

FIREPOINT



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INTERNATIONAL ASSOCIATION OF ARSON INVESTIGATORS

NSW - CHAPTER No. 47 (INC.)

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CONTENTS

Page 3	Committee Members and Contents
Page 4	Editorial
Page 5	President's Message
Page 6	FIU Report
Page 8	Just In Case
Page 11	Article — Where There's Smoke
Page 12	ASTM Adopts Fire Debris Analysis Standards State Arson Committee Calls For Action To Fight Crime
Page 13	Article — When The Heat Is On
Page 14	JB Crossword

We would like to see letters to the Editor, so get pen to paper and send to:
R. Brogan, 11 Spencer St., Five Dock, N.S.W. 2046.

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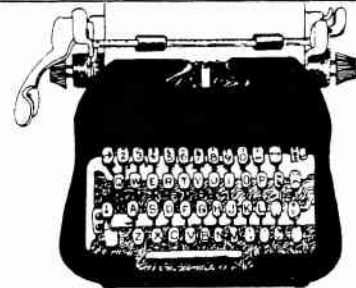
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EDITORIAL



"ARSON IN THE IN THE 90'S — QUO VADIS" the title of the IAAI Seminar in October 1990. The question asked by the title (roughly translated) "where are we headed?" Well, if you take the optimistic view, and, you took notice of the comments made by Mr. Justice Brownie at the last IAAI discussion night (29TH AUGUST 1991, North Sydney Leagues Club) we are headed in the right direction. Justice Brownie presides over the commercial division of the Supreme Court and discussed the aspect of civil arson matters.

His main point was that more often than not, nowadays, in matters brought before the courts the insured are conceding that the fire involving their property was in fact arson, but that they weren't the arsonists. His point was that all of us involved in fire investigation have achieved our goal, set several years ago, to improve our professional aims of proving arson/cause and origin beyond a reasonable doubt. His opinion is that we have achieved that, and are proving

it quite well. Now our aims are to achieve the goal of proving, "Who did it". This may need a more concerted effort, and even more professional methods, but I believe we (as a group) can achieve this goal.

To assist all of us in this endeavour and to show that the IAAI (NSW Chapter) is an innovator in this field, the NSW Committee are in the process of organizing a one day seminar (Friday 8th November 1991) to be held in the auditorium of the North Sydney Leagues Club. The seminar will feature Peter Couchman in a panel/audience discussion; will have four other speakers focusing on the insurance and legal aspects involved and will be titled "ARSON — A TRAVESTY OF JUSTICE — CIVIL OR CRIMINAL?" The cost of the day will be \$95 per head and will involve lunch and other refreshments. Advertising material and attendance applications will be distributed in the very near future.

You may have heard about the extensive changes going on in NSW

with the regionalisation of the Fire Service. Even though there have been a great deal of administrative changes and changes to the Senior rank structure, the service provided by the firefighting staff and that of FIU will remain unchanged and they will still provide quality assistance to you in relation to fire investigation enquiries.

One good thing coming from the recession (as seen by the staff at FIU) is that the petrol companies must be making a fortune at the moment, just from sales of petrol brought for the purpose of burning property.

It may be that these sales are approaching the magnitude of sales to run vehicles. It seems like nine out of ten fires attended by FIU lately are deliberate attempts at destroying property. A definite sign of the times.

The Committee, and myself, look forward to seeing you all at the seminar, November 8th.

THE EDITOR

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In a Rome laundry: Ladies, leave your clothes here and spend the afternoon having a good time.

Outside a Paris dress shop: Dresses for street walking.



"... Guilty, I'm afraid ..."

MESSAGE FROM THE PRESIDENT

It is a sobering thought when you sit down to write to the members of the Association to realise that two thirds of the year have disappeared into history and you wonder if anything has been achieved. I suppose that this can be viewed as living in the past but I believe that it is entirely human to consider the events which shape progress, or lack of it, in order to more clearly see the direction ahead.

Oscar Wilde is credited with saying that experience is what old men call their mistakes!

Nevertheless, experience related to the activities of the Association leads me to the opinion; so far so good. This opinion is based on the perceived success of our education programme (Discussion Evenings) where the numbers attending have been very satisfying to your Committee and leads us to feel that this reflects the standard of speakers and the various subject matters offered.

The high standard was certainly maintained at our August meeting when Mr Justice John Brownie favoured us with a very enlightening insight to the problems of presenting arson cases to court as seen from the "bench" side of matters. His Honour certainly pin-pointed areas that must be addressed by our members if the best evidence and persuasive testimony is to be presented in support of cases.

An aspect which I, and I am sure others, appreciated was the very candid and uncomplicated manner in which His Honour presented his address. One rightly or wrongly expects that when the legal profession meet in what would seem virtual conclave, there is a tendency to converse in fluent Latin or at least 'legalese'. I realise of course that this is decidedly 'non sequitur' but it was a pleasure to be able to follow every detail so ably presented in terms which even I could understand and I express the congratulations of the Committee to His Honour on giving the Association his time and the benefit of skill and experience together with the hope that this was the first of many such occasions.

It is not often that an association has the opportunity to express its congratulations to two of its members for a personal triumph which occurred to each at exactly the same time. To this end we offer the Association's sincere congratulations to Ross and Shari Blowers on the birth of their son and report that mother and child are both well and in much better shape than Dad. We are prepared to wait until the little guy can write before expecting him to continue the family's 100% membership of I.A.A.I.

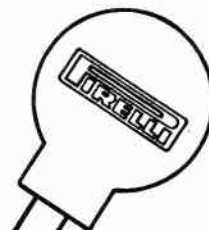
It is now commercial time and it is my pleasure to draw to your attention the one day seminar which we will be running at the North Sydney Leagues Club on Friday, 8th November, 1991.

This is a seminar with a difference as we will be tackling the problems linked to combating arson by identifying them from the stand-point of each contributing area e.g. privacy considerations, reporting immunity legislation, investigation and insurance industry decisions to name a few. This will lead into a debate situation involving the "experts" and the audience with a moderator/stirrer in no less a person than MR PETER COUCHMAN of A.B.C. fame.

"BEAR" in mind that the auditorium at this venue holds 400 so, my advice is to reserve early if you want to be sure of being part of this event. It is expected that the brochures will be posted in the near future with all necessary detail and application form.

**On behalf of the Committee
John Boath
President.**

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F.I.U. REPORTS

An on-going section for reports of incidents from the Fire Investigation Unit (F.I.U.)

N.S.W. REPORT

by ALAN EASY

In the first six months of 1991 the Fire Investigation Unit attended 412 incidents, which was an increase compared to the 359 attended in the first six months of 1990. However it was a decrease when compared to the 161 attended during the last six months of 1990.

There is not a great deal of meaning in examining these figures as it is only our attendances, which can be influenced by the decisions of the fire officers in the field in requesting our assistance in determining cause.

Even in looking at the statistical figures one can gain a false impression since these figures represent only the number of incidents and does not reflect the dollar loss. One major industrial fire could equal the insurance pay out for a couple of hundred house fires.

In N.S.W. a review of the final statistics for 1990 compared to 1989 showed a 10.7% increase for suspicious/incendiary structural fires and a steep increase of 63.3% for vehicle fires in this category. Over the first five months of 1991 the trend has continued with a 13% increase in suspicious/incendiary structure fires when compared to the first five months of 1990. The alarming escalation continues with suspicious/incendiary vehicles fires — up 48% on the similar period for 1990.

The alarm bells are at last ringing in the insurance industry on the theft of motor vehicles, many of which end up torched. A "summit" has just been held on the problem. It was revealed that an average 150 vehicles are stolen every day in N.S.W. That is over 54,000 for a year and represents a car being stolen every 10 minutes. Who pays for all of this? The community of course, as insurance companies adjust their premiums to cover pay outs.

March and April were tragic months with fifteen fire deaths investigated, of which seven were children. May was not much better with investigations into six fire deaths, five of whom were children. In late March, two very young children died in a caravan fire and just three days later a baby died in another caravan fire.

These deaths caused some Government review of the regulations applying to caravans. One fire involved a caravan in an off-road situation and the other in a caravan park. Both fires were near 1.00 a.m. at night. Experience shows that once a

fire starts in a caravan or motorhome, fire spread is rapid because of the inherent design characteristics. The room geometry, fire load density, relatively low ceilings and combustible materials and finishes provide the potential for rapid fire development with high temperatures and toxic gas generation in a relatively short period of time.

School fires continue despite upgraded security. During these first six months of 1991 we have investigated a total of 39 fires in schools. Eleven occurred in the school holidays in January alone. The Police do have some success in apprehending the offenders but many are Juveniles and the punishment may not fit the crime.

Of the major fires which occurred, a few stand out. The Hanimex fire at Brookvale in Sydney had a damage bill in the range of \$5 to \$10 million. The final insurance pay out would depend upon the assessment of smoke damage to sensitive photographic papers through the warehouse.

Then we had the great pallet fires in Lidcombe and Villawood. In the former some 4,000 timber pallets damaged over half a hectare of open storage. In the Villawood fire approx. 18,000 pallets were severely damaged. Both fires suspicious — is this the start of a war?

On 14th May, the insurance industry, still groaning after the Newcastle earthquake, hailstorms and the mini-cyclone which ripped through the North Shore in Sydney, reeled at the damage incurred in a freezer warehouse fire on the outskirts of Sydney. This was a very large building with various sections leased out to food companies.

The fire started internally in a loading area and penetrated the insulated panels of freezer rooms and involved palletised frozen goods. The fire travelled within the polystyrene panels which were steel sandwiched.

Control of the fire took nearly two hours with firefighters working under unusual conditions. There was ice under foot as water froze, temperatures in the loading area at -5 degrees Celsius and in the freezer room was down to -30 degrees Celsius. Outside, visibility was near zero as fog developed to a height of 3 metres as cold air escaped from the interior into the truck loading docks.

As the fire had knocked out the electrical system, health inspectors declared all food would have commenced to defrost and could not be sold. 6,000 pallets of goods went to the tip. The damage bill will exceed \$16 million. After days of investigation, cause recorded as undetermined.

The award of the year through goes to a take-away food shop fire. After an unsuccessful arson attempt two years ago, someone got the formula right at last. Explosion and fire, with debris blown a distance of 64 metres and structural damage severe. What a surprise for whoever lit the petrol.

Inspector Keith Eadie, Officer in Charge of the F.I.U., has moved on, being promoted to Deputy Regional Commander (North).

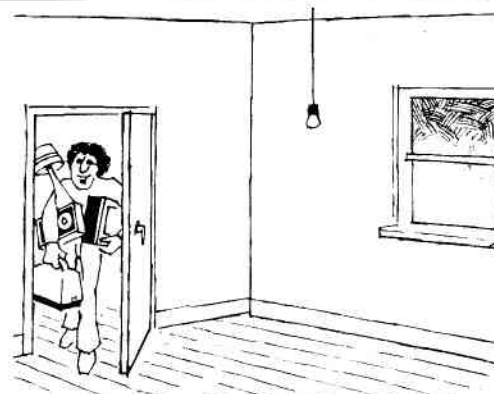
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'JUST IN CASE'

An on-going section with articles of a legal nature

YOU ARE INVITED!.... TO BE A WITNESS

By Peter S. Beering,

*Chief Prosecuting Attorney of the
Arson Unit of the Indianapolis/Marion
County Prosecutor's Office, President
of the INIAAI Chapter, CFI.*

WOULD MISS MANNERS APPROVE OF THIS INVITATION?

The rules of etiquette set forth a number of formal requirements for an invitation: it must state who is invited, the type of party being given, the attire for the occasion, and whether a response is necessary. Ordinarily, people are pleased, sometimes even flattered, to receive an invitation; however, when the invitation comes in the form of a subpoena, the reaction is not always favorable. Invitation by subpoena can be a particularly unnerving, sometimes even an unwelcome, event. This is particularly true since subpoenas usually only contain the names of the parties, names which may have little or no meaning to the recipient. Miss Manners would doubtless consider such an invitation very rude. The subpoena contains all the elements of a formal invitation, but none of the pleasantries. The favor of a reply is not requested, but demanded. Failure to appear results in contempt of Court, and possibly jail.

Statistics show fire service personnel are likely to receive such invitations and should therefore be prepared to "rise to the occasion".

So how does one make the "A List"? Statisticians report that public safety personnel, by virtue of their professional activities, are involved in events that may ultimately lead to some type of litigation. All of the factors that make this profession challenging, such as fires, auto accidents, intoxicated motorists, crimes, and arson, also tend to be the sorts of events which result in both civil and criminal cases. It is very likely that during your public safety career, you will be involved in some litigation.

WHAT KIND OF PARTY WILL IT BE? CIVIL OR CRIMINAL?

A proper invitation always tells you what type of party is being given. Reading the subpoena will generally reveal whether the case is civil or criminal. If the caption reads "Smith v. Jones, a negligent clod", the case is probably of a civil nature. If the case is captioned "State v. Jones", it is a criminal matter. The subpoena will

also indicate which party of the litigation intends to call you as a witness, what type of hearing or event is to occur, when the event will take place, and the location. The subpoena may also have specific instructions or requests. For example, a subpoena "duces tecum" means that you must bring copies of any non-confidential reports you made in connection with the case. The Subpoena Duces Tecum will specify what items or documents you are to bring to court.

If you do not know what the case is about, call the lawyer who issued the subpoena and ask. Chances are that the case involves some memorable activity or factual situation. Reports should be reviewed and superiors notified before the deposition, hearing, or trial takes place. Your department may have policies in effect about time off for testimony, or replacements may have to be found to cover for you. You may also need help obtaining copies of reports or photographs.

EVERY PARTY HAS A THEME

The kind of event will determine the amount and type of preparation required. Some events, such as suppression hearings will require testimony about why you acted in a certain way, or did a certain thing. Other events will require that you tell what you know about the incident.

DEPOSITIONS

A deposition is best considered as a trial on paper. The preparation should be the same as the preparation for trial. There are two types of depositions, Trial Depositions and Discovery Depositions. At both types of deposition the witness is sworn in by a court reporter and the party's lawyer who called the witness will begin asking questions. Just like at trial, after the direct questions are asked and answered, the opposing lawyer is given the opportunity to cross examine the witness.

Trial Depositions are used to replace actual testimony that would be rendered at trial. This type of deposition is often used if a witness is in very poor health or will be unavailable at the time of the trial. At a Trial Deposition all of the parties are required to be present.

In many states, Discovery Depositions are used by the opposing party to "discover" what testimony a witness will offer. Preparation for this type of

deposition is imperative, since anything you later testify to which is inconsistent with your deposition testimony will result in very unpleasant, and possibly embarrassing, cross examination.

It is not uncommon for depositions to be videotaped. If so, you must pay attention to your dress, demeanor, and voice, since the jury will ultimately watch the tape.

TRIALS

A subpoena for trial is like an invitation to the Royal Ball. At the Royal Ball, there are different kinds of people in attendance: dignitaries, and guests. Likewise, in a trial there are different types of witnesses: expert witnesses and lay witnesses. Lay testimony is the heart of any litigation. Any person who saw, heard, felt, has information about, or in some way was a part of the incident in question can be a witness. Trials are very similar to puzzles. Each witness adds pieces through testimony. At the end of the trial the jury's job is to identify the picture. It is important to remember that sight is only one of the five senses. The fact that someone did not see the event does not necessarily eliminate that person as a witness. To satisfy legal requirements, a witness may have to be called to establish some fact that seems unrelated to the incident.

Victims of arson fires, for example, must testify that they did not give anyone permission to burn their property, yet they seldom witness the arsonist who set the fire. Fire service personnel are often among the first persons at fires, accidents, shootings, domestic disturbances, and so on. What you see and hear upon your arrival and while you are on the scene may be critical to civil or criminal litigation. Where exactly was the body? Did anyone move it? Was forced entry required? What did the accident victims say? What did you observe? Observations made by firefighters have provided some of the most significant testimony in my cases. In one arson case, a firefighter testified about the pool of raw gasoline he crawled through.

ARE YOU A DIGNITARY?

You may be expected to render expert testimony. Expert witnesses, unlike all other witnesses, are allowed to render opinions. To be an expert, a witness must possess skill, training, education, and experience in a given field greater than the skill held by a layman. In making the determination of whether a person is an expert, the court will



look to specific training, teaching, writing, and experience, including past expert testimony. I have qualified line firefighters as expert witnesses in fire suppression, paramedics as experts in emergency medicine, and of course arson investigators as cause and origin experts.

PREPARATION

During the course of your preparation you should familiarize yourself with reports, photographs, and any evidence that might be involved in the case. Become familiar with your notes and reports so that you do not have to refer to them for the answer to every question. In civil cases, your department should have a policy covering the release of reports. In criminal cases, you should not turn over copies of your notes or reports without talking to the prosecutor first. Some reports are protected from disclosure by both the law and your department's policy.

It is also a good idea to review your resume and your credentials to be sure that they are in order. You should be prepared to discuss both your credentials and your reports at the meeting with the lawyers. At this meeting you should find out the following:

1. What the lawyers want from you;
2. How you fit in the trial presentation;
3. What evidence, photographs, or demonstrations you will be expected to testify about;
4. The answers to any questions you have; and
5. When and where you will need to report to testify.

If you are to be called as an expert witness, you should be prepared to teach the lawyers at the meeting about your background, training, experience, and about the subject matter of your testimony.

THE DIGNITARY

Trial witnesses and dignitaries have all eyes upon them. Onlookers (jurors) observe poise, attire, and demeanor. As an exercise not long ago, I asked the Indianapolis Arson Unit to spend a session in a municipal court. I asked them to pay attention specifically to the types of persuasive testimony that was offered, and also to the dress of both defendants and witnesses. Almost to a man, they reported that the better the witness' appearance, the more credible they thought the witness was. A review of an episode or two of the PEOPLE'S COURT on television will teach the same lesson: If you are going to testify in a court of law, look, act, and be professional.

BLACK TIE REQUIRED

Your appearance is completely within

your control and can have a tremendous impact on a jury. Looking sharp is easy. Fire departments are known for some of the prettiest uniforms around. I usually ask firefighters to come to court in uniform. I ask that the uniform be clean and pressed, and that shoes be shined. Hair should be combed and male witnesses should be clean shaven. Distracting, or gaudy jewellery should not be worn.

DEMEANOR

Do not chew gum, mints, or tobacco. When in front of, or near, the jury do not speak to them. Doing so violates court rules and could get you thrown in jail. Avoid distracting mannerisms such as biting nails or playing with moustaches. A jury of twelve people will see the smallest and silliest of habits, and will be distracted by them.

At the risk of sounding like mom... stand up straight, walk slowly, and never slouch. Once on the witness stand, sit up straight and answer in a clear voice which is loud enough to be heard by the jury. When answering questions, look at the jury. Speak in grammatically correct English. Do not use slang expressions; please do not use the phrase "you know" at the end of sentences, and be careful about "fire slang". "I was on duty on engine company 22 and we were sent to a building fire...." means more to a jury than: "I was on the twenty two's working a job at this building". Be engaging, be professional.

If you do not understand a question, say so. Ask to have the question rephrased or repeated so that you may give an appropriate answer. If a question requires additional explanation or cannot be answered yes or no, say so. Answer only the question that is asked. Do not volunteer additional information. Do not try to "help" the lawyers.

At the pre-trial meeting, I try to review the questions I plan to ask with the witness. This insures that the witness understands why the question is being asked, and it prevents surprise answers and misunderstandings at trial.

CROSS EXAMINATION ISSUES

No one has ever died from cross examination; many have wanted to, but no one has. Some tips: answer the question that is asked, then keep quiet. Do not volunteer information. Do not argue with the lawyers. Do not back down if you are correct. Above all else, keep your cool.

With some advance preparation and an understanding of what to expect, your courtroom experience can be very rewarding and you will be the hit of the party.

THE INVESTIGATION OF FIRE THROUGH PHOTOGRAPHS!

Yes, impossible!

From I.A.A.I. Fire and Arson Investigator, March 1991

By Raymond W. Wagner, San Bernardino, California.

I read with interest, the article by Mr. David M. Smith, Tucson, Arizona, which appeared in the September issue of the IAAI, Fire and Arson Investigator, volume 41, #1.

I would like to offer some comments from an opposing point of view. The first thing that needs to be done is to define terms. Mr. Smith considers himself a professional Origin and Cause Consultant. I consider myself to be a professional Origin and Cause Investigator. I have been employed as a full-time fire investigator for seven years. Our company works with the insurance industry.

When a fire origin and cause investigation assignment is received by our company, it is understood that the assignment will encompass a thorough examination of the fire scene. This investigation includes the removal of debris, or "Digging out", of the area of origin after it has been identified by reading the available fire patterns.

After the area of origin has been thoroughly documented and investigated (including the identification of all possible ignition sources existing in this area) contact is made with the appropriate fire and law enforcement agencies. A sharing of information, to the fullest extent possible, is attempted. Interviews with witnesses is also accomplished. If required and so directed, a complete follow-up investigation is then conducted to identify suspects if the fire is determined to be of incendiary origin, or to identify an appropriate avenue for subrogation, if the fire is found to be of an accidental nature.

On many occasions in the past, our company has been approached, usually by an attorney, with a request to determine the origin and cause of a fire based on photographs taken by others. There is one simple reason that our company has consistently refused to attempt this type of assignment. We are on record as stating, under oath, that it is physically impossible to determine the origin and cause of a fire through another's photographs.

I would freely acknowledge that I am one of the individuals Mr. Smith refers to in his third paragraph as stating, "No one has the capability or experience to determine the cause of a fire, or the origin of a fire from a photograph".

To substantiate this point of view, I would point out that before any individual is allowed to testify as

an expert he must undergo an examination known as a Voir Dire. This is an examination process which may be conducted, and usually is conducted, by both sides of a law suit to determine the qualification of the supposed expert.

In the hands of a skilled attorney, a proper Voir Dire examination should substantiate this very argument. Open ended questions should be asked of the qualifying expert with regards to the proper manner to investigate a fire scene.

The generally excepted proper procedure of investigating a fire scene is to begin at the perimeter of the fire scene (no matter how large) at the area where no fire damage has occurred. You begin to work into a fire scene at the area of least damage and proceed to the area of most damage. Each area of low burn, in turn, must be individually examined and debris removed to the extent a determination may be made in regards to this particular spot. The debris is properly removed in layers and each object in the debris examined. As this process is occurring, the investigator must use all of his senses, including that of sight, smell, and touch to evaluate the various items of physical evidence in the debris before him.

Finally when an area, or areas, of origin have been identified, a meticulous search of this vicinity should be conducted. Even the most meticulous photographer is rarely going to make a photograph of each step in this process.

The entire scene examination actually consists of a series of comparisons. A wall is compared against another wall.

One side of a doorway is compared to the opposite side of the doorway. An electrical wire is compared to another wire, and possibly a length of the same wire compared to the opposite length. Depth of char is constantly evaluated. The top of a table will be compared with the bottom of the table. One side of a chair to the opposite side, and so it goes throughout the entire examination. This process of comparison obviously is to evaluate the various fire patterns as well as the depth of char on the various items encountered.

Throughout this entire process, the alert investigator should be aware of any strange or unusual odors. A hydrocarbon detector may be utilized in appropriate circumstances, or even more preferable a dog, specially trained to detect certain types of accelerants, may be used.

The obvious goal of any origin and cause examination is to identify the fuel load present, the ignition sources capable of igniting the fuel, and the circumstances which allowed the two to come together.

Finally, the importance of the interviewing process cannot be overlooked. Under normal circumstances the best time to conduct these interviews is contemporaneous with the fire, when peoples memories are still fresh.

Going back to the Voir Dire examination, some (but certainly not all) of the questions I might ask if I were an examining attorney, would be:

#1 Investigator, how did you determine the depth of char by looking at this two dimensional photograph?

#2 Investigator, how did you compare the side of this object with its opposing side (assuming there is not another photograph to show)?

#3 Investigator, as a result of your examination, what odors were you able to detect or eliminate?

#4 Investigator, are you prepared to state that there could not be any additional ignition sources on the scene which were simply not recorded in this series of photographs?

By now I think you can see where I am going with this argument.

If I may, allow me now to shift gears and agree with Mr. Smith. Litigation arising out of a fire, whether criminal or civil, can generally be relied upon to be very time consuming and technical in nature. A party to this litigation would be at a distinct disadvantage without an expert fire origin and cause investigator when opposing party has the services of an investigator who is going to testify on their behalf. In this arena however, the more proper terminology is that of consultant, and not the investigator role.

Even after applying the foregoing criteria, our company has accepted an occasional assignment as a "Consultant". In this role we are quick to point out to the attorney, that we cannot and will not attempt to determine the origin and cause of a fire from photographs taken of a fire scene we had not visited.

As with Mr. Smith, we have had our share of investigators who "Feel comfortable with providing an opinion after arriving at the scene and not leaving his vehicle or walking through the scene with his hands in his pockets, kicking the ashes."

Our role as consultants is to assist counsel in making a determination with regards to the validity of the opposing experts determination of the origin and cause of a fire, based on the thoroughness of his investigation.

We would provide the attorney with types of questions and information needed by him to make an

examination, in the Voir Dire process, to quickly determine the validity of his opinions based on the type of examination he has conducted.

While we will never attempt to identify "The" cause of the fire, we will assist in the inquiries necessary to determine if the investigator at the scene took into account and eliminated all possible sources of ignition for the fire, and the process by which he determined the origin of the fire.

I do agree with Mr. Smith, nothing will ever take the place of a trained investigator being at the fire scene. There does exist however a definite need for trained and qualified "Consultants" to keep the on-scene investigators honest.

On this subject, Mr. Smith makes reference to "Selling your soul." We are all familiar with the fire consultant who goes beyond the limits of a reasonable inquiry. His role is simply to "Muddy the waters" sufficiently to confuse a jury made up of lay people.

As Mr. Smith mentions in his article, this investigation turns on two key words, integrity and honesty.

In a Hongkong supermarket: For your convenience, we recommend courteous, efficient self-service.

From a brochure of a car rental firm in Tokyo: When a passenger of foot heave in sight, tootle the horn. Trumpet him melodiously at first, but if he still obstacles your passage then tootle him with vigor.

– English well talking
– Here speeching American.

On the menu at a Swiss restaurant: Our wines leave you nothing to hope for.

In a Copenhagen airline ticket office: We take your bags and send them in all directions.

On the door of a Moscow hotel room: If this is your first visit to the USSR, you are welcome to it.

In a Norwegian cocktail lounge: Ladies are requested not to have children in the bar.

WHERE THERE'S SMOKE....

Early warning of a fire in the home — although no guarantee of getting out safely — gives potential victims at least a good chance of escaping. Smoke alarms have proven to be an effective first line safety measure in many homes, and fire departments across Australia recommend smoke alarms be used as part of an overall fire safety package for every household.

Australia's new national Standard for self-contained smoke alarms (AS 3786), which applies to smoke alarms used in the home, specifies requirements for their design and performance.

There are two types of smoke alarms currently available in Australia — ionisation and optical (no smoke alarms are manufactured in Australia). Both types set off a loud warning alarm after detecting a fire in its earliest stage. They are generally not sensitive to cigarette smoke, but aerosol sprays can trigger them if used nearby.

A small to average sized house, where all the bedrooms are grouped together, only needs one smoke alarm located in the hall outside the bedrooms. Houses of more than one level, or where sleeping quarters are separated, should have an alarm on each level or near each sleeping area. Extra smoke alarms can be installed in bedrooms and loungerooms for more protection, especially if smokers live in the house.

Smoke alarms should not be installed in or near kitchens, bathrooms or very dusty areas, or near fluorescent lights, outside lights (where insects gather) or garages.

Fitting most self-contained smoke alarms is a simple process of screwing them to the ceiling, as close to the centre of the room or hallway as possible, but at least 30cm away from any wall or light fitting. The alarm must be fitted so it can be heard throughout the house, and particularly by sleeping family members.

Smoke alarms are designed to blend into the background but should never be painted over as smoke entry holes can be blocked or circuitry damaged. They should be checked regularly to make sure all alarm functions are operating, and the batteries replaced every 12 months.

Guide

Standards Australia is currently developing a "Guide for Residential Fire Safety" which will include installation and coverage rules for smoke alarms, as well as sprinkler systems, and other fire prevention and protection tips for fire safety in the home. This document will be designed to be easily read and understood by all Australians, and is expected to be an important contribution to reducing the toll from house fires in the future.

Victoria is the only State so far to introduce legislation requiring the installation of smoke alarms in all new buildings — this of course still leaves existing buildings without mandatory smoke alarms, and lives will continue to be lost.

Australia has a long way to go before it catches up with countries such as Norway, which requires that all residences have smoke alarms and fire

fighting equipment installed. Until then, we must rely on public education from fire departments and in the preparation and use of national Standards to alert people to the dangers of house fires and measures to combat their occurrence.

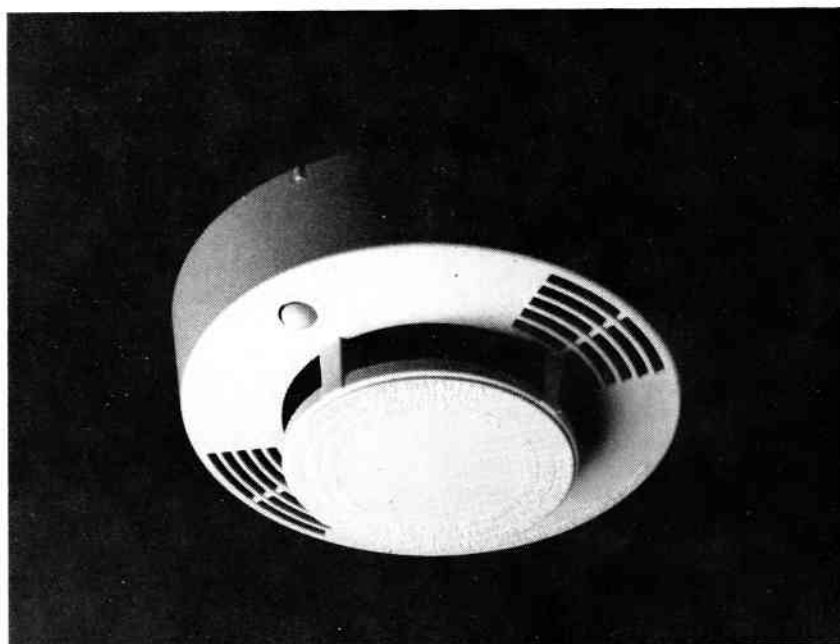
Good advice

Australia's first national Standard for self-contained smoke alarms, which was published late last year, has already attracted interest from manufacturers, keen to secure Standards Australia certification (the StandardsMark) for their products.

General Manager of Standards Australia's Quality Assurance Services Division, Owen Archer, said he welcomed the approach by senior fire brigade personnel around the country who were advising the public to purchase products bearing the StandardsMark.

"The truth is, however, that we have not yet issued any licenses to this new Standard, although I expect the first of these to be on the market in the not too distant future," he said.

The presence of the StandardsMark on a product, he added, provided the purchaser with the only independent proof that their purchase complied with a national or international Standard.



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JB CROSSWORD SOLUTION FOR JUNE

ASTM ADOPTS FIRE DEBRIS ANALYSIS STANDARDS

By John Lentini,

Marietta, GA; Chairman of the Forensic Sciences Committee I.A.A.I.

The American Society for Testing and Materials (ASTM) has recently adopted a Standard Test Method for the Identification of Flammable or Combustible Liquid Residues in Fire Debris Samples. This Method bears the designation ASTM E-1387-90, and is under the jurisdiction of ASTM Committee E-30 on Forensic Sciences, and specifically Subcommittee E-30.01 on Criminalistics.

The Test Method outlines the procedures which a laboratory analyst must use in order to make an identification of various flammable or combustible liquids in extracts from fire debris samples. In a nutshell, the Method requires the use of gas chromatography and pattern recognition, techniques which have been recognized in the industry for more than twenty years. Adoption of this Method by the ASTM elevates the methodology to something which is far more important than a particular analyst's "opinion" of what is proper methodology. ASTM Standards, while voluntary, meet the court, accepted definition of "industry standards". Laboratories which fail to follow the

procedures outlined in the Method do so at risk of their own credibility and at grave risk to their clients' cases.

Five other Standard Practices regarding methods of preparing fire debris extracts for analysis by the Standard Test Method have also been approved by ASTM, and two additional Standard Practices will be put to a Society ballot in the Spring of 1991. These Standard Practices allow the analyst wide latitude in the selection of an appropriate separation technique. The only acceptable analytical technique, however, is the one outlined in E-1387.

The adoption of these forensic science techniques represents a bold step forward for the forensic science community, as these are the first techniques to be formally adopted through the peer review system of ASTM. These Standards should bring greater uniformity and reliability to laboratory analysis of fire debris.

The IAAI, through its Forensic Science Committee, has played a central role in the development and adoption of the ASTM Standards. E-1387 is basically a refinement of the "Guidelines for Laboratories Performing Chemical and Instrumental Analyses of Fire Debris Samples" which was first published in

the *Fire & Arson Investigator* by the IAAI Forensic Science Committee in June of 1988. These "Guidelines", in turn, owe their existence to the research and teaching efforts of the laboratory staff of the Bureau of Alcohol, Tobacco and Firearms.

The Standards, as currently constituted, had their origins when, in 1987, then President John Primrose instructed the IAAI Forensic Science Committee to develop a uniform reporting format for the analysis of fire debris. Over the next year, Committee members discussed methodologies and reporting formats and eventually reached a consensus which resulted in the publication of the "Guidelines". Through the liaison with the American Academy of Forensic Sciences and the ASTM, these "Guidelines" became the basis for the first set of forensic science Standards adopted by ASTM.

The members and directors of our organization can be proud of the central role played by the IAAI in supporting the formulation and adoption of these industry standards.

The ASTM will be publishing these Standards in the Fall of 1991. If anyone wishes to obtain a copy prior to that publication, please contact the Forensic Science Committee.

STATE ARSON COMMITTEE CALLS FOR ACTION TO FIGHT INCREASING CRIME

*From the ICA BULLETIN,
May-June 1991*

The Insurance Council of Australia (ICA), a member of the Victorian arson standing committee established to fight the crime, has announced it is costing Victorians more than \$50 million a year in insurance pay outs. According to the standing committee, the total cost to the community could be as high as \$400 million.

Mr Tony MacKintosh, ICA's Regional Manager, Victoria said there was an urgent need for police and fire brigades to receive the resources to investigate each incident.

'The recession has led to an estimated 25 per cent increase in the number of Victorians deliberately burning down their homes and businesses to claim on insurance. More and more often, insurance companies are investigating

the financial position of a business or individual when a claim is submitted following a fire.'

'There is increasing evidence of organised crime becoming involved in corporate arson at a sophisticated level, for the purpose of eliminating business rivals or obtaining pay outs by fraud'

The standing committee is also concerned that arson is not included in the police index of major crime, although many less serious crimes were counted. Arson to defraud insurers, while significant, accounts for only a relatively small part of the total arson bill, according to Mr MacKintosh. Much arson is associated with vandalism and burglary.

'As the incidence of arson increases, insurance premiums also rise. The ICA estimates that up to 15 cents in every dollar paid in premiums goes towards

pay outs for fraud and a significant proportion of that is arson', Mr MacKintosh said. 'Only the arsonist profits — at the expense of honest policyholders.'

Statistics suggest that the total cost of arson to society could be eight times the total money paid out by insurance companies. 'For every \$1 an insurance company pays as a result of arson fire, a further \$8 is borne by tax payers as money for the maintenance of services such as police and fire brigades, the courts and to cover the dislocation of services where, for example, employees of a factory ravaged by fire are forced out of work and onto social service payments.'

'Arson can no longer be regarded as a closet crime. It is a community crime, committed not only by criminals but also by the desperate, the sick, the bored and the irresponsible.'

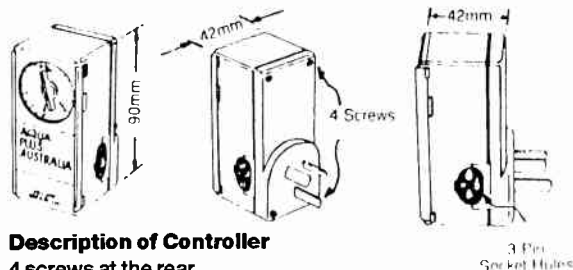


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WHEN THE HEAT IS ON

By Robyn Beatty

*From "The Australian Standard",
April 1991*

A recent house fire in which a mother and her five children perished has brought to light the inadequate provisions that most Australians make for coping with a life-threatening house fire.

In Australia last year, at least 168 people died in an estimated 10,000 house fires, and a further 11,000 people were injured. This figure is short of the real toll, as seriously injured victims who later die in hospital are not included. Given enough warning, clear escape routes, and adequate mobility, all these deaths could have been avoided — so why is it that people (particularly the very old and the very young) continue to be victims of what is essentially an avoidable occurrence?

A spokesman for the New South Wales Fire Brigades has warned that the general Australian attitude to house fires is that 'it won't happen to me'.

Darryl Leggett, Officer in Charge of Public Education, said that, in fact, Australia has a comparatively high number of house fires and related deaths.

"Fires can start anywhere", he said, "but most often start in the living areas. They can be caused by overloading of wiring (too many appliances), careless smokers, or using heaters to dry clothes."

"Smoke — the 'silent killer' — is the lethal factor in most house fires. Smoke from a house fire consists of up to 70% carbon monoxide, much more than exhaust fumes from a car," he added.

Older structures — buildings which often house older people or young families — are more likely to catch fire. Whether this is due to electrical faults, worn out appliances or people error (children 'playing' often cause fires), deaths and injuries resulting from residential fires can at least be limited by certain practices.

Panic

Knowing what to do in an emergency is possibly the crucial element. Smoke alarms and other devices will serve little purpose if there is panic and confusion — even early warning of a fire may not give you enough time to react. Fires can spread rapidly, blocking exits and creating dangerous smoky conditions, so it is important not to panic, keep low (smoke and heat rise), and get out as quickly as possible.

If your clothes catch fire, stop, drop to the ground, cover your face with your hands, and roll. Your body will do the best job of smothering the flames.

Be prepared for an emergency situation by planning and practising an escape procedure with your family. Known as EDITH (Exit Drills In The Home), fire departments encourage a complete plan for every situation. And don't forget the children; they might have to cope on their own in an emergency. Bedrooms, especially, should have two escape routes (usually the door and window), and everyone must recognise the importance of staying outside once they're out — people have died returning to a burning building.

The most effective way of surviving a house fire is to prevent it happening. Fires are caused by a myriad of factors, but carelessness is usually an integral factor. Open fires need to be watched, the oven turned off when you go to the shop, the iron switched off unless you're using it, and rubbish around the house cleaned up. Smokers need to be particularly careful, and children taught the dangers of fire and electricity.

Most importantly, fire safety in the home is just not simply a matter of installing smoke alarms, fire extinguishers, or sprinklers. It also involves planning, discussion and education among the whole family. If it ever does happen to you, you and your family will be in a much better position to survive what to another family might be its tragic end.

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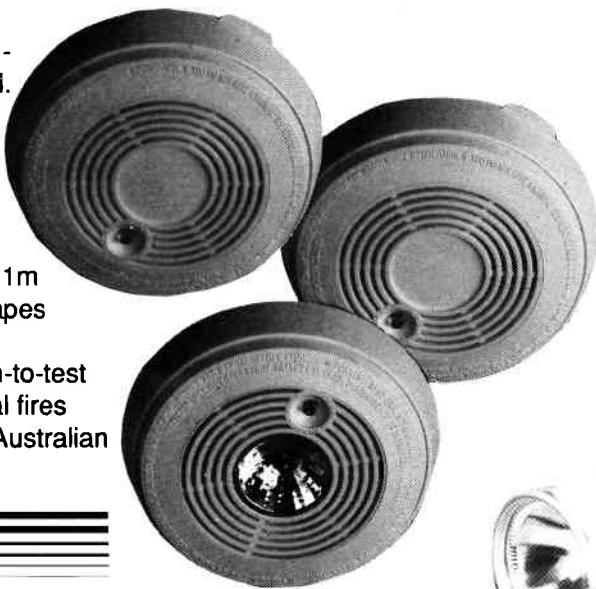
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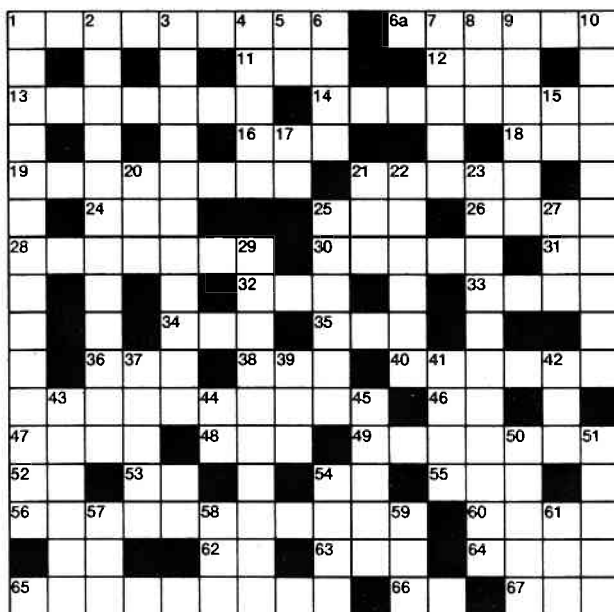
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ACROSS.

1. Literary classic (9)
- 6a. Acid (6)
11. Asian deer (3)
12. French land measure (3)
13. Nitrogen trihydride (7)
14. Standard state (8)
16. Spread to dry (3)
18. Constellation (3)
19. Impeded (8)
21. Reproductive cell (5)
24. Ordnance acronym (3)
25. Express disgust (3)
26. Irish Gaelic (4)
28. Remote centre (7)
30. Accept (5)
31. At home (2)
32. Ram turn-on (3)
33. Hindu queen (4)
34. Int'l firm (init) (3)
35. French king (3)
36. Greek letter (3)
38. Fuss (3)
40. Blank books (6)
43. Magnet type (9)
46. Gold symbol (2)
47. Otherwise (4)
48. Mature (3)
49. Undress again (7)
52. Concerning (2)
53. Conception method (2)
54. Behold! (2)
55. Bind (3)
56. Rogue (11)
60. Responsibility (4)
62. Egyptian sun god (2)
63. Anecdotes (3)
64. Bird abode (4)
65. Official recorder (9)
66. Exist (2)
67. W. Winkee size (3)

THE JB CROSSWORD



SOLUTION NEXT ISSUE

DOWN.

1. Volatility guide (10)
2. Protests (12)
3. Abode of demons (11)
4. Angry (5)
5. Negative (2)
6. Care for (4)
7. Relief carving (5)
8. Historical period (3)
9. Vote counter (6)
10. Physics branch (10)
15. Chem. sym. cerium (2)
17. Short Brogan (2)
20. Fishing method (3)
21. Unhappy (3)
22. Aversion (6)
23. Recompense (11)
25. Protector (6)
27. Transgress (3)
29. Tripartite (10)
37. Regions (5)
39. River (3)
41. Endure (4)
42. French pers. pron. (3)
43. Satisfy (6)
44. Milne's initials (2)
45. Golf course (5)
47. Human fault (3)
50. Renovate (5)
51. Fake jewel (5)
54. Prevaricator (4)
57. Iron type (3)
58. Skill (3)
59. Apprehend (3)
61. Function (3)

FIREPOINT