

NASA and the Moon Mission

Presented by Bill Borucki

MY SMALL CONTRIBUTION TO THE APOLLO PROGRAM

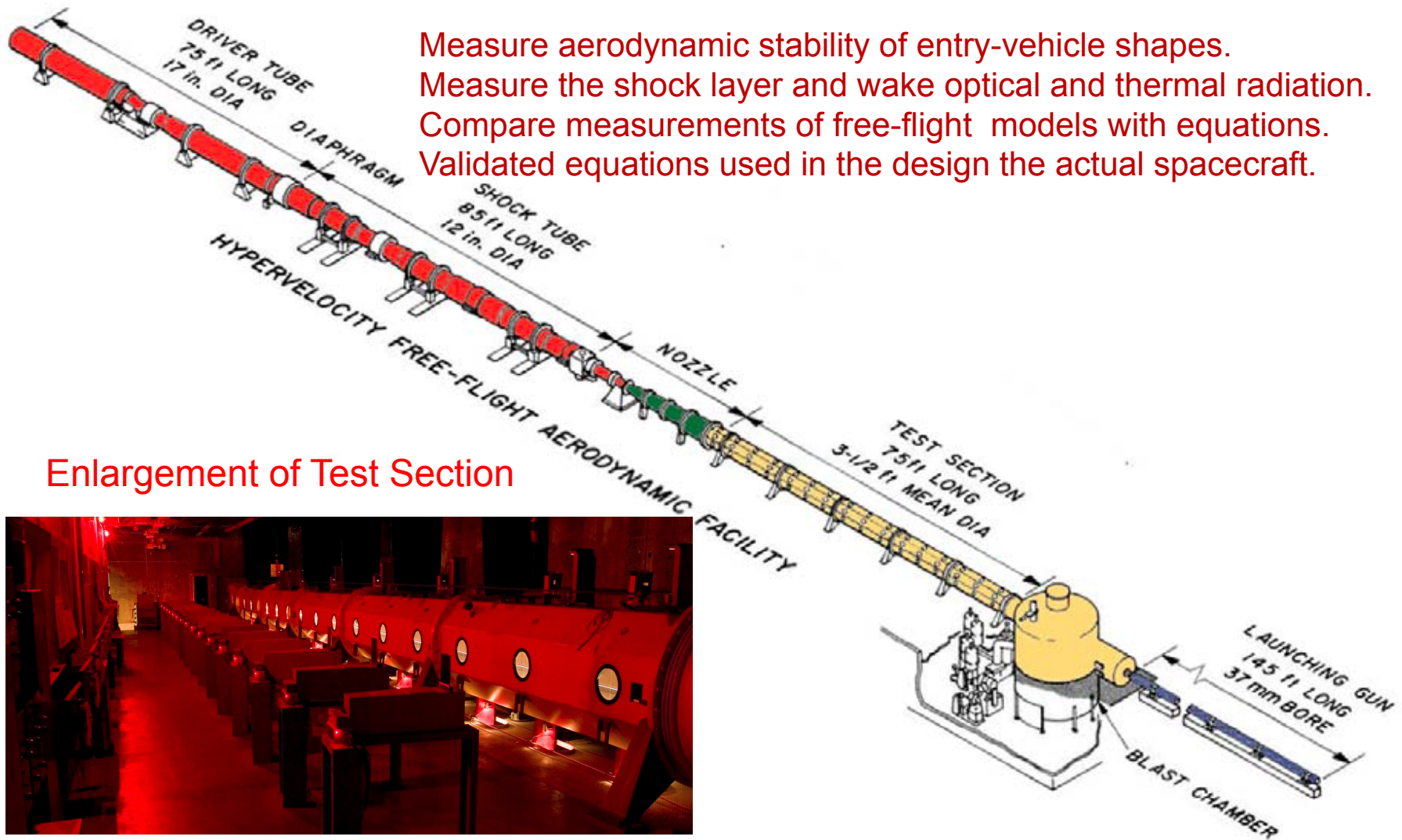
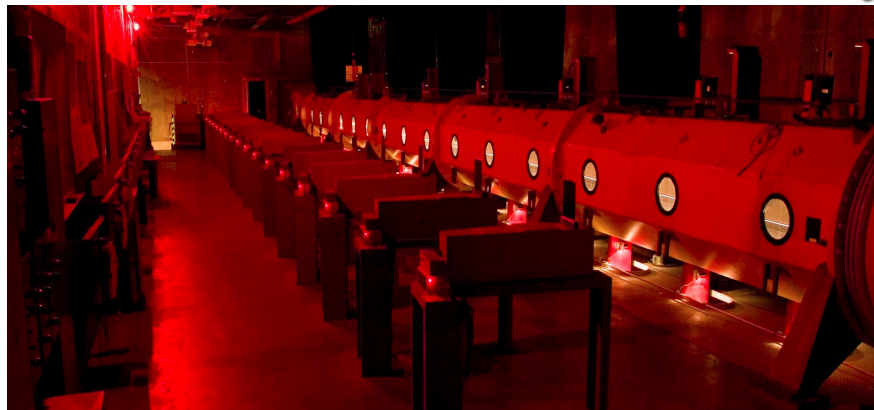
William Borucki April 28, 2020

- Joined NASA Ames (Moffett Field, CA) in 1962
- Mercury Program already completed
- Gemini Program underway
- Apollo Program in development
- I was a junior member of team researching the aerodynamic stability of the crew capsule and determining the performance of heat shield materials.

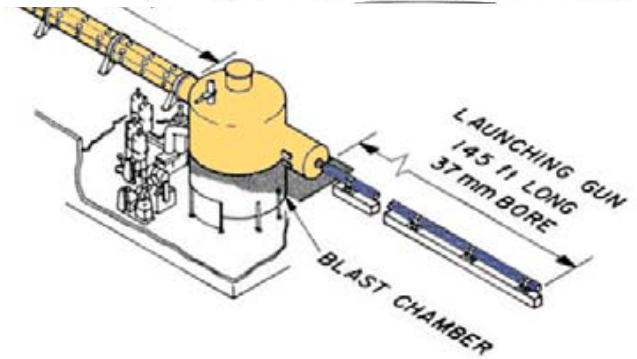
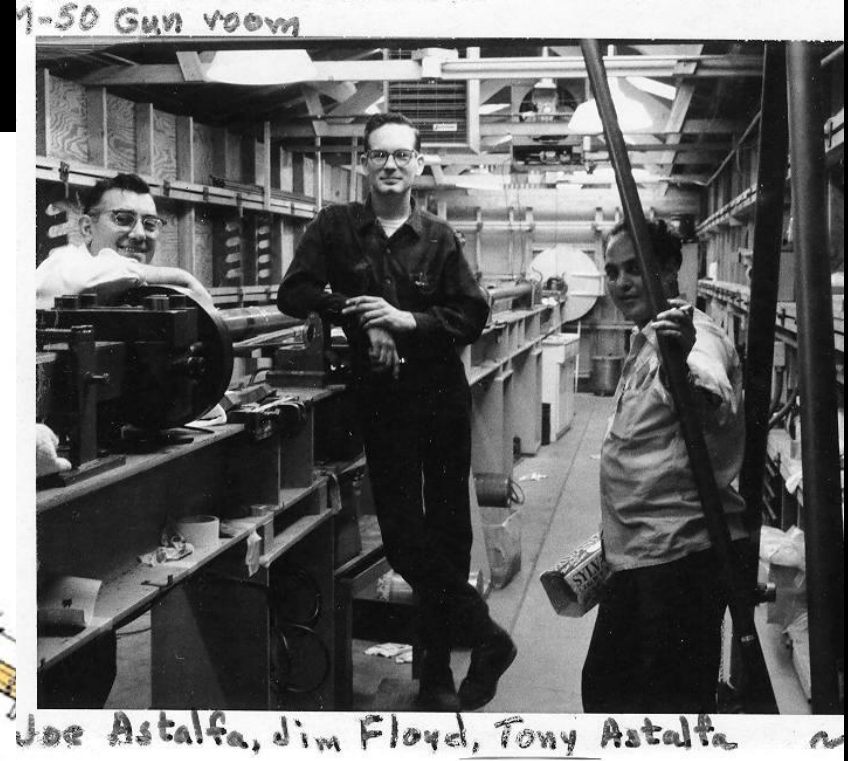
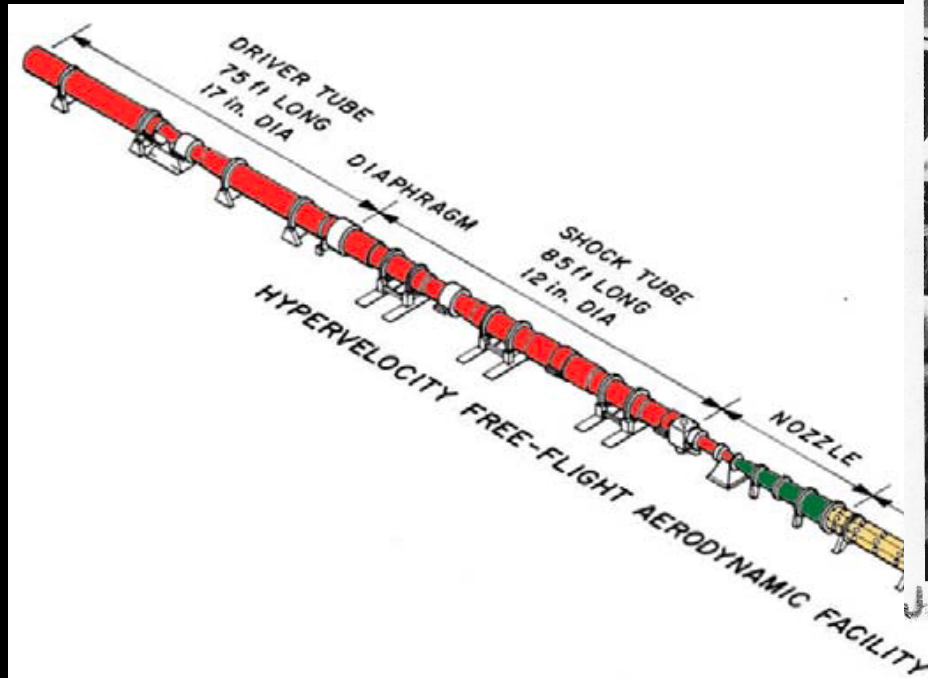
NASA AMES HYPERSONONIC FREE-FLIGHT RANGE

Measure aerodynamic stability of entry-vehicle shapes.
Measure the shock layer and wake optical and thermal radiation.
Compare measurements of free-flight models with equations.
Validated equations used in the design the actual spacecraft.

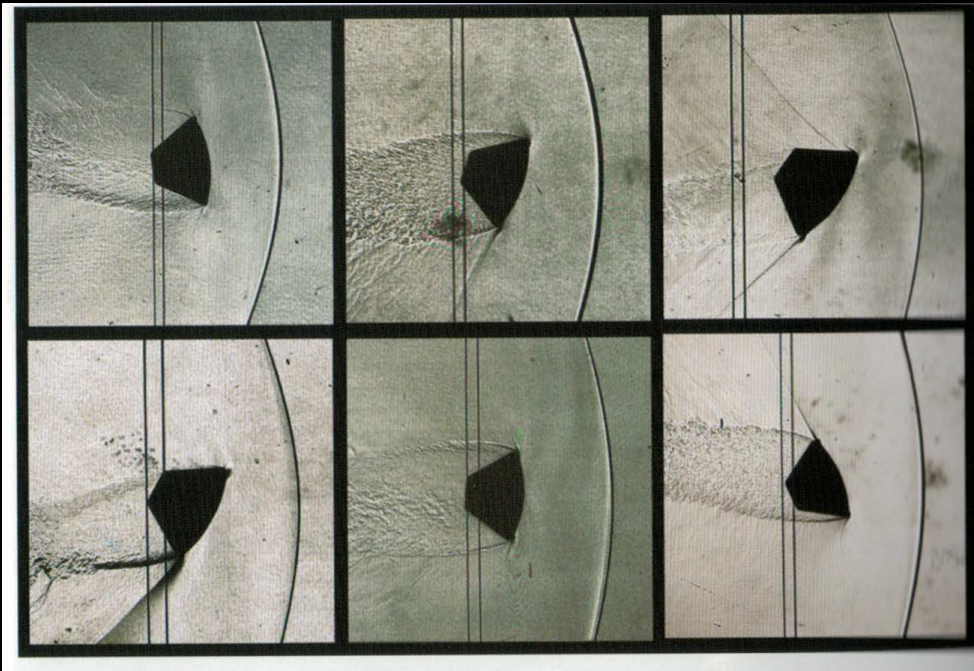
Enlargement of Test Section



Gun Crew Next to the Light-gas Guns



Ballistic Range Tests of Model of Crewed Earth-Return Vehicle



Test shows oscillations from which values for stability and lift can be measured.

NASA Ames Photos