

LEWIS NEWS

Lewis Research Center

Cleveland, Ohio

National Aeronautics and Space Administration

Vol. 5 No. 19

September 13, 1968

\$3.29 Million Contract Let for PSL Expansion

Lewis' Propulsion Systems Laboratory expansion presently under construction entered its second phase with the awarding of a \$3,290,500 contract last week to Pittsburgh DesMoines Steel Company.

The contract will cover the fabrication and installation of the heavy steel test chambers and their related systems to be housed in the one-story building. According to Robert Godman, chief of Engineering Services, "it will amount to about 1,500 tons of steel being put into place."

Director Named

Dr. Abe Silverstein was elected to the Board of Trustees of the Cleveland Natural Science Museum at its annual meeting on August 26.

For the past year Dr. Silverstein has served as a member of the Natural Science Advisory Council. The Museum is a part of the corporate family of the Cleveland Museum of Natural History, which maintains a future scientists program.

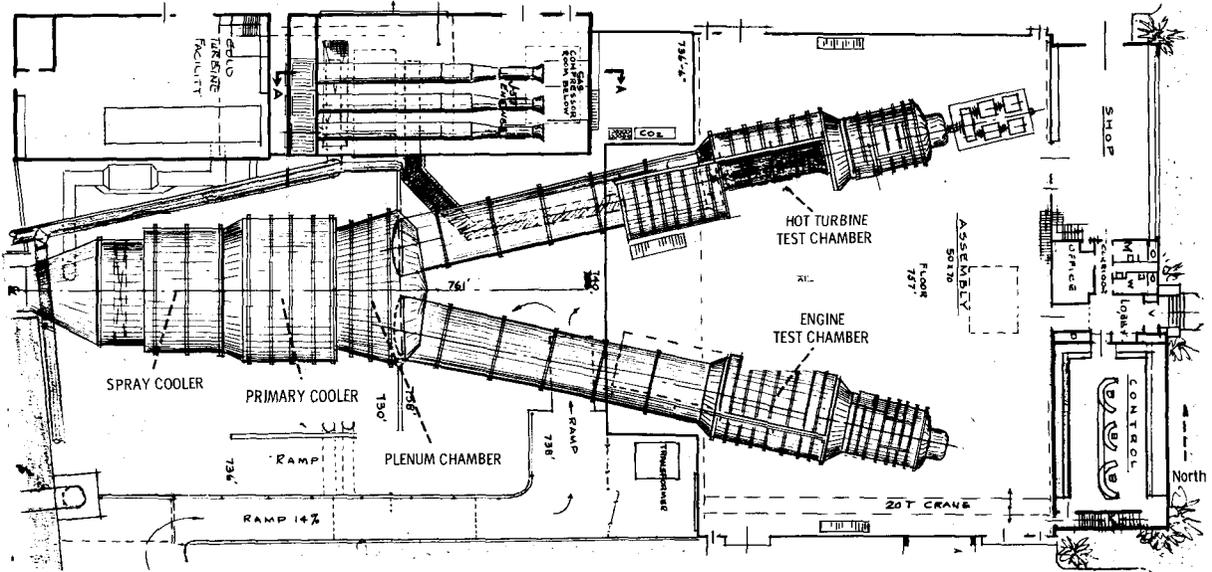
Accounting for part of this large tonnage will be the two altitude chambers which will be used for testing large jet engines and high temperature turbines. The chambers are 24 feet in diameter and 40 feet in length. The altitude chambers with their separate diffusers meet in a common plenum chamber that leads to the primary cooler, measuring nearly 43 feet in diameter and 30 feet long.

The primary cooler contains 5,500 separate cooling tubes which will be fed by water from the recently completed water tower in the west area. The temperature of the air is further reduced as it passes through a spray cooler containing three banks of spray nozzles, spur-

(Continued on Page 3)

nferees

nard, Managing Director of the Edison Electric Institute, and Mr. Karl Rudolph, President of the Cleveland Electric Illuminating Co.



SLINGSHOT DESIGN of the two altitude test chambers, cooling and exhaust systems is shown

in this artist's concept of the Propulsion Systems Laboratory expansion.

PSL Expansion Contract Is Awarded...

(Continued from Page 1)

ting water out at the rate of 3,000 gallons per minute. Before the air is exhausted at a temperature of around 120° Fahrenheit -- cooled down from test temperatures of nearly 3,500° F. -- moisture is removed by a stainless steel mesh

located at the exhaust end of the spray cooler.

Pittsburgh DesMoines Steel Co. will fabricate all of the steel necessary to build the altitude chambers and cooling system facility at its own plant. The "boiler plate" will be shipped to Lewis where final assembly will take place on the site.

Steel will start to arrive here next spring for assembly and erec-

tion on the site. The steel work is scheduled for completion by April 1970, concluding the second of four major contracts worth \$14 million.

Meanwhile work is continuing on the building's exterior steel frame. The contractor, Gillmore-Olson Co., has completed about 55% of its work on the foundation and building. That portion should be finished early next year.

National ANS