General Headquarters
August 28, 1940

Mr. Elliot Fairback
7th Floor

NORTH AMERICAN AVIATION -
Stonefelt as a health hazard

So far as Mr. Zemansky's inquiry relates to the effect of Stonefelt upon the skin and lungs, the following statements may be included in a letter addressed to him or to North American Aviation:

Stonefelt, in common with all synthetic mineral fibres, sometimes produces a slight rash upon workmen who are unaccustomed to handling it. Our own experience shows that this rash rapidly disappears and that after a short period no further physical discomfort is experienced.

Our experience likewise has proven that the manufacture and handling of the material will not produce silicosis or any other lung disorder. We have had more than thirty years' experience with this material (and) materials of substantially similar composition. These products have been subjected to exhaustive tests and medical surveys have been made at the plants where the materials have been produced and handled by hundreds of workmen over long periods of time. These tests and surveys have conclusively demonstrated that the materials are incapable of producing the lung fibrosis known as silicosis. Although Stonefelt contains a considerable percentage of silica, this ingredient is present in the form of silicate whereas it is universally recognized that silicosis can be produced only by free silica and then only when the workmen are exposed over long periods of time to excessively high concentrations of microscopic particles thereof.

The survey of our plants referred to above was conducted by the Industrial Health Section of the Metropolitan Life Insurance Company and this survey included the interpretation of x-rays of all of the employees, some of whom had been continuously exposed to these materials for more than thirty years and a majority of whom had been engaged in handling them for more than fifteen years. Over four hundred employees were involved. Not a single case of silicosis was discovered. Following the survey we were advised by Metropolitan Life Insurance Company that we could safely assume that materials of this type were innocuous from the viewpoint of lung fibroses.

Neither does our Stonefelt material contain anything of a toxic character. This fact has been demonstrated by

a series of tests conducted by Dr. Lawrence T. Fairhall of the Harvard School of Public Health, the results of which were published in the November 1935 issue of the Journal of Industrial Hygiene. We may be able to obtain for you a reprint of this article if you consider it desirable. The material used in making these experiments was mineral wool of our manufacture but, as you are undoubtedly aware, this material constitutes the basic ingredient of Stonefelt.

Mr. Zemansky also requested information as to how Stonefelt affects moving parts of machinery. Someone else will have to advise him on this point.

Vandiver Brown

VB: k