Aircraft Vibration Maintenance Just Got

Simpler
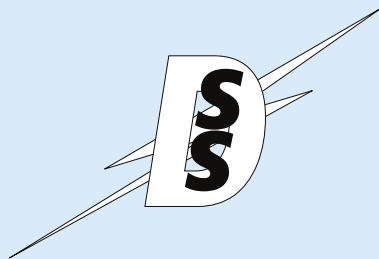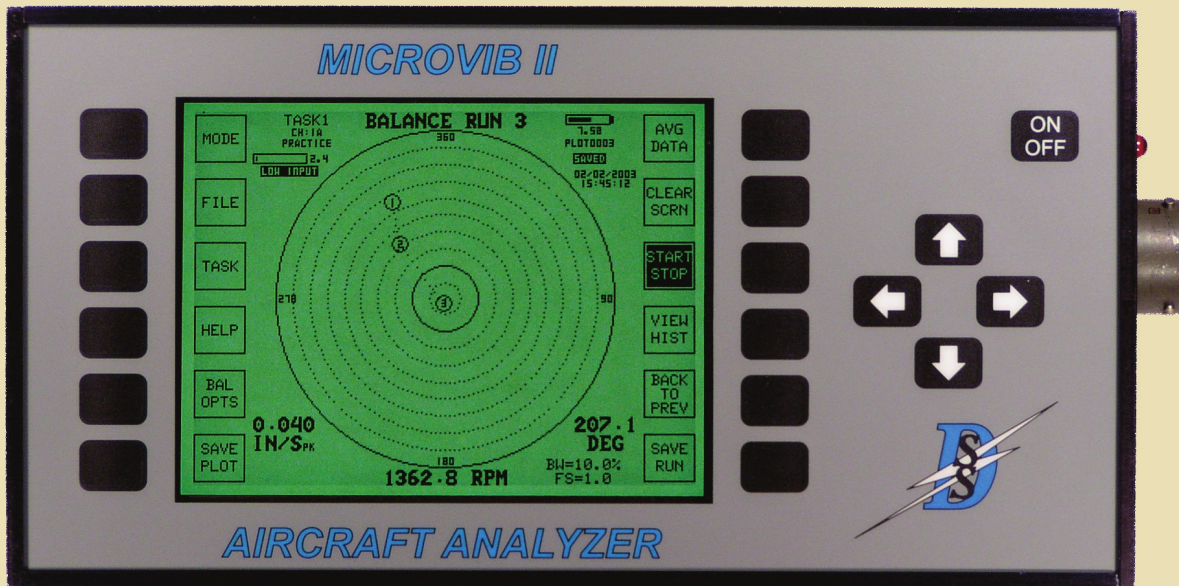
Smarter

Faster

MicroVib II ™

Vibration Analyzer/Dynamic Balancer

DSS

Dedicated to making your job easier

The MicroVib II Aircraft Analyzer does it all.

MICROVIB II

TASK1
CH:IA
PRACTICE
LOW INPUT
2.4

BALANCE RUN 3

360

7.50
PLOT0003
SAVED
02/02/2003
15:45:12

MODE
FILE
TASK
HELP
BAL OPTS
SAVE PLOT

AVG DATA
CLEAR SCRN
START STOP
VIEW HIST
BACK TO PREV
SAVE RUN

270

90

0.040
IN/S_{PK}

207.1
DEG

180

1362.8 RPM

BW=10.0%
FS=1.0

ON OFF

AIRCRAFT ANALYZER

Balancing / Tracking

The MicroVib II Aircraft Analyzer saves time and engine starts by providing precise measurement of aircraft vibrations and by learning the aircraft's response to adjustment (Weight, Sweep, Head Shift, Pitch Link, Tab, etc.) with each new run. The companion MicroTrack Blade Tracker provides the user with a graphic display of rotor tip path and lead-lag. Both aircraft vibration and rotor track information are used to provide the optimum solution for the individual aircraft being worked without the need for special software for each model aircraft.

Vibration Analysis

Select from spectrum, waveform or other analysis modes to collect and analyze vibration data for a definitive record of engine, airframe, drivetrain, rotor/propeller health and cabin comfort. All collected vibration data is automatically saved to the non-volatile MicroDisk ™. Files can be recalled to memory for later display and analysis.

Download Data to your PC

Download stored data files for permanent storage to the MicroBase System. Data stored in MicroBase can be recalled for review, analysis, printing and other tasks.

Data Printout

Data can be printed by downloading to MicroBase Pro for printing via PC connected printer.

MicroVib II makes your job easier

Need to perform a manufacturer specified vibration check on a turbine engine? Need to keep Balance History records for Q.A. Checks or log book entries? With the MicroVib II Aircraft Analyzer you already have the system to do the job.

Lease to own

Our lease-to-own program makes MicroVib II pay for itself as you use it.

Some of the Many MicroVib II Capabilities

- Helicopter rotor track & balance
- Vibration Absorber (Hammer) Tuning
- Balance Props Single or Multi engine
- Turbofan balancing
- Shaft balancing
- High temperature turbine engine analysis

- Tachometer checks
- Reciprocating or Turbine engine analysis
- Reduction gearbox analysis
- Cabin vibration survey
- Airframe vibration troubleshooting
- Cooling fan balance

Six of the many screens that can be called up on the MicroVib II Aircraft Analyzer
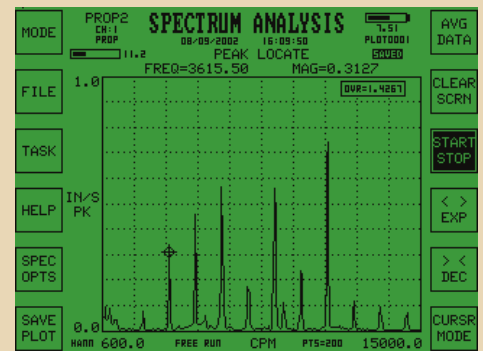
Balance Screen
Provides polar plot of IPS and phase overlayed with balance history for clear display of the Big Picture.
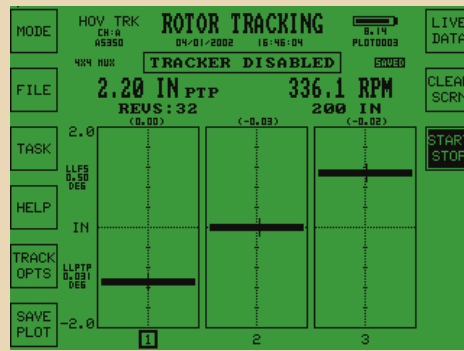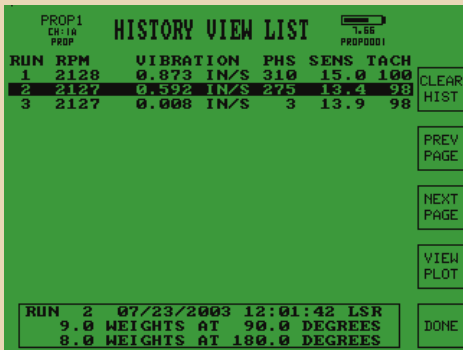
Rotor Track Plot
Provides a display of blade track position including both elevation and lead/lag of each blade.

Spectrum Plot
Provides a graphical plot of all vibration peaks & corresponding frequencies found at sensor location.

Balance History Screen
Provides a listing of all data collected during the balancing process.

Select Group Screen
Permits the user to select preconfigured templates or custom group files.

Select Task Screen
Provides a means of choosing tasks during the balancing process.

Getting Started

Getting started with the MicroVib II is as simple as selecting an existing group file for the aircraft type being balanced. The group file consists of a number of tasks to be accomplished for a given balance job. Each task contains the aircraft specific information required to accomplish the task. Corrective action is displayed in appropriate adjustment terms and amounts (ie, pitch link flats, up or down, and blade color etc.). Each task is named so as to simplify in-flight selection. Group files are readily available for download from DSS website and easily created for any aircraft.

MicroVib II Specifications

- Size: 8.7 inches long, 4.25 inches wide, 1.7 inches deep. (221 mm long, 108 mm wide, 43 mm deep.)
- Weight: 36.8 oz. (1044 grams)
- Temperature: 15 to 120F, -10 to 50C
- LCD Display: 3.84 inches wide, 2.88 inches high, .012 dot pitch. 97.5 mm wide, 73 mm high, .3mm dot pitch. LED Backlight.
- Analysis Modes: Balance, Spectrum, Waveform, True RMS, Peak Hold, Overall, Tach, Tach Ratio.
- Spectrum Ranges: 250 Hz, 1KHz, 5KHz, 20 KHz

- Internal battery powered - NIMH Battery provides 16-24 hours of continuous use. Recharges in 4 hours.
- Data may be displayed in Units: G's, IPS or Mils. Units type: Peak, RMS, Average, dB or Pk-Pk. English or Metric Units.
- Can store up to 44 history files, each file can contain up to 10 tasks and 64 runs of data.
- Can store over 200 400 line spectra on Micro-Disk™
- User selectable spectrum resolution 50-800 lines.

MicroVib II Fixed Wing Aircraft Kit

The MicroVib II fixed wing aircraft kit supports piston and turboprop, single engine and multi-engine fixed wing dynamic propeller balance and general purpose airframe and powerplant vibration troubleshooting.

- MicroVib II Aircraft Analyzer
- Vibration Sensor
- Optical Photo-Tach
- Cable Set & Brackets
- Retro-Reflective Tape
- Propeller/Rotor protractor
- Electronic Scale
- Battery charger
- User Manual
- Carrying Case

Multi-engine fixed wing kits are available which support propeller balance of up to four engine aircraft. Balance history data is automatically saved for each individual engine/prop.

MicroVib II Helicopter Kit

The MicroVib II helicopter kit will support dynamic track and balance of helicopter rotor systems, dynamic shaft balancing and general purpose airframe and powerplant vibration troubleshooting.

- MicroVib II Aircraft Analyzer
- Optical Blade Tracker or
- Strobe Blade tracker
- Vibration Sensors
- Optical photo-tach
- Cable Set & Mounting Brkts
- Retro-Reflective Tape
- Electronic Scale
- Propellor/Rotor protractor
- Battery charger
- Interface Cable
- Four channel signal multiplexer
- User manual
- Carrying Case with wheels

MicroBase Pro System for your Windows-based PC

Fast and simple transfer of data to/from MicroVib II and your PC
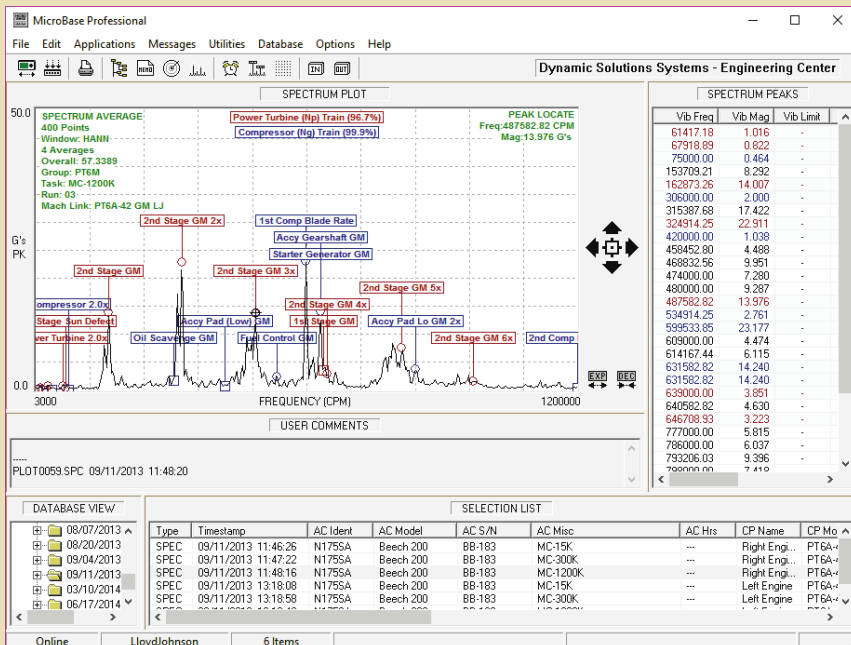
The MicroBase Pro System not only provides an arsenal of powerful data storage, analysis and output features, but allows sharing data with other users. MicroBase Pro is designed for compatibility with today's high performance personal computers which use the Microsoft Windows operating system. Aircraft maintenance, engineering and research groups alike will be able to boost their capabilities with modern, flexible, computerized analysis technology.

Dedicated to making
your job easier
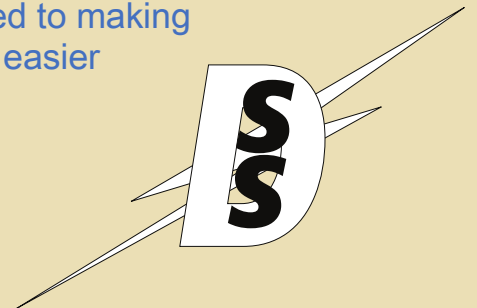
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