

FAILURE REPORT

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SUBJECT: Unscheduled Removal of P & W R2800 CB.17
Engine #51219, #2 Position, DC6B A/C #431
CP, CVO, Vancouver, B. C. 18th. July, 1953.
Time S/O - 490:18 hours. Time S/N - 570:03 hrs.
570:03 649:18

During a routine maintenance inspection of the above-mentioned engine, quite a quantity of steel flakes and particles were found in the main oil screen. The engine was therefore removed and returned to the overhaul shop for investigation and necessary corrective action.

Upon receipt of the engine the reduction gear assembly was removed and dismantled. This revealed no failure. The rear crankcase was removed next and was found in good state of repair. This was followed up by removing the front accessory crankcase and the front support plate assembly, which revealed a failed front cam P/N 76270. This failure was in the form of a broken area on the exhaust track of approximately $\frac{1}{2}$ " square and of considerable depth. The front counter balance bearing and gear assembly P/N 156621 had flaked on the bearing surface in a few places.

In performing a check of the ignition equipment a partial tear-down of the magneto serial #26491, fitted new by CP & W during overhaul and conversion, revealed that the lower magnet shaft ball bearing P/N 10-25038 had failed completely and the area retaining the bearing was one mass of steel flakes and particles, with the inner race severely broken, as well as cracked and broken balls etc. The magnet shaft poles had fouled the housing, causing some damage.

In view of the magneto bearing failure, we had a Service Representative of Magneto Sales and Service, Vancouver, inspect the unit and obtain all pertinent data and we are now awaiting action on behalf of Bendix Sainilla.

It is the opinion that the direct source of metal being found in the main oil screen originated from the magneto bearing failure. The incipient failure to cam track was secondary

The engine is to be repaired and returned to service.



W. G. Boone,
Supervisor, Power Plant Overhaul.

29th. July, 1953.