

second to the United States, where he fulfilled a number of important speaking engagements and made a special study of Canadian information activities in that country.

DEAFNESS FROM TRACTOR NOISE

Farm tractors are causing permanent loss of hearing to thousands of farmers, according to a recent study supervised by the Department of Agricultural Engineering, University of Alberta, and the Industrial Health Services Division of the Alberta Department of Health. The paper prepared on this study deals specifically with farm-tractor noise, its immediate effects on the driver and its possible long-term effects as a health hazard. It states that the noise of the majority of tractors is well above safe limits for hearing and may be causing many tractor operators to go permanently deaf.

To determine the noise level of the major contributors to farm noises, tests were run on 19 tractors, including seven well-known makes, some with cabs. The tractors tested ranged from 1947 to 1967 models. All but three were diesels.

The results showed that the mean average noise sound pressure level was 104 decibels. The highest individual level recorded was 114 decibels on a new tractor where the operator had removed the muffler "because it got in the way", to a low of 92 decibels. An average noise level of 104.3 db was recorded on tractors with cabs, against 103.9 db for tractors without cabs.

These noise levels can be compared to a noisy home, which rates 40 to 60 db; an automobile at 20 feet, 70 to 80 db; a power lawn mower, 100 to

110 db; and a loud automobile horn at 3 feet, 110 to 120 db.

Tests were made of tractor drivers' hearing to determine the effect of the noise. An audiometer was used to detect any deafness ascribed to tractor driving. The human ear is responsive to frequency ranges from about 16 to 16,000 cycles a second for normal sound intensity levels. The nerve endings in the inner ear are susceptible to noise damage, a noise-induced deafness which cannot be helped by hearing aids or surgery.

TEST RESULTS

The development of high-tone sensorineural hearing loss seems to be part of the natural course of growing older and the drivers tested show little difference from others in their age group in the low-frequency range. A 10-to-12 decibel greater hearing loss, however, was indicated in the high-frequency range. Individual readings of those tested showed that the younger group suffer a greater hearing loss than that attributed to natural aging in the high-frequency range, while the older group shows the loss moving into the speech frequencies of 2,000 and 3,000 cps. The temporary threshold shift for tractor drivers working an average of 4.2 hours on tractors with a mean noise level of 104 db shows that the losses are fairly consistent in all frequencies tested. Although these losses are only temporary, it is possible they may become permanent.

Drivers of farm tractors may not notice that they are slowly going deaf, when in fact they are. They can protect themselves by using ear-muffs or ear-plugs. It is concluded by this report, however, that tractors could be made less noisy by modification at the factory.

Canadian Library Bulletin Vol. 23, No. 35, dated August 28, 1968, page 1. The new organization to be known as the Strategic Library-Canadian Institute is housed at the Prime Minister's Office, 1 Lal Bazaar Street, the head office at McGill University, Quebec. The main objective of the Institute is to promote and foster growth of research in Indian studies in Canadian universities and thereby contribute to greater understanding of Indian life and culture in Canada. Programs of studies and research in India in the fields of humanities and social sciences will be undertaken by scholars chosen from Canadian universities and colleges. The Institute will also support other academic programmes and activities relating to India and will acquire library materials for their use. Among the founding members of the Institute will be two eminent Canadian scholars in India and the other members of the Indian Council of Cultural Relations will be met on the land of course. Particular attention will be given to the study of the Indian mind and the maintenance of the Indian mind. The Institute is estimated to be about \$450,000 during the first five years.