

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND,
MASSACHUSETTS, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND,
OR VERMONT, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION B
831 PARK AVENUE
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA,
PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR
WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30323

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR
WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III
MATERIALS LICENSING SECTION
796 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA,
NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH,
OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
MATERIAL RADIATION PROTECTION SECTION
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON,
AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS
TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
MATERIAL RADIATION PROTECTION SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

☒ A.

NEW LICENSE

☐ B.

AMENDMENT TO LICENSE NUMBER _____

☐ C.

RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)

NATIONAL FEEDSCREW & MACHINING, INC.
577 Oberlin Road S.W.
Massillon, OH 44646

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.

NATIONAL FEEDSCREW & MACHINING, INC.
577 Oberlin Road S.W.
Massillon, OH 44646

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Thomas McInnes

TELEPHONE NUMBER

1-216-837-3868

SUBMIT ITEMS 5 THROUGH 11 ON 8 1/2 x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number, b. chemical and/or physical form, and c. maximum amount
which will be possessed at any one time

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR
TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSEE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY New License AMOUNT ENCLOSED \$ 700.00

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE
BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS
PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 20, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN,
IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948, 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION
TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

SIGNATURE—CERTIFYING OFFICER

TYPED/PRINTED NAME

TITLE

DATE

Ronald B. Pribich

Ronald B. Pribich

Vice-President of Finance

4-29-85

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS

<\$250K
\$250K-\$500K
\$500K-\$750K
\$750K-\$1M

\$1M-\$3.5M
\$3.5M-\$7M
\$7M-\$10M
>\$10M

b. NUMBER OF EMPLOYEES (Total for
entire facility excluding outside contractors)

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Dollar and/or staff hours)
ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE
PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? (NRC regulations permit
it to protect confidential commercial or financial—proprietary—information furnished to
the agency in confidence)

YES

FOR NRC USE ONLY

TYPE OF FEE

FEE LOG

FEE CATEGORY

COMMENTS

appl

May 11

30

AMOUNT RECEIVED

CHECK NUMBER

\$700

173

RECEIVED

MAY 02 1985

REGION III

MAY 2 1985

I SCOPE

These procedures are written so that the operation of National Feedscrew & Machining, Inc., CO⁶⁰ facilities will be operated safely and according to provisions given in Section 34-32, 10 CFG Part 34. All exposures will be made in the x-ray room with the storage containers in their permanent place. This will insure that all areas outside of the x-ray exposure room will be at a 2 mR/hr level or lower.

II MAKING EXPOSURES

A. Preparations:

1. At the start of each working shift all Pocket Dosimeters are charged to zero so as to be able to read from 0 to 200 mr.
2. At the time of getting the keys, the operator also takes his film badge and a charge pocket dosimeter, which are required to be worn by anyone working in the exposure room. The operator also takes the calibrated survey instrument, warms it up and adjusts it to zero position.
3. One film badge is worn by the same person for two weeks.
4. Pocket dosimeters should be worn on the outside of the clothing, as far as practical, so the device can measure average bodily amount of dosage received, if any. Read the dosimeter often during the day.
5. The method of charging and readying the dosimeters is found in the Victoreen Instruction Sheet for the Model 541/A personal dosimeter.

B. Unlocking:

1. The operator unlocks the alarm system, then unlocks the door to the entrance of the Radiographic Room.

C. 20 Curie Operations:

1. Check to see if the gamma alarm is reading green.
2. Check to see if light on remote crank shows source is in safe position.
3. Survey room to double check source is in safe position.

6. Lock door and put alarm system in operating position, return keys. Take down procedures are the same. Be sure to survey from the end of the source tube backwards to the safe to insure source is positively in safe position, after returning source and locking case which houses the crank.
- D. Each day the source is used, the operator will check the following before the source is put in use and enter check-out in the daily log book:
1. The source indicator light is checked.
 2. The crank mechanism and locking device is checked.
 3. The drive cable is checked for ease of operation and no damage.
 4. Positioner lights working.
 5. Tube connectors checked for damage and tightness; both control tubes and extension tubes.

III RECORDS

A. Radiographers:

1. Radiographers shall keep records of all exposures. Pocket Dosimeter readings are to be read after each exposure and recorded in Log Book.
2. When Pocket Dosimeter reading is off scale (above 200 mr.), the film badge is to be immediately mailed for emergency report. The employee involved is not to be exposed to any radiation until film badge report is returned. The Chief Radiographer is to be notified immediately. Upon receipt of the film badge report, proceed with directions given in Title 10 Part 20 concerning notification.

IV PHYSICAL RADIATION SURVEYS

1. Complete surveys of Cobalt 60 facilities are made only when sources are changed and the results are recorded on drawings of Cobalt 60 facility showing all radiation levels and distances. Complete perimeter of the installation is to be done with source in position that it would normally be in for a radiographic exposure to insure that the radiation levels are below 2 mr.
2. Daily surveys are made prior to, and after each exposure, to insure source is in safe position.
3. Use of survey meter is as follows:
 - a. Turn switch to zero.
 - b. Adjust zero control, so that the meter reads zero.

- c. Switch to proper range.
- d. Survey radiographic area to insure source is in safe position.
- e. Do not leave meter on any longer than necessary.
- f. Re-zero each time meter is turned on.
- g. See operational manual in file.

IV PHYSICAL RADIATION SURVEYS (continued)

4. At the end of each working day a check is made of the storage safe to assure that the CO⁶⁰ device is in its proper place. Then Radiographer fills the Log Book with the time of the check and signs his or her name.

V ACCIDENT AND EMERGENCY

1. An emergency is a situation of fire, theft, or misplacement source lodging in tube or if the source capsule comes apart.
2. If an emergency exists, carry out the following steps:
 - a. Call Chief Radiographer. (Thomas McInnes.)
 - b. Conduct a physical radiation survey immediately and rope off an area outside of the permanent facility that has 2 mr. radiation or above.
3. The Chief Radiographer shall notify the AEC in accordance with paragraphs 20.402, 20.403 and 20.405 of Part 20, as necessary.

VI RESPONSIBILITY OF CHIEF RADIOGRAPHER

1. Conduct and keep records of leak tests.
2. Conduct and keep records of calibration of survey instruments.
3. Conduct and keep records of inspection and maintenance of cobalt projector semi-annually.
4. Charge a new source when necessary.

APPENDIX 1 - SPECIAL CALIBRATION TESTS AND RECORD KEEPING - CO-60

- A. It will be the duty of the Chief Radiographer to conduct the following activities and to maintain the records given in this appendix.
- B. Leak Testing
1. Leak Testing for 0.5 Curie Cobalt 60 source:
 - a. Leak test will be performed at intervals not to exceed six (6) months.
 - b. Remove 0.5 curie source cap.
 - c. Continue the operation from Items 3 and 4, as given in Leak Test Kit #518.
 - d. Replace source cap back into container.
 - e. Continue with instructions, as given in Leak Test Kit #518, supplied by Tech-Ops, Incorporated, Burlington, Massachusetts.
 - f. Time between source cap out and source cap in should be one minute or less.
 - g. Records of tests shall be maintained.
 2. Leak Test for Curie Cobalt 60 Source:
 - a. Leak Test will be performed at intervals not to exceed six (6) months.
 - b. These tests are done in accordance with instructions in Leak Test Kit #518 - supplied by Tech-Ops, Incorporated, Burlington, Massachusetts.
 - c. Records of tests shall be maintained.

APPENDIX II - TRAINING, POLICIES AND MISCELLANEOUS ITEMS FOR CO-60 OPERATIONS

- C. Calibration of Survey Meter:
1. Tech-Ops Cobalt 60 Source numbers 269 which is less than 0.1 curie in strength will be used for instrument calibration.
 2. The calibration is conducted within the existing exposure area. By placing the source holder on the inside north wall sufficient distance is available to obtain radiation levels for all three scales. The north, south maize wall is available for shielding while the 269 source is in its holder.
 3. The Chief Radiographer will conduct the calibration.
 4. Instrument will be calibrated at two points on each scale:
Example: X - 1 Scale 3 mr & 6 mr
X - 10 Scale 30 mr & 60 mr
X- 100 Scale 300 mr & 600 mr

Calculation Examples shown below:

Source Strength = .285

At one (1) foot $\frac{.285}{1.000} \times 14.5 = 4.13 \text{ R/H}$

3 mr distance -

$$\begin{aligned} (.003) (D_2^2) &= 4.13 (I^2) \\ (D_2^2) &= \frac{4.13}{.003} = 1377 \end{aligned}$$

(D) = 37 Ft. (at least 37 feet the radiation is 3 mr)

600 mr distance -

$$\begin{aligned} (.600) (D_2^2) &= 4.13 (I^2) \\ (D_2^2) &= \frac{4.13}{.600} = 6.9 \end{aligned}$$

(D) = 2 ft. 6 inches (at 2 ft. 6 inches the radiation is 600 mr)

C. Calibration of Survey Meters (Continued) -

5. Actual calibration is conducted by doing the following steps:

- a. Do all work carefully but remember that time of exposure must be kept to a minimum.
- b. Check to see that you are wearing your film badge and dosimeter.
- c. Run calculations for distances of the following radiation levels 3, 6, 30, 60, 300 and 600 mr. This will give you a 1/3 and 2/3 scale check on each scale.
- d. Set source holder against the north inside Cobalt Room wall.
- e. Measure distances calculated in (c) above and check the floor at the calculated distances.
- f. Zero survey meter to be calibrated and place on south side of maize wall.
- g. Unlock 269 source.
- h. With tongs remove source cap, being careful that the radiation will only be coming out in a column out the hole, stay to the side of this column.
- i. String our lead wire and check that it is in good shape; if so obtain fish pole.
- j. Holding fish pole in one hand and guide wire in the other hook source out of safe, remembering to hold pole extended to maximum distance between you and the source. Carefully place source in the source holder previously placed against the north wall.
- k. Return to the south side of the maize wall, with fish pole.

C. Calibration of Survey Meters (Continued) -

1. Rezero the survey meter.
- m. Place switch on proper scale and read radiation at the distances previously marked on the work sheet. Hold the instrument so that the can chamber is above distance marks. Keep time to a minimum.
- n. If the measured radiations are within plus or minus 10 per cent of the calculated values the source can be returned to its safe position and locked. Place in reverse order as given in g thru k.
- o.. Fill out and sign calibration work sheet and file. Mark inspection tag on survey instrument as to the date of the calibration.

D. Inspection and Maintenance of Cobalt Projector -

1. This is to be done semi-annually in January and July.
2. The source is checked for safe storage. This is accomplished by checking the source position signal lights and survey meter.
3. The source extension housing is disconnected and the shipping dummy is inserted in the source storage safe to confine the source in the stored position.
4. The control housings for the cable is disconnected from the storage safe and the crank. The crank mechanism is disassembled.
5. The control cable is pulled from the cable housing and crank mechanism, coiled for cleaning purposes, as well as inspected for defects.
6. The cable is washed in a basin of solvent and brushed from the safe storage entrance to its end.
7. The crank shell is removed from the crank housing, cleaned and inspected for wear or trouble. The crank housing is also cleaned and inspected.
8. The cable housing, both the extension and control sections are cleaned with solvent and inspected.
9. After giving sufficient time for the cable and housing to dry, the housings are mounted in place and the cable inserted and fed into the control housing. The cable is greased with the recommended lubricant as it is fed into the housing.
10. The crank wheel is greased and mounted in the crank housing and the cable fed to the crank mechanism. After the cable is completely inserted in the housing and crank mechanism, the housing connections are made to the storage safe and crank housing.

D. Inspection and Maintenance of Cobalt Projector (Continued) -

11. New batteries, if needed, are installed in the electric system for the signal position lights.
12. The shipping dummy plug is removed and the extension housing is bolted in place. The housing is then connected to the collimator exposure unit.
13. Results of maintenance will be included in the daily maintenance check book at the entrance of the exposure room.

E. Procedure for Changing a New Source from Shipping Container onto Projector

1. Only seldomly, when the 20 curie source drops below half-life, will a new source be purchased. When this happens, then the following procedure is to be used in making the change:
 1. Place the changer in the radiographic exposure room and proceed as follows:
 2. Unscrew the half-down cap from the empty value (on the left) and attach in its place the guide tube coming from your radiography unit.
 3. Crank the old source into the vault and disconnect it from the source cable by releasing the snap fitting. (This is perfectly safe because the source is "around the bend").
 4. Unscrew the guide tube and replace it with the hold-down cap. (This disposes of the used source which is now safely shielded for return to the supplier.)
 5. Unscrew the hold-down cap from right hand vault and attach in its place the guide tube you have just removed from the other vault.
 6. Snap the end of the source cable into the fitting on the new source assembly.
 7. Crank the new source back into the radiographic unit and you are back in business.
 8. Survey to insure both sources are secure.
 9. The source changer will be the one furnished by Technical Operator.

NATIONAL FEEDSCREW & MACHINING, INC.

No. 5 - MATERIAL TO BE POSSESSED

- A. Cobalt 60 Sealed Source Technical Operation's Model 1-424-2. ✓
- B. Cobalt 60 Sealed Source Technical Operation's Model A-411.
- A. To be used in technical operations model 402 exposure device for industrial radiography and technical operations model 416 source changer for source replacement and storage. ✓
- B. To be used for open air instrument calibration.

No. 6 - PURPOSE FOR WHICH LICENSED MATERIAL WILL BE USED

- CO⁶⁰ 20 curie max. source will be used for industrial radiography.
- CO⁶⁰ 500 millicuries max source will be used for instrument calibration.

No. 7 - INDIVIDUAL(S) RESPONSIBLE FOR RADIATION PROGRAM AND THEIR TRAINING AND EXPERIENCE

Ronald B. Pribich, Vice-President of Finance, will act as the liaison officer. He will monitor all records and reports of the radiography program and see that all phases of the program are up to date.

Thomas McInnes will be the chief radiographer. He will make all of the exposures, leak tests, instrument calibrations, maintain all of the equipment and records and reports.

I entered the radiography department at the former Massillon Steel Casting Co., 577 Oberlin Road S.W., Massillon, Ohio 44646, in July of 1973. I had a short on the job training program then went to a one week course safety for radiation at the Picker X-ray Corporation, 1020 London Road, Cleveland, Ohio 44110. Then returned to an on-the-job training program conducted by a Mr. J.M. Hathway, who is now employed by the Canton Drop Forge Co. The dates that I was advanced to radiographer and chief radiographer are not available. I was in the radiography department from July, 1973, to October 31, 1983.

No. 8 - TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

Due to the low level of x-raying to be performed at this site, the chief radiographer will be the only one in the area.

No. 9 - FACILITIES AND EQUIPMENT

The radiation facility is a solid cement poured building of 2' thick walls with a 12" thick floor and a metal roof.

The only entrance to the radiation area is through a 9' wide x 10' high overhead metal door. Adjacent to the east wall of the cobalt room is the N.D.T. laboratory. There is no building above or below the radiation area.

A Technical Operations, Inc., gammalarm model 492-D is used for the visible signal system. When the source is exposed, the safe green light goes out and reloading red light goes on. The gammalarm is located on the west wall of the cobalt room directly across from the overhead door as you enter the room. An audible horn alarm is wired into the gammalarm system so that the horn is sounding when the source is out. When the source is out and the overhead door is closed, the audible horn goes off. When the overhead door is opened and the source is out the horn sounds telling the radiographer that the source is exposed.

A double lock with two keys is located on the east wall inside the N.D.T. lab. (See drawing for location. One key opens the overhead door, the other key is an audible alarm that if a person or persons enter the cobalt room without using the proper lock setting, a shop wide alarm will be sounded.

The perimeter of the cobalt room was surveyed using a victoreen gamma survey meter model 592-B, using a 7 curie CO^{60} source. No radiation was present.

There is a 5 foot chain link fence around the cobalt room roof. The chain link fence is posted on all sides with "Caution High Radiation Area" signs. There are no means of access to the roof.

NATIONAL FEEDSCREW & MACHINING, INC.

No. 10 - RADIATION SAFETY PROGRAM

10-1 - PERSONNEL MONITORING EQUIPMENT

Two victoreen pocket dosimeters model 541-R with a range of 0 to 200 milliroentgens will be used by the radiographer.

The radiographer will wear a film badge supplied by R.S. Landauer, Jr., & Co. The maximum for the film badge exchange will be 2 weeks, 10-2 radiation detection.

There will be one operable and calibrated survey meter, victoreen model 592-B gamma survey meter. The meter will be calibrated so as the readings are + or - 20% of actual values. Enclosed is a chart of the calibration procedure that will be used. The survey meter will record calibration within a three-month period and the records for a minimum of two years. 10-3 internal inspection program.

As there will be only one radiographer, the internal inspection program will be handled by the "liaison officer". Enclosed is a form that will be used for the program.

NATIONAL FEEDSCREW & MACHINING, INC.

11. WASTE MANAGEMENT

Licensed material will be shipped back to the original supplier.

NATIONAL FEEDSCREW & MACHINING, INC.

INTERNAL INSPECTION-RADIOGRAPHY SAFETY

YES

NO

1. Previous internal inspection records on file, and any deviations corrected or satisfactorily explained.

2. Film badges worn; exposure records current and available.

3. Dosimeters working, being worn, records current and available. Calibration current and available.

4. Warning signs in place and legible; locks, controls and equipment in working condition; audible and visual alarms tested and working. Record of daily inspections current and available. Record of any service work done.

5. Survey meter working, calibrated, and calibration records current and available.

6. Leak test current and records available.

7. Utilization log current and available.

8. Quarterly inventory completed, current, and records available.

9. Periodic equipment inspection and maintenance completed, current, and records available.

10. General housekeeping in the Cobalt Room acceptable.

11. Required documents available to those people who need access to them.

12. Are proper security measures being followed.

COMMENTS:

This inspection conducted on _____, 198____.

CONTROL NO. 8364

QUARTERLY METER CALIBRATION

$$CQ_{60} \times 14.5 =$$

$$3 \text{ MR/HR} = \sqrt{\text{---}} = \sqrt{\text{---}} \quad \text{---} \quad \text{---}$$

$$6 \text{ MR/HR} = \sqrt{\text{---}} = \sqrt{\text{---}} \quad \text{---} \quad \text{---}$$

$$30 \text{ MR/HR} = \sqrt{\text{---}} = \sqrt{\text{---}} \quad \text{---} \quad \text{---}$$

$$60 \text{ MR/HR} = \sqrt{\text{---}} = \sqrt{\text{---}} \quad \text{---} \quad \text{---}$$

$$300 \text{ MR/HR} = \sqrt{\text{---}} = \sqrt{\text{---}} \quad \text{---} \quad \text{---}$$

$$600 \text{ MR/HR} = \sqrt{\text{---}} = \sqrt{\text{---}} \quad \text{---} \quad \text{---}$$

METER MODEL NO. _____ SERIAL NO. _____

NAME OF MANUFACTURER _____

DATE _____ NEXT CALIBRATION DATE _____

NAME AND TITLE OF PERSON MAKING CALIBRATION _____

SOURCE SERIAL NO. _____ SOURCE STRENGTH _____

	CALCULATED DISTANCE	METER READING	% ERROR
SCALE 3 MR/HR.	_____	_____	_____
x 1 6 MR/HR	_____	_____	_____
SCALE 30 MR/HR	_____	_____	_____
x 10 60 MR/HR	_____	_____	_____
SCALE 300 MR/HR.	_____	_____	_____
x 100 600 MR/HR	_____	_____	_____

OPEN AREA ← 34 FT →

← 30 FT →

→ 19 FT →

← 21 FT OPEN AREA →

← 12 FT →

← 10 FT →

← 21 FT →

→ 17 FT →

← 21 FT OPEN AREA →

EXPOSURE
AREA

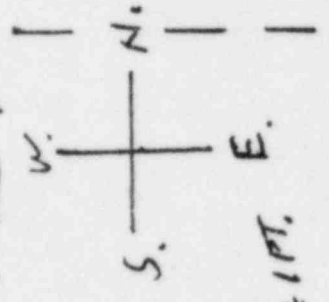
OVER HEAD DOOR
HEAVY METAL

← 9 FT →

← 25 FT →

DOOR LOCK
2 KEYS

N. D. T. LAB
BUILDING



SCALE 1/4" = 1 FT.