New Zealand After Nuclear War

THE BACKGROUND PAPERS

New Zealand Planning Council PO Box 5066, Wellington

September 1987

CONTENTS



- 1a. The Likelihood of Nuclear War; 1b Study Assumptions, by the Study Team
- 2. Impacts on New Zealand's climate and growing season, by A.B. Mullan and M.J. Salinger
- 3. Impacts on New Zealand's natural environment, by Bob Brockie
- 4. Meeting New Zealand's food needs, by Diane Hunt
- 5. Effects of electromagnetic pulse on power and communications, by Gerald Coates
- 6. Impacts on energy systems in New Zealand, by Jeanette Fitzsimons
- 7. Impacts on communications systems in New Zealand, by Judith Wright with contributions from John Tiffin and Harry Whale
- 8. Disruptions to transport systems in New Zealand, by Judith Wright
- 9. Radiation effects on the environment and people of New Zealand, by Peter Roberts
- 10. Impacts on health and the health care systems in New Zealand, by Phillipa Kitchin
- 11. Human responses to disaster a review, by Neil Britton
- 12. The impact on New Zealand society, by Cathy Wylie
- 13. Impacts on New Zealand's urban systems, by David Haigh
- 14. Government agencies for control and recovery in New Zealand, by John Mitchell
- 15. Policy options and planning approaches for the New Zealand government, by a working party
- 16. Initial impacts on New Zealand's financial sector, by Peter Rankin with contributions from Paul Tompkinson
- 17. Initial disruptions to trade and employment in New Zealand, by Kevin Makin and Campbell Gillman
- 18. International migration to New Zealand, by Judith Wright
- 19. Implications for links with South Pacific countries, by Kevin Clark and David Small

BACKGROUND PAPER 18

INTERNATIONAL MIGRATION TO NEW ZEALAND

by

Judith Wright

This is one of a set of background papers prepared, in consultation with the Nuclear Impacts Study Team, from material provided by a wide range of contributors sources the papers comprised the basis of the book New Zealand After Nuclear War, Planning Council, 1987. The assumptions that the study was based on are explained in Background Paper 1, note particularly the assumption that New Zealand is not a target, and the variable assumption involving an electromagnetic pulse (EMP - for an explanation, see Background Paper 5).

After a Northern Hemisphere nuclear war, it is possible that New Zealand would be seen as a desirable haven for the lost and homeless. Already, "many migrants who have come to Australia and New Zealand in recent decades came to escape from the tensions and possibilities of nuclear war which hang over the peoples of Europe and the United States" (Pittock, 1987).

This paper looks at the types of people who may wish to come to New Zealand and the factors which would affect their ability to arrive, but does not estimate the numbers involved. It also looks at how New Zealand would be affected by an influx of homeless people.

After a nuclear war not all those in search of resettlement would be escaping political persecution or invasion by warring states. Non-combatant countries might be affected to such an extent that people would leave their homelands in search of a better place to live.

For the purpose of this paper all survivors seeking resettlement (whether from combatant or non-combatant countries) are referred to as "migrants", not "refugees". A refugee is a person who "... owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his/her nationality, and is unable, or owing to such fear, is unwilling to avail him/herself of the protection of that country". (United Nations, 1951) The survivors of a major nuclear war would be more likely to be escaping starvation and death than political persecution.

From 1981 to 1986 New Zealand accepted annually less than 800 hand-picked refugees out of the 10 million people in need of international protection as refugees, and just under 10,000 permanent immigrants.

The New Zealand government is not forced to accept refugees - it responds on humanitarian grounds rather than under legal obligation. The number of refugees accepted is based on government's assessment of satisfactory long term settlement opportunities.

If we assume New Zealand is presently resettling the optimum number of refugees

and immigrants, any increase in these numbers after a nuclear war would strain post-war resources. It would be difficult for the country to cater for the needs of the immigrants, i.e. accommodation, food, health and welfare, employment, spiritual and emotional support, acceptance into the community and ways of overcoming language barriers.

TYPES OF POTENTIAL MIGRANTS

There are several types of people who may want to migrate to New Zealand, some of whom would have the constitutional right to enter. The estimates are of how many people there are now in each of these categories, not how many would, given a nuclear war in the Northern Hemisphere, actually want, or be able, to migrate to New Zealand.

Foreign nationals already in New Zealand

Although not a migrating group, the foreign nationals already present in New Zealand at the time of a nuclear war would require special attention - housing, food, employment, reassurance. Among them would be tourists, business people, students, fishermen, crew of international ships and aircraft, embassy staff.

Unpublished Department of Statistics figures suggest there were up to 45,000 people in New Zealand at the time of the 1986 census whose normal place of residence was outside New Zealand.

New Zealand citizens abroad

New Zealanders travel a lot - in the year ended 31 March 1986 there were 52,524 long-term and permanent departures by New Zealanders and 389,937 temporary (for less than 12 months) departures (Department of Statistics, 1986).

The largest group of New Zealand citizens overseas is in Australia. The Australian census of 1986 recorded a population of 206,400 New Zealand-born people.

1981 British census figures showed 29,108 New Zealand-born residents in Britain. A proportion of these would be married to non-New Zealanders who, with their dependants, would also have the right to enter New Zealand as permanent residents.

In addition 36,384 temporary (less than one year) visits were made by New Zealanders to Great Britain during 1984-85. Since the majority of those visits (28,356) were for a period of one to six months, there could be up to 20,000 short-term New Zealand visitors in Great Britain at any one time.

The American census does not provide a category for New Zealand-born residents in the USA. However it can be estimated (US Census, 1984) that during the years 1951-1980, 10,200 New Zealand born immigrants were admitted to the US for permanent residence. Spouses and dependants would increase the number allowed entry to New Zealand; deaths and permanent returns to New Zealand would decrease the number.

In addition, there could be 15,000 short-term visitors in the USA at any one time. This estimate is based on the 1984-85 figures stating that 35,220 New Zealanders returned from the USA after an absence of less than one year. Since these visits

to be of shorter duration than visits to Britain, there are likely to be

1981 Canadian statistics suggest approximately 8,000 New Zealand-born residents in Canada.

Estimates from the Ministry of Foreign Affairs indicate there are between 10 and 12,000 New Zealanders in South Africa and 4,000 in Papua New Guinea (1983). Ministry does keep mailing lists, which account for 10,000 New Zealanders in countries other than those listed above.

These estimates show there could be over 400,000 New Zealanders outside the country, all of whom, with their spouses and dependants (who would not be included in the figures if they are not New Zealanders) would be entitled to re-entry to

Epidemiologist Janet Sceats estimates "if 5,000 New Zealanders on average have left the country and not returned over, say, the last 30 years, and if most of them have married and had children overseas, there may be as many as 500,000 persons living overseas with the right to return to New Zealand."

Another group of New Zealand citizens abroad are the 1,500 Tokelau Islanders, over 2,000 Niuean Islanders, and 18,000 Cook Islanders who have constitutional rights to enter New Zealand.

Civilian migrants

There is already one category of civilian migrants here: those who have come to New Zealand to escape the tensions and possibilities of nuclear war which hang over the people of the Northern Hemisphere. In a pre-war build-up there may be many more who could "read the signs" and escape from the Northern Hemisphere.

A second group of civilians would be those in transit at the time of a war. Analysis of shipping statistics (Ministry of Transport, 1987) shows that of the world's cargo fleet of over 5,000 deadweight tonnes, there could be on any one day 1,650 ships entering or crossing the Pacific Ocean in the course of international trade regardless of where those ships are owned or registered, 950 in the Indian Ocean, and 1,400 in the Atlantic Ocean (excluding ships trading between Canada and the United States).

Most of these ships, with an average of say 30 crew aboard, could if so desired divert to New Zealand. An average ocean-going ship has sufficient fuel bunkers for 50 days' sailing which, unless a ship were near the end of a long voyage, would allow for a diversion. In practice bunkers are topped up in the course of a voyage so it would be uncommon for a ship at sea to be on very low bunkers.

Cruise liners are less likely than merchant vessels to reach New Zealand, as they bunker frequently and do not have the range to complete lengthy unbroken diversions. However, any that might arrive could have 1,000 passengers and crew aboard. Vessels in the Indian Ocean and the South Pacific would be within the range of New Zealand. During the 1987-88 southern summer, New Zealand ports are expecting 19 visits from cruise vessels.

If unaffected by EMP effects, aircraft in flight might also divert to New Zealand. Boeing 747s can fly 10,600 km without refuelling, carrying 400-542 passengers (depending on baggage loads) while Boeing 767s can travel 8100 km with 220-286 passengers. At any one time in 1987, Air New Zealand has aircraft stationed at or passengers. At any one time in 1987, Air New Zealand has aircraft stationed at or passengers or Tokyo and New Zealand (five Boeing 747s) and Rarotonga, New Zealand Singapore or Tokyo and New Zealand (five Boeing 747s) and Rarotonga, New Zealand and Australia (three Boeing 767s). All but the aircraft in/near London would be able to fly to New Zealand without refuelling. Qantas airline operates 40 flights able to fly to New Zealand without refuelling. Thirteen other international air each week between Australia and New Zealand. Thirteen other international air services operate a total of 47 flights into New Zealand each week. On any one services operate a total of 47 flights into New Zealand each week. On how Zealand. Any number of these, with 400 or so passengers each, might divert to New Zealand (assuming they survived blast and EMP effects).

The greatest uncertainty lies with the "Boat-people" category of migrants. There could be many people who have escaped direct targeting in search of somewhere to live and grow food.

"The indirect effects of a nuclear war, especially as mediated by disruption in food availability, could be much more extensive than the direct effects. This risk is especially severe for noncombatant countries - for the 4 billion or so humans expected to survive the immediate period after a nuclear war relatively physically unharmed [for example] 25 percent of current grain production could keep only about 15 percent of the population alive in Japan..." (Harwell, 1986.)

Boat-loads of survivors from India, Asia, Japan, and Indo-china, for example, might set out in search of somewhere else to live.

Armed migrants

New Zealand would have to face the possibility of armed invaders, both military and civilian. Military vessels at sea not directly involved with the conflict might prefer the relative safety of the Southern Hemishpere to the war-torn Northern Hemisphere. It is hard to imagine they would give up their arms easily.

FACTORS DETERMINING THE FLOW OF MIGRANTS TO NEW ZEALAND

It is not easy to estimate whether New Zealand would be flooded by migrants arriving in ships, planes and small boats from Australia and the Northern Hemisphere, or whether New Zealand would remain relatively isolated from wandering migrants. During the Vietnamese migration 2,000 Vietnamese refugees made the journey by boat to Australia (Viviani, 1984, p. 51) though Gunn says "few if any refugees will land in New Zealand by accident, and the prospect of fleets of boat-people from south East Asia randomly finding their way here is too remote to consider".

It is, however, possible to discuss the factors that would affect the chances of any migrants arriving in New Zealand.

Before leaving one country in search of a new life elsewhere, the migrant has to balance the incentive to leave against the risks of the journey, the deterrents of governmental control and the chances of finding a better life elsewhere.

One major factor is the length of the warning time, if any, before a nuclear

nd.

86

10

1/

d

e

S

"With a long warning period, people living in or bordering on the Pacific Warning, people are less likely to leave before their government limits provides time to try and circumvent any restrictions on the use of the means of overseas travel, should any exist... The number of armed refugees would because there is a greater likelihood of such severe social disorder in many leave and have the means to seize, if necessary, suitable means of the transportation." (J S Bradley, pers. comm.)

The length of warning time could make a difference to the New Zealand government's ability to restrict an inflow by altering passport and visa regulations. For example, Zealand, the present bi-lateral arrangement with Australia allows without visas. If an attack occurred next week, anybody with permanent residence status in New Zealand or Australia, who was living in Australia, could enter New Zealand with the minimum of administrative control. The same lack of restrictions applies to some Pacific countries.

The extent of a war would effect the flow of migration. A "small" war could result in more survivors, with greater pressures among the surviving populations, and more resources to enable them to leave.

A badly destroyed country may not have retained the amount of organization required for mass migration. A high degree of sophistication is required for air travel for example. Apart from the availability of craft in working order, and fuel, flying requires trained pilots, ground crew, and operable airports. Mass migration by ship also requires craft, fuel and port facilities.

On the other hand, a less badly destroyed country may have a government with the power to prevent people from leaving, and taking with them valuable resources, including the craft and fuel.

One major deterrent would be the distance required to travel to New Zealand. See appended map (from Review of Defence Policy, 1987) which shows the boundary of the hemisphere centred on Wellington. New Zealand's half of the globe is mostly water. Australia and Antarctica are the only continents within the circle, while Hong Kong, Tokyo and Buenos Aires are on the fringe of the hemisphere.

However, "if there is one lesson to be learned from the various experimental voyages that have been undertaken in a wide variety of archaic craft, as well as from the numerous transoceanic efforts of small boat sailors, it is that no voyage can be safely declared impossible." (Finney, 1987.)

The time of year of migration would affect sailing boats. Every Southern Hemisphere summer the prevailing southeast trade winds, and the South Equatorial Current, weaken and are often replaced by westerly winds. This is known as the El Nino effect. (Finney, 1987 p. 11.)

Very few voyagers to New Zealand could sail (or fly) here without having to

negotiate land masses. There would be a clear passage only from the west coasts of North and South America, or the east coast of Australia. People from Asia, Japan, North and South America, or the east coast of Australia. People from Asia, Japan, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, Indonesia, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East Africa are more likely to reach Australia first, China, India and East A

THE IMPACT OF AN INFLOW OF MIGRANTS TO NEW ZEALAND

New Zealand's long stretches of unpopulated coastline have "important strategic implications" (New Zealand Government, 1987), i.e. would be extremely hard to police. The present immigration procedures may not be capable of controlling an increase in immigration.

Immigration policies tend to recognize the need to regulate immigration in the best interests of the host country, for example, to

"...ensure that immigrants, in so far as this is practicable, will be controlled as to numbers within New Zealand's capacity to provide employment, housing and community services and admitted...with the objective of assisting the promotion of stable growth rates in the economy, and also maintaining reasonable increases in living standards for a growing population.

"...and to ensure that those admitted as immigrants can be absorbed without undue social strain so that the policy will be generally acceptable to the New Zealand community." (Farmer, 1979.)

No matter how many, or how few migrants were to arrive in New Zealand postnuclear war, the country's resources would be stretched to such a level that not even the basic requirements of food and health-care could be guaranteed. Housing, employment and community services would be equally unobtainable. The voluntary agencies and the government organisations that usually assist new immigrants and refugees might not be able to offer adequate support, thus forcing the migrants to fend for themselves.

"To admit all comers could severely burden an already very strained economy as well as the food production and distribution systems; further threaten the health of the resident population; and would place the political and social fabrics of the country under additional stress. Moreover, a substantial number of the refugees could be surviving remnants of the comabant forces, ie New Zealand harbours could be filled with submarines and surface vessels drawn from various nations, many perhaps with residual munitions." (Health Dept, 1986.)

Despite the 1987 food surpluses (when New Zealand will produce enough meat, dairy products, cereals, fruit and vegetables to feed several times its present population), after a nuclear war there might not be sufficient food to feed New Zealand's population. Shortages of essential seeds, fuels, agricultural chemicals and spare parts for machinery and severe disruptions in food processing and distribution would decimate food production.

Any sickness among incoming migrants would tip the balance of the predicted precarious health resources. All vaccination material for human use (i.e.

of of oan, rst, or

nd

gh

vaccines for polio, tuberculosis, diphtheria, tetanus, typhoid and rubella) is imported, as are all medicines (except heparin, an anticoagulant). (Background

The chance of infectious diseases being brought in by migrants is high, particularly if they have escaped from a war zone. Survivors "have increased nuclear weapons and the subsequent pressures and hardships confronted." (Abrams and von Kaenel, 1981.)

The condition of migrants on arrival in New Zealand "could be very bad, with severe problems of malnutrition, vitamin deficiency (with perhaps severe cases of reduced immune defence systems), and despair. The communicable disease problem on prevalence of tuberculosis among Vietnamese refugees has been very high, plus cholera." (Health Department, 1986.)

Twenty-three diseases have been identified (Abrams and Von Caenel, 1983) as being likely to cause problems after a nuclear war. One category consists of epidemic diseases presently of low incidence among the world's populations and includes cholera, Malaria, plague, shigellosis, smallpox, typhoid fever, typhus, yellow fever, polio and leprosy. The second category contains diseases already present in New Zealand, though not in epedemic proportions. Any increase in the incidence of these (for instance diarrhea, diptheria, hepatitis, influenza, meningitis, pneumonia, tuberculosis, whooping cough, salmonella, dysentry and AIDS) would be disastrous for a depleted post-nuclear war health system.

There would be very limited resources with which to treat migrants suffering from radiation sickness.

Migrants forced to live in "resettlement camps" would probably be subjected to overcrowding, poor nutrition and poor hygiene, causing tuberculosis and respiratory diseases such as viral pneumonia and influenza to spread rapidly (Background Paper 10).

New Zealand's transport, energy and urban systems would also be severely strained by incoming migrants.

New Zealand would have to face the possibility that armed migrants, invaders, or remnants of combatant forces could arrive.

POST-WAR ADJUSTMENTS

The adjustments required by New Zealand if faced by an inflow of migrants would depend on the decisions made about accepting them or turning them away.

If migrants were accepted into New Zealand, scarce resources (particularly medical aid) would have to be shared, and the newcomers would have to be absorbed into the structure of the post-nuclear war society. Organisations would have to be set up to help them, as the agencies currently aiding refugees and migrants would probably not be able to cope with massive influxes. High in priority would be housing (either in "migrant camps", in accommodation vacated by internal migration, or with New Zealand families), food, clothing, medical aid, spiritual

and emotional counselling, and the means of employment.

Adjustments would obviously have to be made by the incoming migrants. Those with the least problems would be New Zealanders who had gone away recently, or who had been away temporarily, as they would probably still have a structure to fit into, been away temporarily, as they would probably still have a structure to fit into, and their family ties would probably be intact. New Zealand citizens returning from a lengthy absence would not adjust as easily.

Foreign nationals who had been resident in New Zealand for some time, who had accommodation and who had become accustomed to the local society, would have fewer problems than tourists and short-term visitors. Lack of accurate information from the Northern Hemisphere would affect all the foreign visitors. Some of the foreign nationals "trapped by circumstance" may wish to leave, and attempt to hijack aircraft, boats, crew and fuel.

The New Zealand government, and the people, might decide to prevent some or all of the intending migrants from landing. There would be pressure, as there was during the 1939-45 war, "for a citizen army to defend hearth and home, for a rural militia to guard the coast" (Taylor, 1986), particularly as doubt exists about the military's ability to defend the country. Defence reporter Kevin O'Connor suggests "ammunition stocks held by the army fall badly short of the levels needed to cope with any serious threat." (Dominion, 1987.)

The 1987 Government White Paper on the review of defence policy is not reassuring about New Zealand's defence capability. It concludes: "New Zealand is not threatened by invasion or large scale attack and no likelihood of such an attack is foreseen in the next decade. Indeed, the contingency of invasion is so remote that it need not form the basis of our defence strategy." (New Zealand Government, 1987.)

If New Zealand could prevent unwanted migrants from landing, a quota system might be set in place, with decisions made on who would be accepted into the country, and who would be turned away.

Those able to control the inflow of migrants may give preference to people from Australia and the South Pacific, or to people with skills deemed useful to New Zealand, or those who have least medical problems and the greatest resources. This could mean turning away boatloads of unwanted migrants, as occurred after the Vietnam war:

"...by the end of 1977 the practice of pushing boats out to sea was already well established. None of the ASEAN countries was willing to grant boat people the status of refugees, which would have meant incurring specific obligations under international law, and their classification of boat people as illegal immigrants in their view justified expulsion ... From the first months of 1975, Singapore had refused to allow refugee boats or boats carrying refugees to land without prior guarantee of settlement by a third to sea, largely as a deterrent to others, but this course was unsuccessful at that time." (Viviani, 1984, pp. 45,46.)

Considering the impact on New Zealand if an excessive number of migrants were to arrive (particularly armed ones) the ability to regulate the inflow could be a critical challenge to New Zealand's continued existence.

Also to be considered is the possibility of preventing ships or aircraft from Also to be constant the possibility of preventing ships or aircraft from leaving. The government might requisition all vessels and aircraft in its waters leaving. The general requisition all vessels and aircraft in its and aircraft in its and aircraft in its

PRE-WAR PLANNING OPTIONS

th ad.

0, g

ľ

Before any pre-war planning could proceed, government would have to address the Before any problems of whether to accept migrants or turn them away, bearing in mind that there are those who believe only "the wealthy, the resourceful and the greedy will survive." (Sociologist, University of Canterbury.)

One side of the argument, as expressed by an historian at Massey University, goes:

"We can expect massive attempts to move to New Zealand from Australia, Asia and possibly the Northern Hemisphere. Given the economy's incapacity to provide for the existing 3 million residents it will be essential to repulse these people ... I regard this as not only the most tragic aspect of the dilemma facing this country in the scenario depicted but also the most crucial because the civilisation that survives will in part, be identified by the manner of its response to this problem. An enlightened approach cannot be left to the crisis situation of the immediate aftermath of nuclear

Alternatively (as expressed by a senior Church official):

"The most important areas for officials of the Church and officials in refugee organisations would be ... to alert our people and through them the whole community, that the tragedy which has occurred is going to require us to be prepared for a large, but certainly uncertain, number of refugees ... The whole crisis of a possible nuclear war also moves me to think that church people at least should plug away at some basic social justice teachings, i.e. the dignity of every human person, no matter their race, colour or creed; the need for compassion toward anybody who is sick, poor or homeless; our responsibiltiy for all our sisters and brothers in this world. Basically I am talking about promoting unselfishness - thinking about the other."

The government might consider revising immigration policy to include a list of "peoples to be rescued and brought to New Zealand". Decisions would have to be made about who would be "useful" to New Zealand, and to whom New Zealand owes an obligation.

The government might want to assess how many migrants New Zealand could cope with (i.e. assess the carrying capacity of different systems within a post-nuclear war society) in order to know when to start turning migrants away.

If New Zealand decided to turn people away, and it had the capability to do so, it would have to be decided under what circumstances this action would be taken.

The question of responsibility towards a military alliance was raised by a political scientist: "a political decision would have to be made about the level of military violence we would be willing to sustain to protect our 'gatekeeper' function. If [armed] allied military forces did enter, would our policy be to allow the positioning of fuel, stores and munitions? Would these forces have available to them impressed New Zealand labour? Would hospitals be requisitioned for foreign personnel? What powers, if any, would New Zealand police have vis-avis foreign military personnel. Would such forces have the power of life and death where their installations were threatened? Would there be the diversion of New Zealand food stocks to feed nuclear survivors in 'allied' zones abroad?"

SUMMARY

There is a great debate as to whether New Zealand would be seen as a popular haven for boat loads of wandering migrants after a Northern Hemisphere nuclear war, or whether few would want to come to the South Pacific, and fewer still would survive the great distances required to travel.

What can be said is that if all the 500,000 New Zealands presently overseas, and the 20,000 Pacific Islanders with statutory rights to enter New Zealand, did return, the 17% increase in the population would severely strain the country's resources.

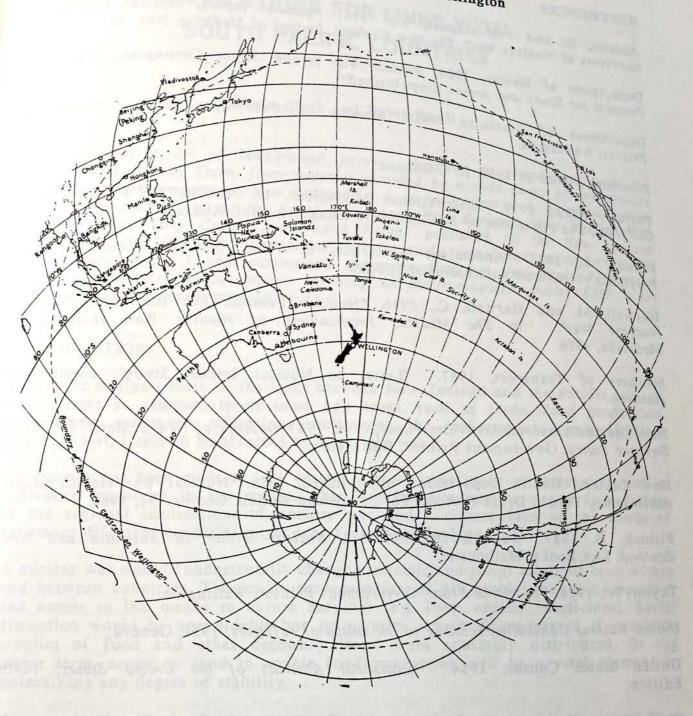
Before any migrants were to arrive on the horizon, the New Zealand government and people would have to answer the ethical questions:

- 1. Should New Zealand welcome the homeless, and share with them the country's limited resources?
- 2. Or should New Zealand actively discourage migrants from landing?
- 3. How much force should be employed in resisting the entry of migrants? Would New Zealand resort to sinking boats?
- 4. Should a priority list of acceptable peoples be made up and adhered to?
- 5. How much support would be given to remnant military forces, either allied or belligerent?

FUTURE RESEARCH

It would be more beneficial to establish how many extra people New Zealand could cope with post-nuclear war, rather than to ascertain how many people might want to come. A detailed study of the carrying capacity of post-nuclear war New Zealand would show how many international migrants the country could absorb without detriment to the local population. For example, how many people could New Zealand feed? How many sick people could the health system care for? How many jobs might there be?

Boundary of hemisphere centred on Wellington



Source: Review of Defence Policy, 1987

REFERENCES

Abrams, H. and Von Kaenel, W., 1981. "Special report, Medical Problems of Survivors of Nuclear War". The New England Journal of Medicine, Nov. 12.

Department of Health, 1986, Nuclear War Health Sector Contingency Plan, Draft Protocol for Study and Action. Unpublished.

Department of Statistics, 1986. Monthly Abstract of Statistics. Government Printer, Wellington.

Dominion, March 25 1987. K. O'Connor.

Farmer, R.S.J., 1979, "International Migration". In Neville, R.J.W and O'Neill C.J. (eds), The Population of New Zealand. Longman Paul, Auckland.

Finney, B., 1987. "Anomalous Westerlies, El Nino, and the Colonization of Polynesia". American Anthropologist 1, 9-26.

Harwell, M. and Harwell, C., 1986. "Nuclear Famine: The Indirect Effects of In The Medical Implications of Nuclear War, Institute of Nuclear War". Medicine, 1986

Ministry of Transport, 1987. "Letter to Nuclear Impact Study", unpublished research.

New Zealand Government White Paper, G.4a 1987. Defence of New Zealand. Review of Defence Policy. Government Printer, Wellington.

New Zealand Health Department, unpublished, 1986. "Nuclear War Health Sector contingency Plan". Draft Protocol for Study and Action. October 31, 1986.

Pittock, B. 1987. "Beyond Darkness" in Nuclear Winter in Australia and New Zealand. Sun Books, Melbourne.

Taylor, N., 1986. The Home Front. Government Printer, Wellington.

United Nations Convention relating to the status of refugees, 1951. Geneva

United States Census, 1984. Statistical Abstract of the United States, 104th Edition.

Viviani, N., 1984. The Long Journey. Melbourne University Press.