

SERVICE BULLETIN

NOVEMBER 5, 2015

MORE COMPANY S.B. NO. 101 Rev. 1

PT6A TURBOPROP ENGINE ALTERNATE VIBRATION ANALYZER

1. Planning Information

A. Effectivity

Applies to PT6A engines using the following MORE STC's:

SE000EN PT6A-21, -27, -28 SE00001EN PT6A-38, -41, -42, -42A

SE00002EN PT6A-34, -34AG, -34B, -36, -114, -114A, -116, -135, -135A

SE00003EN PT6A-6/C20, -20, -20A, -20B

SE00004EN PT6A-11, -11AG, -15AG, -110, -112

SE00006EN PT6A-45A, -45B, -45R

SE00010EN PT6A-25, -25A SE00011EN PT6A-25C

B. Concurrent Requirements

None.

C. Purpose

To provide a functionally equivalent but non-identical substitute for the Chadwick-Helmuth 192A Spectrum Analyzer. The two systems may not give exactly the same results, but the limits defined in the MORE STC Manuals do not change.

D. Description

The MicroVib II Aircraft Analyzer and MicroBase Vibration Analysis Database. This system introduces new functionality that is not available with the Chadwick-Helmuth 192A as follows:

- The Chadwick-Helmuth 192A measures the frequency range from 150 cycles per minute to 900,000 cycles per minute. The MicroVib II measures the frequency range from 150 cycles per minute to 1,200,000 cycles per minute.
- 2. The MicroVib II can measure IPS, mils, and G's. The MicroVib II can measure IPS and G's in two measurements, faster than the Chadwick-Helmuth 192A can measure IPS alone.
- 3. The MicroVib II measures both frequency and vibration amplitude more accurately than the Chadwick-Helmuth 192A.
- 4. The horizontal scale (frequency) on the Chadwick-Helmuth 192A is logarithmic, and the frequency on the MicroVib II is linear, making the job of interpreting the vibration survey less difficult.
- 5. Easily transfer Microbase files across the internet.



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6. Propeller balancing solutions are provided by the MicroVib II Aircraft Analyzer.

E. Compliance

This alternative is optional.

F. Approval

Federal Aviation Administration has reviewed and approved the technical contents of this Service Bulletin, Revision Original.

Revision 1 is a Minor Engineering Change approved by Chief Engineer, MORE Company with permission from Federal Aviation Administration. Revision 1 page 3, paragraph 3, - paragraph 3B added.

G. Weight and Balance

None.

H. Electrical Load Data

Not Changed.

I. Software Accomplishment Summary

Contact MORE Company, Inc. at 775-782-3346 to obtain the "MORE Report Generator" software. This software will generate the results in an authorized format "Authorized MORE STC Report". This report allows an internal cross check confirming required limits are met.

J. References

Comply with DSS Application Note - AN-PT6M.

K. Publications Affected

The following MORE Company, Inc. STC's are affected:

SE000EN PT6A-21, -27, -28 SE00001EN PT6A-38, -41, -42

SE00002EN PT6A-34, -34AG, -34B, -36, -114, -114A, -116, -135, -135A

SE00003EN PT6A-6/C20, -20, -20A, -20B

SE00004EN PT6A-11, -11AG, -15AG, -110, -112

SE00006EN PT6A-45A, -45B, -45R

SE00010EN PT6A-25, -25A SE00011EN PT6A-25C

L. Interchangeability and Intermixability of Parts

Not applicable.

M. Reason for Revision

To better define the records keeping requirements when the DSS Micro Vib II is utilized.

2. Material Information



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A. <u>Industry Support Information</u> Not Applicable.

B. <u>Material Availability</u>

The MicroVib II Aircraft Analyzer can be purchased from Dynamic Solutions Systems Inc. 760-744-0187. The MORE STC Report Generator software can be obtained from MORE Company, Inc. at 775-782-3346.

C. Manpower

Not applicable.

D. Material Necessary for Each Engine

Not applicable.

E. Reidentified Parts

None.

F. Tooling Availability

Not applicable.

3. Accomplishment Instructions

Comply with DSS Application Note – AN_PT6M to collect data. Download data to the MORE STC Report Generator software to obtain the "Authorized MORE STC Report".

A. Additional Information

A different bracket and vibration sensor is used with the MicroVib II. The MORE STC Manuals specify the use of Chadwick-Helmuth 192A brackets 6752 or 6752-1. The MicroVib II uses vibration sensor 1460 and high frequency bracket 1472.

B. <u>Records Keeping Requirements</u>

The print outs provided by the MORE STC Report Generator software are a suitable replacement / substitute for the Chadwick-Helmuth 192A Red and Green cards.