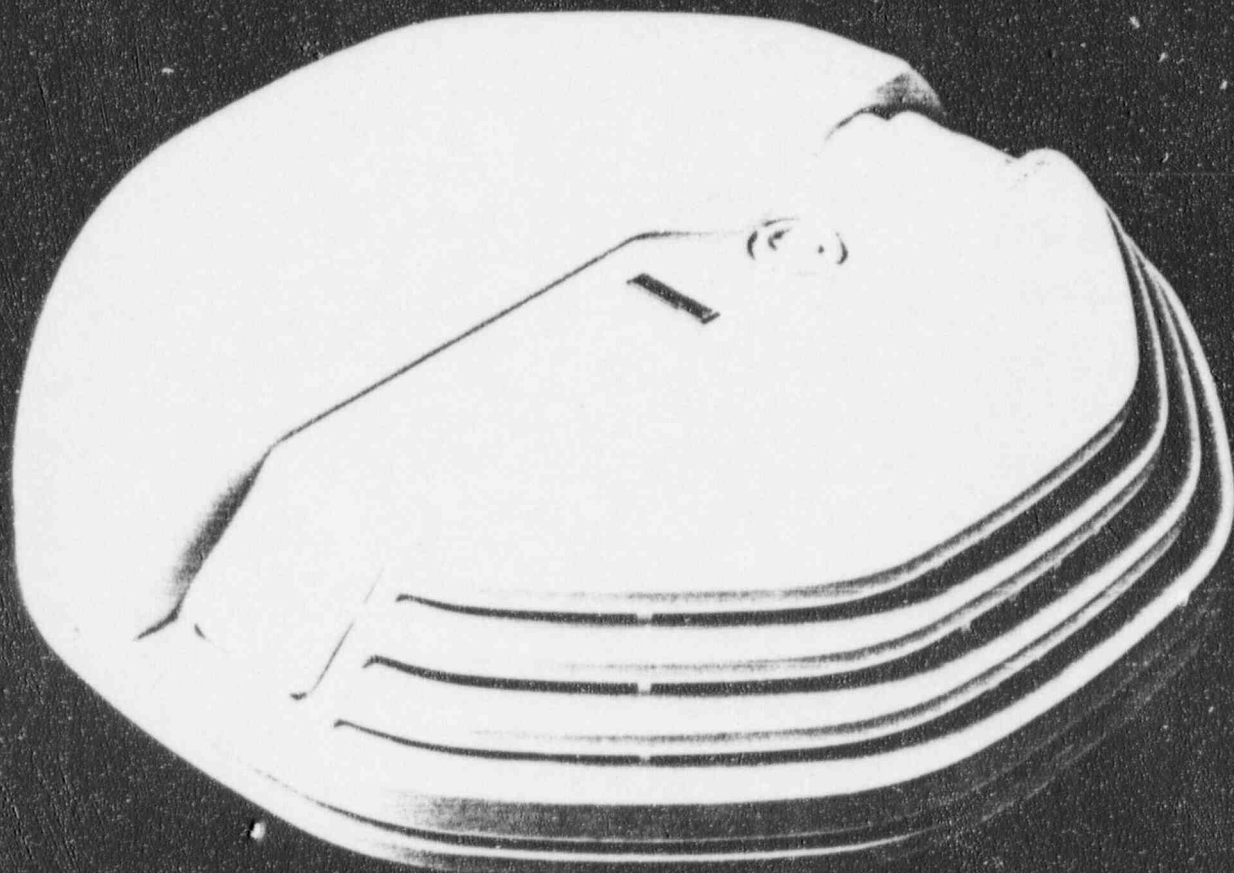
Wireless, Battery-Powered
Smoke Detectors.



*
All alarm together when any
SafeNight detector senses smoke.

SafeNight™

Wireless, Battery-Powered
Smoke Detectors.



All alarm together when any
detector senses smoke.

When Minutes Count.

SafeNight smoke detectors undergo rigorous UL smoke detector testing and meet the highest manufacturing quality standards.

Repeating Signal Alert (RSA)

A patented communications protocol that ensures the best possible radio signal reliability.

Test/Silence Control Buttons

In the event of a false alarm (or testing), one button on any unit can silence and control the entire network.

Low Power Usage Circuitry - High technology circuitry that uses very little power. A single 9-volt battery provides power far longer than for conventional radio products.

Smoke Sensing Chamber

A proven, high performance smoke sensing device.

Computer Chip

A 44-pin custom integrated circuit incorporating C-Mos circuitry and thousands of transistors.

Piezoelectric Horn

High quality, loud warning horn.

LED Light

Indicates which detector originates the alarm.

ABS Housing

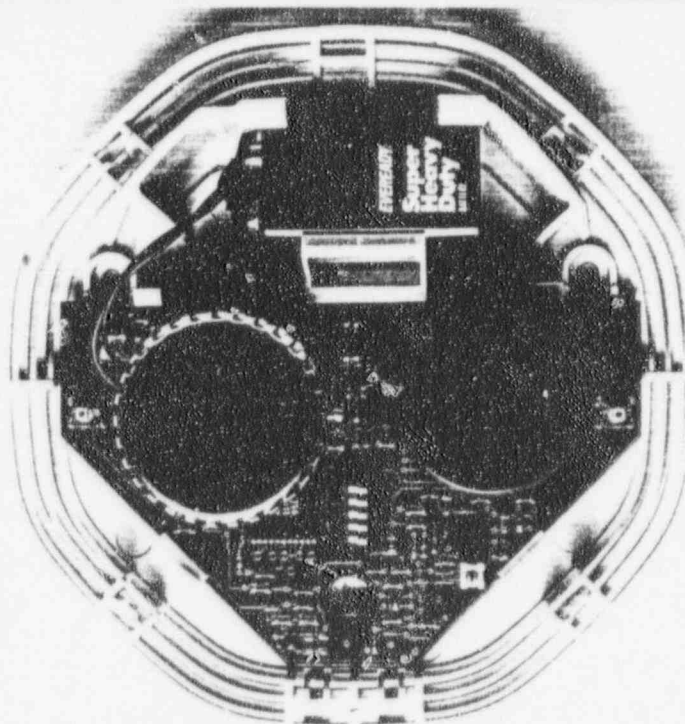
An attractive, heavy duty housing.

Intelligent Command Controller

A custom manchester encoder/decoder design allows each SafeNight detector to control all others in your system.

Transmitter/Ultra Sensitive Receiver

Detectors communicate through a very reliable multiplexed radio communication network.



SafeNight Smoke Detectors feature a world-class design that is the result of a joint effort between a leading U.S. military defense contractor and other commercial firms.

Patent Pending, U.S. Patent Number 4,363,031

SafeNight Technology, Inc.

2121 Electric Road SW
PO Box 21847
Roanoke, Virginia 24018
703/989-5738
After 8/1/95, 540/989-5738

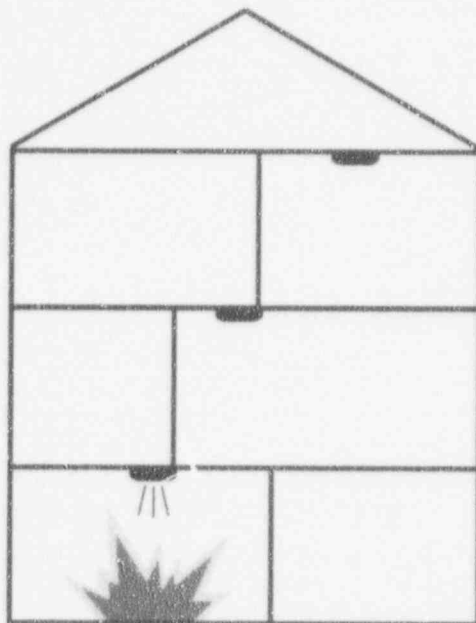
SafeNight™ Smoke Detect

All alarm together when any Sa

Conventional battery-powered smoke detectors are obsolete.

1. A basement smoke alarm sounds in response to a fire. This alarm wakes no one. Few people are awakened by fire alarms that are not in close proximity to where they are sleeping.

2. Two minutes into the fire. Flames are really starting to kick up. This fire will double in size every thirty seconds.



3. Three minutes. Fire and smoke roar toward the unsuspecting family. A second smoke alarm sounds but is still too distant, and no one hears.

4. Four minutes. The smoke and fire block some exits as the sleeping - level alarm sounds. Panicked, this family has only seconds to escape.

Conventional battery-powered smoke alarms, even when functioning perfectly, simply cannot deliver the protection families need.

"At present, I may have a fire security, but I first-floor or smoke detector awakened then — Cha researcher

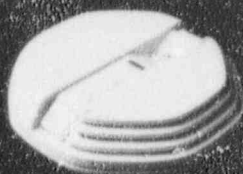
"Detectors remote from area may not enough to average pers — Nation tion Ass

"Smoke detector be heard. We that smoke detector interconnect — a major sr

SafeNight Smoke Detectors.

All alarm when any one senses smoke.

SafeNight Smoke Detectors offer protection for your family no other battery-powered smoke detector can match. Though each unit is a wireless, battery-powered smoke detector, when one alarms, all alarm. Working together through an advanced system of radio transmitters and receivers, SafeNight provides the maximum warning of fire and the most reaction time for your family.

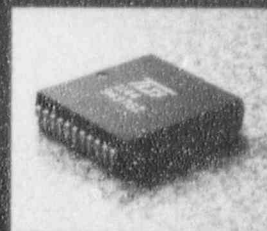


A new generation of technology.

A new level of protection.

The key is in a revolutionary computer chip and patented **Repeating Signal Alert (RSA)** that recognizes the presence of smoke and initiates radio signals, causing all other alarms in the network to sound.

Although SafeNight Smoke Detectors are a bold leap forward in terms of electronic sophistication, they are easy to use. In fact, one button on any unit can test or silence the entire network.



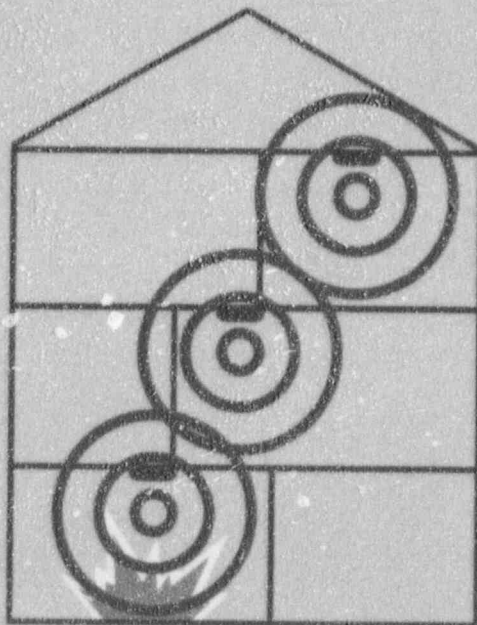
Seconds. When Minutes Count.

Night detector senses smoke.

SafeNight All-Alarm Smoke Detectors deliver unsurpassed protection.

1. The SafeNight smoke alarm located in the basement sounds in response to a fire. As family members sleep upstairs, the basement alarm sends radio signals to other SafeNight detectors.

2. Quickly, all other SafeNight alarms that are part of the local network receive the radio signal and begin to sound, awakening the family.



3. Time is still precious, but this family has up to 400% more time to escape the fire and smoke than conventional battery-powered alarms allow.

4. The family exits quickly to the safety and comfort of a neighbor's home.

**ANSTEC
APERTURE
CARD**

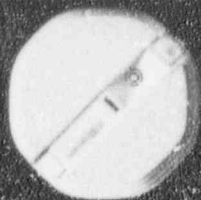
This family is safe because of the superior protection provided by SafeNight All-Alarm Smoke Detectors.

Also Available on
Aperture Card

When minutes count.

Earlier warning means better protection.

SafeNight's all-alarm protection is a concept that has been enthusiastically endorsed by fire and safety experts as well as insurance professionals.



Contrasted with conventional battery-operated smoke detectors, our all-alarm feature could allow up to four times more warning time to react to a fire...time that can be used to save lives and property.

The advantages of a hard-wired alarm system.

Without the expense.

Since 1989, virtually all new construction codes have required wired interconnected smoke alarm systems so all detectors sound when there is a fire. It's an idea that saves lives. Yet the vast majority of owners of homes built prior to this regulation have not installed these systems because of the expense of wiring. In fact, wiring a system into an existing home can cost thousands of dollars.



SafeNight Smoke Detectors make the superior protection of interconnected alarms affordable.

9701310180-01