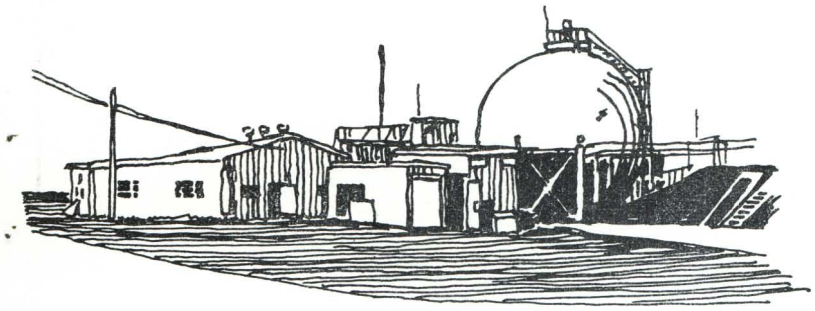


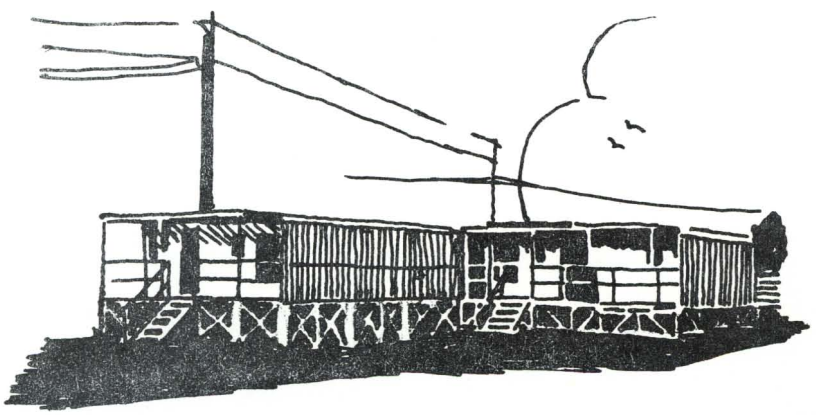
ROCKET SYSTEMS TEST SITES

In this area, hydrogen-oxygen rocket engines are fired and data is obtained on heat transfer between the hot gases and the nozzle walls. Also, studies are made on heat transfer from the nozzle wall to the liquid hydrogen used to cool the nozzle. This heat transfer research is being done to support the development of nozzles for nuclear rocket engines.

Also located in this area is a space environment tank, where various types of liquid hydrogen propellant tanks can be tested at space conditions. Various types of tank insulations are being studied.

The 38-foot diameter steel containment vessel is a hydraulics laboratory used to test liquid fluorine and liquid oxygen under pressures up to 1200 pounds per square inch.

CONTROL AREA

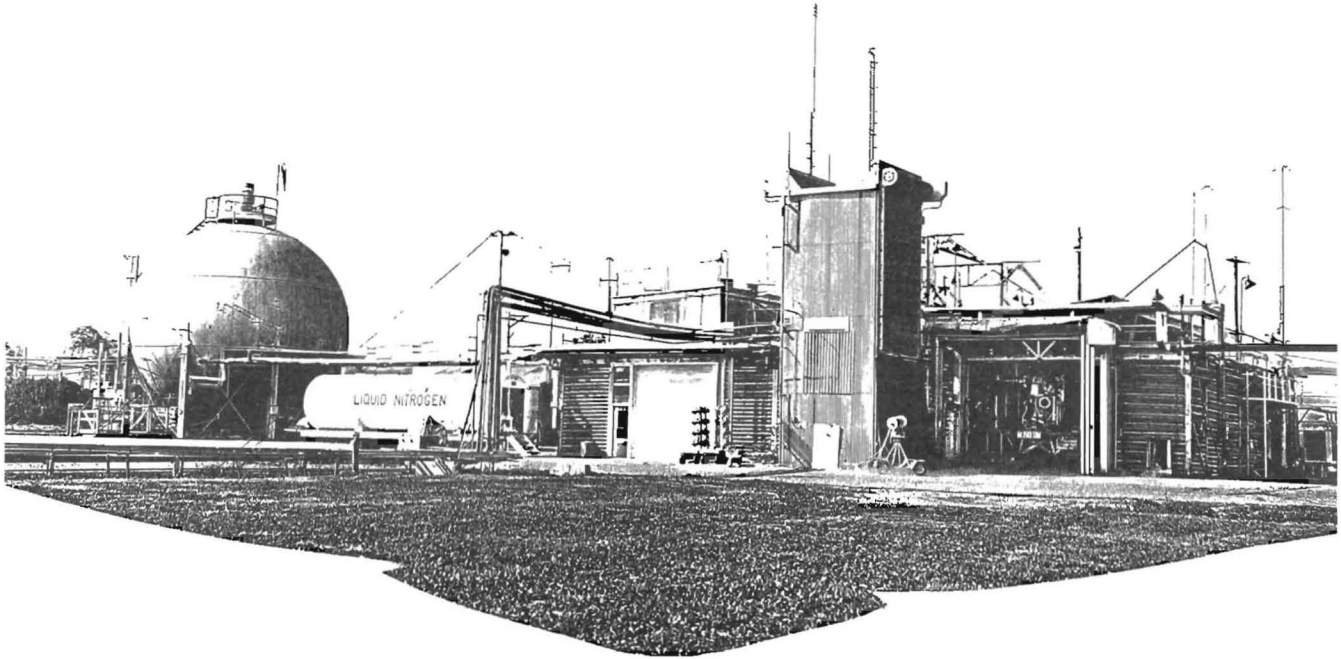


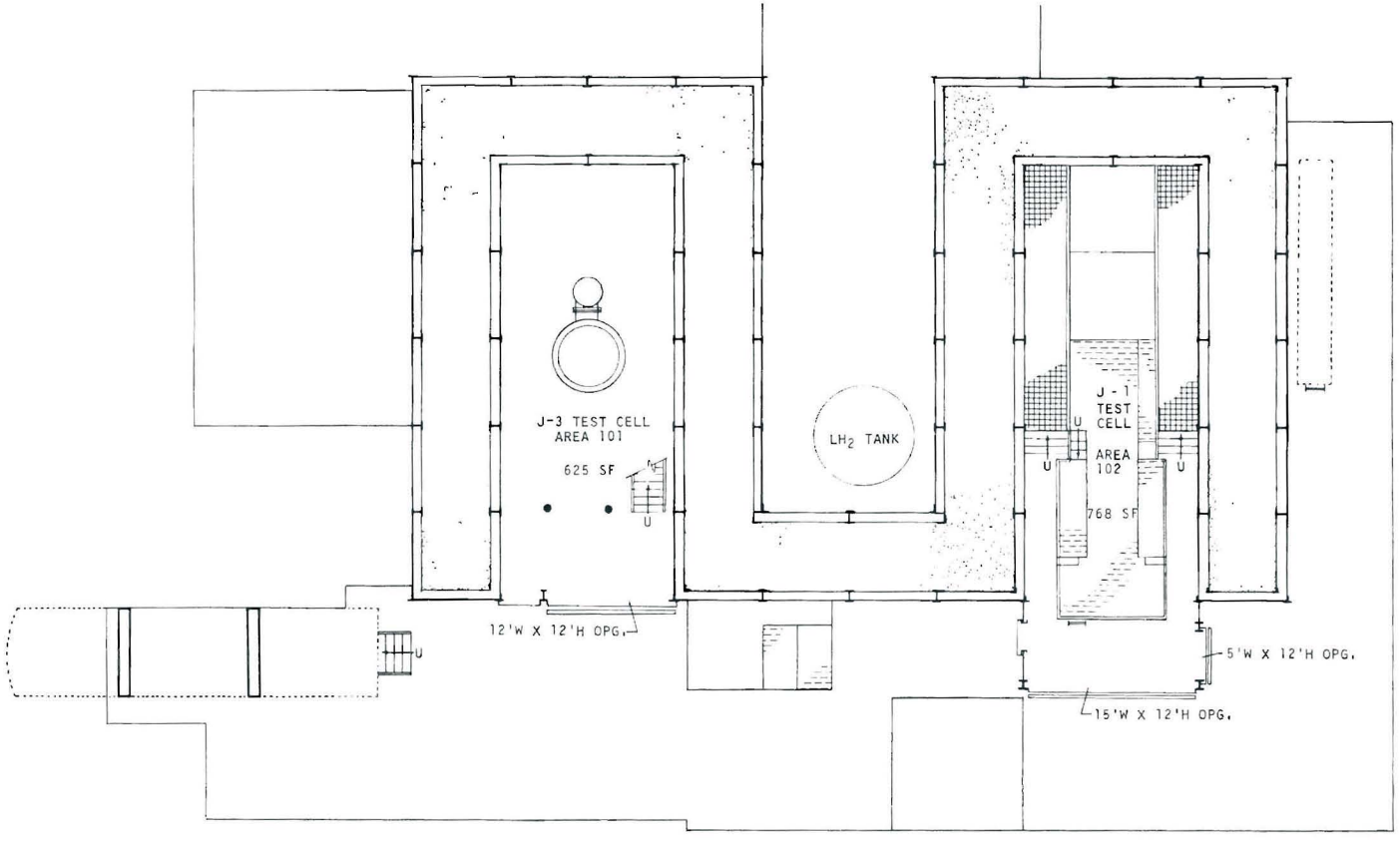
10 ROCKET SYSTEMS TEST SITES

In this area, hydrogen-oxygen rocket engines are fired and data is obtained on heat transfer between the hot exhaust gases and the nozzle walls. Studies are also made on heat transfer from the nozzle wall to the liquid hydrogen used to cool the nozzle. This heat transfer research is being done to support the development of nozzles for nuclear rocket engines.

Also located in this area is a space environment tank where different types of liquid hydrogen propellant tanks can be tested at space conditions. Various types of tank insulations are being studied.

The 38′ diameter steel containment vessel is a hydraulics laboratory used to test liquid fluorine and liquid oxygen under pressures up to 1200 pounds per square inch.


LIQUID NITROGEN



FIRST FLOOR
REF. DRWG. PF-20946

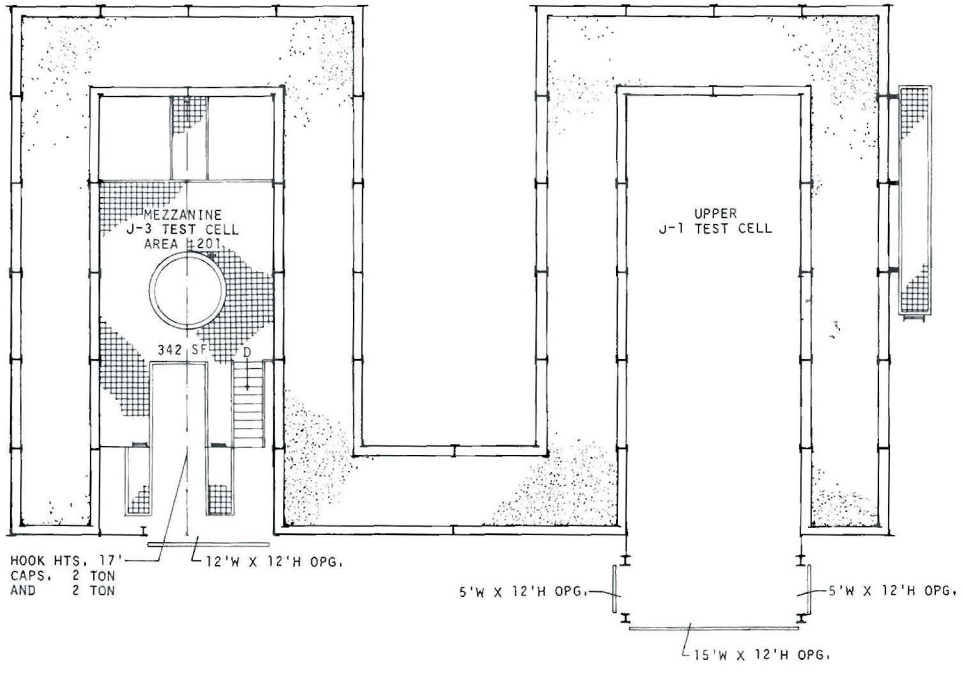
J SITE J1 AND J3 TEST BUILDING

BUILDING NO.
2711

N

8 0 8 16
SCALE 1/16" = 1'-0"

NASA LEWIS RESEARCH CENTER - PLUM BROOK STATION
SANDUSKY, OHIO



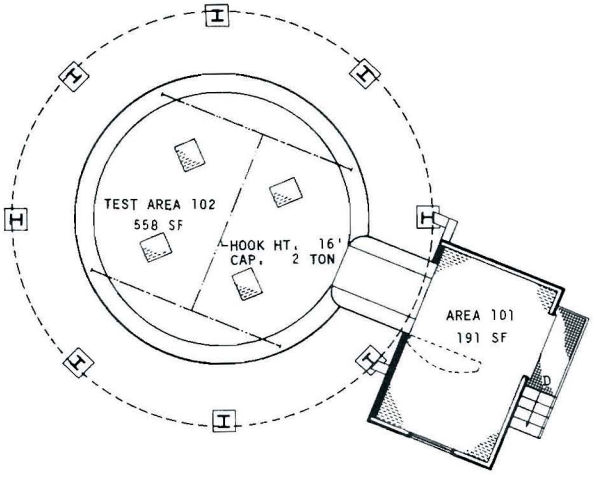
SECOND FLOOR
REF. DRWG. PF-20946

N

8 0 8 16
SCALE 1/16" = 1'-0"

J SITE J1 AND J3 TEST BUILDING

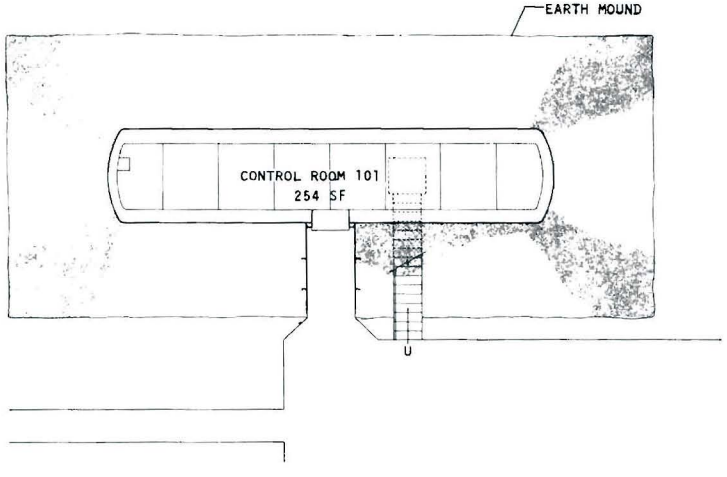
BUILDING NO.
2711



N

2713

J SITE J5 TEST BUILDING
REF. DRWG. PD-22575



N

2714

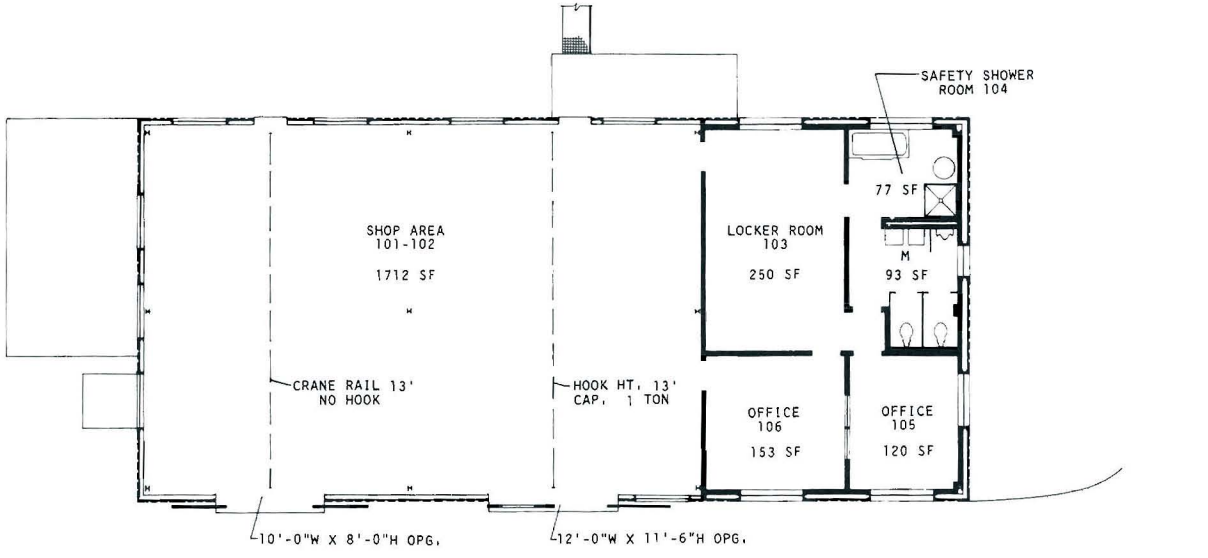
J SITE J5 CONTROL TANK
REF. DRWG. PF-22567

J SITE J5 TEST BUILDING AND J5 CONTROL TANK

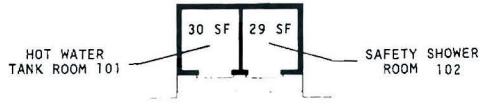
STRUCTURE NOS.
2713 & 2714

8 0 8 16
SCALE 1/16" = 1'-0"

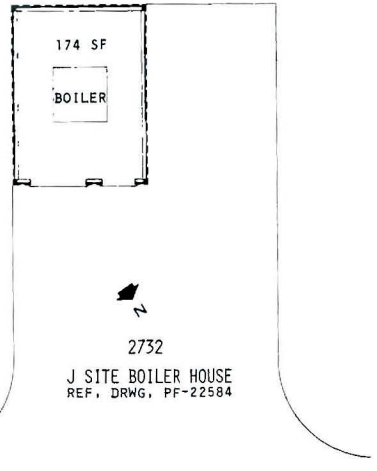
NASA LEWIS RESEARCH CENTER - PLUM BROOK STATION
SANDUSKY, OHIO



2721
J SITE SHOP
REF. DRWG. PF-20942



2731
J SITE SAFETY SHOWER BUILDING
REF. DRWG. PF-SK-670908C

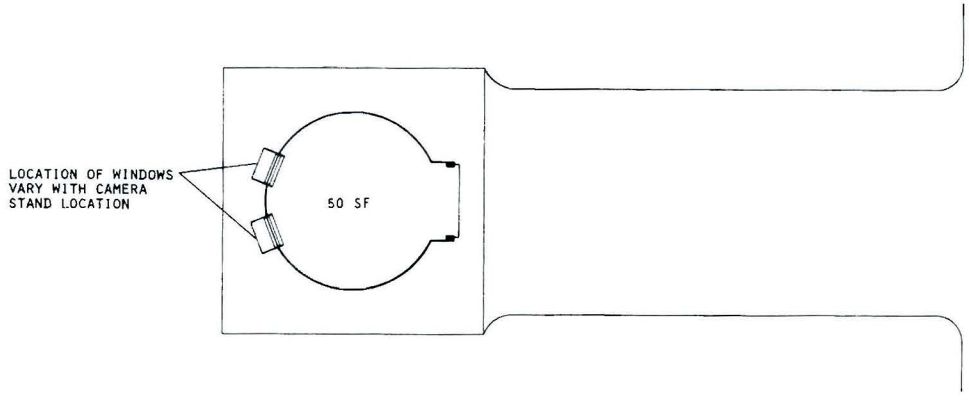


2732
J SITE BOILER HOUSE
REF. DRWG. PF-22584

J SITE SHOP, SAFETY SHOWER BUILDING AND BOILER HOUSE

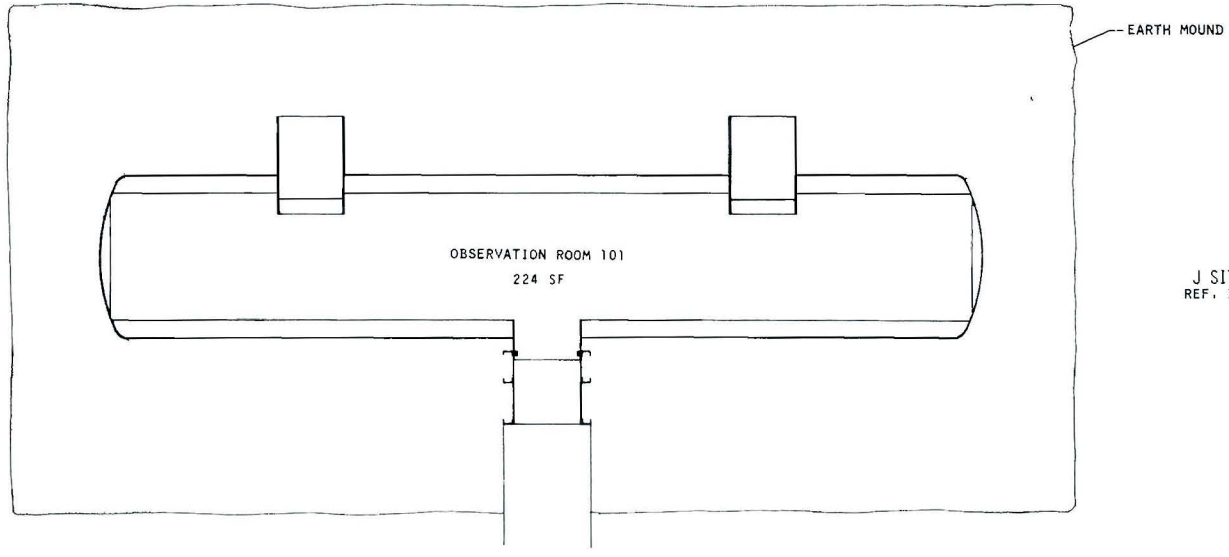
BUILDING NOS. 2721 & 2731 & STRUCTURE NO. 2732

8 0 8 16
SCALE 1/16" = 1'-0"



2791

J SITE CAMERA STANDS
(1, 2 & 3)
REF. DRWG. PF-SK-670909



2792

J SITE OBSERVATION TANK
REF. DRWG. PF-SK-670908D

J SITE CAMERA STANDS (1, 2 & 3) AND OBSERVATION TANK

STRUCTURE NOS.
2791 & 2792

N

4 0 4 8
SCALE 1/8" = 1'-0"