

FIGURE 10

The experiment verified that the liquid hydrogen could be controlled and could be kept in a settled condition in a zero gravity environment. The technique employed for settling was through the continuous venting system which provided just enough forward thrust to keep the hydrogen at the bottom of the tank, and subsequently, support the second start of the engine.

When compared with other decisions we have had to make, the problem with the TV camera on AS-203 is considered minor. For example, the first stage of the first Uprated Saturn I flight vehicle was on the launch pad and undergoing test and checkout when the forward bulkhead of one of the nine clustered tanks collapsed due to an overpressurization in the forward part of the vhicle. We were then faced with