

SERVICE No.576 BULLETIN

Piper Aircraft Corporation

"DOA SO-1 Approved"

Lock Haven, Pennsylvania, U.S.A. November 30, 1977 S/M

Subject:

To Disseminate Information from Teledyne Continental Motors Regarding the TSI0360 Series Engines

Models Affected:

Serial Numbers Affected:

Compliance Time: Effective upon receipt.

<u>Purpose</u>: We have been advised of reports received by Teledyne Continental Motors of engine out conditions resulting from technically unexplained crankshaft fractures. The purpose of this Release is to disseminate information received from Teledyne Continental Motors and advise all owners and operators of aircraft utilizing these engines, to be familiar with the latest revisions of the Pilots Operating Manual and/or Pilots Operating Handbook with particular emphasis placed on the Emergency Procedures Section. There have been twelve (12) Seneca II aircraft crankshaft fractures and one (1) Turbo Arrow III aircraft crankshaft fracture.

<u>Instructions:</u> Please check your Pilots Operating Manual and/or Pilots Operating Handbook to insure they contain the latest revisions:

- 1. PA-34-200T (1975/1976) Pilots Operating Manual; Revision #13, August 8, 1977.
- 2. PA-34-200T (1977/1978) Pilots Operating Handbook; Revision #4, August 1, 1977.
- 3. PA-28R-201T Pilots Operating Handbook; Revision #3, July 13, 1977.

Material Required: Not Applicable.

Availability of Parts: Not Applicable.

Effectivity Date: This Service Release is effective upon receipt.

THE FOLLOWING BULLETIN IS SUBMITTED FOR YOUR RELEASE: FROM: TELEBYNE CONTINENTAL MOTORS, AIRCRAFT PRODUCTS DIVISION TO: PIPER AIRCRAFT CORPORATION SUBJECT: TECHNICALLY UNEXPLAINED CRANKSHAFT FRACTURES MODELS AFFECTED: TS10360 SERIES ENGINES

TELEDYNE CONTINENTAL MOTORS, AIRCRAFT PRODUCTS DIVISION, HAS RECEIVED REPORTS OF ENGINE-OUT CONDITIONS RESULTING FROM TECHNICALLY -UNEXPLAINED CRANKSHAFT FRACTURES DURING OPERATION OF CONTINENTAL TS10360 SERIES ENGINES.

WE HAVE CONDUCTED AND ARE CONTINUING INTENSIVE METALLURGICAL AND ENGINEERING STUDIES IN AN EFFORT TO DETERMINE THE CRUSE OF THE FRACTURES. POSSIBILITIES BEING INVESTIGATED INCLUDE IMPROPER OPERATION AND DEFICIENT MAINTENANCE OF THE ENGINES. BECAUSE OF THE SERIOUSNESS OF AN ENGINE-OUT CONDITION, YOU ARE URGED TO ADVISE OWNERS OF AIRCRAFT UTILIZING THESE ENGINES TO FAMILIARIZE THEMSELVES WITH THE APPROPRIATE PILOTS OPERATING MANUAL AND PILOTS OPERATING HANDBOOK, WHICHEVER IS APPLICABLE, WITH PARTICULAR EMPHASIS PLACED ON THE EMERGENCY PROCEDURES SECTION, AND TO FOLLOW PRESCRIBED MAINTENANCE PROCEDURES. AS OF THIS REPORT, TWELVE (12) SENECA II CRANKSHAFT FRACTURES AND ONE (1) TURBO ARROW III CRANKSHAFT FRACTURE HAS BEEN DETERMINED.

DON BIGLER TELEDYNE CONTINENTAL MOTORS

(Ref.: S.B. #576)