> require that short fibers (less than 5 microns in length) be counted or controlled. This oversight may have considerable biological significance in that small chrysotile fibers readily produce asbestos disease."

The statement is followed by references to seven studies, concerning exposure to short fibers, published between 1964 and 1975 without mentioning that they were all animal studies and that there is no proof that such exposure is hazardous to humans. Those at the meeting last Thursday will recall that, when questioned, Dr. Nicholson was unable to document any cases of mesothelioma among brake service mechanics in the United States.

It is of interest that NIOSH industrial hygiene surveys of brake service garages has shown mechanics mean daily TWA exposure to range between 0.5 and 0.19 fibers/cc as determined by optical microscopy. Field surveys conducted by Raybestos-Manhattan have given similar results except where friction materials were machined without exhaust ventilation.

The Rohl et al report commented as follows on conditions in New York City garages:

> "It was generally found that there was minimal, if any, effort to control dust in most garages. Workmen do not use respiratory protection. There was little awareness of the potential hazard of brake dust."

In recent surveys, the California Health Department has found airborne asbestos concentrations as high as 80 fpcc where heavy duty materials are machined without exhaust ventilation.

An educational campaign is clearly needed for both manufacturers and customers. I suggest the Friction Materials Standard Institute could perform a most important service for the industry by publishing work practice guidelines for brake service mechanics and others involved in the field processing of asbestos containing friction materials. Ike Weaver will bring the matter up at a meeting of the FMSI Asbestos Study Committee on January 19th and suggest a committee be appointed to take on this assignment.

Your comments would be appreciated.

John H. Marsh

/as

CC: Messrs. Gerald Chase
F. S. Daly
E. W. Drislane
R. M. Gordon
Dr. H. C. Lewinsohn
B. J. Iwarsson
R. H. Mereness
John Riopelle
W. S. Simpson
I. H. Weaver
E. R. Zacharias