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of Transportation

**Federal Aviation
Administration**

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SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

<http://www.faa.gov/aircraft/safety/alerts/SAIB>

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin recommends that you, registered owners, operators, and certificated repair facilities of **certain Teledyne Continental Motors (TCM) and Textron Lycoming Corp. (Lycoming) series reciprocating engines (see Table 1)** overhauled by BC Aero Engines, LTD., of British Columbia, Canada, between February 1, 2002 and July 18, 2004, inspect those engines for non-conformance to the approved overhaul instructions.

Background

Transport Canada reported that BC Aero Engines, LTD. might have improperly overhauled or repaired TCM and Lycoming reciprocating engines between February 1, 2002 and July 18, 2004. Transport Canada determined that these engines might not be in conformance with the manufacturer's overhaul instructions and data, and might have serious quality issues that could result in an unsafe condition. Transport Canada issued Airworthiness Directive (AD) CF-2005-40, dated December 5, 2005 to specify mandatory corrective actions for these engines. We concur with Transport Canada's conclusions, but have determined that mandatory action is unnecessary in the USA.

Recommendations

1. For engines identified in Table 1 below, we recommend that you take the following actions within 50 hours time-in-service

(TIS) or six months, whichever comes first, after the issue date of this SAIB:

- a. Review your engine logbook and records to determine the level of maintenance performed by BC Aero Engines, LTD.
 - b. If the level of maintenance can be determined by the records, disassemble your engine to the same level and repair as necessary. Otherwise, overhaul your engine in accordance with the engine manufacturer's overhaul instructions.
2. For engines not identified in Table 1 below, we recommend that you review your engine logbook and records within 50 hours TIS or six months, whichever comes first, after the issue date of this SAIB. If BC Aero Engines, LTD. overhauled, repaired, or disassembled your engine between February 1, 2002 and July 18, 2004, we recommend that you comply with paragraphs 1.a. and 1.b. above.

The complete text of Transport Canada AD CF-2005-40 is available on their website at <http://www.tc.gc.ca/civilaviation/certification/menu.htm>.

For Further Information Contact

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TABLE 1**Confirmed Overhauls by B.C. Aero Engines Ltd**

| Work Order | Date Overhauled (dd/mm/yy) | Engine Type | Engine Serial Number |
|-------------------|-----------------------------------|--------------------|-----------------------------|
| 05 | 07/08/02 | Cont O-300-C | 20170-D-9-6 |
| 06 | 09/04/02 | Lyc O-360-A3A | L-1256320 |
| 10 | 08/02/02 | Lyc O-235 L2A | L19308-15 |
| 22 | 07/12/02 | Lyc ???? | LS9615-8-N-R |
| 51 | 09/07/02 | Lyc O-235 L2C | L17688-15 |
| 62 | 10/02/02 | Lyc O-320-E2D | L2003-27A |
| 64 | 04/12/02 | Lyc O-320 | L-6256-27 |
| 73 | 03/01/03 | Cont O-300-A | 15750-D-5-AF |
| 78 | 24/06/02 | Lyc IO-540-C4B5 | LW-9388-48 |
| 81 | 03/30/03 | Lyc O-540-E4C5 | L11686-40 |
| 82 | 02/18/03 | Cont O-200-A | 250679 |
| 89 | 04/03/03 | Lyc TIO-540-F2BD | RL 4876-61A |
| 90 | 03/10/03 | Lyc O-320-D2J | L-12323-39A |
| 111 | 02/06/03 | Lyc O 320-E2D | L-30661-27A |
| 112 | 07/12/02 | Cont O-200A | 72-1ABJ-A-48 |
| 115 | 09/06/03 | Lyc IO-360 | 351106 |
| 118 | 06/03/03 | Lyc O-320-D2J | L-10672-39A |
| 119 | 31/07/03 | Lyc O-540-E4B5 | L-9638-40 |
| 126 | 21/07/03 | Lyc TIO-540-A2B | L185-61 |
| 138 | 27/08/03 | Lyc O-320-D2J | L11739-39 |
| 142 | 10/06/03 | Cont O-470-R | 226648R |
| 146 | 11/07/03 | Lyc O-540-E4C5 | L15311-40 |
| 150 | 12/23/03 | Lyc IO-540-K1B5 | 27766-48A |
| 152 | | Cont O-300-D | 35531 D7D |
| 164 | 22/04/04 | Cont O-470-U | 249977R |
| 165 | 28/03/03 | Lyc IO-540-C4B5 | L6082-48 |
| 166 | 26/02/04 | Lyc IO-540-F2BD | RL710-68A |
| 167 | 05/01/04 | Cont O-300A | 15573-D2AR |
| 168 | 20/02/04 | Lyc O-320-D2J | 12273-39A |
| 173 | 26/03/04 | Lyc O-540-E4C5 | L-2789-40 |
| 183 | 04/05/04 | Cont IO-470-V-O | 148919-9V |
| 185 | 22/04/04 | Lyc O-235-L2C | L18342-15 |
| 189 | 29/04/04 | Lyc TIO-540-A2A | L8840-61C |
| 192 | 04/05/04 | Cont IO-470-V-O | 148927-9V |
| 195 | 05/10/04 | Lyc. IO-540-C4B5 | L8326-48A |
| 196 | 07/08/04 | Cont O-200A | 255453 |
| 200 | 27/05/04 | Lyc TIO-540 | L-1076-61 |
| 213 | 29/06/04 | Lyc O-235 L2C | L13878-15 |
| | | Cont TSIO 520 P | L278738 |
| | 21/10/02 | Lyc O-235 C | L11351-15 |
| | 29/12/03 | Lyc O-360 A3M | L9819 36A |
| | 02/05/02 | Lyc O-235-C1L | L19306-16 |