## LANGLEY RESEARCH CENTER

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| FACILITY LOCATION | Hampton, Virginia 23665 |
| FACILITY NUMBER | ~~64T~~ 1250 |
| FACILITY NAME | 5-Foot x 10-Foot High-Altitude Simulator |
| FUNCTIONAL NAME | High-Altitude Simulator, 5-Ft x 10-Ft |
| TECHNOLOGICAL AREAS | Environmental testing |

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| INITIAL COST | $ 39 K | YR. BUILT | 1960 | STATUS CODE | Active |
| ACCUM. COST | $ 60 K | NASA B.O.D. | 1960 | OWNER CODE | NASA |
| LIFE EXPECT. | Indef. | | | OPER. CODE | NASA |

CONTRACTOR NAME
(if contr. oper.)

POTENTIAL

PLANS

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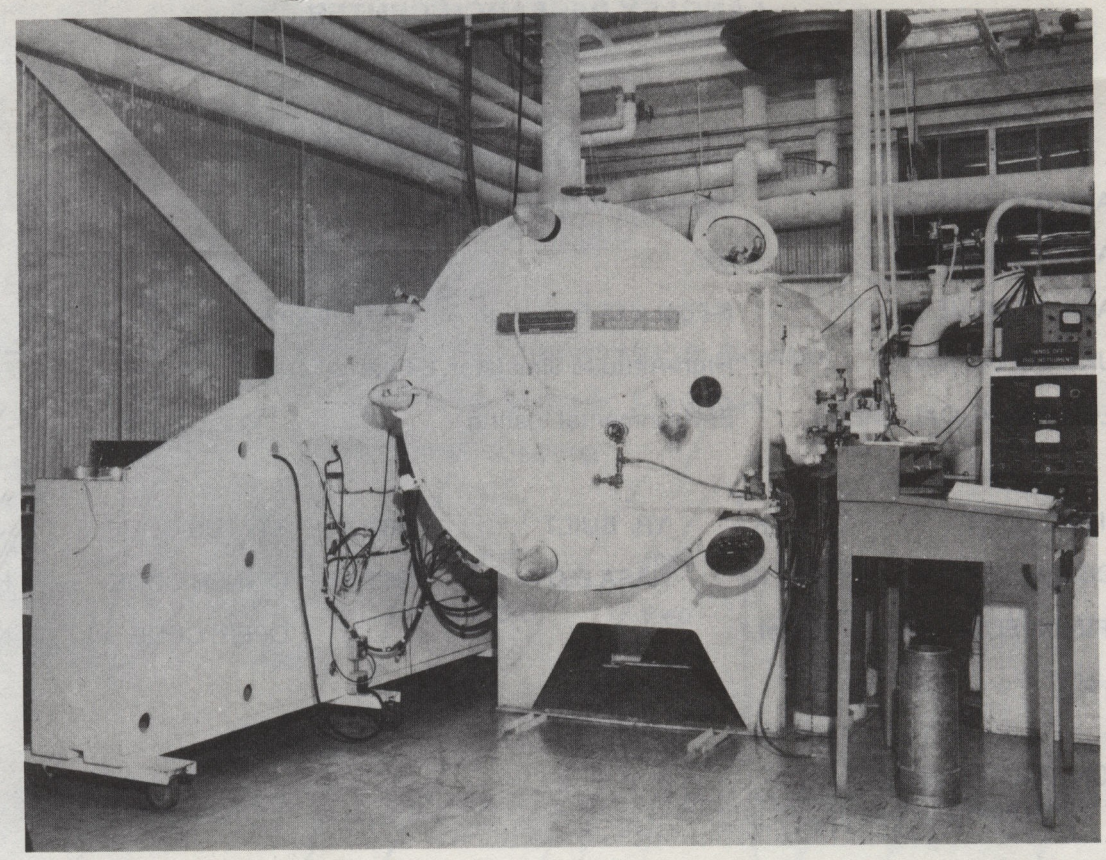
| OTHER INFO SOURCES | Characteristics of Environmental Test Equipment at the Langley Research Center, NASA TM X-1129, July, 1965 |
| COGNIZANT ORG. COMPONENT | Systems Engineering Division |
| LOCAL CONTACT FOR FURTHER INFO | Chief, Research Facilities Engineering Division, Code 56.000; (804) 827-3171 |

January 1974



B-1250



DESCRIPTION

The 5-ft x 10-ft high-altitude simulation chamber is stainless steel with 5 sight ports on the front door and one on the back door. There is also a full-size glass door for solar simulation or viewing. It has a 16-in. diffusion pump and a 200-in.$^3$/min roughing pump. It has a half-length nitrogen cryopanel and a half-length quartz-lamp heat shield, and is capable of temperatures ranging from -250°F to +700°F. There are 90 thermocouple penetrations and 2 BNC-type connectors; 440- and 110-V electrical penetrations; and cooling water, air, and liquid nitrogen penetrations. The chamber has dual vacuum gages to read chamber pressure and the pressure inside the model. It has a capability of $5 \times 10^{-6}$ torr in 1-1/2 hr pumpdown time, or about 100 mi altitude.

There is a 5-ft x 5-ft extension that can be used with this chamber, making it 15 ft long. This chamber will take a payload 43 in. in diameter x 9 ft long.