

INTERNATIONAL ASSOCIATION OF **ARSON INVESTIGATORS**

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Editorial

We would like to see letters to the editor, so get pen and paper and send to: The Editor, 158 Cobham Avenue, WEST RYDE NSW 2114

ART DIRECTOR — TONY HANNA

PRINTING—FIRST IMPRESSIONS

Articles appearing in this magazine do not necessarily reflect the view or opinions of I.A.A.I and are entirely the responsibility of the authors.

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INTERNATIONAL ASSOCIATION OF ARSON INVESTIGATORS NEW SOUTH WALES CHAPTER (No. 47) INC.

PRESIDENT'S MESSAGE

In this, my first message as President of the NSW Chapter of I.A.A.I., I give welcome to all and wish everyone a happy and prosperous 1995.

The NSW Chapter Annual General Meeting was held on the 5th. December, 1994 during which, the following Committee of Management was elected to serve in 1995:

PRESIDENT: Roger BUCHOLTZ

(NSW Fire Brigades)

SEN. V. PRES: Ross BLOWERS

(CIC Insurance Ltd.)

JUN. V. PRES: Mitchell PARISH

(Zurich Insur. Ltd.)

SECRETARY: Robert CAMERON

(Abbott Tout)

TREASURER: Claire WIVELL

(Phillips Fox)

COMMITTEE

Barbara BAILEY Carl CAMERON Martin GREEN Robert KING **Bruce SAINSBURY**

I give warm welcome to the new faces on the Committee and express the thanks of the Chapter members, as well as my own, to the outgoing Committee for their unstinted time and effort during 1994.

NAME CHANGE

At the Annual General Meeting of the Chapter, a proposal was placed before the Committee and members calling for a change of name for the Chapter.

After relatively brief discussion, it was agreed that the name to be adopted would be:

"N.S.W. ASSOCIATION of FIRE INVESTIGATORS Inc."

Members will see that this is a culmination of not a little agitation by members to correct the very erroneous view that our fire investigator members only investigate arson related fires. As the name change has to be accepted by the Corporate Affairs Commissioner, it is not yet our official title and we will keep you informed when this becomes fact but we do not believe there will be any difficulty in having the change accepted.

I, and the Committee, consider that the new title will represent more clearly the role of our investigator members in the Association.

DISCUSSION EVENINGS

We will continue to follow the Chapter's Charter in doing our best to create opportunities for education over a broad range of member oriented interests during 1995 and the following dates have been set aside for the purpose:

THURSDAY, MARCH 9th

THURSDAY, MAY, 4th

THURSDAY, SEPTEMBER 21st

These evenings will all be held at North Sydney Leagues Club commencing at 1800 hours (6.00 pm for people with ordinary watches)

WRITE THESE DATES IN YOUR DIARY NOW!

ANNUAL GENERAL MEETING

This will be held on THURSDAY, DECEMBER 7th. at a venue to be advised later. This should also be a diary entry!

> **NSW CHAPTER** ANNUAL DUES

ONE DAY SEMINAR

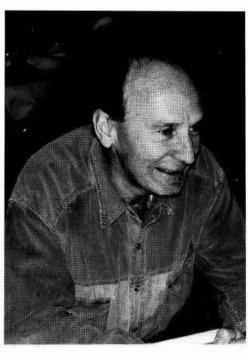
"SET TO EXPLODE"

This has been planned for THURSDAY, AUGUST 3rd. at GOLDEN GATE PLAZA Thomas Street HAYMARKET, SYDNEY

This is not to be missed!

Finally, I ask you to keep in mind that this is YOUR magazine. Please support it by using it not only to gain knowledge but also to pass on to others information which will be of value either by submitting articles or writing to the Editor. Your views are eagerly sought.

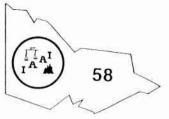
ROGER BUCHOLTZ **NSW PRESIDENT**



STOP PRESS!

THE NSW CHAPTER DISCUSSION **DON'T FORGET!** NOW \$40.00 EVENING HAS BEEN POSTPONED TO THURSDAY, 16th. MARCH, 1995 **BUT STILL AT NORTH SYDNEY** LEAGUES CLUB AT 6.00 pm.





I.A.A.I. Victorian Chapter 58

EDITORIAL

I hope all members have had a safe and eventful Christmas and New year.

The Committee has planned activities designed to enhance the education and social aspects of the Chapter for the coming year and invites all members to take advantage of them.

Any comments or suggestions for either forthcoming events or articles for the Journal should be directed to the Secretary.

The "House Burn" which was advertised for April this year has now been postponed due to the house which was organised no longer being available.

Due to the importance of this event, the Chapter has planned that it will occur later in this year.

PHOTOGRAPHIC CONTEST

As there have been <u>no</u> entries for this competition the contest will be continued and will close on January 1st., 1996.

This will give all members the opportunity throughout this year to get their camera and other essential equipment into gear and send us their winning entry.

Here is your opportunity to show others how to take photographs. Who knows? The first prize could lie somewhere between a free film (12 exposures) and a top-of-the-line camera as you step aboard for your all expenses paid Caribbean cruise. But you'll never know unless you enter!

COMING EVENTS

APRIL 1995 - DINNER MEETING (To be advised)

JUNE 1995 - DINNER MEETING
(To be advised)

JULY 1995 - AGM & SUPPER MEETING

AUGUST 1995 - DINNER MEETING

OCTOBER 1995 - CHAPTER SEMINAR 1955

NOVEMBER 1995 - SOCIAL FUNCTION

POSTPONED DINNER MEETING

The Dinner Meeting; "Failure to Search is Failure to Find", which was scheduled for Tuesday, 21st. of February, 1995, was postponed due to a lack of attending numbers.

This session will be rescheduled to another date to be advised.

If members have any other suggestions for these night meetings designed to improve attendances or; other suitable subjects which should be considered as attracting attendances, please contact Secretary Phil. Harris on (03) 420 3883.

COMMITTEE CONTACTS

CHANGES

Members should take note of the following contact amendments for the Chapter:

PRESIDENT: Garry MARTIN Phone: (03) 420 3883

SECRETARY: Phil. HARRIS Phone: (03) 420 3883

COMMITTEE: Brian NEAL Phone: (03) 762 1322

NOVEMBER GOLF DAY

The Chapter held a Social Golf Day at the Yarra Bend Golf Club on which occasion, 42 members attended with a further 14 supporters. All those who attended enjoyed the golf and the following barbecue and, many thanks to **COLIN**, the Chief Cook.

There were several prizes presented with the overall team event being won by the Metropolitan Fire Brigade Team.

WORLD POLICE & FIRE GAMES

During the last week of February, 1995, Melbourne hosted the World Police and Fire Games in which some of our members participated as competitors and support staff

All the visiting teams enjoyed the sports and the friendly atmosphere of both Melbourne and Australia.

Some of the international visitors had already, or were planning to visit more places in Australia so, you may see them traveling about.

By all reports, the games were a total success.

BRIAN NEAL EDITOR, VICTORIA CHAPTER

DID YOU KNOW?

Energy authorities test electrical appliances for safety prior to permitting their sale. This testing is exhaustive and ensures that you can only purchase electrically safe equipment which complies with Australian Standards or a standard promoted by an acceptable overseas body.

Unfortunately, and understandably, this is no guarantee that a failure leading to the production of sufficient heat to cause fire will not occur some years of operation down the track.

This failure can embody parts; i.e. bearings, which are not vital to electrical safety but blame will tend to make the equipment of dubious electrical safety when such is not the case. Take care to find the real failure!



JUVENILE FIRESETTERS

SOME NEW APPROACHES

This is a paper presented to the NSW Chapter Seminar in July this year by Station Officer Ian KRIMMER of the NSW Fire Brigade. Ian is a Regional Fire Prevention Officer and has, over many years, dedicated himself to saving the lives of children by educating them and their parents/guardians in the dangers of fire concentrating on the well known problem of the child's curiosity about fire. He is well known to children and probably also to their parents through his marvelously instructive puppet "MR. CINDERS". He has taken the trouble to equip himself for the task by successfully completing courses and was granted the singular honour of a Churchill Fellowship directed towards the subject matter.

His ability and the importance of his safety contribution has been recognised officially by education authorities by accrediting him as a qualified teacher.

"To take a fire crew with its gleaming red fire engine with lights and siren to the school and teach - 'Don't Play With Matches' - is like sitting a child in a candy shop and expecting the child to learn about the dangers of tooth decay!" (anon)

QUESTION: In our good natured attempts to educate our youth, have we unwittingly compounded the very problem we have been trying to stop?

It is documented (Kafry, 1980; Cole et al., 1986) that children, especially boys, from the age of two onwards, will progress through a period of fascination with fire.

For many, it will simply be the birthday candle, the ..."please light it again!..." syndrome which most parents have experienced. For many others it will progress on to more intense fire experimentation and **fire play**.

For some, sadly, a pattern of **firesetting** will be established in the early impressionable years when it is quickly realised that a cigarette lighter is an effective weapon which can be carried (legally) in the pocket and quickly utilised to attract attention, fight back, destroy or even kill.

THE FACTS:

*NSW Fire Brigades attend about 35,000 fire incidents annually.

*Every year, about 9,000 of these fire incidents are attributed to children under the age of 16 years. It has been estimated (Fineman, K.R.. 1980) that only 10% of fires lit by children are brought to the attention of fire departments. The other 90% being discovered by parents etc. and extinguished without further assistance being required.

It is therefore suggested that, in NSW, some 90,000 fires are lit annually by young children.

These figures are frightening when it is considered what the potential of a young child in possession of a cigarette lighter, and unaware of the apparent risks, can inflict on themselves and their immediate environment.

SOME NEW APPROACHES

The NSW Fire Brigade is investigating some new approaches to these problems.

1. PRIMARY INTERVENTION approach to children

The first time we meet the children, usually in the pre-school environment, are we achieving our objective of teaching the child appropriate fire competent behavior?

2. SECONDARY INTERVENTION approach.

How do we best deal with a child who is identified as having inappropriate fire competencies or behavior?

This child is often:

- a) Met on the fireground
- b) Brought to the fire station by a concerned parent
- Brought to the attention of the Brigade by a teacher, welfare worker, police officer, criminal justice system etc.

PRIMARY INTERVENTION

All children from the age of two years and onwards will become curious about fire. This is a normal phase of growing as they experience the environment around them. The major problem is that most younger children have no concept of the life threatening properties of fire. Most youngsters have no understanding that clothing and skin can burn.

Traditionally, the NSW Fire Brigade has responded to requests from preschools for fire engine visits etc. There is some concern that there may be a better approach to child fire education and safety.

Recent studies, particularly done in Melbourne during 1993 and 1994, have revealed that there are concerns that when the children see a fire engine, meet the firefighters, hear the siren etc., there is a high probability that fire curiosity will increase, particularly in boys from the age of two onwards. This is probably due to the high level of excitement which a fire engine, its crew and equipment create.



• All firefighters enjoy going to fires; we wouldn't be in the Fire Brigade if that wasn't true! Unfortunately, children are very perceptive! No matter how hard we try, we can't avoid imparting this impression to children that fires are exciting and, sometimes, fun!

In order to address this serious concern, we are trialing what we believe is a better approach.

Before we show children our fire engines and fire stations, we must ensure that all of the children have an understanding that fire is a "Negative Experience" - Fire kills and destroys!

As members of the NSW Fire Brigade, we are amongst the most proficient and professional fire combating agencies in the world, our skills do not always extend to the recognised and specialised expertise required in child education.

 We now ask THE TEACHER to conduct some simple lessons on our behalf.

The pre-school is now requested to conduct two simple fire safety lessons using the guidelines we provide. The objective is to teach children some simple "Negative Aspects" about fire prior to our visit.

The two **KEY FIRE SAFETY BEHAVIORS** taught by the teachers are:

- Unit 1. Stay Away From Hot Things That Can Hurt.
- Unit 2. Tell a Grown-up When You Find Matches or Lighters.

The Fire Crew now visit the pre-school and conduct a follow-up unit:

Unit 3. Toys are OK... But Matches... NO WAY!

SECONDARY INTERVENTION

...when all else has failed!

In 1991, the NSW Fire Brigade commenced a programme in an attempt to address the alarming statistics of child related fires. The programme is designed to intervene where a child fire lighter has been identified to determine if further assistance could be required.

The programme in NSW is known as; "CHIPS" - The Child Intervention Programme.

CHILD INTERVENTION PROGRAMME ("CHIPS")

DEFINITION

The NSW Fire Brigade Child Intervention Programme can be defined as one which sets out a procedure whereby trained and experienced fire brigade personnel are brought into direct contact with juvenile fire players and firesetters and their families for the purpose of deciding what actions and methods are required to bring about a possible cessation of the fire lighting problem.

PROGRAMME OBJECTIVES

- 1. To provide early intervention and assistance to the community with a view to reducing the high incidence of fatalities, serious injuries and property damage resulting from juvenile fire lighting in New South Wales.
- 2. To provide assistance to firefighters confronted with the problem of dealing with juvenile fire lighters and their families.
- 3. To establish a statistical data base to better enable a proper determination of the scope of juvenile fire lighting and the resources required to counter the problem.
- 4. To establish correct protocol and working links with appropriate welfare agencies with a view to better availability and organisation of community resources.
- 5. To make available suitable literature/pamphlets for the guidance of the general community and operational fire crews in relation to juvenile fire lighting.

WHAT DOES THE PROGRAMME DO?

The CHIPS programme has two phases:

- 1. Attempt to determine **WHY** is the child lighting fires?
- 2. To determine the **BEST** course of action.

If it can be determined that **Firelighting** is a case of **curiosity** or **experimentation**, then the best course of action is education.

The NSW Fire Brigade can and should intervene further with careful education for the child and parent(s) The next decision is whether to conduct the education one-on-one or through the school and parent groups.

However, if it is determined that there is a possibility that **other factors** may be affecting the child; such as:

Family disruption or dysfunction, physical, verbal or mental abuse, adverse medical conditions, problems with cognitive, social or physical development etc., it is immediately recognised that the fire lighting is possibly a symptom of a greater problem and therefore beyond the capabilities or expertise of the firefighter.

In such circumstances the client is immediately referred to a network of agencies established by the NSW Fire Brigade programme.

Avenues pursued may consist of school counsellor, local community health service, local church or priest, local general practitioner, child psychology or psychiatry services available through local hospital, Department of Community Services etc.

The NSW Fire Brigade Child Intervention Programme is therefore a system which enables a trained firefighter/practitioner to apply an approved tool such as a questionnaire, which helps him/her to assess an individual case and decide upon the most appropriate course of action.

HOW IS AN ASSESSMENT MADE?

Most fire crews in NSW will now refer a case of child fire lighting to a Regional Fire Prevention Officer of which there are four.

The Fire Prevention Officer is a Child Intervention Practitioner who will establish communication with the parents or care-giver of the child. In the first instance, such communication is usually over the phone.



From Page 7

A short questionnaire, which enables the practitioner to identify any possible factors contributing to the child's activity with fire, is applied to the parent(s).

In some cases, it is determined that a face to face assessment may be required. In such cases (if deemed necessary) a child questionnaire is sometimes applied.

The questionnaires utilised have been reviewed and approved by the Department of Psychiatry at the Sydney Children's Hospital, Camperdown.

The practitioner is required to possess good communication, counselling and interviewing skills. Great care and sensitivity is required during this process to ensure that information received is authentic and appropriate.

THE QUESTIONNAIRE

In each questionnaire there are three columns for answers.

If all the answers given fall in column one:

It generally signifies that the fire lighting is a case of curiosity or general FIRE PLAY in which case, education intervention by the Fire Brigade is proposed and recommended.

If however, several answers fall into column two:

It is a sign to the practitioner that there are possibly some external factors acting on the child which may be the cause of the fire lighting. In such cases, further careful questioning of the parents and the child is pursued before deciding on the next course of action.

In these cases the practitioner will always confer with a member of the Child Psychology Unit at the Camperdown Hospital for professional advice. A combination of Fire Brigade and other Community Service intervention is usually pursued.

If any of the answers given fall into the third column:

This is a sign that urgent intervention is required by other professional welfare agencies and the case is immediately referred to the appropriate network agency for urgent follow-up.

SOME COMMON SCENARIOS

The following list **does not** provide a typical profile. It simply shows an entire range of various issues that have been regularly identified in NSW case studies.

Often, **but not always**, one or more of the following will be identified:

- Male
- 2 8 years old
- Extremely curious
- Extremely intelligent
- Enjoys experimentation and exploration
- Single parent home living with mother
- Either no "father figure" present or there will be a constant change of adult male
- Recent trauma, such as moved home, school
- Lower socio-economic profile
- Attention Deficit Disorder (ADD/Hyperactivity
- Recent new baby
- Feels neglected

mentally

- Low self-esteem
- Poor communicator
- Parents are poor communicators
- Slow learner, poor reader
- Behavior problems at school
- Difficulty in relating with peers
- Often prefers adult companyAbused physically, sexually,
- Easily influenced by peers

SOME SAMPLE STATISTICS

The **CHIPS** Programme has been able to draw out some interesting statistics that would otherwise go unrecorded in normal fireground data collection.

Recently the programme was able to provide some valuable data to assist in the push for the establishment of a working party to investigate the introduction of child resistant

disposable lighters within NSW.

PERIOD: 6 January1993 - 30 May 1994 (17 months)

SCOPE: Fire Zones in the Sydney Northern Suburbs and Newcastle

CHILD FIRE LIGHTING INCIDENTS REPORTED

TOTAL:

218

HOW REFERRED

Fire Crews - (Enquiries at station) 54 (At Fires)

18

Direct enquiry to Region office - 42
School counsellors - 31
Undetermined - 24
Recommended by existing client - 22
Community Health - 12
NSW Police - 8
Fire Investigation unit - 6
Local Magistrate - 1

YOUNGEST AGE

20 months

OLDEST AGE

19 years (with a mental age of 12)

MOST COMMON FIRE LIGHTING TOOLS

1.	Disposable lighter -	106
2.	Matches -	81
3	Non-disposable lighter -	22

MOST COMMON SOURCE OF TOOLS

 Left unattended by parent/ caregiver - 154
 Purchased by child - 31
 From other child - 24

DISPOSABLE LIGHTER WORKING PARTY

The following is an extract from a submission made to support the introduction of a working party for child resistant disposable lighters....

"It is my opinion that 24 of the cases brought to my attention involved children aged between 20 months and 6 years of age that could have been prevented, or the impact of the event reduced had only a child resistant lighter

been present".

In relation to these 24 cases:

* 20 involved only minor fire lighting with insignificant property damage. However, it is recognised that the potential for more significant loss is always present.



- * 2 of the cases were discovered by parents in early stages requiring a minor fire extinguishing medium to be applied.
- * 2 of the cases required Brigade response and resulted in significant property damage in excess of \$5.000.00
- * 3 of the above cases, although causing insignificant property damage, resulted in children requiring medical assistance for minor burn injury,

From all the cases, it is evident that parents and caregivers are responsible for leaving multiple supplies of matches and lighters of all descriptions in easily accessible locations.

In all cases, the parent or caregiver reported that they were unaware of the child's ability to locate and operate the lighters.

FUTURE ISSUES

It has been proposed that a project is to be conducted within the Northern Suburbs and Regions of NSW to determine the following issues:

SCOPE:

- * To establish a data base to determine the scope of the NSW problem.
- * To identify target groups in terms of geography, socio-economic status, time of day, time of year, etc.
- * To quantify the cost to the community in terms of:
 - a) dollar loss
 - b) deaths
 - c) injury
 - d) brigade costs of response to incidents
- * To quantify cost to the Brigade of establishing a workable programme.
- * To establish a suitable selection procedure for practitioners.
- * To formulate a cost effective training programme for practitioners.

- * To investigate the feasibility of a National Fire Service approach to facilitate an Australian Standardised Programme.
- * To investigate a cooperative approach with other stakeholders, particularly school education Authorities, Health Authorities,

community welfare agencies, police, community justice and court systems, parent and community orientated groups.

A Project Report is to be submitted to the NSW Fire Brigade in January, 1995.

IAN KRIMMER NSW FIRE BRIGADES.

SOME TIPS FOR PARENTS

ON

FIRE PLAY!

WHEN A CHILD'S CURIOSITY CAN KILL!

CHILDREN WITH MATCHES AND LIGHTERS

The Child Intervention Programme of the NSW Fire Brigade was established to deal with the very serious concern that at least 1 in 5 of all fires set involve youngsters and most of these are caused by children between 2 and 9 years old experimenting with matches and lighters.

EVEN GOOD KIDS GET BURNED!

The real problem is that curiosity about fire is a very normal part of growing up, especially for boys aged between 2 and 10, but all of us experiment at some time.

Normal, though, does not mean "Okay" Most fires caused by children occur at home where there is most danger to life and property, even when adults are on hand.

WE ARE HERE TO HELP

Trained firefighters of the Fire Prevention Office, experienced with youngsters, welcome the chance to discuss the problem with you.

Our purpose is prevention through **education.**

If needed or requested, we also offer referrals for counselling and other related services on a voluntary basis. We are supported and endorsed by the Sydney Camperdown Children's Hospital, where professional assistance is on call as required.

ALL OUR SERVICES ARE FREE AND CONFIDENTIAL

INFORMATION IS THE BEST CURE

We have found that most children who cause fires are guilty only of not knowing the dangers. (Many are even unaware of how flammable their own clothes can be).

Parents can help prevent most of these fires by:-

- * Reminding children about the dangers of playing with fire... or letting us help by contacting the Fire Prevention Officer.
- * Keeping lighters and matches out of reach. About 95% of child related fires involve matches and lighters. These items can be found elsewhere, so education is still the best prevention.
- * Setting a good example by taking special care when using matches, lighters and cigarettes. Children learn

best by imitating the adults around them.

FIRE IS A TOOL, NOT A TOY Call 8.00am - 4.00pm (02) 901 2400 If fireplay seems innocent, consider one child with ONE match!





THE CASE OF THE EXPLODING CHRISTMAS TREE!

This article is reprinted from the December issue of "FIRE AND ARSON INVESTIGATOR" the official organ of I.A.A.I.

It was written by Les ROWLAND of INS INVESTIGATIONS BUREAU, INC. of Cohutta, GEORGIA

I received an assignment from one of my regular adjuster customers to examine a residential fire in Kerville, Texas.

On the way, I was considering what he told me over the telephone. He had used the word "subrogation" so many times, he sounded like a first-year law student who had just discovered a new synonym for money.

I got the hint!

His information was that the fire had started in the fireplace but, when he looked at the scene a few hours later, it appeared as though the still standing, deceased Christmas tree was the culprit.

No one was around to talk to about the fire when he was there, so he called on me to check it out for subrogation purposes of course.

Upon arrival, I thought that there had been a mistake. No one was home, the house looked fine and there was no sign that a fire had taken place. After knocking on the front door, I walked around to the backyard and that's when I knew that I was in the right place.

The remains of the once glorious Christmas tree was standing as a lone sentinel on the otherwise clean patio. It looked like a skinny, knobby black stick that had been trapped in a cereal bowl with legs which had once functioned as a tree stand. The remains of the Christmas lights were draped around and around the stand like a burned-out steel-belted tyre.

Nearby, in the yard, was the remains of a couch with one end severely charred (with my investigative skill, I concluded that it had probably been the end nearest the Christmas "stick").

By the time Mrs. Stevens, the lady of the house, came home, I concluded that there was no indication that the Christmas tree lights had malfunctioned and that the damage to the couch was from an external source.

When I stepped into the den, it was easy to see that the Christmas tree had been in the north-western corner of the den which ran 12 feet (3.66 metres) east and west; and 18 feet (5.5 metres) north and south. The outline of the now defunct couch could be seen on the western wall just south of where the Christmas tree had been.

That corner of the room exhibited a lovely "V" pattern which could only have been caused by the Christmas tree. There was no other fire damage in the room except for the ceiling above that corner. The fire had not even penetrated the sheet rock. The fireplace across the room on the eastern wall was intact and had no fire damage, except for containing three barely singed logs, each the size of a tyre-killing 'speed bump'.

I asked Mrs. Stevens what happened, knowing already that she probably was going to tell me that the "Christmas 'stick' just started burning all by itself ... I don't know why ... I didn't do anything!"

I was wrong - she told me that she was "lighting the fireplace and fire shot across the room and ignited the Christmas tree". Yea, right. The fireplace was on the other side of the room along the eastern wall about nine feet (2.7 metres) from the edge of the tree.

I'm not stupid, even I could make up a better story than that to get my house redecorated. I decided that maybe I needed to get just a few more details ... you know ... tie up those loose ends.

At this point, I figured; (1) I had a live one on my hands; or; (2) Mrs. Stevens experienced a true religious experience and I was here to record the event in a detailed fire report to an insurance company. (The cause and origin of this fire is ... God?!)

I started out using my Perry Mason approach. You know the one; "your Honour, I'd like to recall the deceased's widow, Mrs. Gotrocks, to the stand so I can trick her into a surprise confession before the last commercial comes on". It's a powerful feeling knowing that you have the skill and expertise to strike fear into the hearts of ... oops ... sorry ... I just stroked out there for a minute!

I lead her gently and expertly through the scenario of events. This is her story: Wanting to start a fire in the fireplace, she got three relatively large logs (WHEW) and put them in the fireplace. Not wanting to waste time with kindling, she got the charcoal lighter fluid off the barbecue pit outside and sprayed the three logs liberally with the fluid. She then set the container of lighter fluid with the pop-top open on the edge of the bricks in front of the raised fireplace.

She bravely threw a lighted match on to the logs and instantly had a chestnut roasting-type fire. Satisfied, she then went to another part of the house to get something that had the half-clad figure of Fabio on the front cover to curl up with in front of the roaring fire.

When she returned a few minutes later, the fire had died down to smoke and some small embers and the logs were barely singed. She then demonstrated to me how she planted herself, crouched like a Cowboy's linebacker, in front of the fireplace with her feet apart and picked up the squirt bottle of lighter fluid. (you got this picture in your mind yet?)

Her words: "When I squirted the logs this time, fire burst from the logs and, at the same time, a blast of fire shot across the room between my legs," she said as she lifted the front and back edges of the skirt of her house-dress with one hand, "and the Christmas tree exploded in flames". She finished this statement bending over as far as her body would allow, looked between her knees and pointed determinedly with her other hand towards the opposite corner of the room where the Christmas 'stick' once stood.



N.S.W. CHAPTER

ONE DAY SEMINAR

" <u>SET TO EXPLODE</u>! '

ALL YOU NEED TO KNOW ABOUT:

"VAPOUR verses GASES"

DATE:

THURSDAY, 3RD. AUGUST, 1995

TIME:

0900 HOURS - 1600 HOURS

VENUE:

GOLDEN GATE PLAZA, THOMAS ST.

HAYMARKET, SYDNEY

THIS PROMISES TO BE THE I.A.A.I. EVENT OF THE YEAR IN AUSTRALIA WITH SELECTED SPEAKERS, WHO ARE ACKNOWLEDGED EXPERTS IN THE FIELD OF GASES AND VAPOURS AND THEIR KNOWN BEHAVIOUR.

Ot should not be missed!

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From Page 10

While she was trying to right herself, I pretended to be deep in thought and attempting to contain my laughter at her graphic but sincere demonstration. Now - I knew that flames don't leap across an area on their own without help, So, after some thought, I asked her for a glass of water and started pouring it on the tiled floor in various spots between the fireplace and the ex-tree.

I concluded that when she lit the fire the first time with the open container of lighter fluid near the heat, it warmed the fluid which exuded volatile fumes that exited the container and gathered at the lowest point on the floor.

(Editors note; vapour pressure/density??)

The fumes followed the same path that the water took and started gathering in the north-western corner of the room under the ex-tree. When she lit the fire the second time, the fumes in the room also ignited causing a "blast of fire" between her legs straight to the north-western corner where other fumes had gathered under the hapless, dry spruce.

It must have been awe inspiring. An instant burning bush in her own living room! What a revelation!

Moral: Don't arrive at any preconceived notions (the Christmas tree was the only heat-producing source of ignition in the area where the fire was located) before you talk to the witnesses and gather all the facts. If it looks too obvious, be careful. Those are the kind which will come back to bite you in a trial or deposition.

Remember, it's just as important to be able to effectively eliminate all other reasonable causes of the fire as it is to arrive at cause and origin.

Your testimony in trial or deposition will be equally important on both of these subjects. Be prepared for it! You don't have a defensible case unless you eliminated the other possibilities.

In other words, it ain't over until the sweet "petite" lady with the great personality (and I might add, blue, fuzzy slip-on house slippers)_ ... SINGS! ahh ... POINTS!

Note: This is based on a true story. Names of individuals and cities are fictitious.

(There are those who would view the footwear details as superfluous. However, one should present all the facts even if it does nothing to enhance the case - if you don't get off on it someone else might! "Firepoint" Ed.)

表面在在在在在在在在在在在在在在在在在在在在在在在在在在在在在在在

SO THAT FOOTBALL DOESN'T MISS OUT!

A sweet young lady who was not noted for her punctuality arrived at her very first football match on the arm of a rather disgruntled escort just after the start of the second half.

He hurriedly enquired of a spectator what the score was. When she heard the spectator reply: "It's nothing to nothing." She cooed: "See we haven't missed a thing!"



TOASTER FIRES

This article is reprinted from the December, 1994 issue of the I.A.A.I. "FIRE AND ARSON INVESTIGATOR".

It was written by Dr. Bernard BELAND, eng. Departement de genie electrique et de genie informatique Universite de Sherbrooke.

Lately this author inspected a fire scene in which a roaster was suspected as the cause of the fire.

The main points in evidence to suggest that the toaster was the cause of the fire were sticking contacts and that the toaster was in the "on" position. The toaster handle was down. That may seem to be iron-clad evidence but, this is not so.

I entertained serious doubts in that case since the point of origin was not clear. Truly enough, the toaster was in the area of origin but so were many other appliances.

A toaster is a simple electrical appliance. When the handle is depressed, the slices of bread are inserted into the toaster and the power is applied to the heating elements which become red hot. A latching device keeps the toast down and, after a certain time, the latch opens.

When the handle is depressed, a spring is compressed or stretched. When the latch opens, the spring pushes the mechanism up and opens the electrical contents.

Two toasters were bought and examined. Examination of the mechanism showed that if the spring was removed or weakened, the mechanism will fall down as if the handle was depressed.

A spring is usually made of steel. At high temperatures, the spring loses its strength and becomes soft. It sags much like that of mattress springs under fire conditions. Quite clearly, under certain fire conditions, the handle could fall down and the contacts will close. After the fire, one could then recover a toaster which will show all the signs that it was on at the time of the fire and is the cause of the fire.

In fact, this state can be just a normal consequence of the fire.

TESTING

One toaster was installed in the normal vertical position in a wood fire of about two feet (600mm) in diameter. Electricity was not connected.

After twenty minutes in the fire, the toaster was removed. The handle had fallen down and the electrical contacts were sticking together as if the toaster had been "on" before the fire.

This test has been reported to show that one has to be very careful in interpreting the evidence.

Supposed "iron-clad evidence" could just be normal consequence of the fire.

Before any conclusion is drawn, the actual mechanism of a similar device should be studied and subjected to such a simple and inexpensive test as putting the suspected device in a fire. The study of the mechanism, as to its propensity to fall down under fire conditions, is even more important than the actual fire test. The handle of an appliance may very well fail to fall down because of friction, while another test on a similar device may show otherwise.

Another possibility to consider is that of falling debris on the handle could put it into the "on" position.

In such cases, it is all too easy to err and draw wrong conclusions.

I know of a few case in which toasters were pointed to as the cause of fires on the dubious evidence of being in the "on" position after the fire.

Similar comments could be made in relation to coffee-makers, mixers and numerous other appliances.

A case in point is that of a coffee-maker which was supposedly the cause of a fire. The evidence which the fire investigator had was that of a melted No. 10 copper wire. A quick check with the company showed that such a wire

was not used by the manufacturer. in fact, anyone familiar with such appliances, should have suspected that this type of copper conductor will not be used in a small appliance. The wire was there either as fallen debris or the appliance had been repaired.

Still, in that particular case, the manufacturer was being sued but, eventually, the case was closed.

The purpose of this article is to show that one has to be very careful in the interpretation of the evidence.

Amazing results are often normal and common consequences of fires.

It should be made clear that it was not the intention of the author to suggest that toasters could not start fires.

Clearly, if the latching mechanism operation is delayed, the toast will eventually be burning with short flames above the toaster which may ignite adjacent combustible material.

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MORE GOLF HUMOUR/HORROR

Like most beginners, he hit just one magnificent, long drive during the round. When the game was over, he could not stop boasting about that particular shot: "Wasn't that drive marvelous?" he asked a fellow player for about the tenth time.

Said the little girl to her mother as the golfer in the bunker paused for breath: I think it must be dead, mummy, he's stopped beating it!"

A woman in a sports store asked the assistant if she could be shown a "low handicap" explaining that her husband was always expressing the desire to have one and she thought that it would be very nice to surprise him with one on his birthday!



LETTERS TO THE EDITOR

Sir,

I read in a recent edition of "Firepoint" (June, 1994) a letter from Paul BAHR of the South Australia Police requesting from readers any information they might have of trials designed to find a suitable absorbent which could be used for extracting accelerants from porous mediums such as a concrete floor.

I am replying because I have conducted such trials and I have found that a wide variety of materials are suitable for this purpose.

The situation generally found at the fire scene is that of a suspected accelerant being present on a concrete floor and the investigator needs a sample for laboratory testing. The investigator is faced with the problem of either having to remove the concrete containing the accelerant or; much more simply, extract it in situ from the concrete.

Before extracting the accelerant, it is important to ensure that the concrete is wet. If not, then the concrete must be thoroughly wetted with water and the water then allowed to soak into the concrete for approximately one hour. Then, by extracting the water from the concrete, the accelerant will co-extract as it adsorbs to the water.

In the past, ordinary flour has been used with moderate success. The problem of using flour is that it tends to ferment when wet which not only produces carbon dioxide gas causing pressure within the sampling container but, also produces ethanol, a major component of methylated spirits and a commonly used accelerant. Additionally, the laboratory analyst is confronted by a mass of fermented flour giving off a putrid smell.

Therefore, an absorbent not only needs to be capable of drawing up quantities of water but also needs to be totally inert

Absorbents which are made of plastics may contain monomers or they may give off pyrolysis products during extraction in the laboratory, both of which will interfere with the subsequent chromatographic analysis. They may also absorb accelerants very strongly which would make it difficult for extracting the accelerants in the laboratory or they may be dissolved by the accelerant which could cause problems.

The best absorbents are therefore totally inert materials which are highly absorbent of moisture.

Diatomaceous earth is such a material as are clay absorbents, such as those which are used for collecting spillage of oil.

Other commercially produced clay absorbents, such as 'kitty litter', should also be suitable.

Cotton based absorbents, such as sanitary napkins, have also been found to be suitable for extracting accelerants from wet concrete due to their high absorbtivity and inertness. It does not take a great stretch of imagination to realise that new, disposable nappies would likewise be suitable for use as an absorbent.

If using such material, it is recommended that only the cotton layer be used and any plastic liners discarded.

It shouldn't be too difficult to find a suitable material for use as an absorbent as there are many such products available designed to absorb high volumes of moisture, the quality which makes them ideal for absorbing accelerants from concrete.

Before deciding on a suitable absorbent material, it should be tested in the laboratory to ensure that it is inert both in the field and in the laboratory.

Generally, the most important steps to remember when sampling concrete is to ensure that the concrete is thoroughly soaked beforehand and that the absorbent is allowed to remain on the surface for a suitable length of time in order to absorb the moisture and, at the same time, the accelerant from deeply within the concrete.

TONY CAFE.

NSW CHAPTER

HOW TERMS HAVE CHANGED!

We often think and say how times are changing, meaning that different circumstances and conditions affecting our lives need differing attitudes to those which stood us in good stead when the challenge, however tiny, had to be confronted in the long gone and sometimes, forgotten years.

Have you ever noticed the subtle way in which words and phrases depart from the idiom as the years pass and the younger generations take them and pass them through the blender where the older folk were quite content to pass them through the mangle and they then had flat accaptance.

Just think; If you said you knew a serviceman fifty years ago, it would be immediately grasped that you were referring to a member of the armed services. Today, he or she would be arriving at your door to repair one of your appliances. "Yes Sergeant, go right through to the laundry!"

Come to think of it, if your washing machine needed fixing fifty years ago you would more than likely call an ambulance. Although, in those days doctors made house calls.

Take-away was something that happened to your garbage and it wasn't guarded by somebody called Otto.

Briefs were something known only by solicitors who have done nothing to explain to us that it doesn't really mean them and that paper wearing apparel never caught on.

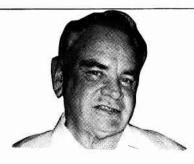
A group was a number of assembled people who would have died before assailing your ears with a deadly din of electronic origin.

Thongs were something that the orally afflicted thang, sneakers told on you and you mowed grass and never attempted to use it to roll your own or fill your pipe.

These days a particular variety of grass could also be a sneaker!

Still, some of the tradition remains-we still have politicians and they never change!





EDITORIAL



EFFICIENCY!-GONE AWRY!

Many years ago it was decided to completely refurbish the banking chamber of a very large city bank and this entailed, in the main, redecorating the walls and ceiling with an oil based paint.

The chamber was on the ground floor, had a floor area about half the size of a football field and the floor to very decorative ceiling height was approximately 7 metres.

As banking was not to be interrupted during this operation, much steel scaffolding, drop sheets and temporary corridors lined with similar sheeting were provided. The piece de resistance being a timber platform set at a level about 2 metres below the ceiling and composed of brand new oregon timber planking fitted tightly together.

This not only acted as a work platform but also provided a paint-drip and falling tool protector for the bank's customers.

Everything was going fine with the painting and repair work completed. All that remained to do was to replace the refurbished light fittings and remove the protection. Alas ----

At about midday on this particular day, a call of fire was received by the Fire Brigade with the caller indicating that there was a serious fire in the bank and that the "roof of the bank was all on fire"!

On arrival, the Brigade found that general modest fire was burning above the temporary platform and this was quickly extinguished by a small capacity hose line.

Then it came to "what happened?" and the story unfolded.

It was like this, an electrician was replacing a light fitting in the ceiling somewhere about the middle when he somehow managed to strike an arc which deposited on the timber surface and started a "small fire" on the timber surface.

Having followed safety instructions to the letter, he had equipped himself with a 9 kilogram dry chemical fire extinguisher and he took rapid aim with the nozzle of this machine pointing it at the "small patch" of fire and operated the discharge mechanism.

To his surprise (and some apparent panic) the fire "took off" rapidly involving the entire below ceiling space destroying the newly finished paintwork but without occasioning any structural damage.

Piecing together the available information it became obvious that the main contributor to such rapid fire spread was the surface of the rough-sawn oregon platform which, as no doubt many of you will have observed, had become ,on drying and boot scuffing, a surface not unlike a short but very dry lawn. Add to this the newly applied oil-base paint and you have a quite unexpected fire load!

But, you cry, why didn't the fire extinguisher extinguish the fire?

The answer to this is that very probably, the discharge was directed towards the fire before the powder was seen to issue from the applicator and, although the pressurising medium is not flammable, this was similar to blowing on kindling setting the fire on the run through the furred finish on the timber.

Strangely, you can achieve the same spread problem by blasting something like burning paper, rubbish etc. with the jet of a hose-reel or water type extinguisher and I have seen a large furniture manufacture totally destroyed when this was done to rubbish in a cart dock and the burning material distributed into layers of fine saw and planer dust deposited on horizontal surfaces.

It is well to know that there is another problem which may prevent a dry powder extinguisher from efficiently discharging and this relates to the packing down of the powder caused usually by moving them from place to place, vibration from machinery or the carrying of them in motor vehicles.

This is why proper servicing of these extinguishers demands that the powder be stirred up at regular intervals and don't just believe that it is efficient working order because the pressure gauge says so!

As to the subject fire - old boards, water based paint, isolation of the electric circuit being worked on, an efficient fire extinguisher and/or lessons in effective use of the same, may have caused an increase of about .0025% on deposits made at that particular bank.

Then again, the work had to be re-done so somebody made money out of that; the bank would have claimed through the builders insurance cover so nobody lost!

Did I hear an insurance Claims Manager say; "How was that again?"

JOHN BOATH.

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