

Report number: ML5204	
Date: 10/26/2016	
 Continental Motors, Inc. <i>Powering Aircraft Since 1929</i> CONTINENTAL MOTORS METALLURGICAL REPORT	<u>Distribution</u> 1) Phillip Grice
Subject: Engine Serial 5204	

A piece of the connecting rod of a GO300 model engine serial number 5204 was submitted for analysis under analytical exhibit 1385. The original manufacture date was reported as 2/21/1958, and the engine had been overhauled since that time.

INSPECTION:

The cap of the number six connecting rod is shown in figures 1-3. There is substantial damage, but beach marks are still visible indicating a fatigue crack growing from the oil transfer hole in the center of the cap. Figure 4 shows a magnified picture of these beach marks.

CONCLUSIONS:

- 1) The number six rod cap fractured in fatigue, from a crack at the oil transfer hole.
- 2) The crack growth indicates the fracture was primary in the events of the engine failure.



Figure 1 Fractured cap and bolt



Figure 2 Fractured cap



Figure 3 Fractured cap and bolt

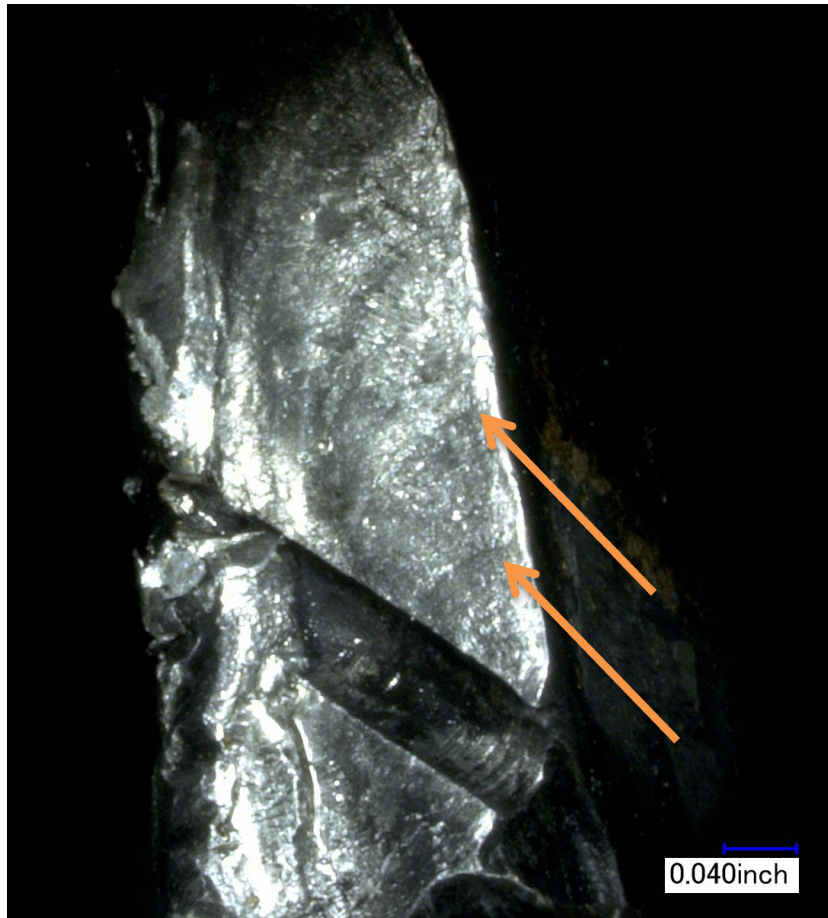


Figure 4 Fracture surface with beach marks originating from the oil transfer hole