

CANADIAN PRATT & WHITNEY AIRCRAFT CO. LIMITED

INSPECTION REPORT SUMMARY

CUSTOMER: Canadian Pacific Air Lines

SUBJECT: R-2800-75-51

SERIAL No. 42-54623

TIME SINCE LAST O/H: 440:37

PREVIOUS O/H BY: C.P. & A.L. Aug, 1955

TOTAL TIME: 2536:52 (known)

DATE INSPECTED: March 27, 1956

REASON FOR O/H OR REPAIR:

Front Cam Failure

LIST OF MAJOR PARTS REQUIRED:

ITEM No.	DESCRIPTION	REASON FOR REQUIREMENTS
1-	Bearing, Propeller Thrust	Races pitted by corrosion
2-	Gear, Fixed	Outer teeth deeply worn
3-	Pump, Front Oil	Not received
4-	Cam, Front	See remarks
5-	Guides, Tappet (9)	Damaged
6-	Rollers, Tappet (18)	Chipped and spalled on O.D.
7-	Case, Rear	Corroded through at rear drain boss
8-	Assy. Main Oil Screen	Not received
9-	Assys. Rear Scavenge Pressure Pump	I.D. of bodies excessively worn and gears nicked.
10-	Pistons (8)	#2, 4, 6, 8, 13, 14, 16 & 18 as per customer's special requirements
11-	Cylinders (4)	#10, 12, 16 & 18 cracked at S/P bushing.

REMARKS

Examination of the front Cam revealed that the leading ramp to each exhaust was chipped and spalled. Spalling is usually caused by surface crack, inclusion, or similar surface injury causing a progressive breaking away of the surface under load. Metal from these damaged lobes had circulated throughout the engine. The taper rollers were damaged from constant contact with the damaged lobes.

This condition would undoubtedly cause rough engine operation. The total time on the failed cam is unknown.

Oil Sludge and carbon deposits were normal throughout the engine. Valve pistons rings were free in their guides and grooves respectively.

All parts were inspected and replaced where necessary in accordance with overhaul procedure.

K. J. Dawson
K. J. Dawson,
Assistant General Supervisor
Service Department.