

FIRE FIGHTING AND THE NUCLEAR THREAT

by P.N. Hewett

The fourth arm of National Defence is Civil Defence, and its role in the nuclear age is more important than ever before. It is of interest to consider the part likely to be played by the Forests Department following a nuclear attack on Perth.

A rational approach to nuclear warfare has been used by the Civil Defence experts, who have made the following observations.

1. The nuclear weapon will be carried by a Polaris type missile from a submarine.
2. When World War III commences, Australia can expect "strategic warning", by virtue of the likelihood that the U.S.A. and U.S.S.R. will hurl these things at each other first.
3. The missile warhead will probably be in the 10 megaton range and may be a "clean" weapon. i.e. a near-ground burst with limited fall-out.
4. Perth is an unlikely target at its present stage of development, but it is as well to be prepared if we can.

The Blast Pattern: Assuming that the weapon explodes at the Narrows Bridge, then the following zones of damage would follow a 10 megaton blast.

radius from blast	zone of damage	areas affected
0 - 4 miles	Ground Zero - total destruction	Victoria Park, Maylands, Claremont, Mt.Pleasant
4 - 7 miles	Zone 'B' - irreparable damage	Maida Vale, Guildford, Scarborough, East Fremantle
7 - 13 miles	Zone 'C' - moderate to severe damage	Jandakot, Swan View, Gosnells, Kalamunda, Gnangara

In Zone 'C', the Civil Defence forces will be able to do some effective work if they are organized and prepared. Serious fires will occur throughout 'C' Zone in a "fire belt" extending 13 miles from Ground Zero for a ground burst 10 megaton weapon. Secondary fires caused by electrical faults, domestic cooking fires etc., will occur further away again, but the residents will probably have to handle these fires themselves.

An attack on the 'C' Zone firebelt may well be the first task for existing fire fighting forces - the Metropolitan Fire Brigade, bush fire brigades, volunteer town brigades and the Forests Department.

It has been decreed that all fire fighting personnel will be under the command of the Fire Brigades Board but one wonders at the wisdom of this.

1. If Ground Zero is at the Narrows Bridge, then the belts of complete destruction and irreparable damage must account for 70 to 80% of the Fire Frigate Board stations, men and equipment.
2. The fire belt passes through Kalamunda, Swan View, Gnangara, Jandakot and Gosnells. Surely this will be a BUSH FIRE.
3. The Fire Stations are equipped and trained to fight house and building fires with reticulated water from hydrants. Any forester who has witnessed uniformed firemen at a fire with no hydrants or poor mains pressure, will recall that they pack up and go home. There will be no reticulated water within 25 miles or more of Perth, because of the shattering which will occur throughout the metropolitan system. The only supplies for fire fighting will be low level static water. The rural and F.D. forces are surely better equipped and trained to use these sources of supply.
4. On many sectors of the fire belt, there will be no water - static, mobile or any other kind! At a Mount Macedon Civil Defence School this possibility was suggested to a number of uniformed firemen and their invariable reply was "No water, no firefighting". The rural and Forests Department firefighters have met this problem repeatedly and must therefore be better prepared to take command of "dry" fire fighting attack.
5. Communications will be vital for all phases of Civil Defence, but in the firefighting business, the rural and Forests Department forces have existing, proven, radio communications. These groups must surely control the system with which they are familiar.

Subversive though these comments may seem, the writer believes that rural fire fighting executives should assume command of the Fire Function after a nuclear attack.