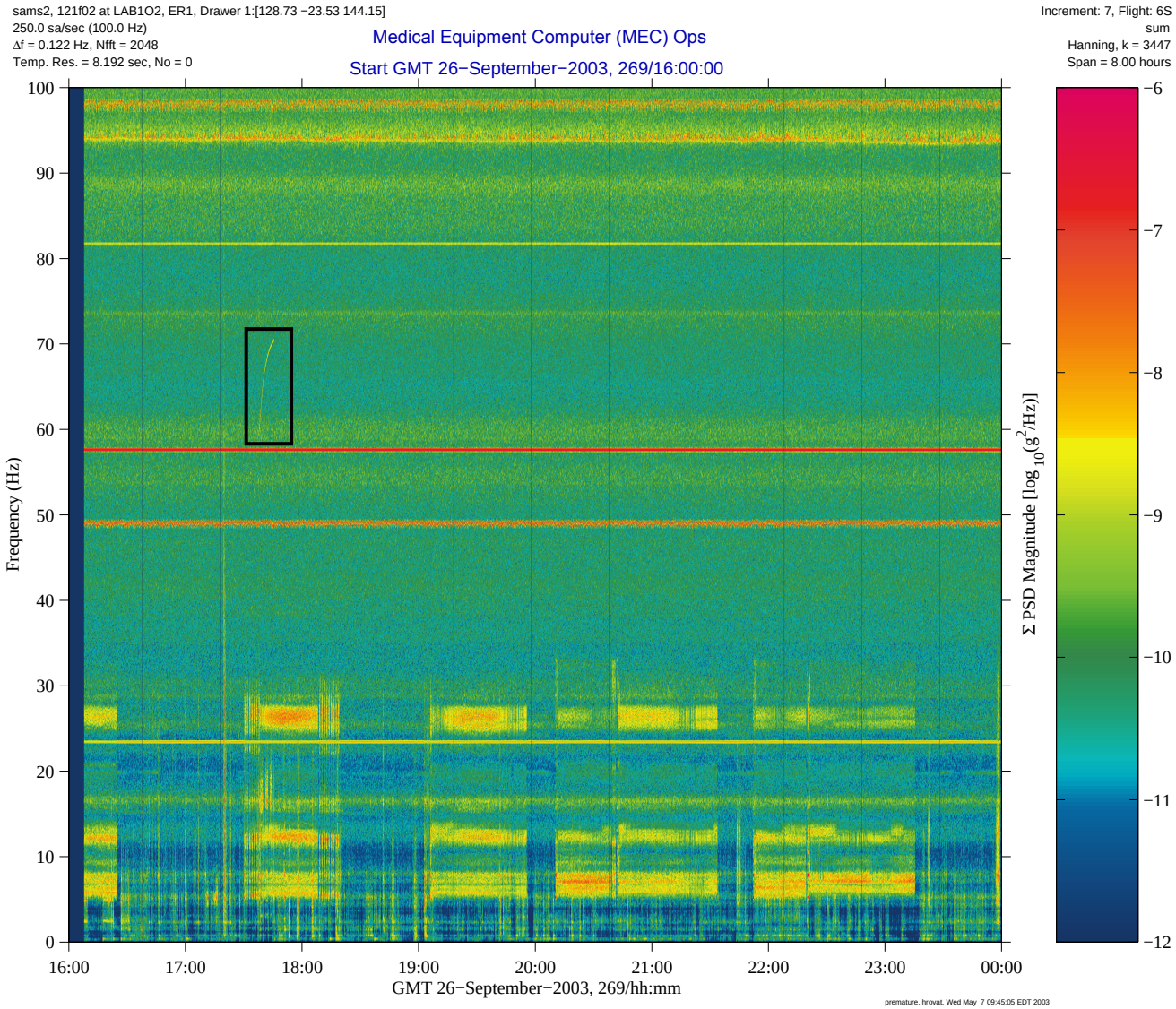
Medical Equipment Computer (MEC) Qualify

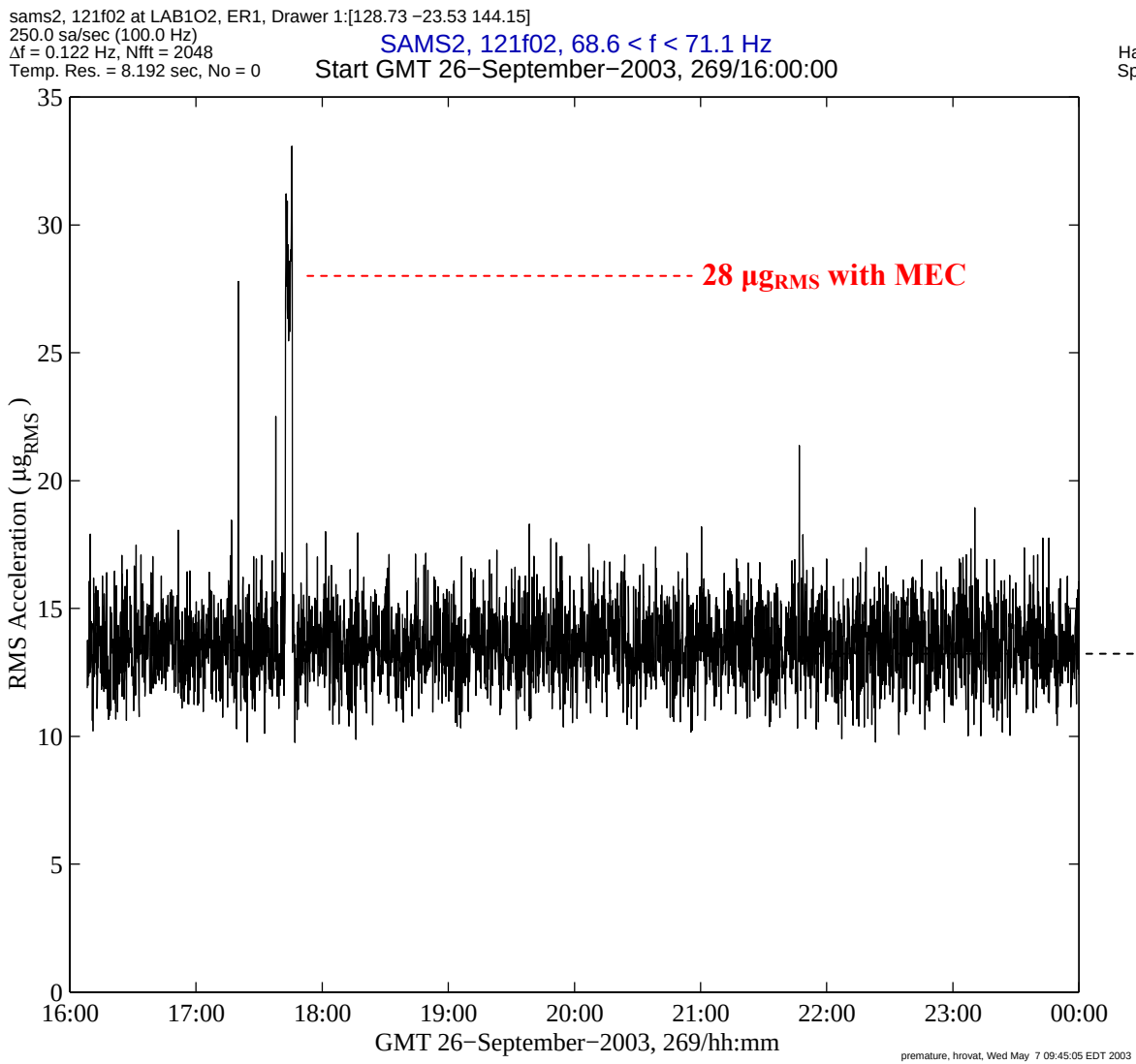


Data Description	
Sensor	121f02 250.0 sa/sec (100.0 Hz)
Location	LAB1O2, ER1, Drawer 1
Inc/Flight	Increment: 7, Flight: 6S
Plot Type	spectrogram

Notes:
For crew activity that involves the medical equipment computer (MEC), a narrowband signature similar to the start-up of signature observed for the Periodic Fitness Evaluation (PFE) activity is observable in vibratory data collected by SAMS 121f02 and MAMS HiRAP sensors. The 121f02 spectrogram at the left has this brief signature surrounded by a black box. The specific example of this signature shown in this box lasts slightly less than 8 minutes and climbs from 59.5 to 70.4 Hz. This is brief example is representative of the MEC operations, although sometimes this narrowband disturbance persists for a long span, while presumably the crew is tending to other tasks.

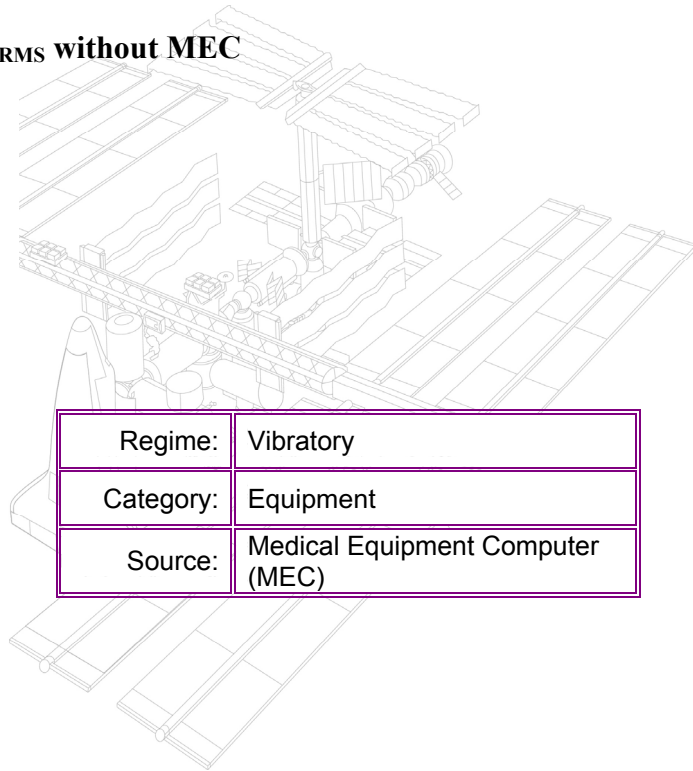
Regime:	Vibratory
Category:	Equipment
Source:	Medical Equipment Computer (MEC)

Medical Equipment Computer (MEC)
Quantify



Data Description	
Sensor	121f02 250.0 sa/sec (100.0 Hz)
Location	LAB1O2, ER1, Drawer 1
Inc/Flight	Increment: 7, Flight: 6S
Plot Type	Interval RMS

Notes:
This interval RMS plot serves to show the effect of the MEC equipment on the narrow vibratory range around 70 Hz. The RMS level shifts from a baseline of just under 14 μg_{RMS} to up over 28 μg_{RMS} while the equipment is being operated. To put this in some context for comparison, the median RMS level for the entire passband (up to 100 Hz) for the entire period shown at the left is over 350 µgRMS.



Regime:	Vibratory
Category:	Equipment
Source:	Medical Equipment Computer (MEC)

Microgravity Science Division

Glenn Research Center