

TEXUS-33 EXPERIMENT (1994)

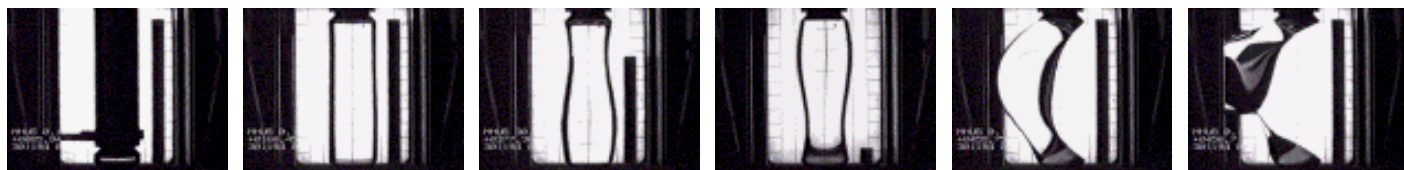


Fig. 1. Several selected frames from a Texus-33 experiment on a quasi-static calibrated microgravity acceleration ($100 \pm 1 \mu g$), on a liquid bridge, well above the uncontrolled g-jitter of the platform. A silicone oil 10-times more viscous than water was used. First the liquid bridge is established between discs of 30 mm in diameter, initially touching (first frame), then displacing one up to 85 mm (second frame), and then forcing a gentle oscillation of the whole experimental cell up and down (100 mm peak-to-peak with a 45 s period) as evidenced by the parallel solid bar seen on the field-of-view but that was kept fixed to the rocket and not to the cell (frames 3 and 4). The final two frames show the liquid bridge breakage at the uncontrolled reentry of the capsule.

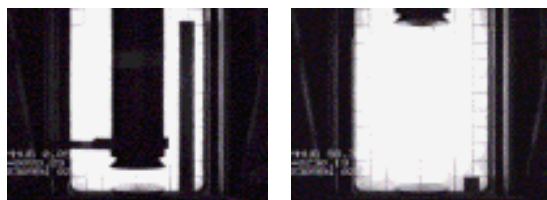


Fig. 2. Ground trials (in dry) before flight.

[References \(see Publications\).](#)