16 May 2003

The Committee Secretary Select Committee on the Recent Australian Bushfires Parliament House Canberra ACT, 2600

Dear Sir,

Enclosed with my apologies is my late submission to the inquiry you are conducting.

I was advised submissions were due on the 30th May not the 9th May.

I regard the incident in two phases;

- first the lightning caused bushfires in Victoria and NSW

- second the movement of these fires that joined up and moved into the ACT and destroyed houses in the ACT as a consequence of inadequate action by many 'players'.

I trust my submission will help you, in your investigation of the cause and their effects, and point to

some ways of preventing future catastrophies by my suggested remedial actions.

Yours Sincerely

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JH Wickett

BComm., Dip Ed., QDAH, APD., NM., RFD.

AUSTRALIAN BUSHFIRES and ACT FIRE DAMAGE

by JOHN WICKETT

BACKGROUND.

I have spent all of my 65 years associated with the forestry industry.

My father was a New Zealand forestry engineer and brought his family to Canberra in 1940 to serve in a position as lecturer at the Canberra Forestry School under Dr. Lane-Poole for six years.

In 1946 we moved to Cabbage Tree Creek in Victoria where dad built and managed a saw mill for Alstergrens for three years.

We then moved to the sawmilling complex for Australian Newsprint Mills at Boyer Tasmania for five years, then to Cairns for three years where dad redesigned all the saw mills in North Queensland owned by Bunning Bros.

In 1956 we moved to Western Australia where my father was the Utilization Officer for the W.A. Forests Dept. for the next 20 odd years.

During all this time I was closely associated with the forestry industry in all these areas of Australia and after graduating from Gatton Agricultural College in 1956 I moved to Western Australian with my father and worked with the W.A. Forests Dept.

During that time I worked in the pine plantations, as well as helping with fuel hazard reduction burns in Departmental Coastal areas near urban developments. I was instrumental in getting the Forest Department Gnangara Fire Control Truck to the Scaddan Pine plantation blaze in Feb/March 1957 and so got experienced Forestry Dept. firefighters into a city area to help protect all the houses adjacent to the eastern edge of the blazing pine plantation. This was despite the incompetence of the city firefighters who did not listen to my advice which would have prevented the loss of the pine plantation.

This was my first lesson, that there are 'horses for courses', and that City firefighters can sometimes be very inexperienced in knowing how to fight forest fires, i.e. Eucalptus based bushfires or Pine tree based forest fires.

SITUATION

The Australian Bush, particularly the open sclerophyl forest of most the southern part of Australia is a natural system that has developed to its climax over hundreds of thousands of years, by periods of spontaneous or lightning generated fires and the subsequent forest regeneration. These fires were the catalysts for breaking seed dormancy and allowing germination and regeneration of the forest.

The aborginal custom of burning forests for ease of game spearing, for over 40,000 years continued the adaptation of our Australian forests to fire regeneration.

European settlement and encroachment on aboriginal land, stopped the burning of forests and so allowed fuel supplies to build up in the forests and so become dangerous in the event of a spontaneous fire or a lightning strike.

There have been instances in Australia where horrific bushfires have burnt out large areas of forest, farmland, houses and adjacent townships, because of the non reduction in forest fuel loads.

Examples are:-

WA Pemberton fires Xmas Day 1860's and Dwellingup fire Summer of 1960 Black Friday in Victoria in the 1930's Victorian Ash Wedesday Fires in the 1980's Blue Mountains/Sydney fires in 1990's, 2001, 2002 and 2003.

Canberra in 1938, the 1950's and now in 2003.

PREVENTION

The most logical way to minimise the chance of an extensive forest fire as we have witnessed this year of 2003 in Victoria, New South Wales and the A.C.T. is to carry out forest fuel reduction programs by each Forest Department Authority in each State with co-ordination between States.

This can best be done using the techniques developed by the WA Forest Department in the 1960's.

DWELLINGUP FIRE 1960

The policy of the W.A. Forests Dept. in the late 1950's was minimal burning of forest fuel loads.

In the hot summer of 1960 a fire started in the Dwellingup Forest south of Perth, swept swiftly through the heavy dry undergrowth along the river banks up into the Eucalypt crowns, igniting the Eucalptus oil with ferocious heat, creating fierce winds that blew the fire at brakeneck speed, demolishing the township of Dwellingup with great loss of property, stock and some lives. It took days to be brought under control.

The Conservator of Forests, Mr Harris, subsequently made the policy that fuel reduction would be part of standard operating procedures for Western Australian Forests as it was the driest state, in the driest continent on earth, so vulnerable to fire. These procedures were developed so that the whole of the forest was divided into manageable blocks or coups, with wide, clear fire breaks around each block. These blocks would then be burnt by a slow burn, as individual non-continuous, blocks once every five years in autumn, just before the winter rains. This ensured adequate protection for humans, the forest, settlements and native animals.

The Western Australian Forest Dept. was regarded as the World's best bushfire control practitioners and was used to teach other World firefighters such as the Californians, how to manage bushfires.

AUSTRALIAN CAPITAL TERRITORY

On my arrival back in the ACT in 1992, I was amazed at the lack of fire breaks around

farming properties, the massive fuel loads in the forests that I understand had not been reduced in 80 years, and the disaster waiting to happen in the Duffy area, with houses being built in a pine forest area with the pines trees across to their west, north-west and north,

The norh-west is the fire danger area, where the hot summer winds would come from. With a fire, these winds will increase to ferocious forces, as we witnessed on Saturday, 18 January 2003, and spot fires will start many kilometers in front of the flames, carried by these winds. Again this is exactly what happened.

These fires could have been prevented if adequate action had been taken on the 8 January 2003 when the bushfires first started.

BRINDABELLA FIRES INFLUENCE

Once the fires in the Brindabellas enlarged, it was obvious that the pine plantations to the North, North-west and West of Canberra were going to catch alight by spot fires, because there had not been a properly co-ordinated effort in NSW to do 'back burns' to put the fires out before they wiped out Wee Jasper.

The inability of the water dropping helicopters to fly in the windy, dangerous visibility conditions, show the inadequaces of the policies of bushfire control and urban protection. There had been no 'plan B' to counter such a contingency.

Supplies of Bush Fire Brigade equipment and numbers of personnel were quite inadequate. Why get people to leave areas long distances away to fight fires at a dangerous time of the year when they may be needed in their own areas.

Each region should be self sufficient with its own resources of materials and personnel, as well as adequate training of all people who live in fire prone areas.

The Victorian Government is now taking steps in this direction.

HOUSE FIRES IN CANBERRA

Once the Pine Plantations were ablaze it was obvious that the houses adjoining the plantations would be in danger.

The best advice to be broadcast on radio and by newspaper was to block up windows and doors with wet towels, block gutters and fill with water and hose the front walls of houses facing the flames. This is the advice, along with other very pertinent information given by David Holmgren in his small book 'Flywire Houses', which he wrote after his investigation of the Ash Wednesday fires for the Victorian Forest Dept. But the advice that was not given, should have been 'stay with your house and put out spot fires'. ' That your house will only burn from a fire that starts either underneath your house or inside your house' and that ' the safest place you can be is inside your house putting out spot fires for the short time that the heat and the flames are around'.

But hosing was futile when hoses only dribbled water, because of the failure and inadequacy of ACTEW water supply system in the fire affected areas. Another problem may have been the tardiness in switching off gas supplies.

A friend of mine was at home in the danger area on Satuday afternoon, the 18 January 2003. He spent his time after he had secured his house with wet towels etc. checking on 3 or 4 of his friends' houses who were away at the coast. As he was walking between houses an angry young police constable, very fresh out of training school, drove up to a group of men and told

them to evacuate, and drove off in a rush to tell others to evacuate. My friend walked to the next friends' house, saw a spot fire starting in a brush fence, put it out with buckets of water from the adjacent swimming pool, then saw the wooden ramp to the side door starting to smoulder, so he put that out, again with buckets of water from the swimming pool, and drenched the whole dry area under the ramp to put out any smouldering bits. He then jumped the fence and checked the next house as he went on to the front road. From here he was accosted by the same young policeman who screamed at him, "I told you to evacuate, if you don't I'll arrest you".

My friend said "Okay, I'm going to get my things" and returned home putting out a few spot fires on the way. He then spent the rest of the evening patrolling the area for spot fires and finally collapsed into his bed about 4.00a.m.

This is an example of how my friend saved many houses from being burnt. Solely due to the fact that he was able to prevent spot fires from developing into major fires.

Driving around the area a few days after the fires had subsided I could see the houses that had survived because someone was there to look after them and put out spot fires. While houses on either side of them were burnt out remnants, similar to most of the houses I saw in East Timor

in 2000, that had been sabotaged by the militia burning the furnishings inside the houses.

SUMMARY and SUGESTIONS

Summertime fires in the Australian bush are always a possibility, either spontaniously, by lightning or by human error,

eg. campfires or cigarette butts.

Remedies

a. As per the WA Forests Department, a five year rotation of hazard reduction burns, of 20% of the forest each year, not 1 or 2% of the forest as burnt by the NPWS in NSW each year! b. \$2,000 on the spot fines for throwing cigarette butts out of cars. A law that has been on W.A. Statutes for over 20 years to control this disgusting thoughtless habit.

. Bushfires, Pine plantation and urban fires are all different

Remedies

A thorough study of past events must look at the needs of the respective bodies such as State Forestry Departments, Rural Brigades, Urban Brigades, Police and appropriate Armed service units for their adequate equipment, personnel numbers, training and funding.

Bushfires know no boundaries.

Remedies.

a. All forests must be managed by State Forestry Departments

b. All States and Territories must liase together to have co-operation and co-ordination between states in all areas of work, equipment and training.

Housefires

As well as being built on solar passive designs to save energy, houses can be built with fire proof designs to prevent live embers getting under or into houses to set them alight.

Remedy

. Publication of solar passive housing designs as done by ACT Government but incorporating fire prevention ideas as written by David Holmgren.

. Promalgation of these ideas by press and televion to create an awareness of the problems and the solutions.

House and land protection

Forests, farms, streets and houses need to be protected from fire.

Remedy.

a. By planting fire retardant trees and shrubs on the north, north-west and west of areas and buildings to be protected. e.g. The following publications contain very useful information:

- . CSIRO Bushfire Behaviour and Management
- . Queensland DPI have an article for keeping your home safe from fire.
- . Lismore District NPWS have a list of suitable varieties.
- . NSW Rural Fire Service tree selection for fire prone areas.
- . NSW Rural Fire Service fires in pine forests.
- . Permaculture publications give advice in this area.

b.Planting combustable eucalypt species and pine species close to houses on the west, north west

and north sides of buildings is creating a fire hazard.

c. The above remedies should be promulgated via the press and television and taught at schools in areas of science as well as an area of community development, so that all children leave high school with a basic understanding of the problems of bushfire.

Adequate Water Supplies.

Houses in the fire area ran out of water.

Remedy

a An investigation by an independent body into the adequacy of pipes, storages and outlets required to give sufficient supply in times of emergency.

b. Back up plans in the event of electricity failures.

Education

It would appear that the majority of Canberrans' lacked even the basic understanding of how to cope with a bushfire.

<u>Remedy</u>

a. Introduce bushfire skills training in schools, similar to School Fire Evacuation Drills.

b. Teach basic house and land protection skills in areas of science and community development.

c. Ensure adequate training of Police in their roles during fire emergencies.

d. During winter, run Adult Education Courses in all aspects of : 'Bushfires and their control', 'Preparations for Summer time house and land protection', and

'What to do in and during a bushfire'.

e. Promulgate these lessons in the press and television periodically, to ensure maximum penetration.

f. Organise a system that enables householders to group together as a cohesive body to assist each other overcome the immediate problems created by any emergency. This is being done now by the Victorian State Government.

Command and Control

In any emergency there must be a system that is adequate to take control, and command the necessary resouces to overcome that emergency.

<u>Remedy</u>

To effectively take command of an emergency situation and control the operation, a set of standard operating procedures must be available and understood by all Government bodies so that actions can be implemented quickly with the full authority of the Law

This will allow remedial actions to be taken quickly without fear of repercussions by a populace who are waiting for leadership and guidance.