

Williams Shaun

From: Phillip Grice [REDACTED] >
Sent: Wednesday, June 01, 2016 12:24 PM
To: Williams Shaun
Subject: DMS Pages

Shaun,

It is permissible to place pages from the Detailed Model specification on the public docket. These pages were issued in the course of an accident investigation.

Thanks

Mr. Phillip M Grice
Manager, Product Field Performance
Continental Motors Group.
2039 Broad Street
Mobile, AL 36615
Office: [REDACTED]
Cell: [REDACTED]
Fax: [REDACTED]

[REDACTED]
Please note that my email address has changed

O-470-L
Dated: 12-14-61
Supersedes:
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Rev.: 5/25/01
Rev: 6/20/03
Rev: 08/26/03
Rev: 10/22/03
Rev: 3/9/06
3/1/07
Rev. 6/8/07

DETAIL SPECIFICATION FOR
CONTINENTAL AIRCRAFT ENGINE
MODEL O-470-L

CONTINENTAL MOTORS CORPORATION
AIRCRAFT ENGINE DIVISION
MUSKEGON, MICHIGAN

"PROPRIETARY"

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APPROVED BY:

Project Engineer

Chief Project Engineer

Assistant Chief Engineer

Chief Engineer

D. OPERATING LIMITS (CONT'D.)

D-3. Cylinder Temperatures.-The cylinder temperatures specified below are for down draft cooling. Note if up draft cooling is to be used Contact Continental Motors Aircraft Engine Division for limits.

<u>A. Cylinder Head</u>	<u>Thermocouple Location</u>
500°F. (Maximum)	Spark Plug gasket thermocouple
460°F. (Maximum)	Bayonet thermocouple boss.
<u>B. Cylinder Barrel</u>	
290°F. (Maximum)	Two drilled holes in flange to barrel fillet, thermocouple to be installed in accordance with CMC drawing #630361.

D-4. Oil Flow and Heat Rejection.-When operated at normal rated power and speed with 215°F. oil inlet temperature for SAE #50 oil at 50 PSI $\pm$ 2 PSI oil pressure and 60 Lbs./Min. oil flow, the heat rejection of the oil will be 425 BTU's/Min. at 2300 RPM.

D-5. Magneto Temperature.-The maximum allowable magneto temperature is 170°F. as measured by a thermocouple under the coil holddown screw.

D-6. Fuel Pressure.-The required fuel pressure for all operating conditions is 1.5 to 9 PSI.

D-7. Oil Consumption.-The specific oil consumption shall not exceed .012 Lbs. per BHP per hour at rated power and RPM.

D-8. Fuel Consumption.-The specific fuel consumption curve shows the estimated brake fuel consumption at sea level with the carburetor mixture control set at full rich. The values given may vary plus or minus 4%.

E. ENGINE SHIPPING

E-1. Preparation for Delivery.-Each engine is packaged, packed, preserved and marked in accordance with commercial practice.

NOTES:

1. A full flow oil filter may be used with this engine if the installation incorporates a filter by-pass valve which opens between 8 and 16 psi. The oil filter housing is eligible for direct mounting of oil filter equipment having a maximum weight of six pounds and an overhang moment of 25 in.-lbs.

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