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Media Release

**Hon Paul East
Minister of Defence**

Minister Releases Report On Nuclear Test Veterans

The Minister of Defence, Paul East, said today that a new report on a follow-up study of the incidence of cancer in sailors who monitored British nuclear weapons tests in the Pacific during the 1950s has confirmed the findings of the previous report, released in 1990.

The first study was undertaken by a Wellington School of Medicine team led by Dr Neil Pearce and Dr Ian Prior. It indicated that there was an increased incidence of leukemia, and possibly some other haematological cancers, in the men who participated in the weapons test programme.

The new report, prepared by Dr Pearce, was released today by Mr East. It has involved following the men from 1988 to 1992 and gathering information on deaths and cancer cases over that period. The report gives results that are consistent with the earlier data. It should be noted that statistical data has to be interpreted with caution when the numbers are small.

The latest study found that 97 (18.4%) of the 528 men who took part in the tests had died by the end of 1992, compared with 256 (17.0%) of a comparison group of 1,504 men who had not taken part in the tests. Of the group of 97 men, 36 had died from cancer, while of the 256 men, 85 had died from cancer. The percentages who had died were virtually identical in the two groups for causes of death other than cancer and for cancer overall.

However, the men who monitored the nuclear tests had a death rate nearly four times higher for the group of cancers that includes leukemia and lymphoma. Four of the 528 who took part in the tests have died from leukemia compared with only two from the comparison group of 1,504.

"Three of the four test participants who have died from leukemia died more than 25 years after the nuclear tests. If their deaths are attributable to the tests, the long latency period for the leukemia is difficult to explain. Nonetheless, the report concludes that the evidence is still consistent in that some haematological cancers may have been caused by participation in the nuclear weapons test programme," said Mr East

"At the same time, the report provides reassurance that there is no increased risk of other types of cancer, in the test participants, compared with other sailors.

"Following the release of the 1990 report the then Labour Government announced that the test veterans who developed haematological cancers would be eligible for war pensions and this is still Government policy. The granting of the pensions is not because of a proven causal link between participation in the tests and leukemia, but because of the possibility of a linkage.

"Anyone who considers that they are suffering from a disability as a result of their service around Christmas Island and Malden Island in 1967 and 1968 should apply for a pension from the War Pension section of their local New Zealand Income Support Service office," said Mr East.

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Attached: **Two page summary of the report.**

**DEATHS AND CANCER CASES IN NEW ZEALAND PARTICIPANTS IN
UNITED KINGDOM NUCLEAR WEAPONS TESTS IN THE PACIFIC:
SUPPLEMENTARY REPORT**

SUMMARY

This is a supplementary report on the follow-up of 528 Royal New Zealand Navy men who took part in the United Kingdom nuclear weapons tests at Christmas Island and Malden Island during 1957-1958. We have studied the numbers of deaths and cancer cases in these men since they took part in the tests, and we have compared them with a control group of 1504 men who were in the Navy at the same time, but who did not take part in the tests.

Previous follow-up: We previously followed both groups of men from 1957 until 1987. We found that during that time 13.3% (70 out of 528) of the test participants had died, and that 11.9% (179 out of 1504) of the control group had died. Thus, the overall death rates in the two groups were very similar, but slightly higher for the test participants. We then looked separately at cancer deaths and at other causes of death. For causes of death other than cancer we found that the death rates were very similar in the two groups (8.7% in the test participants and 8.4% in the controls). However, cancer deaths were more common in the test participants than in the controls; in particular, 7 of the test participants (1.4%) had died from hematologic cancers (including leukemia and non-Hodgkin's lymphoma), which was more than three times the risk in the controls.

New follow-up: We have now followed these men for a further five years, up until the end of 1992. We did this by searching national death registrations and cancer registrations to find out who had died and who had developed cancer. The following table shows the findings for the entire follow-up period of 1957-1992:

| Cause of death | Test participants | Controls | Relative risk |
|--------------------------|-------------------|-------------|---------------|
| Causes other than cancer | 61 (11.6%) | 171 (11.4%) | 1.0 |
| Cancer deaths | 36 (6.8%) | 85 (5.7%) | 1.2 |
| Total deaths | 97 (18.4%) | 256 (17.0%) | 1.1 |

The table shows that 97 (18.4%) of the test participants had died by the end of 1992, compared with 256 (17.0%) of the controls. Thus, a slightly higher percentage of the test participants had died; this was entirely due to an excess of cancer deaths in the test participants. The death rates were about the same in the two groups for causes of death other than cancer (11.6% in the test participants and 11.4% in the controls).

When we looked at the types of cancer that the test participants were dying from. We were particularly concerned about hematological cancers, because this is the group of cancers that is known to be most strongly caused by radiation exposure:

| Cause of death | Test participants | Controls | Relative risk |
|-----------------------------|-------------------|-----------|---------------|
| Hematological cancer deaths | 8 (1.5%) | 6 (0.4%) | 3.9 |
| Other cancer deaths | 28 (5.3%) | 79 (5.3%) | 1.0 |
| Total cancer deaths | 36 (6.8%) | 85 (5.7%) | 1.2 |

The table shows that the test participants and the controls had exactly the same risk of dying from cancers that did not belong to the group known as "haematological cancers". However, the test participants had nearly four times the risk of developing a hematological cancer (1.5% in the test participants and 0.4% in the controls).

When we looked separately at each type of hematological cancer we found the following results:

| Cause of death | Test participants | Controls | Relative risk |
|-----------------------------|-------------------|----------|---------------|
| Non-Hodgkin's lymphoma | 2 (0.4%) | 1 (0.1%) | 5.7 |
| Hodgkin's Disease | 1 (0.2%) | 1 (0.1%) | 2.8 |
| Multiple myeloma | 1 (0.2%) | 2 (0.1%) | 1.4 |
| Leukemia | 4 (0.8%) | 2 (0.1%) | 5.7 |
| Hematological cancer deaths | 8 (1.5%) | 6 (0.4%) | 3.9 |

Thus, 8 of the test participants died from haematological cancers (a relative risk of 3.9): 4 of these were leukemias (a relative risk of 5.7), and 2 of these were Non-Hodgkin's lymphomas (a relative risk of 5.7).

Conclusions: From this further follow-up to the end of 1992, we concluded that the evidence is still consistent that some hematological cancers (including some leukemias and some non-Hodgkin's lymphomas) may have been caused by participation in the nuclear weapons test programme. However, this further follow-up strengthens the evidence that there is no increased risk for non-hematological cancers or for causes of death other than cancer in the test participants.