PLUM BROOK TODAY - A PROGRESS REPORT

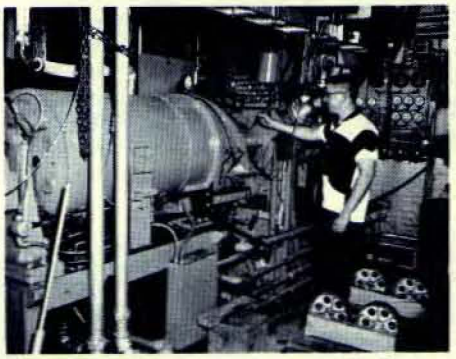
THE PILOT PLANT AND THE BARRICADE AREA

Continuing in the series on Plum Brook facilities, ORBIT takes you to the Rocket Components area. In construction here are five main rocket components test facilities and the central control building. In operation are the Pilot Plant and the Barricade Area.

THE PILOT PLANT consists of two test buildings and a combination control and instrumentation tank. The word "tank" is used in its most literal sense, for two ammonia storage tanks, 39 feet long and 9 feet in diameter have been combined and adapted as control and instrumentation housing. These tanks are earthed-over for protection. One of the problems of this earth covering has been in ridding it of burrowing groundhogs!

Periscopes are installed in the control tank for viewing during operations in either of the two test buildings. These test rigs are located 350 feet from the control building. In building #1 a gaseous hydrogen turbine is in operation. Within a few days, operations will begin on a liquid hydrogen pump in building #2.

Looking past Pilot Plant control tank (right) to test rigs.



Dick Jarvis inspects cold flow turbine rig.

Barricade Area with Pilot Plant in distant background.

Ron Williams & Dick Jarvis in control tank.

THE BARRICADE AREA is located approximately 2500 feet from the Pilot Plant. This area has been designed to house three particular test rigs. In operation is the gas generator rig. Soon to be in operation will be the 20,000 pound vertical rocket trailer, and the ground handling system. Controls and instrumentation for the Barricade Area are housed in movable trailers which were secured from Army surplus and adapted to their present usage.

A compliment of 25 research and service personnel is required to set up, maintain, and operate both the Pilot Plant and Barricade Area. Most of the staff have already transferred to Plum Brook.

The Fluid Systems Division is conducting research in both the Pilot Plant and the Barricade Area. In the very near future, the Propulsion Systems Division will begin research in the Barricade Area.

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PLUM BROOK TODAY

Keeping pace with the fast-moving developments at Plum Brook, ORBIT presents the latest views. The photos you see in this edition show significant changes which have taken place at both the reactor and rocket test areas since our last reporting.

At this date radioactive fuel elements are expected to arrive in the near future. This means that the reactor's "critical" status is drawing closer.

Entrance to the fenced-in Nuclear Reactor area will be through the Security Control building. Starr Truscott, Administrative Officer is seen entering the nearly completed building.

The Lobby of the Nuclear Reactor building will receive visitors at this reception desk. Posing for Orbit camera are secretary s Mrs. Arlene Ann Case (left) and Miss Ruth Ann Oetzel.

In one of the Conference Rooms in the Nuclear Reactor building, Dr. Theodore Hallman, Chief of Reactor Research discusses the blackboard diagram of the reactor core with (l to r) engineers William Poley, Harold Giesler and Thomas Tambling.

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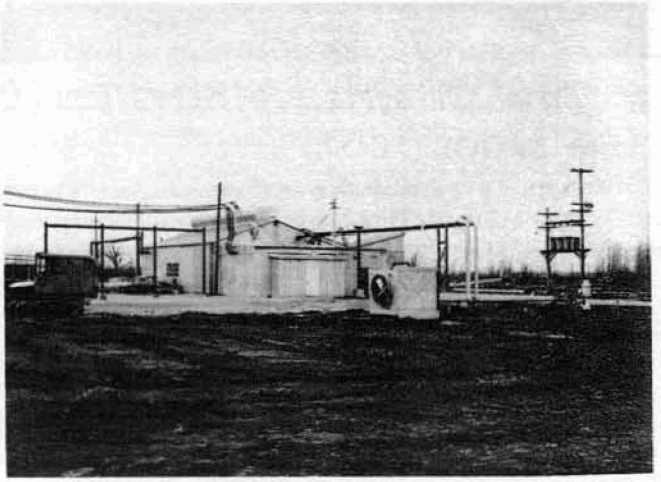
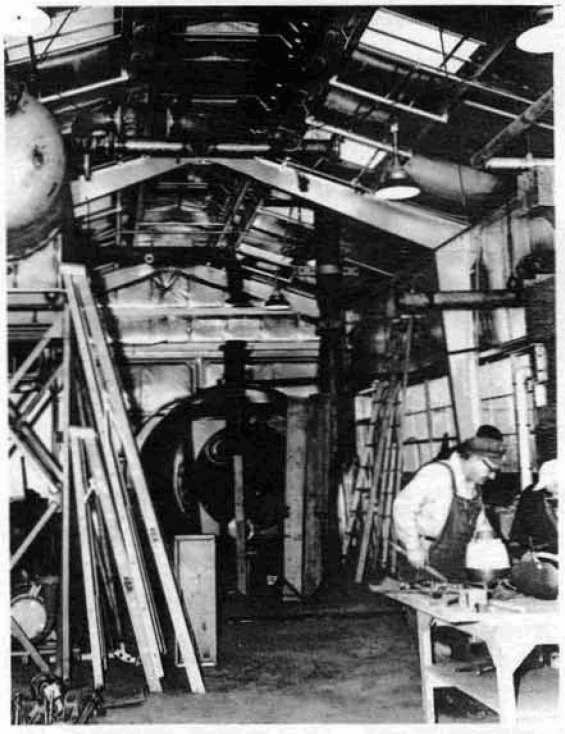
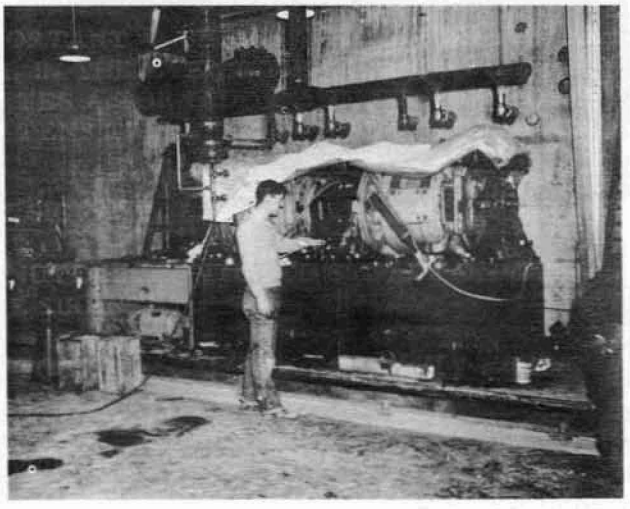
Exterior view of "I" Site Pump Rig showing the start of cryogenic piping installation. The concrete wall area contains a carbon reactor in which boiled off gases are captured and decontaminated before exhausting into the air.





Interior of "I" site Pump Rig showing the external containment vessel in the center of the photo. This 134-ton tank was formerly used by Erie Ordnance for ammonia storage. A 9500 pound stainless steel internal tank is used as the pump capsule. The entire rig is mounted on tracks so it may be moved outside for easier pump installation.

A permanent fixture in the "D" Site Turbine Rig are these dynamatics. Mounted on bed plate, they act as electrical brakes in the overall job of checking the thrust developed by the turbines. Formerly used in Engine Research Building at Lewis, the dynamatics were overhauled and taken to Plum Brook. Ted A. Klonk is seen standing by the dynamatics.



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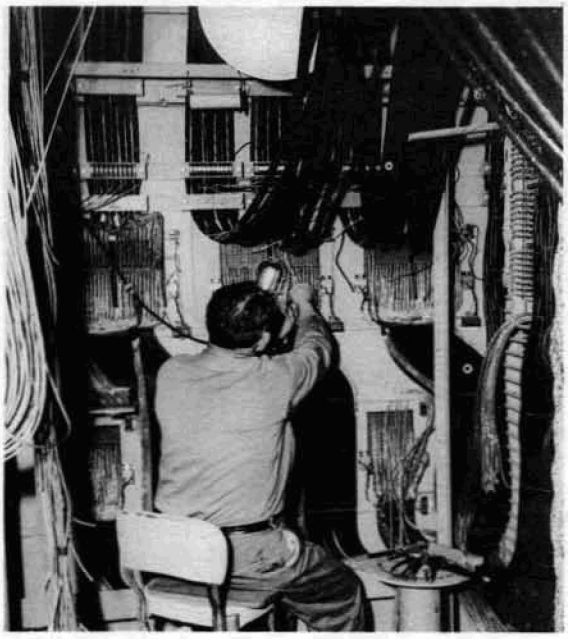
The Central Control Building will be the terminal point of 14.3 miles of cable from six separate facilities at Plum Brook. From each of these six sites (A, C, D, E, F & I) there are 926 conductors to Central Control. These are instrumentation, coaxial and TV control cables. Warren Bordine, construction engineer, shows the patch board side of Instrument Data Switching Cabinet.

A technician connects a myriad of varicolored wires in the Instrument Data Switching Board in the Central Control Building.



things to come

Film Classics Club will show "The Prisoner" starring Alec Guiness & Jack Hawkins on January 22. This story roughly parallels the case of Cardinal Mindzenty. On January 29th "The White Sheik" will be shown. This is an Italian comedy, originally scheduled for December 18.

Information Session - The Speech Class soon to begin, will hold an information session on Tuesday, January 26, 8:00 p.m. in the Auditorium. All employees are welcome without charge or obligation. Mr. William McCleery, speech instructor at Berea High School will answer questions and make final arrangements for the series of eight two-hour sessions in effective speaking. Course fee is $16 per person. For further advance information contact the Training Office, 5261 or LLama Club members.

Mardi Gras - M & S Division's 4th Annual Dance will be swinging on Saturday, February 20. Social hour from 7 to 8 p.m., dinner 8 to 9 p.m., dancing and usual refreshments from 9 p.m. on. Tickets are $5 per person - everything included. To join the Mardi Gras celebration, see Phil Romano.

East Siders - Have you ever considered attending a Llama Club meeting but postpone doing so because it is too much trouble to go home for dinner and return to the Center? Wait no longer. Every Llama meeting is a dinner meeting. Come to the Wednesday, February 3 meeting as a guest of the club. Call John Everett 3138 or Cliff Talcott 2218. (West Siders are invited too!)