

July 29, 1938.

Mr. E.J. Bussey
Pratt and Whitney Aircraft
East Hartford, Conn.

Dear Mr. Bussey:

We have analyzed the sample of dust attached to your letter of July 26th. We only ran a qualitative test and this showed a very large amount of lead present. In our opinion there would be a considerable health hazard with this spark plug cleaning operation if the operator was continually engaged in it and if strong suction ventilation was not employed. If powerful suction ventilation is employed with an air stream of sufficient velocity to immediately remove any dust as it is formed there would seem to be no hazard involved provided the dusty air is suitably disposed of. The dusty air, in our opinion, should be discharged well above ground level so that the lead dust will be rapidly dispersed.

Any health hazard from the lead deposits occurring in an engine is almost entirely due to inhalation of dust. If any dust formed is rapidly removed by ventilation or alternatively, if deposits are wetted with oil before removal all hazard should be practically eliminated.

We would be interested to know whether the ventilation system you have installed complies with the above suggestions.

We are forwarding a copy of your letter and our reply to our medical consultants and shall also pass them any further information you have to offer.

Yours very truly,



S.D. Heron

SDH:REL
CC: Dr. W.F. Machle

KE 0009093