

Treadmill Vibration Isolation System (TVIS) In-Flight Maintenance (IFM) Hammering Qualify



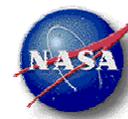
Data Description	
Sensor	
Location	Deck of US LAB
Inc/Flight	
Plot Type	

Notes:

The Principal Investigator Microgravity Services (PIMS) database has a 37 minute 11 second video (2004_03_09_tvvis_ifm.wmv) that shows the two Increment 8 crew members working together on a Treadmill Vibration Isolation System (TVIS) In-Flight Maintenance (IFM) task. The database also contains a spreadsheet excerpt of the PIMS telescience support center console logbook (pimslog_2004_03_08_14_15_51excerpt.xls) for part of a day, which details some of the action as it was observed on live module video downlink. In order to reseal a bearing, some hammering was required for this IFM while the flywheel was held on the deck of the US Lab.



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PIMS ISS Acceleration Handbook
Date last modified 6/8/04

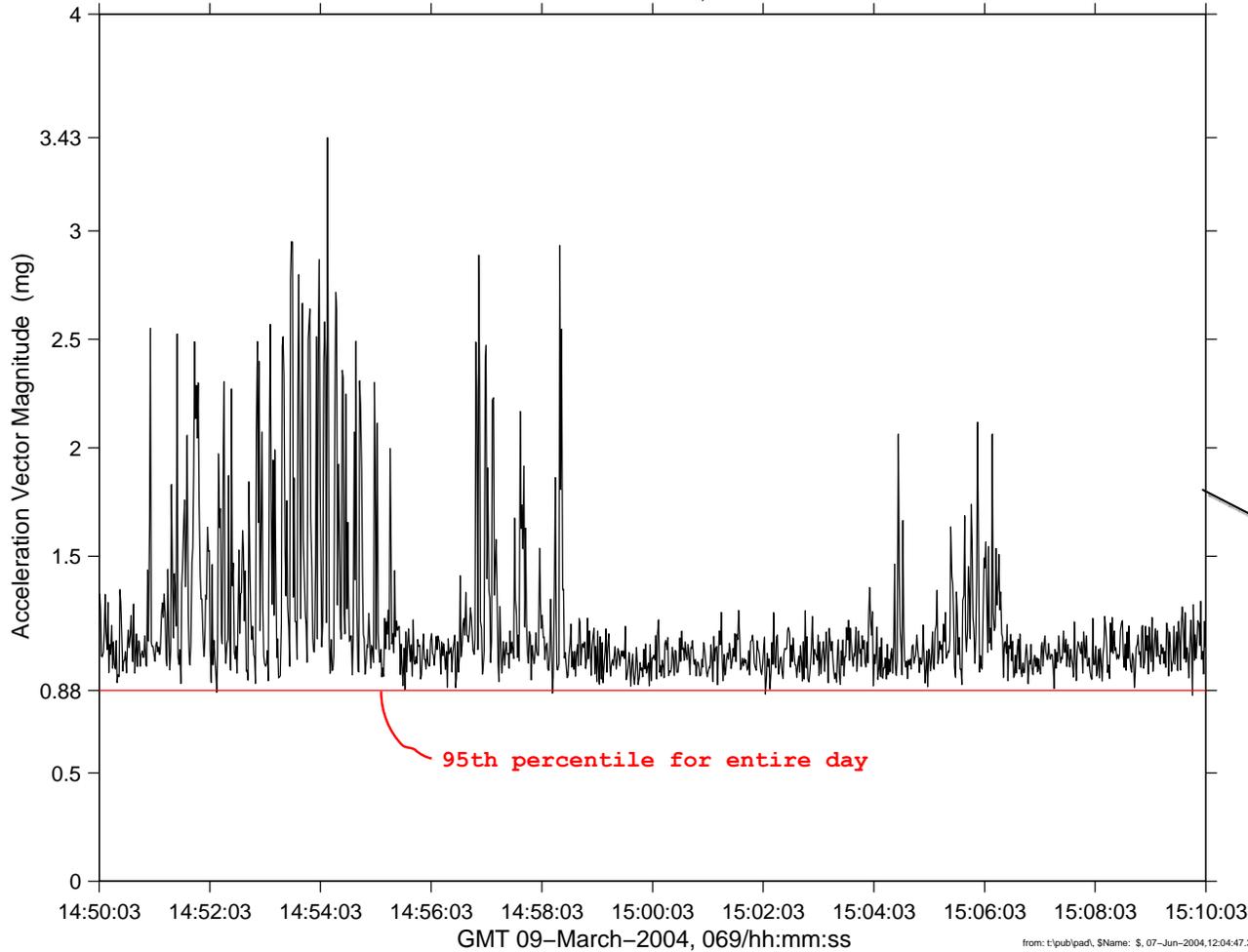
Regime:	Vibratory
Category:	Crew
Source:	Treadmill Vibration Isolation System (TVIS) In-Flight Maintenance (IFM) Hammering

Treadmill Vibration Isolation System (TVIS) In-Flight Maintenance (IFM) Hammering Quantify

sams2, 121f02 at LAB1O2, ER1, Drawer 1:[128.73 -23.53 144.15]
1.0000 sa/sec (100.00 Hz)

Increment: 8, Flight: 7S
Vector Magnitude
Interval Max
Size: 1.00, Step: 1.00 sec.

TVIS IFM Hammering
Start GMT 09-March-2004, 069/14:50:03.004



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Sensor	
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Notes:

Comparing some acceleration magnitude statistics derived from measurements collected by the SAMS sensor heads located overhead toward the forward end of the US Lab,

SAMS Sensor	Acceleration Vector Magnitude (mg)	
	Maximum During 20-Minute Span*	95 th %-ile For Entire Day
121f02	3.43	0.88
121f03	11.36	2.40
121f04	42.88	2.45
121f05	2.37	0.68

it is evident that this deck-based hammering transmitted vibrations quite well to the SAMS sensor head locations.

* span started at GMT 09-Mar-2004, 14:50:03.



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