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FIREPOINT: IF YOU HAVEN'T PAID YOUR FEES FOR THE CURRENT YEAR, PLEASE DO SO NOW.

EDITORIAL

This issue has a seminar report from Queensland, a case study from Victoria, and a research report from New South Wales. And there is news from the International Association.

We can all learn from one another.

I would like to take this opportunity to wish all members the best for the holiday season. May 2006 be a good year for you all.

Wal Stern



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Victorian Chapter News

Life Membership Awards

The VAFI (Victorian Association of Fire Investigators), Chapter 58 of the IAAI (International Association of Arson Investigators) held their Annual General Meeting on the Friday 30th September 2005.

Significant events at the meeting were the election of Bob Hetherington (MFESB) to the position. President's the presentation of Life Membership Awards, and a presentation on the Joint Fire Investigation of a large warehouse fire in Apia, Samoa.

The immediate past President Alex Conway (MFESB) was presented with a Life Membership of the Association for his 10 years on the committee and the past 6 years as President, presented by Bob Hetherington.

Vice President Brian Neal (CFA) was also presented with a Life Membership of the Association, being one of the original committee member serving on the committee for 16 years and being a Past President. Brian is also the Victorian Editor of the national 'Firepoint" magazine and was presented with his award by Alex Conway.

Both Alex and Brian have been recognised for their leadership, support and dedication to the Association and their contribution to Fire Investigation throughout the State. They join Association Life Members Fred McCouch, Adrian Edwards, John Kelleher and Terry McCabe,



Brian Neal with His Life Membership Award



Alex Conway with His Life Membership Award



NSW ASSOCIATION OF FIRE INVESTIGATORS INC

(IAAI CHAPTER No.47)

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PRESIDENT'S REPORT

Dear Members

Welcome to my final President's report for 2005.

When I look back over the events of 2005 I am encouraged by what I believe represents another successful year for the NSW Association of Fire Investigators.

As 1 said at the beginning of this year, training for our members was to be one of our maior focuses. To honour that commitment the Association has staged of free number а seminars aimed at providing vou. our membership, with more of the tools you will need when investigating the everchanging phenomenon of fire behaviour.

The presentation byInspectorMarkCavanough from theNSW Fire Brigades FireInvestigationandResearchUnitregardingtheconstructionof

residential premises and their behaviour in fire was of particular interest. I believe it heralds a new direction for the emergency services that focuses on the premises that are causing the most deaths in our community.

In recent months we have seen an unprecedented number of people killed in their homes when fire has broken out. These led deaths to the introduction of new legislation be to introduced next year making the installation smoke detectors of mandatory for all new homes and any rented Whilst home. this legislation is a positive step, it is only part of the solution.

The reasons for these deaths are complex and we in this industry have an obligation to discover all the factors that contribute to such tragedies. I urge all members to have an active interest in fire investigation involving residential properties so that we can ensure legislative that the bodies such as the Australian Buildina Code Board are fully all the informed of issues.

We continued with a commitment to training by staging what was a very successful three day conference, consisting of a one day practical workshop and two days of a conventional conference format.

We were privileged to have a star-studded list conference of speakers, headed by our international guests Nick Carey and Mark Svare, All the speakers provided the delegates enthralling with an insight into the role of electricity as а fire Many of the cause. case studies explained, how detail. one in should best examine a where it is scene suspected electricity has played a role. I'm sure that all walked away a little wiser from the event.

The workshop also proved a very popular draw-card, selling out in only a few days. Mark and Nick provided the workshop delegates with a very hands-on experience of electrical behaviour studying, in great detail, the ways in which common household items fail electrically and what evidence is left for the investigator to discover.

The day ended with a spectacular display of willful destruction with each group engineering a particular electrical failure and watching as their appliance melted into an unrecognisable mass of plastic.

During the conference we also held our Annual General Meeting to elect a new committee and set some direction for the coming year. I was nominated for reelection as President and humbly accepted the role.

Roger Bucholtz was reelected as Senior Vice President with Sonia Casamento being elected as Junior Vice President. What was most encouraging was the number of people from varying sectors of the industry that were also elected onto the committee.

We now have an active member of the Police

Service as well as members of the NSW Fire Brigades, the NSW Rural Fire Service and representatives of the insurance sector and the private investigation industry. With this array of talent and broad knowledge base. I am sure that the committee will continue to provide members with information regarding the issues that matter most.

Our branch continues to represent you through abroad our liaison with the International Association of Arson Investigators (IAAI). Our liaison officer Ross Brogan attended this vear's international conference in the United States.

Ross's involvement and assistance with the many committees of the IAAI has proved very beneficial for our branch and we continue to impress all with our progressive approach to fire investigation. The IAAI continues to support its members through its interactive web site and the new training aids.

The CFI trainer program is proving a very successful web based training aid that is providing detailed training programs for all members. I encourage all to visit the web site at <u>www.cfitrainer.net</u> and see for yourselves the services that are available.

Ross also presented a regarding paper the future of fire investigation training in region to the our Australian Fire Authorities Council conference held in New Zealand. By all Ross's accounts presentation was well received and provided the delegates with a clear very understanding of the future requirements for the fire investigation training.

In closing, can I take opportunity this to thank you all for your support for the committee over the last year. We hope that we have addressed some of your needs and with vour help we will continue to work to identify the issues that matter to you most in the year to come.

I also would like to wish you all the compliments of the season. I hope that your Christmas and New Year are all that you want them to be.

Stay Safe Kind Regards

Paul Bailey President.

Queensland Association of Fire Investigators Seminar Rights of Access to a Fire Scene, Rights of Evidence Collection

On 21 July 2005, the Queensland Association of Fire Investigators held a Seminar entitled Rights of Access to a Fire Scene, Rights of Evidence Collection.

This seminar provided a unique opportunity to inform all stakeholders in fire investigation in Queensland, of the legal rights of government agencies and private sector parties to enter fire conduct scenes. examinations and collect exhibits.

Invited speakers representing various stakeholders were:

- Area Director Danny Carson, Manager State Fire Investigation and Research Section, Queensland Fire and Rescue Service (QFRS),
- Sergeant Michael Holohan, Senior Scientific Officer, Queensland Police Service (QPS),
- Trevor Little, Department of Industrial Relations, Electrical Safety Office (ESO) and Workplace Health and Safety (WHS),

- John Fleming, Chief Inspector Petroleum and Gas, Department of Natural Resources and Mines,
- Tim Fynes-Clinton, Managing Partner, King & Company Solicitors, representing the Local Government Association, and
- Quentin Lanyon-Owen, Partner, Hunt and Hunt Lawyers, representing the private sector.

This summary of the seminar is split into firstly two parts, the addressing Government perspective and secondly the private sector, with a full reproduction of а paper prepared by Quentin Lanyon-Owen.

Part 1 - Rights of Access to a Fire Scene -Government

QFRS

Area Director Danny Carson provided an overview of the *Fire and Rescue Service Act 1990* (Qld) and the provisions authorising fire officers to enter a fire scene for

preventative or investigative purposes in and particular, to ascertain the cause of a fire or hazardous materials emergency. Significantly however. was the apparent omission of provisions under the Act relating to the seizure of evidence. Evidence is therefore collected by those have who do legislative power, for example, the QPS or the ESO. А Memorandum of Understanding exists between the QFRS. QPS and the ESO to the assist in investigation of fires Queensland. in highlighted Dannv WHS issues in relation to the QFRS providing scene to access representatives of private sector the problems they and are currently experiencing in having relation to electrical exhibits examined and in deciding which to private sector party exhibits should be released. once no longer required by the QFRS, QPS or ESO.

QPS

Generally, investigating officers from **QFRS** the attend a fire scene in the company of a **QPS** Scientific or Scenes Crime of Officer and Sergeant Michael Holohan advised that Members of the QPS are authorised under the Police Powers and Responsibilities Act 2000 (Qld). The authorizes Act а police officer who reasonably suspects that the place is a crime scene to enter place that and remain for as reasonably necessary to decide whether or not to establish а crime The police scene. officer may declare the scene a crime scene under the Act when satisfied that the scene is а

primary or secondary crime scene. This is obviously the case at fire scenes in circumstances where the cause and origin of the fire are suspicious or merely unknown.

Upon establishing the scene as a crime scene, police officers are authorized to exercise crime scene powers, specifically under s93:

- (a) enter the crime scene;
- (b) if reasonably necessary, enter another place to gain access to the crime scene;
- (C) any perform necessary investigation, includina. for example, а search and inspection of the crime scene and anything in it to obtain evidence of the commission of an offence;
- (d) open anything at the crime scene that is locked;
- (e) take electricity for use at the crime scene;
- (f) dig up anything at the crime scene;
- (g) remove wall or ceiling linings or floors of a building, or panels or fittings of a vehicle;
- (h) remove or cause to be removed an obstruction from the crime scene;
- (i) photograph the crime scene and anything in it; and

 (j) sieze all or part of a thing that may provide evidence of the commission of an offence.

Additionally the Act authorizes police officers restrict to access to the crime scene. A person. other than the responsible officer. must not enter a crime scene unless-

- (a) the person has a special reason, associated with the investigation, for entering the crime scene; or
- (b) the person is a police officer who is asked to enter the crime scene by the responsible officer or an investigating police officer; or
- (c) the person is an authorised assistant; or
- (d) the presence of the person is necessary to preserve life or property at a crime scene; or
- (e) the person is authorised to enter by the responsible officer.

Police are further authorised to direct a person to leave the crime scene or remove a vehicle from the crime scene.

These provisions of the Act prima facie prohibit the presence of private fire scene examiners or loss adjustors to enter a fire scene whilst the scene is under the control of the QPS. An exception lies within Schedule 4 of the Act which permits by access an authorised assistant. Under the Act. а person who is not a police officer is an authorised assistant if in the opinion of the responsible officer at a crime scene, the has person specialised knowledge or skills of a kind necessary for exercising a power mentioned in s93 of the Act. This provision would enable police investigating a fire scene to draw on the expertise of an electrical or gas inspector. pathologist, engineer or merely someone who has an intimate knowledge of the

building or contents.

The general powers under the Act to seize evidence provide officers with a general power to seize anything, which reasonably they suspect may afford evidence of the commission of an offence, from a public or from place. another place which they have entered lawfully. Items of intrinsic value are their returned to respective owners following completion of their examination. they should so desire. Fire debris samples are destroyed following examination due to health and safety issues with their return to their owner. Third parties are able to view exhibits. for example electrical appliances, only in instances where the items owner authorises them to do so.

WHS & ESO

Trevor Little from the Department of Industrial Relations. reported on the operation of Health Workplace and Safety Queensland (WHS) the Electrical and Safety Office (ESO). principal The

legislation involved is:

- Workplace Health & Safety Act 1995
- Workplace Health
 & Safety
 Regulation 1997
- Electrical Safety
 Act 2002
- Electrical Safety Regulations 2002

Under the various pieces of legislation, the inspectors have the following powers:

- Enter a workplace
- Inquire into circumstances of incidents (e.g. taking statements)
- Observe/search any part of a place
- Inspect, measure, test, photograph or film any part of a place
- Take things or samples
- Obtain copies of documents at the workplace
- Seize evidence
- Ask for assistance in exercising powers

As previously reported, the QFRS utilise some of the powers of the ESO to assist in the collection of exhibits from a fire scene.

Petroleum and Gas

John Fleming from the Department of Natural Resources and Mines advised that the Petroleum and Gas (Production and Safety) Act 2004 gives the inspectors various powers in relation to investigations.

There are general provisions that allow an inspector to enter a place if:

- (a) its occupier consents to the entry; or
- (b) it is a public place and the entry is made when it is open to the public; or
- (c) the entry is authorised by a warrant; or
- (d) it is a place of business to which this Act relates and the entry is made when the place is open for business or otherwise open for entry; or
- (e) its occupier has been given a compliance direction and entry the is made, at a time or interval the stated in direction. to check

compliance with the direction

- Under emergency provisions, an inspector may enter if:
- (a) the inspector reasonably suspects---(i) an emergency exists, or may exist, involving petroleum or fuel gas or suspected petroleum or fuel gas at the place; and (ii) the emergency is causing, or is likely to cause imminent and significant harm to persons or damage to property; or
- (b) an incident is happening at the place and—
 (i) the incident is causing harm to persons or property; and

(ii) it is reasonably necessary for the inspector to enter the place to investigate and manage the incident to the extent it relates to petroleum or fuel gas.

There are special powers of entry such that an inspector may. at anv reasonable time. enter a place where an operating plant is situated, other than a part of the place where а person resides.

In addition, there are special provisions under the Act for obtaining and serving warrants.

After gaining entry, the inspector may do all or any of the following—

- (a) search any part of the place;
- (b) inspect, measure, test, photograph or film any part of the place or anything at the place;
- (c) take a thing, or a sample of or from a thing, at the place for analysis or testing;
- (d) copy a document at the place;
- (e) take into or onto the place any person, equipment and materials the inspector reasonably requires for the exercise of a

power under this division.

Local Government

Tim Fynes-Clinton. Managing Partner, Kina & Company Solicitors, advised on the local government perspective. He reported that in Queensland the current Act is the Local Government Act 1993. That Act defines the system of local government for Queensland and identifies the various functions and powers of local government. relation to fire In scenes, the following two areas are under the control of local governments:

- 1. Storage of flammable and combustible liquids; and
- 2. Regulation of building matters.

relation to the In storage of flammable and combustible Authorised liquids, Officers can obtain access to premises by various means, including consent, if it is open to the public, under a warrant, if a dangerous situation exists and to urgently investigate a major accident or near

miss. Once access has been obtained, the authorised officer has relatively broad powers of investigation, including:

- (a) search any part of the place; or
- (b) inspect, measure, test, photograph or film any part of the place or anything at the place; or
- (c) take a thing, or a sample of or from a thing, at the place for analysis or testing; or
- (d) copy a document at the place; or
- take into or onto (e) the place any persons, equipment and materials the authorised officer reasonably for requires exercising а under power this part; or
- (f) require a person at the place, to give the authorised officer reasonable help to exercise the authorised officer's powers under paragraphs (a) to (e); or

- (g) require a person at the place, to
 - answer questions by the authorised officer to help the authorised officer ascertain whether this Act is being or has been complied with.

In relation to building structure, if entry is obtained to a fire damaged building. and the authorised forms person the view that the building is dangerous or dilapidated, the authorised person is empowered to issue enforcement an notice requiring the building to be repaired or, in an extreme case, demolished.

The power to take that action is found in sections 22 and 23 of the *Building Act* 1975.

The second part of this summary in the next issue of "Firepoint" will address issues that relate to the private sector and provide a general summary of the July seminar.

Australian Standards of Fire Investigation

One of the roles of the members of the Editorial Board of the "Fire & Arson Investigator" (the magazine of the IAAI) is to review articles submitted for publication, to ascertain technical content suitability and, to check for international content and suitability.

After all, the IAAI is international an association. Does the content inform the members of how it is other done in countries, without too confusion much related to different terminology [with a motor vehicle - is it a boot or a trunk; is it a bonnet or a hood? Who cares? As long as we all understand what is being imparted!

"Standards" are. like the term implies, something that is done in a uniform fashion, no matter where you are. Standards are followed to maintain consistency in whatever it is that we do. If a standard and uniform approach has been adopted to

a specific role or work practice, it is usually followed wherever that practice is carried out [why re-invent the wheel – so to speak?]

It is no different in Australia. The recognised standards of fire investigation practices used in the USA. United the Kingdom, Israel, New Zealand. Canada, taught and etc.. preached by recognised authors of technical manuals and texts such as Kirk's Fire Investigation, IFE Principles Fire of Investigation, Coles' Investigation of Motor Vehicle Fires, NFPA 921 and ATFE/USFA arson/fire and evidence manuals, amongst others; are recognised and utilised fire for investigation throughout the States Territories and of Australia, and in New Zealand.

Throughout Australia and New Zealand the numerous Fire Brigades covering all of these two countries are members of the Australasian (Australia & New Zealand) Fire Authorities Council [AFAC].

AFAC has an organised group consisting of representatives from all member fire services' fire investigation bodies, the Australasian Fire Investigation & Analysis Group (AFIAG). This group has the objective of establishing а uniform standard for fire investigation training and operational all guidelines for members throughout both countries.

This objective has two ultimate aims; 1. Establish a uniform set of guidelines for operational investigators to follow at fire scenes; and,

2. Establish а uniform training regime, so that one investigator may transfer between brigades (or with countries), standard training qualifications; and the job gets done in a uniform fashion

evervwhere. In all. the final outcome will produce a standard set of data on fire origin and cause statistics throughout all fire brigades; ensuring a uniform approach to both fire prevention and. arson mitigation.

AFIAG has adopted the standard approach of using NFPA (Standard) 1033 as the background to the basic competency qualifications required by investigators in Australia and New Zealand.

NFPA (Guide) 921 has been adopted as the standard technical document to be used as a reference document to assist with training of investigators and with operational fire investigations conducted.

A Diploma of Fire Investigation has been developed, in conjunction with the AFIAG and AFAC to assist with the aims and objectives of the group.

Charles Sturt University, in Australia, offers fire investigation training

Universitv at Graduate Degree level. The University currently has students enrolled from all over Australia and New Zealand, with interest shown from other numerous countries.

The courses offered begin at Graduate Certificate level, progress to Graduate Diploma and can be rounded off with a Master of Arts (Fire Investigation) Degree.

The course programme has been developed with **NFPA** 1033 as а basis. formulating basic levels of competency for fire investigators in-line international with standards. The set texts for studv material include. NFPA 921. Kirk's Fire Investigation, **IFE Principles of Fire** Investigation, Munday's Safety at Scenes of Fire and Building Brannigan Construction for the Fire Service (amongst others in specialty subjects).

One of the objectives of the course coordinators is to promote the use of

the principles detailed NFPA in 921, particularly the "Basic Methodology" contained in Chapter (2004),for 4 conducting а fire investigation by the "Systematic" or "Scientific" method.

This methodology is recommended by NFPA 921 as a universal method for conducting a fire investigation and involves the following steps;

- recognize the need
- define the problem
- collect data
- analyse the data
- develop a hypothesis
- test the hypothesis
- select the final hypothesis;

a sound and tested method that should be followed as a universal practice.

As reference а document, NFPA 921 has not been used very widely in the court system in Australia, up to this point in time: certainly not as widely used as it is in the USA system.

It is used by prosecutors and defence counsel, but not as a matter of course, and certainly not as much as it could be to maintain standard and а uniformity in court cases, either civil or criminal.

After involvement with reviewing recent articles written for the Fire & Arson Investigator magazine, on LP gas safety and investigations, inquiries in Australia showed that many **NFPA** & UL Standards although recognized in Australia and New Zealand are not used as a "Standard" due to Australia and New Zealand having their Standards own system.

It was found that although the NFPA & UL standards (NFPA 54. NFPA 58 _ relating to fuel gases, and UL 144 relating to LPG regulators) recognized are throughout the gas industry and certain parts of these standards are complied with, and, in conjunction with the relevant NZ Australian or standard, provide

greater compliance than required; therefore greater safety for the end user.

As of а matter interest. until up several years ago, operated batterv (single-point) home smoke alarms sold in Australia were recommended for use by fire services throughout the if thev country complied with UL (Underwriters Laboratories) or BS Standards) (British testing standards compliance: as Australia did not Australian have a Standard for smoke alarms.

Many other NFPA and UL standards are recognized in Australia and New Zealand in this way.

In the court system in Australia the ethical fire conduct of investigators is covered the by "Rules of Evidence" under the coverage of "Expert Opinion Evidence" for all types of expert not just witnesses, fire investigators.

Firstly, for an opinion from an investigator to be accepted as

evidence the report from the expert must be accompanied by a comprehensive CV. detailing the qualifications of the expert: specifically the expertise and qualifications of the expert to give opinion evidence on the matter at hand (fire origin and cause in this case).

Secondly, the rules stipulate that the expert is appearing in court to "assist the court" and that the expert is presenting evidence in the matter on behalf of the court and not on behalf of the person/company engaging the expert.

Thirdly, if there are points of anv contention between opposing experts in any case the court rules indicate that the court can order the experts to take part in a conference to try to agree on any points that cause that conflict of opinion; and. come to agreement on those points.

If there are points that cannot be agreed upon, then a written statement must be submitted detailing the reasons

those points why cannot be agreed upon (each expert's point of view on each point). Any areas that cannot be agreed upon are put to the magistrate or jury, iudge for deliberation.

As an added precaution, if any of the lawyers are sceptical regarding the qualifications put forward by the they experts can request the court to hold a "Voire Dire".

This is where the presiding Judge/Magistrate and both prosecuting and defence counsel question the expert the regarding qualifications and expertise in order to satisfy the court that the qualifications are aenuine and acceptable to allow the evidence to be presented.

This is where the qualifications gained by fire investigators, such as the AFAC the Diploma or Sturt Charles Degrees come into assist the play to establish witness expert witness status.

IAAI Certified The Fire Investigator (CFI) qualification is not universallv the recognized in court system in Australia, as it is not really understood to a great degree; it is seen as something of mystery, а "something from overseas"

We in Australia are trying to change that attitude by explaining the qualification as much as possible when questioned and by presentations at fire investigation conferences.

Without acceptance by the industry in the Australia. and people the in industry, it makes it difficult as well. Currently Australia has three CFI's (all in the same state -New South Wales) New Zealand and one.

Hopefully we are all on the same track, working toward arson prevention/mitigation and safety of the community – at different ends of the globe.

The IAAI is well represented in this part of the world by members filling positions in a number of committees, such as Ethics, Wildfire Investigations, T & E, FISC, Membership, Education Foundation and many others.

Ross Brogan AFSM, CFI, FISC, Liaison NSW/Vic., T & E, F & A I Magazine Editorial Board.

Inspector NSW Fire Brigades Sydney,.

Ross Brogan is the Liaison Officer for the NSW and Victorian Chapters with the IAAI.

He has been a regular attendee at the IAAI Annual Meeting over the past several years.

This article is a slightly amended version of an article Ross had published in the October 2005 issue of "Fire and Arsin Investigator", the IAAI journal.

Ross was the first Editor of "Firepoint", when it started life as a magazine of the NSW Chapter.

OPERATION VALIMA - A CASE STUDY

This report by Brian Neal is of a presentation Alex Conway made to the VAFI AGM, on 30th September, 2005.

FIRE INCIDENT

A fire occurred at a \$12M large Warehouse/Supermarket and Motel in Apia, Samoa, one of the Pacific Islands. Although a significant fire which totally destroyed the premises, a joint team of investigators through SAPOC and New Zealand Police. (New Zealand Police, MFESB, Samoa Police and Fire Service) were requested to investigate the fire due to a previous fire and the lack of resources.

BACKGROUND

The previous \$10M fire had not been investigated. Zurich Insurance were concerned, and requested an investigation. The large building containing all types of products including frozen food, explosives and most grocery items was almost totally destroyed. Most items were stored in bulk on pallets. Outside the building were refrigerated containers powered from the main building.

The warehouse was the major supplier of foodstuffs and general items to the surrounding 46,000 population. The fire service had only two appliances and at the time of the fire, the town water system was not operating.

The fire was noticed at 0300hrs on Saturday 13th August 2005, notified to the Police at 0315hrs and Fire Service at 0321hrs. Main fire attack was to protect motel. Police secured area. but 13 refrigerated the containers were removed. The police also canvassed persons for statements but took no further action. Cause/s were undetermined

ACTION

From the Insurance Company a joint fire investigation was requested and organized. First a plan of action and a control structure was developed. Overall command was the Fire Chief, with Police responsible for Security and the Fire Service responsible for extinguishment, fire investigation and scene safety.

The fire continued to burn and extinguishment continued during the investigation. The investigation started. Considered suspicious cause through recent sackings, theft, loud bang and reported yellow ute. seen leaving the scene, but no Accidental result. cause was considered through workmän's tools electrical work being area. in electrics undertaken, and poor

throughout the building, and poor housekeeping.

Failure of electrical equipment was suspected due to the poor electrical system and the wiring to the refrigerated containers.

The cause of the fire was determined as accidental, caused by the bank of 12 outlets to the containers overloading and igniting bulk pallet of matches adjacent to the outlets within the building through wall.

LESSONS LEARNT

Working conditions in 40°C heat was difficult for persons not from area. Lack of water was a normal occurrence due to turning off supply to restrict usage. Control of scene and burning products provided a hazard to investigators, due to the laid back attitude and lack of equipment. Extinguishment of the fire continued but due to the lack of water was slow.

Team approach worked well. Scene safety and safety equipment was lacking in local team members. Being a major event the scene was determined as a crime scene but lack of knowledge and expertise of investigation procedures hampered progress.

Regard for the run off pollution from the fire and the dangerous goods was not considered or controlled. Building construction, fire protection and maintenance to building lacked local regulations, controls and inspections. Lack of segregation of products within the building may have assisted in spread of fire. This was a successful joint investigation and local authorities are reviewing procedures in line with the procedures and investigation following this incident.

Thanks are due to Alex Conway for his presentation and review of the investigation and problems. It was noted that the investigation procedures used in Australia are adaptable and succeed.

(Note that Valima is the name of the local beer)



Alex Conway (left) and Brian Neal (right), VAFI President and Vice President, at the VAFI 2005 AGM.

Congratulations to both Alex and Brian on their elevation to Life Membership at this meeting. Between them they have 32 years of continuing dedicated membership of the Victorian Association.

News from IAAI

CFITrainer.net is developing into a IAAI areat training tool. is continuing to develop programs for this internet based training. We have had over 4700 users who taken advantage of the have programs offered. If you have not go to the website done so www.firearson.com and check out the offerings on CFITrainer.

We will be receiving details in the future on a Juvenile Firesetter program which will include a train the trainer program for Chapters to train some of their members to run the program in their home Chapters.

The IAAI will be hosting the 2007 ATC in Victoria, British Columbia. Due to possible changes in travel regulations if you do not have a passport please get a passport as you may need a passport to enter Canada in 2007.

The IAAI Hurricane Katrina Relief Fund has received \$13,000.00 in donations.

Congratulations to Colorado and Nevada who have become the newest Combination Membership As review Chapters. а Combination Membership allows the International Office to bill members both their Chapter International and Chapter dues at one time. If your Chapter is looking into the interested in **Combination Membership Program** information can be found on the Membership website under Committee.

Electronic Balloting - Beginning in 2006 - Beginning in 2006 for the annual election balloting will be done electronically. Those that are unable to make the Annual Meeting will be able to vote electronically during a prescribed time prior to the Annual Meeting. Members will no longer need to apply for a mail in ballot to cast a vote. Members will now be able to vote electronically on line during the prescribed time period to be announced in the At the Annual Meeting future. votina will be completed electronically. We will keep you all posted regarding this benefit.

A message from IAAI-UK Member, Mike Kelter of Gardiner Associates says:

A friend of mine is investigating a car fire where an air bag deployed during fire fighting. The entire plastic casing was propelled from the vehicle, with considerable force, and struck a fire-fighter as it fell to the ground. It goes without saying that this 'near miss' is being taken very seriously. I am advised that a similar event was reported in EMS news (a US publication).

A message from our member Garry Millington of the London Fire Brigade Fire Investigation Group regarding a serious fire that he is investigating says:

Has anyone out there had any experience or knowledge of fireworks as an ignition source on stacked tyres. Please contact me on <u>gary.millington@london-</u> fire.gov.uk

AS SAFE AS HOUSES

Class 1a Building Research Project

Background:

Over the last 20 years dramatic changes have occurred in the way our houses are built. Timber and other natural resources have been depleted and costs of materials have substantially increased. As a result building engineers have utilised alternative solutions and cheaper materials to construct the modern family home.

Class One buildings and the safety of its occupants represents a major challenge to the NSWFB given the lack of formal

consultation between the NSWFB and the regulating bodies (outside of the new smoke detector legislation).

Δ detailed research study is being undertaken of the current building construction methods, internal furnishings, fit-outs, occupant behavioural response to fire. and **NSWFB** intervention and suppression tactics. This research will assist in providing a clearer understanding of whether the current BCA requirements adequately address the risks associated with these buildings.



<u>Graph 1</u> – Demonstrates the % of Class One fires compared to the total structure fires attended by NSW Fire Brigade.



Graph 2 -

Demonstrates the cost of insurance claims in Class One dwelling fires from Insurance Statistics Australia. These figures do not represent the total cost nor do they represent any unclaimed damage costs from fire.

Project Purpose:

The primary aim of the project is to undertake qualitative and quantitative research into fires involving Class 1a buildings with the view of reducing the number of fatalities and serious injuries to both building occupants and firefighters that may occur. Internal and external stakeholders will be involved in the research to assist in validating any argument for fire service input or consultation into fire safety requirements for Class 1a buildings.

Current and Anticipated Research Topics:

- Air conditioning ducting and fire spread
- Building Insulation and fire risks
- I-Beam construction
- Sandwich panel construction in Class 1's
- Smoke detectors vs. Gas detectors
- Polyurethane furnishings and fire
- Timber vs. Steel vs. Concrete construction
- Compartmentation and fire development

- Rebuild vs Repair (cost analysis)
- Fire Retardants are they more dangerous than the fuel they are protecting
- Water supply in modern estates / developments
- Lightweight materials and structural integrity issues
- Modern design and construction techniques

This is far from an exhaustive list and the development of new sub-projects is expected to ensure that the research completed and outcomes achieved are kept within the parameters of the desired outcomes.

Projects on polyurethane furnishings and air conditioning ducting and their respective contribution to fire spread have been completed.

The results and recommendations will be utilised to provide courses of action as the project progresses.

Project Outcomes and Benefits:

- Identification of structural and fire risk factors that may impact on fire-fighters and occupants
- Develop improved safe working practices for fire-fighters through training and education to ensure suppression tactics are compatible with the increased fire development and hazards being experienced
- Promote community safety and minimise the risk and impact of fire incidents to the community in Class 1 incidents. This would be expected to lead to a reduction in fatality and injury numbers associated with Class One building fires.

Project Manager:

Inspector Mark Cavanough Fire Investigation and Research Unit NSW Fire Brigades

For more information contact mark.cavanough@fire.nsw.gov.au