

# OAK RIDGE NATIONAL LABORATORY

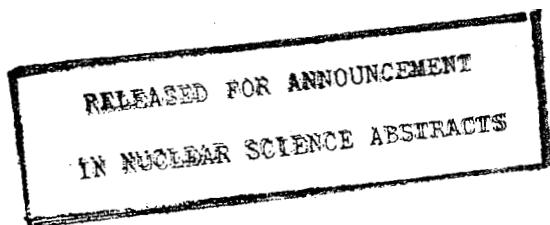
operated by  
UNION CARBIDE CORPORATION  
for the  
U.S. ATOMIC ENERGY COMMISSION

# MASTER

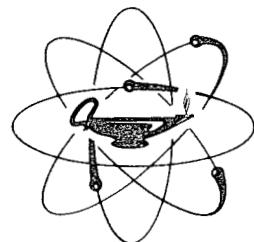
## LIST OF AEC RADIOTRISOTOPE CUSTOMERS WITH SUMMARY OF RADIOTRISOTOPE SHIPMENTS

FY 1965

Compiled by  
P. S. Baker



ISOTOPES INFORMATION CENTER



## **DISCLAIMER**

**This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency Thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.**

## **DISCLAIMER**

**Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.**

LIST OF AEC RADIOISOTOPE CUSTOMERS  
WITH SUMMARY OF RADIOISOTOPE SHIPMENTS  
FY 1965

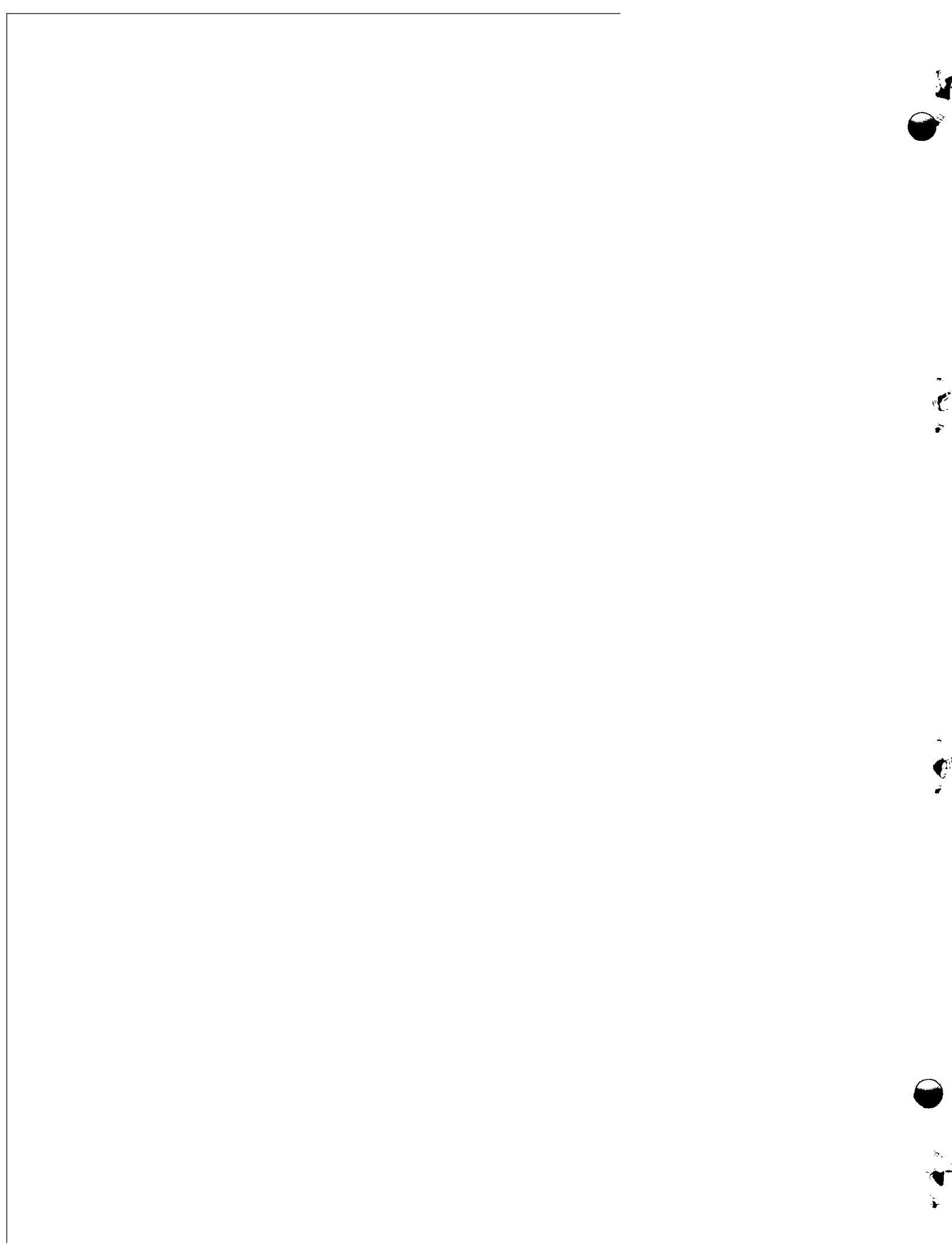
Compiled by P. S. Baker  
Isotopes Information Center

RELEASED FOR ANNOUNCEMENT  
'IN NUCLEAR SCIENCE ABSTRACTS'

MARCH 1966

OAK RIDGE NATIONAL LABORATORY  
Oak Ridge, Tennessee  
operated by  
UNION CARBIDE CORPORATION  
for the  
U. S. ATOMIC ENERGY COMMISSION

This document is  
**PUBLICLY RELEASABLE**  
*Larry E. Williams*  
Authorizing Official  
Date: 06/13/2007



## CONTENTS

Introduction .....	1
I. Alphabetical List of Customers, with Contacts and Isotopes Purchased .....	2
A. Domestic .....	2
B. Foreign.....	45
II. Alphabetical List of Isotopes, Cross-Referenced to Customer Numbers .....	56
A. Domestic .....	56
B. Foreign.....	62
III. Alphabetical List of States and Countries, Cross-Referenced to Customer Numbers .....	65
A. Domestic .....	65
B. Foreign.....	66
IV. Radioisotope Sales FY 1965 .....	68

**LIST OF AEC RADIOISOTOPE CUSTOMERS  
WITH SUMMARY OF RADIOISOTOPE SHIPMENTS  
FY 1965**

**INTRODUCTION**

This second edition of the AEC radioisotope customer list has again been prepared at the request of the Division of Isotopes Development of the Commission to present the radioisotope sales during FY 1965 by Commission facilities at Argonne National Laboratory, Brookhaven National Laboratory, Hanford Atomic Products Operation, Mound Laboratory, Oak Ridge National Laboratory, Phillips Petroleum Company, and the Savannah River Plant.

The information is divided into four sections. The first is an alphabetical list of customers that includes, as far as was practical, contacts (or purchasers), and isotopes purchased during the fiscal year. It is further subdivided into domestic and foreign customers. In order to differentiate among the suppliers, the isotopes furnished by Oak Ridge National Laboratory have no other designation. Those furnished by Argonne National Laboratory are followed by (A); those by Brookhaven National Laboratory are followed by (B); those by Hanford Atomic Products Operation, by (G); those by Mound, by (M); those by Phillips, by (P); and by Savannah River Plant, by (S). The designations CSI, SI, and SS denote, respectively, cyclotron service irradiations, reactor service irradiations, and special services (including such items as target fabrication, source encapsulation, and preparation of special chemical forms). Fission products are designated by FP.

The second section is an alphabetical list of isotopes, cross-referenced to customer numbers and again divided into the domestic and foreign categories. The third section is an alphabetical list of states and countries, also cross-referenced to customer numbers. The purpose of this is to indicate geographical concentrations of isotope users. The final section is a comprehensive table which includes an alphabetical listing of the isotopes and a breakdown into shipments, quantities, and dollars for each isotope under the domestic, foreign, and project (AEC facilities) categories. There is also included a tabulation of the total figures for each isotope.

The effect of withdrawal of the Commission from the supplying of certain isotopes will be quite apparent if the current information is compared with that presented in the FY 1964 edition (TID-21620).

## I. ALPHABETICAL LIST OF CUSTOMERS, WITH CONTACTS AND ISOTOPES PURCHASED

### A. Domestic

1. Abbott Laboratories  
1400 Sheridan Road  
North Chicago, Illinois  
L. H. Keeper, Purchasing Department  
 $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{51}\text{Cr}$ ,  $^{64}\text{Cu}$ ,  
 $^{85}\text{Kr}$ ,  $^{197}\text{Hg}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{35}\text{S}$ ,  
 $^{133}\text{Xe}$ , CSI( $^{74}\text{As}$ ,  $^{57}\text{Co}$ ), SS, SI
2. Adelphi University  
Levermore Hall  
Garden City, L.I., New York  
R. Miller, Purchasing Department  
 $^{32}\text{P}$ ,  $^{35}\text{S}$
3. Aerojet - General Corp.  
Nerva Test Operations  
Jackass Flats, Nevada  
A. R. Marshall  
 $^{132}\text{Te}$  (B)
4. Aerojet-General Corporation  
P.O. Box 1947  
Sacramento, California  
R. McLearie, Purchasing Department  
 $^{140}\text{Ba}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{131}\text{I}$ ,  $^{147}\text{Nd}$ ,  $^{86}\text{Rb}$ ,  
 $^{103}\text{Ru}$ ,  $^{90}\text{Sr}$ ,  $^{182}\text{Ta}$ ,  $^{95}\text{Zr}$ , SS
5. Aerojet General Nucleonics  
P.O. Box 77  
San Ramon, California  
 $^{238}\text{U}$
6. Aerospace Corporation  
P.O. Box 95085  
Los Angeles 45, California  
E. F. Martina  
 $^{133}\text{Ba}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{203}\text{Hg}$
7. Air Reduction Co., Inc.  
Murray Hill, New Jersey  
W. A. Keats  
 $^{85}\text{Kr}$ ,  $^{133}\text{Xe}$ , SS
8. Alabama, University of, Med. Center  
1919 Seventh Avenue, South  
Birmingham, Alabama  
J. P. Wingo, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{141}\text{Ce}$ ,  $^{36}\text{Cl}$ ,  $^{51}\text{Cr}$ ,  $^{191}\text{Os}$ ,  $^{32}\text{P}$ ,  
 $^{42}\text{K}$ ,  $^{103}\text{Ru}$ ,  $^{89}\text{Sr}$ , SI, SS
9. Alaska, University of  
College, Alaska  
C. G. Beers, Purchasing Department  
 $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$
10. Alaska, University of  
Douglas Marine Station  
Box 185  
Douglas, Alaska 99824  
 $^{60}\text{Co}$ ,  $^{59}\text{Fe}$ ,  $^{89}\text{Sr}$
11. Alcoa Research Laboratories  
P. O. Box 772  
New Kensington, Pennsylvania  
O. E. Proctor, R. P. A.  
SI (B)
12. Alfred University  
Alfred, New York  
 $^{63}\text{Ni}$ ,  $^{32}\text{P}$
13. Allis-Chalmers Manufacturing Company  
P. O. Box 512  
Milwaukee 1, Wisconsin  
E. L. Phillips, Purchasing Department  
 $^{36}\text{Cl}$ ,  $^{35}\text{S}$
14. Aluminum Company of America  
Alcoa Research Laboratories  
New Kensington, Pennsylvania  
O. E. Proctor, Purchasing Department  
 $^3\text{H}$ , SS

15. American Cyanamid Company  
Lederle Laboratories Division  
Pearl River, New York  
W. Hoffer, Senior Buyer  
 $^3\text{H}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , SS
16. American Cyanamid Company  
P. O. Box 400  
Princeton, New Jersey  
 $^3\text{H}$
17. American Cyanamid Company  
1937 West Main Street  
Stamford, Connecticut  
 $^3\text{H}$
18. American Export Isbrandtsen Lines, Inc.  
General Agent for U.S. Dept. of Commerce  
Maritime Administration  
26 Broadway  
New York, New York 10004  
 $^{131}\text{I}$ , SS
19. American Museum of Natural History  
Central Park West and 79th St.  
New York 24, New York  
A. R. Messina, Purchasing Department  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$
20. The American National Red Cross  
17th and D Streets, NW.  
Washington, D.C. 20006  
E. Lewis, Assistant General Supply Officer  
 $^{59}\text{Fe}$
21. American Nuclear Corporation  
P. O. Box 426  
Oak Ridge, Tennessee  
J. Wilde  
 $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{90}\text{Sr}$ , SS
22. Ames Atomium Inc.  
575 Middlesex Turnpike  
Billerica, Massachusetts  
J. Ferullo, Purchasing Agent  
 $^{133}\text{Ba}$ , SS
23. Ames Laboratory  
Box 1129, I.S.U. Station  
Ames, Iowa  
A. F. Voigt, Assistant Director  
 $^{152}\text{Eu}$  (P),  $^{182}\text{Ta}$  (P),  $^{183}\text{Ta}$  (P),  $^{121}\text{Te}$  (P),  
 $^{123}\text{Te}$  (P),  $^{170}\text{Tm}$  (P),  $^{169}\text{Yb}$  (P), SI (A)  
( $^{124}\text{Sb}$ ,  $^{160}\text{Tb}$ ,  $^{232}\text{U}$ ,  $^{90}\text{Y}$ )
24. Amperex Electronic Corporation  
230 Duffy Avenue  
Hicksville, Long Island, New York  
 $^{238}\text{U}$
25. Applied Nucleonics Consultants  
12328 Magnolia Boulevard  
N. Hollywood, California  
A. M. Goldstein  
 $^{137}\text{Cs}$ , SS
26. Applied Science Laboratories, Inc.  
P. O. Box 140  
State College, Pennsylvania  
R. F. Kruppa, Service Manager  
 $^{14}\text{C}$
27. Ardel Corp.  
619 Justin Avenue  
Glendale, California 91201  
E. G. Harrington, Purchasing Department  
 $^{5}\text{Kr}$
28. Argonne Cancer Research Hospital  
University of Chicago  
950 East 59 Street  
Chicago 37, Illinois  
Dr. L. H. Lanzl  
 $^{60}\text{Co}$  (P)  
Dr. Leif Sorenson  
 $^{99}\text{Mo}$  (B),  $^{99m}\text{Tc}$  (B)
29. Argonne National Laboratory  
9700 South Cass Avenue  
Argonne, Illinois 60439  
Attn: B. D. Devine  
 $^{250}\text{Bk}$ ,  $^{252}\text{Cf}$ ,  $^{165}\text{Dy}$ ,  $^{166}\text{Dy}$ ,  $^{166}\text{Ho}$ ,  $^{193}\text{Os}$ ,  
 $^{151}\text{Pm}$ ,  $^{49}\text{Sc}$ ,  $^{161}\text{Tb}$ ,  $^{119}\text{Sn}$ ,  $^{187}\text{W}$ ,  $^{175}\text{Yb}$ ,  
 $^{177}\text{Yb}$  (all isotopes intralab transfers)

- Argonne National Laboratory  
9700 South Cass Avenue  
Argonne, Illinois 60439  
R. H. Krueger  
 $^{241}\text{Am}$ ,  $^{124}\text{Sb}$ ,  $^{125}\text{Sb}$ ,  $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  
 $^{250}\text{Bk}$  (S),  $^{109}\text{Cd}$ ,  $^{115}\text{Cd}$  (P),  $^{45}\text{Ca}$ ,  $^{252}\text{Cf}$  (S)  
 $^{252}\text{Cf}$ ,  $^{141}\text{Ce}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  
 $^{165}\text{Dy}$  (S),  $^{166}\text{Dy}$  (S),  $^{181}\text{Hf}$ ,  $^{166}\text{Ho}$  (S),  $^3\text{H}$ ,  
 $^3\text{H}$  Targets,  $^{129}\text{I}$ ,  $^{131}\text{I}$ ,  $^{192}\text{Ir}$ ,  $^{55}\text{Fe}$ ,  $^{85}\text{Kt}$ ,  
 $^{203}\text{Hg}$ ,  $^{99}\text{Mo}$ ,  $^{147}\text{Nd}$ ,  $^{237}\text{Np}$ ,  $^{63}\text{Ni}$ ,  $^{95}\text{Nb}$ ,  
 $^{193}\text{Os}$  (S),  $^{32}\text{P}$ ,  $^{151}\text{Pm}$  (S),  $^{231}\text{Pa}$ ,  $^{86}\text{Rb}$ ,  
 $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  $^{49}\text{Sc}$  (S),  $^{110}\text{Ag}$ ,  $^{85}\text{Sr}$ ,  
 $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{182}\text{Ta}$ ,  $^{99}\text{Tc}$ ,  $^{161}\text{Tb}$  (S),  
 $^{204}\text{Tl}$ ,  $^{170}\text{Tm}$ ,  $^{170}\text{Tm}$  (P),  $^{119}\text{Sn}$  (S),  $^{185}\text{W}$ ,  
 $^{187}\text{W}$  (S),  $^{133}\text{Xe}$ ,  $^{175}\text{Yb}$  (S),  $^{177}\text{Yb}$  (S),  $^{91}\text{Y}$ ,  
 $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , CSI ( $^{206}\text{Bi}$ ), SI, SS
30. Argonne National Laboratory  
P. O. Box 2528  
Idaho Falls, Idaho  
F. Kirn  
 $^{122}\text{Sb}$  (P)
31. Arizona, University of  
P. O. Drawer 4100  
Tucson, Arizona  
R. E. Deal, Purchasing  
 $^{210}\text{Bi}$ ,  $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{64}\text{Cu}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  
 $^{114}\text{In}$ ,  $^{59}\text{Fe}$ ,  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{210}\text{Po}$  (M),  $^{86}\text{Rb}$ ,  
 $^{110}\text{Ag}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
32. Arkansas, University of  
Graduate Institute of Technology  
P. O. Box 3017  
Little Rock, Arkansas  
R. W. Blair, Purchasing Agent  
 $^{131}\text{I}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{35}\text{S}$   
J. Nix, Chemistry Department, Fayetteville  
SI (A)
33. Atlantic Research Corp.  
Shirley Highway and Edsall Road  
Alexandria, Virginia  
B. C. Strachan  
 $^{45}\text{Ca}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$
34. Atlas Chemical Industries, Inc.  
Valley Forge Industrial Park  
Valley Forge, Pa.  
C. B. Roden, Purchasing Agent  
 $^{85}\text{Kr}$
35. Atomic Corp. of America  
7901 San Fernando Road  
Sun Valley, California 91352  
J. P. Rips, Purchasing  
 $^{36}\text{Cl}$ ,  $^{59}\text{Fe}$ ,  $^{63}\text{Ni}$ ,  $^{106}\text{Ru}$ ,  $^{35}\text{S}$ ,  $^{204}\text{Tl}$
36. Atomics International Div.  
North American Aviation, Inc.  
P. O. Box 309  
Canoga Park, California  
T. J. Bales, Purchasing  
 $^{140}\text{Ba}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{58}\text{Co}$ ,  $^3\text{H}$ ,  $^{59}\text{Fe}$ ,  
 $^{85}\text{Kr}$ ,  $^{110}\text{Ag}$ ,  $^{85}\text{Sr}$ ,  $^{95}\text{Tc}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , SI, SS
37. Auburn University  
Auburn, Alabama  
Dr. H. Zallen, Radiological Safety Officer  
 $^{14}\text{C}$ , SS
38. Babcock and Wilcox Co.  
Atomic Energy Division  
1201 Kemper Street  
Lynchburg, Virginia 24505  
G. P. Gunn, Jr., Purchasing Agent  
 $^{137}\text{Cs}$ ,  $^{99}\text{Mo}$ ,  $^{90}\text{Sr}$ ,  $^{204}\text{Tl}$
39. Baltimore Gas and Electric Co.  
P. O. Box 1472  
Baltimore 3, Maryland  
J. W. Stout, Purchasing  
 $^{110}\text{Ag}$
40. Bartol Research Corp.  
Swarthmore, Pennsylvania  
F. A. Ernst, Purchasing Agent  
 $^{125}\text{Sb}$  CSI ( $^{127}\text{Xe}$ ), SI, SS

41. Battelle Memorial Inst.  
505 King Avenue  
Columbus, Ohio 43201  
R. Eddy, Buyer  
 $^{45}\text{Ca}$ ,  $^{131}\text{I}$ ,  $^{133}\text{I}$  (B),  $^{99}\text{Mo}$ ,  $^{110}\text{Ag}$ ,  $^{89}\text{Sr}$ ,  
 $^{35}\text{S}$ ,  $^{132}\text{Te}$  (B),  $^{133}\text{Xe}$ ,  $^{95}\text{Zr}$ , CSI ( $^{95}\text{Tc}$ ), SS  
**Battelle-Northwest - See Pacific Northwest Laboratories**
42. Baylor University  
College of Medicine  
1200 M. D. Anderson Blvd.  
Houston 25, Texas  
P. E. Riehl  
 $^{32}\text{P}$ ,  $^{99\text{m}}\text{Tc}$  (B),  $^{133}\text{Xe}$ , SS
43. Bell Telephone Laboratories, Inc.  
Murray Hill, New Jersey  
J. D. Struthers  
K. Wolfstirn  
SI (B)
44. Bell Telephone Laboratories, Inc.  
463 West Street  
New York 14, New York  
G. N. Russo  
 $^{144}\text{Ce}$ ,  $^{152-154}\text{Eu}$ ,  $^{151}\text{Gd}$ ,  $^3\text{H}$ ,  $^{59}\text{Fe}$ ,  
CSI ( $^{151}\text{Gd}$ ), SI, SS
45. Bendix Corporation  
Scintilla Division  
Sidney, New York  
C. L. Kessler, Purchasing  
 $^{137}\text{Cs}$
46. Beth Israel Hospital  
330 Brookline Avenue  
Boston, Massachusetts  
V. W. Godlesky, Purchasing Agent  
 $^{32}\text{P}$
47. Beth Israel Hospital  
10 Nathan D. Perlman Place  
New York, New York  
G. B. White, Purchasing  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ , SS
48. Bio-Rad Laboratories  
32nd and Griffin Avenue  
Richmond, California  
G. F. Abel, Sales Representative  
 $^{14}\text{C}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{55-59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
49. Birdwell Surveys  
Division of SSC  
P. O. Box 1590  
Tulsa, Oklahoma  
G. F. Moore, Purchasing  
 $^{47}\text{Ca}$ ,  $^{140}\text{Ba}$ , SS
50. The Boeing Company  
Aero-Space Division  
P. O. Box 3707  
Seattle, Washington  
D. W. Cairney, Purchasing  
 $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{35}\text{S}$ ,  $^{182}\text{Ta}$
51. The Borden Chemical Company  
Godfrey Avenue and Langdon Street  
P. O. Box 9524  
Philadelphia 24, Pennsylvania  
D. Connell, Purchasing Department  
 $^{110}\text{Ag}$
52. Boston University  
700 Commonwealth Avenue  
Boston, Massachusetts 02215  
W. Peters  
 $^{32}\text{P}$ ,  $^{89}\text{Sr}$ , CSI ( $^{84}\text{Rb}$ )
53. Bowdoin College  
Brunswick, Maine  
J. L. Howland  
 $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$
54. Bowman Gray School of Medicine  
Winston-Salem 7, North Carolina  
R. L. Witcofski  
 $^{144}\text{Ce}$
55. Boyce Thompson Institute for Plant  
Research, Inc.  
1086 No. Broadway  
Yonkers, New York  
Miss H. V. Knapp  
 $^{60}\text{Co}$ ,  $^{32}\text{P}$

56. Brandeis University  
Laboratory Supplies and Services  
415 South Street  
Waltham, Massachusetts 02154  
  
 $^{192}\text{Ir}$ ,  $^{35}\text{S}$ , CSI ( $^{22}\text{Na}$ )
57. Brigham Young University  
Provo, Utah  
  
 C. R. Peterson, Purchasing  
 $^{35}\text{S}$
58. Bristol Laboratories  
P. O. Box 657  
Syracuse 1, New York  
  
 D. L. Johnson  
  
 $^{35}\text{S}$
59. Bristol Myers Products Div.  
225 Long Avenue  
Hillside 5, New Jersey  
  
 Joanne Guttadora  
 $^{45}\text{Ca}$ ,  $^{51}\text{Cr}$ ,  $^{35}\text{S}$
60. Brookhaven National Laboratory  
Upton, L.I., New York  
  
 R. F. Keller, Buyer  
  
 $^{24}\text{Am}$ ,  $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  $^{82}\text{Br}$ ,  $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  
 $^{47}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$  (S),  $^{181}\text{Hf}$ ,  $^3\text{H}$ ,  $^{129}\text{I}$ ,  
 $^{59}\text{Fe}$ ,  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{110}\text{Ag}$ ,  $^{90}\text{Sr}$ ,  $^{99}\text{Tc}$ ,  
 $^{204}\text{Tl}$ ,  $^{95}\text{Zr}$ , CSI ( $^7\text{Be}$ ,  $^{57}\text{Co}$ ), SI (B) (Al, Sb,  
 $\text{Sb}_2\text{O}_3$ , Ar, As, Ba,  $\text{BaCO}_3$ , Br,  $^{79}\text{Br}$ ,  $^{81}\text{Br}$ ,  
 $\text{NH}_4\text{Br}$ ,  $\text{KBrO}_3$ , Cd, Ca,  $\text{CaCO}_3$ ,  $^{48}\text{CaCO}_3$ ,  
graphite,  $^{142}\text{CeO}_2$ , Cs,  $^{137}\text{Cs}$ ,  $\text{NaClO}_3$ , Cr,  
 $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$ ,  $\text{Cr}(\text{NO}_3)_3$ ,  $\text{Cr}_2(\text{SO}_4)_3$ ,  $\text{K}_2\text{CrO}_4$ ,  
Co,  $^{60}\text{Co}$ ,  $\text{Co}_2\text{O}_3$ , Cu, Cu-C, Cu-Pt-U,  $\text{DyAl}_2$ ,  
 $^{151}\text{Eu}$ ,  $^{153}\text{Eu}$ ,  $^{158}\text{Gd}$ , Au, Au-Ir,  $^{179}\text{Hf}$ , Ho,  
 $\text{H}_2\text{O}$ , In,  $\text{In}_2\text{O}_3$ ,  $^{129}\text{I}$ , Ir, Fe, Fe-Ni, Fe-Se,  
 $^{82}\text{Kr}$ ,  $^{208}\text{Pb}$ , Li,  $^6\text{LiF}$ ,  $^7\text{LiF-Mg}$ ,  $\text{Lu}_2\text{O}_3$ ,  
 $^{176}\text{Lu}$ , Mn,  $\text{KMnO}_4$ ,  $\text{HgO}$ ,  $\text{MoO}_3$ , Ni,  $^{192}\text{Os}$ ,  
 $^{196}\text{Pt}$ ,  $\text{KHC}_2\text{H}_4\text{O}_2$ ,  $\text{KNO}_3$ ,  $\text{K}_3\text{PO}_4$ ,  $^{42}\text{K}$ ,  
 $^{141}\text{Pr}$ , Rb,  $\text{RbCl}$ , Re, Ru, Sm,  $^{152}\text{Sm}$ ,  $^{154}\text{Sm}$ ,  
Sc,  $^{74}\text{Se}$ , selenohomo-cystine, Si,  $\text{SiO}_2$ ,  
glass, quartz, Na,  $\text{Na}_2\text{CO}_3$ ,  $\text{NaCl}$ ,  $\text{NaF}$ ,  $^{24}\text{Na}$ ,  
Ta,  $\text{TaCl}_5$ ,  $^{126}\text{Te}$ ,  $^{128}\text{Te}$ , TI, Th,  $^{232}\text{Th}$ ,
56. Brandeis University  
Laboratory Supplies and Services  
415 South Street  
Waltham, Massachusetts 02154  
  
 $^{192}\text{Ir}$ ,  $^{35}\text{S}$ , CSI ( $^{22}\text{Na}$ )
57. Brigham Young University  
Provo, Utah  
  
 C. R. Peterson, Purchasing  
 $^{35}\text{S}$
58. Bristol Laboratories  
P. O. Box 657  
Syracuse 1, New York  
  
 D. L. Johnson  
  
 $^{35}\text{S}$
59. Bristol Myers Products Div.  
225 Long Avenue  
Hillside 5, New Jersey  
  
 Joanne Guttadora  
 $^{45}\text{Ca}$ ,  $^{51}\text{Cr}$ ,  $^{35}\text{S}$
60. Brookhaven National Laboratory  
Upton, L.I., New York  
  
 R. F. Keller, Buyer  
  
 $^{24}\text{Am}$ ,  $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  $^{82}\text{Br}$ ,  $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  
 $^{47}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$  (S),  $^{181}\text{Hf}$ ,  $^3\text{H}$ ,  $^{129}\text{I}$ ,  
 $^{59}\text{Fe}$ ,  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{110}\text{Ag}$ ,  $^{90}\text{Sr}$ ,  $^{99}\text{Tc}$ ,  
 $^{204}\text{Tl}$ ,  $^{95}\text{Zr}$ , CSI ( $^7\text{Be}$ ,  $^{57}\text{Co}$ ), SI (B) (Al, Sb,  
 $\text{Sb}_2\text{O}_3$ , Ar, As, Ba,  $\text{BaCO}_3$ , Br,  $^{79}\text{Br}$ ,  $^{81}\text{Br}$ ,  
 $\text{NH}_4\text{Br}$ ,  $\text{KBrO}_3$ , Cd, Ca,  $\text{CaCO}_3$ ,  $^{48}\text{CaCO}_3$ ,  
graphite,  $^{142}\text{CeO}_2$ , Cs,  $^{137}\text{Cs}$ ,  $\text{NaClO}_3$ , Cr,  
 $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$ ,  $\text{Cr}(\text{NO}_3)_3$ ,  $\text{Cr}_2(\text{SO}_4)_3$ ,  $\text{K}_2\text{CrO}_4$ ,  
Co,  $^{60}\text{Co}$ ,  $\text{Co}_2\text{O}_3$ , Cu, Cu-C, Cu-Pt-U,  $\text{DyAl}_2$ ,  
 $^{151}\text{Eu}$ ,  $^{153}\text{Eu}$ ,  $^{158}\text{Gd}$ , Au, Au-Ir,  $^{179}\text{Hf}$ , Ho,  
 $\text{H}_2\text{O}$ , In,  $\text{In}_2\text{O}_3$ ,  $^{129}\text{I}$ , Ir, Fe, Fe-Ni, Fe-Se,  
 $^{82}\text{Kr}$ ,  $^{208}\text{Pb}$ , Li,  $^6\text{LiF}$ ,  $^7\text{LiF-Mg}$ ,  $\text{Lu}_2\text{O}_3$ ,  
 $^{176}\text{Lu}$ , Mn,  $\text{KMnO}_4$ ,  $\text{HgO}$ ,  $\text{MoO}_3$ , Ni,  $^{192}\text{Os}$ ,  
 $^{196}\text{Pt}$ ,  $\text{KHC}_2\text{H}_4\text{O}_2$ ,  $\text{KNO}_3$ ,  $\text{K}_3\text{PO}_4$ ,  $^{42}\text{K}$ ,  
 $^{141}\text{Pr}$ , Rb,  $\text{RbCl}$ , Re, Ru, Sm,  $^{152}\text{Sm}$ ,  $^{154}\text{Sm}$ ,  
Sc,  $^{74}\text{Se}$ , selenohomo-cystine, Si,  $\text{SiO}_2$ ,  
glass, quartz, Na,  $\text{Na}_2\text{CO}_3$ ,  $\text{NaCl}$ ,  $\text{NaF}$ ,  $^{24}\text{Na}$ ,  
Ta,  $\text{TaCl}_5$ ,  $^{126}\text{Te}$ ,  $^{128}\text{Te}$ , TI, Th,  $^{232}\text{Th}$ ,
61. Brookhaven National Laboratory Medical Department  
Upton, L.I., New York  
  
 Dr. Atkins  
 $^{99m}\text{Tc}$  (B)  
  
 Dr. Connard  
 $^{132}\text{I}$  (B)
62. Brown University  
Providence, Rhode Island 02912  
  
 R. L. Crowley  
 $^{36}\text{Cl}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{35}\text{S}$ , SS
63. Brown University  
Metals Research Laboratory  
Providence 12, Rhode Island  
  
 Professor R. Trueill  
  
SI (B)
64. Bryn Mawr College  
Bryn Mawr, Pennsylvania  
  
 J. R. Pruett  
 $^{124}\text{Sb}$ ,  $^{76}\text{As}$ ,  $^{32}\text{P}$
65. The Budd Company  
Instruments Division  
2950 Roberts Avenue  
Philadelphia, Pennsylvania  
  
 C. W. Bothwell, Jr., Purchasing Agent  
 $^{137}\text{Cs}$ , SS
66. Butler University  
College of Pharmacy  
Indianapolis, Indiana 42607  
  
 H. A. Swartz  
  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^3\text{H}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{204}\text{Tl}$ ,  
 $^{65}\text{Zn}$ , SS

67. California Inst. of Technology  
1201 E. California Blvd.  
Pasadena, California  
K. A. Jacobson  
 $^{243}\text{Am}$ ,  $^{109}\text{Cd}$ ,  $^{252}\text{Cf}$ ,  $^{143}\text{Ce}$  (P),  $^{60}\text{Co}$ ,  
 $^{165}\text{Dy}$  (P),  $^{169}\text{Er}$  (P),  $^{161}\text{Gd}$  (P),  $^{175}\text{Hf}$  (P),  
 $^{181}\text{Hf}$  (P),  $^{181}\text{Hf}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{131}\text{I}$ ,  
 $^{59}\text{Fe}$  (P),  $^{177}\text{Lu}$  (P),  $^{203}\text{Hg}$  (P),  $^{203}\text{Hg}$ ,  
 $^{193}\text{Os}$  (P),  $^{32}\text{P}$ ,  $^{106}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  $^{35}\text{S}$ ,  $^{180}\text{Ta}$  (A),  
 $^{182}\text{Ta}$  (P),  $^{160}\text{Tb}$  (P),  $^{170}\text{Tm}$  (P),  $^{121}\text{Sn}$  (P),  
 $^{169}\text{Yb}$  (P),  $^{175}\text{Yb}$  (P), CSI ( $^{183}\text{Re}$ ,  $^{179}\text{Ta}$ ),  
SI (A) ( $^{180}\text{Tm}$ ,  $^{170}\text{Tm}$ ), SS
68. California State Dept. of Public Health  
2151 Berkeley Way  
Berkeley, California  
W. J. Kurtz  
 $^{140}\text{Ba}$ ,  $^{131}\text{I}$ ,  $^{89}\text{Sr}$ ,  $^{95}\text{Zr}$
69. California State Polytechnic College  
San Luis Obispo, California  
H. B. Marquez, Purchasing Department  
 $^{131}\text{I}$ , SS
70. California, University of  
400 Sproul Hall  
Berkeley, California  
F. S. Harter, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^3\text{H}$ ,  $^{131}\text{I}$ ,  
 $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{140}\text{La}$ ,  $^{99}\text{Mo}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  
 $^{106}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  $^{75}\text{Se}$ ,  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  
 $^{65}\text{Zn}$ , SI, SS
71. California, University of  
Davis, California  
R. E. Schwartz  
 $^{133}\text{Ba}$ ,  $^{47}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{59}\text{Fe}$ ,  $^{147}\text{Nd}$ ,  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  
 $^{86}\text{Rb}$ ,  $^{75}\text{Se}$ ,  $^{35}\text{S}$ ,  $^{182}\text{Ta}$
72. California, University of  
P. O. Box 109  
La Jolla, California 92038  
B. F. Millijour  
 $^{252}\text{Cf}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , SI, SI (A)
73. California, University of  
405 Hilgard Avenue  
Los Angeles 24, California  
K. A. Weydert  
 $^{82}\text{Br}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{252}\text{Cf}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^{64}\text{Cu}$ ,  
 $^{131}\text{I}$ ,  $^{132}\text{I}$  (B),  $^{59}\text{Fe}$ ,  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  
 $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{99m}\text{Tc}$  (B), SS
74. California, University of  
P. O. Box 112  
Administration Building  
Riverside, California  
U. E. Murphy, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{141}\text{Ce}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$
75. California, University of  
San Francisco Medical Center  
San Francisco 22, California  
Edith Shoaf  
 $^{45}\text{Ca}$ ,  $^{64}\text{Cu}$ ,  $^3\text{H}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  
 $^{75}\text{Se}$ ,  $^{35}\text{S}$ , SS
76. California, University of  
Santa Barbara, California  
E. D. Harmer, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Ca}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  
 $^{90}\text{Sr}$ ,  $^{65}\text{Zn}$ , SI
77. California, University of  
Lawrence Radiation Laboratory  
Berkeley, California  
W. B. Reynolds, Business Manager  
 $^{24}\text{Am}$ ,  $^{122}\text{Sb}$ ,  $^{124}\text{Sb}$ ,  $^{125}\text{Sb}$ ,  $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  
 $^{249}\text{Bk}$  (S),  $^{109}\text{Cd}$ ,  $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{250}\text{Cf}$  (S),  
 $^{251}\text{Cf}$  (S),  $^{252}\text{Cf}$  (S),  $^{253}\text{Cf}$  (S),  $^{254}\text{Cf}$  (S),  
 $^{14}\text{C}$ ,  $^{14}\text{C}$  (S),  $^{141}\text{Ce}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{51}\text{Cr}$ ,  
 $^{244}\text{Cm}$  (S),  $^{245}\text{Cm}$  (S),  $^{246}\text{Cm}$  (S),  $^{247}\text{Cm}$  (S),  
 $^{248}\text{Cm}$  (S),  $^{254}\text{Es}$  (S),  $^{255}\text{Es}$  (S),  $^{169}\text{Er}$  (P),  
 $^{152-154}\text{Eu}$ ,  $^{254}\text{Fm}$  (S),  $^{255}\text{Fm}$  (S),  $^{257}\text{Fm}$  (S),  
 $^{198}\text{Au}$ ,  $^{199}\text{Au}$ ,  $^{181}\text{Hf}$ ,  $^3\text{H}$ ,  $^{114}\text{In}$ ,  $^{129}\text{I}$ ,  $^{131}\text{I}$ ,  
 $^{192}\text{Ir}$ ,  $^{59}\text{Fe}$ ,  $^{177}\text{Lu}$  (P),  $^{203}\text{Hg}$ ,  $^{237}\text{Np}$ ,  $^{63}\text{Ni}$ ,  
 $^{95}\text{Nb}$ ,  $^{191}\text{Os}$ ,  $^{32}\text{P}$ ,  $^{197}\text{Pt}$  (P),  $^{143}\text{Pr}$ ,  $^{231}\text{Pa}$ ,  
 $^{186}\text{Re}$ ,  $^{86}\text{Rb}$ ,  $^{106}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  $^{75}\text{Se}$ ,  $^{110}\text{Ag}$ ,  
 $^{110}\text{Ag}$  (P),  $^{24}\text{Na}$ ,  $^{87m}\text{Sr}$  (B),  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  
 $^{182}\text{Ta}$ ,  $^{182}\text{Ta}$  (S),  $^{99}\text{Tc}$ ,  $^{99m}\text{Tc}$  (B),  $^{160}\text{Tb}$  (S),  
 $^{204}\text{Tl}$ ,  $^{170}\text{Tm}$  (P),  $^{170}\text{Tm}$ ,  $^{113}\text{Sn}$ ,  $^{185}\text{W}$ ,  
 $^{185}\text{W}$  (P),  $^{187}\text{W}$ ,  $^{133}\text{Xe}$ ,  $^{91}\text{Y}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , FP,  
SS (Targets)

78. California, University of  
Lawrence Radiation Laboratory  
End of East Avenue  
Livermore, California  
Attn: S. Chin  
 $^{37}\text{Ar}$  (S),  $^{54}\text{Cr}$  (S),  $^{255}\text{Es}$  (S),  $^{18}\text{Hf}$  (S),  
 $^{59}\text{Fe}$  (S),  $^{177}\text{Lu}$  (S),  $^{177m}\text{Lu}$  (S),  $^{42}\text{K}$  (S),  
 $^{193}\text{Os}$  (S),  $^{32}\text{P}$  (S),  $^{210}\text{Po}$  (M),  $^{188}\text{Re}$  (S),  
 $^{189}\text{W}$  (S),  $^{125}\text{Xe}$  (S),  $^{127}\text{Xe}$  (S),  $^{175}\text{Yb}$  (S),  
 $^{177}\text{Yb}$  (S), SI (A) ( $^{236}\text{U}$ )
79. California, University of  
Los Alamos Scientific Lab.  
P. O. Box 1663  
Los Alamos, New Mexico  
P. M. Petersen  
A. J. Patrick  
 $^{124}\text{Sb}$ ,  $^{140}\text{Ba}$ ,  $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  
 $^{114}\text{In}$ ,  $^{131}\text{I}$ ,  $^{132}\text{I}$  (B),  $^{203}\text{Hg}$ ,  $^{99}\text{Mo}$ ,  $^{147}\text{Nd}$ ,  
 $^{95}\text{Nb}$ ,  $^{32}\text{P}$ ,  $^{143}\text{Pr}$ ,  $^{147}\text{Pm}$ ,  $^{231}\text{Pa}$ ,  $^{86}\text{Rb}$ ,  
 $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$ ,  $^{110}\text{Ag}$ ,  $^{111}\text{Ag}$ ,  $^{85}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  
 $^{182}\text{Ta}$ ,  $^{99}\text{Tc}$ ,  $^{132}\text{Te}$  (B),  $^{185}\text{W}$ ,  $^{133}\text{Xe}$ ,  
 $^{90}\text{Y}$  (P),  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , CSI ( $^{205}\text{Bi}$ ), SI, SS
80. Calvin College  
1331 Franklin Street, S.E.  
Grand Rapids, Michigan 49506  
T. P. Dirkse  
 $^{110}\text{Ag}$
81. Campbell Soup Company  
P. O. Box 768  
Camden 1, New Jersey  
J. R. Morris  
32P
82. Carnegie Institute of Technology  
Schenley Park  
Pittsburgh 13, Pennsylvania  
J. D. Sands  
 $^{76}\text{As}$ ,  $^{82}\text{Br}$ ,  $^{115}\text{Cd}$ ,  $^{115m}\text{Cd}$ ,  $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  
 $^{72}\text{Ga}$ ,  $^{198}\text{Au}$ ,  $^{181}\text{Hf}$ ,  $^{131}\text{I}$ ,  $^{133}\text{I}$  (B),  $^{197}\text{Hg}$ ,  
 $^{203}\text{Hg}$ ,  $^{95}\text{Nb}$ ,  $^{32}\text{P}$ ,  $^{106}\text{Ru}$ ,  $^{204}\text{Tl}$ , Si, Si (A),  
SS
83. Carnegie Institution of Washington  
Genetics Research Unit  
Cold Spring Harbor, Long Island, New York  
B. Bocskay  
 $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{s}$
84. Carroll College  
Helena, Montana  
L. G. Walchuk, Purchasing Agent  
32P
85. Case Institute of Technology  
10900 Euclid Avenue  
Cleveland, Ohio  
F. Miraldi  
 $^3\text{H}$ ,  $^{24}\text{Na}$ , SS
86. Catholic University of America  
104 McCort-Ward Hall  
Washington, D.C. 20017  
D. Braungart  
 $^{90}\text{Y}$
87. Central Washington State College  
Ellensburg, Washington  
 $^{60}\text{Co}$
88. Charles F. Kettering Research Laboratory  
150 East South College Street  
Yellow Springs, Ohio  
J. C. Crawford  
 $^{32}\text{P}$
89. Charles Pfizer and Company, Inc.  
235 East 42 Street  
New York, New York  
32P
90. Chemagro Corporation  
Box 4913, Station F  
Hawthorn Road  
Kansas City 20, Missouri  
J. F. Delancey  
 $^{14}\text{C}$ ,  $^{32}\text{P}$
91. Chemical Separations Corporation  
101 Midway Lane  
Oak Ridge, Tennessee  
 $^{137}\text{Cs}$
92. Chemstrand Research Center, Inc.  
P. O. Box 731  
Durham, North Carolina  
W. A. Beard, Buyer  
 $^{124}\text{Sb}$ ,  $^{59}\text{Fe}$ ,  $^{113}\text{Sn}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$

93. ChemTrac Corporation  
33 University Road  
Cambridge, Massachusetts  
J. C. Leak  
 $^{125}\text{Sb}$ ,  $^{109}\text{Cd}$ ,  $^{36}\text{Cl}$ ,  $^{198}\text{Au}$ ,  $^3\text{H}$ ,  $^{59}\text{Fe}$ ,  $^{147}\text{Pm}$ ,  
 $^{89}\text{Sr}$ ,  $^{65}\text{Zn}$ , SS
94. Chevron Research Company  
576 Standard Avenue  
Richmond, California  
R. M. Hoyt  
 $^{124}\text{Sb}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{198}\text{Au}$ ,  $^{46}\text{Sc}$ ,  $^{35}\text{S}$ ,  
 $^{95}\text{Zr}$ , SI, SI (B)
95. Chicago, University of  
5801 S. Ellis Avenue  
Chicago, Illinois 60637  
E. H. Wilkens  
 $^{47}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{36}\text{Cl}$ ,  $^{64}\text{Cu}$ ,  $^{198}\text{Au}$ ,  $^{131}\text{I}$ ,  
 $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{204}\text{Tl}$ ,  $^{113}\text{Sn}$ ,  
SI, SI (A) ( $^{51}\text{Cr}$ ,  $^{107}\text{Pd}$ ,  $^{90}\text{Y}$ )
96. Chicago Wesley Memorial Hospital  
250 East Superior Street  
Chicago, Illinois 60611  
J. D. Dempsey, Purchasing Agent  
 $^{47}\text{Ca}$ ,  $^{99m}\text{Tc}$  (B)
97. Cincinnati, University of  
Cincinnati, Ohio 45221  
P. J. Carson, Jr.  
 $^{45}\text{Ca}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{203}\text{Hg}$
98. Cincinnati Milling Machine Company  
Research Department 47-B  
Cincinnati, Ohio 45209  
Marko Paliobagis  
SI (B)
99. The City College  
136 Street and Convent Avenue  
New York, New York  
H. Rudner  
 $^{55}\text{Fe}$
100. Clark University  
Department of Chemistry  
Worcester 10, Massachusetts  
T. T. Sugihara  
 $^{110}\text{Ag}$
101. Clemson University  
Clemson, South Carolina 29631  
E. S. Liberty, Director of Purchasing  
 $^{32}\text{P}$ ,  $^{65}\text{Zn}$
102. Cleveland Clinic Foundation  
2020 E. 93rd Street  
Cleveland 6, Ohio  
Mr. Widrnan, Purchasing  
 $^{45}\text{Ca}$
103. Cleveland Metropolitan General Hospital  
3395 Scranton Road  
Cleveland 9, Ohio  
Dr. B. M. Dobyns  
 $^{131}\text{I}$
104. University Hospitals of Cleveland  
2065 Adelbert Road  
Cleveland 6, Ohio  
Dr. O. H. Pearson  
 $^{47}\text{Ca}$ ,  $^{85}\text{Sr}$ , SI, SS
105. College of St. Thomas  
310 Albertus Magnus  
St. Paul, Minnesota 55101  
Attn: W. D. Larson  
 $^{89}\text{Sr}$
106. Colorado School of Mines  
Research Foundation, Inc.  
P. O. Box 112  
Golden, Colorado 80402  
F. L. Smith  
 $^{152-154}\text{Eu}$ ,  $^{55-59}\text{Fe}$ ,  $^{95}\text{Nb}$ , SI (A)
107. Colorado, University of  
Boulder, Colorado  
Mrs. Dori Bonertz, Buyer  
 $^{133}\text{Ba}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$

108. Colorado, University of  
Medical Center  
Denver, Colorado  
Dr. A. J. Aikawa  
 $^{28}\text{Mg}$  (B)
109. Colorado State University  
Fort Collins, Colorado  
E. B. McCall  
 $^{134}\text{Cs}$ ,  $^{137}\text{Cs}$ ,  $^{64}\text{Cu}$ ,  $^{32}\text{P}$ ,  $^{46}\text{Sc}$
110. Columbia University  
Pupin Building  
538 W. 120 Street  
New York 27, New York  
P. M. Lorio  
 $^{82}\text{Br}$ , CSI (B) (Ho)
111. Columbia University  
Government Contract Division  
Box 6, Low Library  
New York 27, New York  
R. N. Jenkins  
 $^{37}\text{Ar}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^3\text{H}$ ,  $^{131}\text{I}$ ,  
 $^{85}\text{Kr}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{35}\text{S}$ , SS
112. The Connecticut Agr. Exper. Station  
P. O. Box 1106  
New Haven, Connecticut 06504  
I. Zelitch  
 $^{137}\text{Cs}$ , SS
113. Connecticut, University of  
Storrs, Connecticut  
H. V. Coontz  
 $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{89}\text{Sr}$
114. Consolidated Electrodynamics Corporation  
360 North Sierra Madre Villa  
Pasadena, California 91109  
R. Lomax  
 $^{85}\text{Kr}$
115. Consolidation Coal Company  
Research and Development Division  
Library, Pennsylvania  
P. M. Yavorsky  
 $^{131}\text{I}$
116. Continental Can Company  
7622 S. Racine Avenue  
Chicago, Illinois 60620  
E. H. Manuel, Radiological Safety Officer  
~~32P~~
117. Continental Oil Company  
Ponca City, Oklahoma 74602  
J. H. Murphy, Buyer  
 $^{14}\text{C}$ ,  $^3\text{H}$ ,  $^{85}\text{Kr}$ ,  $^{35}\text{S}$ , SS
118. Cook County Hospital  
1903 W. Harrison Street  
Chicago 12, Illinois  
Dr. I. F. Hummon  
 $^{82}\text{Br}$ ,  $^{35}\text{S}$
119. Cornell University  
New York State College of Agriculture  
and Veterinary College  
160 Day Hall  
Ithaca, New York  
R. Metz  
 $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{141}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  
 $^{181}\text{Hf}$ ,  $^{114}\text{In}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{191}\text{Os}$ ,  $^{32}\text{P}$ ,  $^{85}\text{Sr}$ ,  
 $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{182}\text{Ta}$ ,  $^{204}\text{Tl}$ ,  $^{185}\text{W}$ ,  $^{91}\text{Y}$ , SI
120. Cornell University Medical College  
1300 York Avenue  
New York; New York 10021  
Dr. H. Hempling  
Dr. Helena Gilder  
 $^{42}\text{K}$  (B)
121. Corning Glass Works  
Houghton Park  
Corning, New York  
H. M. Garfinkel  
 $^{45}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{110}\text{Ag}$
122. Dallas, University of  
University of Dallas Station, Texas 75061  
A. F. Reid  
 $^{36}\text{Cl}$ ,  $^{24}\text{Na}$

123. Dartmouth College  
Silsby Hall  
Hanover, New Hampshire 03755  
J. H. Copenhaver  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ , SS
124. Davidson College  
Davidson, North Carolina  
Dr. W. T. Lammers  
 $^{32}\text{P}$
125. Dayton, University of  
Dayton, Ohio 45409  
D. R. Geiger  
 $^{14}\text{C}$ ,  $^{32}\text{P}$
126. Denison University  
Granville, Ohio 43023  
A. M. Dewey  
 $^{131}\text{I}$ ,  $^{32}\text{P}$
127. Denver, University of  
University Park  
Denver, Colorado 80210  
E. R. Guthrie, Purchasing Officer  
 $^{244}\text{Cm}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$
128. DePaul University  
25 East Jackson Blvd.  
Chicago, Illinois 60604  
R. J. Neu  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$
129. Detroit, University of  
4001 West McNichols Road  
Detroit 21, Michigan  
Dr. A. Szutka  
 $^{198}\text{Au}$ ,  $^{131}\text{I}$
130. Dow Chemical Company  
P. O. Box 191  
Midland, Michigan  
V. C. Richards  
 $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  $^{72}\text{Ga}$ ,  
 $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{28}\text{Mg}$  (B),  $^{197}\text{Hg}$ ,  $^{203}\text{Hg}$ ,  $^{99}\text{Mo}$ ,  
 $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{147}\text{Pm}$ ,  $^{86}\text{Rb}$ ,  $^{153}\text{Sm}$ ,  $^{24}\text{Na}$ ,  
 $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$ , SS
131. The Dow Chemical Company  
P. O. Box 351  
Pittsburg, California  
 $^{14}\text{C}$ ,  $^{86}\text{Rb}$
132. The Dow Chemical Company  
Box 150  
Plaquemine, Louisiana  
 $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{197}\text{Hg}$ ,  $^{203}\text{Hg}$ ,  $^{65}\text{Zn}$
133. The Dow Chemical Company  
Rocky Flats Division  
P. O. Box 888  
Golden, Colorado 80402  
 $^{241}\text{Am}$ ,  $^{237}\text{Np}$ ,  $^{42}\text{K}$ ,  $^{24}\text{Na}$
134. Downstate Medical Center  
Brooklyn, New York  
 $^{28}\text{Mg}$  (B)
135. Duke University  
Durham, North Carolina  
J. E. Doxey  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  
 $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  $^{133}\text{Xe}$
136. Duke University Hospital  
Durham, North Carolina  
Dr. Pircher  
Dr. P. Horowicz  
 $^{132}\text{I}$  (B),  $^{42}\text{K}$  (B),  $^{24}\text{Na}$  (B),  $^{87\text{m}}\text{Sr}$  (B),  
 $^{99\text{m}}\text{Tc}$  (B)
137. Dunbarton College of Holy Cross  
2935 Upton Street, N.W.  
Washington, D.C. 20008  
Sister Barbara Marie, Purchasing Director  
 $^{90}\text{Sr}$
138. E. I. du Pont de Nemours and Company  
Savannah River Plant  
Aiken, South Carolina 29802  
L. R. Bailey, Purchasing  
 $^{140}\text{Ba}$ ,  $^{252}\text{Cf}$  (S),  $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  $^{36}\text{Cl}$ ,  
 $^{244}\text{Cm}$  (S),  $^{152-154}\text{Eu}$ ,  $^{131}\text{I}$ ,  $^{192}\text{Ir}$ ,  $^{55}\text{Fe}$ ,  
 $^{59}\text{Fe}$ ,  $^{140}\text{La}$ ,  $^{203}\text{Hg}$ ,  $^{237}\text{Np}$ ,  $^{237}\text{Np}$  (S),  $^{95}\text{Nb}$ ,  
 $^{32}\text{P}$ ,  $^{210}\text{Po}$  (S),  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  
 $^{46}\text{Sc}$  (S),  $^{110}\text{Ag}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{204}\text{Tl}$ ,  
 $^{204}\text{Tl}$  (S),  $^{170}\text{Tm}$ ,  $^{170}\text{Tm}$  (S),  $^{171}\text{Tm}$  (S),  
 $^{113}\text{Sn}$ ,  $^{91}\text{Y}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , SI, SS

139. E. I. du Pont de Nemours and Company  
Wilmington 98, Delaware  
 $^{36}\text{Cl}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$
140. Duquesne Light Company  
435 Sixth Avenue  
Pittsburgh, Pennsylvania 15219  
D. E. Nesbit, Purchasing Agent  
 $^{60}\text{Co}$
141. Duval Corporation  
P. O. Box 38  
Sahuarita, Arizona  
F. C. Hoogerwerf  
 $^{137}\text{Cs}$
142. Dynatomics, Inc.  
180 Mills St., N.W.  
Atlanta, Georgia 30313  
B. M. Bowen  
 $^{110}\text{Ag}$
143. East Carolina College  
Greenville, North Carolina  
F. W. Eller  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$
144. Eastern Pennsylvania Psychiatric Institute  
Henry Ave. and Abbottsford Road  
Philadelphia, Pennsylvania 19129  
Dr. R. E. Schultz, Business Administrator  
 $^{42}\text{K}$
145. Eastman Kodak Company  
Kodak Park Works  
Rochester, New York 14650  
E. P. Kron  
 $^{144}\text{Ce}$ ,  $^{110}\text{Ag}$
146. Eberline Instrument Corp.  
P. O. Box 279  
Santa Fe, New Mexico  
G. Salazar  
 $^{144}\text{Ce}$
147. Economics Laboratory, Inc.  
320 Guardian Building  
St. Paul, Minnesota 55101  
E. Beiglund  
 $^{45}\text{Ca}$ ,  $^{59}\text{Fe}$
148. Edgerton, Germeshausen and Grier, Inc.  
95 Brookline Avenue  
Boston 15, Massachusetts  
J. G. Kewer  
 $^{140}\text{Ba}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{131}\text{I}$ ,  $^{63}\text{Ni}$ ,  $^{106}\text{Ru}$ ,  
 $^{90}\text{Sr}$ ,  $^{95}\text{Zr}$
149. Edgerton, Germeshausen and Grier, Inc.  
700 Becknell Road  
Goleta, California  
 $^{140}\text{Ba}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{131}\text{I}$ ,  $^{106}\text{Ru}$ ,  $^{90}\text{Sr}$ ,  
 $^{95}\text{Zr}$
150. Eitel-McCullough, Inc.  
301 Industrial Way  
San Carlos, California  
D. L. Rogers, Purchasing Agent  
 $^{85}\text{Kr}$
151. Elgin State Hospital  
Elgin, Illinois 60121  
Dr. E. S. Klein  
 $^{32}\text{P}$
152. Emory University  
Atlanta, Georgia 30322  
C. W. Hayes, Director of Purchases  
 $^{133}\text{Ba}$ ,  $^{36}\text{Cl}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{110}\text{Ag}$ ,  $^{35}\text{S}$ ,  
 $^{99m}\text{Tc}$  (B)
153. Eon Corporation  
175 Pearl Street  
Brooklyn 1, New York  
M. Youdin  
 $^{241}\text{Am}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{99}\text{Tc}$
154. Evans Research & Development Corporation  
250 E. 43rd Street  
New York, New York 10017  
F. I. Hussey, Buyer  
SI (B)

155. Evansville College  
 P. O. Box 329  
 Evansville, Indiana 47704  
 D. R. Harbison, Buyer  
 $^{36}\text{Cl}$ ,  $^{63}\text{Ni}$
156. Fairchild Semiconductor  
 P. O. Box 790  
 Mountain View, California  
 L. R. Swasey, Jr., Purchasing  
 $^{85}\text{Kr}$
157. Florida State Board of Health  
 Oslo Road  
 P. O. Box 308  
 Vero Beach, Florida  
 R. P. Dow  
 $^{32}\text{P}$
158. Florida State University  
 Tallahassee, Florida  
 W. R. Beyer  
 $^{252}\text{Cf}$ ,  $^{60}\text{Co}$ ,  $^{244}\text{Cm}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{24}\text{Na}$ ,  
 $^{90}\text{Sr}$ ,  $^{35}\text{S}$ , SS
159. Florida, University of  
 Gainesville, Florida  
 B. G. Dunavant  
 $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{252}\text{Cf}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  
 $^{181}\text{Hf}$ ,  $^{129}\text{I}$ ,  $^{131}\text{I}$ ,  $^{55-59}\text{Fe}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  
 $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{75}\text{Se}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$ , FP, SI
160. Florida, University of  
 J. Hillis Miller Health Center  
 Gainesville, Florida  
 B. G. Dunavant  
 SI (B)
161. Ford Motor Company  
 21500 Oakwood Boulevard  
 Dearborn, Michigan  
 L. I. Webb, Senior Buyer  
 $^{45}\text{Ca}$ ,  $^{192}\text{Ir}$ ,  $^{28}\text{Mg}$  (B),  $^{203}\text{Hg}$ ,  
 (SI (A) ( $^{105}\text{Ag}$ ))
162. Fordham University  
 East Fordham Road  
 Bronx, New York 10458  
 Dr. Michael Cefola - Chemistry Department  
 SI (B)
163. Frigidaire Division  
 General Motors Corporation  
 Dayton, Ohio  
 J. T. Heavin, Purchasing Agent  
 $^{85}\text{Kr}$
164. Fundamental Methods Associates  
 Incorporated  
 31 Union Square West  
 New York 3, New York  
 M. S. Cohen  
 SI, SS
165. Geigy Chemical Corporation  
 Saw Mill River Road  
 Ardsley, New York  
 D. P. Ryskiewich  
 $^{14}\text{C}$
166. Gem Irradiation Laboratories, Inc.  
 580 Fifth Avenue  
 New York 36, New York  
 N. Levko  
 SI (B)
167. General Atomic  
 A Division of General Dynamics  
 Corporation  
 P. O. Box 608  
 San Diego 12, California  
 Miss Alice Thomas, Purchasing  
 $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{140}\text{La}$ ,  
 $^{99}\text{Mo}$ ,  $^{95}\text{Nb}$ ,  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  $^{153}\text{Sm}$ ,  $^{24}\text{Na}$ ,  
 $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{182}\text{Ta}$ ,  $^{133}\text{Xe}$ ,  $^{91}\text{Y}$ ,  $^{95}\text{Zr}$
168. General Dynamics  
 Fort Worth, Texas  
 J. Barnard  
 SI (A) ( $^{140}\text{La}$ )
169. General Dynamics Corporation  
 P. O. Box 1708  
 San Diego, California  
 L. A. Chirichetti  
 $^{86}\text{Rb}$ , SI, SS

170. General Electric Company  
1495 Fillmore Avenue  
Buffalo, New York 14211  
F. J. Feller  
<sup>85</sup>Kr
171. General Electric Company  
21800 Tungsten Road  
Cleveland, Ohio 44117  
M. Coates  
<sup>3</sup>H, <sup>131</sup>I, <sup>85</sup>Kr, SS
172. General Electric Company  
P. O. Box 100  
Richland, Washington 99352  
FP (B)
173. General Electric Company  
P. O. Box 254  
San Jose, California  
J. G. Jorgenson  
<sup>241</sup>Am, <sup>133</sup>Ba, <sup>137</sup>Cs, <sup>147</sup>Nd, <sup>237</sup>Np, <sup>32</sup>P,  
<sup>110</sup>Ag, <sup>99</sup>Tc, <sup>238</sup>U, SS
174. General Electric Company  
The Knolls, P. O. Box 1088  
Schenectady, New York  
R. C. Dawes, Manager  
<sup>199</sup>Au, <sup>114</sup>In, <sup>46</sup>Sc, <sup>75</sup>Se, <sup>110</sup>Ag, <sup>111</sup>Ag,  
<sup>99</sup>Tc, <sup>91</sup>Y, SI (B), SS
175. General Electric Company  
Building No. 7  
Electronics Park Laboratory  
Syracuse, New York  
M. M. Magnarelli, Buyer  
<sup>85</sup>Kr
176. General Electric Company  
\*General Electric Drive  
Waynesboro, Virginia  
B. S. Thayer  
<sup>85</sup>Kr
177. General Electric Co.  
Hanford Atomic Products Operation  
Richland, Washington  
<sup>28</sup>Mg (B)
178. General Electric Company  
Nuclear Materials and Propulsion Operation  
P. O. Box 15132  
Cincinnati, Ohio 45215  
F. E. Knapp, Purchasing Agent  
<sup>60</sup>Co, <sup>3</sup>H, <sup>3</sup>H Targets, <sup>85</sup>Kr, <sup>133</sup>Xe,  
CSI (<sup>57</sup>Co), SI, SS
179. General Electric Company  
Pinellas Peninsula Plant  
P. O. Box 11508  
St. Petersburg, Florida  
A. D. Seabury, Buyer  
<sup>85</sup>Kr
180. General Nuclear, Inc.  
6740 Telean  
Houston, Texas 77034  
W. Peebler  
<sup>109</sup>Cd, <sup>137</sup>Cs, <sup>147</sup>Pm, SS
181. General Radioisotope Processing Company  
3086 Claremont Avenue  
Berkeley, California  
H. W. Patterson, President  
<sup>125</sup>Sb, <sup>133</sup>Ba, <sup>109</sup>Cd, <sup>47</sup>Ca, <sup>144</sup>Ce, <sup>36</sup>Cl,  
<sup>60</sup>Co, <sup>198</sup>Au, <sup>131</sup>I, <sup>59</sup>Fe, <sup>85</sup>Kr, <sup>203</sup>Hg,  
<sup>99</sup>Mo, <sup>95</sup>Nb, <sup>32</sup>P, <sup>46</sup>Sc, <sup>110</sup>Ag, <sup>24</sup>Na, <sup>90</sup>Sr,  
<sup>35</sup>S, <sup>204</sup>Tl, <sup>113</sup>Sn, <sup>95</sup>Zr
182. Georgetown University Hospital  
3800 Reservoir Road, N.W.  
Washington 7, D.C.  
Dr. F. T. Brayer  
<sup>124</sup>Sb, <sup>115</sup>Cd, <sup>47</sup>Ca, <sup>60</sup>Co, <sup>64</sup>Cu, <sup>198</sup>Au,  
<sup>59</sup>Fe, <sup>28</sup>Mg (B), <sup>63</sup>Ni, <sup>86</sup>Rb, <sup>111</sup>Ag, <sup>24</sup>Na,  
<sup>89</sup>Sr, <sup>113</sup>Sn, <sup>65</sup>Zn
183. Georgia Institute of Technology  
225 North Avenue, NW.  
Atlanta, Georgia  
R. L. Zimmerman, Radiation Safety Officer  
<sup>124</sup>Sb, <sup>133</sup>Ba, <sup>140</sup>Ba, <sup>36</sup>Cl, <sup>60</sup>Co, <sup>181</sup>Hf,  
<sup>203</sup>Hg, <sup>110</sup>Ag, <sup>170</sup>Tm, <sup>113</sup>Sn, <sup>91</sup>Y, <sup>95</sup>Zr, SI
184. Georgia Institute of Technology  
Nuclear Research Center  
Atlanta, Georgia  
M. E. McLain, Jr.  
SI (B)

185. Georgia, University of  
Athens, Georgia  
F. E. Johnston, Jr.  
 $^{82}\text{Br}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
186. Giannini Controls Corp.  
1600 S. Mountain Avenue  
Duarte, California  
A. L. Alfeld, Purchasing Agent  
 $^{144}\text{Ce}$ ,  $^{85}\text{Kr}$ , SS
187. The Glidden Company  
3901 Hawkins Point Road  
Baltimore 26, Maryland  
C. E. Crompton, Director of Research  
 $^{59}\text{Fe}$ ,  $^{95}\text{Nb}$
188. Goodyear Tire and Rubber Co.  
1144 E. Market Street  
Akron 16, Ohio  
G. M. Larsen  
 $^{35}\text{S}$ ,  $^{65}\text{Zn}$
189. Goucher College  
Towson, Baltimore 4, Maryland  
Helen M. Habermann  
 $^{32}\text{P}$
190. Grace New Haven Community Hospital  
P. O. Box 1001  
New Haven 4, Connecticut  
J. E. Corrigan, Buyer  
 $^{186}\text{Re}$
191. Grady Memorial Hospital  
Atlanta, Georgia  
 $^{99m}\text{Tc}$  (B)
192. Grumman Aircraft Engineering Corporation  
Bethpage, L.I., New York  
M. D'Agostino  
 $^{51}\text{Cr}$ ,  $^{3}\text{H}$ ,  $^{3}\text{H}$  Targets
193. Gulf Research and Development Co.  
P. O. Drawer 2038  
Pittsburgh, Pa. 15230  
N. C. Maranowski, Buyer  
 $^{182}\text{Ta}$
194. Hahnemann Medical College & Hospital  
230 North Broad Street  
Philadelphia, Pennsylvania  
Dr. M. J. Boyd  
35 s
195. Halliburton Company  
Duncan, Oklahoma  
R. G. Mihram  
 $^{60}\text{Co}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , SS
196. Hampton Institute  
Hampton, Virginia  
D. S. Lewis  
 $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$   
Hanford Atomic Products Operation  
(See General Electric Company)
197. Harper Hospital  
3825 Brush Street  
Detroit, Michigan 48201  
V. M. Farneti, Purchasing Agent  
CSI ( $^{84}\text{Rb}$ )
198. Hartwick College  
Oneonta, New York  
P. R. Shilling  
 $^{131}\text{I}$ ,  $^{32}\text{P}$
199. Harvard Biology Laboratory  
Cambridge, Massachusetts  
E. Lenhoff  
 $^{28}\text{Mg}$  (B)
200. Harvard University  
75 Mount Auburn Street  
Cambridge 38, Massachusetts  
P. S. Mullen  
 $^{45}\text{Ca}$ ,  $^{3}\text{H}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ , SS
201. Hastings Radiochemical Works  
Division of William Wayne Electronics, Inc.  
5827 Lyndhurst Drive  
Houston, Texas  
 $^{241}\text{Am}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{203}\text{Hg}$ ,  $^{46}\text{Sc}$ ,  $^{89}\text{Sr}$ ,  $^{65}\text{Zn}$ ,  
 $^{95}\text{Zr}$

202. Hawaii, University of  
Honolulu, Hawaii 96822  
H. J. Roes, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
203. Hawaii Marine Laboratory  
University of Hawaii  
Honolulu, Hawaii  
 $^{28}\text{Mg}$  (B)
204. Hazleton-Nuclear Science Corp.  
4062 Fabian Way  
Palo Alto, California  
D. C. Lawrence  
 $^{243}\text{Am}$ ,  $^{45}\text{Ca}$ ,  $^{60}\text{Co}$ ,  $^{244}\text{Cm}$ ,  $^{131}\text{I}$ ,  $^{203}\text{Hg}$ ,  
 $^{63}\text{Ni}$ ,  $^{90}\text{Sr}$ ,  $^{99}\text{Tc}$ , FP
205. Henry Ford Hospital  
2799 West Grand Boulevard  
Detroit 2, Michigan  
L. Preuss  
 $^{131}\text{I}$ ,  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{90}\text{Sr}$ ,  $^{99}\text{Tc}$ ,  $^{204}\text{Tl}$ , SI, SS
206. Highland View Cuyahoga County Hospital  
3901 Ireland Drive  
Cleveland 22, Ohio  
Dr. J. P. Storaasli  
 $^{24}\text{Na}$
207. Honeywell, Inc.  
500 Washington Avenue, South  
Hopkins, Minnesota 55343  
D. C. Prem  
SI
208. Hospital for Special Surgery  
535 East 70th Street  
New York, New York 10021  
Dr. E. Smith  
Dr. D. McPherson  
SI (B)
209. Houston, University of  
Cullen Boulevard  
Houston 4, Texas  
Dr. J. E. Evans  
 $^{32}\text{P}$
210. Howard Hughes Medical Institute  
P. O. Box 2688  
Miami Beach, Florida 33140  
Joan A. Deazley, Purchasing Agent  
 $^{35}\text{S}$
211. Howard University  
2401-6th Street, S.W.  
Washington, D.C. 20001  
Thomas D. Lowe, Purchasing Agent  
 $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{24}\text{Na}$
212. Hughes Research Laboratories  
3011 Malibu Canyon Road  
Malibu, California  
B. Jones, Buyer  
 $^{114}\text{In}$ ,  $^{75}\text{Se}$ ,  $^{35}\text{S}$ ,  $^{99}\text{Tc}$ , SS
213. Hunter College  
695 Park Avenue  
New York, New York 10021  
Dr. M. Green  
 $^{14}\text{C}$ ,  $^{86}\text{Rb}$
214. IBM Corporation  
Route 17C and Glendale Drive  
Endicott, New York 13764  
L. L. Loudon, Senior Buyer  
 $^{115}\text{Cd}$ ,  $^{59}\text{Fe}$ ,  $^{147}\text{Pm}$ ,  $^{35}\text{S}$ , SI
215. IBM Watson Laboratory  
612 West 115th Street  
New York, New York  
 $^{59}\text{Fe}$ , SI
216. Idaho State College  
Pocatello, Idaho  
Dr. J. L. Thompson  
 $^{110}\text{Ag}$ ,  $^{90}\text{Sr}$ ,  $^{204}\text{Tl}$
217. Idaho, University of  
Moscow, Idaho 83843  
L. C. Warner, Purchasing Agent  
 $^{32}\text{P}$ ,  $^{46}\text{Sc}$ ,  $^{35}\text{S}$

218. Illinois Institute of Technology  
3300 S. Federal Street  
Chicago, Illinois 60616  
M. G. Morgan, Purchasing Agent  
 $^{114}\text{In}$ ,  $^{113}\text{Sn}$ ,  $^{238}\text{U}$ , SI (A)
219. I.I.T. Research Institute  
10 West 35th Street  
Chicago, Illinois 60616  
 $^3\text{H}$  Targets
220. Illinois, University of  
203 Administration Building (E)  
Urbana, Illinois 61803  
D. L. Hartman, Buyer  
 $^{124}\text{Sb}$ ,  $^{125}\text{Sb}$ ,  $^{45}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{51}\text{Cr}$ ,  
 $^{199}\text{Au}$ ,  $^{181}\text{Hf}$ ,  $^3\text{H}$ ,  $^{129}\text{I}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  
 $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{147}\text{Pm}$ ,  $^{86}\text{Rb}$ ,  $^{153}\text{Sm}$ ,  
 $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$ , CSI ( $^{57}\text{Co}$ ),  
SI, SI (A), SS
221. Illinois, University of  
P. O. Box 6998  
Chicago, Illinois 60680  
 $^{45}\text{Ca}$ ,  $^{42}\text{K}$ ,  $^{35}\text{S}$
222. Indiana State College  
6th and Chestnut Streets  
Terre Haute, Indiana 47809  
K. Black, Purchasing Agent  
 $^{109}\text{Cd}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{204}\text{Tl}$ , SI (A)
223. Indiana University  
Bloomington, Indiana  
R. H. Cooper, Purchasing Department  
 $^{124}\text{Sb}$ ,  $^{210}\text{Bi}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  
 $^{64}\text{Cu}$ ,  $^{198}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{85}\text{Kr}$ ,  $^{99}\text{Mo}$ ,  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  
 $^{42}\text{K}$ ,  $^{143}\text{Pr}$ ,  $^{147}\text{Pm}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  $^{170}\text{Tm}$ ,  
 $^{185}\text{W}$ ,  $^{187}\text{W}$ , SS, CSI ( $^{84}\text{Rb}$ )
224. Indiana University Medical Center  
1100 West Michigan Street  
Indianapolis, Indiana 46207  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{131}\text{I}$ ,  $^{85}\text{Kr}$ ,  $^{28}\text{Mg}$  (B),  $^{32}\text{P}$ ,  
 $^{42}\text{K}$ ,  $^{84}\text{Rb}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$
225. Institute for Muscle Disease, Inc.  
515 East 71st Street  
New York 21, New York  
Irene Morgan, Purchasing Department  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{89}\text{Sr}$
226. Institute of Paper Chemistry  
Box 1048  
Appleton, Wisconsin  
D. W. Theisen, Assistant Controller  
 $^{14}\text{C}$ ,  $^{110}\text{Ag}$
227. Instruments, Incorporated  
3102 Charles Page Boulevard  
Tulsa, Oklahoma 74101  
J. R. Marshall  
 $^{137}\text{Cs}$ , SS
228. International Chemical and Nuclear  
Corporation  
13332 East Torch Street  
City of Industry, California  
Miss Ann Schoonderbeck  
 $^{14}\text{C}$ ,  $^{35}\text{S}$
229. International Telephone and Telegraph  
Laboratories  
Nutley, New Jersey  
 $^3\text{H}$ ,  $^{63}\text{Ni}$ , SS
230. Iowa, State College of  
Cedar Falls, Iowa  
Dr. J. W. Kercheval  
 $^{131}\text{I}$ ,  $^{32}\text{P}$
231. Iowa State University  
Ames, Iowa  
A. F. Voigt, Radiation Safety Officer  
 $^{124}\text{Sb}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^{198}\text{Au}$ ,  $^{181}\text{Hf}$ ,  $^3\text{H}$ ,  
 $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  $^{99}\text{Mo}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{85}\text{Sr}$ ,  
 $^{99}\text{Tc}$ ,  $^{170}\text{Tm}$ , SI (B), SS
232. Iowa, State University of  
Iowa City, Iowa  
A. G. Burks, Purchasing Agent  
 $^{36}\text{Cl}$ ,  $^{131}\text{I}$ ,  $^{110}\text{Ag}$ ,  $^{111}\text{Ag}$ , SI (A)

233. IsoServe, Incorporated\*  
 131 Portland Street  
 Cambridge 39, Massachusetts  
 R. S. Flax  
 $^{125}\text{Sb}$ ,  $^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  
 $^{36}\text{Cl}$ ,  $^{51}\text{Cr}$ ,  $^{60}\text{Co}$ ,  $^{129}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{28}\text{Mg}$  (B),  
 $^{203}\text{Hg}$ ,  $^{99}\text{Mo}$  (B),  $^{63}\text{Ni}$ ,  $^{147}\text{Pm}$ ,  $^{86}\text{Rb}$ ,  
 $^{106}\text{Ru}$ ,  $^{110}\text{Ag}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{99\text{m}}\text{Tc}$  (B),  
 $^{204}\text{Tc}$  (B),  $^{204}\text{Tl}$ ,  $^{113}\text{Sn}$ ,  $^{65}\text{Zn}$ , CSI ( $^{84}\text{Rb}$ ),  
 SS
- \*Now: Cambridge Nuclear Corporation
234. Isotopes, Incorporated  
 123 Woodland Avenue  
 Westwood, New Jersey  
 P. W. Krey  
 $^{198}\text{Au}$ ,  $^{133}\text{I}$  (B),  $^{99}\text{Mo}$ ,  $^{63}\text{Ni}$ ,  $^{103}\text{Ru}$ ,  
 $^{132}\text{Te}$  (B),  $^{187}\text{W}$ ,  $^{133}\text{Xe}$ ,  $^{95}\text{Zr}$ , SS
235. Itek Corporation  
 Lexington 73, Massachusetts  
 R. Shield, Purchasing Agent  
 $^{110}\text{Ag}$ , SS
236. Jackson Laboratories  
 P. O. Box 258  
 Bar Harbor, Maine  
 M. F. Brewer, Purchasing Agent  
 $^{75}\text{Se}$
237. Jackson Memorial Hospital  
 Miami, Florida,  
 Dr. A. J. Gilson  
 $^{99\text{m}}\text{Tc}$  (B)
238. Jefferson Medical College  
 307 South 11th Street  
 Philadelphia, Pennsylvania 19107  
 Dr. F. X. Hausberger  
 $^{131}\text{I}$ ,  $^{86}\text{Rb}$ ,  $^{99}\text{Tc}$  (E)  
 Jet Propulsion Laboratory  
 (See California Institute of Technology)
239. Jewish Chronic Disease Hospital  
 86 East 49th Street  
 Brooklyn 3, New York  
 Dr. S. Wisenfield  
 $^{131}\text{I}$ ,  $^{24}\text{Na}$  (B)
240. Jewish Memorial Hospital  
 Broadway and 196th Street  
 New York, New York 10040  
 H. Freeman  
 $^3\text{H}$ ,  $^{131}\text{I}$ , SS
241. Johns Hopkins University  
 615 N. Wolfe Street  
 Baltimore, Maryland 21218  
 C. W. Mareck, Buyer  
 $^{140}\text{Ba}$ ,  $^{82}\text{Br}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{141}\text{Ce}$ ,  $^{36}\text{Cl}$ ,  
 $^{132}\text{I}$  (B),  $^{59}\text{Fe}$ ,  $^{140}\text{La}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  
 $^{110}\text{Ag}$ ,  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{99\text{m}}\text{Tc}$  (B),  
 $^{133}\text{Xe}$ ,  $^{65}\text{Zn}$ , CSI ( $^{57}\text{Co}$ ), SI, SS
242. Johns-Manville Products Corporation  
 Research and Engineering Center  
 Manville, New Jersey  
 N. G. Churchill, Senior Buyer  
 $^{45}\text{Ca}$
243. Johnson C. Smith University  
 Charlotte, North Carolina 28208  
 F. J. Amstead, Business Manager  
 $^{198}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$
244. Kaiser Foundation Research Institute  
 1924 Broadway  
 Oakland 12, California  
 J. A. Weiss  
 $^{75}\text{Se}$ ,  $^{35}\text{S}$
245. Kansas City, University of  
 Tenth and Troost  
 Kansas City 6, Missouri  
 B. W. Warner  
 $^{45}\text{Ca}$ ,  $^{59}\text{Fe}$
246. Kansas State College of Pittsburg  
 Pittsburg, Kansas  
 Prof. J. L. Pauley  
 $^{134}\text{Cs}$

247. Kansas State Teachers College of Emporia  
Emporia, Kansas 66802  
Elizabeth Howell  
 $^{131}\text{I}$
248. Kansas State University  
Manhattan, Kansas 66504  
A. H. Daane  
 $^{82}\text{Br}$ ,  $^{109}\text{Cd}$ ,  $^{115}\text{Cd}$ ,  $^{115\text{m}}\text{Cd}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  
 $^{60}\text{Co}$ ,  $^{198}\text{Au}$ ,  $^3\text{H}$ ,  $^{114}\text{In}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  
 $^{99}\text{Mo}$ ,  $^{95}\text{Nb}$ ,  $^{32}\text{P}$ ,  $^{103}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  $^{85}\text{Sr}$ ,  $^{35}\text{S}$ ,  
 $^{65}\text{Zn}$ , SS
249. Kansas, University of  
West 15th Street  
Lawrence, Kansas 66044  
B. S. Friesen  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  
SS (Targets)
250. Kansas, University of  
Medical Center  
Kansas City, Kansas 66103  
 $^{36}\text{Cl}$ ,  $^{131}\text{I}$
251. Kaufman, S. & M.  
2 West 47th Street  
New York, New York  
Abraham Kaufman  
SI (B)
252. Kentucky, University of  
Lexington, Kentucky  
W. D. DeVore  
 $^{14}\text{C}$ ,  $^{152-154}\text{Eu}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{59}\text{Fe}$ ,  
 $^{203}\text{Hg}$ ,  $^{95}\text{Nb}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{35}\text{S}$ ,  $^{90}\text{Y}$ ,  $^{65}\text{Zn}$ ,  
SI (A)
253. Kentucky, University of  
Medical Center  
Lexington, Kentucky  
 $^{99\text{m}}\text{Tc}$  (B)
254. King County Hospital  
Seattle, Washington  
Dr. J. T. Dowling  
 $^{132}\text{I}$  (B)
255. Knolls Atomic Power Laboratory  
P. O. Box 1072  
Schenectady, New York  
H. C. Metzger  
 $^{124}\text{Sb}$ ,  $^{45}\text{Ca}$ ,  $^{252}\text{Cf}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  
 $^{181}\text{Hf}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{129}\text{I}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  
 $^{63}\text{Ni}$ ,  $^{147}\text{Pm}$ ,  $^{90}\text{Sr}$ ,  $^{99}\text{Tc}$ , SI (B), SS
256. Kresge Eye Institute  
690 Mullett Street  
Detroit 26, Michigan  
Dr. E. V. Kinsey  
 $^{36}\text{Cl}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$ ,  $^{65}\text{Zn}$
257. Lafayette College  
Easton, Pennsylvania 18042  
Dr. Eric C. Kunz  
 $^{113}\text{Sn}$
258. Lamar State College of Technology  
Beaumont, Texas 77704  
H. T. Baker  
 $^{51}\text{Cr}$ ,  $^{59}\text{Fe}$ ,  $^{110}\text{Ag}$ ,  $^{111}\text{Ag}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$   
Lawrence Radiation Laboratory  
(See California, University of)
259. Le Fiell Manufacturing Company  
13700 Firestone Blvd.  
Santa Fe Springs, California  
C. K. Le Fiell  
 $^{147}\text{Pm}$ , SS
260. Lenox Hill Hospital  
111 East 76th Street  
New York 21, New York  
Dr. K. R. Paley  
 $^{131}\text{I}$
261. Libbey-Owens-Ford Glass Company  
811 Madison Avenue  
Toledo, Ohio 43624  
H. P. Hagerty  
 $^{75}\text{Se}$

262. Linde Division, Union Carbide Corporation  
East Park Drive and Woodward Avenue  
Tonawanda, New York  
Mr. Taggard  
 $^{85}\text{Kr}$
263. Lionel Toy Corporation  
Ramsey Avenue  
Hillside, New Jersey  
J. Donzelli  
 $^{14}\text{C}$
264. Lockheed-Georgia Company  
Marietta, Georgia 30061  
 $^3\text{H}$ , SI
265. Lockheed Missiles and Space Company  
P. O. Box 504  
Sunnyvale, California  
J. Dunham, Buyer  
 $^{109}\text{Cd}$ ,  $^{198}\text{Au}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{55}\text{Fe}$ ,  
 $^{95}\text{Nb}$ ,  $^{42}\text{K}$ ,  $^{24}\text{Na}$ ,  $^{185}\text{W}$ , SI, SS
266. Long Island Jewish Hospital  
New Hyde Park, New York  
Dr. L. Levy  
 $^{99m}\text{Tc}$  (B)
267. Long Island University  
Brooklyn 1, New York  
Dr. H. Freudenthal  
 $^{14}\text{C}$ ,  $^{35}\text{S}$   
Los Alamos Scientific Laboratory  
(See California, University of)
268. Louisiana State University  
Nuclear Science Center  
Baton Rouge, Louisiana  
H. D. Richardson  
 $^{76}\text{As}$ ,  $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{198}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  
 $^{140}\text{La}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{103}\text{Ru}$ ,  $^{111}\text{Ag}$ ,  
 $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  $^{91}\text{Y}$ ,  $^{65}\text{Zn}$
269. Louisville, University of  
Belknap Campus  
Louisville, Kentucky  
W. M. Gruber  
 $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{130}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{42}\text{K}$ ,  $^{75}\text{Se}$ ,  $^{24}\text{Na}$ ,  
 $^{65}\text{Zn}$ , SI, SS
270. Lovelace Foundation for Medical  
Education and Research  
4800 Gibson Blvd., S.E.  
Albuquerque, New Mexico  
C. R. Tiber  
 $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{106}\text{Ru}$ ,  $^{85}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  
 $^{91}\text{Y}$ , SS
271. Loyola University  
6525 N. Sheridan Road  
Chicago, Illinois  
Dr. H. Spencer  
 $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{65}\text{Zn}$ , SI (A)
272. Lynch Radiation Services  
855 N. Orlando Avenue  
Los Angeles 69, California  
T. W. Lynch  
 $^{198}\text{Au}$
273. Maimonides Hospital  
Brooklyn, New York  
Dr. Kramer  
 $^{28}\text{Mg}$  (B)
274. Maine, University of  
Room 204 Library  
Orono, Maine  
M. R. Billington, Director of Purchases  
 $^{59}\text{Fe}$ ,  $^{32}\text{P}$
275. Mallinckrodt Chemical Works  
2nd and Mallinckrodt Streets  
St. Louis 7, Missouri  
L. W. Powitzky, Purchasing Agent  
 $^{60}\text{Co}$ ,  $^{63}\text{Ni}$ ,  $^{75}\text{Se}$ ,  $^{65}\text{Zn}$
276. Marine Biological Laboratory  
Woods Hole, Massachusetts  
H. P. Smith  
 $^{32}\text{P}$ ,  $^{35}\text{S}$
277. Martin Company  
Baltimore 3, Maryland  
D. F. Sacha, Buyer  
 $^{32}\text{P}$ ,  $^{147}\text{Pm}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{91}\text{Y}$

278. Martin Company  
P. O. Box 5817  
Orlando, Florida  
 $^{32}\text{P}$
279. Martin Marietta Corporation  
Rias Division  
1450 South Rolling Road  
Baltimore, Maryland  
 $^{32}\text{P}$
280. Maryland, University of  
6 South Greene Street  
Baltimore, Maryland 21201  
J. M. Hunter  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$
281. Maryland, University of  
College Park, Maryland  
 $^{45}\text{Ca}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$
282. Massachusetts General Hospital  
Isotope Laboratory  
Boston 14, Massachusetts  
J. F. Balcius  
 $^{133}\text{Ba}$ ,  $^{131}\text{I}$ ,  $^{99\text{m}}\text{Tc}$  (B)
283. Massachusetts Institute of Technology  
Box 69  
Cambridge 38, Massachusetts  
J. L. Sargent  
 $^{124}\text{Sb}$ ,  $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  
 $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{114}\text{In}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  
 $^{95}\text{Nb}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{106}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  $^{111}\text{Ag}$ ,  $^{95}\text{Zr}$ ,  
SI, SS
284. Massachusetts, University of  
Amherst, Massachusetts  
W. R. Harvey  
 $^{36}\text{Cl}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$
285. Mayo Clinic  
Rochester, Minnesota  
E. G. Southwick, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{132}\text{I}$  (B),  $^{85}\text{Kr}$ ,  $^{75}\text{Se}$ ,  $^{170}\text{Tm}$ ,  
 $^{91}\text{Y}$ ,  $^{65}\text{Zn}$
286. McCrone Research Institute  
451 East 31st Street  
Chicago 16, Illinois  
J. Teetsov  
 $^{115}\text{Cd}$
287. Mechanical Technology Company, Inc.  
5821 Seminary Road  
Baileys Crossroads, Virginia  
M. P. Canby  
 $^{137}\text{Cs}$
288. Medical College of Georgia  
Talmadge Memorial Hospital  
Augusta, Georgia  
Dr. J. B. Hudson  
 $^{32}\text{P}$ ,  $^{35}\text{S}$
289. Medical College of the State of  
South Carolina  
Charleston, South Carolina  
M. G. Weidner  
 $^{85}\text{Kr}$
290. Medical College of Virginia  
12th and Marshall Streets  
Richmond, Virginia 23219  
J. T. Bayhan, Purchasing Officer  
 $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{131}\text{I}$ ,  $^{85}\text{Kr}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{133}\text{Xe}$ , SI
291. Mellon Institute  
4400 Fifth Avenue  
Pittsburgh 13, Pennsylvania  
Dr. R. H. Schuler  
 $^{131}\text{I}$
292. Merck and Company  
Rahway, New Jersey 07065  
A. R. Braunmuller  
 $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{51}\text{Cr}$ ,  $^{60}\text{Co}$ ,  $^{198}\text{Au}$ ,  
 $^{131}\text{I}$ ,  $^{42}\text{K}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{185}\text{W}$ , SS
293. Methodist Hospital  
6720 Bertner  
Houston, Texas 77025  
V. A. Johnston, Purchasing Agent  
CSI ( $^{84}\text{Rb}$ )

294. Miami, University of  
P. O. Box 8066  
Coral Gables, Florida 33146  
E. J. Davis, Purchasing Agent  
 $^{47}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
295. Miami University  
Oxford, Ohio  
R. G. Young, Director of Purchases  
 $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$
296. Michael-Reese Hospital and Medical Center  
29th Street and Ellis Ave.  
Chicago, Illinois 60616  
Dr. B. Levin  
 $^{147}\text{Pm}$ , SS
297. Michigan State University  
East Lansing, Michigan  
W. B. Richards  
 $^{125}\text{Sb}$ ,  $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  
 $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{106}\text{Ru}$ ,  $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  
 $^{185}\text{W}$ ,  $^{65}\text{Zn}$ , SI (A) ( $^{113}\text{Sn}$ ), SS
298. Michigan Technological University  
Houghton, Michigan 49931  
R. L. Sibilsky, Purchasing Agent  
 $^{32}\text{P}$ ,  $^{75}\text{Se}$
299. Michigan, University of  
Ann Arbor, Michigan  
W. L. Bulwick, Director of Purchasing  
 $^{125}\text{Sb}$ ,  $^{140}\text{Ba}$ ,  $^{82}\text{Br}$ ,  $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{134}\text{Cs}$ ,  $^{35}\text{S}$ ,  
 $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{85}\text{Kr}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  
 $^{99}\text{Tc}$ ,  $^{113}\text{Sn}$ ,  $^{95}\text{Zr}$
300. Miles Laboratories, Inc.  
Elkhart, Indiana  
E. J. Emergy, Director of Purchases  
 $^{82}\text{Br}$
301. Mine Safety Appliance Company  
201 North Braddock Avenue  
Pittsburgh 8, Pennsylvania  
J. K. Leith  
 $^{131}\text{I}$
302. Minnesota Mining and Manufacturing Co.  
P. O. Box 3121  
St. Paul 6, Minnesota  
E. J. Kunz  
 $^{241}\text{Am}$ ,  $^{210}\text{Bi}$ ,  $^{3}\text{H}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  
 $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{210}\text{Po}$  (M),  $^{147}\text{Prn}$ ,  $^{106}\text{Ru}$ ,  
 $^{46}\text{Sc}$ ,  $^{111}\text{Ag}$ ,  $^{35}\text{S}$ ,  $^{204}\text{Tl}$ , SI, SS
303. Minnesota, University of  
402 Morrill Hall  
Minneapolis, Minnesota  
H. M. Larnpert, Buyer  
 $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  
 $^{18}\text{F}$  (A),  $^{199}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  
 $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  
 $^{35}\text{S}$ ,  $^{99\text{m}}\text{Tc}$  (B),  $^{204}\text{Tl}$ , FP, SI, SI (A), SS
304. Mississippi State University  
Box 307  
State College, Mississippi  
E. J. Middlebrooks  
 $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{85}\text{Kr}$ , SS
305. Mississippi, University of  
Jackson, Mississippi  
W. E. Pitts, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$
306. Missouri, University of  
Columbia, Missouri  
H. J. Fields, Director of Purchasing  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  
 $^{99}\text{Mo}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ , SI (A)
307. Missouri, University of, at Rolla  
Rolla, Missouri 65401  
 $^{203}\text{Hg}$
308. Monsanto Chemical Company  
800 North Lindbergh Boulevard  
St. Louis, Missouri 63177  
 $^{137}\text{Cs}$ ,  $^3\text{H}$ ,  $^{59}\text{Fe}$ ,  $^{90}\text{Sr}$ ,  $^{133}\text{Xe}$ , SI (B), SS
309. Monsanto Company  
P. O. Box 1311  
Texas City, Texas 77591  
 $^{82}\text{Br}$ ,  $^{137}\text{Cs}$ ,  $^3\text{H}$ ,  $^{90}\text{Sr}$ ,  $^{133}\text{Xe}$

310. Monsanto Research Corporation  
1515 Nicholas Road  
Dayton, Ohio 45407  
  
H. B. Honious  
  
 $^{241}\text{Am}$ ,  $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  
 $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{114}\text{In}$ ,  $^{129}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  
 $^{203}\text{Hg}$ ,  $^{237}\text{Np}$ ,  $^{210}\text{Po}$  (M),  $^{86}\text{Rb}$ ,  $^{90}\text{Sr}$ ,  
 $^{170}\text{Tm}$ ,  $^{113}\text{Sn}$ ,  $^{95}\text{Zr}$ , SI, SS
311. Monsanto Research Corporation  
Mound Laboratory  
P. O. Box 32  
Miamisburg, Ohio 45342  
  
 $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{114}\text{In}$ ,  $^{129}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  
 $^{210}\text{Po}$  (P),  $^{86}\text{Rb}$ ,  $^{90}\text{Sr}$ ,  $^{113}\text{Sn}$ ,  $^{95}\text{Zr}$ , SI
312. Montana State University  
Bozeman, Montana 59715  
  
R. Hehn, Manager  
 $^{32}\text{P}$ ,  $^{86}\text{Rb}$
313. Montefiore Hospital  
E. 210th Street and Bainbridge Avenue  
Bronx 67, New York  
  
Dr. H. Hart  
 $^{131}\text{I}$
314. Dr. M. E. Morton  
117 E. 8th Street  
Long Beach, California  
  
Dr. M. E. Morton  
 $^{59}\text{Fe}$
315. Motorola, Incorporated  
5005 East McDowell Road  
Phoenix, Arizona 85008  
  
W. M. Jones  
 $^{198}\text{Au}$ , SI
316. Mount Sinai Hospital  
Fifth Avenue and 100th Street  
New York 29, New York  
  
L. R. Wasserman  
 $^{59}\text{Fe}$
317. National Center for Atmospheric Research  
1420-30th Street  
Boulder, Colorado  
  
 $^{110}\text{Ag}$
318. National Dairy Research Laboratory, Inc.  
801 Waukegan Road  
Glenview, Illinois 60025  
  
I. B. Whitney  
 $^{140}\text{Ba}$ ,  $^{32}\text{P}$
319. National Lead Company  
P. O. Box 58  
South Amboy, New Jersey  
  
M. C. Christensen, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{237}\text{Np}$ ,  $^{95}\text{Nb}$ ,  $^{35}\text{S}$
320. National Lead Company of Ohio  
Box 39158  
Cincinnati, Ohio 45239  
  
Mr. Doerr  
 $^{152-154}\text{Eu}$ ,  $^{198}\text{Au}$
321. Nebraska, University of  
511 Administration Building  
Lincoln, Nebraska 68508  
  
E. O. Ingram, Div. of Purchases  
 $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  
 $^{32}\text{P}$ ,  $^{110}\text{Ag}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
322. Nevada, University of  
Reno, Nevada  
  
R. M. Moyers  
 $^{137}\text{Cs}$ ,  $^{75}\text{Se}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$
323. New England Institute for Medical Research  
Ridgefield, Connecticut  
  
Dr. J. H. Heller  
 $^{76}\text{As}$
324. New England Nuclear Corporation  
575 Albany Street  
Boston, Massachusetts  
  
C. B. Killian  
 $^{241}\text{Am}$ ,  $^{125}\text{Sb}$ ,  $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  
 $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{3}\text{H}$ ,  $^{85}\text{Kr}$ ,  $^{99}\text{Mo}$  (B),  $^{63}\text{Ni}$ ,  
 $^{147}\text{Pm}$ ,  $^{90}\text{Sr}$ ,  $^{99}\text{Tc}$ ,  $^{204}\text{Tl}$ ,  $^{65}\text{Zn}$ , CSI ( $^{7}\text{Be}$ ),  
 $^{56}\text{Co}$ ,  $^{57}\text{Co}$ ,  $^{68}\text{Ge}$ ,  $^{195}\text{Au}$ ,  $^{55}\text{Fe}$ ,  $^{193}\text{Pt}$ ,  
 $^{209}\text{Po}$ ,  $^{121\text{m}}\text{Te}$ ,  $^{44}\text{Ti}$ ), SI, SS
325. New Hampshire University  
Durham, New Hampshire  
  
A. R. Amell  
 $^{45}\text{Ca}$

326. New Mexico Highlands University  
Las Vegas, New Mexico  
J. E. Connor, Comptroller  
 $^{32}\text{P}$
327. New Mexico State University  
University Park, New Mexico  
A. Richardson  
 $^{32}\text{P}$
328. New Mexico, University of  
Albuquerque, New Mexico  
Dr. M. L. Riedesel  
 $^{137}\text{Cs}$ ,  $^{51}\text{Cr}$ ,  $^{198}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  
 $^{65}\text{Zn}$
329. New York Central System  
577 E. 152nd Street  
Cleveland, Ohio  
J. J. Wright  
SI (B)
330. New York City Department of Hospitals  
Francis Delafield Hospital  
99 Fort Washington Avenue  
New York 32, New York  
 $^{24}\text{Na}$
331. New York Hospital  
525 E. 68th Street  
New York, New York  
Dr. Erlandson  
 $^{28}\text{Mg}$  (B)
332. New York Medical College  
5th Avenue at 105th Street  
New York, New York 10029  
Dr. I. Danishefsky  
 $^{35}\text{S}$
333. New York State Department of Health  
Office of Fiscal Management  
84 Holland Avenue  
Albany 8, New York  
Eleanor M. Plum  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$
334. New York, State University of  
Downstate Medical Center  
450 Clarkson Avenue  
Brooklyn 3, New York  
D. Thompson  
 $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^{85}\text{Kr}$ ,  $^{32}\text{P}$ ,  
 $^{42}\text{K}$ ,  $^{86}\text{Rb}$ , SS
335. New York, State University of  
Research Foundation  
Upstate Medical Center  
766 Irving Avenue  
Syracuse, New York 13210  
 $^{42}\text{K}$
336. New York, State University of  
Stony Brook  
Long Island, New York  
Dr. John Alexander, Chemistry Department  
CSI (B) (Foils)
337. New York University  
University Heights  
New York, New York 10453  
 $^{131}\text{I}$
338. New York University and New York  
University Medical Center  
550 First Avenue  
New York 16, New York  
Mr. Mills  
 $^{140}\text{Ba}$ ,  $^{144}\text{Ce}$ ,  $^{64}\text{Cu}$ ,  $^{198}\text{Au}$ ,  $^{199}\text{Au}$ ,  $^{131}\text{I}$ ,  
 $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  $^{95}\text{Zr}$ , SI (B)
339. North American Aviation, Inc.  
Atomics International Division  
P. O. Box 309  
Canoga Park, California  
A. Gunby  
 $^{125}\text{Sb}$  (P)
340. North American Aviation, Inc.  
831 N. Douglas Street  
El Segundo, California  
G. D. Goodfellow  
 $^{144}\text{Ce}$ , SS

341. North American Aviation Science Center  
1049 Camino Dos Rios  
Thousand Oaks, California  
W. M. Clifford, Supervisor  
 $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^3\text{H}$ , SS
342. North Carolina Baptist Hospital  
Winston-Salem, North Carolina  
 $^{99m}\text{Tc}$  (B)
343. North Carolina Memorial Hospital  
Chapel Hill, North Carolina  
Dr. F. D. Pepper  
 $^{99m}\text{Tc}$  (B)
344. North Carolina State College  
107-1911 Building  
Raleigh, North Carolina  
J. C. Williams, Purchasing Agent  
 $^{137}\text{Cs}$ ,  $^{64}\text{Cu}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$
345. North Carolina, University of  
Chapel Hill, North Carolina  
H. W. Dark  
 $^{133}\text{Ba}$ ,  $^{115}\text{Cd}$ ,  $^{36}\text{Cl}$ ,  $^{198}\text{Au}$ ,  $^{181}\text{Hf}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  
 $^{110}\text{Ag}$ ,  $^{24}\text{Na}$ , SI, SS
346. North Dakota, University of  
Grand Forks, North Dakota  
Dr. H. D. Bale  
 $^{32}\text{P}$ ,  $^{35}\text{S}$ , SI
347. North Dakota State University  
State University Station  
Fargo, North Dakota  
D. B. Schlechenwayer  
 $^{45}\text{Ca}$ ,  $^{114}\text{In}$ ,  $^{59}\text{Fe}$
348. North Georgia College  
Dahlonega, Georgia  
C. M. Yager  
 $^{32}\text{P}$
349. Northeastern University  
360 Huntington Avenue  
Boston, Massachusetts 02115  
R. W. Clifford  
CSI ( $^{84}\text{Rb}$ )
350. Northern Illinois University  
DeKalb, Illinois  
D. Bushnell  
SI (A)
351. Northern States Power Company  
15 South 5th Street  
Minneapolis, Minnesota 55402  
V. C. Forrest  
 $^{131}\text{I}$
352. Northrop Space Laboratories  
3901 West Broadway  
Hawthorne, California 90250  
 $^{237}\text{Np}$
353. Northwest Community College  
Powell, Wyoming  
A. L. Mickelson  
 $^{32}\text{P}$ , SS
354. Northwestern University  
619 Clark Street  
Evanston, Illinois  
T. M. Johnson  
 $^{86}\text{Rb}$ , SI (A)
355. Notre Dame, University of  
Notre Dame, Indiana  
J. J. Sechowski  
 $^{144}\text{Ce}$ ,  $^{181}\text{Hf}$ ,  $^{114}\text{In}$ ,  $^{203}\text{Hg}$ ,  $^{95}\text{Nb}$ ,  $^{142}\text{Pr}$ ,  
 $^{86}\text{Rb}$ ,  $^{147}\text{Sm}$  (A),  $^{150}\text{Sm}$  (A),  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  
 $^{182}\text{Ta}$ ,  $^{113}\text{Sn}$ , SI (A) ( $^{151}\text{Eu}$ ,  $^{153}\text{Eu}$ ,  $^{168}\text{Er}$ ,  
 $^{147}\text{Sm}$ ,  $^{150}\text{Sm}$ )
356. Nuclear-Chicago Corporation  
333 East Howard Avenue  
Des Plaines, Illinois  
R. B. Young  
 $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{55}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  
 $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{147}\text{Pm}$ ,  $^{24}\text{Na}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  
 $^{182}\text{Ta}$ ,  $^{204}\text{Tl}$ ,  $^{65}\text{Zn}$ , FP, SS
357. Nuclear Consultants Corporation  
9842 Manchester Road  
St. Louis 19, Missouri  
G. Ogier, General Manager  
 $^{47}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{51}\text{Cr}$ ,  $^{198}\text{Au}$ ,  $^{114}\text{In}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  
 $^{197}\text{Hg}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{88}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{133}\text{Xe}$ ,  
 $^{95}\text{Zr}$ , SS

358. Nuclear Corporation of America  
2 Richwood Place  
Denville, New Jersey  
R. Kurkewicz, Purchasing Agent  
 $^{137}\text{Cs}$ ,  $^3\text{H}$ , SS
359. Nuclear Materials and Equipment Corporation  
Apollo, Pennsylvania 15613  
C. W. Flint  
 $^{241}\text{Am}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{210}\text{Po}$  (M),  $^{170}\text{Tm}$ ,  
 $^{238}\text{U}$
360. Nuclear Measurement Corporation  
2460 North Arlington Avenue  
Indianapolis, Indiana 46218  
J. L. Sommerville, Purchasing Agent  
 $^{32}\text{P}$
361. Nuclear Research Chemicals, Inc.  
100 North Crystal Lake Drive  
Orlando, Florida  
Dr. G. A. Greathouse  
 $^{14}\text{C}$ ,  $^3\text{H}$ ,  $^{35}\text{S}$ , SS
362. Nuclear Science and Engineering Corporation  
P. O. Box 10901  
Pittsburgh 36, Pennsylvania  
P. A. Weston  
 $^{133}\text{Ba}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{129}\text{I}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  
 $^{63}\text{Ni}$ ,  $^{147}\text{Pm}$ ,  $^{99}\text{Tc}$ ,  $^{204}\text{Tl}$ , CSI ( $^{26}\text{Al}$ ,  $^7\text{Be}$ ,  
 $^{139}\text{Ce}$ ,  $^{57}\text{Co}$ ,  $^{68}\text{Ge}$ ,  $^{195}\text{Au}$ ,  $^{55}\text{Fe}$ ,  $^{183}\text{Re}$ ,  
 $^{85}\text{Sr}$ ,  $^{44}\text{Ti}$ ,  $^{181}\text{W}$ ,  $^{48}\text{V}$ ,  $^{88}\text{Y}$ ,  $^{89}\text{Zr}$ ), FP, SS
363. Nucleonic Corporation of America  
196 De Graw Street  
Brooklyn 31, New York  
Dr. B. Schloss  
 $^{124}\text{Sb}$ ,  $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{59}\text{Fe}$ ,  $^{24}\text{Na}$ ,  $^{204}\text{Tl}$ ,  $^{113}\text{Sn}$
364. Oak Ridge Associated Universities  
P. O. Box 117  
Oak Ridge, Tennessee  
H. E. Elliott, Purchasing Agent  
 $^{241}\text{Am}$ ,  $^{124}\text{Sb}$ ,  $^{76}\text{As}$ ,  $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  
 $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{51}\text{Cr}$ ,  $^{60}\text{Co}$ ,  $^{68}\text{Ga}$  (B),  
 $^{198}\text{Au}$ ,  $^{130}\text{I}$ ,  $^{131}\text{I}$ ,  $^{52}\text{Fe}$  (B),  $^{55}\text{Fe}$ ,  $^{59}\text{Fe}$ ,  
 $^{140}\text{La}$ ,  $^{28}\text{Mg}$  (B),  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{46}\text{Sc}$ ,  
 $^{85}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{99\text{m}}\text{Tc}$  (B),  $^{204}\text{Tl}$ ,  $^{113}\text{Sn}$ ,  $^{65}\text{Zn}$ ,  
 $^{95}\text{Zr}$ , CSI ( $^{68}\text{Ge}$ ), SI, SS
365. Oak Ridge Technical Enterprises Corporation  
102 Midland Road  
Oak Ridge, Tennessee  
S. C. Irwin, Purchasing Agent  
 $^{36}\text{Cl}$
366. Oberlin College  
Oberlin, Ohio  
J. L. Powell  
 $^{89}\text{Sr}$
367. Occidental College  
1600 Campus Road  
Los Angeles 41, California  
S. Granett, Purchasing Agent  
 $^{36}\text{Cl}$
368. Ohio Agricultural Experiment Station  
Wooster, Ohio  
W. R. Vaughn, Comptroller  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{46}\text{Sc}$ ,  $^{35}\text{S}$
369. Ohio State University  
190 North Oval Drive  
Columbus, Ohio 43210  
J. E. Medley, Director of Purchasing  
 $^{82}\text{Br}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  $^{198}\text{Au}$ ,  $^3\text{H}$ ,  
 $^3\text{H}$  Targets,  $^{114}\text{In}$ ,  $^{123}\text{I}$  (B),  $^{192}\text{Ir}$ ,  $^{59}\text{Fe}$ ,  
 $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{110}\text{Ag}$ ,  $^{87\text{m}}\text{Sr}$  (B),  $^{35}\text{S}$ ,  $^{204}\text{Tl}$ ,  
 $^{65}\text{Zn}$ , SS
370. The Ohio State University Research Foundation  
1314 Kinnear Road  
Columbus, Ohio 43212  
 $^{82}\text{Br}$ ,  $^{45}\text{Ca}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{192}\text{Ir}$ ,  $^{86}\text{Rb}$ ,  $^{35}\text{S}$
371. Ohio University  
Athens, Ohio  
W. H. Herbert, Purchasing Agent  
 $^{24}\text{Na}$
372. Oklahoma Medical Research Foundation  
825 N.E. 13th Street  
Oklahoma City, Oklahoma 73104  
R. McGee, Business Administrator  
 $^{35}\text{S}$

373. Oklahoma State University  
Stillwater, Oklahoma  
J. B. West  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{182}\text{Ta}$
374. Oklahoma, University of  
Oklahoma City, Oklahoma  
L. G. Jolly, Purchasing  
 $^{131}\text{I}$
375. Oklahoma, University of  
Research Institute  
Normal, Oklahoma  
E. Klehr  
 $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{110}\text{Ag}$
376. Olin Mathieson Chemical Corporation  
275 Winchester Avenue  
New Haven, Connecticut  
C. E. Michelson  
 $^{36}\text{Cl}$ ,  $^{64}\text{Cu}$ ,  $^{32}\text{P}$
377. Oregon State University  
Corvallis, Oregon  
Lila Shore, Authorizing Agent  
 $^{124}\text{Sb}$ ,  $^{125}\text{Sb}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{141}\text{Ce}$ ,  $^{144}\text{Ce}$ ,  
 $^{181}\text{Hf}$ ,  $^{203}\text{Hg}$ ,  $^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{46}\text{Sc}$ ,  $^{75}\text{Se}$ ,  
 $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  $^{182}\text{Ta}$ ,  $^{65}\text{Zn}$ , SI
378. Oregon, University of  
Eugene, Oregon  
W. N. McLaughlin, Business Manager  
 $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{199}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  
 $^{147}\text{Pm}$ ,  $^{99}\text{Tc}$ , SI
379. Oregon, University of  
Medical School  
Portland Oregon  
Dr. M. A. Greer  
 $^{132}\text{I}$  (B)
380. Osteopathic Medicine and Surgery, College of  
722 Sixth Avenue  
Des Moines, Iowa 50309  
Dr. D. R. Celander  
 $^{75}\text{Se}$
381. Pacific-Northwest Laboratories (Battelle-Northwest)  
Richland, Washington 99352  
L. G. Hendrickson  
 $^{124}\text{Sb}$  (G),  $^{125}\text{Sb}$ ,  $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{141}\text{Ce}$ ,  
 $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{58}\text{Co}$  (S),  $^{60}\text{Co}$  (G),  $^{131}\text{I}$ ,  
 $^{59}\text{Fe}$ ,  $^{54}\text{Mn}$  (S),  $^{99}\text{Mo}$ ,  $^{147}\text{Nd}$ ,  $^{32}\text{P}$ ,  $^{210}\text{Po}$  (G),  
 $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$ ,  $^{46}\text{Sc}$  (S),  $^{110}\text{Ag}$ ,  
 $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  $^{85}\text{Sr}$  (G),  $^{89}\text{Sr}$ ,  $^{132}\text{Te}$  (B),  $^{133}\text{Xe}$ ,  
 $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , CSI ( $^{95}\text{Tc}$ ), SS
382. Palo Alto Medical Research Foundation  
860 Bryant Street  
Palo Alto, California  
J. A. Patterson  
 $^{42}\text{K}$
383. Pan American World Airways, Inc.  
P. O. Box 670  
Las Vegas, Nevada  
F. Zurenda, Purchasing Agent  
 $^{141}\text{Ce}$ ,  $^{131}\text{I}$ ,  $^{99}\text{Mo}$ ,  $^{147}\text{Nd}$ ,  $^{132}\text{Te}$  (B)
384. Parametrics, Inc.  
221 Crescent Street  
Waltham, Massachusetts  
A. Cucchiara  
 $^{85}\text{Kr}$ , CSI ( $^{109}\text{Cd}$ )
385. Pennsylvania Hospital, University of  
8th and Spruce Street  
Philadelphia 7, Pennsylvania  
Dr. G. N. Ling  
 $^{51}\text{Cr}$ ,  $^{28}\text{Mg}$  (B),  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{35}\text{S}$ ,
386. Pennsylvania State University  
University Park, Pennsylvania  
D. A. Baker  
 $^{45}\text{Ca}$ ,  $^{114}\text{In}$ ,  $^{129}\text{I}$ ,  $^{85}\text{Kr}$ ,  $^{32}\text{P}$ ,  $^{75}\text{Se}$ ,  $^{89}\text{Sr}$ ,  
 $^{35}\text{S}$ ,  $^{204}\text{Tl}$ ,  $^{65}\text{Zn}$ , SI (A) ( $^{39}\text{K}$ ,  $^{40}\text{K}$ )
387. Pennsylvania, University of  
3025 Walnut Street  
Philadelphia, Pennsylvania  
H. J. Swartz  
 $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{99\text{m}}\text{Tc}$  (B),  $^{170}\text{Tm}$ ,  
SI, SS

388. Peter Bent Brigham Hospital  
721 Huntington Avenue  
Boston 15, Massachusetts  
Dr. R. Gorlin  
 $^{115}\text{Cd}$ ,  $^{85}\text{Kr}$ ,  $^{203}\text{Hg}$ ,  $^{65}\text{Zn}$
389. Philco Corporation  
Ford Road  
Newport Beach, California  
J. E. Walsh, Buyer  
 $^{137}\text{Cs}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{113}\text{Sn}$ , SS
390. Phillip-Morris, Inc.  
P. O. Box 3-D  
Richmond, Virginia 23206  
G. Segura, Jr.  
 $^{14}\text{C}$
391. Phillips Petroleum Company  
Atomic Energy Division  
P. O. Box 2067  
Idaho Falls, Idaho  
 $^{115m}\text{Cd}$ ,  $^{144}\text{Ce}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{95}\text{Nb}$ ,  $^{210}\text{Po}$  (M),  
 $^{106}\text{Ru}$ ,  $^{153}\text{Sm}$ ,  $^{89}\text{Sr}$ ,  $^{182}\text{Ta}$ ,  $^{113}\text{Sn}$ ,  $^{95}\text{Zr}$ , CSI  
( $^{147}\text{Eu}$ ,  $^{148}\text{Eu}$ ,  $^{172}\text{Lu}$ ,  $^{96}\text{Tc}$ ,  $^{155}\text{Tb}$ ), SI (A)  
( $^{175}\text{Hf}$ )  
R. A. Duce  
 $^{24}\text{Am}$   
C. H. Hogg  
 $^{60}\text{Co}$  (P),  $^{66}\text{Cu}$  (P),  $^{116}\text{In}$  (P),  $^{65}\text{Ni}$  (P),  
 $^{5}\text{Ti}$  (P),  $^{52}\text{V}$  (P)  
W. H. Burgus  
 $^{60}\text{Co}$  (P),  $^{198}\text{Au}$  (P),  $^{69}\text{Zn}$  (P),  $^{93}\text{Zr}$  (P)  
R. L. Heath  
 $^{169}\text{Er}$  (P)  
S. D. Anderson  
 $^{170}\text{Tm}$  (P)
392. Phillips Petroleum Company  
Bartlesville, Oklahoma  
J. N. Romine  
 $^{115}\text{Cd}$ ,  $^{144}\text{Ce}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  
 $^{95}\text{Nb}$ ,  $^{106}\text{Nb}$ ,  $^{153}\text{Sm}$ ,  $^{89}\text{Sr}$ ,  $^{182}\text{Ta}$ ,  $^{99}\text{Tc}$ ,  
 $^{113}\text{Sn}$ ,  $^{95}\text{Zr}$ , SS
393. Picker X-Ray Corporation  
17325 Euclid Avenue  
Cleveland 12, Ohio  
J. Dunn  
 $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{197}\text{Hg}$ ,  $^{147}\text{Pm}$ , SS
394. Piper Well Surveys  
Box 261  
Bradford, Pennsylvania  
D. J. Piper  
 $^{46}\text{Sc}$
395. Pittsburgh, University of  
Pittsburgh, Pennsylvania 15213  
D. J. Brewer, Director of Purchases  
 $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{152-154}\text{Eu}$ ,  $^{131}\text{I}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  
 $^{186}\text{Re}$ ,  $^{85}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{204}\text{Tl}$ ,  $^{185}\text{W}$ ,  $^{65}\text{Zn}$ , FP
396. Polytechnic Institute of Brooklyn  
333 Jay Street  
Brooklyn, New York 11201  
Dr. I. Cohen  
 $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{32}\text{P}$
397. Pomona College  
747 North Dartmouth Avenue  
Claremont, California 91713  
D. L. Ryerson  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{35}\text{S}$
398. Portland, University of  
5000 North Willamette Boulevard  
Portland, Oregon  
C. W. Bonhonst  
 $^{75}\text{Se}$
399. Potter and Brumfield  
Princeton, Indiana 47570  
E. Cox, Purchasing  
 $^{85}\text{Kr}$
400. Pratt and Whitney Aircraft  
United Aircraft Corporation  
Gate 17-C - Silver Lane  
East Hartford 8, Connecticut  
 $^{129}\text{I}$

401. Presbyterian Hospital  
188 Fort Washington Avenue  
New York, New York  
E. E. Stickley  
 $^{99m}\text{Tc}$  (B)
402. Presbyterian Medical Center  
Clay and Webster Streets  
San Francisco, California  
Dr. J. M. Lowenstein  
 $^{86}\text{Rb}$ ,  $^{35}\text{S}$
403. Presbyterian-St. Luke's Hospital  
1753 West Congress Parkway  
Chicago 12, Illinois  
E. R. Blomquist  
 $^{59}\text{Fe}$  (A),  $^{24}\text{Na}$ , SI (A) ( $^{59}\text{Fe}$ )
404. Princeton University  
Princeton, New Jersey  
R. A. Winters  
 $^{252}\text{Cf}$ ,  $^{244}\text{Cm}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{103}\text{Ru}$ ,  $^{35}\text{S}$ ,  
 $^{182}\text{Ta}$
405. Princeton University  
Forrestal Research Center  
Princeton, New Jersey  
R. A. Naumann  
CSI (B) ( $^{103}\text{Pd}$ )
406. Princeton University  
Palmer Physical Laboratory  
Princeton, New Jersey  
O. Ames  
SI (B)
407. Procter and Gamble Company  
P. O. Box 175  
Groesbeck Station  
Cincinnati, Ohio  
H. W. Lampe  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , SI (B)
408. Public Health Research Institute of New York  
Foot of East 16th Street  
New York, New York 10009  
Florence M. Zulbert  
 $^{131}\text{I}$ ,  $^{32}\text{P}$
409. Puerto Rico Nuclear Center  
Bio Med Building  
Caparra Heights Station  
San Juan, Puerto Rico  
 $^{45}\text{Ca}$ ,  $^{60}\text{Co}$ ,  $^{55-59}\text{Fe}$
410. Puerto Rico Nuclear Center  
University of Puerto Rico  
College Station  
Mayaguez, Puerto Rico 00709  
 $^{144}\text{Ce}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{106}\text{Ru}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
411. Puerto Rico Water Resources Authority  
San Juan, Puerto Rico  
J. C. Muniz  
 $^{131}\text{I}$ ,  $^{85}\text{Kr}$ ,  $^{182}\text{Ta}$ , SS
412. Puerto Rico, University of  
P. O. Box 516  
Rio Piedras, Puerto Rico  
J. A. Colon  
 $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{55-59}\text{Fe}$ ,  $^{59}\text{Fe}$ ,  
 $^{32}\text{P}$ ,  $^{106}\text{Ru}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
413. Puget Sound, University of  
Tacoma 6, Washington  
M. E. Nelson  
 $^{32}\text{P}$
414. Purdue University  
Lafayette, Indiana  
P. L. Ziemer  
 $^{124}\text{Sb}$ ,  $^{76}\text{As}$ ,  $^{77}\text{As}$ ,  $^{133}\text{Ba}$ ,  $^{82}\text{Br}$ ,  $^{115}\text{Cd}$ ,  
 $^{115m}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{252}\text{Cf}$ ,  $^{36}\text{Cl}$ ,  $^{198}\text{Au}$ ,  
 $^{181}\text{Hf}$ ,  $^{130}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{140}\text{La}$ ,  $^{28}\text{Mg}$  (B),  $^{203}\text{Hg}$ ,  
 $^{99}\text{Mo}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  
 $^{230}\text{Th}$ ,  $^{95}\text{Zr}$ , CSI ( $^{179}, ^{180}\text{Re}$ ), SI (A)
415. Pure Oil Company  
Research Center  
Crystal Lake, Illinois  
C. M. Ridgeway, Manager  
SI (B)
416. RIAS, Inc.  
7212 Bellona Avenue  
Baltimore, Maryland  
J. H. Pretyman, Purchasing Agent  
 $^{32}\text{P}$ ,  $^{35}\text{S}$

417. Radiation Research Corporation  
1150 Shames Drive  
Westbury, New York  
Phylles Chiuchiolo  
 $^3\text{H}$ , SS
418. Radio Corporation of America  
Box 432  
Princeton, New Jersey 08540  
R. F. Bailey  
 $^{137}\text{Cs}$
419. Radio-Carbon Laboratories, Inc.  
120 Chester Avenue  
San Francisco, California 94132  
Dr. J. W. Davis, Jr.  
 $^{32}\text{P}$
420. Radiochemistry, Inc.  
1111 West St. Catherine  
Louisville, Kentucky  
Nelda Moyers, Purchasing Agent  
 $^{35}\text{S}$
- 42 Radium Chemical Company, Inc.  
161 East 42nd Street  
New York 17, New York  
W. M. Holm  
 $^{147}\text{Pm}$
422. Rensselaer Polytechnic Institute  
110-8th Street  
Troy, New York  
D. Howells II, Manager of Purchasing  
 $^{45}\text{Ca}$ ,  $^{252}\text{Cf}$ ,  $^{64}\text{Cu}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  
SI (B)
423. Research Triangle Institute  
P. O. Box 490  
Durham, North Carolina 27702  
W. J. Thomas, Purchasing Agent  
 $^{147}\text{Pm}$ ,  $^{204}\text{Tl}$ ,  $^{113}\text{Sn}$ , SI, SS
424. Retina Foundation  
20 Staniford Street  
Boston, Massachusetts  
J. Gergely  
 $^{45}\text{Ca}$
425. Reynolds Electric Engineering Company, Inc.  
P. O. Box 1360  
Las Vegas, Nevada 89101  
M. C. Rees  
 $^{140}\text{Ba}$ ,  $^{131}\text{I}$ ,  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  
 $^{132}\text{Te}$  (B), SI
426. R. J. Reynolds Tobacco Company  
Winston-Salem, North Carolina  
J. B. Glenn, Buyer  
 $^{14}\text{C}$
427. Rhode Island, University of  
Marine Laboratory  
Kingston, Rhode Island  
 $^{45}\text{Ca}$
428. Rhode Island, University of  
Marine Laboratory  
Narragansett, Rhode Island  
Dr. J. T. Corless  
 $^{45}\text{Ca}$ ,  $^{114}\text{In}$ ,  $^{59}\text{Fe}$ ,  $^{46}\text{Sc}$ ,  $^{89}\text{Sr}$
429. Rice University  
Houston, Texas  
R. V. Talmage  
 $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ , SI (A) ( $^3\text{He}$ )
430. Richfield Oil Corporation  
Research & Development  
1900 Crescent Avenue  
Anaheim, California  
L. M. Richards, Manager  
SI (B)
431. Riker Laboratories, Inc.  
19901 Nordoff Street  
Northridge, California  
J. T. Finn, Buyer  
 $^{35}\text{S}$
432. Rochester, University of  
575 Elmwood Avenue  
Rochester 20, New York  
R. H. Hayes  
 $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^{51}\text{Cr}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  
 $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  
 $^{35}\text{S}$ ,  $^{185}\text{W}$ ,  $^{65}\text{Zn}$ , SI (A), SS

433. Rochester, University of Strong Memorial Hospital  
Rochester, New York  
Dr. J. Green  
 $^{99m}\text{Tc}$  (B)
434. The Rockefeller Foundation  
111 West 50th Street  
New York, New York 10020  
S. E. Harris  
 $^{47}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$
435. The Rockefeller University  
66th Street and York Avenue  
New York, New York 10021  
R. M. Miller  
 $^{45}\text{Ca}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{35}\text{S}$
436. Rosary Hill College  
4380 Main Street  
Buffalo, New York 14226  
Sister M. Regina, O.S.F.  
 $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$
437. Roswell Park Memorial Institute  
666 Elm Street  
Buffalo 3, New York  
Dr. M. A. Bender  
 $^{45}\text{Ca}$ ,  $^{141}\text{Ce}$ ,  $^{130}\text{I}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{24}\text{Na}$ ,  
 $^{99m}\text{Tc}$  (B), SS
438. Rutgers – The State University  
University Heights Campus  
Radiation Science Center  
New Brunswick, New Jersey  
J. C. Frisch, Jr.  
 $^{131}\text{I}$ ,  $^{55-59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$
439. St. Elizabeth's Hospital Research Laboratories  
736 Cambridge Street  
Brighton, Massachusetts  
Dr. F. Stohlman, Jr.  
 $^{59}\text{Fe}$
440. St. Jude Children's Research Hospital  
332 North Lauderdale  
Memphis 3, Tennessee  
C. D. Davidson, Purchasing Agent  
 $^{32}\text{P}$
441. St. Louis University  
221 North Grand Boulevard  
St. Louis 3, Missouri  
Dr. N. E. Melechen  
 $^{203}\text{Hg}$ ,  $^{32}\text{P}$
442. St. Lukes Episcopal Hospital  
6720 Bertner  
Houston, Texas 77025  
CSI ( $^{84}\text{Rb}$ )
443. St. Lukes Hospital  
San Francisco, California  
Dr. Black  
 $^{133}\text{Ba}$ ,  $^{99m}\text{Tc}$  (B)
444. St. Mary's College  
Winona, Minnesota  
Brother L. George  
 $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$
445. St. Mary's University  
2700 Cincinnati Avenue  
San Antonio, Texas 78228  
E. A. Gettinger  
 $^{115}\text{Cd}$ ,  $^{65}\text{Zn}$
446. St. Olaf College  
Northfield, Minnesota  
D. C. Kringen, Business Manager  
14 c
447. Sandia Corporation  
P. O. Box 5800  
Albuquerque, New Mexico  
M. F. Stewart, Buyer  
 $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{63}\text{Ni}$ ,  $^{147}\text{Pm}$ ,  $^{46}\text{Sc}$
448. San Diego State College  
San Diego, California 92115  
S. C. Hartigan, Business Manager  
 $^{252}\text{Cf}$ ,  $^{32}\text{P}$
449. Sandoz Pharmaceuticals  
Route 10, P. O. Box 11  
Hanover, New Jersey 07936  
E. L. Sutherland  
 $^{36}\text{Cl}$

450. San Francisco State College  
1600 Holloway Avenue  
San Francisco 27, California  
L. F. Mardall  
 $^{130}\text{I}$ ,  $^{131}\text{I}$   
Savannah River Laboratory  
(See E. I. du Pont de Nemours and Co.)
451. Schlumberger Well Surveying Company  
P. O. Box 217.5  
Houston, Texas 77001  
O. C. Cheatham  
 $^3\text{H}$ , SS
452. Schwarz BioResearch, Inc.  
Mountain View Avenue  
Orangeburg, New York  
R. Capodieci  
 $^{14}\text{C}$ ,  $^3\text{H}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ , SS
453. Select Services  
800 Brooklawn  
Boulder, Colorado  
C. R. Quinn  
 $^{46}\text{Sc}$
454. Seton Hall College of Medicine  
24 Baldwin Avenue  
Jersey City 4, New Jersey  
 $^{129}\text{I}$ ,  $^{85}\text{Kr}$
455. Shell Chemical Corporation  
P. O. Box 2633  
Deer Park, Texas  
E. W. Herrington  
 $^{185}\text{W}$
456. Shell Development Company  
1410 45th Street  
Emeryville, California  
Miss M. Abney  
 $^{198}\text{Au}$ ,  $^{199}\text{Au}$ ,  $^{35}\text{S}$ ,  $^{99}\text{Tc}$
457. Shell Oil Company  
Houston Refinery  
P. O. Box 100  
Deer Park, Texas  
 $^{144}\text{Ce}$ ,  $^{46}\text{Sc}$
458. Sinclair Research Laboratories, Inc.  
155 North Wacker Drive  
Chicago, Illinois 60606  
 $^{60}\text{Co}$ ,  $^{198}\text{Au}$ ,  $^{110}\text{Ag}$
459. Sloan-Kettering Institute  
410 East 68th Street  
New York, New York  
P. C. Wrenn  
 $^{131}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{89}\text{Sr}$
460. Smith College  
Northampton, Massachusetts  
Ester Carpenter  
 $^{131}\text{I}$
461. Smith Kline and French Laboratories  
1530 Spring Garden Street  
Philadelphia 1, Pennsylvania  
P. A. Geary  
 $^{35}\text{S}$ , SS
462. Smithsonian Institution  
10th Street and Constitution Avenue, N.W.  
Washington, D.C. 20560  
A. W. Wilding  
 $^{14}\text{C}$ ,  $^{32}\text{P}$
463. Socony-Mobile Oil Company, Inc.  
3600 Duncanville Road  
Dallas, Texas 75221  
Joe Guynes  
 $^{45}\text{Ca}$ ,  $^{141}\text{Ce}$ ,  $^{36}\text{Cl}$ ,  $^{152-154}\text{Eu}$ ,  $^{129}\text{I}$ ,  
 $^{86}\text{Rb}$ ,  $^{89}\text{Sr}$
464. South, University of the  
Sewanee, Tennessee  
Dr. T. Felder Dorn  
 $^{64}\text{Cu}$
465. South Carolina, University of  
Columbia, South Carolina 29208  
J. F. Tyler  
 $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{89}\text{Sr}$
466. South Dakota State College  
Brookings, South Dakota 57007  
W. G. Harris  
 $^{14}\text{C}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{75}\text{Se}$ ,  $^{35}\text{S}$

467. Southeast Louisiana Hospital  
State Department of Hospitals  
Mandeville, Louisiana  
W. G. Wascom, Business Administrator  
 $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{65}\text{Zn}$
468. Southeast Missouri State College  
Cape Girardeau, Missouri  
E. L. Bahn, Jr.  
 $^{14}\text{C}$ ,  $^{114}\text{In}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$
469. Southeastern Louisiana College  
Hammond, Louisiana 70402  
J. W. Reeves, Business Manager  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$
470. Southern California, University of  
University Park  
Los Angeles, California 90007  
D. L. McNamara  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  
 $^{35}\text{S}$
471. Southern Illinois University  
Carbondale, Illinois  
G. A. Taberman  
 $^{86}\text{Rb}$ ,  $^{65}\text{Zn}$
472. Southern Research Institute  
2000 Ninth Avenue, South  
Birmingham, Alabama 35205  
 $^{35}\text{S}$
473. Southwest Research Institute  
8500 Culebra Road  
San Antonio 6, Texas  
J. M. Clark, Jr.  
SI (B)
474. Southwestern Medical School  
5323 Harry Hines Boulevard  
Dallas, Texas  
Mr. Rampy  
 $^{36}\text{Cl}$ ,  $^{131}\text{I}$ ,  $^{42}\text{K}$ ,  $^{24}\text{Na}$ ,  $^{35}\text{S}$ , SS
475. Southwestern University  
Georgetown, Texas  
E. C. True  
 $^{32}\text{P}$
476. Space-Research Incorporated  
1020 Sligh Boulevard  
Orlando, Florida  
 $^{14}\text{C}$
477. Sprague Electric Company  
North Adams, Massachusetts  
H. H. Mallory  
SI
478. E. R. Squibb & Sons  
Georges Road  
New Brunswick, New Jersey  
Dr. G. Lindenblad  
 $^{99}\text{Mo}$  (B),  $^{99\text{m}}\text{Tc}$  (B)
479. E. R. Squibb and Sons  
Division of Olin-Mathieson Chemical Corp.  
445 West 59th Street  
New York 19, New York  
H. Austin  
 $^{82}\text{Br}$ ,  $^{47}\text{Ca}$ ,  $^{51}\text{Cr}$ ,  $^{60}\text{Co}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  $^{86}\text{Rb}$ ,  
 $^{75}\text{Se}$ ,  $^{85}\text{Sr}$ ,  $^{35}\text{S}$ , SS
480. Stanford Research Institute  
Menlo Park, California  
T. L. Tasso, Purchasing Services  
 $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{32}\text{P}$ ,  $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$ ,  $^{95}\text{Zr}$
481. Stanford University  
300 Pasteur Drive  
Palo Alto, California  
M. F. Moran  
 $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{3}\text{H}$ ,  $^{3}\text{H}$  Targets,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  
 $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{99\text{m}}\text{Tc}$  (B), SI
482. Stauffer Chemical Company  
Victor Chemical Division  
11th & Arnold Streets  
Chicago Heights, Illinois 60411  
W. B. Chess  
SI (B)
483. Stevens Institute of Technology  
Castle Point Station  
Hoboken, New Jersey  
 $^{3}\text{H}$

484. Swedish Hospital  
Tumor Institute  
Seattle, Washington  
  
Dr. Stapleton  
 $^{99m}\text{Tc}$  (B)
485. Sylvania Electric Products Inc.  
Towanda, Penn. 18848  
 $^{99}\text{Mo}$ ,  $^{32}\text{P}$ ,  $^{113}\text{Sn}$
486. Sylvania Electric Products, Inc.  
100 Sylvan Road  
Woburn, Massachusetts  
  
A. M. Ellis  
 $^{85}\text{Kr}$ ,  $^{99}\text{Mo}$ ,  $^{113}\text{Sn}$
487. Syracuse University  
205 University Place  
Syracuse, New York 13210  
  
E. E. Thompson, Purchasing Director  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$
488. Syracuse University Research Corporation  
1075 Comstock Avenue  
Syracuse, New York  
  
Dr. N. Lazaroff  
 $^{35}\text{S}$
489. TRG Incorporated  
Route 110  
Melville, Long Island, New York  
  
John Rusinak, Purchasing  
SI (B)
490. TRW Space Technology Laboratories  
One Space Park  
Redondo Beach, California  
  
E. E. Larsen  
 $^{85}\text{Kr}$ ,  $^{147}\text{Pm}$ ,  $^{204}\text{Tl}$
491. Taylor University  
Upland  
Indiana  
 $^{32}\text{P}$
492. Technical Operations, Inc.  
South Avenue  
Burlington, Massachusetts  
  
R. J. Prest  
 $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{192}\text{Ir}$ ,  $^{192}\text{Ir}$  (P)
493. Temple University and Temple University  
Hospital  
Broad and Montgomery Streets  
Philadelphia, Pennsylvania 19140  
  
W. T. Barclay  
 $^{37}\text{Ar}$ ,  $^{85}\text{Kr}$ ,  $^{75}\text{Se}$ ,  $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  $^{99m}\text{Tc}$  (B),  
 $^{133}\text{Xe}$ , SS
494. Tennessee, University of  
Dabney Hall  
Knoxville, Tennessee  
  
W. F. O'Toole  
University of Tennessee Medical  
Medical Units  
Memphis, Tennessee  
  
J. L. Wood  
 $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{134}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  
 $^{114}\text{In}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{99}\text{Mo}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{46}\text{Sc}$ ,  
 $^{75}\text{Se}$ ,  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{185}\text{W}$ ,  
 $^{65}\text{Zn}$ , SI, SS
495. UT-AEC Agricultural Laboratory  
1299 Bethel Valley Road  
Oak Ridge, Tennessee  
  
 $^{115m}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{134}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{64}\text{Cu}$ ,  $^{131}\text{I}$ ,  
 $^{54}\text{Mn}$ ,  $^{99}\text{Mo}$ ,  $^{32}\text{P}$ ,  $^{75}\text{Se}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  
 $^{35}\text{S}$ ,  $^{185}\text{W}$ ,  $^{65}\text{Zn}$
496. Tennessee Valley Authority  
Wilson Dam, Alabama 35661  
  
Dr. P. M. Giordano  
 $^{130}\text{I}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$ , SI
497. Texas A and M Research Foundation  
P. O. Box 44  
College Station, Texas  
  
Dr. W. C. Ellis  
 $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  $^{60}\text{Co}$ ,  $^{32}\text{P}$ ,  $^{103}\text{Ru}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  
 $^{95}\text{Zr}$

498. Texas Highway Department  
Camp Hubbard  
Austin, Texas 78703  
A. W. Eatman  
 $^{192}\text{Ir}$
499. Texas Instruments  
P. O. Box 5474  
Dallas 22, Texas  
M. D. Noell, Purchasing Agent  
 $^{37}\text{Ar}$ ,  $^{76}\text{As}$ ,  $^{64}\text{Cu}$ ,  $^{72}\text{Ga}$ ,  $^{198}\text{Au}$ ,  $^{199}\text{Au}$ ,  $^3\text{H}$ ,  
 $^{85}\text{Kr}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{103}\text{Ru}$ ,  $^{182}\text{Ta}$ ,  $^{133}\text{Xe}$ ,  
 $^{95}\text{Zr}$ , SI, SS
500. Texas Technological College  
Texas Agricultural Experiment Station  
Lubbock, Texas 79409  
J. P. House  
 $^{91}\text{Y}$
501. Texas, University of  
Austin, Texas 78712  
E. F. Gloyne  
 $^{45}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$ ,  $^{35}\text{S}$ ,  
 $^{99}\text{Tc}$ , SS
502. Texas, University of  
M. D. Anderson Hospital & Tumor Institute  
Houston, Texas  
 $^{32}\text{P}$ ,  $^{99m}\text{Tc}$  (B), SI (B)
503. Texas, University of  
Medical Branch  
Galveston, Texas 77551  
 $^{32}\text{P}$
504. Todd Shipyards Corporation  
P. O. Box 656  
Galveston, Texas  
G. C. Finkbiner  
 $^{131}\text{I}$ , SS
505. Touro Infirmary  
3500 Prytania Street  
New Orleans 15, Louisiana  
Dr. S. B. Nadler  
 $^{36}\text{Cl}$
506. Tracerlab, Inc.  
2419 South Boulevard  
Houston 6, Texas  
Janet Staker  
 $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{152-154}\text{Eu}$ ,  
 $^{181}\text{Hf}$ ,  $^{3}\text{H}$ ,  $^{55}\text{Fe}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{203}\text{Hg}$ ,  $^{63}\text{Ni}$ ,  
 $^{32}\text{P}$ ,  $^{147}\text{Pm}$ ,  $^{46}\text{Sc}$ ,  $^{110}\text{Ag}$ ,  $^{24}\text{Na}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  
 $^{35}\text{S}$ ,  $^{204}\text{Tl}$ ,  $^{113}\text{Sn}$ ,  $^{133}\text{Xe}$ ,  $^{95}\text{Zr}$ , CSI ( $^{57}\text{Co}$ ),  
SS
507. Tracerlab, Inc.  
1601 Trapelo Road  
Waltham, Massachusetts 02154  
W. Karp  
 $^{24}\text{Am}$ , CSI ( $^{57}\text{Co}$ )
508. Tracerlab, Inc.  
2030 Wright Avenue  
Richmond, California  
C. L. Freitas  
 $^{90}\text{Y}$  (B)
509. Trinity College  
Washington, D.C. 20017  
Sister St. John Neponucene  
 $^{32}\text{P}$ ,  $^{35}\text{s}$
510. Tufts New England Medical Center Hospitals  
37 Bennet Street  
Boston 11, Massachusetts  
R. Noonan  
 $^{45}\text{Ca}$
511. Tufts University Dental School  
136 Harrison Avenue  
Boston, Massachusetts  
W. J. Schnible, Purchasing Agent  
 $^{32}\text{P}$
512. Tulane University  
New Orleans, Louisiana 70118  
J. U. Hidalgo  
 $^{45}\text{Ca}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{140}\text{La}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  
 $^{24}\text{Na}$ ,  $^{35}\text{S}$ , SI, SS

513. Tung-Sol Electric, Inc.  
200 Bloomfield Avenue  
Bloomfield, New Jersey  
John F. Grimm  
SI (B)
514. Tuskegee Institute  
P. O. Box 1239  
Tuskegee Institute, Alabama 36088  
J. A. Fernandes  
 $^{14}\text{C}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  $^{198}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  
 $^{35}\text{S}$ , SS
515. Twin City Testing Corporation  
P. O. Box 95  
Tonawanda, New York 14152  
 $^{14}\text{C}$
516. Union Carbide Corporation  
P. O. Box P  
Oak Ridge, Tennessee 37830  
Central Purchasing  
 $^{192}\text{Ir}$ , SS
517. Union Carbide Corporation  
Oak Ridge National Laboratory  
P. O. Box X  
Oak Ridge, Tennessee 37830  
Central Purchasing  
 $^{241}\text{Am}$ ,  $^{243}\text{Am}$  (S),  $^{124}\text{Sb}$ ,  $^{125}\text{Sb}$ ,  $^{133}\text{Ba}$ ,  
 $^{140}\text{Ba}$ ,  $^{210}\text{Bi}$ ,  $^{82}\text{Br}$ ,  $^{109}\text{Cd}$ ,  $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  
 $^{47}\text{Ca}$ ,  $^{14}\text{C}$  (G),  $^{141}\text{Ce}$ ,  $^{144}\text{Ce}$ ,  $^{134}\text{Cs}$ ,  
 $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{36}\text{Cl}$  (G),  $^{51}\text{Cr}$ ,  $^{60}\text{Co}$ ,  $^{60}\text{Co}$  (S),  
 $^{60}\text{Co}$  (metal),  $^{64}\text{Cu}$ ,  $^{244}\text{Cm}$  (S),  $^{245}\text{Cm}$  (S),  
 $^{246}\text{Cm}$  (S),  $^{152-154}\text{Eu}$ ,  $^{72}\text{Ga}$ ,  $^{198}\text{Au}$ ,  $^{181}\text{Hf}$ ,  
 $^3\text{H}$ ,  $^3\text{H}$  (S),  $^3\text{H}$  Targets,  $^{114}\text{In}$ ,  $^{129}\text{I}$  (S),  $^{130}\text{I}$ ,  
 $^{131}\text{I}$ ,  $^{192}\text{Ir}$ ,  $^{192}\text{Ir}$  (S),  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{140}\text{La}$ ,  
 $^{203}\text{Hg}$ ,  $^{203}\text{Hg}$  (G),  $^{99}\text{Mo}$ ,  $^{99}\text{Mo}$  (B),  $^{147}\text{Nd}$ ,  
 $^{237}\text{Np}$ ,  $^{237}\text{Np}$  (S),  $^{95}\text{Nb}$ ,  $^{100}\text{Os}$ ,  $^{109}\text{Pd}$ ,  
 $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{147}\text{Pm}$ ,  $^{241}\text{Pu}$  (S),  $^{242}\text{Pu}$  (S)  
 $^{186}\text{Re}$ ,  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$ ,  $^{153}\text{Sm}$ ,  $^{46}\text{Sc}$ ,  
 $^{75}\text{Se}$ ,  $^{110}\text{Ag}$ ,  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$  (G),  
 $^{182}\text{Ta}$ ,  $^{99}\text{Tc}$ ,  $^{204}\text{Tl}$ ,  $^{113}\text{Sn}$ ,  $^{185}\text{W}$ ,  $^{187}\text{W}$   
 $^{233}\text{U}$  (S),  $^{91}\text{Y}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , FP, SI, SI (A)  
( $^{33}\text{P}$ ), SS
518. Union Carbide Corporation  
P. O. Box Y  
Oak Ridge, Tennessee 37830  
Central Purchasing  
 $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{60}\text{Co}$  (metal),  $^{152-154}\text{Eu}$ ,  $^{129}\text{I}$ ,  
 $^{131}\text{I}$ ,  $^{192}\text{Ir}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{197}\text{Hg}$ ,  $^{203}\text{Hg}$ ,  
 $^{147}\text{Nd}$ ,  $^{32}\text{P}$ ,  $^{75}\text{Se}$ ,  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  
 $^{35}\text{S}$ , SI, SS
519. Union Carbide Corporation  
Paducah, Kentucky  
R. F. Smith  
SI
520. Union Carbide Corporation  
Chemicals Division  
P. O. Box 8361  
South Charleston 3, West Virginia  
O. C. Lloyd  
 $^{14}\text{C}$
521. Union Carbide Nuclear Company  
Long Meadow Road  
P. O. Box 324  
Tuxedo, New York  
R. W. Harrison  
 $^{45}\text{Ca}$ ,  $^{99}\text{Tc}$ ,  $^{99m}\text{Tc}$  (B),  $^{204}\text{Tl}$ , CSI ( $^{57}\text{Co}$ )
522. Union University (Albany Medical College)  
47 New Scotland Avenue  
Albany, New York 12208  
L. J. Flansburg, Purchasing Agent  
 $^{47}\text{Ca}$ ,  $^{85}\text{Kr}$ ,  $^{32}\text{P}$ , SS
523. United Aircraft Company  
Silver Lane  
East Hartford, Connecticut  
J. H. McMeekin  
 $^{85}\text{Kr}$ ,  $^{133}\text{Xe}$ , SS
524. United States Air Force  
McClellan Air Force Base  
California  
Charles H. Anderson, Captain  
 $^{124}\text{Sb}$ ,  $^{125}\text{Sb}$ ,  $^{140}\text{Ba}$ ,  $^{210}\text{Bi}$ ,  $^{203}\text{Hg}$ ,  $^{237}\text{Np}$ ,  
 $^{95}\text{Nb}$ ,  $^{147}\text{Pm}$ ,  $^{24}\text{Na}$ ,  $^{95}\text{Zr}$

525. United States Air Force  
ASCFC-13, Building 11, Area B  
Wright Patterson Air Force Base  
Ohio 45433  
D. L. Stahl, Contracting Officer, EWPB  
 $^{241}\text{Am}$ ,  $^{133}\text{Ba}$ ,  $^{134}\text{Cs}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{198}\text{Au}$ ,  
 $^{203}\text{Hg}$ ,  $^{95}\text{Nb}$ ,  $^{142}\text{Pr}$ ,  $^{185}\text{W}$ ,  $^{65}\text{Zn}$ , SS
526. United States Army  
Army Medical Center  
Walter Reed Army Medical Center  
Washington, D.C. 20012  
J. J. Degen  
 $^{124}\text{Sb}$ ,  $^{140}\text{Ba}$ ,  $^{115}\text{Cd}$ ,  $^{51}\text{Cr}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  
 $^{198}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{55}\text{Fe}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{203}\text{Hg}$ ,  $^{63}\text{Ni}$ ,  
 $^{110}\text{Ag}$ ,  $^{113}\text{Sn}$ ,  $^{90}\text{Y}$ , SS
527. United States Army  
Dugway Proving Ground  
1750 South Redwood Road  
Dugway, Utah  
F. Kennedy, Procurement Division  
 $^{32}\text{P}$
528. United States Army  
Edgewood Arsenal, Maryland 21010  
J. Van Silder, Contracting Officer  
 $^{45}\text{Ca}$ ,  $^{129}\text{I}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$
529. United States Army  
Fitzsimons General Hospital  
Denver, Colorado 80240  
Ora Lee Brown  
 $^{170}\text{Tm}$ ,  $^{133}\text{Xe}$
530. United States Army  
Fort McClellan, Alabama 36205  
Mary W. Kirk  
 $^{198}\text{Au}$ ,  $^{140}\text{La}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{46}\text{Sc}$ ,  $^{35}\text{S}$ , SI
531. United States Army  
Frankford Arsenal  
Bridge and Tacony Streets  
Philadelphia, Pennsylvania 19137  
W. E. Ibberson  
 $^{85}\text{Kr}$ , SS
532. United States Army  
Picatinny Arsenal  
Dover, New Jersey  
R. Hachadoorian  
 $^{59}\text{Fe}$
533. United States Army  
Pine Bluff Arsenal  
Arsenal, Arkansas  
 $^{85}\text{Kr}$
534. United States Army  
Rock Island Arsenal  
Rock Island, Illinois 61202  
Alma L. Dannenfeldt, Contracting Officer  
 $^{35}\text{S}$ , SI
535. United States Army  
West Point  
United States Military Academy  
West Point, New York 10996  
Fred A. Childs, Activity Supply Officer  
 $^{144}\text{Ce}$
536. United States Army Biological Laboratories  
Fort Detrick, Maryland  
W. A. Blumenauer  
 $^{131}\text{I}$ ,  $^{32}\text{P}$
537. United States Army Missile Support Command  
P. and C. Division  
Building T-3152  
Redstone Arsenal, Alabama 35809  
D. G. Rowland  
SI
538. United States Atomic Energy Commission  
New York Operations Office  
376 Hudson Street  
Bay K, King Street, Fifth Floor  
New York, New York 10014  
J. H. Harley  
 $^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{51}\text{Cr}$ ,  $^{198}\text{Au}$ ,  
 $^{114}\text{In}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{75}\text{Se}$ ,  $^{24}\text{Na}$ ,  
 $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{204}\text{Tl}$ ,  $^{170}\text{Tm}$ ,  $^{113}\text{Sn}$ ,  $^{95}\text{Zr}$ ,  
SI, SS

539. United States Atomic Energy Commission  
Oak Ridge Operations Office  
Oak Ridge, Tennessee  
 $^{82}\text{Br}$
540. United States Atomic Energy Commission  
Richland Operations Office  
P. O. Box 6550  
Richland, Washington 99352  
 $^{60}\text{Co}$ ,  $^{106}\text{Ru}$ ,  $^{95}\text{Zr}$
541. United States Department of Agriculture ARS  
Eastern Administrative Division  
Fort Washington, Pennsylvania 19034  
 $^{64}\text{Cu}$ ,  $^{65}\text{Zn}$
542. United States Department of Agriculture ARS  
Southern Administrative Division  
P. O. Box 53326  
New Orleans, Louisiana  
 $^{124}\text{Sb}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{32}\text{P}$
543. United States Department of Agriculture ARS  
Western Administrative Division  
1960 Addison Street  
Berkeley, California 94704  
 $^{36}\text{Cl}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
544. United States Department of Agriculture  
Crops Research Division, ARS  
Plant Industry Station  
Beltsville, Maryland  
E. L. Marshall, Procurement Officer  
 $^{124}\text{Sb}$ ,  $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{64}\text{Cu}$ ,  
 $^{198}\text{Au}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{147}\text{Pm}$ ,  $^{86}\text{Rb}$ ,  $^{46}\text{Sc}$ ,  
 $^{75}\text{Se}$ ,  $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
545. United States Department of Commerce  
National Bureau of Standards  
Connecticut Ave. and Van Ness St., N.W.  
Washington, D.C.  
C. B. Kipps, Chief Procurement Section  
 $^{243}\text{Am}$ ,  $^{133}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  
 $^{141}\text{Ce}$ ,  $^{51}\text{Cr}$ ,  $^{58}\text{Co}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  $^{152-154}\text{Eu}$ ,  
 $^{181}\text{Hf}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{203}\text{Hg}$ ,  $^{95}\text{Nb}$ ,  $^{32}\text{P}$ ,  
 $^{75}\text{Se}$ ,  $^{35}\text{S}$ ,  $^{182}\text{Ta}$ ,  $^{99}\text{Tc}$ ,  $^{204}\text{Tl}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ ,  
SI, SS
546. United States Department of Interior  
Bureau of Commercial Fisheries  
Beaufort, North Carolina 28516  
 $^{82}\text{Br}$ ,  $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  
 $^{42}\text{K}$ ,  $^{90}\text{Sr}$ ,  $^{91}\text{Y}$ ,  $^{95}\text{Zr}$ , FP
547. United States Department of Interior  
Bureau of Mines  
224 New Custom House  
Denver, Colorado 80202  
 $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{59}\text{Fe}$ ,  $^{99}\text{Mo}$ ,  $^{147}\text{Pm}$ ,  $^{86}\text{Rb}$ ,  
 $^{182}\text{Ta}$
548. United States Department of Interior  
Bureau of Mines  
Collins Ferry Road  
Morgantown, West Virginia  
Dr. R. F. Stewart  
 $^{252}\text{Cf}$
549. United States Department of Interior  
Bureau of Mines  
Forbes Avenue  
Pittsburgh, Pennsylvania 15213  
 $^{198}\text{Au}$ ,  $^{90}\text{Sr}$
550. United States Department of Interior  
Bureau of Mines  
1600 East 1st South  
Salt Lake City, Utah 84112  
P. R. Davis, Administrative Officer  
 $^{140}\text{Ba}$ ,  $^{82}\text{Br}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  
 $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{198}\text{Au}$ ,  $^3\text{H}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{99}\text{Mo}$ ,  
 $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{147}\text{Pm}$ ,  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  $^{110}\text{Ag}$ ,  $^{85}\text{Sr}$ ,  
 $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{182}\text{Ta}$ ,  $^{91}\text{Y}$ ,  $^{95}\text{Zr}$ , FP, CSI, SI, SS
551. United States Department of Interior  
Bureau of Mines  
Metallurgy Research Center  
P. O. Box 70  
Albany, Oregon 97321  
Attn: F. E. Block  
 $^{60}\text{Co}$  (S)
552. United States Department of Interior  
Bureau of Reclamation  
Denver Federal Center  
Denver, Colorado 80225  
 $^{198}\text{Au}$ ,  $^{131}\text{I}$

553. United States Department of Interior  
Geological Survey  
Washington , D.C. 20242  
 $^{140}\text{Ba}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{131}\text{I}$ ,  $^{103}\text{Ru}$ ,  $^{110}\text{Ag}$ ,  $^{35}\text{S}$ ,  
 $^{91}\text{Y}$ , FP
554. United States Food and Drug Administration  
South Agriculture Building  
12th and C Streets, S.W.  
Washington, D.C.  
E. P. Laug  
 $^{137}\text{Cs}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{110}\text{Ag}$ ,  $^{90}\text{Sr}$ ,  $^{113}\text{Sn}$ , SS
555. United States National Aeronautics and Space  
Administration  
Lewis Research Center  
21000 Brookpark Road  
Cleveland, Ohio 44135  
B. S. Torre  
 $^{85}\text{Kr}$ , CSI
556. United States National Aeronautics and Space  
Administration  
Goddard Space Flight Center  
Glendale Road  
Greenbelt, Maryland 20771  
 $^{147}\text{Pm}$ ,  $^{89}\text{Sr}$ ,  $^{95}\text{Zr}$ , CSI
557. United States National Aeronautics and Space  
Administration  
Ames Research Center  
Moffett Field, California 94035  
M. E. Toland, Contracting Officer  
 $^{60}\text{Co}$ ,  $^{32}\text{P}$ ,  $^{147}\text{Pm}$ ,  $^{89}\text{Sr}$ ,  $^{95}\text{Zr}$ , CSI, SS
558. United States Naval Air Development Station  
Johnsville, Pennsylvania  
G. F. Argetsinger  
 $^{32}\text{P}$
559. United States Naval Civil Engineering  
Laboratory  
Port Hueneve, California 93041  
J. H. Reyes  
SI, SS
560. United States Naval Ordnance Laboratory  
White Oak  
Silver Spring, Maryland  
 $^{140}\text{Ba}$ ,  $^{144}\text{Ce}$ ,  $^{99}\text{Mo}$ ,  $^{106}\text{Ru}$ ,  $^{132}\text{Te}$  (B),  
 $^{95}\text{Zr}$ , SI
561. United States Naval Postgraduate School  
Monterey, California  
CW04 D. R. Siler, Assistant Supply and  
Fiscal Officer  
 $^{131}\text{I}$ ,  $^{65}\text{Zn}$
562. United States Naval Propellant Plant  
Indian Head, Maryland 20640  
Dr. P. E. Wilkniss  
 $^{86}\text{Rb}$
563. United States Naval Radiological Defense  
Laboratory  
San Francisco, California 94135  
A. E. Cozby  
 $^{124}\text{Sb}$ ,  $^{77}\text{As}$ ,  $^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  
 $^{137}\text{Cs}$ ,  $^{3}\text{H}$ ,  $^{114}\text{In}$ ,  $^{131}\text{I}$ ,  $^{132}\text{I}$  (B),  $^{59}\text{Fe}$ ,  
 $^{140}\text{La}$ ,  $^{203}\text{Hg}$ ,  $^{99}\text{Mo}$ ,  $^{95}\text{Nb}$ ,  $^{109}\text{Pd}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  
 $^{186}\text{Re}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{170}\text{Tm}$ ,  $^{113}\text{Sn}$ ,  
 $^{91}\text{Y}$ ,  $^{65}\text{Zn}$ , CSI ( $^{95}\text{Tc}$ ), SI, SS
564. United States Naval Research Laboratory  
Washington, D.C. 20390  
D. Linehan, Contracting Officer  
 $^3\text{H}$ ,  $^{55-59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{24}\text{Na}$ ,  $^{90}\text{Sr}$ , SI (B),  
SS
565. United States Naval Station  
Treasure Island  
San Francisco, California  
Supply Officer  
SI
566. United States Navy  
Bureau of Ships  
Washington 25, D.C.  
E. E. Linehan  
 $^{137}\text{Cs}$
567. United States Navy  
Mare Island Naval Shipyard  
Vallejo, California  
G. E. Jennings  
 $^{140}\text{Ba}$ ,  $^{181}\text{Hf}$ ,  $^{182}\text{Ta}$ ,  $^{95}\text{Zr}$

568. United States Navy  
 National Naval Medical Center  
 Bethesda 14, Maryland  
 W. E. Royals, Contracting Officer  
 $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{198}\text{Au}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{197}\text{Hg}$ ,  
 $^{99}\text{Mo}$ ,  $^{42}\text{K}$ ,  $^{24}\text{Na}$
569. United States Navy  
 New York Naval Shipyard  
 United States Naval Applied Science  
 Laboratory  
 Brooklyn, New York 11251  
 D. Gerard  
 $^{35}\text{S}$
570. United States Nuclear Corporation  
 801 North Lake Street  
 Burbank, California  
 K. Amlauer  
 $^{133}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  
 $^{3}\text{H}$ ,  $^{192}\text{Ir}$ ,  $^{55}\text{Fe}$ ,  $^{63}\text{Ni}$ ,  $^{210}\text{Po}$  (M),  $^{147}\text{Pm}$ ,  
 $^{106}\text{Ru}$ ,  $^{75}\text{Se}$ ,  $^{90}\text{Sr}$ ,  $^{204}\text{Tl}$ ,  $^{170}\text{Tm}$ , CSI  
 $(^{57}\text{Co})$ , SS
571. United States Public Health Service  
 P. O. Box 684  
 4505 Maryland Parkway  
 Las Vegas, Nevada 89101  
 R. D. Ostlund, General Services Assistant  
 $^{133}\text{Xe}$
572. United States Public Health Service  
 P. O. Box 61  
 Montgomery, Alabama 36101  
 F. H. Gorrie  
 $^{140}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{147}\text{Pm}$ ,  $^{103}\text{Ru}$ ,  $^{106}\text{Ru}$
573. United States Public Health Service  
 Rockville, Maryland  
 C. B. Kincaid  
 $^{132}\text{Te}$  (B)
574. United States Public Health Service  
 15th Avenue and Lake Street  
 San Francisco, California  
 Dr. Kenneth Hyatt  
 $^{28}\text{Mg}$  (B)
575. United States Public Health Service  
 330 Independence Avenue, S.W.  
 Washington, D.S. 20201  
 Helen S. Shartzner, Purchasing Agent  
 $^{82}\text{Br}$ ,  $^{131}\text{I}$ ,  $^{147}\text{Nd}$ ,  $^{32}\text{P}$ ,
576. United States Public Health Service  
 National Institutes of Health  
 Baltimore City Hospitals  
 Baltimore 24, Maryland  
 E. W. High  
 $^{32}\text{P}$
577. United States Public Health Service  
 National Institutes of Health  
 Isotope Laboratory  
 Building 21  
 Bethesda 14, Maryland  
 J. M. Brown, Jr.  
 $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^{130}\text{I}$ ,  $^{131}\text{I}$ ,  $^{132}\text{I}$  (B),  $^{59}\text{Fe}$ ,  
 $^{197}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{99\text{m}}\text{Tc}$  (B),  
 $^{185}\text{W}$ ,  $^{65}\text{Zn}$ , SS
578. United States Public Health Service  
 Robert A. Taft Sanitary Engineering Center  
 4676 Columbia Parkway  
 Cincinnati, Ohio 45226  
 K. F. Schroeder, Procurement Assistant  
 $^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{137}\text{Cs}$ ,  $^{131}\text{I}$ ,  $^{133}\text{I}$  (B),  $^{32}\text{P}$ ,  
 $^{85}\text{Sr}$ ,  $^{132}\text{Te}$ ,  $^{133}\text{Xe}$
579. United States Public Health Service  
 Rocky Mountain Laboratory  
 Hamilton, Montana 59840  
 B. E. Anderson  
 $^{32}\text{P}$
580. United States Radium Corporation  
 4150 Old Berwick Road  
 P. O. Box 380  
 Bloomsburg, Pennsylvania  
 J. G. MacHutchon  
 $^{241}\text{Am}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{3}\text{H}$ ,  $^{85}\text{K}$ ,  $^{63}\text{Ni}$ ,  
 $^{210}\text{Po}$  (M),  $^{106}\text{Ru}$ ,  $^{90}\text{Sr}$ ,  $^{204}\text{Tl}$ , SS

581. Unit Process Assemblies, Inc.  
53 - 15 37th Avenue  
Woodside, New York 11377  
J. J. Weinstock  
 $^{90}\text{Sr}$ ,  $^{204}\text{Tl}$
582. The Upjohn Company  
301 Henrietta Street  
Kalamazoo, Michigan  
D. B. Gauss, Purchasing Agent  
 $^{82}\text{Br}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{24}\text{Na}$
583. Utah State University  
Logan, Utah 98186  
F. H. Baugh, Purchasing Agent  
 $^{32}\text{P}$ ,  $^{65}\text{Zn}$
584. Utah, University of  
Purchasing Department  
Salt Lake City, Utah 84112  
William Christensen, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{110}\text{Ag}$ ,  
 $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{230}\text{Th}$ , SS
585. Vanderbilt University  
Business Manager's Office  
Nashville 5, Tennessee  
June Jenkins  
 $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  
 $^{182}\text{Ta}$ ,  $^{170}\text{Tm}$ , SS
586. Veterans Administration Center  
Martinsburg, West Virginia 25401  
T. H. Bain  
 $^{131}\text{I}$
587. Veterans Administration Center  
Wood, Wisconsin 53193  
R. E. Franks, Supply Director  
 $^{47}\text{Ca}$ ,  $^{99\text{m}}\text{Tc}$  (B)
588. Veterans Administration Hospital  
West Side Hospital  
820 South Damen Avenue  
Chicago, Illinois 60612  
 $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{99\text{m}}\text{Tc}$  (B), SS
589. Veterans Administration Hospital  
1200 Anastasia Avenue  
Coral Gables, Florida  
W. G. Rather, Chief Supply Division  
 $^{133}\text{Xe}$
590. Veterans Administration Hospital  
4500 South Lancaster Road  
Dallas 16, Texas  
William J. Leonard, Chief, Purchasing  
 $^{60}\text{Co}$ ,  $^{131}\text{I}$ ,  $^{32}\text{P}$
591. Veterans Administration Hospital  
1055 Clermont Street  
Denver 20, Colorado  
L. A. Beebe, Chief, Purchasing  
 $^{82}\text{Br}$ ,  $^{85}\text{Kr}$ ,  $^{170}\text{Tm}$
592. Veterans Administration Hospital  
Fulton Street and Erwin Road  
Durham, North Carolina  
Dr. H. Kamin  
 $^{32}\text{P}$
593. Veterans Administration Hospital  
Fort Howard, Maryland 21052  
Anne M. Albrecht, Chief, Purchasing  
 $^{91}\text{Y}$
594. Veterans Administration Hospital  
1481 West Tenth Street  
Indianapolis, Indiana 46207  
P. D. Dwenger  
 $^{137}\text{Cs}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ , CSI ( $^{84}\text{Rb}$ )
595. Veterans Administration Hospital  
Iowa City, Iowa 52241  
R. W. Matson  
 $^{14}\text{C}$ ,  $^{85}\text{Kr}$ ,  $^{42}\text{K}$ ,  $^{24}\text{Na}$ , SS
596. Veterans Administration Hospital  
300 East Roosevelt Road  
Little Rock, Arkansas 72206  
N. R. Shirley  
 $^{24}\text{Na}$

597. Veterans Administration Hospital  
5901 East Seventh Street  
Long Beach, California  
B. B. Smith  
 $^{35}\text{S}$
598. Veterans Administration Hospital  
Zorn and Mellwood Avenues  
Louisville, Kentucky 40202  
Q. A. Sims  
 $^{75}\text{Se}$
599. Veterans Administration Hospital  
54th Street and 48th Avenue, S.  
Minneapolis, Minnesota 55417  
M. L. Novitzki  
 $^{32}\text{P}$
600. Veterans Administration Hospital  
1310 24th Avenue, S.  
Nashville, Tennessee 37203  
L. J. Smoak, Chief of Procurement
601. Veterans Administration Hospital  
1601 Perdido Street  
New Orleans, Louisiana 70140  
 $^{24}\text{Na}$
602. Veterans Administration Hospital  
First Avenue at East 24th Street  
New York, New York 10010  
T. W. Hopkins  
 $^{130}\text{I}$ ,  $^{42}\text{K}$  (B),  $^{35}\text{S}$
603. Veterans Administration Hospital  
4101 Woolworth Avenue  
Omaha, Nebraska 68105  
R. E. Ogborn  
 $^3\text{H}$ , SS
604. Veterans Administration Hospital  
Oteen, North Carolina 28805  
W. Radcliff, Jr.  
 $^{60}\text{Co}$
605. Veterans Administration Hospital  
University and Woodland Avenues  
Philadelphia, Pennsylvania 19104  
A. J. Bovio, Purchasing Agent  
 $^{45}\text{Ca}$
606. Veterans Administration Hospital  
Richmond, Virginia 23225  
Chief, Supply Division  
 $^{85}\text{Kr}$ ,  $^{133}\text{Xe}$
607. Veterans Administration Hospital  
915 North Grand Avenue  
St. Louis, Missouri 63106  
N. Gallagher  
 $^{115}\text{Cd}$ ,  $^{203}\text{Hg}$ ,  $^{86}\text{Rb}$ ,  $^{65}\text{Zn}$
608. Veterans Administration Hospital  
500 Foothill Drive  
Salt Lake City, Utah 84113  
 $^{133}\text{Xe}$
609. Veterans Administration Hospital  
42nd Avenue and Clement Street  
San Francisco, California 94121  
Dr. Cavalieri  
 $^{75}\text{Se}$
610. Veterans Administration Hospital  
4435 Beacon Avenue South  
Seattle, Washington 98108  
D. K. Hirahara  
 $^{47}\text{Ca}$ ,  $^{131}\text{I}$ ,
611. Veterans Administration Hospital  
Sepulveda, California  
V. W. Odom  
 $^{45}\text{Ca}$ ,  $^{35}\text{S}$
612. Veterans Administration Research Hospital  
Los Angeles, California  
 $^{99\text{m}}\text{Tc}$  (B)
613. Veterans Administration Research Hospital  
Washington, D.C.  
 $^{132}\text{I}$  (B)

614. Veterans Administration Research Hospital  
Wood, Wisconsin  
 $^{99m}\text{Tc}$  (B)
615. Victoreen Instrument Company  
5806 Hough Avenue  
Cleveland 3, Ohio  
V. Gittery  
 $^{140}\text{La}$ ,  $^{63}\text{Ni}$
616. Virginia Agricultural Experiment Station  
Purchasing Department  
Blacksburg, Virginia  
H. W. Swink  
 $^{35}\text{S}$
617. Virginia Polytechnic Institute  
Purchasing Department  
Blacksburg, Virginia  
H. W. Swink, Purchasing Agent  
 $^{131}\text{I}$ ,  $^{95}\text{Nb}$ ,  $^{32}\text{P}$ ,  $^{91}\text{Y}$
618. Virginia, University of  
Purchasing Department  
Charlottesville, Virginia  
A. R. Elder  
 $^{144}\text{Ce}$ ,  $^{60}\text{Co}$ ,  $^3\text{H}$ ,  $^3\text{H}$  Targets,  $^{32}\text{P}$ ,  $^{110}\text{Ag}$ ,  
 $^{35}\text{S}$ ,  $^{65}\text{Zn}$ ,
619. Viso Corporation  
16825 Wyoming Avenue  
Detroit, Michigan 48221  
F. L. Green  
SI
620. Volk Radiochemical Company  
8260 Elmwood Avenue  
Skokie, Illinois  
 $^{45}\text{Ca}$ ,  $^{36}\text{Cl}$ ,  $^3\text{H}$ ,  $^{192}\text{Ir}$ ,  $^{59}\text{Fe}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{35}\text{S}$ ,  
 $^{65}\text{Zn}$ , SS
621. Wabash College  
Purchasing Department  
Crawfordsville, Indiana 47933  
D. L. Dake  
 $^{32}\text{P}$
622. Wadley Research Institute and Blood Bank  
3600 Gaston Avenue  
Dallas, Texas  
P. Bailey  
 $^{90}\text{Y}$
623. Walter Reed Army Medical Center  
Washington, D.C. 20012  
J. J. Degen  
 $^{210}\text{Po}$  (M)
624. Warner-Lambert Research Institute  
170 Tabor Road  
Morris Plains, New Jersey 07950  
E. J. Merrill  
 $^{86}\text{Rb}$
625. Washington State University  
Comptroller's Office  
Pullman, Washington  
R. B. Smaulay, Buyer  
 $^{45}\text{Ca}$ ,  $^{203}\text{Hg}$ ,  $^{95}\text{Nb}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{35}\text{S}$
626. Washington, University of  
Purchasing Department  
400 Administration Building  
Seattle 5, Washington  
V. A. Sichler  
 $^{115m}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^3\text{H}$ ,  $^{131}\text{I}$ ,  
 $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{86}\text{Rb}$ ,  $^{46}\text{Sc}$ ,  $^{75}\text{Se}$ ,  
 $^{110}\text{Ag}$ ,  $^{24}\text{Na}$ ,  $^{85}\text{Sr}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{99}\text{Tc}$  (B),  
 $^{204}\text{Tl}$ ,  $^{91}\text{Y}$ , SI (A) ( $^{252}\text{Cf}$ ), SS
627. Washington University  
Business Office  
Lindell and Skinker  
St. Louis 30, Missouri  
A. C. Wahl  
 $^{125}\text{Sb}$ ,  $^{109}\text{Cd}$ ,  $^{115m}\text{Cd}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{114}\text{In}$ ,  
 $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{86}\text{Rb}$ ,  $^{24}\text{Na}$ ,  $^{35}\text{S}$ ,  $^{185}\text{W}$ ,  $^{65}\text{Zn}$ , SI,  
SI (A) ( $^{121}\text{Sn}$ ), SI (B), SS
628. Wayne State University  
Accounting Department  
Detroit, Michigan 48202  
P. Grayson  
 $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{114}\text{In}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{95}\text{Zr}$ , SI

629. West Virginia University  
Purchasing, Administration Building  
Morgantown, West Virginia  
Dr. H. Patrick  
 $^{45}\text{Ca}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$
630. West Virginia University Medical Center  
Morgantown, West Virginia  
Dr. J. Jones  
 $^{28}\text{Mg}$  (B)
631. Western Electric Company  
555 Union Boulevard  
Allentown, Pennsylvania  
 $^{85}\text{Kr}$
632. Western Electric Company, Inc.  
100 Central Avenue  
Kearny, New Jersey  
J. E. Speer  
 $^{137}\text{Cs}$ ,  $^{85}\text{Kr}$
633. Western Electric Company, Inc.  
1600 Osgood Street  
North Andover, Massachusetts  
 $^{85}\text{Kr}$
634. Western Electric Company  
Winston-Salem, North Carolina  
 $^{85}\text{Kr}$
635. Western New York Nuclear Research Center  
Service Center Building  
Stores Drive  
Buffalo, New York  
 $^{115\text{m}}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{85}\text{Kr}$ ,  $^{35}\text{S}$
636. Western Reserve University  
2220 Cummington Road  
Cleveland 6, Ohio  
H. D. Pallister  
 $^{124}\text{Sb}$ ,  $^{133}\text{Ba}$ ,  $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{64}\text{Cu}$ ,  $^{131}\text{I}$ ,  
 $^{59}\text{Fe}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{35}\text{S}$ , SI, SI (A), SS
637. Westinghouse Electric Corporation  
Atomic Power Division  
P. O. Box 355  
Pittsburgh 30, Pennsylvania  
W. P. Sipe  
 $^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{252}\text{Cf}$ ,  $^{181}\text{Hf}$ ,  $^{3}\text{H}$ ,  $^{3}\text{H}$   
Targets,  $^{192}\text{Ir}$ ,  $^{85}\text{Kr}$ ,  $^{203}\text{Hg}$ ,  $^{99}\text{Mo}$ ,  $^{237}\text{Np}$ ,  
 $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{103}\text{Ru}$ ,  $^{46}\text{Sc}$ ,  $^{75}\text{Se}$ ,  $^{110}\text{Ag}$ ,  $^{89}\text{Sr}$ ,  
 $^{182}\text{Ta}$ ,  $^{204}\text{Tl}$ ,  $^{185}\text{W}$ ,  $^{238}\text{U}$ ,  $^{9}\text{Y}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ ,  
SS
638. Westinghouse Electric Corporation  
Bettis Atomic Power Laboratory  
P. O. Box 1468  
Pittsburgh, Pennsylvania  
John Clayton, Reactor Metallurgy  
SI (B)
639. Weyerhaeuser Company  
Sulphite Mill  
Everett, Washington 98201  
R. M. Inkster  
 $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{46}\text{Sc}$
640. Whirlpool Corporation  
300 Broad Street  
St. Joseph, Michigan  
R. W. Marquardt  
 $^{137}\text{Cs}$
641. William H. Johnston Laboratories, Inc.  
3617 Woodland Avenue  
Baltimore, Maryland 21215  
W. F. Keys  
 $^{106}\text{Ru}$
642. Wisconsin, University of  
428 North Murray Street  
Madison, Wisconsin 53706  
R. L. Farnsworth  
 $^{241}\text{Am}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{36}\text{Cl}$ ,  $^{64}\text{Cu}$ ,  $^{3}\text{H}$ ,  
 $^{131}\text{I}$ ,  $^{32}\text{P}$ ,  $^{42}\text{K}$ ,  $^{75}\text{Se}$ ,  $^{35}\text{S}$ ,  $^{65}\text{Zn}$ , SI, SI (A),  
SS
643. Wyoming, University of  
Laramie, Wyoming  
W. A. Harris, Purchasing Agent  
 $^{75}\text{Se}$

644. Wyandotte Chemical Corporation  
Accounts Payable Department  
Wyandotte, Michigan

H. H. Devereux, Purchasing Agent  
 $^{45}\text{Ca}$ ,  $^{63}\text{Ni}$

645. Worcester Foundation  
Foundation for Experimental Biology  
222 Maple Avenue  
Shrewsbury, Massachusetts

I. E. Washburn  
 $^3\text{H}$ ,  $^{59}\text{Fe}$ , SS

646. Woods Hole Oceanographic Institute  
Woods Hole, Massachusetts

A. T. Henderson

$^{140}\text{Ba}$ ,  $^{59}\text{Fe}$ ,  $^{153}\text{Sm}$ ,  $^{91}\text{Y}$

647. Yale University  
20 Ashrnum Street  
New Haven, Connecticut

R. H. Coe, Buyer

$^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  $^3\text{H}$ ,  
 $^{114}\text{In}$ ,  $^{129}\text{I}$ ,  $^{131}\text{I}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{203}\text{Hg}$ ,  $^{32}\text{P}$ ,  
 $^{89}\text{Sr}$ ,  $^{113}\text{Sn}$ ,  $^{65}\text{Zn}$ , SI (B), SS

648. Yeshiva University  
Albert Einstein College of Medicine  
110 West 57th Street  
New York 19, New York

J. S. Perlestein

$^{45}\text{Ca}$ ,  $^{64}\text{Cu}$  (B),  $^{67}\text{Cu}$  (B),  $^3\text{H}$ ,  $^{28}\text{Mg}$  (B),  
 $^{32}\text{P}$ ,  $^{87m}\text{Sr}$  (B),  $^{35}\text{S}$ , SS

## B. Foreign

### Argentina

649. Comision Nacional de Energia Atornica  
(Gerencia de Energia)  
Avda. del Libertador 8250  
Buenos Aires, Argentina  
E. J. Donadei  
 $^{47}\text{Ca}$ ,  $^{106}\text{Ru}$ ,  $^{99m}\text{Tc}$  (B)

### Australia

650. Australian Atomic Energy Commission  
Research Establishment  
Lucas Heights

Via Sydney, Australia

$^{252}\text{Cf}$

652. Commonwealth X-Ray and Radium Laboratory  
Melbourne, Australia

D. J. Stevens

$^{132}\text{I}$  (B),  $^{99}\text{Mo}$  (B)

653. Consul General  
Australian Consulate General  
636 Fifth Avenue  
New York 20, New York

T. F. Slade

$^{37}\text{Ar}$ ,  $\text{Pu}$ ,  $^{147}\text{Pm}$ ,  $^{89}\text{Sr}$ , Th/Uranium,  $^{230}\text{Th}$ ,  
 $^{235}\text{U}$ , FP

### Austria

654. Institut fur Radiumforschung der Oest.  
Akademie der Wissenschaften  
Boltzmanngasse 3  
Wien IX, Austria

Dr. A. Saulich

$^{63}\text{Ni}$ ,  $^{32}\text{P}$ ,  $^{90}\text{Sr}$ , SS

655. International Atomic Energy Agency  
Seibersdorf, Niederosterreich  
Austria

Attn: Dr. G. B. Cook

$^{252}\text{Cf}$ ,  $^{239}\text{Pu}$ ,  $^{233}\text{U}$

656. International Atomic Energy Agency  
Kaeerntnerring 11-13  
Vienna I, Austria

J. Veselsky

$^{252}\text{Cf}$ ,  $^{129}\text{I}$

### Belgium

657. BelgoNucleaire  
35, rue des Colonies  
Brussels, Belgium

J. Gilkin

$^{137}\text{Cs}$

658. Bureau Central des Mesures Nucleaires  
Steenweg OP Retre  
Geel, Belgium  
 $^{239}\text{Pu}$ ,  $^{242}\text{Pu}$ ,  $\text{U}$
659. Centre d'Etude de l'Energie Nucleaire  
31, rue Belliard  
Mol-Donk, Belgium  
R. Constant  
Dr. M. Neve de Mevargnies  
 $^{37}\text{Ar}$ ,  $^{239}\text{Pu}$ ,  $^{240}\text{Pu}$
660. Euratom  
51-53, rue Belliard  
Brussels, Belgium  
 $^{241}\text{Am}$ ,  $^{243}\text{Am}$ ,  $^{45}\text{Ca}$ ,  $^{144}\text{Ce}$ ,  $^{36}\text{Cl}$ ,  $^{59}\text{Fe}$ ,  
 $^{85}\text{Kr}$ ,  $\text{Np}$ ,  $\text{Pu}$ ,  $^{238}\text{Pu}$ ,  $^{239}\text{Pu}$ ,  $^{240}\text{Pu}$ ,  $^{242}\text{Pu}$ ,  
 $^{85}\text{Sr}$ ,  $\text{U}$ ,  $^{232}\text{U}$ ,  $^{233}\text{U}$ ,  $^{238}\text{U}$ ,  $^{65}\text{Zn}$
- Bermuda
661. Bermuda Biological Station for Research, Inc.  
St. George's West, Bermuda  
D. W. Menzel, Assistant Director  
 $^{45}\text{Ca}$
- Brazil
662. Instituto Technologico de Aeronautica  
Jao Jose Dos Campos, Brazil  
Prof. G. Bernski  
 $^{55}\text{Fe}$
- Canada
663. Atomic Energy of Canada Limited  
Operations Division  
Chalk River, Ontario, Canada  
H. B. Reid  
 $^{243}\text{Am}$
664. Atomic Energy of Canada Limited  
Commercial Products Division  
P. O. Box 93  
Ottawa, Ontario, Canada  
R. P. Slattery, Purchasing  
 $^{243}\text{Am}$ ,  $^{37}\text{Ar}$ ,  $^{45}\text{Ca}$ ,  $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^3\text{H}$ ,  $^{85}\text{Kr}$ ,  
 $^{99}\text{Mo}$ ,  $\text{Pu}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Sr}$ ,  $^{99}\text{Tc}$
665. British Columbia, University of  
Purchasing Department  
Vancouver 8, B.C., Canada  
 $^{85}\text{Sr}$
666. Canada Department of Agriculture  
Research Branch Experimental Farm  
Lacombe, Alberta, Canada  
 $^{133}\text{Ba}$
667. Canada Agriculture Experiment Farm  
Research Branch  
Indian Head, Saskatchewan, Canada  
J. R. Foster, Superintendent  
 $^{32}\text{P}$
668. Charles E. Frosst and Company  
P. O. Box 247  
Montreal, Quebec, Canada  
Dr. Jarnieson  
 $^{60}\text{Co}$ ,  $^{59}\text{Fe}$ ,  $^{99m}\text{Tc}$  (B)
669. Geological Survey of Canada  
Department of Mines and Technical Surveys  
601 Booth Street  
Ottawa 4, Ontario, Canada  
Mr. R. K. Wanless  
 $^{111}\text{Ag}$ ,  $^{230}\text{Th}$ ,
670. Hospital Notre-Dame  
1560 East Sherbrooke Street  
Montreal, Quebec, Canada  
 $^{85}\text{Kr}$
671. Loyola College  
Purchasing Department  
Sherbrook Street, W.  
Montreal, Canada  
R. J. Lennen, Director of Purchasing  
CSI ( $^{144}\text{Pm}$ )
672. McGill University  
Biology Building  
Montreal 2, P.Q., Canada  
Dr. J. V. Milligan  
 $^{45}\text{Ca}$

673. McMaster University  
Hamilton, Ontario, Canada  
Dr. R. H. Tomlinson  
 $^{63}\text{Ni}$ ,  $^{89}\text{Sr}$
674. Manitoba, University of  
Comptroller's Office  
Winnipeg, Manitoba, Canada  
Dr. R. D. Connor  
 $^{124}\text{Sb}$ ,  $^{131}\text{Ba}$ ,  $^{147}\text{Nd}$ ,  $^{32}\text{P}$ ,  $^{187}\text{W}$
675. Montreal General Hospital  
1625 Pine Avenue  
Montreal, Quebec, Canada  
 $^{64}\text{Cu}$
676. National Research Council  
Division of Applied Physics  
Montreal Radioisotope Laboratories  
Ottawa, Ontario, Canada  
 $^{137}\text{Cs}$ ,  $^{90}\text{Sr}$
677. Ontario Department of Health  
Industrial Hygiene Branch  
360 Christie Street  
Toronto, Ontario, Canada  
E. O. Braaten  
 $^{45}\text{Ca}$
678. Ontario Veterinary College  
Guelph, Ontario, Canada  
Dr. G. A. Robinson  
 $^{99}\text{Mo}$  (B),  $^{99\text{m}}\text{Tc}$  (B)
679. Ottawa, University of  
Physics Department  
Ottawa, Ontario, Canada  
Dr. I. L. Fairweather  
 $^{140}\text{La}$
680. Queens University  
Etherington Hall  
Kingston, Ontario, Canada  
Purchasing Department  
 $^{85}\text{Kr}$ ,  $^{28}\text{Mg}$  (B)
681. Saskatchewan, University of  
Purchasing Department  
Saskatoon, Saskatchewan, Canada  
T. Smith  
 $^{170}\text{Tm}$
682. Sherbrooke, Universite de  
Faculte des Sciences  
Sherbrooke, P.Q., Canada  
Dr. R. A. Muzzarelli  
 $^{54}\text{Mn}$
683. Suffield Experimental Station  
Defence Research Board/DND  
Ralston, Alberta, Canada  
Chief Superintendent  
 $^{147}\text{Pm}$
684. Toronto, University of  
Toronto, Canada  
Dr. Joan Harrison  
 $^{28}\text{Mg}$  (B)
685. Toronto, University of  
Chief Accountant's Office  
Simcoe Hall  
Toronto 5, Ontario, Canada  
A. Stite  
 $^{203}\text{Hg}$
686. Victoria General Hospital  
Halifax, Nova Scotia, Canada  
 $^{99\text{m}}\text{Tc}$  (B)
- Chile
687. Instituto Central de Quimica  
Universidad de Concepcion  
Casilla 3, C  
Concepcion, Chile  
P. Dobud  
 $^{58}\text{Co}$ ,  $^{59}\text{Fe}$ ,  $^{35}\text{S}$
688. Universidad de Chile  
Instituto de Ciencias  
Blanco Encalada 2008  
Casilla 6524  
Santiago, Chile  
Dr. D. Yudilevich  
 $^{36}\text{Cl}$ ,  $^{59}\text{Fe}$ ,  $^{32}\text{P}$ ,  $^{86}\text{Rb}$

## China

689. China Institute of America  
125 East 6th Street  
New York 21, New York  
 $^{54}\text{Cr}$ ,  $^{59}\text{Fe}$

690. Chinese Government Procurement and Services Mission  
Division for Taiwan Sugar Corporation  
50 Church Street  
New York 7, New York  
S. Bao, Director  
 $^{32}\text{P}$ ,  $^{86}\text{Rb}$ ,  $^{89}\text{Sr}$

691. National Tsing Hua University  
110 Chin Hua Street  
Taipei, Taiwan  
Republic of China  
 $^{51}\text{Cr}$ ,  $^{3}\text{H}$ , Targets,  $^{59}\text{Fe}$

## Colombia

692. Instituto de Asuntos Nucleares  
Apartado Aereo No. 8595  
Bogota, Colombia, South America  
 $^{32}\text{P}$

## Costa Rica

693. Radioisotopes Laboratory  
Nuclear Energy Program  
I.I.C.A.  
Turrialba, Costa Rica  
C. C. Moh  
 $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$

## Czechoslovakia

694. OMNIPOL/62  
Washingtonova 11  
Prague 1, Czechoslovakia  
 $^{37}\text{Ar}$

## Denmark

695. Atomic Energy Commission  
Research Establishment RISO  
Roskilde, Denmark  
K. Heydorn  
 $^{242}\text{Pu}$ ,  $^{89}\text{Sr}$ , U/Pu,  $^{234}\text{U}$ ,  $^{235}\text{U}$ ,  $^{236}\text{U}$

## Egypt

696. Middle Eastern Regional Radioisotope Center  
Sh Malach El Gamaa  
Dokki, Cairo, Egypt  
Dr. I. B. Hazzaa  
 $^{32}\text{P}$

## Finland

697. Valio Laboratory  
Helsinki, Finland  
Prof. A. I. Wirtanen  
 $^{75}\text{Se}$

## France

698. Commissariat à l'Energie Atomique  
Centre D'Etudes Nucleaires De Saclay  
Boite Postale No. 2  
Gif-Sur-Yvette, France  
 $^{252}\text{Cf}$ ,  $^{137}\text{Cs}$ ,  $^{242}\text{Pu}$ ,  $^{238}\text{U}$

699. Commissariat à l'Energie Atomique  
New York Office  
972 Fifth Avenue  
New York 21, New York  
P. de Bellaigue, Director  
 $^{37}\text{Ar}$ ,  $^{45}\text{Ca}$ ,  $^{252}\text{Cf}$ ,  $^{14}\text{C}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{3}\text{H}$ ,  
 $^{59}\text{Fe}$ ,  $^{95}\text{Nb}$ ,  $^{147}\text{Pm}$ ,  $^{106}\text{Ru}$ ,  $^{75}\text{Se}$ ,  $^{90}\text{Sr}$ ,  
 $^{99}\text{Tc}$ , U

700. Commissariat à l'Energie Atomique  
29 Rue de la Federation  
Paris XV, France  
 $^{238}\text{U}$

701. Groupement d'Importation des Produits  
Pharmaceutiques  
46 Rue de Turbigo  
Paris (IIIe), France  
Dr. Gest, Centre Rene Huguenin, St. Cloud  
 $^{85}\text{Sr}$

702. Institut Francois du Petrole  
164 Avenue du Bois-Preau  
Rueil-Malmaison, S. and O.  
France  
 $^{147}\text{Pm}$

703. Massiot-Philipps  
37 Bis, Rue de Belfort  
Corbevois (Seine), France  
M. H. Thiery  
 $^{137}\text{Cs}$
704. Companie Pechiney, L.R.M.  
8 rue Ampere  
Grenoble, Ircle, France  
Monsieur le Professeur Dugain  
 $^{95}\text{Nb}$
705. Service des Radioelements Artificiels  
Gif-sur-Yvette (S & O), France  
Prof. Kellersohn  
 $^{28}\text{Mg}$  (B)
706. Stockage Materials Fissiles  
CEN – Cadarache  
Centre d'Etudes Nucleaires  
M. Dumesnil  
 $^{252}\text{Cf}$ ,  $^{242}\text{Pu}$   
Germany
707. Buchler and Company  
Braunschweig  
Frankfurter Str. 294  
Germany  
Dr. W. Gorup  
 $^{37}\text{Ar}$ ,  $^{133}\text{Ba}$ ,  $^{134}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{198}\text{Au}$ ,  $^{181}\text{Hf}$ ,  
 $^{59}\text{Fe}$ ,  $^{63}\text{Ni}$ ,  $^{147}\text{Pm}$ ,  $^{86}\text{Rb}$ ,  $^{106}\text{Ru}$ ,  $^{75}\text{Se}$ ,  
 $^{89}\text{Sr}$ ,  $^{182}\text{Ta}$ ,  $^{99}\text{Tc}$
708. Technischen Hochschule Darmstadt  
Institut f. Strahlen – u. Kernphysik  
Schlossgartenstr. 9  
61 Darmstadt  
Germany  
Dr. Wien  
 $^{133}\text{Ba}$ ,  $^{151}\text{Sm}$ , CSI ( $^{174}\text{Lu}$ )
709. Farbwerke Hoechst **AG.**  
Radiochemisches Labor.  
Frankfurt/Main-Griesheim  
Niederkirchweg, Ecke Stroofstrasse  
Germany  
 $^{59}\text{Fe}$
710. Gesellschaft fur Kernforschung m.b.H.  
75 Karlsruhe  
Postfach 947  
Germany  
 $^{241}\text{Am}$ ,  $^{124}\text{Sb}$ ,  $^{144}\text{Ce}$ ,  $^{137}\text{Cs}$ ,  $^{244}\text{Cm}$ ,  $^{181}\text{Hf}$ ,  
 $^{237}\text{Np}$ , Pu/U,  $^{143}\text{Pr}$ ,  $^{238}\text{U}$
711. Hahn-Meitner Institut  
Glienicker Strasse 100  
Berlin, Germany  
Dr. Jens Sheer  
 $^{252}\text{Cf}$
712. Universitat Hamburg – Fuhlsbuttel  
Physiologisch-Chemisches Institut  
Hamburg, Germany  
Dr. Heinrich  
 $^{59}\text{Fe}$
713. Isotopen-Laboratorium  
Harffstr. 148  
Dusseldorf-Eller  
West Germany  
Dr. Sauerwein  
 $^{99}\text{Tc}$ , FP
714. Kernforschungsanlage Julich  
des Landes Nordrhein-Westf. -e.V.  
Verwaltungsgebäude  
517 Julich  
Germany  
Dr. Zimmermann  
 $^{60}\text{Co}$ ,  $^{95}\text{Zr}$
715. Kernreaktor-Bau-u. Betriebs **GmbH**  
Finanzabteilung  
Postfach 947  
Karlsruhe, West Germany  
 $^{244}\text{Cm}$ ,  $^{238}\text{Pu}$
716. Kuhne und Nagel  
6 Frankfurt/M  
Flughafen  
Germany  
 $^{241}\text{Am}$ , Am/Np,  $^{90}\text{Sr}$
717. W. Maier KG  
Postfach (P.O.B.) 126  
722 Schwenningen a.N.  
West Germany  
W. Maier  
 $^{147}\text{Pm}$

718. Physikalisches Institut  
der Universität Marburg  
Marburg/Lahn, Renthof 5  
West Germany  
 $^{35}\text{S}$
719. Max-Planck-Institut fur Biologie  
Corrensstr. 38  
74 Tubingen, Germany  
Dr. J. H. Matthaei  
 $^{14}\text{C}$
720. Technischen Hochschule Munchen  
Arcistrasse 21  
8 Munchen 2  
Germany  
CSI ( $^{149}\text{Eu}$ ,  $^{174}\text{Lu}$ ,  $^{202}\text{Tl}$ )
721. Technische Hochschule Munchen  
Institut fur Radiochemie  
8046 Garchiny b.  
Munchen  
Munich Airport, Rein  
Germany  
Am,  $\text{Np}$ ,  $^{151}\text{Sm}$ , SI
722. Universitat Munchen  
Institut fur Anorganische Chemie  
Meiserstrasse 1  
8 Munchen 2, Germany  
Dr. F. Weigel  
 $^{99}\text{Tc}$ , U
723. Nuclear Research Center  
Juelich, Germany  
Dr. P. R. Kasten  
U/Th
724. Osram GmbH  
1 Berlin 10  
Ernst-Reuter-Platz-8  
Charlottenburg, Germany  
 $^{85}\text{Kr}$
725. Siemens-Reiniger-Werke Aktiengesellschaft  
8520 Erlangen  
Germany  
 $^{137}\text{Cs}$
726. Uranerz-Verwertung  
Rudolf Wickmann  
Jungfernstieg 30  
2 Hamburg 36, Germany  
 $^{147}\text{Pm}$
- Great Britain
727. Atomic Energy Establishment  
Winfrith  
England  
 $^{238}\text{U}$
728. Postgraduate Medical School of London  
150 Ducane Road  
London, W.12, England  
Professor J. F. Fowler  
Dr. C. J. Robinson  
 $^{47}\text{Ca}$ ,  $^{28}\text{Mg}$  (B)
729. Radiochemical Centre  
Arnesham, Buckinghamshire  
England  
 $^{24}\text{Am}$
730. Sussex, University of  
Physics Laboratory  
Brighton, Sussex, England  
Dr. Hamilton  
 $^{18}\text{Hf}$
731. United Kingdom Atomic Energy Authority  
Atomic Energy Research Establishment  
Chemistry Division  
Harwell, Didcot, Berks.  
England  
M. L. Smith  
M. H. Woods  
 $^{241}\text{Am}$ ,  $^7\text{Be}$ ,  $^{207}\text{Bi}$ ,  $^{109}\text{Cd}$ ,  $^{252}\text{Cf}$ ,  $^{57}\text{Co}$ ,  
 $^{242}\text{Cm}$ ,  $^{244}\text{Cm}$ ,  $^{55}\text{Fe}$ ,  $^{237}\text{Np}$ ,  $^{85}\text{Sr}$ ,  $^{44}\text{Ti}$ ,  
 $^{236}\text{U}$ ,  $^{238}\text{U}$ ,  $^{88}\text{Y}$ , CSI ( $^{74}\text{As}$ )
732. United Kingdom Treasury and Supply  
Delegation  
25 Broadway  
New York 4, New York  
 $^{241}\text{Am}$ ,  $^{243}\text{Am}$ ,  $^{125}\text{Sb}$ ,  $^{133}\text{Ba}$ ,  $^{140}\text{Ba}$ ,  $^{109}\text{Cd}$ ,  
 $^{36}\text{Cl}$ ,  $^{181}\text{Hf}$ ,  $^{129}\text{I}$ ,  $^{55}\text{Fe}$ ,  $^{59}\text{Fe}$ ,  $^{237}\text{Np}$ ,  
 $^{210}\text{Po}$  (M),  $^{147}\text{Pm}$ ,  $^{89}\text{Sr}$ ,  $^{99}\text{Tc}$ ,  $^{88}\text{Y}$ ,  $^{95}\text{Zr}$ ,  
CSI ( $^{68}\text{Ge}$ )

733. Westland Aircraft Ltd.  
Fairey Aviation Division  
Hayes, Middlesex, England

$^3\text{H}$

Greece

734. Greek Atomic Energy Commission  
5 Merlin Street  
Athens, Greece

$^{32}\text{P}$

India

735. Atomic Energy Establishment Trombay  
Mohatta Building  
Palton Road  
Bombay 1, India

S. Rangachary  
 $^{244}\text{Cm}$ ,  $^{147}\text{Pm}$ ,  $^{99}\text{Tc}$ ,  $^{238}\text{U}$

736. Bose Institute  
93/1, Acharya Prafulla  
Chandra Road  
Calcutta 9, India

$^{32}\text{P}$

737. Delhi, University of  
Department of Physics  
Delhi 6, India

Professor Majumdar

SI

738. Electronic Instruments Industries

Ashok Marg  
"C" Scheme  
Jaipur, India

$^{85}\text{Kr}$

739. Saha Institute of Nuclear Studies  
92 Acharya Prafulla Chandra Road  
Calcutta 9, India

M. Rama Rao

$^{124}\text{Sb}$ ,  $^{134}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  $^{60}\text{Co}$ ,  $^{114}\text{In}$ ,  $^{63}\text{Ni}$ ,  
 $^{46}\text{Sc}$ ,  $^{110}\text{Ag}$ ,  $^{113}\text{Sn}$ ,  $^{91}\text{Y}$

740. Siemens Engineering and Manufacturing  
Company of India Ltd.

Stadium House, Veer Nariman Road  
Bombay, India

$^{137}\text{Cs}$

741. Tata Institute of Fundamental Research  
Holiday Camp, Colaba  
Bombay 5, India

M. Vivares, Purchasing Officer

$^{124}\text{Sb}$ ,  $^{131}\text{Ba}$ ,  $^{129}\text{I}$ ,  $^{192}\text{Ir}$ , CSI ( $^{121}\text{Te}$ ,  $^{129}\text{Xe}$ )

Israel

742. Hadassah Medical Organization  
P. O. B. 499  
Jerusalem, Israel

$^{45}\text{Ca}$

743. The Hebrew University of Jerusalem  
Jerusalem, Israel

Dr. J. Burde

SI

744. Israel Atomic Energy Commission  
Hakirya, Tel Aviv  
Israel

$^{36}\text{Cl}$ ,  $^{129}\text{I}$ , U,  $^{65}\text{Zn}$

745. Scientific Attache  
Embassy of Israel  
Washington, D.C. 20008

J. Eyal

$^3\text{H}$

746. Landseas Corporation  
48 West 48th Street  
New York, New York

$^3\text{H}$ ,  $^{129}\text{I}$

747. The Negev Institute for Arid Zone Research  
P. O. B. 1025  
Beersheva, Israel

$^{36}\text{Cl}$

748. YEDA  
Research and Development Company, Ltd.  
P. O. Box 26  
Rehovoth, Israel

$^3\text{H}$

Italy

749. CNEN Representative  
818 18th Street N.W.  
Washington, D.C.

Attn: G. Lanzano

$^{238}\text{U}$

750. Central Inforrnazioni Studi  
Esperienze  
Casella Postale 3986  
Milano, Italy  
 $^{238}\text{U}$
751. Eratom-C.C.R.  
Sezione doganale d'Ispra  
Ispra (Varese), Italy  
 $^{237}\text{Np}$ ,  $^{238}\text{U}$
752. Generay Generale Radiologica Spa  
Via Monte Albanza, 9  
Monza, Italy  
 $^{137}\text{Cs}$
753. Ispra Research Center  
CCR Euratom Sezione-Doganale  
Ispra (Varese), Italy  
Dr. G. Bartolini  
 $^{252}\text{Cf}$
754. Istituto di Fisica del Politecnico  
P. za L. de Vinci, 32  
Milano, Italy  
 $^{203}\text{Hg}$
755. Istituto di Fisica Tecnica  
Facolta di Ingegneria  
Via Eudossiana, 18  
Roma, Italy  
 $^{147}\text{Pm}$
756. Istituto di Serneiotica Medica  
Universit  di Padova  
Padova, Italy  
Prof. M. Austoni  
 $^3\text{H}$ ,  $^{59}\text{Fe}$
757. Radiochemistry Laboratory  
Pavia University  
V. Ie Tararnelli 12,  
Pavia, Italy  
Prof. M. Rollier  
 $^{237}\text{Np}$
758. University of the West Indies, Mona  
Kingston 7  
Jarnica, West Indies  
Dr. T. Goreau  
 $^{42}\text{K}$
- Japan
759. Dainabot Radioisotope Laboratory, Ltd.  
Chuo-ku, Tokyo, Japan  
Kyosuke Naito  
 $^{99}\text{Mo}$  (B),  $^{99\text{m}}\text{Tc}$  (B)
760. Mitsubishi International Corporation  
120 Broadway  
New York 5, New York  
K. Oka, Manager Chemicals Department  
 $^{140}\text{Ba}$ ,  $^{115}\text{Cd}$ ,  $^{45}\text{Ca}$ ,  $^{14}\text{C}$ ,  $^{137}\text{Cs}$ ,  $^{36}\text{Cl}$ ,  
 $^{60}\text{Co}$ ,  $^{3}\text{H}$ ,  $^{59}\text{Fe}$ ,  $^{85}\text{Kr}$ ,  $^{203}\text{Hg}$ ,  $^{63}\text{Ni}$ ,  $^{191}\text{Os}$ ,  
 $^{147}\text{Pm}$ ,  $^{106}\text{Ru}$ ,  $^{111}\text{Ag}$ ,  $^{89}\text{Sr}$ ,  $^{35}\text{S}$ ,  $^{99}\text{Tc}$ ,  
 $^{113}\text{Sn}$ ,  $^{65}\text{Zn}$ ,  $^{95}\text{Zr}$ , F.P.
761. Mitsubishi Shoji Kaisha, Ltd.  
chi yodo-Ku, Tokyo, Japan  
K. Oka, Manager, Mitsubishi International  
Corporation, 277 Park Avenue,  
New York, New York 10017  
 $^{241}\text{Am}$ ,  $^{99\text{m}}\text{Tc}$  (B)
762. Surnitorno Shoji New York, Inc.  
149 Broadway  
New York, New York 10006  
S. T. Nishizaka  
 $^{137}\text{Cs}$ ,  $^{60}\text{Co}$ ,  $^{85}\text{Kr}$
- Korea
763. Office of Atomic Energy  
Republic of Korea  
Seoul, Korea  
Attention: Dr. Il Sun Yun  
 $^{244}\text{Cm}$
764. Seoul Atomic Energy Co., Ltd.  
252 Kwanchul-Dong, Chongro-Ku  
I.P.O. Box 1104  
Seoul, Korea  
Kwon oh Young  
 $^{45}\text{Ca}$ ,  $^{55}\text{Fe}$ ,  $^{86}\text{Rb}$
- Mexico
765. Control de Calidad, S.A.  
Obrero Mundial 556-5  
Mexico 12, D.F.  
 $^{137}\text{Cs}$

766. Hospital de Enfermedades de la Nutricion  
Calle del Dr. Jimenez 261  
Mexico 7, D.F., Mexico  
 $^{90}Y$
767. Nuclear, S.A.  
Melchor Ocampo 469-605  
Mexico 5, D.F., Mexico  
J. Lacombe  
 $^{45}Ca$ ,  $^{60}Co$ ,  $^{204}Tl$ ,  $^{91}Y$
768. Siemens Mexicana, S.A.  
Vallarta 19  
Mexico 4, D.F., Mexico  
 $^{137}Cs$
- Monaco
769. International Laboratory of Marine  
Radioactivity  
Musée Oceanographique, Monaco  
Dr. R. Fukai  
 $^{115}Cd$
- Morocco
770. Radiologie Maroc S.A.  
Marix  
18 Rue D'Epernay  
Casablanca, Morocco  
 $^{137}Cs$
- The Netherlands
771. Fijksingkoopbureau  
(Netherlands Govt. Purchasing Office)  
55 A Laan Van Meerdervoort  
The Hague, Netherlands  
 $^{243}Am$ ,  $^{129}I$ , U
772. Institute for Atomic Sciences in Agriculture  
Keyenbergweg 6  
Wageningen, The Netherlands  
 $^{85}Sr$
773. Instituut Voor Kernfysisch Onderzoek  
IKO, Oosterriengdijk 18 Oost.  
Amsterdam, Netherlands  
 $^{199}Au$ ,  $^{237}Np$ ,  $^{204}Tl$
774. Lab. voor Techn, Fysika  
1, Lorentzeveg  
Delft, Netherlands  
 $^{48}Sc$
775. N. V. Philips-Duphar  
Apolloalaan 151  
Amsterdam (Holland)  
The Netherlands  
Ir J. J. Arlman  
 $^{36}Cl$ ,  $^{59}Fe$ , CSI ( $^{207}Bi$ )
776. Reactor Centrum Nederland  
Petten N.H.  
The Netherlands  
 $^{243}Am$ ,  $^{237}Np$ ,  $^{238}U$
777. Reactor Instituut Delft  
15, Berlageweg, Delft  
Netherlands  
H. Van Krugten  
Np, CSI ( $^{48}Sc$ )
- New Zealand
778. New Zealand Commercial Counselor  
1145-19th Street  
Suite 306  
Washington 6, D.C.  
 $^3H$ , SS
779. Wallaceville Animal Research Centre  
Private Bag  
Wellington, New Zealand  
Dr. E. W. Wright  
 $^{75}Se$
780. University of Canterbury  
Christchurch, New Zealand  
Dr. J. E. Fergusson  
 $^{99}Tc$
- Norway
781. Institutt for Atomenergi  
P. O. Box 40  
Kjeller, Norway  
 $^{239}Pu$

## Pakistan

782. Pakistan Atomic Energy Commission  
 P. O. Box 3112  
 Karachi, Pakistan  
 M. A. Khan  
 $^{140}\text{Ba}$ ,  $^{115}\text{Cd}$ ,  $^{114}\text{In}$ ,  $^{131}\text{I}$ ,  $^{192}\text{Ir}$ ,  $^{203}\text{Hg}$ ,  
 $^{32}\text{P}$ ,  $^{110}\text{Ag}$ ,  $^{35}\text{S}$ ,

## Philippines

783. International Rice Research Institute  
 Manila Hotel  
 Manila, Philippines  
 J. D. Drillon, Jr.  
 $^{59}\text{Fe}$

784. Philippine Atomic Energy Commission  
 727 Herran Street  
 Manila, Philippines  
 $^{63}\text{Ni}$

## Poland

785. Elektrim  
 Polish Foreign Trade Company for  
 Electric Equipment  
 Ul. Czackiego, 15/17  
 Warsawa, Poland  
 $^{99}\text{Tc}$

## Portugal

786. Comissao de Estudos de Energia Nuclear  
 Instituto Superior Technico  
 Lisboa, Portugal  
 $^{144}\text{Ce}$

787. Junta de Energia Nuclear  
 Laboratorio de Fisica  
 e Engenharia Nucleares  
 E.N. No. 10  
 Sacavem, Portugal  
 $^{59}\text{Fe}$ ,  $^{170}\text{Tm}$

788. Siemens-Reiniger S.A.R.L.  
 Rua de Santa Marta, 33, 1,  
 Lisboa, Norte  
 Portugal  
 $^{137}\text{Cs}$

## South Africa

789. University of Cape Town  
 Department of Medicine  
 Observatory  
 Cape Town, South Africa  
 Dr. R. Hoffenberg  
 $^{47}\text{Ca}$

790. South African Atomic Energy Board  
 Merino Building  
 Pretorius Street  
 Private Bag 256  
 Pretoria, South Africa  
 $^{47}\text{Ca}$ ,  $^{55}\text{Fe}$ ,  $^{59}\text{Fe}$ , SI

## Spain

791. Junta De Energia Nuclear  
 C. Universitaria  
 Madrid, Spain  
 $^{90}\text{Sr}$ ,  $^{235}\text{U}$ ,  $^{238}\text{U}$

792. Nuclear Iberica  
 Francisco Santos, 15  
 Apartado 555  
 Madrid 2, Spain  
 $^{90}\text{Sr}$

## Sweden

793. Aktiebolaget Atomenergi  
 Studsvik  
 Nykoping, Sweden  
 $^{252}\text{Cf}$ ,  $^3\text{H}$

794. Chalmers University of Technology  
 Department of Physics  
 Gothenburg, Sweden  
 Olof Wickman  
 $^{243}\text{Am}$

795. Fysiska Institutionen  
 Thunbergsvagen 7  
 Uppsala, Sweden  
 A. Bachlin  
 $^{133}\text{Ba}$ ,  $^{181}\text{Hf}$ ,  $^{113}\text{Sn}$

796. Institution of Alcohol Research  
 Karolinska Institute  
 Stockholm 60, Sweden  
 Prof. G. Hevesy  
 $^{59}\text{Fe}$
797. KEBO AB  
 Fack  
 Stockholm 6, Sweden  
 $^{45}\text{Ca}$
798. Radiofysiska Avdelningen  
 Centrallasarettet  
 Boras, Sweden  
 $^{99}\text{Mo}$   
 Switzerland
799. Eidg. Technische Hochschule  
 Institut fur Kristallographie u. Petrographie  
 Sonneggstrasse  
 8006 Zurich, Switzerland  
 $^{137}\text{Cs}, ^{89}\text{Sr}$
800. European Organization for Nuclear Research  
 (CERN)  
 Geneva 23, Switzerland  
 Dr. R. Brandt  
 $^{252}\text{Cf}, ^{192}\text{Ir}$
801. Geneve, Universite de  
 Inst. de Physique Experimentale  
 32 Boulevard D'Yvoy  
 Geneva, Switzerland  
 $^{99}\text{Tc}$
802. Institut de Radiophysique Appliques  
 Hospital Cantonal  
 Lausanne, Switzerland  
 Dr. P. Lerch  
 $^{140}\text{Ba}, ^{47}\text{Ca}, ^{129}\text{I}, ^{86}\text{Rb}, ^{75}\text{Se}$
803. Laboratoire Suisse de  
 Recherches Horlogeres  
 Rue Breguet 2  
 2000 Neuchatel  
 Switzerland  
 $^{99}\text{Tc}$
804. Merz and Bentelli AG.  
 Berne 18, Switzerland  
 O. W. Thuler  
 $^3\text{H}, ^{147}\text{Pm}$
805. Radium-Chemie A. Zeller and Company  
 Teufen/App.  
 Switzerland  
 A. Zeller  
 $^3\text{H}, ^{147}\text{Pm}$
806. Swiss Federal Institute for Reactor Research  
 Wurenlingen / AG (Schweiz)  
 $^{90}\text{Y} (\text{B})$
807. Swiss Federal Inst. of Technology  
 Laboratory for Solid State Physics  
 Gloriastrasse 35  
 Zurich 7, Switzerland  
 $^{129}\text{I}$
- Turkey
808. Isotope Laboratory  
 Ankara, Turkey  
 Mr. Bergh  
 $^{14}\text{C}$
- Venezuela
809. Instituto Venezolano de  
 Investigaciones Cientificas  
 Apartado 1827  
 Caracas, Venezuela  
 U. Westphal  
 $^{55}\text{Fe}$
810. Universidad Central de Venezuela  
 Catedra de Fisiopatologia  
 Instituto de Medicina Experimental  
 Caracas, Venezuela, S.A.  
 Dr. De Venanzi  
 $^{32}\text{P}$
- Yugoslavia
811. Institute of Nuclear Sciences  
 Boris Kidrich  
 P.O.B. 522  
 Belgrade, Yugoslavia  
 $^{99}\text{Tc}$

## II. ALPHABETICAL LIST OF ISOTOPES, CROSS-REFERENCED TO CUSTOMER NUMBERS

### **A. Domestic**

- Americium-241**  
29, 60, 77, 133, 153, 173, 201, 302, 310, 324, 359, 364, 391, 507, 517, 525, 580, 642
- Americium-243**  
67, 204, 517, 545
- Antimony-122**  
30, 77
- Antimony-124**  
29, 64, 77, 79, 92, 94, 182, 183, 220, 223, 231, 255, 283, 363, 364, 377, 381, 414, 517, 524, 526, 542, 544, 563, 636
- Antimony-125**  
29, 40, 77, 93, 181, 220, 233, 297, 299, 324, 339, 377, 381, 517, 524, 627
- Argon-37**  
78, 111, 493, 499
- Arsenic-76**  
64, 82, 268, 323, 364, 414, 499
- Arsenic-77**  
414, 563
- Barium-131**  
459
- Barium-133**  
1, 6, 22, 29, 60, 71, 77, 107, 119, 130, 152, 167, 173, 181, 183, 282, 283, 297, 310, 324, 341, 345, 356, 362, 375, 414, 432, 443, 517, 525, 545, 570, 636
- Barium-140**  
1, 4, 29, 36, 49, 60, 68, 77, 79, 138, 148, 149, 159, 167, 183, 233, 241, 283, 299, 303, 310, 311, 318, 321, 338, 364, 381, 387, 396, 425, 481, 517, 524, 526, 538, 550, 553, 560, 563, 567, 572, 578, 637, 646, 647
- Barium-140 - Lanthanum-140**  
(See "Barium-140")
- Berkelium-249**  
77
- Berkelium-250**  
29
- Bismuth-210**  
31, 223, 302, 517, 524

### **Bromine-82**

- 60, 73, 82, 110, 118, 185, 241, 248, 299, 300, 309, 369, 370, 414, 479, 517, 539, 546, 550, 575, 582, 591

### **Cadmium-109**

- 29, 60, 77, 93, 180, 181, 222, 233, 248, 265, 283, 310, 395, 506, 517, 538, 544, 545, 563, 570, 578, 627, 637, 647

### **Cadmium-115**

- 29, 77, 79, 182, 214, 248, 286, 292, 334, 345, 388, 392, 414, 445, 494, 517, 526, 545, 563, 585, 607

### **Cadmium-115m**

- 82, 248, 391, 414, 495, 626, 627, 635

### **Calcium-45**

- 1, 8, 19, 29, 31, 33, 41, 47, 59, 60, 66, 70, 73, 74, 75, 76, 77, 79, 97, 102, 111, 119, 121, 123, 128, 130, 135, 143, 147, 159, 161, 181, 200, 202, 204, 220, 221, 223, 224, 225, 231, 233, 241, 242, 245, 249, 255, 268, 269, 271, 280, 281, 283, 285, 290, 292, 297, 299, 303, 305, 306, 310, 311, 319, 321, 324, 325, 333, 334, 341, 347, 356, 363, 364, 368, 369, 370, 373, 375, 377, 381, 386, 387, 395, 396, 397, 407, 409, 412, 414, 422, 424, 427, 428, 429, 432, 435, 437, 459, 463, 465, 469, 470, 481, 487, 494, 495, 501, 506, 510, 512, 517, 521, 528, 538, 544, 545, 546, 547, 550, 563, 568, 572, 577, 584, 585, 588, 605, 611, 620, 625, 626, 628, 629, 635, 636, 637, 642, 644, 648

### **Calcium-47**

- 1, 49, 60, 71, 95, 96, 104, 111, 119, 182, 233, 241, 271, 285, 292, 294, 334, 357, 364, 414, 429, 434, 459, 479, 517, 522, 538, 577, 587, 588, 610, 626, 642

### **Californium-250**

- 77

### **Californium-251**

- 77

### **Californium-252**

- 29, 67, 72, 73, 77, 138, 158, 159, 255, 404, 414, 422, 448, 548, 637

### **Californium-253**

- 77

- Californium-254  
77
- Carbon-14  
1, 8, 19, 26, 29, 37, 53, 66, 70, 73, 76, 77, 82, 83, 90, 94, 111, 117, 125, 130, 131, 135, 138, 159, 165, 185, 202, 213, 223, 224, 226, 228, 231, 248, 249, 252, 263, 267, 297, 306, 310, 321, 324, 334, 361, 362, 364, 369, 373, 377, 390, 407, 426, 432, 434, 436, 446, 452, 462, 466, 468, 470, 476, 487, 494, 497, 506, 514, 515, 517, 520, 542, 544, 545, 550, 553, 580, 582, 595, 626, 628, 642
- Cerium-141  
8, 29, 74, 77, 119, 241, 377, 381, 383, 437, 463, 517, 545
- Cerium-143  
67
- Cerium-144  
4, 29, 36, 44, 54, 77, 79, 82, 95, 130, 138, 145, 146, 148, 149, 153, 167, 181, 186, 255, 270, 283, 299, 303, 321, 324, 338, 340, 355, 356, 364, 377, 381, 392, 410, 412, 457, 480, 497, 517, 535, 547, 550, 560, 570, 618, 636
- Cesium-134  
109, 246, 299, 494, 495, 517, 525
- Cesium-137  
4, 6, 21, 25, 29, 36, 38, 45, 60, 65, 70, 76, 77, 79, 91, 109, 111, 112, 119, 121, 132, 141, 148, 149, 153, 159, 167, 173, 180, 211, 220, 222, 223, 227, 233, 248, 255, 270, 287, 297, 299, 303, 304, 306, 308, 309, 310, 322, 324, 328, 344, 356, 358, 359, 362, 364, 378, 381, 389, 391, 393, 418, 470, 480, 501, 506, 517, 518, 525, 542, 544, 550, 553, 554, 563, 566, 570, 578, 580, 584, 585, 594, 632, 640, 647
- Cesium-137 – Barium-137  
(See “Cesium-137”)
- Chlorine-36  
8, 13, 31, 35, 62, 70, 71, 73, 93, 95, 119, 121, 122, 135, 138, 139, 152, 155, 167, 181, 183, 185, 211, 220, 223, 231, 232, 233, 249, 250, 256, 268, 269, 284, 290, 297, 303, 310, 324, 334, 345, 357, 362, 363, 365, 367, 376, 378, 414, 432, 449, 463, 465, 470, 474, 494, 495, 505, 517, 543, 544, 546, 550, 568, 570, 577, 584, 620, 626, 627, 642, 647
- Chromium-51  
1, 8, 59, 77, 78, 192, 220, 233, 258, 292, 328, 357, 364, 385, 432, 479, 517, 526, 538, 545
- Cobalt-58  
36, 381, 545
- Cobalt-60  
6, 9, 10, 21, 28, 29, 48, 55, 60, 67, 70, 76, 87, 94, 130, 140, 158, 159, 178, 181, 182, 183, 195, 201, 204, 211, 222, 233, 248, 255, 270, 275, 292, 295, 299, 303, 304, 306, 310, 321, 324, 359, 364, 369, 381, 391, 392, 393, 409, 412, 458, 467, 479, 494, 497, 514, 517, 518, 525, 526, 540, 545, 546, 550, 551, 557, 568, 570, 584, 585, 590, 604, 618, 627, 647
- Copper-64  
1, 31, 73, 75, 95, 109, 130, 182, 223, 338, 344, 369, 376, 422, 464, 494, 495, 499, 514, 517, 526, 541, 544, 545, 636, 642, 647, 648
- Copper-66  
391
- Copper-67  
648
- Curium-244  
77, 127, 138, 158, 204, 404, 517
- Curium-245  
77, 517
- Curium-246  
77, 517
- Curium-247  
77
- Curium-248  
77
- Dysprosium-165  
29, 67
- Dysprosium-166  
29
- Einsteinium-254  
77
- Einsteinium-255  
77, 78
- Erbium-9  
67, 77, 391
- Europium-152  
23
- Europium-152–154  
44, 77, 106, 138, 252, 320, 395, 463, 506, 517, 518, 545
- Fermium-254  
77
- Fermium-255  
77

- Fermium-257  
77
- Fission Products  
77, 159, 172, 204, 303, 356, 362, 395, 517, 546, 550, 553, 556
- Gadolinium-151  
44
- Gadolinium-161  
67
- Gallium-68  
364
- Gallium-72  
82, 130, 499, 517
- Gold-198  
77, 82, 93, 94, 95, 129, 181, 182, 223, 231, 234, 243, 248, 265, 268, 272, 292, 315, 320, 328, 338, 345, 357, 364, 369, 391, 414, 456, 458, 499, 514, 517, 525, 526, 530, 538, 544, 549, 550, 552, 568
- Gold-199  
77, 174, 220, 303, 338, 378, 456, 499
- Hafnium-175  
67
- Hafnium-181  
29, 60, 67, 77, 78, 82, 119, 159, 183, 220, 231, 255, 345, 355, 377, 414, 506, 517, 545, 567, 637
- Holmium-166  
29
- Indium-114  
31, 77, 79, 119, 174, 208, 212, 218, 248, 283, 310, 311, 347, 355, 357, 369, 386, 428, 468, 494, 517, 538, 563, 627, 628, 647
- Indium-116  
391
- Iodine-123  
369
- Iodine-129  
29, 60, 77, 159, 220, 233, 255, 310, 311, 362, 386, 400, 454, 463, 517, 518, 528, 647
- Iodine-130  
269, 364, 414, 437, 450, 496, 517, 577, 602
- Iodine-131  
4, 9, 15, 18, 29, 32, 41, 48, 66, 67, 68, 69, 70, 73, 75, 76, 77, 79, 82, 95, 103, 111, 115, 126, 127, 129, 130, 135, 138, 148, 149, 158, 159, 171, 181, 185, 196, 198, 201, 202, 204, 205, 211, 220, 223, 224, 230, 231, 232, 238, 239, 240, 241, 243, 247, 248, 249, 250, 255, 260, 268, 282, 283, 290, 291, 292, 295, 301, 302, 303, 313, 321, 328, 337, 338, 344, 351, 357, 362, 364, 374, 375, 378, 381, 383, 391, 392, 394, 408, 410, 411, 412, 425, 432, 435, 438, 450, 452, 460, 467, 470, 474, 487, 494, 495, 501, 504, 512, 514, 517, 518, 526, 528, 536, 538, 546, 550, 552, 553, 561, 563, 575, 577, 578, 584, 585, 586, 590, 610, 617, 626, 627, 636, 639, 642, 647
- Iodine-132  
61, 73, 79, 136, 241, 254, 285, 379, 563, 577, 613
- Iodine-133  
41, 82, 234, 578
- Iridium-192  
29, 56, 77, 138, 161, 369, 370, 492, 498, 516, 517, 518, 570, 620, 637
- Iron-52  
364
- Iron-55  
29, 99, 138, 265, 356, 364, 506, 526, 564, 570
- Iron-55-59  
20, 48, 106, 119, 159, 409, 412, 438, 439, 564
- Iron-59  
9, 10, 31, 35, 36, 44, 50, 60, 67, 70, 71, 73, 77, 78, 92, 93, 95, 130, 132, 138, 139, 147, 159, 181, 182, 187, 200, 214, 215, 220, 231, 233, 241, 245, 248, 249, 252, 255, 258, 268, 269, 274, 283, 297, 302, 303, 306, 308, 310, 311, 314, 316, 321, 328, 344, 347, 357, 362, 363, 364, 369, 381, 392, 410, 412, 414, 428, 432, 470, 479, 481, 487, 494, 506, 512, 514, 517, 518, 526, 532, 538, 544, 546, 547, 550, 563, 568, 577, 620, 626, 627, 636, 645, 646, 647
- Krypton-85  
1, 7, 27, 29, 34, 36, 50, 70, 75, 111, 114, 117, 119, 150, 156, 163, 170, 171, 175, 176, 178, 179, 181, 186, 200, 223, 224, 262, 285, 289, 290, 299, 302, 304, 310, 324, 334, 384, 386, 388, 399, 411, 454, 486, 490, 493, 499, 506, 517, 518, 522, 523, 526, 531, 533, 555, 580, 591, 595, 606, 626, 631, 632, 633, 634, 635, 637, 647
- Lanthanum-140  
70, 138, 167, 241, 268, 364, 414, 512, 517, 530, 563, 615
- Lutetium-177  
67, 77, 78

- Lutetium-177m**  
78
- Magnesium-28**  
108, 130, 134, 161, 177, 182, 199, 203, 224, 233, 273, 364, 385, 414, 574, 630, 648
- Manganese-54**  
381, 495
- Mercury-197**  
1, 82, 130, 132, 357, 393, 518, 568, 577
- Mercury-203**  
1, 6, 29, 32, 67, 77, 79, 82, 95, 107, 130, 138, 159, 161, 181, 183, 201, 204, 220, 231, 233, 248, 252, 268, 281, 283, 302, 303, 306, 307, 310, 311, 355, 356, 357, 377, 378, 388, 392, 395, 404, 414, 422, 432, 441, 479, 499, 506, 517, 518, 524, 525, 526, 538, 545, 554, 563, 607, 625, 636, 637, 647
- Molybdenum-99**  
28, 29, 38, 41, 70, 79, 130, 167, 181, 223, 231, 233, 234, 248, 306, 324, 381, 383, 414, 478, 485, 486, 494, 495, 517, 547, 550, 560, 563, 568, 637
- Neodymium-147**  
4, 29, 71, 79, 173, 381, 383, 517, 518, 575
- Neptunium-237**  
29, 77, 133, 138, 173, 310, 319, 352, 517, 524, 637
- Nickel-63**  
12, 29, 31, 35, 60, 71, 73, 77, 130, 148, 155, 182, 204, 205, 223, 229, 233, 234, 255, 275, 324, 356, 362, 364, 377, 447, 506, 526, 570, 580, 615, 644
- Nickel-65**  
391
- Niobium-95**  
29, 77, 79, 82, 106, 138, 167, 181, 187, 248, 252, 265, 283, 319, 355, 391, 392, 517, 524, 525, 545, 563, 617, 625
- Niobium-106**  
392
- Osmium-191**  
8, 77, 119, 517
- Osmium-193**  
29, 67, 78
- Palladium-109**  
517, 563
- Phosphorus-32**  
1, 2, 8, 12, 15, 19, 29, 31, 32, 42, 46, 47, 48, 52, 53, 56, 60, 64, 66, 67, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 81, 82, 83, 84, 88, 89, 90, 101, 107, 109, 111, 113, 116, 119, 123, 124, 125, 126, 127, 128, 130, 135, 138, 139, 143, 151, 152, 157, 158, 159, 173, 181, 185, 189, 196, 198, 202, 205, 209, 211, 217, 220, 223, 224, 225, 230, 231, 241, 243, 248, 249, 252, 268, 271, 274, 276, 277, 278, 279, 280, 281, 283, 288, 290, 294, 295, 297, 298, 299, 302, 303, 305, 306, 312, 318, 321, 326, 327, 328, 333, 334, 338, 345, 346, 348, 353, 356, 357, 360, 364, 368, 369, 373, 375, 376, 377, 378, 381, 386, 387, 389, 395, 396, 397, 404, 407, 408, 410, 412, 413, 414, 416, 419, 422, 432, 434, 435, 436, 437, 438, 441, 448, 452, 462, 466, 469, 470, 475, 480, 481, 485, 487, 491, 494, 495, 496, 497, 499, 501, 502, 503, 506, 509, 511, 512, 514, 517, 518, 522, 527, 528, 530, 536, 538, 542, 543, 544, 545, 546, 550, 554, 557, 558, 563, 564, 575, 576, 577, 578, 579, 582, 583, 584, 585, 590, 592, 599, 617, 618, 621, 625, 626, 628, 629, 636, 637, 639, 642, 647, 648
- Platinum-192**  
77
- Plutonium-241**  
517
- Plutonium-242**  
517
- Polonium-210**  
31, 78, 138, 302, 310, 311, 359, 381, 391, 570, 580, 623
- Potassium-42**  
8, 60, 70, 73, 76, 78, 107, 120, 130, 133, 135, 136, 144, 152, 159, 202, 220, 221, 223, 224, 241, 256, 265, 268, 269, 280, 281, 284, 292, 297, 303, 305, 306, 334, 335, 338, 345, 356, 378, 381, 382, 385, 397, 404, 414, 432, 435, 437, 474, 481, 494, 512, 517, 544, 546, 550, 563, 568, 582, 585, 594, 595, 602, 626, 636, 642
- Praseodymium-142**  
355, 525
- Praseodymium-143**  
77, 79, 223
- Promethium-147**  
79, 93, 130, 180, 214, 220, 223, 233, 255, 259, 277, 296, 302, 324, 356, 362, 378, 393, 421, 423, 447, 490, 506, 517, 524, 544, 547, 550, 556, 557, 570, 572
- Promethium-151**  
29

**Protactinium-231**

29, 77

**Rhenium-186**

77, 190, 395, 517, 563

**Rhenium-188**

78

**Rubidium-84**

224

**Rubidium-86**

1, 4, 29, 31, 32, 70, 71, 73, 74, 75, 77, 79, 111, 113, 130, 131, 135, 138, 167, 169, 182, 213, 220, 223, 224, 231, 233, 238, 241, 252, 256, 280, 283, 284, 297, 299, 303, 305, 310, 311, 312, 334, 354, 355, 357, 364, 368, 369, 370, 377, 381, 385, 402, 414, 422, 425, 432, 463, 471, 479, 481, 512, 517, 530, 544, 547, 550, 562, 563, 577, 594, 607, 624, 625, 626, 627, 637

**Ruthenium-103**

4, 8, 29, 79, 138, 167, 234, 248, 268, 299, 303, 381, 404, 425, 480, 497, 499, 501, 517, 550, 553, 572, 637

**Ruthenium-106**

35, 67, 70, 77, 79, 82, 138, 148, 149, 233, 270, 283, 297, 302, 381, 391, 410, 412, 425, 480, 501, 517, 540, 560, 570, 572, 580, 641

**Samarium-153**

130, 167, 220, 391, 392, 517, 646

**Scandium-46**

29, 67, 70, 77, 94, 109, 138, 174, 181, 201, 217, 248, 283, 302, 303, 364, 368, 377, 381, 394, 425, 428, 447, 453, 457, 494, 506, 517, 530, 544, 626, 637, 639

**Scandium-49**

29

**Selenium-75**

70, 71, 75, 77, 159, 174, 212, 236, 244, 261, 269, 275, 285, 298, 322, 377, 380, 386, 398, 466, 479, 493, 494, 495, 517, 518, 538, 544, 545, 570, 598, 609, 626, 637, 642, 643

**Silver-110**

29, 31, 36, 38, 41, 51, 60, 77, 79, 80, 100, 121, 138, 142, 145, 152, 173, 174, 181, 183, 216, 226, 232, 233, 235, 241, 258, 317, 321, 345, 369, 375, 381, 458, 506, 517, 526, 550, 553, 554, 584, 618, 626, 637

**Silver-111**

79, 174, 182, 232, 258, 268, 283, 302

**Sodium-24**

70, 77, 85, 122, 130, 133, 135, 136, 158, 167, 181, 182, 206, 211, 223, 224, 239, 241, 256, 265, 268, 269, 280, 297, 303, 305, 330, 338, 344, 345, 355, 356, 363, 371, 377, 381, 403, 414, 432, 437, 474, 493, 494, 506, 512, 517, 518, 524, 538, 544, 563, 564, 568, 582, 595, 596, 601, 626, 627

**Strontium-85**

29, 36, 70, 73, 79, 104, 119, 167, 220, 231, 241, 248, 270, 277, 303, 344, 355, 357, 364, 381, 395, 444, 479, 494, 495, 517, 518, 550, 578, 626

**Strontium-87m**

77, 136, 369, 648

**Strontium-89**

8, 9, 10, 19, 29, 31, 33, 41, 68, 70, 73, 77, 93, 94, 105, 113, 119, 128, 130, 138, 159, 167, 182, 201, 220, 225, 233, 241, 277, 292, 303, 366, 381, 386, 391, 392, 414, 428, 432, 444, 459, 463, 465, 481, 494, 495, 497, 506, 517, 518, 538, 556, 557, 563, 577, 584, 620, 626, 637, 647

**Strontium-90**

4, 9, 21, 29, 33, 38, 52, 60, 67, 76, 77, 79, 95, 137, 138, 148, 149, 158, 181, 196, 204, 205, 216, 220, 233, 255, 270, 292, 308, 309, 310, 311, 321, 324, 356, 432, 468, 494, 495, 497, 506, 517, 518, 538, 546, 549, 550, 554, 564, 570, 580, 581, 620

**Strontium-90 - Yttrium-90**

(See "Strontium-90")

**Sulfur-35**

1, 2, 13, 15, 19, 29, 31, 32, 35, 41, 48, 50, 53, 56, 57, 58, 59, 62, 66, 70, 71, 72, 73, 75, 77, 83, 94, 95, 111, 117, 119, 128, 130, 135, 138, 143, 152, 158, 159, 181, 185, 188, 194, 196, 202, 210, 212, 214, 217, 220, 221, 223, 241, 244, 248, 252, 258, 267, 268, 276, 288, 290, 294, 297, 299, 302, 303, 319, 321, 328, 332, 338, 346, 356, 357, 361, 364, 368, 369, 370, 372, 377, 385, 386, 387, 389, 395, 397, 402, 404, 407, 410, 412, 414, 416, 420, 431, 432, 435, 436, 438, 456, 461, 466, 468, 469, 470, 472, 474, 479, 481, 487, 488, 493, 494, 495, 496, 501, 506, 509, 512, 514, 517, 518, 530, 534, 538, 543, 544, 545, 550, 553, 563, 569, 577, 584, 597, 600, 602, 611, 616, 618, 620, 625, 626, 627, 628, 629, 635, 636, 642, 648

**Tantalum-182**

4, 23, 29, 50, 67, 71, 77, 79, 119, 167, 193, 355, 356, 373, 377, 391, 392, 404, 411, 499, 517, 545, 547, 550, 567, 585, 637

- Tantalum-183  
23
- Technetium-99  
29, 36, 60, 77, 79, 153, 173, 174, 204, 205, 212, 231, 238, 255, 299, 324, 362, 378, 392, 456, 501, 517, 521, 545, 626
- Technetium-99m  
28, 42, 61, 73, 77, 96, 136, 152, 191, 233, 237, 241, 253, 266, 282, 303, 342, 343, 364, 387, 401, 433, 437, 443, 478, 481, 484, 493, 502, 521, 577, 585, 587, 588, 612, 614
- Tellurium-121  
23
- Tellurium-123  
23
- Tellurium-132  
3, 41, 79, 234, 381, 383, 425, 560, 573, 578
- Terbium-160  
23, 67, 77
- Terbium-161  
**29**
- Thallium-204  
29, 35, 38, 60, 66, 77, 82, 94, 119, 138, 181, 205, 216, 222, 233, 302, 303, 324, 356, 362, 363, 364, 368, 386, 395, 423, 490, 506, 517, 521, 538, 545, 570, 580, 581, 626, 637
- Thorium-230  
414, 584
- Thulium-170  
23, **29**, 77, 138, 183, 223, 231, 285, 310, 359, 391, 529, 538, 563, 570, 585, 591
- Thulium-171  
138
- Tin-113  
77, 92, 94, 138, 181, 182, 183, 218, 233, 257, 299, 310, 311, 355, 363, 364, 389, 391, 392, 423, 485, 486, 506, 517, 526, 538, 554, 563, 647,
- Tin-119  
**29**
- Tin-121  
67
- Titanium-51  
391
- Tritium  
14, 15, 16, 17, 29, 31, 36, 44, 60, 62, 66, 67, 70, 75, 77, 85, 93, 97, 111, 117, 171, 178, 192, 200, 220, 229, 231, 240, 248, 252, 255, 264, 265, 283, 302, 308, 309, 324, 341, 358, 361, 369, 370, 417, 447, 451, 452, 481, 483, 492, 499, 506, 517, 545, 550, 563, 564, 570, 580, 603, 618, 620, 626, 637, 642, 645, 647, 648
- Tritium Targets  
29, 31, 62, 67, 97, 178, 192, 219, 252, 255, 265, 283, 369, 370, 447, 481, 492, 517, 545, 618, 637
- Tritium-Titanium, Tritium-Zirconium  
(See "Tritium Targets")
- Tungsten-185  
29, 77, 79, 119, 223, 265, 292, 297, 395, 432, 455, 494, 495, 517, 525, 577, 627, 637
- Tungsten-187  
**29**, 77, 223, 234, 517
- Tungsten-189  
78
- Uranium-233  
517
- Uranium-238  
5, 24, 173, 218, 359, 637
- Vanadium-52  
391
- Xenon-125  
78
- Xenon-127  
78
- Xenon-133  
1, 7, 29, 41, 42, 77, 79, 135, 167, 178, 234, 241, 290, 308, 309, 357, 381, 493, 499, 506, 523, 529, 571, 578, 589, 606, 608
- Ytterbium-169  
23, 67
- Ytterbium-175  
**29**, 67, 78
- Ytterbium-177  
**29**, 78
- Yttrium-90  
79, 86, 252, 508, 526, 622
- Yttrium-91  
29, 77, 119, 138, 167, 174, 183, 268, 270, 277, 285, 500, 517, 546, 550, 553, 563, 593, 617, 626, 637, 646
- Zinc-65  
**29**, 31, 36, 48, 66, 70, 76, 77, 79, 92, 93, 101, 130, 132, 138, 159, 182, 185, 188, 195, 196, 201, 202, 220, 233, 241, 248, 252, 256, 258, 268, 269, 271, 275, 285, 294, 297, 321, 322, 324, 328, 338, 356, 364, 369, 377, 381, 386, 388, 395, 410, 412, 432, 445, 467, 471, 494, 495, 496, 517, 525, 541, 543, 544, 545, 561, 563, 577, 583, 607, 618, 620, 627, 629, 637, 642, 647

- Zinc-69**  
391
- Zirconium-93**  
391
- Zirconium-95**  
4, 29, 36, 41, 60, 68, 77, 79, 92, 94, 138, 148, 149, 167, 181, 183, 195, 201, 234, 283, 299, 310, 311, 322, 357, 364, 381, 391, 392, 414, 480, 497, 499, 506, 517, 524, 538, 540, 545, 546, 550, 556, 557, 560, 567, 628, 637
- Zirconium-95-Niobium-95**  
(See "Zirconium-95")
- Cyclotron Service Irradiations (CSI)**  
1, 29, 40, 41, 44, 52, 56, 60, 67, 79, 110, 178, 197, 220, 223, 233, 241, 293, 324, 336, 349, 362, 364, 381, 384, 391, 405, 414, 441, 442, 506, 507, 521, 550, 555, 557, 563, 570, 594
- Reactor Service Irradiations (SI)**  
1, 8, 11, 23, 29, 32, 36, 40, 43, 44, 60, 63, 67, 70, 72, 76, 78, 82, 94, 95, 98, 104, 106, 119, 138, 154, 159, 160, 161, 162, 164, 166, 168, 169, 174, 178, 183, 184, 205, 207, 208, 214, 215, 218, 220, 222, 231, 232, 241, 251, 252, 255, 264, 265, 269, 271, 283, 290, 297, 302, 303, 306, 308, 310, 311, 315, 324, 329, 338, 345, 346, 350, 354, 355, 364, 377, 378, 386, 387, 391, 403, 406, 407, 414, 415, 422, 423, 425, 429, 430, 432, 473, 477, 481, 482, 489, 494, 496, 499, 502, 512, 513, 517, 518, 519, 530, 534, 537, 538, 545, 550, 559, 560, 563, 564, 565, 619, 626, 627, 628, 636, 638, 642, 647,
- Special Services (SS)**  
1, 4, 7, 8, 14, 15, 18, 21, 22, 25, 29, 36, 37, 40, 41, 42, 44, 47, 49, 62, 65, 66, 67, 69, 70, 75, 77, 82, 93, 104, 111, 112, 117, 123, 130, 138, 158, 164, 169, 171, 173, 174, 178, 180, 186, 195, 200, 205, 212, 220, 223, 227, 229, 231, 233, 234, 235, 240, 241, 248, 249, 255, 259, 265, 269, 270, 283, 292, 296, 297, 302, 303, 308, 310, 324, 334, 340, 341, 345, 353, 356, 357, 358, 361, 362, 364, 369, 381, 387, 389, 392, 393, 411, 417, 423, 432, 437, 451, 452, 461, 474, 479, 493, 494, 499, 501, 504, 506, 512, 514, 516, 517, 518, 522, 523, 525, 526, 531, 538, 545, 550, 554, 557, 559, 563, 564, 570, 577, 580, 584, 585, 588, 595, 603, 620, 626, 627, 636, 637, 642, 645, 647, 648
- B. Foreign**
- Americium-241**  
660, 710, 716, 721, 729, 731, 732, 761
- Americium-243**  
660, 663, 664, 732, 771, 776, 794
- Antimony-124**  
674, 710, 739, 741
- Antimony-125**  
732
- Argon-37**  
653, 659, 664, 694, 699, 707
- Barium-131**  
674, 741
- Barium-133**  
666, 707, 708, 732, 795
- Barium-140**  
732, 760, 782, 802
- Barium-140 - Lanthanum-140**  
(See "Barium-140")
- Beryllium-7**  
731
- Bismuth-207**  
731
- Cadmium-109**  
731, 732
- Cadmium-115**  
760, 769, 782
- Calcium-45**  
660, 661, 664, 672, 677, 699, 742, 760, 764, 767, 797
- Calcium-47**  
649, 728, 789, 790, 802
- Californium-252**  
650, 655, 656, 698, 699, 706, 711, 731, 753, 793, 800
- Carbon-14**  
693, 699, 719, 760, 808
- Cerium-144**  
660, 699, 710, 786
- Cerium-144 - Praseodymium-144**  
(See "Cerium-144")
- Cesium-134**  
707, 739
- Cesium-137**  
657, 664, 676, 698, 699, 703, 710, 725, 740, 752, 760, 762, 765, 768, 770, 788, 799,
- Cesium-137 - Barium-137**  
(See "Cesium-137")

- Chlorine-36**  
 660, 688, 707, 732, 739, 744, 747, 760, 775  
**Chromium-51**  
 689, 691  
**Cobalt-57**  
 731  
**Cobalt-58**  
 687  
**Cobalt-60**  
 664, 668, 714, 739, 760, 762, 767  
**Copper-64**  
 675  
**Curium-242**  
 731  
**Curium-244**  
 710, 715, 731, 735, 763  
**Fission Products**  
 653, 713, 760  
**Gold-198**  
 707  
**Gold-199**  
 773  
**Hafnium-181**  
 707, 710, 730, 732, 795  
**Hydrogen-3**  
 (See "Tritium")  
**Indium-114**  
 739, 782  
**Iodine-129**  
 656, 732, 741, 744, 746, 771, 802, 807  
**Iodine-131**  
 782  
**Iodine-132**  
 652  
**Iridium-192**  
 741, 782, 800  
**Iron-55**  
 662, 731, 732, 764, 790, 809  
**Iron-59**  
 660, 668, 687, 688, 689, 691, 699, 707, 709, 712,  
 732, 756, 760, 775, 783, 787, 790, 796  
**Krypton-85**  
 660, 664, 670, 680, 724, 738, 760, 762  
**Lanthanum-140**  
 679
- Magnesium-28**  
 680, 684, 705, 728  
**Manganese-54**  
 682  
**Mercury-203**  
 685, 754, 760, 782  
**Molybdenum-99**  
 652, 664, 678, 759, 798  
**Neodymium-147**  
 674  
**Neptunium-237**  
 660, 710, 721, 731, 732, 751, 757, 773, 776, 777  
**Nickel-63**  
 654, 673, 707, 739, 760, 784  
**Niobium-95**  
 699, 704  
**Osmium-191**  
 760  
**Phosphorus-32**  
 654, 667, 674, 688, 690, 692, 693, 696, 734, 736,  
 782, 810  
**Plutonium**  
 653, 660, 664, 710  
**Plutonium-238**  
 660, 715  
**Plutonium-239**  
 655, 658, 659, 660, 781  
**Plutonium-240**  
 659, 660  
**Plutonium-242**  
 658, 660, 695, 698, 706  
**Polonium-210**  
 732  
**Potassium-42**  
 758  
**Praseodymium-143**  
 710  
**Promethium-147**  
 653, 683, 699, 702, 707, 717, 726, 732, 735, 755,  
 760, 804, 805  
**Rubidium-86**  
 688, 690, 707, 764, 802  
**Ruthenium-106**  
 649, 699, 707, 760

Ruthenium-106-Rhodium-106 (See "Ruthenium-106")	Titanium-44 731
Samarium-151 708, 721	Tritium 664, 691, 699, 733, 745, 746, 748, 756, 760, 778, 793, 804, 805
Scandium-46 739	Tritium Targets 691
Scandium-48 774	Tungsten-187 674
Selenium-75 697, 699, 707, 779, 802	Uranium 658, 660, 699, 710, 722, 723, 744, 771
Silver-110 739, 782	Uranium-233 655, 660
Silver-111 669, 760	Uranium-234 695
Strontium-85 660, 665, 701, 731, 772	Uranium-235 653, 695, 791
Strontium-89 653, 664, 673, 690, 695, 732, 760, 799	Uranium-236 660, 695, 731
Strontium-90 654, 664, 676, 699, 707, 716, 791, 792	Uranium-238 660, 698, 700, 710, 727, 731, 735, 749, 750, 751, 776, 791
Strontium-90-Yttrium-90 (See "Strontium-90")	Yttrium-88 731, 732
Sulfur-35 687, 693, 718, 760, 782	Yttrium-90 806
Tantalum-182 707	Yttrium-91 739, 766, 767
Technetium-99 664, 699, 707, 713, 722, 732, 735, 760, 780, 785, 801, 803, 811	Zinc-65 660, 744, 760
Technetium-99m 649, 668, 678, 686, 759, 761	Zirconium-95 714, 732, 760
Thallium-204 767, 773	Cyclotron Service Irradiation (CSI) 671, 708, 720, 731, 732, 741, 775, 777
Thorium-230 653, 669	Reactor Service Irradiation (SI) 721, 737, 743, 790
Thulium-170 681, 787	Special Services (SS) 654, 778
Tin-113 739, 760, 795	

### III. ALPHABETICAL LIST OF STATES AND COUNTRIES, CROSS-REFERENCED TO CUSTOMER NUMBERS

#### A. Domestic

- Alabama                    8, 37, 472, 496, 514, 530, 537, 572
- Alaska                    9, 10
- Arizona                    31, 141, 315
- Arkansas                  32, 533, 596
- California                4, 5, 6, 25, 27, 35, 36, 48, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 94, 114, 131, 149, 150, 156, 167, 169, 173, 181, 186, 204, 212, 228, 244, 259, 265, 272, 314, 339, 340, 341, 352, 367, 382, 389, 397, 402, 419, 430, 431, 443, 448, 450, 456, 470, 480, 481, 490, 508, 524, 543, 557, 559, 561, 563, 565, 567, 570, 574, 597, 609, 611, 612
- Colorado                  106, 107, 108, 109, 127, 133, 317, 453, 529, 547, 552, 591
- Connecticut                17, 112, 190, 323, 376, 400, 523, 647
- Delaware                  139
- District of Columbia    20, 86, 137, 182, 211, 462, 509, 526, 545, 553, 554, 564, 566, 575, 613, 623
- Florida                   157, 158, 159, 160, 179, 210, 237, 294, 361, 476, 589
- Georgia                   142, 152, 183, 184, 185, 191, 264, 288, 348
- Hawaii                   202, 203
- Idaho                     30, 216, 217, 391
- Illinois                   1, 28, 29, 95, 96, 116, 118, 128, 151, 218, 219, 220, 221, 271, 286, 296, 318, 350, 354, 356, 403, 415, 458, 471, 482, 534, 588, 620
- Indiana                   66, 155, 222, 223, 224, 300, 355, 360, 399, 414, 491, 594, 621
- Iowa                      23, 230, 231, 232, 380, 595
- Kansas                   246, 247, 248, 249, 250
- Kentucky                  252, 253, 269, 420, 519, 598
- Louisiana                132, 268, 467, 469, 505, 512, 542, 601
- Maine                     53, 236, 274
- Maryland                  39, 187, 189, 241, 277, 279, 280, 281, 416, 528, 536, 544, 556, 560, 562, 568, 573, 576, 577, 593, 641
- Massachusetts            22, 46, 52, 56, 93, 100, 148, 199, 200, 233, 235, 276, 282, 283, 284, 324, 349, 384, 388, 424, 439, 460, 477, 486, 492, 507, 510, 511, 633, 645, 646
- Michigan                  80, 129, 130, 161, 197, 205, 256, 297, 298, 299, 582, 619, 628, 640, 644
- Minnesota                105, 147, 207, 285, 302, 303, 351, 444, 446, 599
- Mississippi               304, 305
- Missouri                  90, 245, 275, 306, 307, 308, 357, 441, 468, 607, 627
- Montana                  84, 312, 579
- Nebraska                  321, 603
- Nevada                    3, 322, 383, 425, 571
- New Hampshire           123, 325, 330
- New Jersey               7, 16, 43, 59, 81, 229, 234, 242, 263, 292, 319, 358, 404, 405, 406, 418, 438, 449, 454, 478, 483, 513, 532, 624, 632
- New Mexico               146, 270, 326, 327, 328, 447, 483

- New York**  
 2, 12, 15, 19, 24, 44, 45, 47, 55, 58, 60, 61, 83,  
 89, 99, 110, 111, 119, 120, 121, 134, 145, 153,  
 154, 162, 164, 165, 166, 170, 174, 175, 192, 198,  
 208, 213, 214, 215, 225, 239, 240, 251, 255, 260,  
 262, 266, 267, 273, 313, 316, 330, 331, 332, 333,  
 334, 335, 336, 337, 338, 363, 396, 401, 408, 417,  
 421, 422, 432, 433, 434, 435, 436, 437, 452, 459,  
 479, 487, 488, 489, 515, 521, 522, 535, 538, 569,  
 581, 602, 635, 648
- North Carolina**  
 54, 92, 124, 135, 136, 143, 243, 342, 343, 344,  
 345, 423, 426, 546, 592, 604, 634
- North Dakota**  
 346, 347
- Ohio**  
 41, 85, 88, 97, 98, 102, 103, 104, 125, 126, 163,  
 171, 188, 206, 261, 295, 310, 311, 320, 329, 366,  
 368, 369, 370, 371, 393, 407, 525, 555, 578, 615,  
 636
- Oklahoma**  
 49, 117, 195, 227, 372, 373, 374, 375, 392
- Oregon**  
 377, 378, 379, 398, **551**
- Pennsylvania**  
 11, 14, 26, 34, 40, 51, 64, 65, 82, 115, 140, 144,  
 193, 194, 238, 257, 291, 301, 359, 362, 385, 386,  
 387, 394, 395, 461, 485, 493, 531, 541, 549, 558,  
 580, 605, 631, 637, 638
- Puerto Rico**  
 409, 410, 411, 412
- Rhode Island**  
 62, 63, 427, 428
- South Carolina**  
 101, 138, 289, 465
- South Dakota**  
 466
- Tennessee**  
 21, 91, 364, 365, 440, 464, 494, 495, 516, 517,  
 518, 539, 585, 601
- Texas**  
 42, 122, 168, 180, 201, 209, 258, 293, 309, 429,  
 442, 445, 451, 455, 457, 463, 473, 474, 475, 497,  
 498, 499, 500, 501, 502, 503, 504, 506, 590, 622
- Utah**  
 57, 527, 550, 583, 584, 608
- Virginia**  
 33, 38, 176, 196, 287, 290, 390, 606, 616, 617,  
 618
- Washington**  
 50, 87, 172, 177, 254, 381, 413, 484, 540, 610,  
 625, 626, 639
- West Virginia**  
 520, 548, 586, 629, 630
- Wisconsin**  
 13, 226, 587, 614, 642
- Wyoming**  
 353, 643
- B. Foreign**
- Argentina**  
 649
- Australia**  
 650, 652, 653
- Austria**  
 654, 655, 656
- Belgium**  
 657, 658, 659, 660
- Bermuda**  
 661
- Brazil**  
 662
- Canada**  
 663, 664, 665, 666, 667, 668, 669, 670, 671, 672,  
 673, 674, 675, 676, 677, 678, 679, 680, 681, 682,  
 683, 684, 685, 686
- Chile**  
 687, 688
- China**  
 689, 690, 691
- Colombia**  
 692
- Costa Rica**  
 693
- Czechoslovakia**  
 694
- Denmark**  
 695

- Egypt 696
- Finland 697
- France 698, 699, 700, 701, 702, 703, 704, 705, 706
- Germany 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726
- Great Britain 727, 728, 729, 730, 731, 732, 733
- Greece 734
- India 735, 736, 737, 738, 739, 740, 741
- Israel 742, 743, 744, 745, 746, 747, 748
- Italy 749, 750, 751, 752, 753, 754, 755, 756, 757
- Jamaica 758
- Japan 759, 760, 761, 762
- Korea 763, 764
- Mexico 765, 766, 767, 768
- Monaco 769
- Morocco 770
- The Netherlands 771, 772, 773, 774, 775, 776, 777
- New Zealand 778, 779, 780
- Norway 781
- Pakistan 782
- Philippines 783, 784
- Poland 785
- Portugal 786, 787, 788
- South Africa 789, 790
- Spain 791, 792
- Sweden 793, 794, 795, 796, 797, 798
- Switzerland 799, 800, 801, 802, 803, 804, 805, 806, 807
- Turkey 808
- Venezuela 809, 810
- Yugoslavia 811

**IV. RADIOISOTOPE SALES**  
**FY 1965**

Isotope	Domestic			Foreign			Project			Total		
	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars
Americium-241	22		230,943	5		84,030	12		342,673	39	546.1 g	657,646
Americium-243	3		400	3		300				6	184.2 g	700
Antimony-122							4		4,032	4	170.0 g	4,032
Antimony-124	17	0.1	585	3	<0.1	75	15	2.6	1,149	35	2.7	1,809
Antimony-125	11	<0.1	1,155	2	<0.1	1,100	5	<0.1	500	18	<0.1	2,755
Argon-37	4	<0.1	190	2	<0.1	100	1	4.0	2,745	7	4.0	3,035
Arsenic-76	7	0.1	250				27	0.143	205	34	0.3	455
Arsenic-77	2	<0.1	50							2	<0.1	50
Barium-131	4	<0.1	270	3	<0.1	180				7	<0.1	450
Barium-133	44	0.2	15,723	8	<0.1	2,475	16	<0.1	4,950	68	0.3	23,148
Barium-140	38	0.3	559	27	0.8	1,903	22	0.402	1,360	87	1.5	3,822
Berkelium-249							1	$1 \times 10^{-2}$	3,543	1	$1 \times 10^{-2}$	3,543
Berkelium-250							1	2.6	1,209	1	2.6	1,209
Bismuth-210	5	<0.1	200				2	<0.1	150	7	<0.1	350
Bromine-82	43	0.6	1,776				7	<0.1	225	50	0.6	2,001
Cadmium-109	23	<0.1	3,563	5	<0.1	1,120	5	0.003	232	33	<0.1	4,915
Cadmium-115	12	0.1	530	2	0.1	179	1	0.2	482	15	0.4	1,191
Cadmium-115m	20	<0.1	1,452	2	<0.1	116	5	<0.1	231	27	<0.1	1,799
Calcium-45	247	1.2	17,258	33	0.5	8,603	24	0.137	1,941	304	1.8	27,802
Calcium-47	202	0.2	45,715	15	<0.1	1,410	7	<0.1	890	224	0.2	48,015
Californium-250							3	$2.6 \times 10^{-2}$	3,543	3	$2.6 \times 10^{-2}$	3,543
Californium-251							1	$1 \times 10^{-6}$	3,543	1	$1 \times 10^{-6}$	3,543
Californium-252	15		1,400	6		600	4		4,663	25		6,663
Californium-253							1	$1 \times 10^{-3}$	3,543	1	$1 \times 10^{-3}$	3,543
Californium-254							1	$1 \times 10^{-3}$	3,543	1	$1 \times 10^{-3}$	3,543
Carbon-14	149	57.2	240,945	6	1.46	10,000	10	5.9	10,980	165	64.6	261,925
Cerium-143							1	<0.1	38	1	<0.1	38
Cerium-144	35	37.5	1,452	6	11.1	250	27	17.357	1,252	68	66	2,954
Cesium-134	3	<0.1	75	1	<0.1	25	2	<0.1	38	6	<0.1	138
Cesium-137	124	63,416	39,936	22	272,324	151,669	26	15,250	19,288	72	350,989	210,893

Isotope	Domestic			Foreign			Project			Total		
	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars
Chlorine-36	90	<0.1	8,522	10	<0.1	7,484	8	<0.1	1,022	108	<0.1	17,028
Chromium-51	1	0.1	250	1	0.005	10	6	265.0	2,781	8	265.2	3,041
Cobalt-58							1	10		1	10	
Cobalt-60-P	73	1.0	2,546	13	0.2	393	20	0.125	416	106	1.3	3,355
Cobalt-60(Metal)	14	144,458	78,824	5	153,236	76,618	28	999,770	106,711	47	1,297,464	262,153
Copper-64	101	3.5	5,150	2	0.1	130	4	<0.1	4	107	3.6	5,284
Copper-66							1	<0.1	1	1	<0.1	1
Copper-67	1	<0.1	750							1	<0.1	750
Curium-242				1		200				1	0.002 g	200
Curium-244	4		400	4		400	4	234 g	Unknown	12	234 g	800
Curium-245							2	3.65 g	Unknown	2	3.65 g	Unknown
Curium-246							2	7.12 g	Unknown	2	7.12 g	Unknown
Curium-247							1	$1 \times 10^{-6}$	3,543	1	$1 \times 10^{-6}$	3,543
Curium-248							1	$1 \times 10^{-9}$	3,543	1	$1 \times 10^{-9}$	3,543
Dysprosium-165							3		1,495	3		1,495
Dysprosium-166							1	266	1,209	1	266	1,209
Einsteinium-254							1	$1 \times 10^{-5}$	3,543	1	$1 \times 10^{-5}$	3,543
Einsteinium-255							2	$2 \times 10^{-8}$	4,196	2	$2 \times 10^{-8}$	4,196
Erbium-169							40	191.7	6,105	40	191.7	6,105
Europium-152							1	1.1	210	1'	1.1	210
Europium-152-154	8	<0.1	310				10	<0.1	685	18	0.1	995
Fission Products	8	0.1	281	9	0.1	251	8	168	3,040	25	168	3,572
Francium-254							1	$1 \times 10^{-5}$	3,543	1	$1 \times 10^{-5}$	3,543
Francium-255							1	$1 \times 10^{-6}$	3,543	1	$1 \times 10^{-6}$	3,543
Francium-257							1	$1 \times 10^{-10}$	3,543	1	$1 \times 10^{-10}$	3,543
Gadolinium-161							2	<0.1		2	<0.1	
Gallium-68							1	<0.1	120	1	<0.1	120
Gallium-72	3	<0.1	90				3	<0.1	130	6	<0.1	220
Gold-198	94	11.7	1,464	1	0.02	4	21	0.2	139	116	11.9	1,607
Gold-199	26	0.2	1,258				1	<0.1	50	27	0.2	1,308
Hafnium-175							5	0.6	122	5	0.6	122
Hafnium-181	17	0.12	418	4	0.08	124	16	904.6	3,855	37	904.8	4,397
Holmium-156							1	150	3,543	1	150	3,543

Isotope	Domestic			Foreign			Project			Total		
	Shipments	Curies	Dollars	Shipments	Curies	Dollars	Shipments	Curies	Dollars	Shipments	Curies	Dollars
Holmium-166							1	0.4	1,209	1	0.4	1,209
Indium-114	25	0.1	775	1	<0.1	25	6	<0.1	150	32	0.2	950
Indium-116							1	<0.1		1	<0.1	
Iodine-129	14	14.8	11,521	11	2.4	2,340	6	0.3	350	31	17.5	14,211
Iodine-130	8	0.1	221				19	0.4	475	27	0.5	696
Iodine-131	784	58.5	14,717	21	2.3	738	246	19.4	5,061	1051	80.2	20,516
Iodine-132	75	0.7	4,345				3	0.1	265	78	0.8	4,610
Iodine-133	6	0.1	360							6	0.1	360
Iridium-192(Metal)	2	53	358				16	10,163	4,179	18	10,216	4,537
Iron-55	1	<0.1	250				1	<0.1	25	2	<0.1	275
Iron-55-59	7	<0.1	455				1	<0.1	35	8	<0.1	490
Iron-59	221	0.7	22,110	85	0.4	13,179	43	42.2	9,915	349	43.3	45,204
Krypton-85	149	4,732	66,458	18	1,239	18,613	14	537.1	8,051	181	6,508	93,122
Lanthanum-140	24	0.4	1,724	3	<0.1	35	10	0.1	228	37	0.5	1,987
Lutetium-177							7		12,850	7		12,850
Lutetium-177m							2	5	6,289	2	5	6,289
Magnesium-28	96	<0.1	14,980	40	<0.1	14,980	3	<0.1	350	139	<0.1	30,310
Manganese-54							1	10		1	10	
Mercury-197	52	15.0	9,792	1	<0.1	25				53	15.0	9,817
Mercury-203	111	13.4	14,355	6	0.1	150	21	1.5	891	138	15.1	15,396
Molybdenum-99	56	9.7	5,601	9	0.5	388	16	1.2	740	81	11.4	6,729
Neodymium-147	3	<0.1	100	3	0.1	605	15	<0.1	1,750	21	0.1	2,455
Neptunium-237	8		11,060	6		12,350	15		103,822	29	790 g	127,232
Nickel-63	33	2.8	16,160	10	0.5	2,935	11	<0.1	354	54	3.3	19,449
Nickel-65							5	<0.1	39	5	0.1	39
Niobium-95	23	<0.1	853	5	0.1	800	14	<0.1	476	42	0.2	2,129
Osmium-191	2	<0.1	55	2	<0.1	50	3	<0.1	126	7	<0.1	231
Osmium-193							6	30.9	4,066	6	30.9	4,066
Palladium-109	28	0.3	385				2	<0.1	27	30	0.3	412
Phosphorus-32	1679	41.7	45,672	37	1.2	1,379	180	156.1	9,122	1896	199	56,173
Platinum-197							2	24.6	653	2	24.6	653
Plutonium-238				2		104				2	0.102 g	104
Plutonium-239				3		380				3	1.200 g	380
Plutonium-240				1		26				1	0.010 g	26

Isotope	Domestic			Foreign			Project			Total		
	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars
Plutonium-242				5		697				5	178 g	697
Polonium-210	42	4444	117,690	8	491	13,720	14	1290	9,278	64	6225	140,688
Potassium-42	533	4.8	9,651	1	<0.1	12	14	1.1	3,110	548	6.0	12,773
Praseodymium-142	2	<0.1	181							2	<0.1	181
Praseodymium-143	1	<0.1	50	1	<0.1	50	2	<0.1	150	4	<0.1	250
Promethium-147	35	1.165	7,815	103	3,974.6	20,050	6	2,036	9,181	44	7,174.1	37,046
Promethium-151							2	8.3	1,760	2	8.3	1,760
Protactinium-231							3		15,415	3	3.250 g	15,415
Rhenium-186	7	0.1	250				3	<0.1	52	10	0.1	302
Rhenium-188							1	0.1	2,745	1	0.1	2,745
Rubidium-86	253	6.9	5,456	6	0.3	114	17	3	693	276	10.2	6,263
Ruthenium-103	18	<0.1	780	1	<0.1	100	18	0.1	1,805	37	0.2	2,685
Ruthenium-106	19	0.3	2,935	8	0.2	3,030	17	0.1	935	44	0.5	6,900
Samarium-153	4	<0.1	163				4	<0.1	100	8	0.1	263
Scandium-46	41	2.2	1,001	2	<0.1	50	11	30,000	17,367	54	30,002	18,418
Scandium-49							1	0.6	1,209	1	0.6	1,209
Selenium-75	93	1.5	31,919	13	0.1	3,400	9	0.1	431	115	1.8	35,750
Silver-110	37	0.2	807	2	<0.1	50	15	10.2	1,401	54	10.4	2,258
Silver-111	11	<0.1	385				1	<0.1	25	12	<0.1	410
Sodium-24	397	1.22	8,176				44	0.12	751	441	1.34	8,927
Strontium-85	18	<0.1	2,691	13	<0.1	3,100	27	0.2	4,695	58	0.3	10,486
Strontium-87m	22	<0.1	2,915				2	<0.1	240	24	<0.1	3,155
Strontium-89	75	1.0	6,690	34	1.6	3,448	22	1.7	1,978	131	4.3	12,116
Strontium-90	57	107	1,314	4	826	1,670	31	82.1	586	92	1,015	3,570
Sulfur-35	384	13.5	27,024	4	<0.1	71	28	0.7	1,222	416	14.3	28,317
Tantalum-182	18	0.1	635	1	<0.1	25	22	2.4	1,961	41	2.5	2,621
Tantalum-183							1	0.2	36	1	0.2	36
Technetium-99	15	46.7 g	3,498	12	26.7 g	2,130	8	30.7 g	1,068	35	104.1 g	6,696
Technetium-99m	480	67.8	36,763	30	3.5	2,040	86	14.5	7,767	596	85.8	46,570
Tellurium-121							2	0.1	371	2	0.1	371
Tellurium-123							3	0.4	535	3	0.4	535
Tellurium-132	6	<0.1	375				1	<0.1	110	7	0.1	485
Terbium-160							16	16.4	2,008	16	16.4	2,008

Isotope	Domestic			Foreign			Project			Total		
	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars
Terbium-161							2	2.5	1,760	2	2.5	1,760
Thallium-204	41	1.5	1,438	4	0.5	531	10	750	17,325	55	752	19,294
Thorium-230	2		350	2		300				4	0.023 g	650
Thulium-170	14	8	1,641				19	40,487	22,548	33	40,495	24,189
Thulium-171							1	40	17,167	1	40	17,167
Tin-113	20	<0. 1	1,058	5	<0.1	245	12	<0.1	473	37	<0.1	1,776
Tin-119							1	1	2,745	1	1	2,745
Tin-121							1	0.1	16	1	0.1	16
Titanium-51							2	0.110	25	2	0.110	25
Tritium	122	82,872	90,272	28	35,662	37,927	28	2,037	2,402	178	120,571	130,601
Tungsten-185	13	0.1	368				14	12.7	5,811	27	12.8	6,179
Tungsten-187	2		50	1		25	11	151	1,563	14	151	1,638
Tungsten-189							1	0.1	2,745	1	0.1	2,745
Uranium-232					1	100				1	Negligible	100
Uranium-233					3	733				3	3.46 g	733
Uranium-234					1	428				1	0.025 g	428
Uranium-235					3	76				3	1.040 g	76
Uranium-236					2	43				2	0.036 g	43
Uranium-238	9		6,091	13		10,153				22	651.871 g	16,244
Vanadium-52							1	<0. 1		1	<0.1	
Xenon-125							1	150	2,745	1	150	2,745
Xenon-127							1	0.8	2,745	1	0.8	2,745
Xenon-133	120	240	8,550	13	27.0	810	26	10.1	1,290.00	159	277	10,650
Ytterbium-169							4	12.9	516	4	12.9	516
Ytterbium-175							8	33.7	5,117	8	33.7	5,117
Ytterbium-177							3	226.3	7,498	3	226.3	7,498
Yttrium-90	19	1.0	2,807	1	200 beads	100	1	36.5	7,836	21	37.5	10,743
Yttrium-91	18	<0. 1	556	10	0.7	1,455	6	<0.1	181.00	34	0.8	2,192
Zinc-65	76	0.7	2,370	6	0.1	278	19	0.8	1,529.00	101	1.7	4,177
Zinc-69							1	<0.1	3	1	<0.1	3
Zirconium-95							12	6.3	13	12	6.3	13
Zirconium-95	84	2.4	4,227	17	1.5	3,020	30	0.3	1,066.00	131	4.2	8,313
Cyclotron Service Irrad. <sup>1</sup>	217	0.1	197,781	41	<0.1	48,313	24	<0.1	12,571	282	0.2	258,665

Isotope	Domestic			Foreign			Project			Total		
	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars	Ship- ments	Curies	Dollars
Reactor Service Irrad. <sup>2</sup>	463		77,097	13	0.1	1,782	670	0.1	99,270	1146	0.4	178,149
Special Services			145,204			38,321			108,346			291,871
Grand Totals	8665	301,920	1,756,021	877	467,835	617,248	2438	1,105,363	1,159,829	11,980	1,875,118	\$3,533,098

<sup>1</sup> Radioisotopes Produced by Cyclotron Service Irradiations

<sup>74</sup>As, <sup>195</sup>Au, <sup>7</sup>Be, <sup>205,206,207</sup>Bi, <sup>109</sup>Cd, <sup>139</sup>Ce, <sup>56,57</sup>Co, <sup>132</sup>Cs, <sup>148,149</sup>Eu, <sup>55</sup>Fe, <sup>151</sup>Gd, <sup>68</sup>Ge, <sup>1</sup><sub>2</sub>, <sup>174</sup>Lu, <sup>22</sup>Na, <sup>103</sup>Pd, <sup>144</sup>Pm, <sup>209</sup>Po, <sup>193</sup>Pt, <sup>136,137,138</sup>Pr, <sup>84</sup>Rb, <sup>170,181,183</sup>Re, <sup>48</sup>Sc, <sup>85</sup>Sr, <sup>95,95m</sup>Tc, <sup>121,121m</sup>Te, <sup>44</sup>Ti, <sup>202</sup>Tl, <sup>48</sup>V, <sup>181</sup>W, <sup>127</sup>Xe, <sup>88</sup>Y, <sup>89</sup>Zr

<sup>2</sup> Radioisotopes Produced by Reactor Service Irradiations

<sup>122</sup>Sr, <sup>124</sup>Sb, <sup>125</sup>Sn, <sup>41</sup>Ca, <sup>51</sup>Cr, <sup>60</sup>Co, <sup>131</sup>Ce, <sup>159</sup>Dy, <sup>169</sup>F, <sup>171</sup>Fr, <sup>152</sup>Eu, <sup>154</sup>Eu, <sup>18</sup>F, <sup>153</sup>Gd, <sup>159</sup>Gd, <sup>161</sup>Gd, <sup>198</sup>Au, <sup>175</sup>Hf, <sup>181</sup>Hf, <sup>114</sup>In, <sup>192</sup>Ir, <sup>59</sup>Fe, <sup>79</sup>Kr, <sup>140</sup>La, <sup>147</sup>Nd, <sup>149</sup>Nd, <sup>107</sup>Pd, <sup>33</sup>P, <sup>40</sup>K, <sup>148</sup>Pm, <sup>109</sup>Pd, <sup>197</sup>Pt, <sup>103</sup>Ru, <sup>145</sup>Sm, <sup>151</sup>Sm, <sup>155</sup>Sm, <sup>110</sup>Ag, <sup>33</sup>S, <sup>127</sup>Te, <sup>129</sup>Te, <sup>131</sup>Te, <sup>160</sup>Tb, <sup>170</sup>Tm, <sup>113</sup>Sn, <sup>121</sup>Sn, <sup>185</sup>W, <sup>187</sup>W, <sup>232</sup>U, <sup>236</sup>U, <sup>169</sup>Yb, <sup>69</sup>Zn, <sup>71</sup>Zn

