

**BRIDGING**



**DARPA**

**THE GAP**



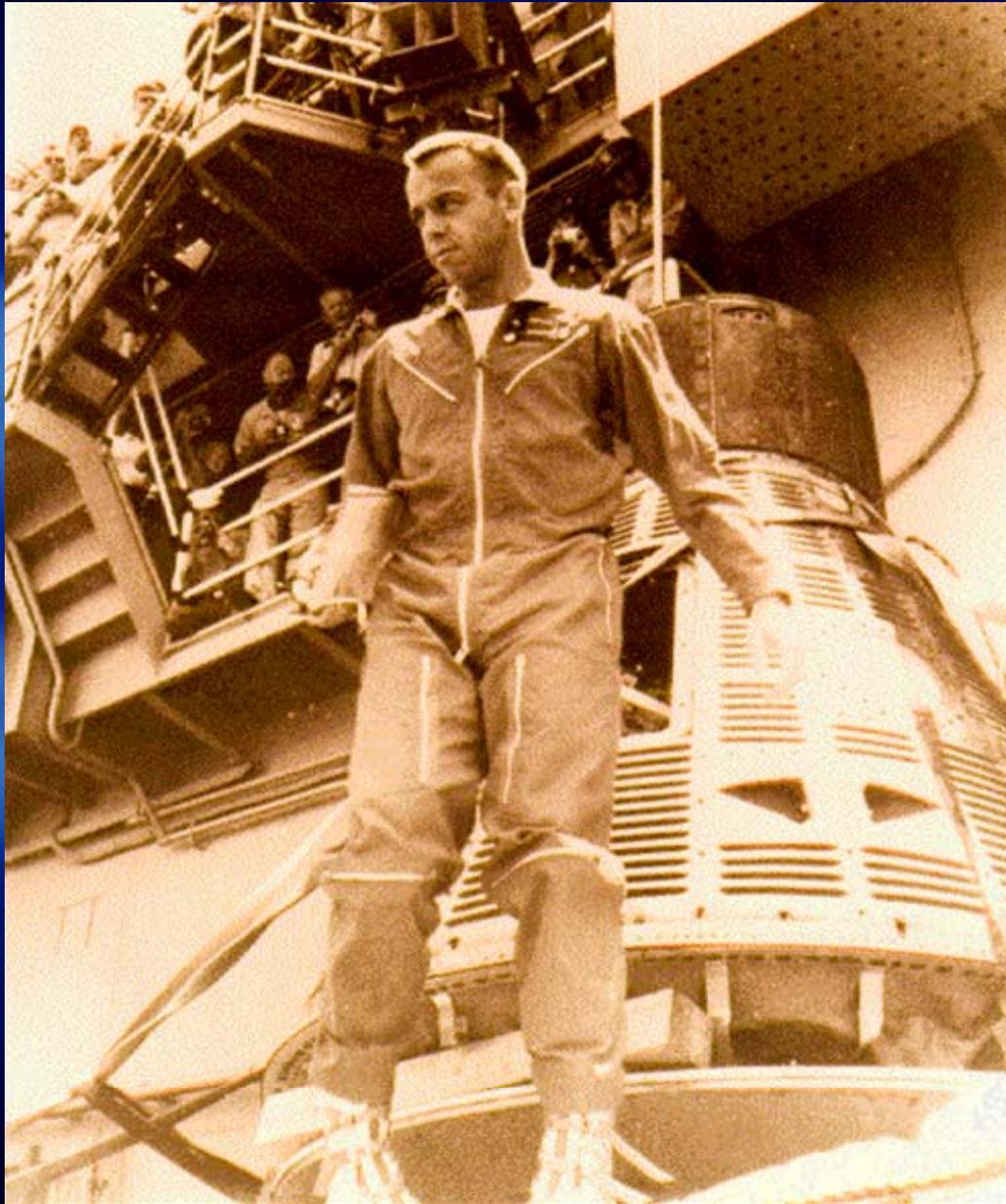
# The Quest for Hypersonics

Dr. Steven H. Walker





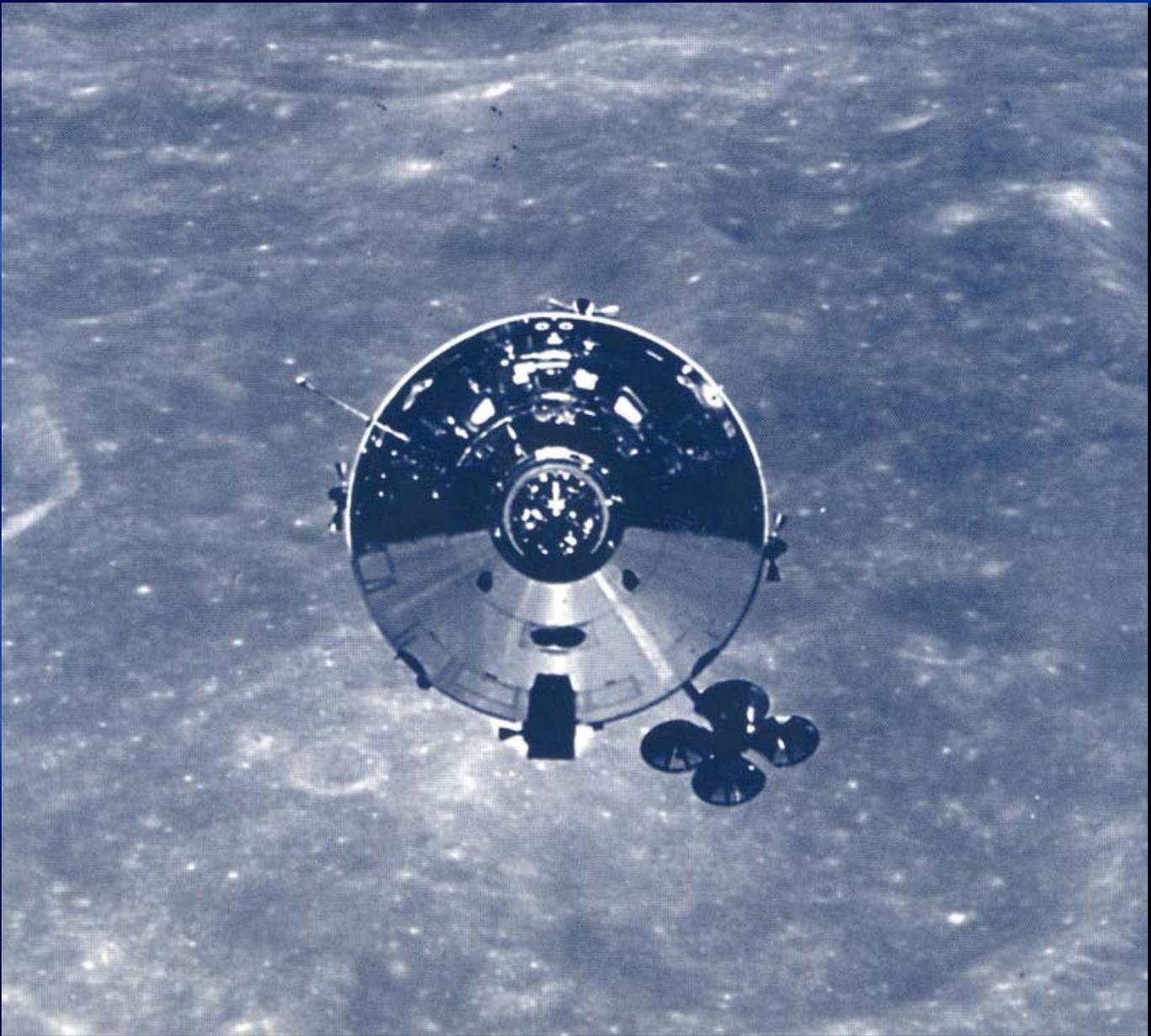






LOGGING  
ARPA  
THE GAP

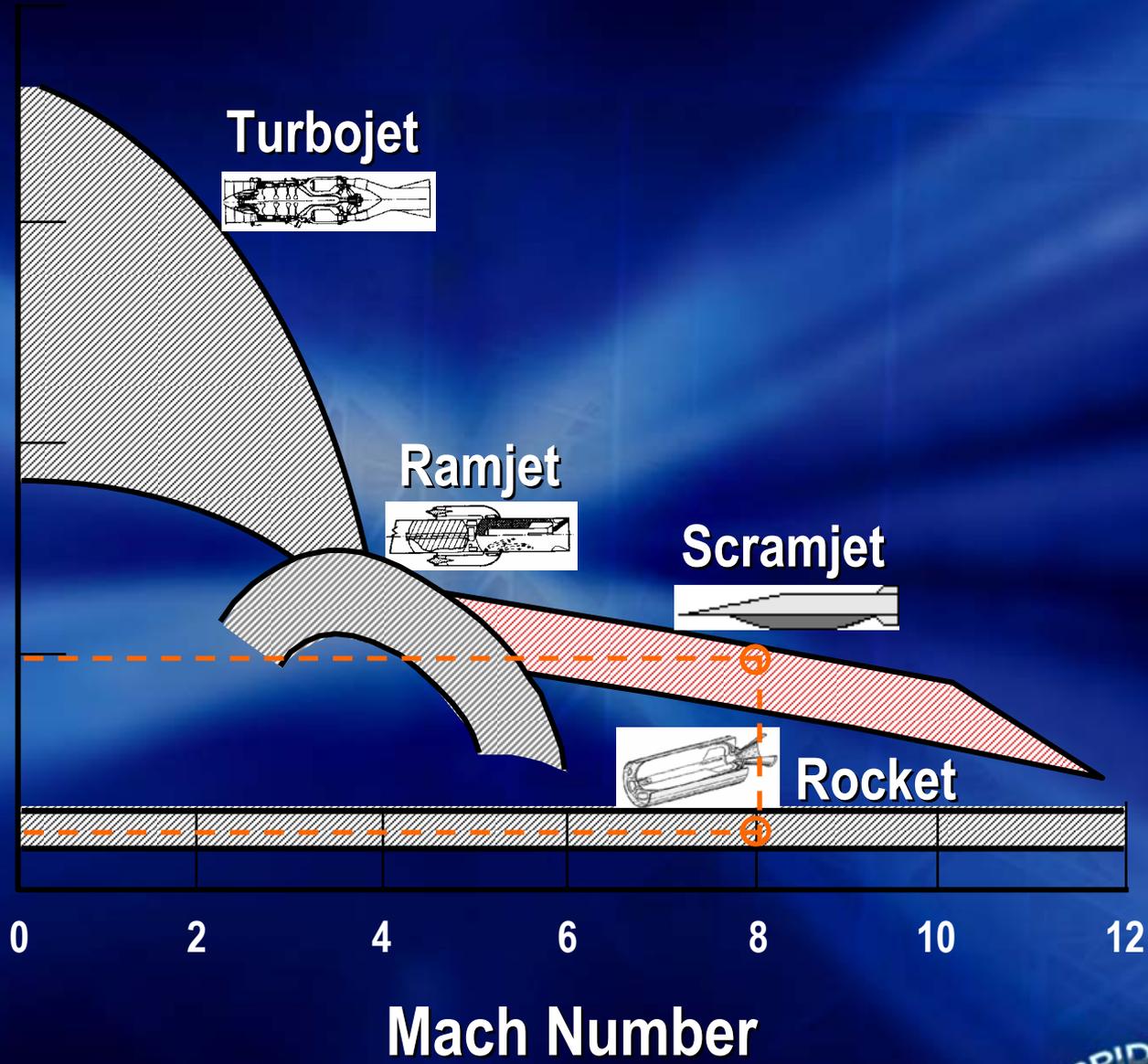


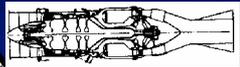


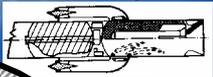




Efficiency



Turbojet  


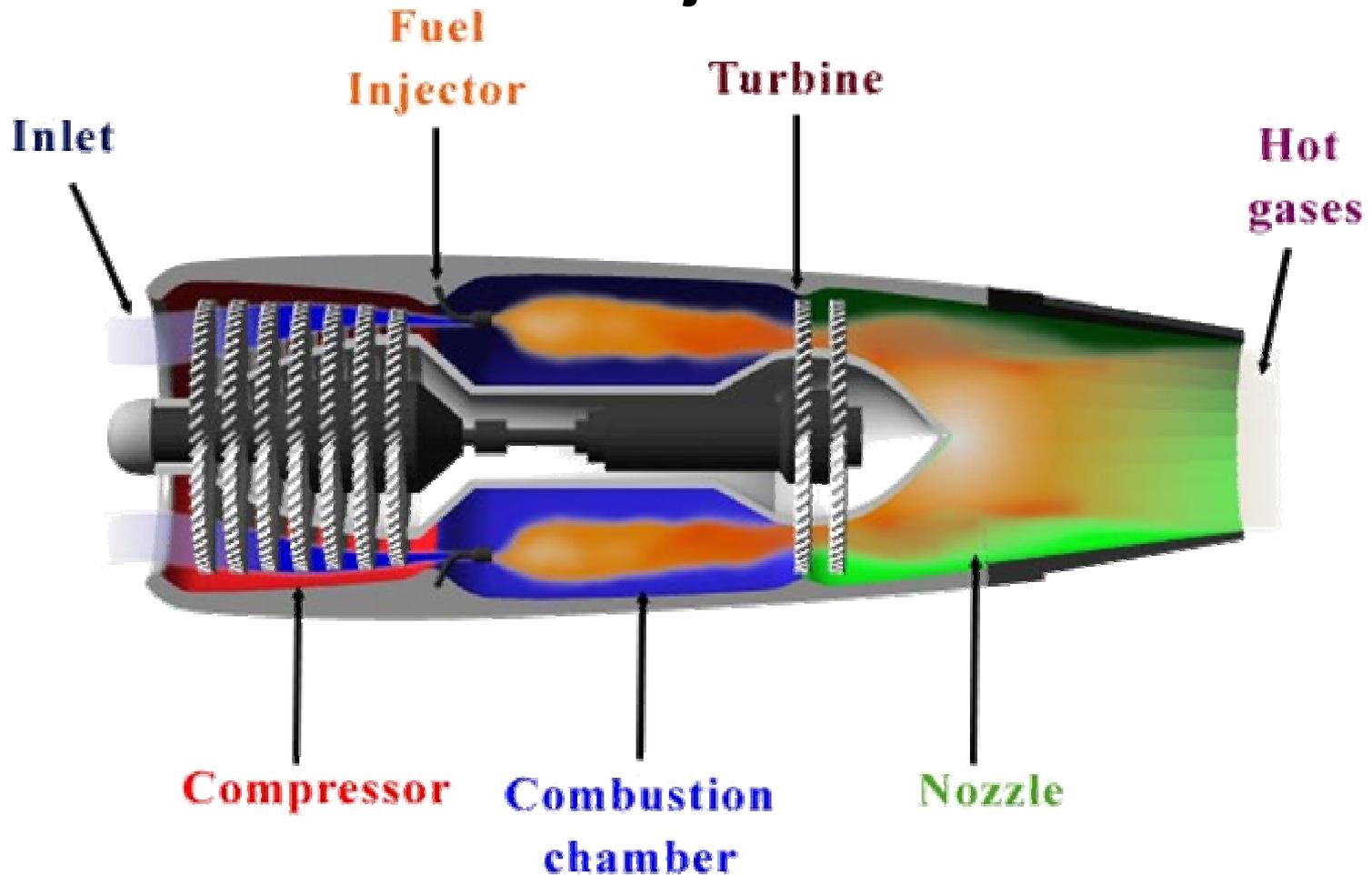
Ramjet  


Scramjet  


Rocket  




# Turbojet

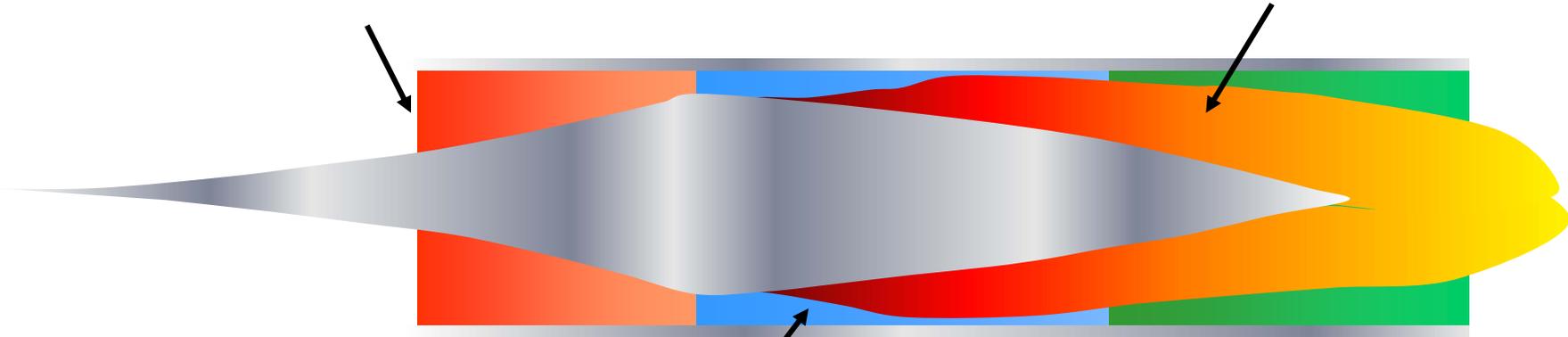


# Scramjet

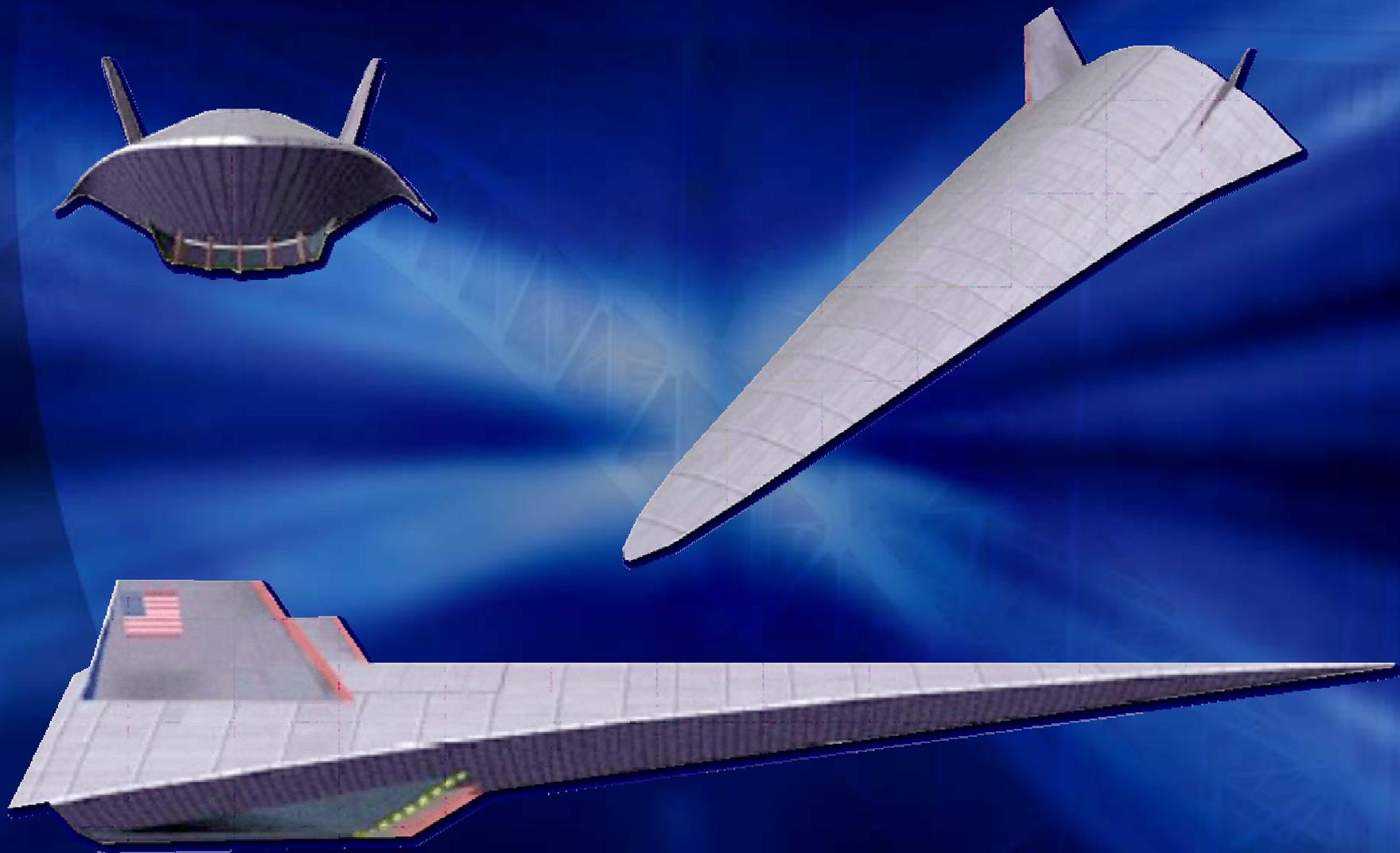
Inlet

Nozzle

Burner



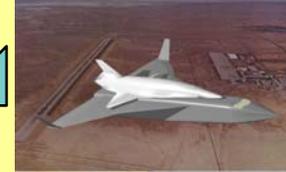






# Hypersonic Stepping Stones

Access to Space



Rapid Strike / Recce Aircraft



Fast Response Standoff Weapon



Aircraft & Missiles



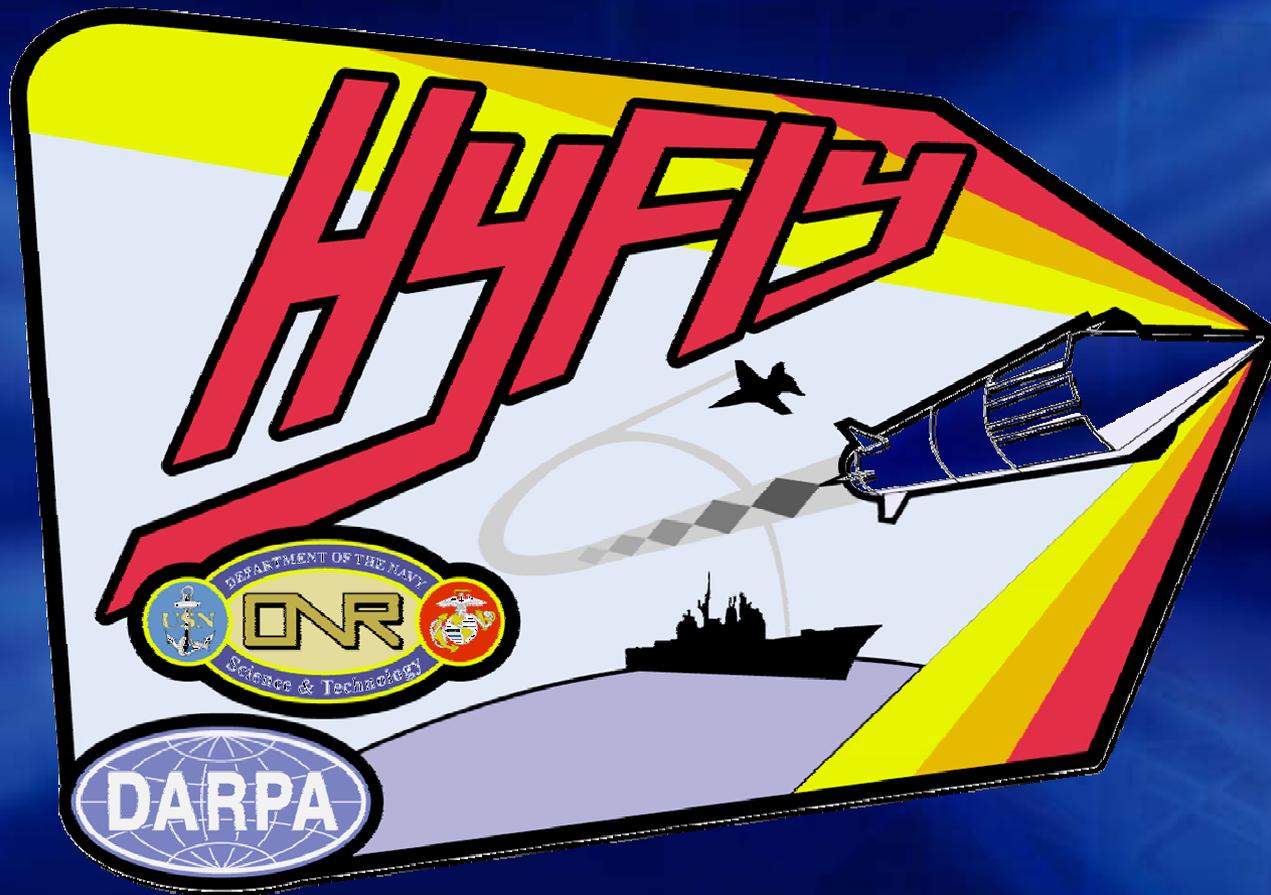
2000

2008

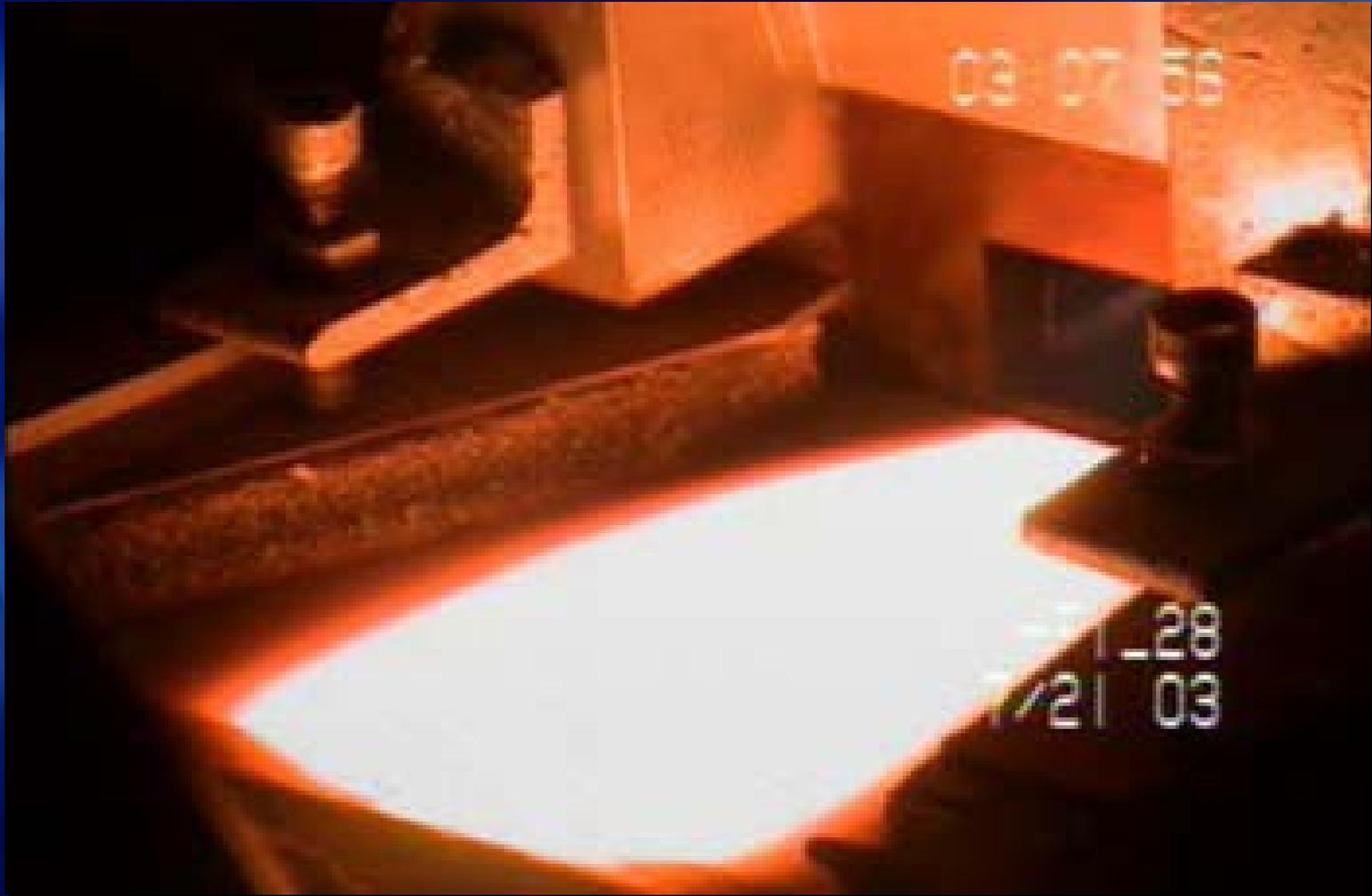
2016

2025





# High Temperature Materials

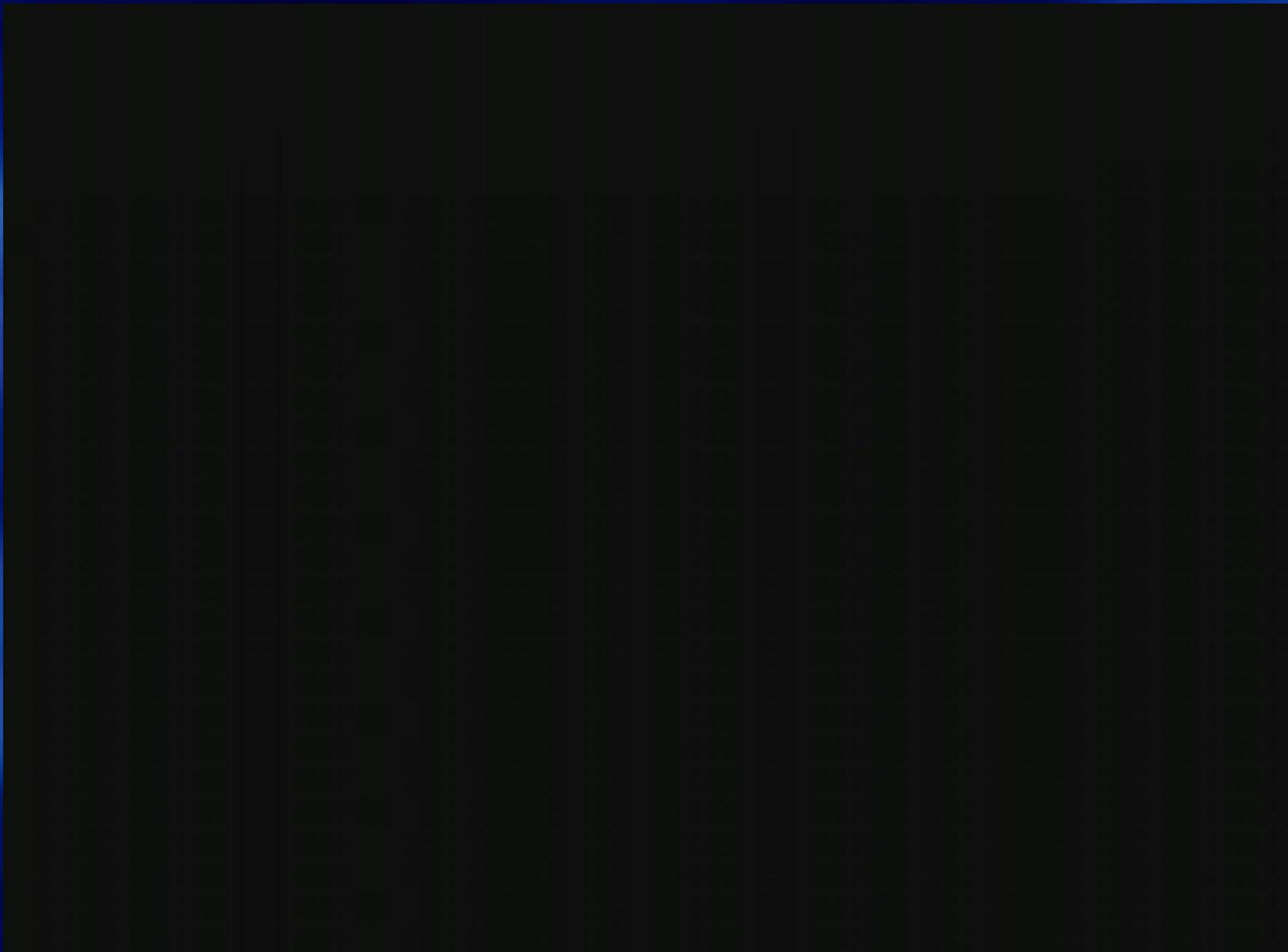


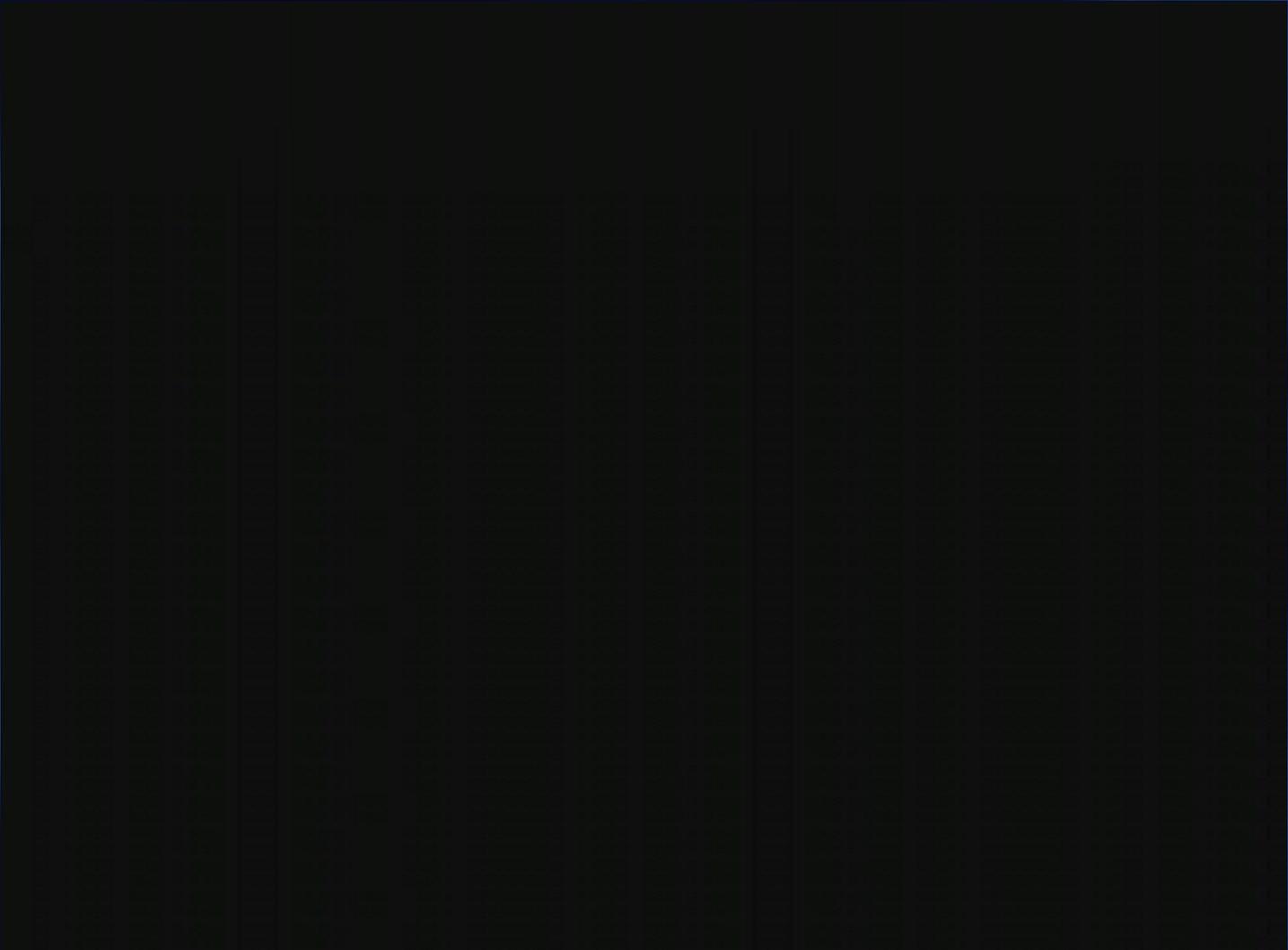


# FALCON:

## Force Application and Launch From CONUS

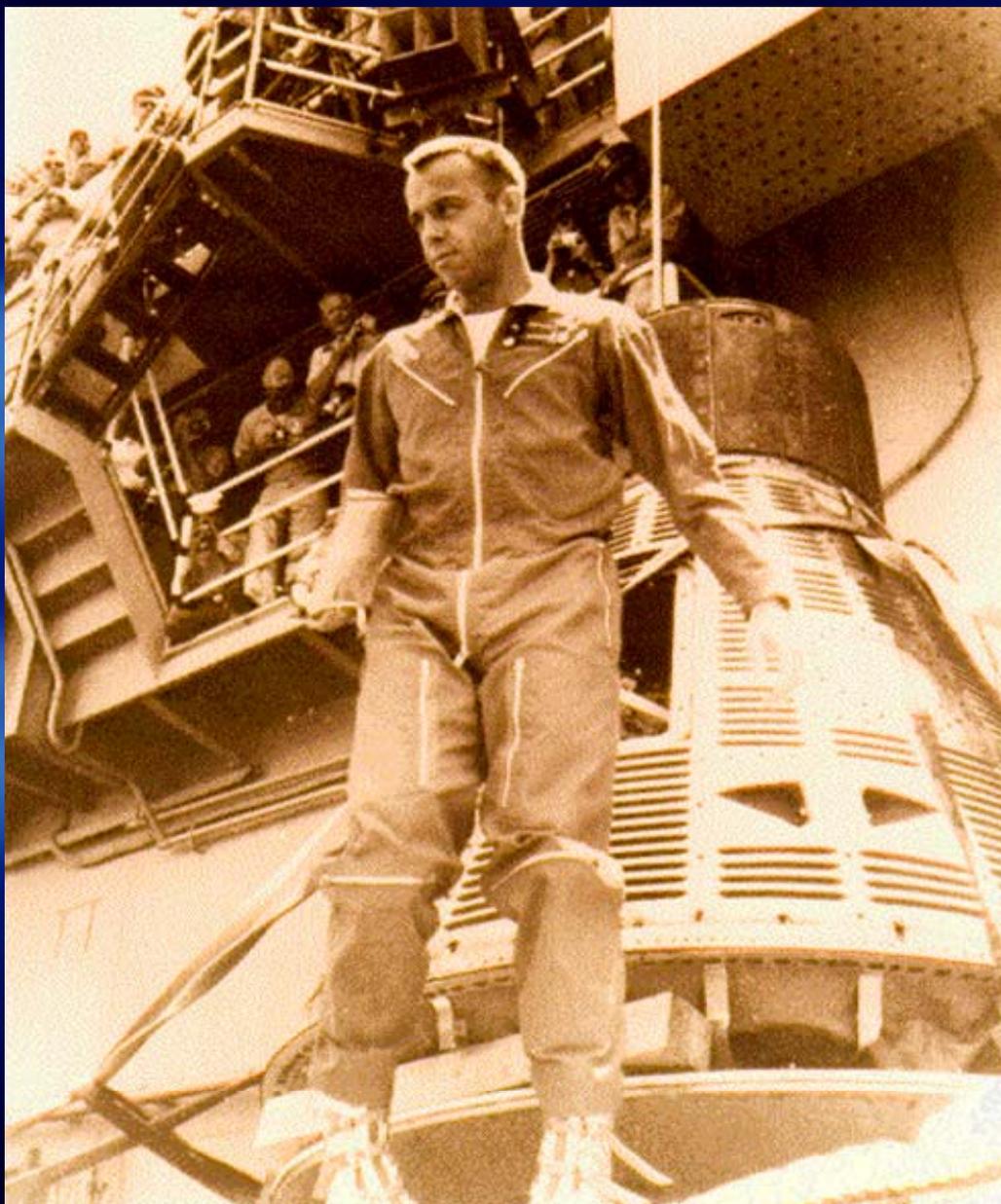














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