HEIGHT NOT TO SCALE

GAMMA RAYS

GAMMA FIAYS

400 KM ALTITUDE

grim picture of conditions in this country following a show-down between the super-THE Planning Council's landmark study — New Zealand After Nuclear War — paints a 20 KW ALTITUDE

40 KM ALTIT

Zealand.

FACE

W AND GENERATION OF ELECTROMAGNETIC PULSE (EMP) AUSTRALIAN TARGETS

solated, its links with the northern sector depends

Hemisphere will die through bomb blast, radiation, disease and starva-tion — there will be fundamental the more horrific consequences of nuclear war — where hundreds of millions of people in the Northern disruption to our society. But the severing of links with the medical supplies, and

Ground Level

Nuclear Explosions

High Arthride Nuclear Explosion

Despite New Zealand's distance from the likely war theatre, the Northern Hemisphere, a major nuastating global effects causing so-cial chaos and breakdown in New clear confrontation will have dev-

If nuclear war occurs on the scale envisaged in the Planning Council's scenario, New Zealand will be left hemisphere smashed leaving the country without access to the vital imported supplies on which every While New Zealand will escape

population centres, the major com-batants and the most likely targets the consequences of extreme radio active fallout and a nuclear winter which will accompany a full-scale are located, shields the country from Nuclear war is unlikely to resul in immediate deaths in New Zealan because its distance from the North ern Hemisphere where the bigges

plies, electronic fuels will be countries which produce the goods on which New Zealand depends such

"This factor alone would mean a loss of virtually all medicines, and medical supplies and would very

But report paints for NZ survivors a bleak picture

By FRAN O'SULLIVAN

asthmatics, people with heart disease and other chronic illness," says the council's principal researcher soon begin to affect diabetics, Vren Green

carry on in the knowledge that millions of people in other countries were dead or dying and that little about the future was certain.

"Most of what we now take for granted would be lost or radically

"And this confused and grief stricken nation would be forced to

hundreds of thousands of people, said Dr Green.

of this society 40 years ago such as diptheria, tetanus, measles, polio and TB would make a comeback as Diseases which were the scourge raccines ran out.

Petrol shortage

war would cause disruptions to prac-tically every area of life in New

As Dr Green summarises, nuclear

changed forever."

But the extent of the local damage depends on the extent to which Aus-tralia is devastated during a nuclear

gence experts are confident that the three important joint USA-Austra-

The Planning Council says intelli

confrontation.

lian military communications facili-ties in Australia at Pine Gap Nurrungar and North-West Cape are tional use of an electromagnetic

Freedom of movement would be savagely curtailed as diesel and avi-ation fuel ran out. A shortage of portion of the cars currently on the road could be used. petrol would mean only a small pro-

As these broke down, it would be-come increasingly difficult to repair them as parts like batteries, spark plugs and tyres became worn out.

writers and printing presses would replace import dependent electronic On the communications front, manual telephone exchanges, typeephones, typewriters, computers

Without access to export markets, thousands would quickly become unemployed — up to 40% of the and presses.

"As happens now, the memployed would lose their sense of purpose and identity, only this would apply to

Power cuts altitude explosion.

pulse of electromagnetic energy produced from a region below a high

pulse (EMP) as a disabling act at the initiation of nuclear war. AN EMP consists of a radiated

directly targeted by Soviet missiles, but this does not preclude the addi-

with an EMP rising to peak voltage in about five billionths of a second and lasting only one millionth of a second with a peak field strength of Its speed and intensity are the 50,000 to 90,000 volts. safest?-

"but I

ping out transmission lines and burn-ing out electronic circuits, as the energy emitted from an EMP is col-lected by any conducting antenna exposed to the pulse such as power and telephone lines, metal support towers, fence wires and radio power density of an EMP causes a surge which damages or destroys The enormous instantaneous peak sensitive electrical apparatus, trip-

Two high altitude explosions over Australia would be sufficient to disable the communication bases and

-City among "We must not switch off"

THE most important message in the study is that prevention is better than cure. This is the view of Christchurch political scientist Kevin Clements,

who contributed to the report.

"There is this self-indulgent atti-tude that we have done it, so the rest of the world can learn from us."

There was also an isolationist ten-

dency, he said.

clear weapons bere doesn't mean we should sit on our laurels. We haven't eliminated the possibility of nuclear War or the impact of nuclear winter on New Zealand." "Just because we have banned nu-

Dr Clements believes New Zea-landers are beginning to switch off from nuclear issues.

"Some people here would just be prepared to pull the blinds down and say goodbye to the rest of the world."

In spite of the report's suggestion that New Zealand could pull through a nuclear winter. Dr Clements believes the psychological effects would be paralysing.

would not mean the end of civilisation here, they fence Act, a well-oiled Under the Civil Deas

organisation would swing into action, with the Army, Navy and Air

Fred Wood, civil defence controller for the North Shore said the results of a nuclear war

"Personally I don't see us being anywhere everything points to us doing just that. of exaggeration about would be grim, "but I believe New Zealanders are survivors and "There has been a lot what would happen. near the action. down, Civil Detence chief G G Elder would Force working with po-lice and fire Defence responsibility for all areas from Taupo communication Action vith Wellington departments. NEW Zealand - and would be among the world's safest spots in a nuclear war, civil de-And a bomb dropped Auckland in particular close as Australia fence chiefs claim.

antennae. lia was a target we should be well and truly mobilised by the time fallout started "And even if Austra-

Auckland

Sun (catibiled)

range of the EMP with ensuing catastrophic effects, dramatically altering the picture of post-nuclear war. New Zealand. disrupt that country's econce activities. If such an explosion occurred 400km above south east Australia, New Zealand would be within

If an EMP affects New Zealand a ctotal blackout will occur as the courty ray snational grid system is unlikely to be able to withstand such a surge in voltage and current. people unless they are in direct contact with conductors, but power supplies and communication would be lost at a particularly stressful time. An EMP does not directly affect

The report says it could take between 12-24 hours to restore minimal power to major centres — suffi-

country's telecommunications system at risk along with radio and 1 television networks, computer networks, control equipment at oil refineries, and transport facilities. cient to run sewage treatment, water supply plants and street lighting, and it could take at least a year for the electricity system to meet the even half the current demand. The voltage surge would destroy a wide variety of electrical and electronic components, making the

council says, in any event, during the first few weeks after. number of severe psychological pressures, particularly those associated with loss and fear. first few weeks after nuclear war, New Zealanders would experience a While the council's worst cast sce-

Its report says the destruction of

so much humanity, the deaths of hundreds of millions of people in combatant countries and the abrupt e loss of ties with people in other countries would overwhelm many with fittenantic feelings of loss and The survival of relatives in the Northern Hemisphere would be unknown and people would not be certain that New Zealand was not a dislocation.

certainty over what actions were appropriate would affect many New Fear of radioactive fallout and unnuclear target. Zealanders.

Banking system

run on withdrawals as people tried to obtain cash and recover savings. The banking system would probably be closed immediately to avoid a

But closure of the banks at crisis time would increase people's anxieties considerably. The sudden loss of confidence in the financial system could cause a downward spiral into economic depression.

It says the most serious threat for sit this country would be the arrival of we retugees carrying infectious distortion of eases bringing epidemic diseases about the work Zealand such as plague, de typhoid fever, cholera typhus and the While there are likely to be large. In numbers of Northern Hemisphere of refugees trying to escape from the effects of nuclear devastation, the council believes New Zealand's distance from the war theatre would prevent huge numbers arriving here.

If a nuclear war occurre are could be up to 45,000 New Zenanders living outside the country who might try to get back home away from the conflict zone.

Such "trapped tourists" would place significant demands on the system straining housing, employment and social services.

The refugee issue poses an ethical dilemma of whether to let them into the country or turn them away to protect the lifestyle of New Zealanders.

The council's report underscores New Zealand's dependence on the outside word, the vulnerability of the technologies used in key systems, and the strong interdependency between sectors.

But while New Zealand has a chance in what has been dubbed the "unwinnable war" — across the Tasman the situation is more serious.

mospheric scientist Barrie Pittock points up Australia's risk as a result of its joint defence communication installations. A study released last week by at-

Highest priority

In Beyond Darkness, Dr Pittock resid 500 people working at the bases fr would be killed outright in the event of a direct attack with up to 10,000 of others in nearby towns being killed theres in nearby towns being killed depending on the size of the warder beats used and the prevailing weath-Beyond Darkness, Dr Pittock er conditions.

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