



SCHOOL OF ENGINEERING AND APPLIED SCIENCES
LOS ANGELES, CALIFORNIA

50-142

May 26, 1976

6-3-76

Mr. J. Busche
Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Sir:

Due to the sensitive nature of the contents of this letter, we request that this document be withheld from public disclosure pursuant to Section 2.790 of 10 CFR Part 2. This letter concerns the revised Security Plan for the UCLA Training Reactor dated April 1, 1976.

When the ultrasonic motion detection system was first ordered from Walter Miles & Co. Inc., the Model K03-130 was ordered. We could not obtain this unit because production of this model had been closed. We received instead a newer model, the K03. This fact was overlooked when writing the Security Plan, hence the information on page 14 of Appendix A is in error. Please replace this page with the appropriate one included with this letter.

Sincerely,

William E. Kastenberg

William E. Kastenberg
Acting Director
Nuclear Energy Laboratory

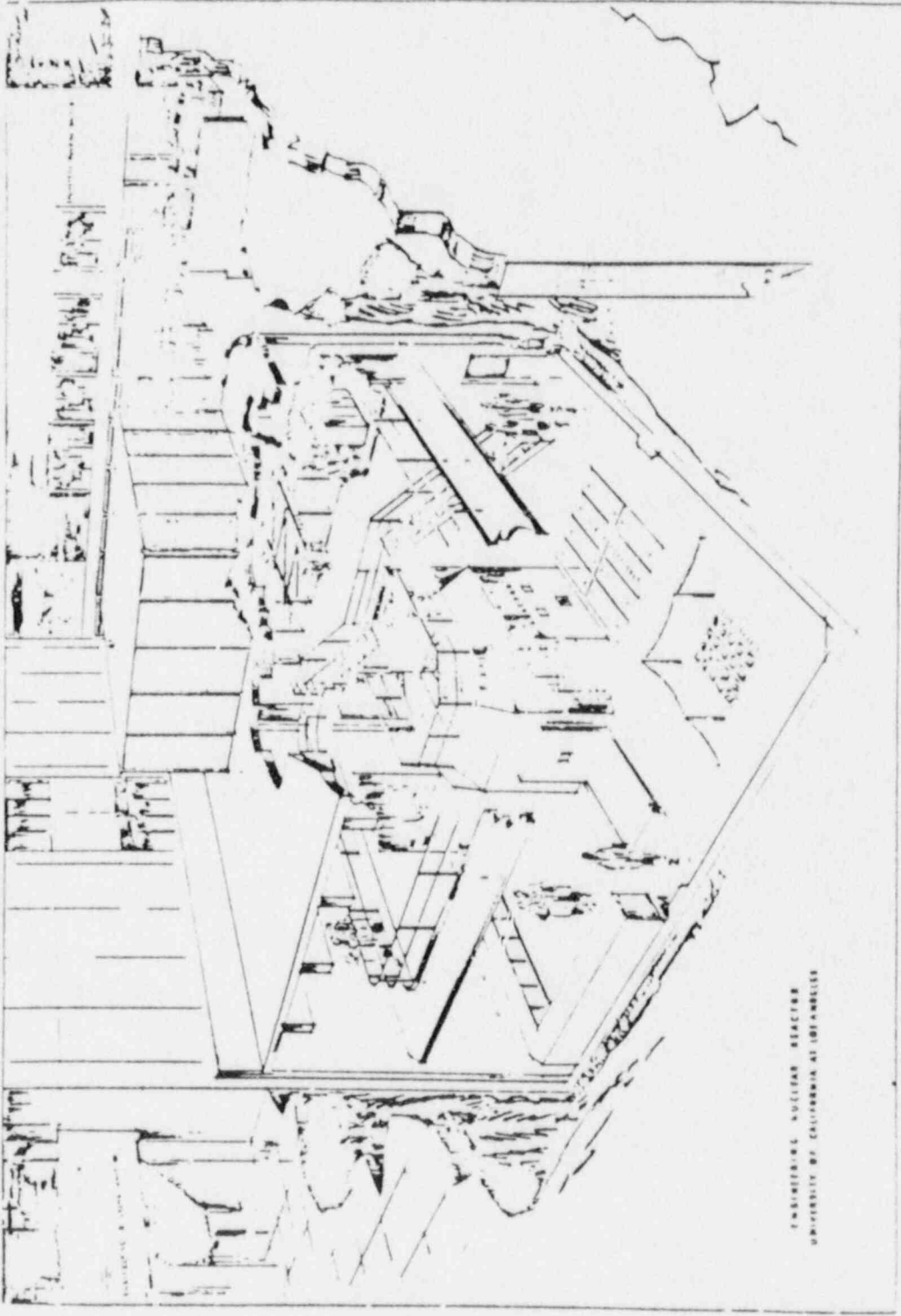
WEK:CEA:v1

Enclosure: page 14 of Appendix A

8806210203 880603
PDR FOIA
AFTER 9085-196 PDR

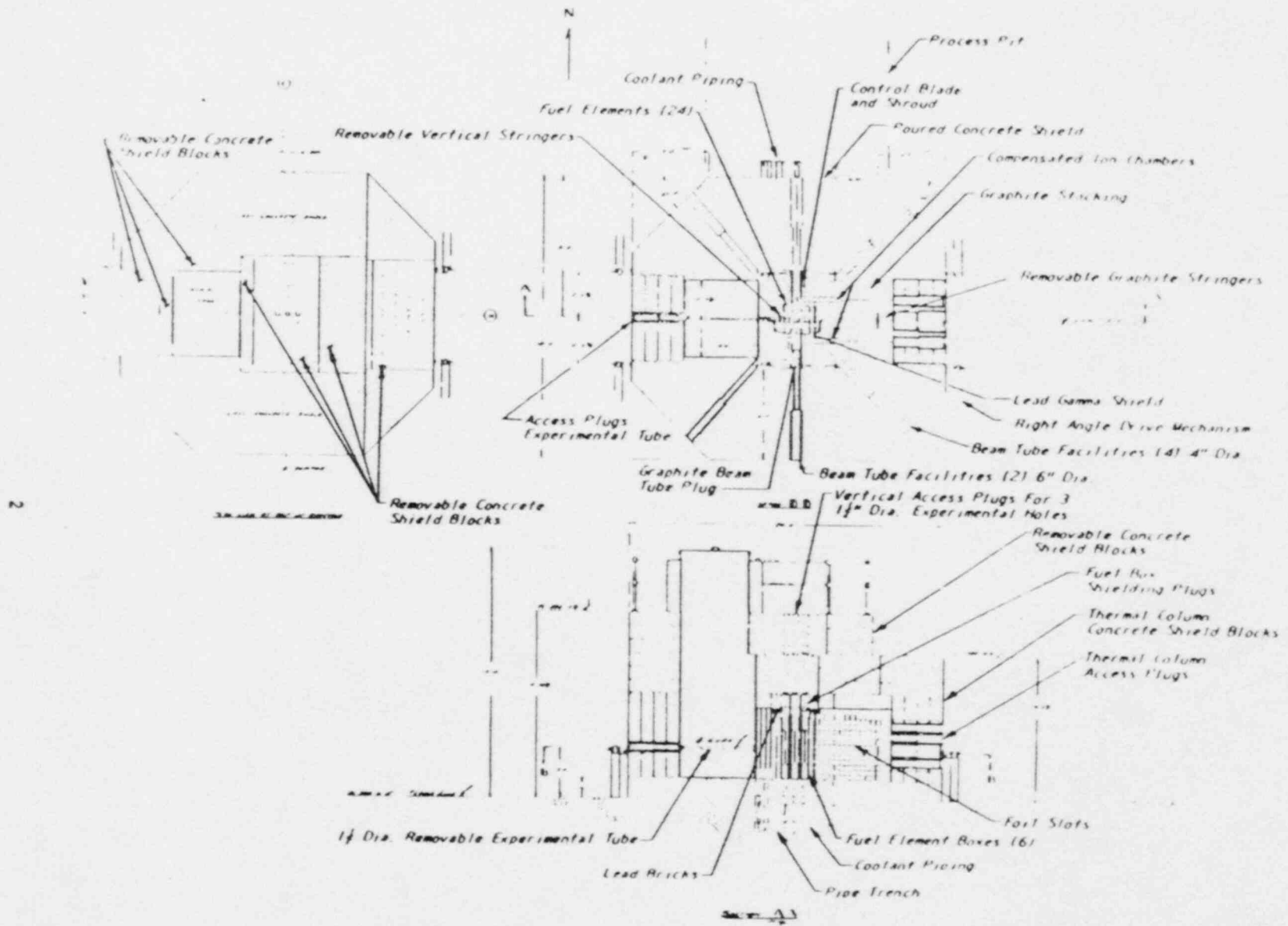
5354

E/11

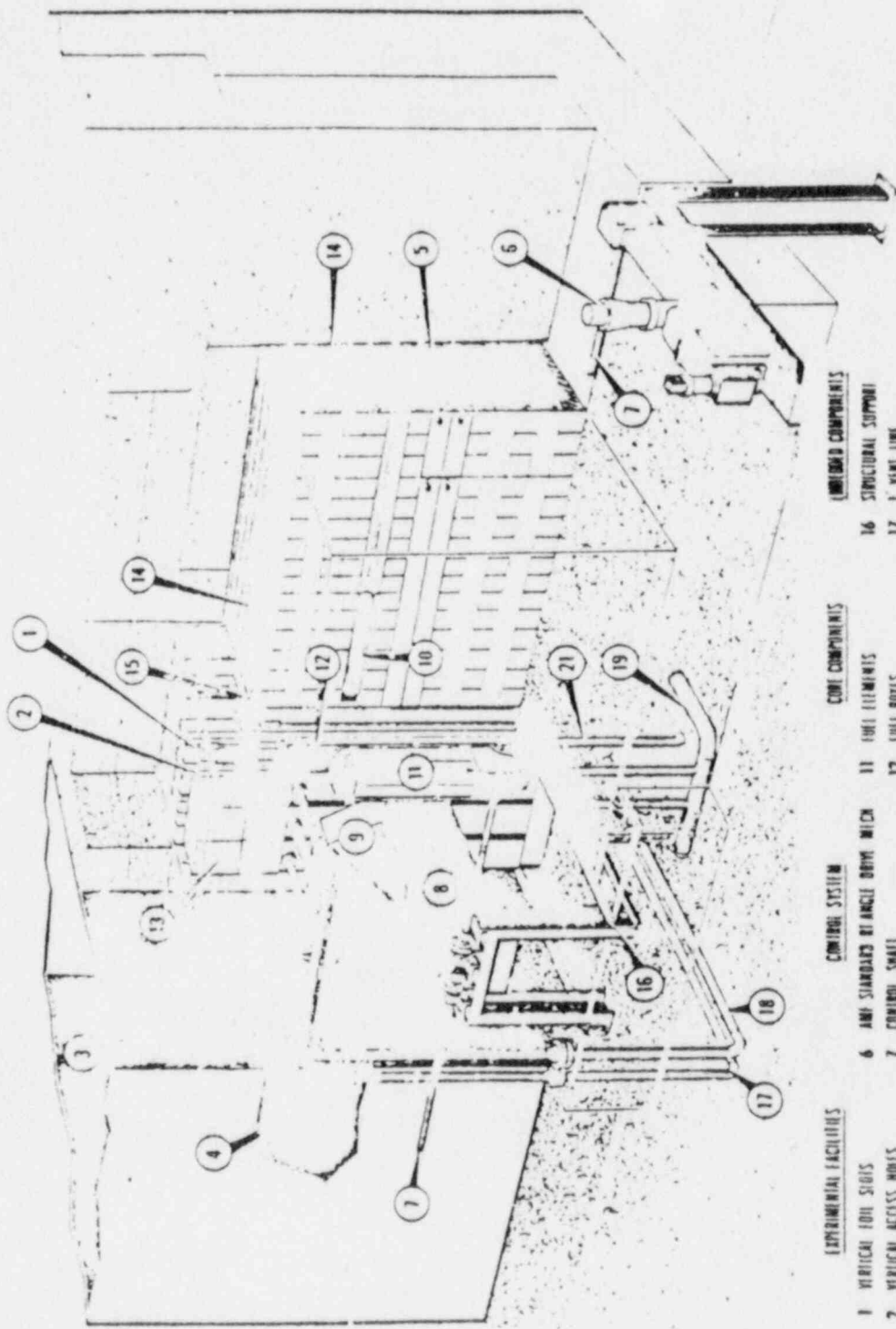


ENGINEERING NUCLEAR REACTOR
UNIVERSITY OF CALIFORNIA AT LOS ANGELES

FIGURE 1

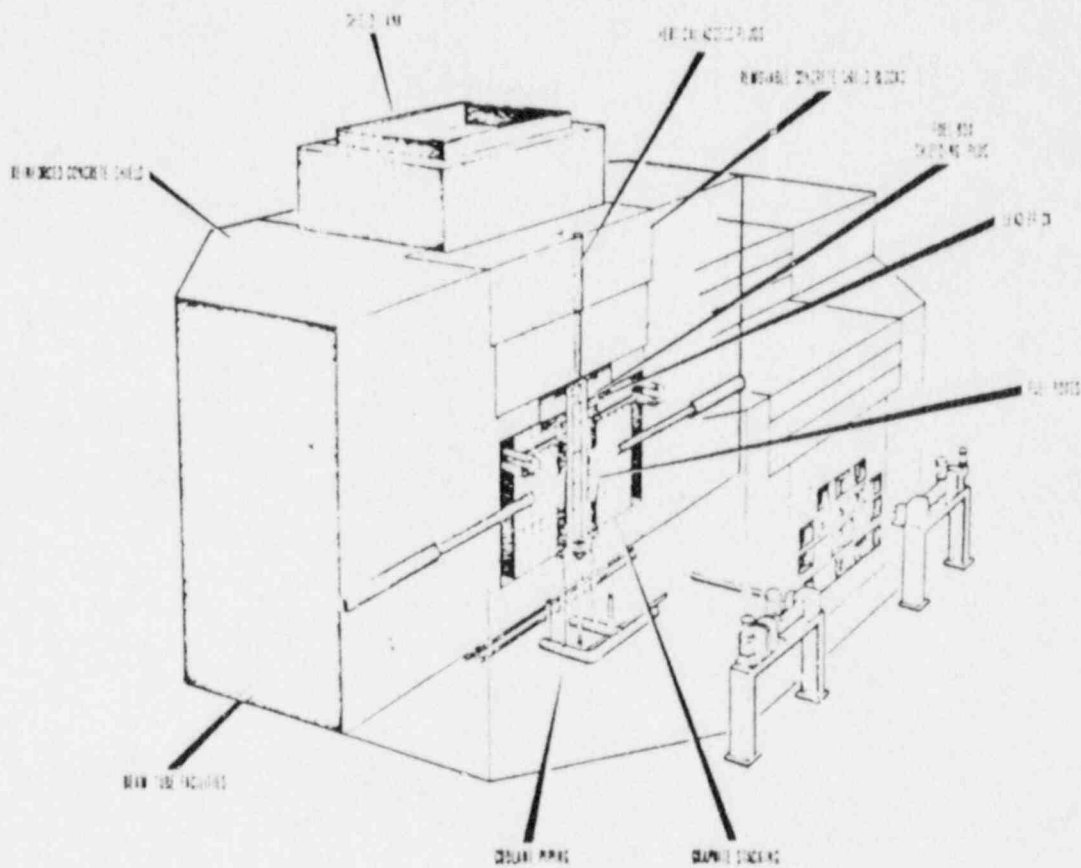


GENERAL ARRANGEMENT FIGURE 2



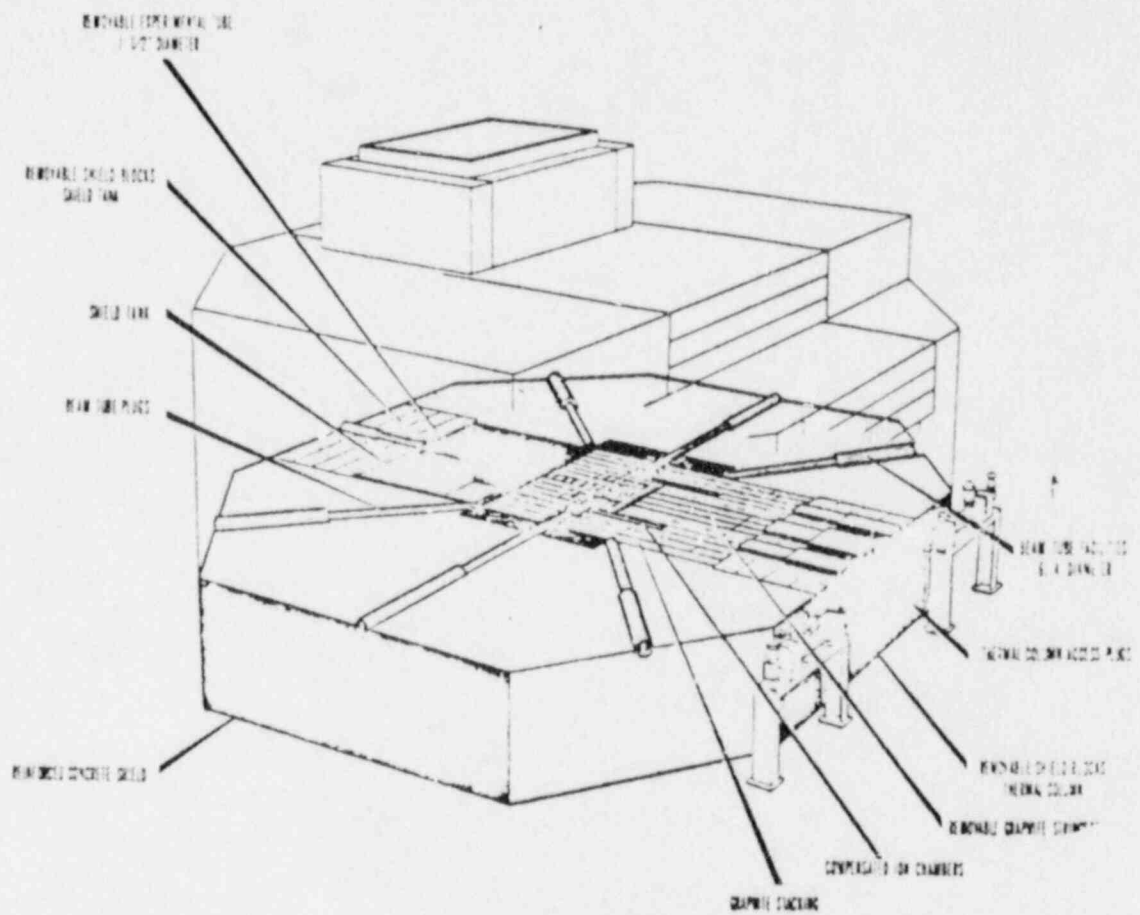
- | EXPERIMENTAL FACILITIES | CONTROL SYSTEM | CORE COMPONENTS | LIMITED COMPONENTS |
|--------------------------------|-----------------------------------|-------------------------------|-----------------------|
| 1 VERTICAL TUBE SHEETS | 6 AMP STANDARDS RIANGLE ROOM WICH | 11 TUBE ELEMENTS | 16 STRUCTURAL SUPPORT |
| 2 VERTICAL ACCESS HOLES | 7 CONTROL SHAFT | 12 TUBE BONES | 17 1 VENT LINE |
| 3 SHIELD TANK | 8 MACHINERY SHROOD | 13 SHIELDING PLUG & DIRECTION | 18 2 RETURN LINE |
| 4 REMOVABLE EXPERIMENTAL TUBE | 9 COLUMN CONTROL HEAD | 14 GRAPHITE THERMAL COLUMN | 19 3 SUPPLY LINE |
| 5 REMOVABLE GRAPHITE STRINGERS | 10 B, PROPORTIONAL COUNT | 15 LEAD BRICK | 21 1 DRAIN LINE |

EDUCATOR REACTOR - CORE AREA



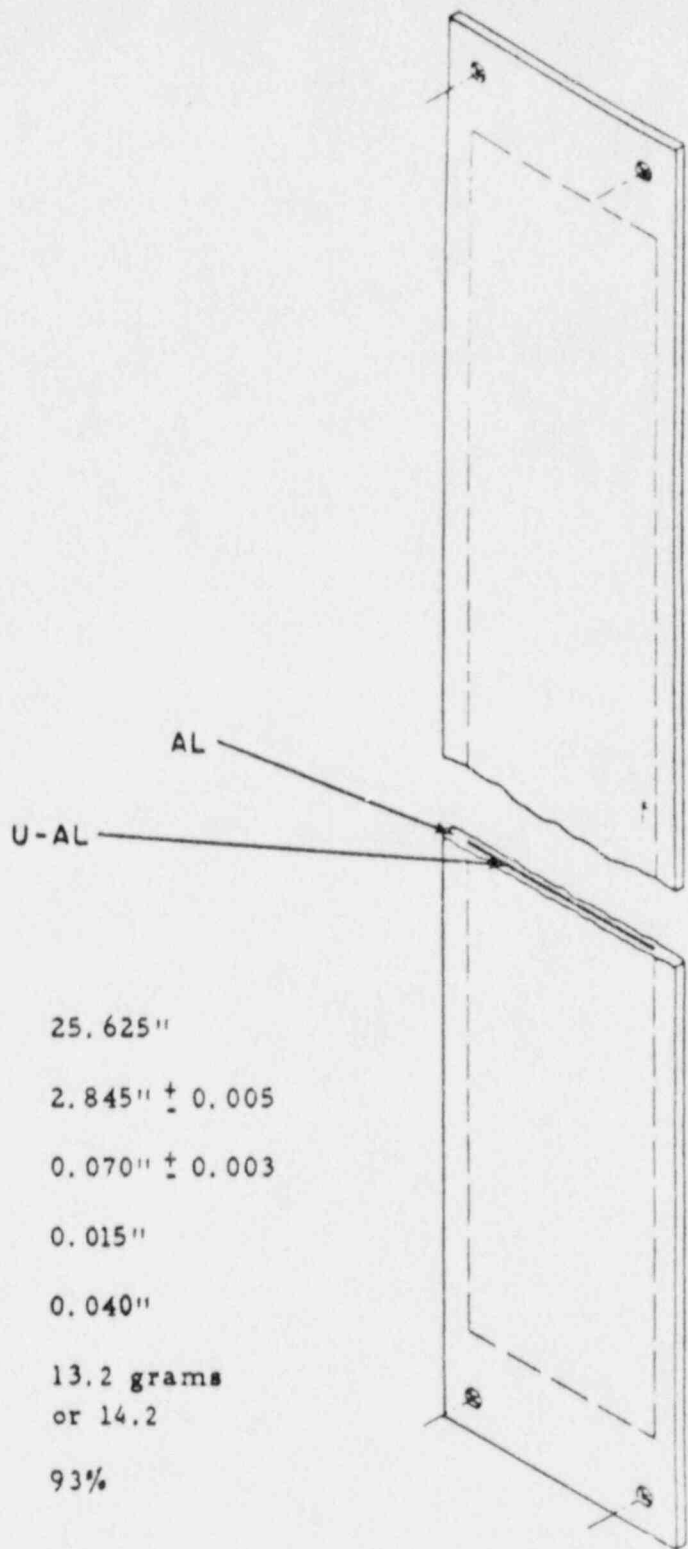
EDUCATOR REACTOR—TRANSVERSE SECTION THROUGH CORE CENTER

FIGURE 5



EDUCATOR REACTOR - HORIZONTAL SECTION AT BEAM TUBE LEVEL

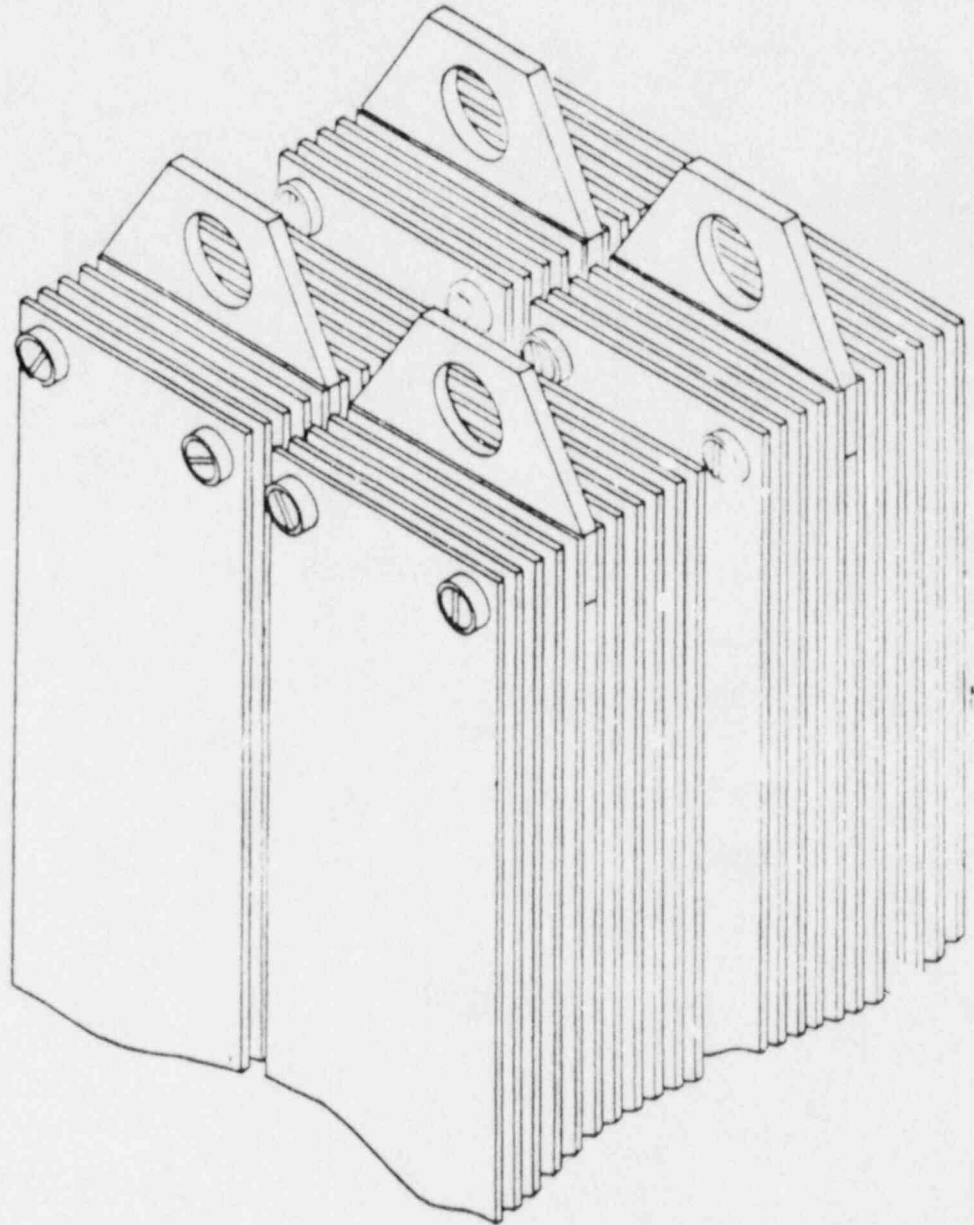
FIGURE 6



LENGTH OF PLATE	25.625"
WIDTH OF PLATE	2.845" \pm 0.005
THICKNESS OF PLATE	0.070" \pm 0.003
THICKNESS OF CLADDING	0.015"
THICKNESS OF U-AL	0.040"
WEIGHT OF U-235 PER PLATE	13.2 grams or 14.2
URANIUM ENRICHMENT	93%

FUEL PLATE

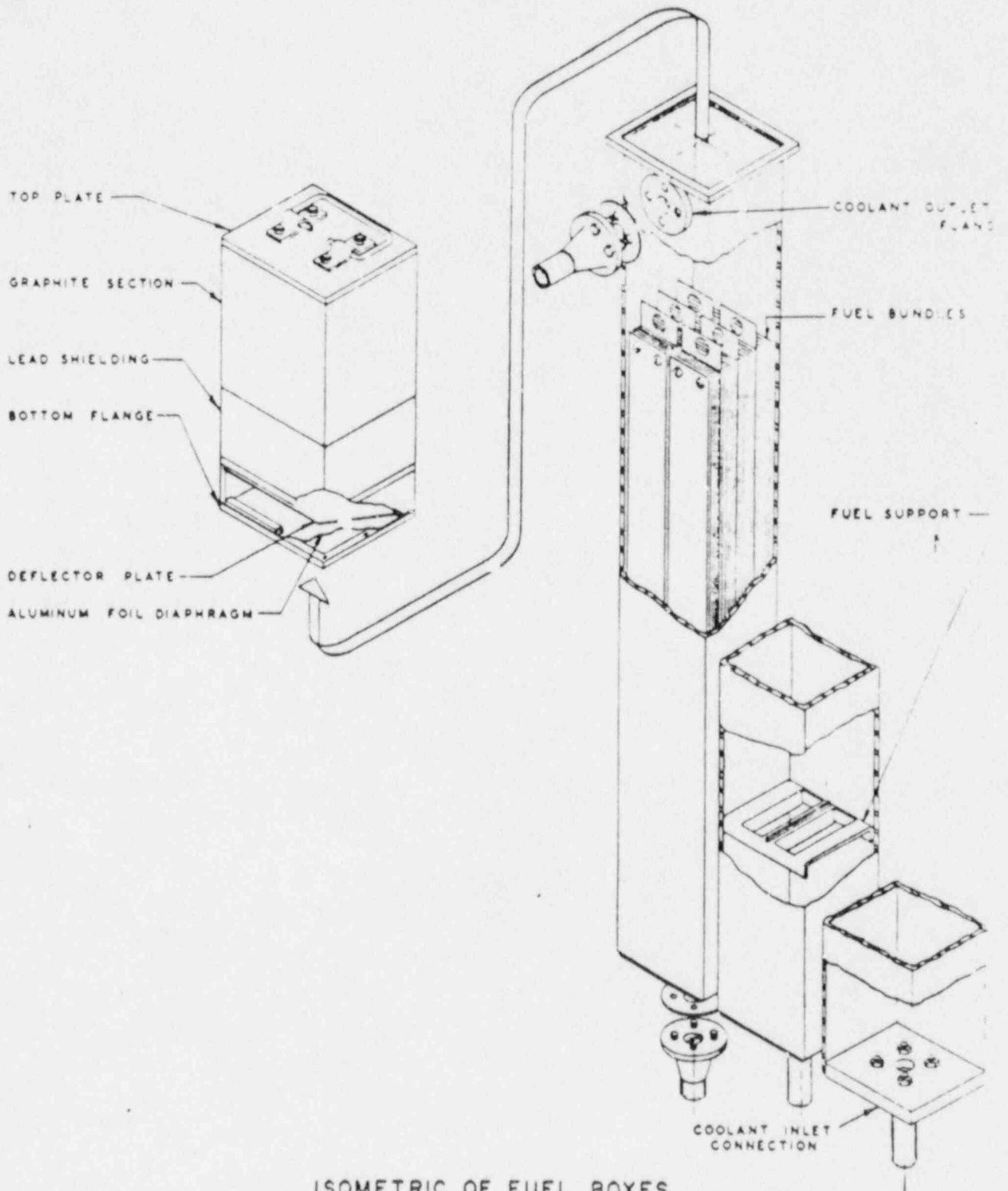
FIGURE 7



TYPICAL FUEL CLUSTER

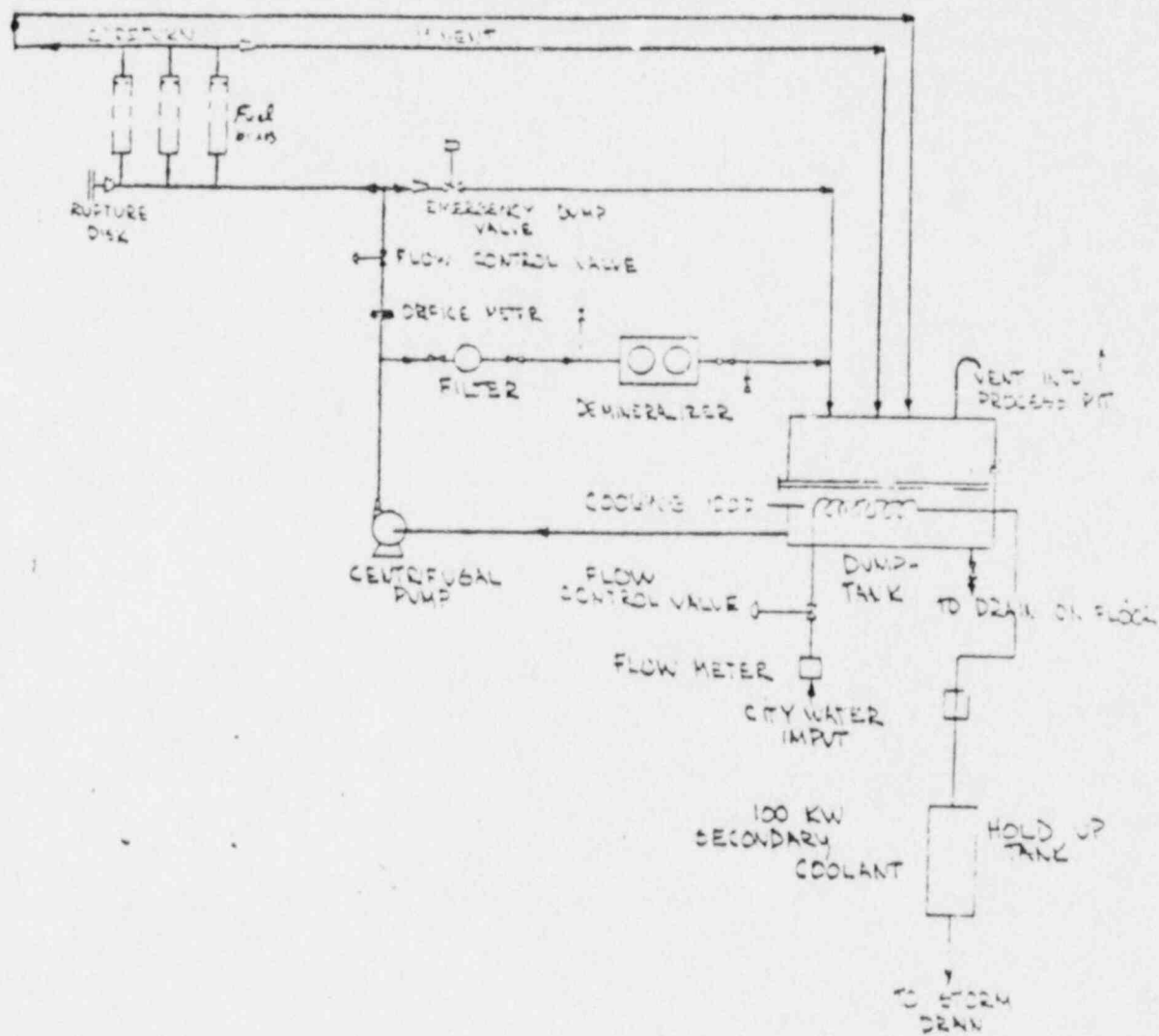
FIGURE 6

AMF-GNE EDUCATOR
AMF ATOMICS, NEW YORK
DIV. AMERICAN MACHINE &
FOUNDRY COMPANY



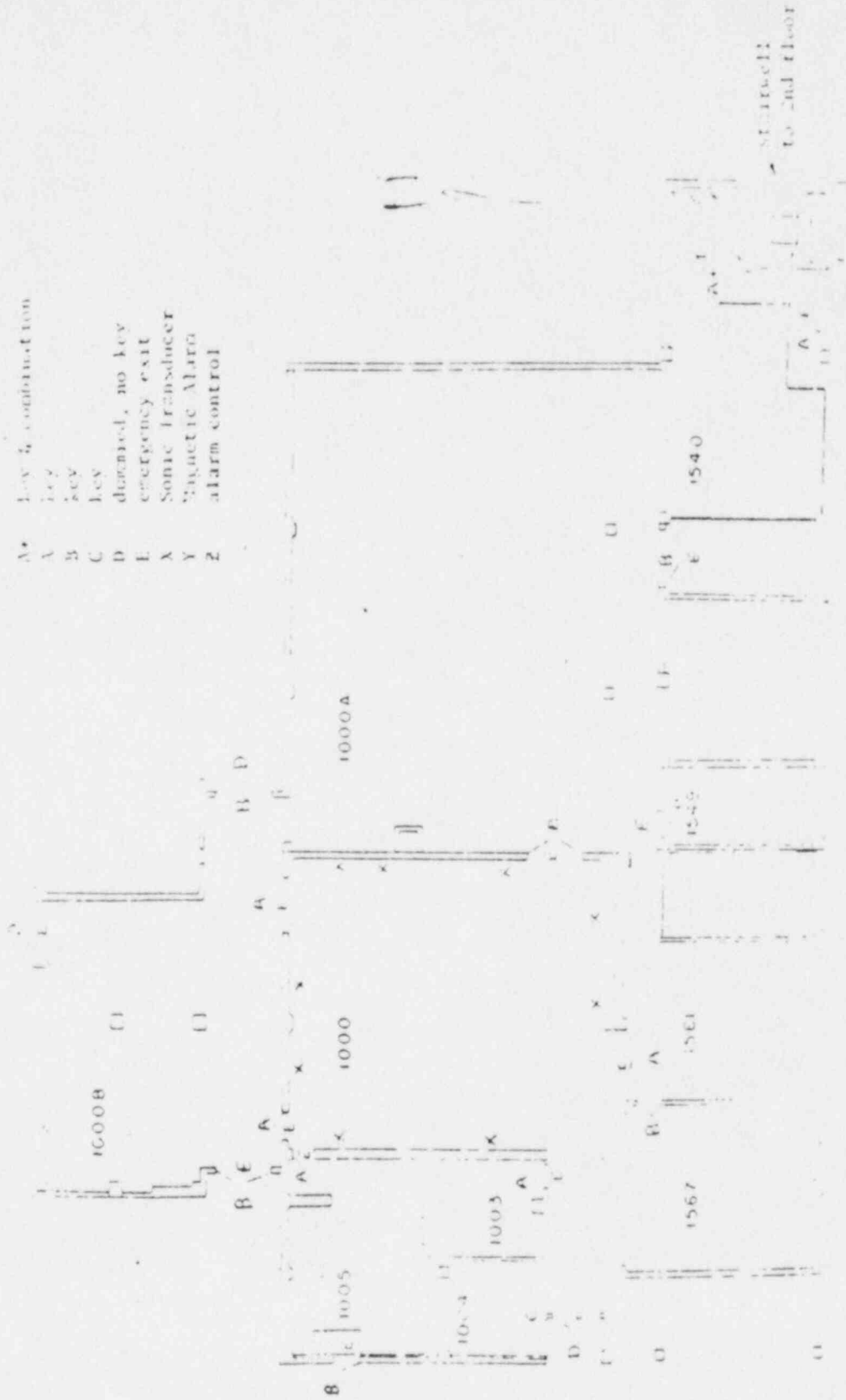
ISOMETRIC OF FUEL BOXES

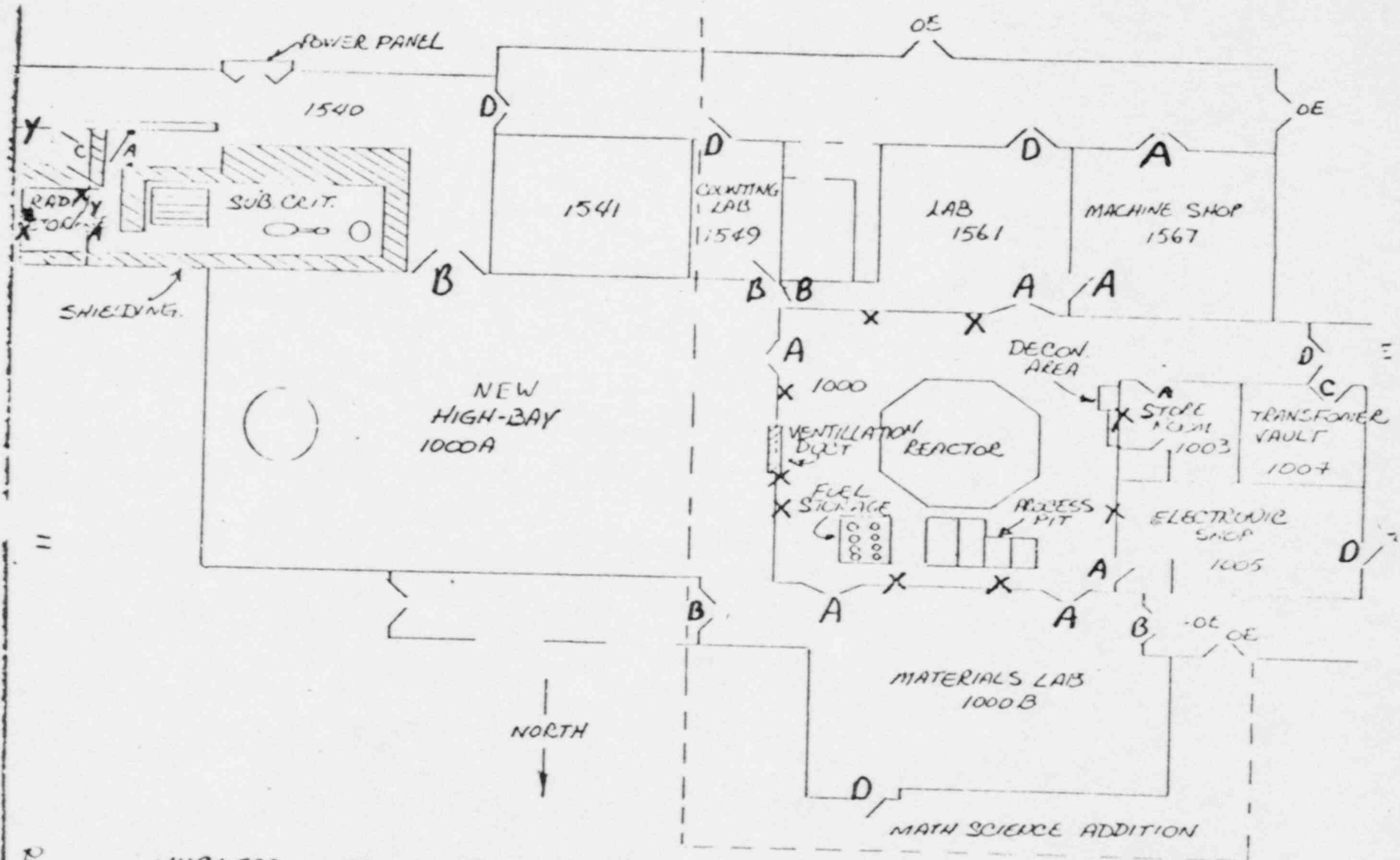
FIGURE 9



REVISED COOLING SYSTEM DIAGRAM
 FIGURE 10

- Key 4 combination
- A key
 - B key
 - C key
 - D key
 - denied, no key
 - E emergency exit
 - X Somic Transducer
 - Y Magnetic Alarm
 - Z alarm control

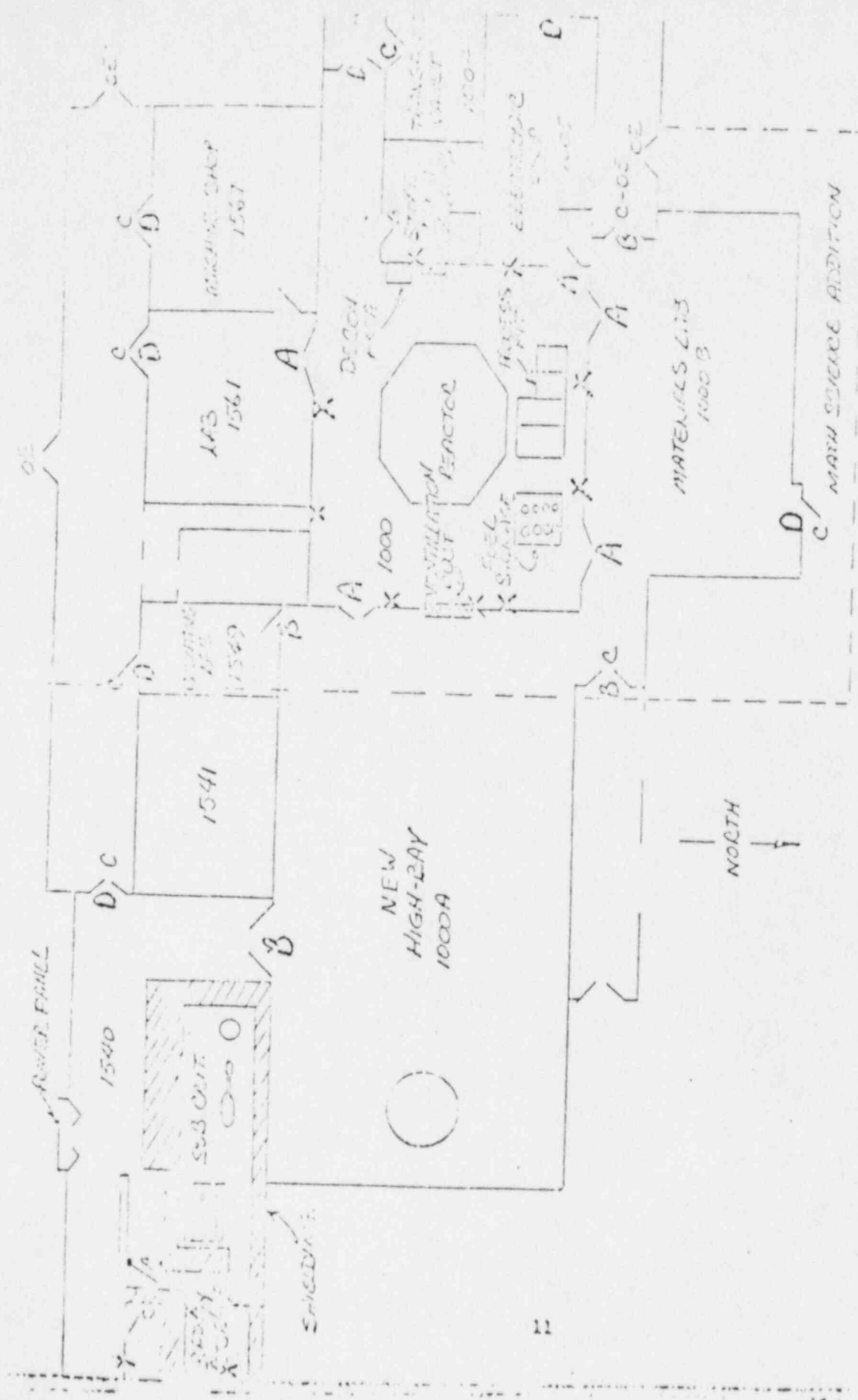




NUCLEAR ENERGY LABORATORY FLOOR PLAN -1000 LEVEL

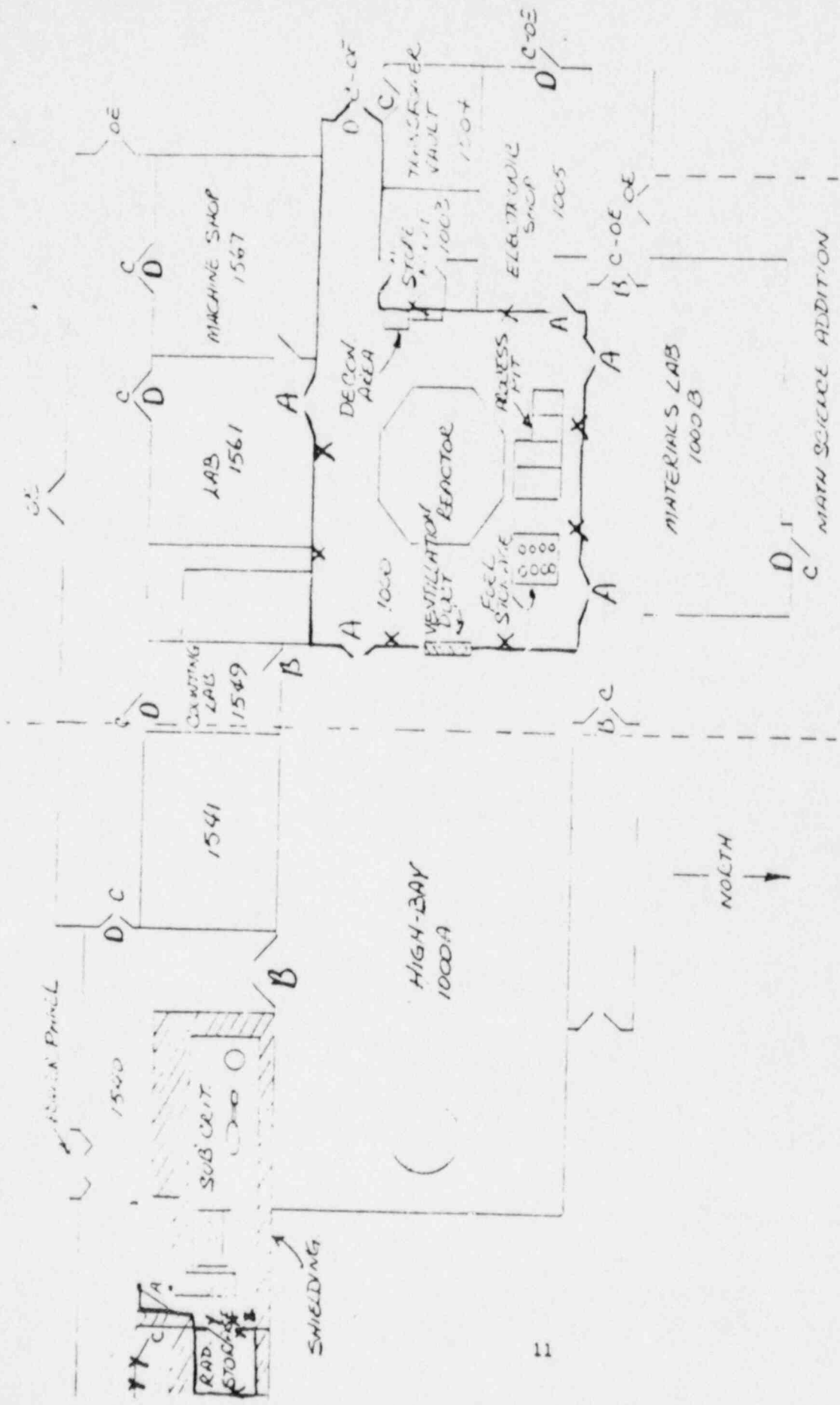
EXITS MARKED "C" ARE CONTROLLED ACCESS, "OE" INDICATED EXIT TO OUTSIDE
 "C" EXIT LOCKS ARE DUMMIED ON OUTSIDE.

Jan 4-1-76



NUCLEAR ENERGY LABORATORY FLOOR PLAN - 1000 LEVEL

EXITS MARKED "C" ARE CONTROLLABLE ACCESS, "OE" INDICATED EXIT TO OUTSIDE
 "C" EXIT LOCKS ARE DUMPED ON OUTSIDE.



NUCLEAR ENERGY LABORATORY FLOOR PLAN -1000 LEVEL
 ENITS MARKED "C" ARE CONTROLLED ACCESS, "OE" INDICATED EXIT TO OUTSIDE
 "C" EXIT LOOKS ARE DUMMED ON OUTSIDE.

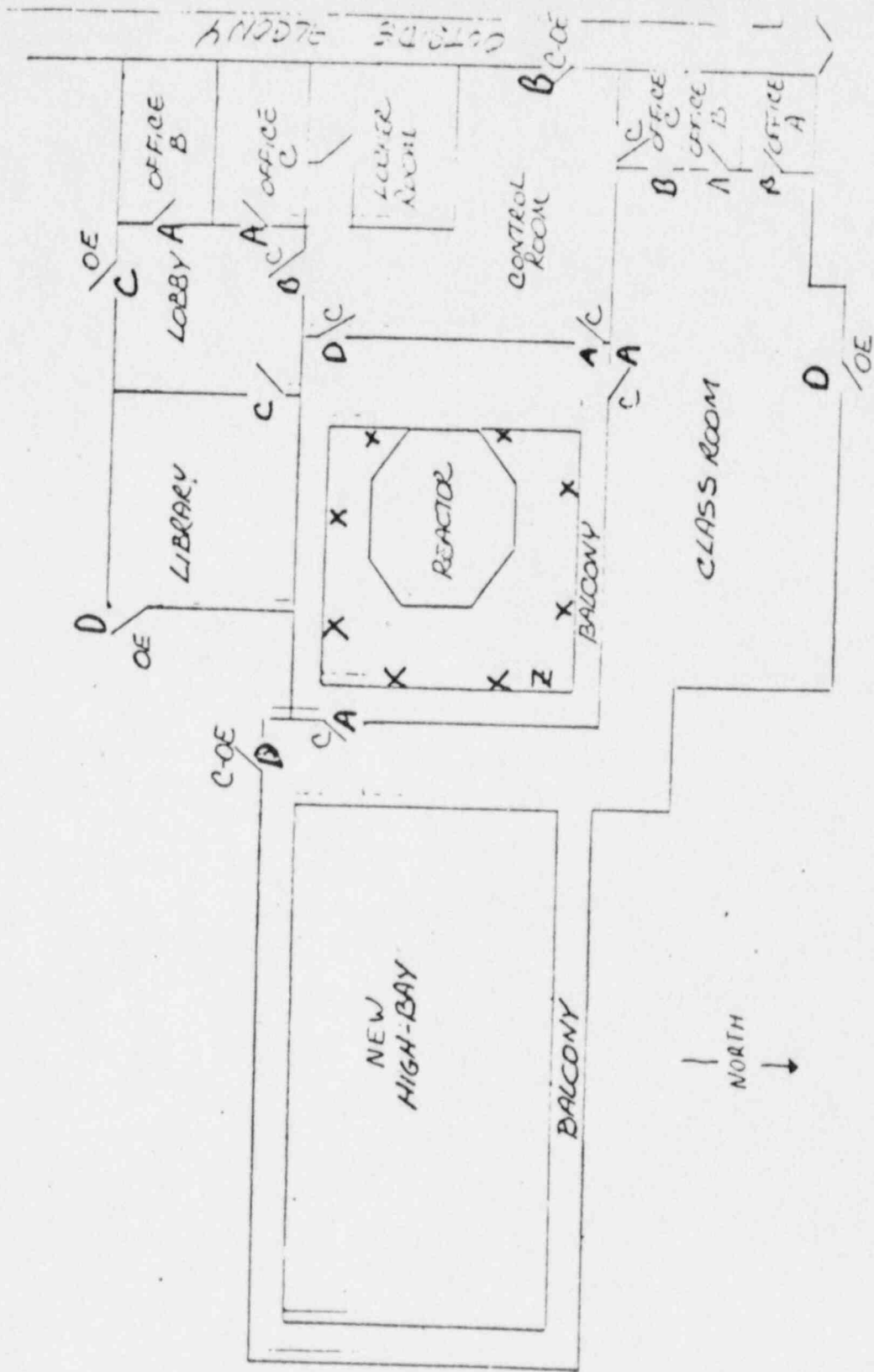
FIGURE 11

- A Key
- B Key
- C Key
- D dimmed, no key
- F emergency exit
- X Sonic Transducer
- Y Magnetic Alarm
- Z alarm control



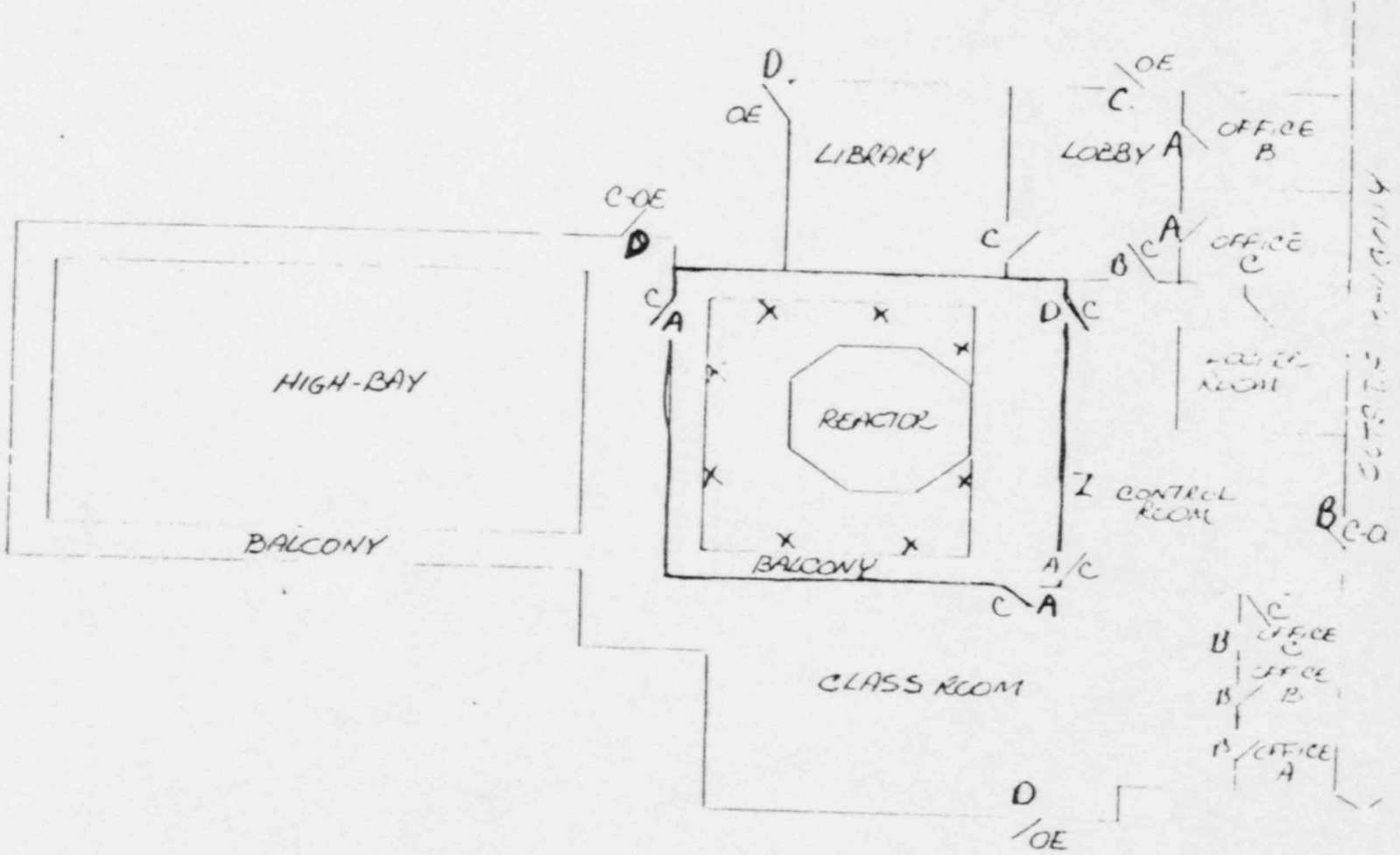
FIGURE 1
 SECURITY PLAN

SECURITY PLAN
 FIGURE 1



NUCLEAR ENERGY LABORATORY FLOOR PLAN - 2000 LEVEL
 EXITS MARKED "C" ARE CONTROLLED ACCESS, "OE" INDICATES EXIT TO OUTSIDE

FIGURE 12



NUCLEAR ENERGY LABORATORY FLOOR PLAN - 2000 LEVEL
EXITS MARKED "C" ARE CONTROLLED ACCESS, "OE" INDICATES EXIT TO OUTSIDE

FIGURE 12

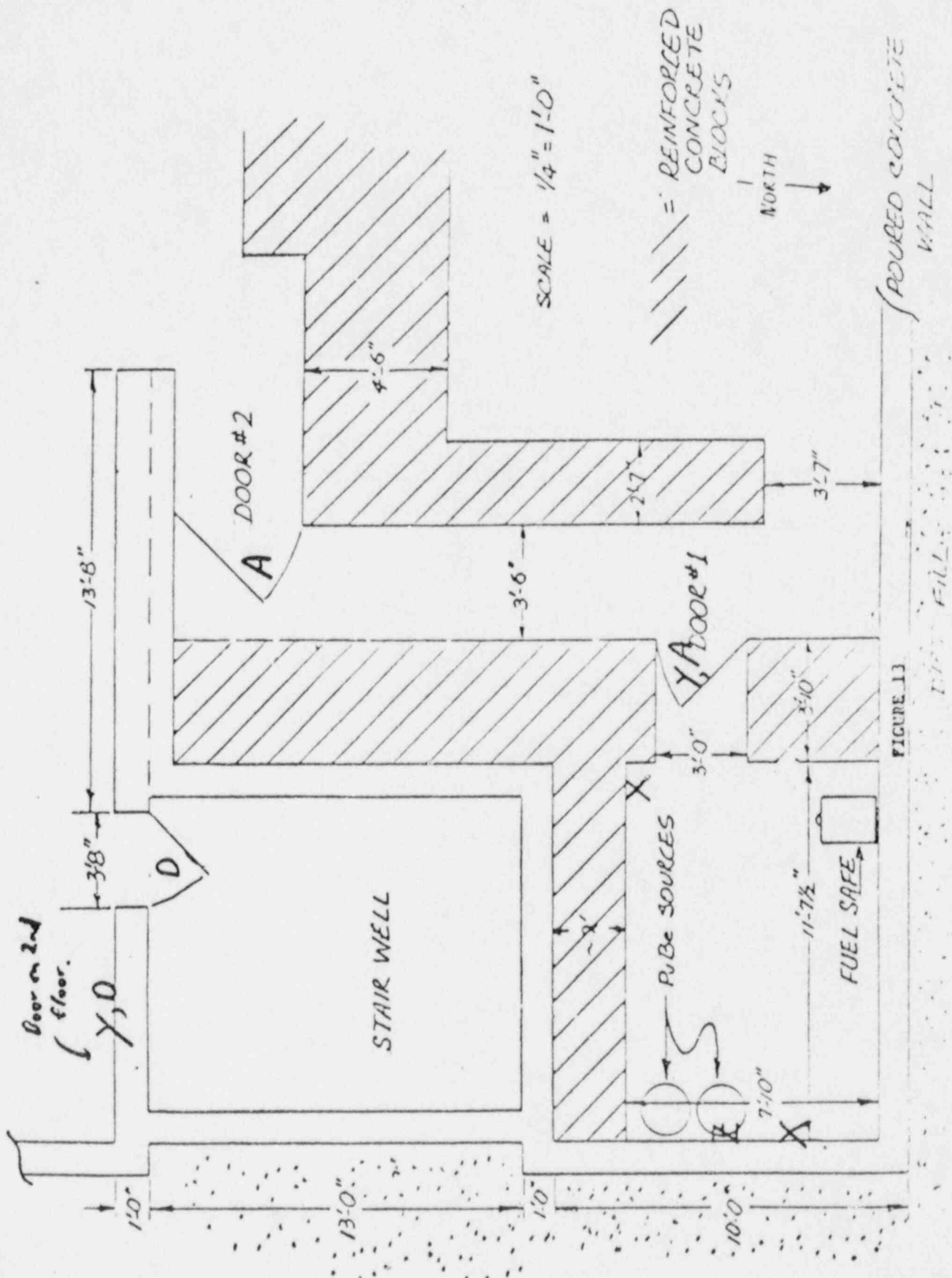
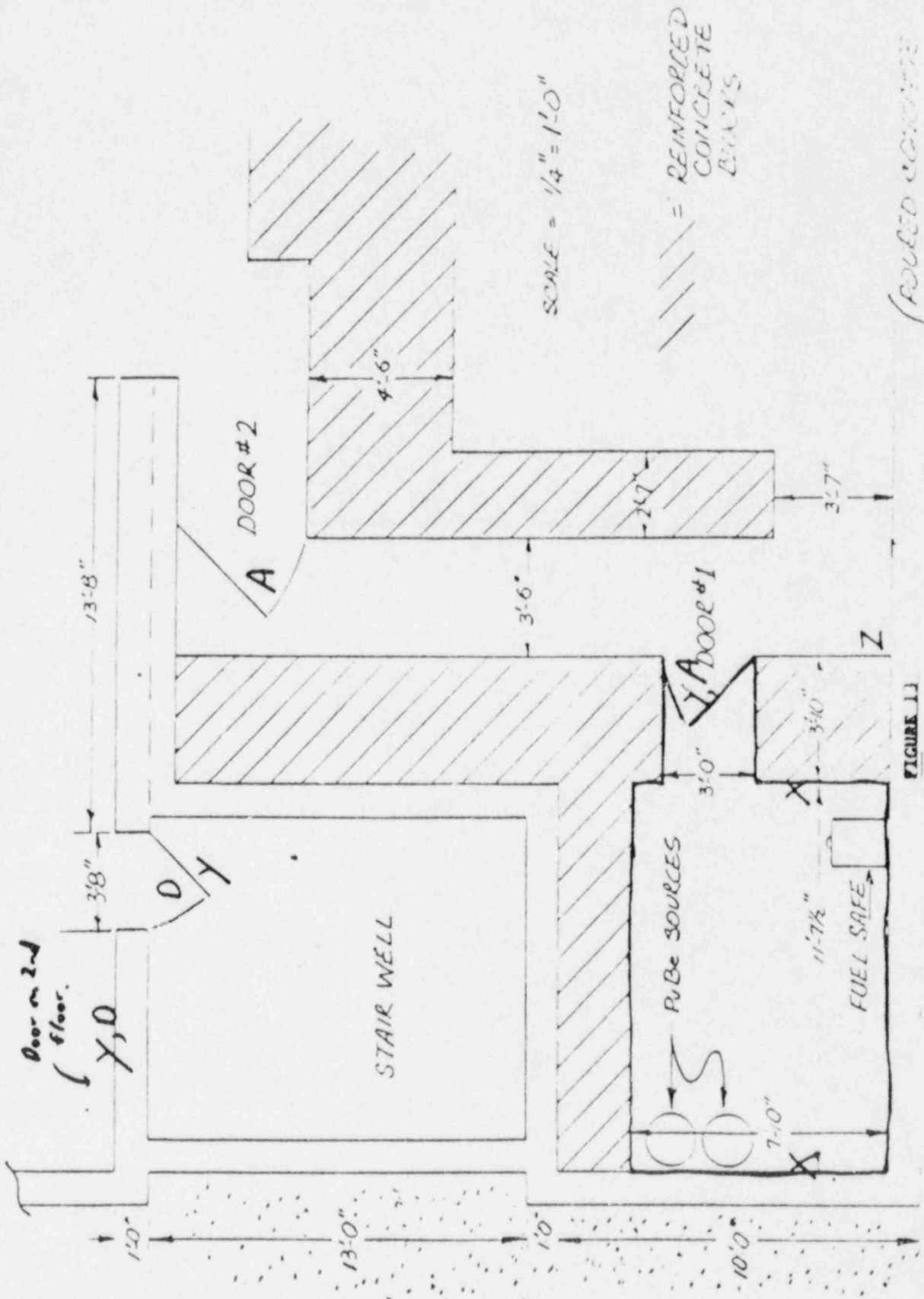


FIGURE 11



POURED CONCRETE
WALL

FIGURE 11

EQUIPMENT LIST

1. 9 Omnidirectional transmitters
Model TR - 90, Part Number 511252
2. 10 Omnidirectional receivers
Model RC - 91, Part Number 511253
3. 2 High Security Magnetic Switch for Doors
Model MR 957, Part Number 507522
4. Two Master Control Units
Model KD3, Part Number 507162

Manufacturer: Walter Kilde & Co. Inc.
Belleville, New Jersey 07109

EQUIPMENT LIST

1. 9 Omnidirectional transmitters
Model TR - 90, Part Number 511252
2. 7 Omnidirectional receivers
Model RC - 91, Part Number 511253
3. 2 High Security Magnetic Switch for Doors
Model DR 350, Part Number 630902
4. Two Master Control Units
Model ICNC 132, Part Number 630136
Manufacturer: Kiddle - Walter Kiddle & Co. Inc.
Belleville, New Jersey 07109

EQUIPMENT LIST

1. 9 Omnidirectional transmitters
Model TR - 90, Par Number 511252
2. 9 Omnidirectional receivers
Model RC - 91, Part Number 511253
3. 2 High Security Magnetic Switch for Doors
Model DR 850, Part Number 630802
4. Two Master Control Units
Model ICMC 132, Part Number 630136
Manufacturer: Kiddle - Walter Kidde & Co. Inc.
Belleville, New Jersey 07109

EQUIPMENT LIST

1. 9 Omnidirectional transmitters
Model TR - 90, Par Number 511252
2. 9 Omnidirectional receivers
Model RC - 91, Part Number 511253
3. 3 High Security Magnetic Switch for Doors
Model DR 850, Part Number 630802
4. Two Master Control Units
Model ICMC 132, Part Number 630136
Manufacturer: Kiddle - Walter Kidde & Co. Inc.
Belleville, New Jersey 07109

University of California, Los Angeles
School of Engineering and Applied Science

NUCLEAR ENERGY LABORATORY

EMERGENCY PROCEDURE

February 1976

NEL Lab Phones

825-2040 825-2825
825-2187

Room 2567
Boelter Hall

- A. For immediate action upon observance of danger from earthquake, riot, police emergency, flood, or enemy attack, shut down reactor, secure facility and assemble in control room if possible.
- B. For immediate action upon observance of danger from nuclear hazard*, fire or explosion, proceed to D.
*If 3 out of 4 radiation alarms trip off scale (high) from an undetermined cause, this constitutes a nuclear hazard: 2 High Bay area monitors, Argon-41 and effluent monitors.
- C. If alarm in 1540 BH (subcritical and radioactive storage area) is sounding, evacuate area and proceed directly to Step D-6.

D. PROCEED TO:

1. Scram reactor, set off alarm, announce evacuation.
2. Shut off ventilation and cooling systems.
3. Take reactor key, health physics suitcase, and available radiation instruments with you.
4. Proceed directly to Boelter Hall 2000 level patio, securing all doors behind you.
5. After gross personal contamination check, follow health physics procedures.
6. Call official personnel in order on list until relieved by one of the following:

- | | | |
|-------------------------------------|--------------------|--|
| 1. Chuck Ashbaugh | 348-6559 | 19. NRC Region V Operations |
| 2. Jack Hornor | 839-2130 | Robt. H. Engleken |
| 3. Ron Bolek | 785-2620 | 852-9-486-3141 or 415-486-3141 |
| 4. Bill Debley | 365-5418 | 20. ERDA Safety & SMI Div: Manley Wu |
| 5. Neill Ostrander | 342-8969 | 852-9-273-7963 or 415-273-7963 |
| 6. Bill Kastenberg | 889-3320 | Guard (night security) 24 hrs. |
| 7. Tony Lane | 714-549-3695 | 852-9-273-4237 or 415-273-4237 |
| 8. Environmental | 825-7147 | 21. Calif. State Health (Radiation |
| Health & Safety | 825-6995, 800-7298 | Safety) 916-322-2073 |
| 9. John Kaufman | 825-6900, 645-1849 | Joe Ward or Don Honey |
| 0. John Evraets | 475-1358 | L.A. Rep. Kim Wong 381-1348 |
| 1. Harold Brown | 776-6008 | Eves. and weekends-State Police |
| 2. UCLA Police | 35, 825-1491 | 916-445-2895 |
| 3. UCLA Physical Plant | 825-1391 | 22. Calif. Disaster (Radiation |
| 4. UCLA Campus Information | 33 | Safety) Charles Manfred, Director |
| 5. Los Angeles Police Emergency | 478-0841 | 916-421-4990 x201 |
| 6. Los Angeles Fire Dept. (Veteran) | 473-1155 | 23. NEL-PIA Liability Engineering Dept |
| 7. Los Angeles Sheriff Dept. (WLA) | 456-6652 | Nuclear Energy Liability/Property |
| 8. NRC Region V Security: | 852-9-486-3141 | Insurance Association, The |
| Doug Schuster | or 415-486-3141 | Exchange, Building 3 Loft A |
| | | Suite 323/Farmington Av/Farmington |
| | | Conn.06032 203-677-7715 |

University of California, Los Angeles
School of Engineering and Applied Science

NUCLEAR ENGINEERING LABORATORY

EMERGENCY PROCEDURE

October 1975

NEL Lab Phones

825-2040 825-2825
825-2187

Room 2567
Boelter Hall

- A. For immediate action upon observance of danger from earthquake, riot, police emergency, flood, or enemy attack, shut down reactor, secure facility and assemble in control room if possible.
- B. For immediate action upon observance of danger from nuclear hazard*, fire or explosion, proceed to D.
*If 3 out of 4 radiation alarms trip off scale (high) from an undetermined cause, this constitutes a nuclear hazard: 2 High Bay area monitors, Argon-41 and effluent monitors.
- C. If alarm in 1540 BH (subcritical and radioactive storage area) is sounding, evacuate area and proceed directly to Stop D-6.

D. PROCEED TO:

1. Scram reactor, set off alarm, announce evacuation.
2. Shut off ventilation and cooling systems.
3. Take reactor key, health physics suitcase, and available radiation instruments with you.
4. Proceed directly to Boelter Hall 2000 level patio, securing all doors behind you.
5. After gross personal contamination check, follow health physics procedures.
6. Call official personnel in order on list until relieved by one of the following:

- | | | |
|--------------------------------------|--------------------|--|
| 1. Chuck Ashbaugh | 837-6979 | 19. NRC Region V Operations |
| 2. Jack Hornor | 839-2130 | Robt. H. Engleken |
| 3. Ron Bolek | 785-2620 | 825-9-486-3141 or 415-486-3141 |
| 4. Bill Debley | 365-5418 | 20. LRDA Safety & SMI Div: Manley Wu |
| 5. Neill Ostrander | 342-8969 | 852-9-273-7963 or 415-273-7963 |
| 6. Bill Kastenber | 889-3320 | Guard (night security) 24 hrs. |
| 7. Tony Lane | 714-549-3695 | 852-9-273-4237 or 415-273-4237 |
| 8. Environmental Health & Safety | 825-7147 | 21. Calif. State Health (Radiation Safety) 916-322-2073 |
| 9. John Kaufman | 825-6995, 825-7298 | Joe Ward or Don Honey |
| 10. John Eyraets | 825-6900, 645-1849 | L.A. Rep. Jim Wong 381-1342 |
| 11. Harold Brown | 475-1358 | Eves. and weekends-State Police |
| 12. UCLA Police | 776-6008 | 916-445-2895 |
| 13. UCLA Physical Plant | 35, 825-1491 | 22. Calif. Disaster (Radiation Safety) Charles Manfred, Director |
| 14. UCLA Campus Information | 825-1391 | 916-421-4900 x201 |
| 15. Los Angeles Police Emergency | 33 | 23. NEL-PIA Liability Engineering Part |
| 16. Los Angeles Fire Dept. (Veteran) | 478-0841 | Nuclear Energy Liability/Property |
| 17. Los Angeles Sheriff Dept. (WLA) | 473-1155 | Insurance Association, The |
| 18. NRC Region V Security: | 456-6652 | Exchange Building 3 Loft A |
| Doug Schuster | 852-9-486-3141 | Suite 323/Farmington Av/Farmington |
| | or 415-486-3141 | Conn.06032 203-677-7715 |

University of California, Los Angeles
School of Engineering and Applied Science

NUCLEAR ENERGY LABORATORY

EMERGENCY PROCEDURE

October 1974

NEL Lab Phones

825-2040 825-2825
825-2187

Room 2507
Boelter Hall

A. For immediate action upon observance of danger from earthquake, riot, police emergency, flood, or enemy attack, shut down reactor, secure facility and assemble in control room if possible.

B. For immediate action upon observance of danger from nuclear hazard*, fire or explosion, proceed to D.

*If 3 out of 4 radiation alarms trip off scale (high) from an undetermined cause, this constitutes a nuclear hazard: 2 High Bay area monitors, Argon-41 and effluent monitors.

C. If alarm in 1540 BH (subcritical and radioactive storage area) is sounding, evacuate area and proceed directly to Step D-6.

D. PROCEED TO:

1. Scram reactor, set off alarm, announce evacuation.
2. Shut off ventilation and cooling systems.
3. Take reactor key, health physics suitcase, and available radiation instruments with you.
4. Proceed directly to Boelter Hall 2000 level patio, securing all doors behind you.
5. After gross personal contamination check, follow health physics procedures.
6. Call official personnel in order on list until relieved by one of the following:

- | | | |
|---------------------------------------|--------------------------|--|
| 1. Chuck Ashbaugh | 837-6979 | |
| 2. Jack Hornor | 839-2130 | |
| 3. Ron Bolek | 785-2620 | |
| 4. Bill Debley | 344-2382 | |
| 5. Neill Ostrander | 342-8969 | |
| 6. Thomas E. Hicks | 886-5327 | |
| 7. Tony Zane | (1)(714) 549-3695 | |
| 8. Environmental | 825-7147, | |
| Health & Safety | 825-6995, 825-7298 | |
| 9. John Kaufman | 825-6900 (home) 645-1849 | |
| 10. John Evraets | 475-1358 | |
| 11. Harold Brown | 776-6008 | |
| 12. UCLA Police | 35, 825-1491 | |
| 13. UCLA Physical Plant (Steam Plant) | 825-1391 | |
| 14. UCLA Campus Information | 33 | |
| 15. Los Angeles Police Emergency | 478-0841 | |
| 16. Los Angeles Fire Dept. (Veteran) | 473-1155 | |
| 17. Los Angeles Sheriff Dept. (WLA) | 456-6652 | |
| (W. Hollywood) | 278-6633 | |
| 18. AEC Region V Operations: Oakland | | |
| Security - Ralph Shannon - tieline | 852-9-273-4226 | |
| or | (1)(415) 273-4226 | |
| | | Safety Division: Robt. L. Westby |
| | | tieline - 852-9-273-7963 or |
| | | (1)(415) 273-7963 |
| | | Regulatory Operations |
| | | (incidents, etc.) Robt. H. Elken |
| | | 852-9-486-3141 or |
| | | (1)(415) 486-3141 |
| | | Guard (nighttime security) 24 hrs. |
| | | 852-9-273-4237 or |
| | | (1)(415) 273-4237 |
| | | 19. AEC Local Operations, Canoga Park |
| | | Chuck Richards 341-1000 x2774, 2776 |
| | | 20. Calif. State Health (Radiation |
| | | Safety) (1)(916) 322-2073 |
| | | Joe Ward or Don Honey |
| | | L. A. Rep. Kim Wong 381-1348 |
| | | Eves. and weekends - State Police |
| | | (1)(916) 445-2895 |
| | | 21. Calif. Disaster (Radiation Safety) |
| | | Robt. L. Vickers, Director |
| | | (1)(916) 421-4990 x201 |
| | | NOTIFY: Engineering Administration |
| | | Estelle Ratner x53144 or 56328 |