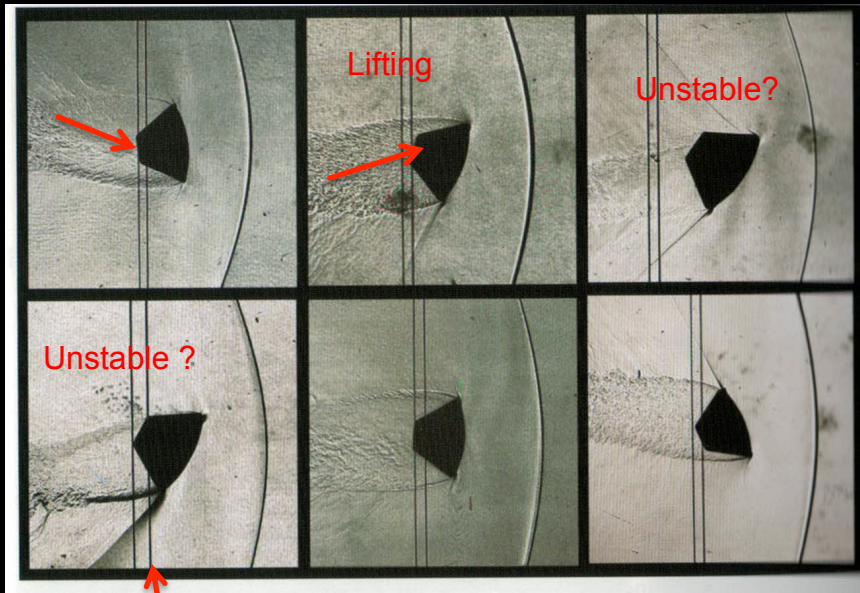


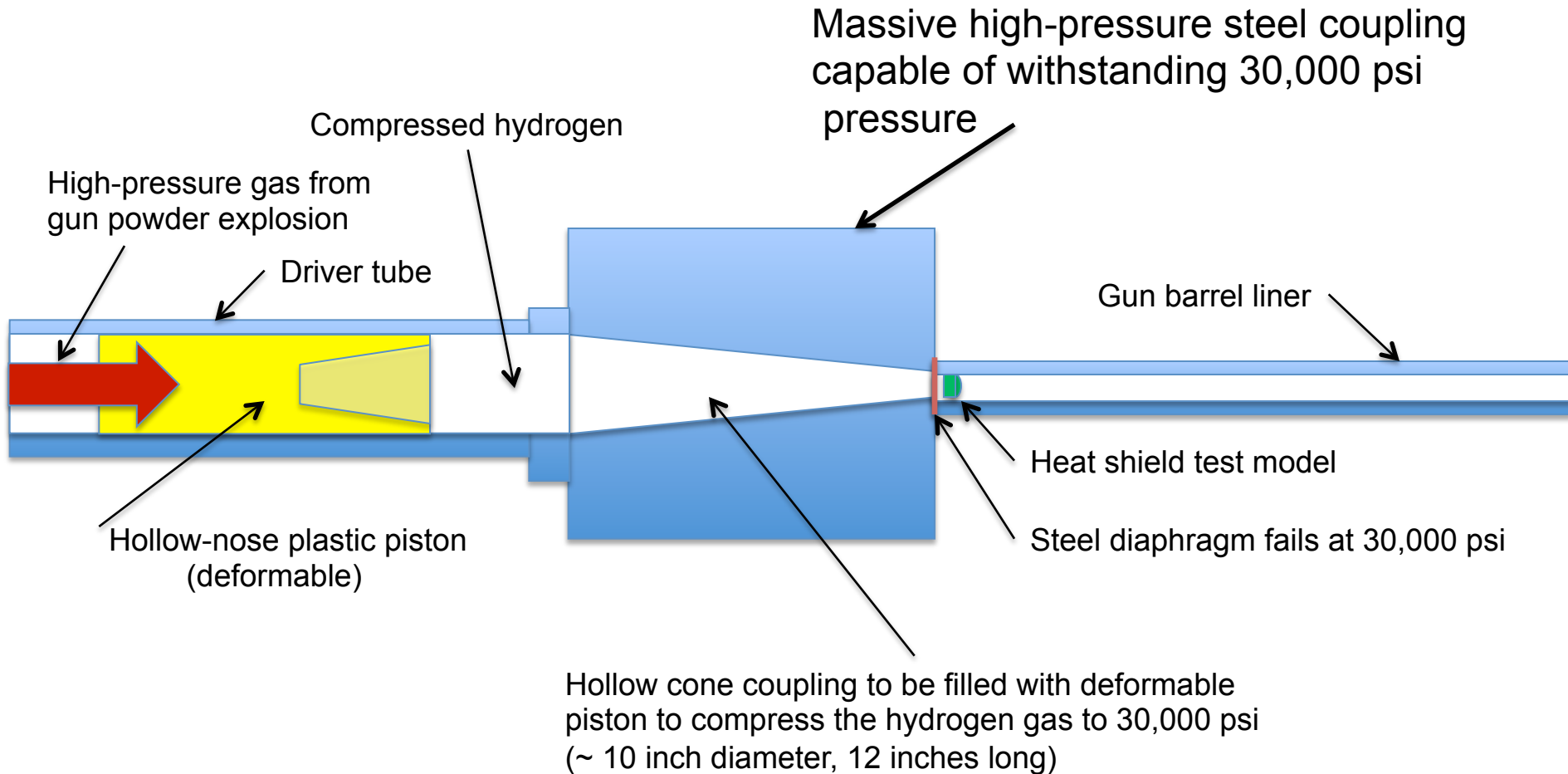
Two of the Computers Who Analyzed the Ballistic Test Images



Measure angles and positions to determine oscillation frequency of the vehicle and its lift and drag coefficients. Lift and drag values used by the astronauts to direct the spacecraft to the desired landing spot.

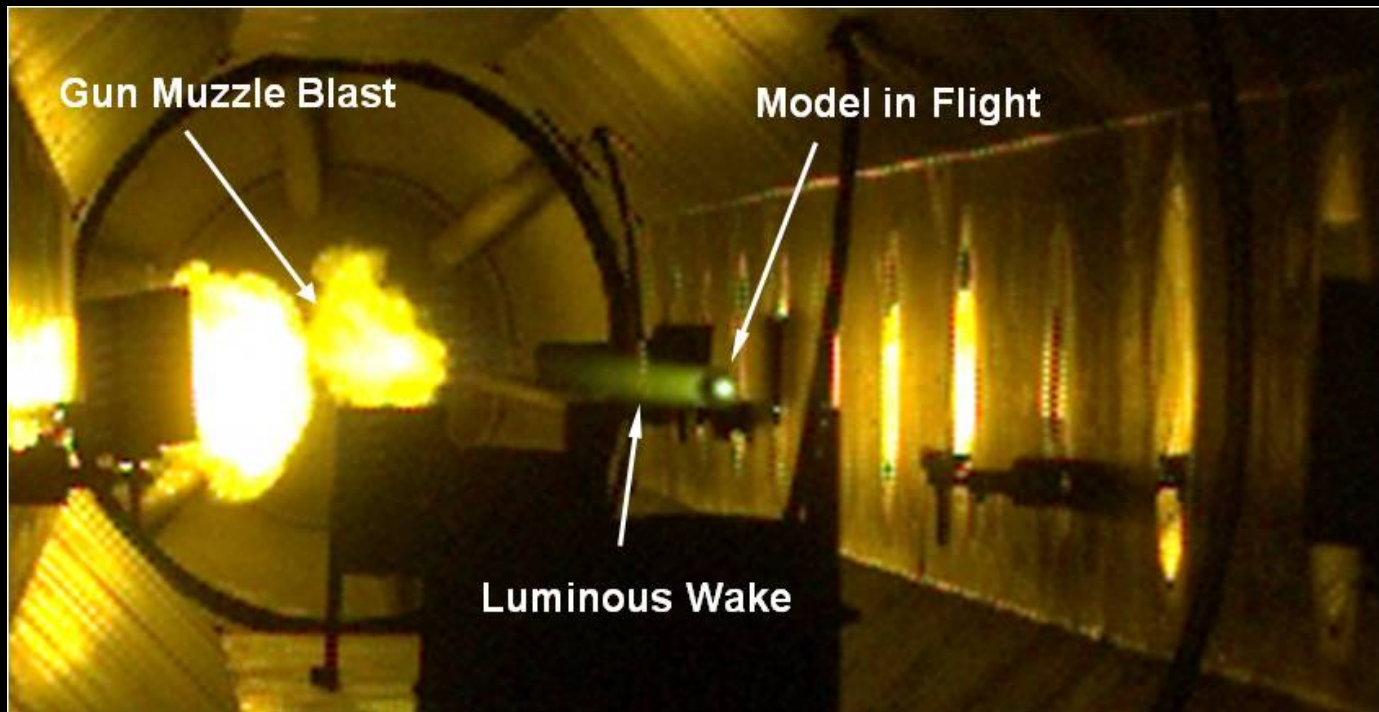
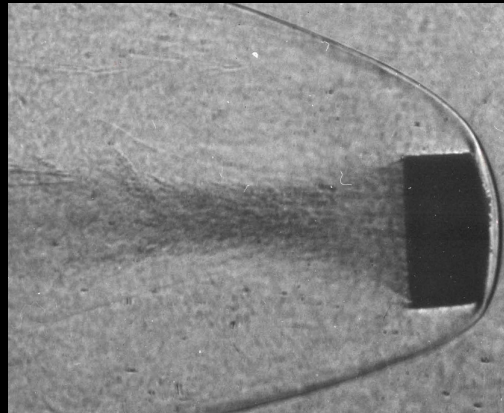
Note: fiducial grids used to determine positions, scales, and angles

Design of a Light-gas Gun Needed to Propel Models to 25,000 mph

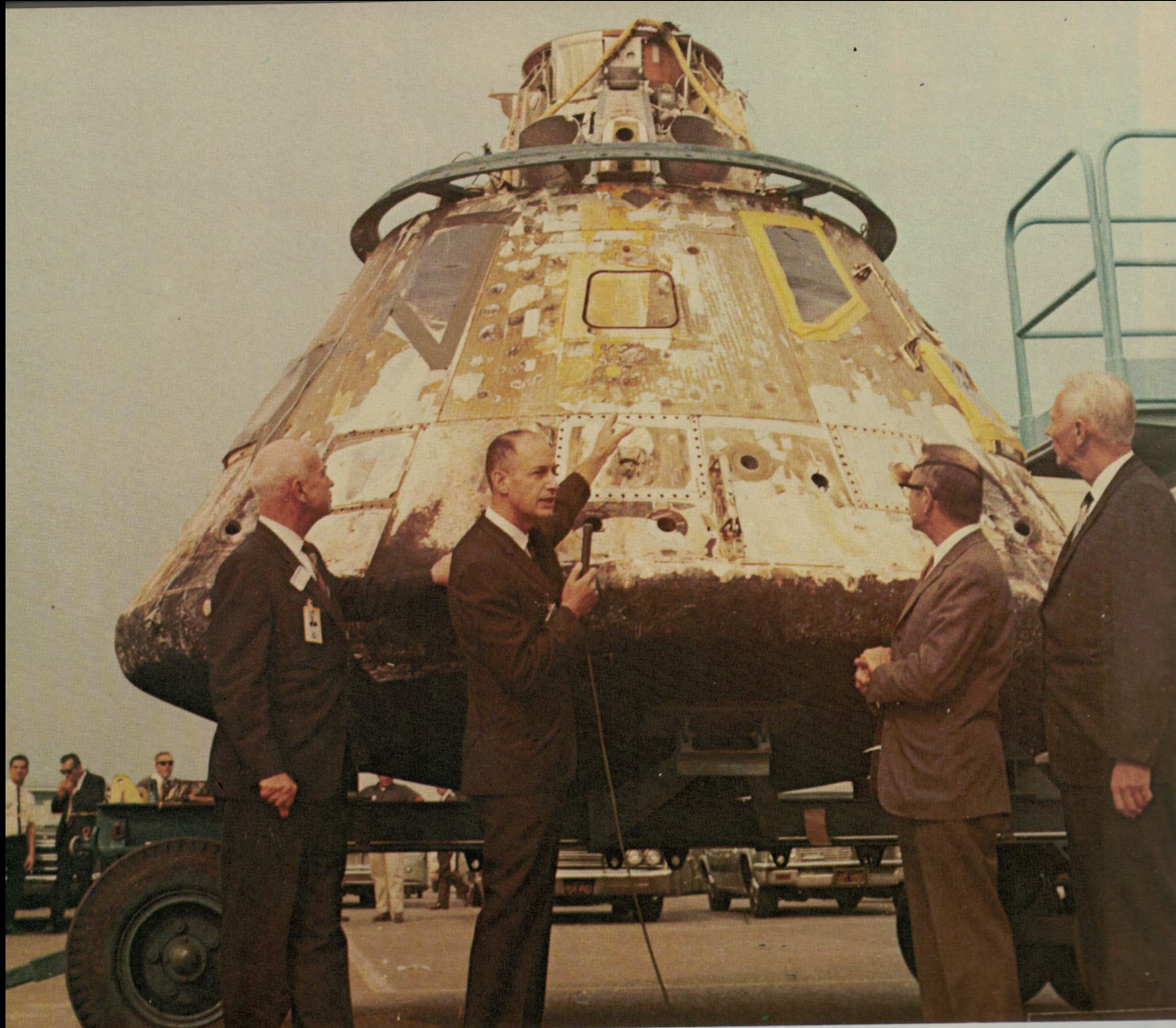


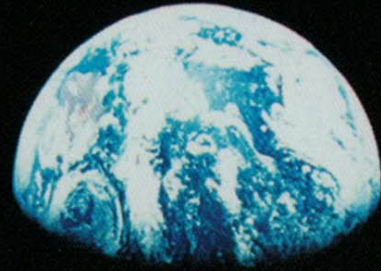
VIEW INSIDE THE TEST CHAMBER

Heat shield
candidate
traveling at
escape speed



Apollo Heat Shield After Atmospheric Entry at 25,000mph





One small contribution from a worker bee,
One giant step for humankind.

Lunar breccia



NASA Lunar Sample 15498
OptoMechEngineer 7/12/2017