

## JOHN RUPERT LONGARD

1910 - 1977

John Rupert Longard, one of this country's original group of Defence Research Scientists and member of the Institute, died on New Year's Eve. He had been ill for much of the time since his retirement from the Defence Research Establishment (Atlantic) in the fall of 1975.

Mr. Longard was born, educated, and spent most of his working life in Halifax. At Dalhousie University he majored in Physics and Mathematics, completing his MSc in Physics in 1934. Drs H.L. Bronson, G.H. Henderson, and J.H.L. Johnstone were then the Physics Department and it was the last two who shortly after the outbreak of World War II undertook, at the request of the British Admiralty, organization of the Canadian end of antimagnetic mine warfare.

John Longard had by this time settled down as a successful high school physics teacher, but did not need much urging by Henderson and Johnstone to get into the war effort as an R.C.N.V.R. Lieutenant (Special Branch) designing and testing degaussing coils fitted in Naval and merchant ships in Halifax.

With the countering of the magnetic mine by degaussing, deperming, and electromagnetic mine-sweeping the enemy turned to even more deadly underwater weapons. John soon joined with other degaussing officers and scientists in working on noise devices to sweep the ocean for acoustic mines. The acoustic torpedo followed.

By the end of the War Lieutenant Commander Longard had become involved in the whole field of underwater sound, including sonar, the tracking of submarines by sound echoes. In 1947 he changed over from naval officer to Naval Research Establishment scientist without really changing jobs.

During the following years Mr Longard was able to contribute to the effective use of the bathythermograph in predicting sound propagation in the sea and in the development of variable depth sonar sonobuoys. He was the first Canadian member of the Tripartite Sonobuoy Working Party.

John's wealth of experience was utilized during six years (1954-60) as Scientific Adviser to the Commander, Maritime Command, followed by three years as Scientific Liaison Officer with the Canadian Joint Staff in Washington, D.C.

It was fitting that as a last project before retirement John Longard was asked to write a record of the first years of Canadian Naval Research. His Naval Research Establishment, 1940-67 which he was still tidying up when he became seriously ill last year will be published within the next twelve months.

John is survived by his wife, Evelyn. Associates and other friends will miss their year end "At Homes". The Longard skill and ingenuity even showed itself in original Christmas decorations! Daughter Nancy is married to a Yarmouth High School Science teacher and son, Arthur, is with the Department of Fisheries. There are three grandchildren.

A fitting close to this brief sketch of the life of a quiet, unassuming, gentle and gifted man might be a sentence written inside the cover

of a recently published US Navy volume on operational research by the American friend and collaborator who sent it to John as a gift when he was in hospital:

"To John Longard whose dedication to science and unfailing co-operation assisted ONR, BU Ships and the U.S. Navy laboratories in making great progress in oceanographic research."

E.B Mercer