UNIVERSITY OF Southampton

Vibration test services of the Human Factors Research Unit

Simulation of whole-body motion in transport vehicles

Description

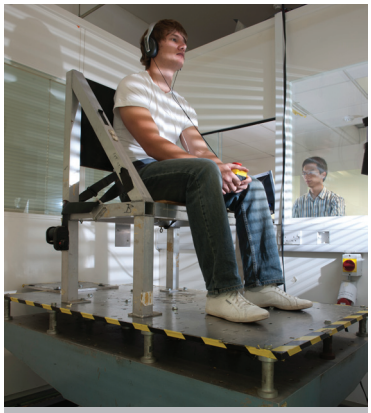
The Human Factors Research Unit has unrivalled facilities for faithful reproduction of motion in transport vehicles, including cars, buses, trains, aircraft and marine craft.

We reproduce motion measurements (vertical, fore-and-aft, lateral, roll, pitch and yaw) on our laboratory simulators for the purpose of simulation demonstrations and for the study of:

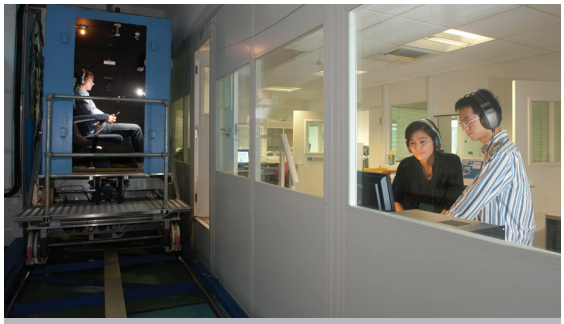
- comfort
- performance
- motion sickness
- physiological responses
- perception
- seating dynamics
- postural stability

Motion, noise and thermal environments

A generic cabin can be attached to a simulator platform to provide a facility for also reproducing the sound and thermal environment (heat, cold, and humidity) within transport. This allows basic research on the determination of the relative importance of motion, noise, and the thermal environment on comfort.



Vertical vibration simulation



Translation and rotation simulation

Simulation of 6-axes of motion:
vertical, fore-and-aft, lateral, roll, pitch and yaw

BSI
ISO 9001
FS 505400

The Human Factors Research Unit operates a Quality Management System which complies with the requirements of ISO 9001

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