

LANGLEY RESEARCH CENTER

FACILITY LOCATION Hampton, Virginia 23665
FACILITY NUMBER 1236
FACILITY NAME 150-Cubic-Foot Space Vacuum Facility
FUNCTIONAL NAME Space Vacuum Facility, 150-Ft³
TECHNOLOGICAL AREAS Space environmental effects testing for spacecraft and experiments

INITIAL COST	\$ 1,477 K	YR. BUILT	1965	STATUS CODE	Active
ACCUM. COST	\$ 1,477 K	NASA B.O.D.	1965	OWNER CODE	NASA
LIFE EXPECT.	Indef.			OPER. CODE	NASA

CONTRACTOR NAME
(if contr. oper.)

POTENTIAL

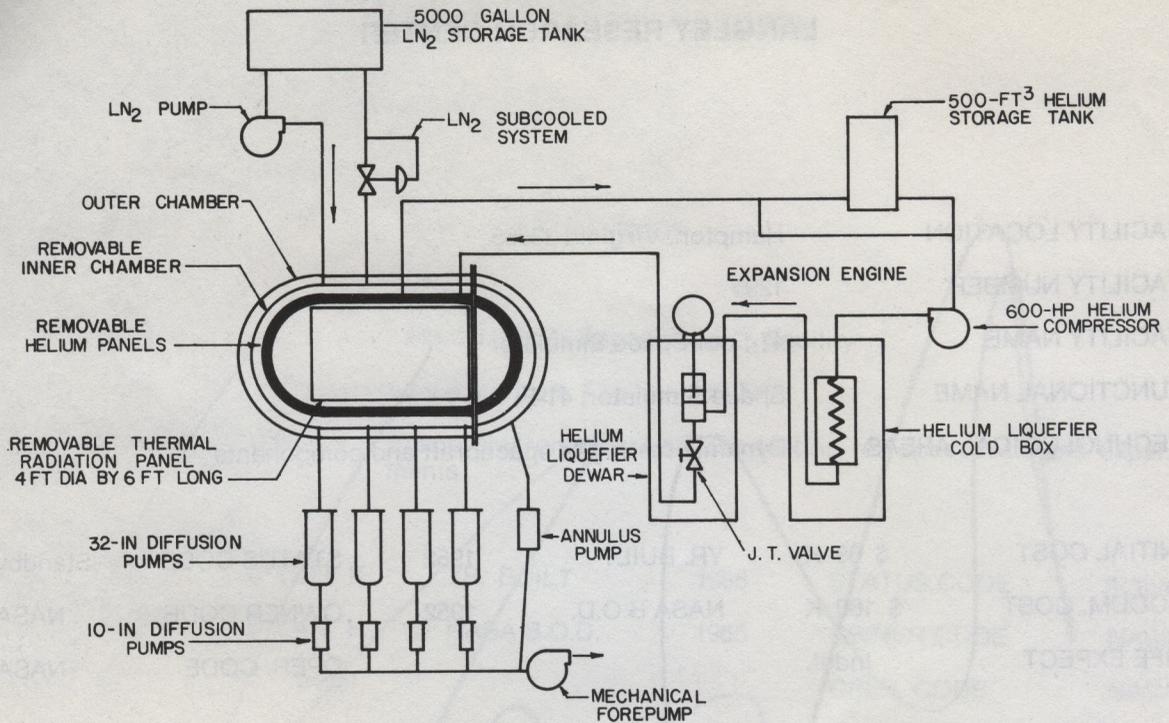
PLANS

OTHER INFO SOURCES A Large Ultra High Vacuum Environmental Chamber with Liquid Helium Cooled Walls, N65-27376, RCA Service Company, April, 1965; Vacuum Capabilities of the 150-Cubic-Foot Space Vacuum Facility at the Langley Research Center, Gregory et al., transactions of the 1966 AIAA/IES/ASTM Space Simulation Conference

COGNIZANT ORG. Systems Engineering Division
COMPONENT

LOCAL CONTACT FOR FURTHER INFO Chief, Research Facilities Engineering Division, Code 56.000; (804) 827-3171

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DESCRIPTION

This facility comprises an environmental chamber with the following salient provisions:

- Ultimate pressure of 2×10^{-12} torr
- Continuous heat dissipation in the test volume from 1.4 kW at approximately 5°K to 10 kW at approximately 80°K
- Cylindrical working volumes ranging from 4 ft in diameter x 6 ft long to 8 ft in diameter x 12 ft long
- Radiant heat flux levels to approximately 290 W/ft²
- Feedthroughs for observation, instrumentation, power, and linear and rotary motion
- Helium liquefier with a minimum withdrawal rate of 80 liters/hr of liquid helium.

Removed