

MICROGRAVITY SCIENCES AND PROCESSES (A2)
Science Results from Ground Based Research (4)

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COMPARISON OF SOUND WAVE CHARACTERISTICS DURING 1 G AND MICROGRAVITY
CONDITION**Abstract**

Fluid exists in two forms – Liquid and Gas. There are numerous documentations upon the changes of characteristics of fluid during microgravity condition in contrast to 1 G condition. Taking that in mind, the team from Universiti Kuala Lumpur Malaysian Institute of Aviation Technology (UniKL MIAT) postulated that the characteristics of Gas, which is a fluid, would change during microgravity condition. The team focused on Sound Wave that traveled in Gas. Thus changes which are postulated to occur in Gas would also occur in Sound Wave. The team had actuated several microgravity experiments using the ‘drop box’ method to record and document these changes in Sound Wave in Microgravity condition in contrast to 1 G condition. A semi-controlled drop tower and several ad hoc apparatuses were built by the team for this purpose. This paper documents the experiments and the results. Results indicated there were changes in Sound Wave though minute.