



# Propeller Balance Monitoring System



## Key features

- Reduces operating costs compared with carry-on systems
- No dedicated ground runs are required
- No dedicated flights are required
- Data is gathered during normal service operation
- No carry-on equipment required, all parts permanently installed
- High reliability of components
- No parts calibration required

## Overview

Our Propeller Balance Monitoring Systems (PBMS) leverage Ultra's extensive experience in aircraft vibration control. Our systems have been providing operators with propeller balancing solutions since 2000 and has been fitted to seven different aircraft types.

The system utilises normal service operation to determine the balance state of the propeller systems, and Ultra's dedicated ground terminal software can provide this status to maintainers, provide balance solutions and vibration predictions, and allow the operator to maintain the system. Balancing propellers using Ultra's PBMS is cost effective and quick.

As the systems use normal flight data, the solutions are more optimised than those created by competing systems that only use ground based measurements.

Ultra's PBMS reduces your operating cost and increases operational readiness, by ensuring your platforms operate at the lowest levels of vibration.

# Propeller Balance Monitoring System

## Tailored to your needs:

Ultra's PBMS is designed to be off-the-shelf hardware that can be configured for your specific platform application. Platform specific calibrations and flight regime definition can be programmed using platform specific databases.

## Optional Interfaces:

PBMS can be installed as a stand-alone system, integrated as part of Ultra's innovative Active Noise Control System, or can be used in conjunction with Pratt & Whitney Canada's FAST™ System.



25-NOV-2003 10:33 Aircraft: 6708 Comms: Calculate New Balance

Propeller Position: Engine 1  
 Max Loading (Hole A): 550

HOLE NO	INITIAL MASS (g)	PROPOSED MASS (g)	ACTUAL MASS (g)
A	0	0	0
B	0	0	0
C	69	6	0
D	129.3	336	336.5

SENSOR NO	INITIAL (ips)	PREDICTED (ips)
Engine 1	0.33	0.33
Engine 2	NO	NO
Engine 3	NO	NO
Engine 4	NO	NO

Highest Vibration: 0.008 ips

