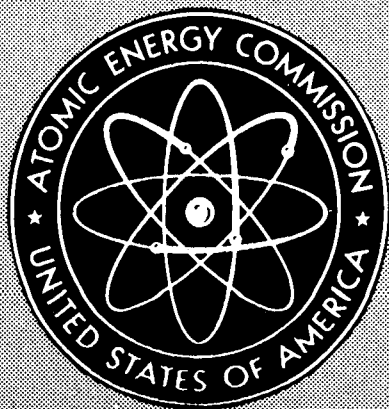


MASTER



TID-21620

LIST OF AEC RADIOISOTOPE CUSTOMERS
WITH SUMMARY OF RADIOISOTOPE
SHIPMENTS, FY 1964

By
P. S. Baker

March 11, 1965
[DTIE Issuance Date]

Oak Ridge National Laboratory
Oak Ridge, Tennessee

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TID-21620

ISOTOPES — INDUSTRIAL TECHNOLOGY
(TID-4500, 37th Ed.)

LIST OF AEC RADIOISOTOPE CUSTOMERS
WITH SUMMARY OF RADIOISOTOPE SHIPMENTS
FY 1964

Compiled by P. S. Baker
Isotopes Information Center

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

This document is
PUBLICLY RELEASABLE

Lawrence E. Williams

Authorizing Official

Date: *06/13/2007*

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INTRODUCTION

At the request of the Division of Isotopes Development of the U. S. Atomic Energy Commission, this tabulation has been prepared to present the radioisotope sales during FY 1964 by Commission facilities at Oak Ridge National Laboratory, Brookhaven National Laboratory, Mound Laboratory, 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 and isotopes purchased during the fiscal year. It is further subdivided into domestic and foreign purchasers. In order to differentiate among the suppliers, the isotopes furnished by ORNL have no other designation; those furnished by BNL are followed by (B); those by Mound Laboratory are followed by (M), and those by the SRP are followed by (S). 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, cross-referenced to customer numbers. The purpose of this is to indicate geographical concentrations of customers. 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, as well as a numerical listing showing rank on the basis of revenue (all isotopes with the same dollar value are given the same rank).

It is hoped that this information will be helpful to current and future commercial organizations connected with the isotope industry.

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

A. DOMESTIC

1. Abbott Laboratories
1400 Sheridan Road
North Chicago, Illinois
L. H. Keepper
Purchasing Department
 ^{131}Ba , ^{133}Ba , $^{115\text{m}}\text{Cd}$, ^{45}Ca ,
 ^{47}Ca , ^{14}C , ^{134}Cs , ^{137}Cs ,
 ^{36}Cl , ^{51}Cr , ^{64}Cu , ^{198}Au ,
 ^{199}Au , ^{125}I , ^{131}I , ^{55}Fe ,
 ^{59}Fe , ^{203}Hg , ^{95}Nb , ^{32}P ,
 ^{42}K , ^{86}Rb , ^{75}Se , ^{24}Na ,
 ^{85}Sr , ^{90}Sr , ^{35}S , ^{113}Sn ,
 ^3H , ^9O .
2. Adelphi College
Levermore Hall
Garden City, L.I., New York
Robert Miller
Purchasing Department
 ^{32}P
3. Aerojet-General Nucleonics
P. O. Box 77
San Ramon, California
D. F. Johns, Jr.
Purchasing Department
 ^{133}Ba , ^{140}Ba , ^{137}Cs , ^{51}Cr ,
 ^{198}Au , ^{131}I , ^{192}Ir , $^{55-59}\text{Fe}$,
 ^{59}Fe , ^{203}Hg , ^{99}Mo , ^{85}Sr ,
 ^{204}Tl , ^3H .
4. Aerospace Corporation
P. O. Box 95085
Los Angeles 45, California
E. Frank Martina
 ^{124}Sb , ^{133}Ba , ^{109}Cd , ^{203}Hg ,
 ^{113}Sn
5. Air Reduction Co., Inc.
Murray Hill, New Jersey
W. A. Keats
 ^{85}Kr .
6. Alabama, University of, Med. Center
1919 Seventh Avenue, South
Birmingham, Alabama
J. P. Wingo
Purchasing Agent
 ^{45}Ca , ^{36}Cl , ^{51}Cr , ^{28}Mg (B),
 ^{42}K , ^{89}Sr .
7. Albert Einstein Med. Center
Northern Division
York and Tabor Roads
Philadelphia 41, Pa.
A. Shortall
 ^{14}C , ^{32}P , ^{110}Ag , $^{87\text{m}}\text{Sr}$ (B).
8. Alderson Research Labs., Inc.
48-14 33rd Street
Long Island City 1, New York
Robert L. Reich
Exec. V. President
 ^{85}Kr .
9. Alfred University
Alfred, New York
George C. Towe
Department of Physics
 ^{32}P , ^{65}Zn .
10. Allen-Bradley Company, Inc.
136 W. Greenfield Avenue.
Milwaukee 4, Wisconsin
A. Domino
 ^{85}Kr
11. Allis-Chalmers Manufacturing
Company
P. O. Box 512
Milwaukee 1, Wisconsin
E. L. Phillips, Purchasing
 ^{36}Cl .

12. Alpine Geophysical Associates
55 Oak Street
Norwood, New Jersey
Walter Smolen
 ^{32}P .
13. American Atomics Corporation
2255 Aviation Highway
Tucson, Arizona
A. F. Mahon
 ^{85}Kr .
14. American Cyanamid Company
Lederle Laboratories
Division
Pearl River, New York
W. Hoffer, Senior Buyer
 ^{36}Cl , ^{32}P , ^{42}K , ^{85}Sr , ^{35}S ,
 ^3H .
15. American Enka Corporation
Enka, North Carolina
H. K. Whiteside
Purchasing Agent
 ^{51}Cr , ^{198}Au .
16. American Nuclear Corporation
P. O. Box 426
Oak Ridge, Tennessee
James Wilde
 ^{137}Cs .
17. The American National Red
cross
17th and D Streets, N.W.
Washington 6, D. C.
W. G. Lovejoy
Asst. Gen. Supply Officer
 ^{131}I , ^{59}Fe .
18. American Museum of Natural
History
Central Park West and 79th St.
New York 24, New York
A. R. Messina, Purch. Dept.
 ^{45}Ca , ^{32}P , ^{90}Sr .
19. Amherst College
Amherst, Massachusetts
Prof. H. H. Plough
Dept. of Biology
 ^{137}Cs .
20. Applied Science Laboratories,
Inc.
P. O. Box 140
State College, Pennsylvania
R. F. Kruppa, Serv. Mgr.
 ^{14}C .
21. Argonne Cancer Research
Hospital
Chicago, Illinois
P. V. Harper
 ^{28}Mg , ^{99}Mo , $^{99\text{m}}\text{Tc}$ (B).
22. Argonne National Laboratory
9700 S. Cass Avenue
Argonne, Illinois
W. H. Krueger
 ^{124}Sb , ^{37}Ar , ^{133}Ba , ^{140}Ba ,
 ^{109}Cd , ^{45}Ca , $^{45\text{m}}\text{Ca}$, ^{14}C ,
 ^{144}Ce , ^{137}Cs , ^{36}Cl , ^{51}Cr ,
 ^{60}Co , ^{114}In , ^{129}I , ^{131}I ,
 ^{55}Fe , ^{59}Fe , ^{85}Kr , ^{140}La ,
 ^{203}Hg , ^{99}Mo , ^{147}Nd , ^{95}Nb ,
 ^{32}P , ^{143}Pr , ^{147}Pm , ^{86}Rb ,
 ^{106}Ru , ^{153}Sm , ^{46}Sc , ^{110}Ag ,
 ^{85}Sr , ^{90}Sr , ^{35}S , ^{99}Tc , ^{204}Tl ,
 ^{113}Cu , ^3H targets, ^{133}Xe
 ^{65}Zn , ^{95}Zr , fission
products.
23. Arizona, University of
P. O. Drawer 4100
Tucson, Arizona
Ralph E. Deal, Purchasing
 ^{124}Sb , $^{115\text{m}}\text{Cd}$, ^{45}Ca , ^{137}Cs ,
 ^{60}Co , ^{64}Cu , ^{198}Au , ^{114}In ,
 ^{131}I , ^{59}Fe , ^{95}Nb , ^{32}P , ^{86}Rb ,
 ^{110}Ag , ^{111}Ag , ^{85}Sr , ^{90}Sr , ^3H ,
 ^3H targets, ^{65}Zn .

24. Arkansas, University of
Graduate Inst. of Technology
P. O. Box 3017
Little Rock, Arkansas
W. B. Stiles
 ^{124}Sb , ^{125}Sb , ^{109}Cd , $^{115\text{m}}\text{Cd}$,
 $^{45\text{m}}\text{Ca}$, ^{214}Ac , ^{214}Pb , ^{214}Bi , ^{214}Po , ^{131}I ,
 ^{59}Fe , ^{35}S , ^{11}C , ^{32}P , ^{86}Rb , ^{75}Se ,
25. Armstrong Cork Company
Research and Development
Center
Lancaster, Pa.
C. W. Herr
 ^{137}Cs .
26. Arthur D. Little, Inc.
15 Acorn Park
Cambridge, Massachusetts
Ernest E. Larken
 ^{181}Hf , ^{95}Zr .
27. Atlas Chemical Industries,
Inc.
Valley Forge Industrial Park
Valley Forge, Pa.
Carl B. Roden, Purch. Agent
 ^{85}Kr .
28. Atomic Laboratories, Inc.
3100 Crow Canyon Road
San Ramon, California
Richard B. Crawford
V. Pres.
 ^{45}Ca , ^{14}C , ^{36}Cl , ^{59}Fe , ^{35}S ,
 ^{65}Zn .
29. Atomics International
Division
North American Aviation, Inc.
P. O. Box 309
Canoga Park, California
T. J. Bales, Purch.
 ^{124}Sb , ^{125}Sb , ^{140}Ba , ^{144}Ce ,
 ^{137}Cs , ^{58}Co , ^{59}Fe , ^{203}Hg ,
 ^{103}Ru , ^{46}Sc , ^{75}Se , ^{85}Sr ,
 ^{95}Zr .
30. Atomium Corporation
575 Middlesex Turnpike
Billerica, Mass.
John Ferullo, Purch. Agent
 ^{133}Ba .
31. Auburn University
Auburn, Alabama
Dr. Harold Zallen
Radiol. Safety Off.
 $^{45\text{m}}\text{Ca}$, ^{131}I , ^{182}Tl .
32. Babcock and Wilcox Res. Center
1562 Beeson St. at Sawberg Ave.
Alliance, Ohio
A. G. Feters, Buyer
 ^{137}Cs , ^{131}I , ^{147}Pm , ^{90}Sr , ^{95}Zr .
33. Ball State Teachers College
Muncie, Indiana
Leon Reynolds, Purchasing
 ^{131}I , ^{32}P , ^{35}S .
34. Barnard College
606 West 120th St.
New York 27, N. Y.
Forrest L. Abbott
 ^{35}S .
35. Barnes Hospital
600 S. Kingshighway
St. Louis 10, Missouri
Jane Esson, Purch. Agent
 ^{131}I .
36. Bartol Research Corp.
Swarthmore, Pa.
F. A. Ernst, Purch. Agent
 ^{198}Au , ^{203}Hg , ^{147}Pm , ^{75}Se ,
 ^{65}Zn .
37. Battelle Memorial Inst.
505 King Avenue
Columbus, Ohio 43201
L. G. Johnson, Buyer
 ^{203}Hg , ^{147}Nd , ^{147}Pm .

38. Baylor University
College of Medicine
1200 M. D. Anderson Blvd.
Houston 25, Texas
P. E. Riehl
 ^{45}Ca , ^{32}P , ^{35}S .
39. Bell Aerosystems Co.
P. O. Box One
Buffalo 5, New York
M. J. Biggane, Purch.
 ^{85}Kr , ^{204}Tl .
40. Bell Telephone Laboratories,
Inc.
463 West Street
New York 14, New York
George N. Russo
 ^{140}Ba , ^{55}Fe , ^{85}Kr , ^{140}La ,
 ^{63}Ni , ^{90}Sr , ^3H .
41. Bendix Corporation
Red Bank Division
Eatontown, New Jersey
W. J. Rennick, Purchasing
 ^{137}Cs .
42. Bio-Rad Laboratories
32nd and Griffin Ave.
Richmond, California
George F. Abel, Sales Rep.
 ^{45}Ca , ^{134}Cs , ^{86}Rb , ^{89}Sr .
43. Birdwell Division of S.S.C.
6200 East 41st St.
Tulsa, Oklahoma
Gayle F. Moore
 ^{46}Sc .
44. The Boeing Company
Aero-Space Division
P. O. Box 3707
Seattle, Washington
D. W. Cairney, Purchasing
 ^{144}Ce , ^{137}Cs , ^{36}Cl , ^{51}Cr ,
 ^{181}Hf , ^{131}I , ^{203}Hg , ^{32}P ,
 ^{110}Ag , ^{182}Ta , ^{65}Zn .
45. Boston University
100 Cummington Street
Boston, Massachusetts
William Peters
 ^{36}Cl , ^{89}Sr .
46. Bowdoin College
Brunswick, Maine
John L. Howland
 ^{32}P , ^{35}S .
47. Bowman Gray School of Medicine
Winston-Salem 7, N. C.
Richard L. Witcofski
 ^{59}Fe .
48. Boyce Thompson Institute
for Plant Research, Inc.
1086 No. Broadway
Yonkers, New York
Miss H. V. Knapp
 ^{14}C , ^{32}P , ^{35}S .
49. Bradley University
Peoria, Illinois
H. John Sathoff
 ^{35}S .
50. Brandeis University
Laboratory Supplies and
Services
415 South Street
Waltham, Massachusetts 02154
H. L. McCarthy, Jr.
Mgr. Lab. Supplies
 ^{45}Ca , ^{137}Cs , ^{60}Co , ^{32}P , ^{35}S .
51. Brigham Young University
Provo, Utah
C. R. Peterson, Purch. Agent
 ^{131}I , ^{32}P , ^{35}S .
52. Bristol-Myers Products Div.
225 Long Avenue
Hillside 5, New Jersey
Joanne Guttadora
 ^{45}Ca , ^{51}Cr , ^{131}I , ^{35}S .

53. Bristol Laboratories
P. O. Box 657
Syracuse 1, New York
David L. Johnson
 ^{35}S .
54. Brookhaven National Lab.
Upton, L.I., New York
B. F. Kellas, Buyer
 ^{140}Ba , ^{82}Br , ^{109}Cd , ^{45}Ca ,
 ^{47}Ca , ^{137}Cs , ^{36}Cl , ^{51}Cr ,
 ^{60}Co , ^{60}Co (S), ^{125}I , ^{129}I ,
 ^{131}I , ^{59}Fe , ^{85}Kr , ^{203}Hg ,
 ^{99}Mo , ^{32}P , ^{42}K , ^{43}K (B),
 ^{147}Pm , ^{110}Ag , ^{85}Sr , ^{90}Sr ,
 ^{35}S , ^{99}Tc , ^{204}Tl , ^3H , ^{65}Zn .
55. Brown University
Providence 12, Rhode Island
R. E. Zilly
 ^3H , ^3H targets.
56. Bryn Mawr College
Bryn Mawr, Pa.
John R. Pruett
 ^{124}Sb , ^{32}P .
57. Butler University
College of Pharmacy
Indianapolis, Indiana 42607
H. A. Swartz
 ^{137}Cs , ^{36}Cl , ^{131}I , ^{32}P , ^{75}Se ,
 ^{89}Sr , ^{35}S , ^{65}Zn .
58. California Corp. for Bio-
chemical Research
3625 Medford Street
Los Angeles 63, California
Miss Irma Sapiro
 ^3H .
59. California Inst. of Technology
1201 E. California Blvd.
Pasadena, California
K. A. Jacobson
 ^{137}Cs , ^{58}Co , ^{181}Hf , ^{131}I ,
 ^{32}P , ^{24}Na , ^{90}Sr , ^{35}S , ^{182}Ta ,
 ^3H , ^3H targets, ^{91}Y .
60. California Research Corp.
200 Bush Street
San Francisco, California
W. E. Stock
 ^{134}Cs , ^{51}Cr , ^{198}Au , ^{55}Fe , ^{85}Kr ,
 ^{110}Ag , ^{24}Na , ^{35}S .
61. California State Dept. of
Public Health
2151 Berkeley Way
Berkeley, California
William J. Kurtz
 ^{32}P .
62. California, University of
400 Sproul Hall
Berkeley 4, California
F. S. Harter, Purch. Agent
 ^{45}Ca , ^{14}C , ^{36}Cl , ^{131}I , $^{55-59}\text{Fe}$,
 ^{59}Fe , ^{32}P , ^{42}K , ^{106}Ru , ^{86}Rb ,
 ^{85}Sr , ^{89}Sr , ^{90}Sr , ^{36}S , ^{204}Tl ,
 ^{91}Y , ^{95}Zr .
63. California, University of
Lawrence Radiation Laboratory
Berkeley 4, California
W. B. Reynolds, Business Mgr.
 ^{124}Sb , ^{125}Sb , ^{37}Ar , ^{133}Ba , ^{82}Br ,
 $^{115\text{m}}\text{Cd}$, ^{45}Ca , ^{47}Ca , ^{14}C , ^{144}Ce ,
 ^{134}Cs , ^{137}Cs , ^{36}Cl , ^{51}Cr , ^{58}Co ,
 ^{199}Au , ^{181}Hf , ^{114}In , ^{125}I , ^{129}I ,
 ^{131}I , ^{192}Ir , ^{55}Fe , ^{59}Fe , ^{203}Hg ,
 ^{99}Mo , ^{147}Nd , ^{63}Ni , ^{95}Nb , ^{32}P ,
 ^{143}Pr , ^{147}Pm , ^{86}Rb , ^{103}Ru , ^{46}Sc ,
 ^{85}Sr , ^{89}Sr , ^{90}Sr , ^{35}S , ^{182}Ta ,
 ^{99}Tc , $^{99\text{m}}\text{Tc}$ (B), ^{204}Tl , ^{113}Sn ,
 ^{170}Tm , ^3H , ^3H targets, ^{133}Xe ,
 ^{91}Y , ^{65}Zn , ^{95}Zr , ^{241}Am .
64. California, University of
Davis, California
R. E. Schwartz
 ^{45}Ca , ^{47}Ca , ^{36}Cl , ^{55}Fe , ^{59}Fe ,
 ^{99}Mo , ^{32}P , ^{86}Rb , ^{90}Sr , ^{35}S ,
 ^3H , ^{65}Zn .

65. California, University of
San Diego
P. O. Box 109
La Jolla, California 92038
B. F. Millijour
 ^{36}Cl , ^{131}I , ^{32}P , ^{35}S .
66. California, University of
Los Alamos Scientific Lab.
P. O. Box 1663
Los Alamos, New Mexico
P. M. Petersen
 ^{140}Ba , ^{210}Bi , ^{45}Ca , ^{14}C ,
 ^{144}Ce , ^{137}Cs , ^{51}Cr , ^{58}Co ,
 $^{152-154}\text{Eu}$, ^{114}In , ^{129}I ,
 ^{131}I , ^{192}Ir , ^{55}Fe , ^{59}Fe ,
 ^{85}Kr , ^{203}Hg , ^{147}Nd , ^{63}Ni ,
 ^{95}Nb , ^{42}K , ^{142}Pr , ^{143}Pr ,
 ^{147}Pm , ^{86}Rb , ^{103}Ru , ^{46}Sc ,
 ^{110}Ag , ^{85}Sr , ^{89}Sr , ^{90}Sr ,
 ^{113}Sn , ^{133}Xe , ^{91}Y , ^{65}Zn ,
 ^{95}Zr .
C. M. Berg
 ^{132}I (B).
67. California, University of
405 Hilgard Avenue
Los Angeles 24, California
K. A. Weydert
 ^{124}Sb , ^{133}Ba , ^{82}Br , ^{45}Ca ,
 ^{47}Ca , ^{14}C , ^{144}Ce , ^{134}Cs ,
 ^{137}Cs , ^{64}Cu , ^{125}I , ^{129}I , ^{131}I ,
 ^{59}Fe , ^{32}P , ^{42}K , ^{86}Rb , ^{85}Sr ,
 ^{90}Sr , ^{35}S , ^{182}Ta , ^{170}Tm ,
 ^{91}Y , ^{65}Zn .
68. California, University of
Los Angeles
650 Buenos Ayres Drive
Los Angeles 24, California
E. B. Jones
 ^{132}I (B).
69. California, University of
P. O. Box 112
Administration Building
Riverside, California
U. E. L. Murphy
 ^{45}Ca , ^{144}Ce , ^{137}Cs , ^{36}Cl ,
 ^{131}I , ^{32}P , ^{86}Rb , ^{89}Sr , ^{35}S ,
 ^{91}Y .
70. California, University of
San Francisco Medical Center
San Francisco 22, Calif.
Edith Shoaf
 ^{45}Ca , ^{131}I , ^{32}P , ^{86}Rb , ^{24}Na ,
 ^{35}S , ^3H , ^{133}Xe .
71. California, University of
Santa Barbara
University, California
E. Don Harner
 ^{42}K .
72. Campbell Soup Company
P. O. Box 768
Camden 1, New Jersey
J. R. Morris
 ^{32}P .
73. Carleton College
Northfield, Minnesota
Richard W. Ranete
 ^{45}Ca .
74. Carnegie Inst. of Technology
Schenley Park
Pittsburgh 13, Pa.
J. D. Sands
 ^{64}Cu , ^{131}I , ^{59}Fe , ^{203}Hg ,
 ^{32}P , ^{110}Ag , ^{111}Ag , ^{113}Sn .
75. Carnegie Institution of
Washington
Genetics Research Unit
Cold Spring Harbor
L.I., New York
Claude F. Rogers
Chief Clerk
 ^{14}C , ^{32}P , ^{35}S .
76. Carroll College
Helena, Montana
Rev. Joseph D. Harrington
 ^{32}P .

77. Case Inst. of Technology
Cleveland, Ohio
F. Miraldi
 ^{45}Ca , ^{36}Cl , ^{35}S , ^{99}Tc .
78. Catholic U. of America
1620 Michigan Avenue, N.E.
Washington, D. C.
Dale Braungart
 ^{137}Cs , ^{51}Cr , ^{131}I , ^{32}P , ^{42}K ,
 ^{24}Na , ^{90}Y .
79. Cedars of Lebanon Hospital
4833 Fountain Avenue
Los Angeles 29, California
Dr. Joseph Katz
 ^{45}Ca .
80. Central Michigan University
Mt. Pleasant, Michigan
H. E. Mitchell, Adm. Asst.
 ^{60}Co , ^{59}Fe , ^{32}P , ^{90}Sr .
81. Charles F. Kettering Research
Lab.
150 East South College Street
Yellow Springs, Ohio
J. C. Crawford
 ^{45}Ca , ^{32}P .
82. Chattanooga, University of
Chattanooga 3, Tenn.
Dr. Kenneth A. Fry
 ^{45}Ca , ^{14}C , ^{60}Co , ^{32}P .
83. Chemagro Corporation
Box 4913, Station F
Hawthorn Road
Kansas City 20, Missouri
J. F. Delancey
 ^{36}Cl , ^{32}P .
84. ChemTrac Corporation
33 University Road
Cam'bridge, Massachusetts
John C. Leak
 ^{133}Ba , ^{14}C , ^{90}Sr , ^3H .
85. Chicago, University of
5801 S. Ellis Avenue
Chicago, Illinois 60637
E. H. Wilhens
 ^{47}Ca , ^{14}C , ^{144}Ce , ^{64}Cu , ^{131}I ,
 ^{59}Fe , ^{203}Hg , ^{63}Ni , ^{32}P , ^{89}Sr ,
 ^{90}Sr , ^{35}S .
86. Children's Hospital of Buffalo
219 Bryant Street
Buffalo 22, New York
Raymond Perez
 ^{51}Cr .
87. Children's Medical Center
Boston, Massachusetts
Dr. R. M. Dowben
 ^{42}K .
88. Cincinnati, University of
Cincinnati 21, Ohio
Paul J. Carson, Jr.
 ^{137}Cs , ^{36}Cl , ^{203}Hg , ^{42}K , ^{24}Na ,
 ^3H , ^3H targets.
89. The City College
136 St. and Convent Ave.
New York 31, New York
Howard Rudner
 ^{59}Fe , ^{32}P , ^{35}S .
90. Clemson College
Clemson, S. C.
D. E. Turk
 ^{65}Zn .
91. Cleveland Metropolitan General
Hospital
3395 Scranton Road
Cleveland 9, Ohio
Dr. Brown M. Dobyns
 ^{131}I .
92. University Hospitals of
Cleveland
2065 Adelbert Road
Cleveland 6, Ohio
O. H. Pearson
 ^{47}Ca , ^{85}Sr .

93. Clevite Corporation
Electronic Research Div.
540 East 105th Street
Cleveland 8, Ohio
Mr. R. E. Hines
 ^{114}In , ^{110}Ag , ^{65}Zn .
94. Colgate-Palmolive Company
Corporate Division
300 Park Avenue
New York 22, New York
Margaret Lyle
 ^{125}I
95. Colgate University
Hamilton, New York
A. S. Brown
 ^{131}I , ^{32}P .
96. College of Osteopathic Medicine and Surgery
722 Sixth Avenue
Des Moines, Iowa 50309
Dr. D. R. Celander
 ^{75}Se .
97. Colorado School of Mines
Research Foundation, Inc.
P. O. Box 112
Golden, Colorado
Fred L. Smith
 ^{45}Ca , ^{137}Cs , $^{55-59}\text{Fe}$, ^{32}P , ^{35}S .
98. Colorado A and M College
Fort Collins, Colorado
E. B. McCull
 ^{45}Ca , ^{131}I , ^{106}Ru , ^{65}Zn , ^{95}Zr .
99. Colorado, University of
Boulder, Colorado
D. K. Schartz
 ^{82}Br , ^{47}Ca , ^{14}C , ^{51}Cr , ^{197}Hg , ^{32}P .
A. J. Aikawa
 ^{28}Mg (B).
100. Columbia University
Govt. Contract Division
Box 6, Low Library
New York 27, New York
R. N. Jenkins
 ^{37}Ar , ^{45}Ca , ^{14}C , ^{134}Cs , ^{131}I , ^{59}Fe , ^{85}Kr , ^{32}P , ^{86}Rb , ^{46}Sc , ^{35}S , ^3H , ^{65}Zn .
101. The Connecticut Agr. Exper. Station
P. O. Box 1106
New Haven, Connecticut 06504
Isreal Zelitch
 ^{45}Ca , ^{137}Cs .
102. Connecticut, University of
Storrs, Connecticut
Harold V. Coontz
 ^{45}Ca , ^{32}P , ^{86}Rb , ^{85}Sr , ^{89}Sr .
103. Consolidated Electrodynamics Corp.
360 North Sierra Madre Villa
Pasadena, California 91109
Roy Lomax
 ^{85}Kr .
104. Consolidation Coal Company
Research and Dev. Division
Library, Pennsylvania
L. J. Smith, Purch. Dept.
 ^{90}Sr .
105. Continental Oil Company
Ponca City, Oklahoma
D. W. McGee
 ^{35}S , ^3H .
106. Controls for Radiation, Inc.
130 Alewife Brook Parkway
Cambridge, Mass. 02140
Dr. Richard Fix
 ^{45}Ca .
- 106a. Cook County Hospital
1903 W. Harrison Street
Chicago 12, Illinois
Dr. I. F. Hummon
 ^{85}Kr , ^{133}Xe .

107. The Cooper Union
51 Astor Place
New York 3, New York
Herbert Lubekind
 ^{32}P , ^{35}S .
108. Cornell University Medical
College
1300 York Avenue
New York, New York
Dr. Harold Hempling
Dr. Roy C. Swan
 ^{42}K
109. Cornell University
N. Y. State College of
Agriculture
160 Day Hall
Ithaca, New York
R. Metz
 ^{133}Ba , ^{140}Ba , ^{109}Cd , ^{45}Ca ,
 ^{47}Ca , ^{14}C , ^{134}Cs , ^{137}Cs ,
 ^{36}Cl , ^{60}Co , $^{152-154}\text{Eu}$, ^{131}I ,
 ^{59}Fe , ^{85}Kr , ^{203}Hg , ^{32}P , ^{42}K ,
 ^{86}Rb , ^{46}Sc , ^{75}Se , ^{110}Ag ,
 ^{24}Na , ^{85}Sr , ^{89}Sr , ^{35}S , ^{204}Tl ,
 ^{113}Sn , ^{91}Y , ^{65}Zn .
110. Corning Glass Works
Corning, New York
J. G. Copley, Jr.
 ^{147}Pm , ^{110}Ag , ^{204}Tl .
111. Curtiss Wright Corp.
35 Market Street
East Paterson, New Jersey
W. B. Neer, Buyer
 ^{147}Pm .
112. Curtis Nuclear Corp.
1645 West 135th Street
Gardena, California
W. A. Hess
 ^{133}Ba .
113. Dallas, University of
P. O. Box 1330
Dallas 21, Texas
Allen F. Reid
 ^{42}K .
114. Dartmouth College
Silsby Hall
Hanover, New Hampshire 03755
J. H. Copenhaver
 ^{32}P , ^{86}Rb .
115. Davidson College
Davidson, N. C.
John B. Hopkins
 ^{32}P .
116. Delaware, University of
Newark, Delaware
C. E. Bischenall
 ^{55}Fe .
117. Delaware Valley College of
Science and Agriculture
Doylestown, Pennsylvania
E. D. Rogers
 ^{32}P .
118. Denison University
Granville, Ohio
A. M. Dewey
 ^{14}C , ^{131}I , ^{32}P , ^{35}S .
119. Denver, University
Denver, Colorado 80210
Richard W. Sullivan
 ^{124}Sb , ^{131}I , ^{32}P .
120. DePaul University
25 East Jackson Blvd.
Chicago, Illinois 60604
Robert J. Neu
 ^{45}Ca , ^{32}P , ^{35}S .
121. Detroit, University of
4001 West McNichols Road
Detroit 21, Michigan
Dr. Anton Szutka
 ^{60}Co , ^{131}I , $^{55-59}\text{Fe}$, ^{32}P ,
 ^{35}S .

122. The Dow Chemical Company
Midland, Michigan
V. C. Richards
 ^{124}Cu , ^{109}Cd , ^{45}Ca , ^{14}C ,
 ^{144}Ce , ^{137}Cs , ^{36}Cl , ^{51}Cr ,
 ^{60}Co , ^{64}Cu , ^{72}Ga , ^{131}I ,
 ^{55}Fe , ^{59}Fe , ^{140}La , ^{197}Hg ,
 ^{203}Hg , ^{63}Ni , ^{32}P , ^{153}Sm ,
 ^{75}Se , ^{24}Na , ^{85}Sr , ^{89}Sr , ^{91}Y ,
 ^{65}Zn .
123. Dow Corning Corporation
Midland, Michigan
R. F. Beck, Buyer
 ^{36}Cl .
124. Duke University
Durham, North Carolina
J. E. Doxey
 ^{77}Au , ^{45}Ca , ^{14}C , ^{60}Co ,
 ^{60}Co (source), ^{64}Cu , ^{125}I ,
 ^{131}I , ^{59}Fe , ^{24}Mg (B), ^{32}P ,
 ^{42}K (B), ^{86}Rb , ^{35}S , $^{99\text{m}}\text{Tc}$
(B), ^{133}Xe , ^{91}Y , ^{65}Zn .
125. E. I. duPont de Nemours and
co.
Savannah River Plant
P. O. Box 117
Augusta, Georgia
J. O. Bowcock
 ^{122}Sb , ^{140}Ba , ^{45}Ca , ^{144}Ce ,
 ^{134}Cs , ^{137}Cs , ^{36}Cl , ^{51}Cr ,
 ^{58}Co , $^{152-154}\text{Eu}$, ^{129}I , ^{131}I ,
 ^{192}Ir , ^{55}Fe , ^{59}Fe , ^{147}Nd ,
 ^{32}P , ^{147}Pm , ^{103}Ru , ^{106}Ru ,
 ^{85}Sr , ^{89}Sr , ^{90}Sr , ^{35}S , ^{182}Ta ,
 ^{99}Tc , ^{91}Y , ^{65}Zn , ^{95}Zr .
126. Duquesne Light Company
435 Sixth *Avenue
Pittsburgh 19, Pa.
D. E. Nesbit
Gen. Purch. Agent
 ^{198}Au , ^{131}I , ^{24}Na , ^{85}Sr .
127. Duquesne University
Pittsburgh 19, Pennsylvania
Norman Li
 ^{114}In , ^{59}Fe , ^{65}Zn .
128. Dynatronics, Inc.
180 Mills St., N.W.
Atlanta, Ga. 30313
B. M. Bowen
 ^{110}Ag
129. Eastern New Mexico University
P. O. Box 2097
Portales, New Mexico
Dr. Warren J. Neill
 ^{51}Cr , ^{35}S .
130. East Carolina College
Greenville, N. C.
Frank W. Eller
 ^{45}Ca , ^{14}C , ^{60}Co , ^{59}Fe , ^{32}P ,
 ^{35}S .
131. Eastman Dental Dispensary
Rochester, New York
Dr. J. F. Cleall
 ^{45}Ca , ^{90}Sr .
132. Eastman Kodak Company
Kodak Park Works
Rochester, New York 14650
E. P. Kron
 ^{129}I , ^{131}I , ^{203}Hg , ^{75}Se .
133. Eberline Instrument Corp.
P. O. Box 279
Santa Fe, New Mexico
G. Salazar
 ^{131}I , ^{85}Sr , ^{204}Tl .
134. Economics Laboratory, Inc.
320 Guardian Building
St. Paul, Minnesota 55101
E. Beiglund
 ^{45}Ca , ^{59}Fe .
- 1-35. Edgerton, Germeshausen and
Grier, Inc.
160 Brookline Avenue
Boston 15, Massachusetts
J. G. Kewer
 ^{63}Ni , fission products.

136. Eitel-McCullough, Inc.
P. O. Box 1077
San Carlos, California
Donald L. Rogers
 ^{85}Kr .
137. Elgin Instrument Company
2435 N. Naomi Street
Burbank, California
G. H. Haire
 ^{90}Sr .
138. L. B. Mendel Research Lab.
Elgin State Hospital
Elgin, Illinois
Dr. Ernest S. Klein
 ^{32}P .
139. Emory and Henry College
Emory, Virginia
Te-Hsui-Ma
 ^{14}C , ^{131}I , ^{32}P .
140. Emory University
Atlanta 22, Georgia
Charles W. Hayes
 ^{51}Cr , ^{59}Fe , ^{32}P , ^{75}Se , ^{35}S ,
 ^{65}Zn .
141. Eon Corporation
175 Pearl Street
Brooklyn 1, New York
Myron Youdin
 ^{137}Cs , ^{63}Ni , ^{147}Pm , ^{106}Ru ,
 ^{90}Sr , ^{99}Tc , ^{204}Tl .
142. Esso International Inc.
15 West 51st Street
New York 19, New York
George A. Hanley
 ^3H , ^3H targets.
143. Esso Research and Engineering
Linden, New Jersey
D. W. Deed
 ^{132}I (B).
144. Evans Res. and Dev. Corp.
250 East 43rd Street
New York, New York 10017
A. X. Hussey, Jr.
 ^{45}Ca .
145. Fairchild Semiconductor
P. O. Box 790
Mountain View, California
George G. Reh
 ^{85}Kr .
146. Florida State University
Tallahassee, Florida
W. R. Beyer
 ^{109}Cd , ^{14}C , ^{137}Cs , ^{60}Co , ^{64}Cu ,
 ^{131}I , ^{59}Fe , ^{203}Hg , ^{95}Nb , ^{32}P ,
 ^{210}Po (M), ^{147}Pm , ^{90}Sr , ^{35}S ,
 ^{204}Tl , ^{113}Sn , ^{65}Zn , ^{95}Zr .
147. J. Hillis Miller Health Center
University of Florida
Gainesville, Florida
B. G. Dunavant
 ^{51}Cr , ^{58}Co , ^{64}Cu , ^{131}I , ^{59}Fe , ^{32}P ,
 ^{42}K , ^{75}Se , ^{85}Sr , ^{89}Sr , ^{35}S ,
 ^{65}Zn , fission products.
148. Florida, University of
Agricultural Experiment Station
Gainesville, Florida
Dr. R. A. Dennison
 ^{60}Co (B).
149. Food, Chemical and Research
Laboratories, Inc.
1201 N. E. 38th Street
Seattle 5, Washington
Quintin P. Peniston
 ^{144}Ce , ^{85}Sr , ^{95}Zr .
150. Ford Motor Company
P. O. Box 2053
Dearborn, Michigan
L. I. Webb
 $^{152-154}\text{Eu}$, ^{198}Au , ^{192}Ir ,
 ^{203}Hg , ^{32}P , ^{110}Ag , ^{35}S .
Henry Domian
 ^{28}Mg (B).

151. Fordham University
New York 58, New York
Michael Cefola
 ^{131}I .
152. Frigidaire Division
General Motors Corp.
F. B. Wilson, Buyer
 ^{85}Kr , ^{203}Hg .
153. Gamma Industries, Inc'.
P. O. Box 2543
Baton Rouge, Louisiana
R. F. Dicharry
 ^{137}Cs , ^{60}Co .
154. Geigy Chemical Corp.
Saw Mill River Road
Ardsley, New York
Daniel P. Ryskiewich
 ^{14}C , ^{59}Fe .
- 1-55. General Atomic
A Division of General
Dynamics Corp.
P. O. Box 608
San Diego 12, California
Miss Alice Thomas, Purch.
 ^{125}Sb , ^{133}Ba , ^{140}Ba , ^{45}Ca ,
 ^{144}Ce , ^{134}Cs , ^{137}Cs , ^{36}Cl ,
 $^{152-154}\text{Eu}$, ^{131}I , ^{85}Kr , ^{99}Mo ,
 ^{95}Nb , ^{32}P , ^{103}Ru , ^{106}Ru ,
 ^{46}Sc , ^{75}Se , ^{110}Ag , ^{24}Na ,
 ^{85}Sr , ^{89}Sr , ^{35}S , ^{99}Tc , ^{113}Sn ,
 ^{133}Xe , ^{95}Zr .
156. General Dynamics/Astronautics
P. O. Box 1708
San Diego, California
L. A. Chirichetti
 ^{51}Cr , ^{86}Rb , ^{103}Ru , ^{106}Ru ,
 ^{65}Zn , ^{95}Zr .
157. General Electric Company
1495 Fillmore Ave.
Buffalo 11, New York
F. J. Feller
 ^{85}Kr .
158. General Electric Company
Nuclear Materials and Pro-
pulsion Operation
P. O. Box 15132
Cincinnati, Ohio 45215
V. P. Calkins
 ^{140}Ba , ^{58}Co , ^{131}I , ^{59}Fe , ^{85}Kr ,
 ^{203}Hg , ^{99}Tc , ^3H , ^3H targets.
159. General Electric Company
21800 Tungsten Road
Cleveland 17, Ohio
S. A. Franco
 ^{85}Kr , ^3H .
160. General Electric Company
P. O. Box 254
San Jose, California
J. G. Jorgenson
 ^{63}Ni , ^{90}Sr .
161. General Electric Company
Pinellas Peninsula Plant
P. O. Box 11508
St. Petersburg, Florida
A. D. Seabury, Buyer
 ^{85}Kr .
162. General Electric Company
Bldg. No. 7, Electronics Park
Syracuse, New York
M. M. Marelli, Senior Buyer
 ^{85}Kr .
163. General Electric Company
Hanford Operations
Richland, Washington 99352
L. G. Hendrickson
 ^{125}Sb , ^{140}Ba , ^{210}Bi , $^{115\text{m}}\text{Cd}$,
 ^{45}Ca , ^{144}Ce , ^{134}Cs , ^{137}Cs ,
 ^{36}Cl , ^{51}Cr , ^{60}Co , ^{64}Cu ,
 $^{152-154}\text{Eu}$, ^{125}I , ^{131}I , ^{192}Ir ,
 ^{59}Fe , ^{203}Hg , ^{147}Nd , ^{63}Ni , ^{95}Nb , ^{32}P ,
 ^{86}Rb , ^{106}Ru , ^{46}Sc , ^{24}Na , ^{85}Sr ,
 ^{90}Sr , ^{35}S , ^{99}Tc , ^{204}Tl , ^{185}W ,
 ^{133}Xe , ^{90}Y , ^{91}Y , ^{65}Zn , ^{95}Zr ,
 ^{241}Am .

164. General Electric Company
General Electric Drive
Waynesboro, Virginia
B. S. Thayer
 ^{85}Kr , ^{210}Po (M).
165. General Electric Research
Laboratory
The Knolls, P. O. Box 1088
Schenectady, New York
R. C. Dawes, Manager
 $^{115\text{m}}\text{Cd}$, ^{64}Cu , ^{131}I , ^{63}Ni ,
 ^{46}Sc , ^{75}Se , ^{35}S .
166. General Motors Corporation
Research Laboratories
General Motors Technical
Center
12 Mile and Mound Roads
Warren, Michigan. 48090
Walter M. Aurand, Purch.
Agent
 ^{131}I , ^{153}Sm , ^{35}S .
167. General Motors Institute
General Motors Corporation
Flint 2, Michigan
O. A. King
 ^{131}I .
168. General Radioisotope
Processing Co.
3086 Claremont Avenue
Berkeley, California
H. Wade Patterson, Pres.
 ^{133}Ba , ^{109}Cd , ^{45}Ca , ^{144}Ce ,
 ^{137}Cs , ^{60}Co , ^{32}P , ^{147}Pm ,
 ^{106}Ru , ^{22}Na , ^{90}Sr , ^{35}S ,
 ^{204}Tl , ^{113}Sn , ^{65}Zn .
169. General Tire and Rubber Co.
Main Plant
1708 Englewood Avenue
Akron, Ohio
D. A. Wiedie, Buyer
 ^{147}Pm , ^{65}Zn .
170. Geophysics Corp. of America
Burlington Road
Bedford, Massachusetts
B. Nichols
 ^{63}Ni .
171. Georgetown University Hospital
3800 Reservoir Road, N.W.
Washington 7, D. C.
Winston L. Rhodes
 ^{86}Rb .
172. Georgia Inst. of Technology
225 North Avenue, N.W.
Atlanta, Georgia
Robert L. Zimmerman
Radiation Safety Officer
 ^{125}Sb , ^{133}Ba , ^{140}Ba , ^{36}Cl ,
 ^{181}Hf , ^{203}Hg , ^{170}Tm , ^{113}Sn .
173. Georgia, University of
Athens, Georgia
F. E. Johnston, Jr.
 ^{82}Br , ^{47}Ca , ^{14}C , ^{36}Cl , ^{131}I ,
 ^{59}Fe , ^{32}P , ^{85}Sr , ^{35}S , ^3H ,
 ^3H targets, ^{65}Zn .
174. Geotechnical Corporation
3401 Shiloh Road
Garland, Texas
R. E. Canada
 ^{147}Pm , ^{90}Sr , ^{204}Tl .
175. G and H Laboratories, Inc.
1001 W. Arbor Vitae
Inglewood, California
E. G. Harrington
 ^{85}Kr .
176. Giannini Controls Corporation
1600 S. Mountain Avenue
Duarte, California
R. A. Schwind
 ^{144}Ce .

177. The Glidden Company
3901 Hawkins Point Road
Baltimore 26, Maryland
R. L. Hotaling,
Furch. Agent
 ^{32}P , ^{35}S .
178. B. F. Goodrich Company
9921 Brecksville Road
Brecksville, Ohio 44141
F. B. Thiel, Purch. Agent
 ^{35}S .
179. Goucher College
Towson, Baltimore 4, Md.
Helen M. Habermann
 ^{32}P .
180. Grace New Haven Community
Hospital
P. O. Box 1001
New Haven 4, Connecticut
J. E. Corrigan, Buyer
 ^{131}I .
181. W. R. Grace and Company
Washington Research Center
Clarksville, Maryland
Joseph D. Moyer
 ^{124}Sb .
102. Grumman Aircraft Engineering
Corp.
Bethpage, Long Island, N. Y.
M. D'Agostino
 ^{51}Cr , ^3H , ^3H targets.
183. Gulf Research and Dev. Company
P. O. Drawer 2038
Pittsburgh 30, Pennsylvania
George Milligan
 ^{137}Cs .
184. Hahnemann Medical College and
Hospital
230 North Broad Street
Philadelphia, Pennsylvania
Dr. M. J. Boyd
 ^{42}K , ^{35}S .
185. Halliburton Company
Duncan, Oklahoma
R. George Mihram
 ^{60}Co , ^{192}Ir , ^{177}Pm , ^{65}Zn ,
 ^{95}Zr .
186. Hartwick College
Oneonta, New York
Paul R. Shilly
 ^{131}I , ^{32}P .
187. Harvard Medical School
Boston 15, Massachusetts
Dr. Lenhoff
 ^{28}Mg (B).
188. Harvard School of Public
Health
Boston, Massachusetts
Dr. Seta/Vitale
 ^{42}K (B).
189. Harvard University
75 Mount Auburn Street
Cambridge 38, Massachusetts
Paul S. Mullen
 ^{127}I , ^{124}Sn , ^{125}Sb , ^{45}Ca ,
 ^{199}Au , ^{55}Fe , ^{85}Kr , ^{32}P ,
 ^{186}Re , ^{86}Rb , ^{204}Tl , ^3H , ^{65}Zn .
190. Haverford College
Haverford, Pennsylvania
Melvin Santer
 ^{32}P .
191. Hawaii, University of
,Honolulu, Hawaii 96822
H. J. Roes, Purch. Agent
 ^{45}Ca , ^{14}C , ^{51}Cr , ^{59}Fe , ^{32}P ,
 ^{35}S , ^{65}Zn .
192. Hawaiian Sugar Planters
Association
Experiment Station
1527 Keeaumoku Street
Honolulu 14, Hawaii
T. Tanimoto, Sr. Biochemist
 ^{32}P

193. Hazleton-Nuclear Science Corp.
4062 Fabian Way
Palo Alto, California
D. C. Lawrence
 ^{124}Sb , ^{125}Sb , ^{133}Ba , ^{144}Ce ,
 ^{36}Cl , ^{131}I , ^{63}Ni , ^{103}Ru ,
 ^{106}Ru , ^{95}Zn .
194. Henry Ford Hospital
2799 West Grand Blvd.
Detroit 2, Michigan
Luther Preuss
 ^{109}Cd , ^{45}Ca , ^{58}Co , ^{114}In ,
 ^{131}I , ^{132}I (B), ^{55}Fe , ^{32}P ,
 ^{147}Pm , ^{85}Sr , ^{113}Sn .
195. Highland View Cuyahoga County Hospital
3901 Ireland Drive
Cleveland 22, Ohio
Dr. J. P. Storaasli
 ^{24}Na .
196. Hoffmann-La Roche, Inc.
Roche Park
Nutley 10, New Jersey
Dr. Harold M. Bates
 ^{3}Ep
197. Hofstra College
Hempstead, New York
Dr. Howard Rosman
 ^{131}I .
198. Hospital for Joint Diseases
1919 Madison Avenue
New York 35, New York
Dr. Vincent Hollander
 ^{32}P .
199. Houston, University of
Houston 4, Texas
H. W. Loman
Purch. Agent
 ^{99}Tc .
200. Howard Hughes Medical Inst.
P. O. Box 2688
Miami Beach, Florida 33140
Joan A. Deazley, Purch. Agent
 ^{35}S .
201. Howard University
2401-6th Street, S.W.
Washington, D. C. 20001
Thomas D. Lowe, Purch. Agent
 ^{14}C , ^{36}Cl , ^{131}I , ^{32}P .
202. Hughes Aircraft Company
P. O. Box 11337
Tucson, Arizona
D. L. Davidson, Buyer
 ^{60}Co , ^{85}Kr , ^{32}P , ^{90}Sr , ^{35}S .
203. Hunter College
695 Park Avenue
New York 21, New York
Dr. M. Green
 ^{32}P .
204. Idaho State University
Pocatello, Idaho
Robert H. Deboer, Purch. Agent
 ^{137}Cs , ^{60}Co .
205. Idaho, University of
Moscow, Idaho 21474
L. C. Warner, Purch. Agent
 ^{32}P .
206. Illinois Institute of Technology
3300 S. Federal Street
Chicago 16, Illinois
Dr. D. G. Gardner
 ^{137}Cs , ^{114}In , ^{32}P , ^{113}Sn , ^{241}Am .
207. Illinois, University of
833 South Wood Street
Chicago, Illinois 60612
Ward L. Walhay, Purch. Dept.
 ^{133}Ba , ^{45}Ca , ^{14}C , ^{137}Cs , ^{36}Cl ,
 ^{51}Cr , ^{131}I , ^{55}Fe , ^{59}Fe , ^{32}P ,

- ^{42}K , ^{86}Rb , ^{106}Ru , ^{24}Na , ^{85}Sr , ^{89}Sr , ^{35}S , ^{113}Sn , ^{185}W , ^{95}Zr ,
 fission products.
208. Indiana University
 Bloomington, Indiana
 R. H. Cooper, Purch. Dept.
 ^{82}Br , ^{45}Ca , ^{14}C , ^{137}Cs , ^{51}Cr ,
 ^{64}Cu , ^{72}Ga , ^{131}I , ^{192}Ir ,
 ^{59}Fe , ^{32}P , ^{42}K , ^{147}Pm , ^{186}Re ,
 ^{86}Rb , ^{24}Na , ^{35}S , ^{170}Tm , ^{90}Y ,
 ^{91}Y .
209. Institute for Muscle Diseases,
 Inc.
 515 East 71st Street
 New York 21, New York
 Hellen W. Milanese
 Business Manager
 ^{45}Ca , ^{32}P , ^{35}S .
210. The Institute of Paper
 Chemistry
 1043 East South River Street
 Appleton, Wisconsin
 Donald W. Theisen
 Asst. Controller
 ^{110}Ag
211. Instruments, Inc.
 3102 Charles Page Boulevard
 Tulsa, Oklahoma 74010
 J. R. Mitchell
 ^{137}Cs .
212. IBM Corporation
 Route 52
 Hopewell Junction,
 New York 12533
 Ralph P. Heyman
 ^{115}Cd , ^{14}C , ^{72}Ga , ^{55}Fe , ^{59}Fe ,
 ^{63}Ni , ^{204}Tl , ^{113}Sn .
213. International Harvester Co.
 Manufacturing Research
 5225 So. Western Boulevard
 Chicago, Illinois 60609
 C. E. Nogal, Purch. Dept.
 ^{140}Ba , ^{51}Cr , ^{32}P , ^{65}Zn .
214. International Minerals and
 Chemical Corp.
 5401 Old Orchard Road
 Skokie, Illinois
 Glen L. Samsel
 32p.
215. International Chemical and
 Nuclear Corp.
 13332 East Torch Street
 City of Industry, California
 Miss Ann Schoonderbeck
 32p.
216. International Telephone and
 Telegraph Laboratories
 Utley, New Jersey
 A. E. Morris
 ^{137}Cs , ^3H .
217. International Resistance
 Company
 401 North Broad Street
 Philadelphia 8, Pennsylvania
 J. H. Cummings, Buyer
 ^{85}Kr .
218. Iowa State University
 Ames, Iowa
 A. F. Voigt
 Radiation Safety Officer
 ^{124}Sb , ^{133}Ba , ^{109}Cd , ^{14}C ,
 ^{144}Ce , ^{134}Cs , ^{137}Cs , ^{36}Cl ,
 ^{60}Co , $^{152-154}\text{Eu}$, ^{131}I , ^{192}Ir ,
 ^{55}Fe , ^{203}Hg , ^{95}Nb , ^{32}P , ^{75}Se ,
 ^{85}Sr , ^{90}Sr , ^{35}S , ^{204}Tl , ^{170}Tm ,
 ^3H , ^{185}W , ^{65}Zn , ^{241}Am .
219. Iowa State Teachers College
 Iowa City, Iowa
 A. G. Burks, Purch. Agent
 ^{131}I , 32p.
220. Isoserve, Inc.
 131 Portland Street
 Cambridge 39, Massachusetts
 Robert S. Flax
 ^{125}Sb , ^{133}Ba , ^{140}Ba , ^{109}Cd ,
 ^{45}Ca , ^{47}Ca , ^{144}Ce , ^{51}Cr , ^{58}Co ,

- ^{189}Au , ^{181}Hf , ^{55}Fe , ^{59}Fe ,
 ^{203}Hg , ^{28}Mg (B), ^{99}Mo (B),
 ^{63}Ni , ^{95}Nb , ^{86}Rh , ^{70}Ru ,
 ^{106}Ru , ^{85}Sr , ^{89}Sr , ^{204}Tl ,
 ^{113}Sn , ^{133}Xe , ^{65}Zn , ^{95}Zr .
221. State University of Iowa
Iowa City, Iowa
A. G. Burks, Purch. Agent
 ^{36}Cl , ^{131}I .
222. Isotopes, Inc.
123 Woodland Avenue
Westwood, New Jersey
Philip W. Krey
 ^{124}Sb , ^{210}Bi , ^{144}Ce , ^{64}Cu ,
 ^{131}I , ^{99}Mo , ^{86}Rb , ^{110}Ag ,
 ^{89}Sr .
 R. Kolo-grivov
 ^{38}Ar (B), ^{128}Xe (B).
223. Isotope Specialties Company
P. O. Box 688
Burbank, California
Mr. Karl Amlauer.
 ^{59}Fe .
224. Jefferson Medical College
Eleventh and Walnut Streets
Room 106 Pavilion
Philadelphia 7, Pa.
F. Rosenberry, Purch. Agent
 ^{131}I , ^{35}S .
Simon Keamer
 ^{90}Y beads (B).
225. Jewish Chronic Disease
Hospital
86 East 49th Street
Brooklyn 3, New York
Dr. Shirley Wisenfield
 ^{131}I .
226. Jewish Memorial Hospital
Broadway and 196th Street
New York 40, New York
Harold Schneider
 ^{131}I , ^3H .
227. John Carroll University
Cleveland 18, Ohio
F. S. Vogel
 ^{32}P
228. Johns Hopkins University
Charles and 34th Street
Baltimore 18, Maryland
H. W. Jones, Purch. Dept.
 ^{140}Ba , ^{82}Br , ^{45}Ca , ^{14}C ,
 ^{144}Ce , ^{134}Cs , ^{137}Cs , ^{36}Cl ,
 ^{51}Cr , ^{60}Co , ^{125}I , ^{129}I ,
 ^{131}I , ^{59}Fe , ^{203}Hg , ^{191}Os ,
 ^{109}Pd , ^{32}P , ^{42}K , ^{86}Rb ,
 ^{110}Ag , ^{24}Na , ^{85}Sr , ^{35}S ,
 ^{99}Tc , ^{204}Tl , ^{185}W , ^{187}W ,
 ^{133}Xe .
229. Johns-Manville Products Corp.
Research and Engineering Center
Manville, New Jersey;
N. G. Churchill
Senior Buyer
 ^{45}Ca .
230. Johnson C. Smith University
Charlotte, North Carolina
28208
F. J. Amstead
Business Mgr.
 ^{14}C , ^{198}Au , ^{131}I , ^{59}Fe , ^{32}P ,
 ^{24}Na , ^{65}Zn .
231. Kaiser Foundation Research
Institute
1924 Broadway
Oakland 12, California
Dr. A. Schrift
 ^{75}Se , ^{35}S .
232. Kaman Aircraft Corporation
Bloomfield, Connecticut
J. F. Squires
 ^{137}Cs .

233. Kansas State University
Manhattan, Kansas
James C. Everett
 ^{37}Ar , ^{109}Cd , ^{115}Cd , $^{115\text{m}}\text{Cd}$,
 ^{14}C , ^{51}Cr , ^{60}Co , ^{130}I , ^{59}Fe ,
 ^{32}P , ^{35}S , ^3H .
234. Kansas State University
Dept. of Nuclear Engineering
Manhattan, Kansas
R. W. Lack
 ^{210}Po (M).
235. Kansas State College of
Pittsburg
Pittsburg, Kansas
Prof. James L. Pauley
 ^{134}Cs .
236. Kansas City, University of
Tenth and Troost
Kansas City 6, Missouri
Benjamin W. Warner
 ^{131}I .
237. Kansas, University of
Lawrence, Kansas
Benjamin S. Friesen
 ^{82}Br , ^{45}Ca , ^{14}C , ^{36}Cl , ^{55}Fe ,
 ^{59}Fe , ^{32}P , ^{42}K , ^{24}Na , ^{89}Sr ,
 ^{35}S .
238. Kentucky, University of
Lexington, Kentucky
Waldo D. DeVore
 ^{82}Br , ^{45}Ca , ^{137}Cs , ^{60}Co , ^{59}Fe ,
 $^{152-154}\text{Eu}$, ^{114}In , ^{55}Fe , ^{59}Fe ,
 ^{32}P , ^{42}K , ^{86}Rb , ^{35}S , ^3H ,
 ^3H targets.
239. Kentucky, University of
Medical Center
Lexington, Kentucky
Dr. Greenlaw
 ^{132}I (B).
240. King County Hospital
325 Ninth Avenue
Seattle 4, Washington
Dr. J. T. Dowling
 ^{132}I (B).
241. Knolls Atomic Power
Laboratory
P. O. Box 1072
Schenectady, New York
H. C. Metzger
 ^{124}Sb , ^{144}Ce , ^{51}Cr , ^{58}Co ,
 ^{60}Co , $^{152-154}\text{Eu}$, ^{129}I , ^{131}I ,
 ^{59}Fe , ^{147}Nd , ^{147}Pm , ^{90}Sr ,
 ^{113}Sn .
242. Kresge Eye Institute
690 Mullett Street
Detroit 26, Michigan
Dr. E. V. Kinsey
 ^{36}Cl , ^{131}I , ^{42}K , ^{86}Rb , ^{24}Na .
243. Lamar State College of
Technology
4400 Port Arthur Road
Beaumont, Texas 77704
W. F. Holliman, Purch.
Agent
 ^{45}Ca , ^{14}C , ^{137}Cs , ^{51}Cr , ^{60}Co ,
 ^{131}I , ^{59}Fe , ^{32}P , ^{106}Ru , ^{110}Ag ,
 ^{90}Sr , ^{35}S , ^{65}Zn .
244. The Bronx-Lebanon Hospital
Center
Mt. Eden Parkway and Grand
Concourse
Bronx 57, New York
H. Katz
 ^{131}I .
245. Lehigh University
Bethlehem, Pennsylvania
Dr. E. D. Amstutz
 ^{147}Nd .

246. Leeson Moos Laboratories
Division of Leeson Corp.
Lake Success Park-Community
Drive
Great Neck, New York 11021
Kenneth I. Rapp, Asst.
Gen. Mgr.
 ^{85}Kr .
247. Lemoyne College
807 Walker Avenue
Memphis, Tennessee
O. L. Brandon
 ^{131}I , ^{32}P .
248. Lenox Hill Hospital
111 East 76th Street
New York 21, New York
A. H. Wilsey
 ^{131}I .
249. Lever Brothers Research
Center
45 River Road
Edgewater, New Jersey
Edward L. O'Brien
 ^{63}Ni
250. Lockheed Missiles and
Space Co.
P. O. Box 504
Sunnyvale, California
John Dunham, Buyer
 ^{51}Cr , ^{114}In , ^{55}Fe , ^{203}Hg ,
 ^{186}Re , ^{113}Sn , ^3H , ^3H tar-
gets, ^{185}W .
251. Los Angeles County Hospital
Los Angeles 33, California
Dr. Helen Martin
 ^{28}Mg (B).
252. Louisiana State University
1542 Tulane Avenue
New Orleans 12, Louisiana
Dr. Mary L. Good
Animal Science Bldg.
P. O. Box 8877
Louisiana State University
Baton Rouge, Louisiana
- ^{45}Ca , ^{58}Co , ^{64}Cu , ^{198}Au , ^{114}In ,
 ^{131}I , ^{59}Fe , ^{140}La , ^{32}P .
253. Louisville, University of
Belknap Campus
Louisville, Kentucky
W. M. Gruber
 ^{45}Ca , ^{60}Co , ^{131}I , ^{59}Fe , ^{86}Rb ,
 ^{65}Zn .
254. The Lovelace Foundation for
Medical Education and Res.
4800 Gibson Boulevard, S.E.
Albuquerque, New Mexico
Charles R. Tiber
 ^{140}Ba , ^{144}Ce , ^{137}Cs , ^{131}I ,
 ^{85}Sr , ^{90}Sr , ^{91}Y .
255. Loyola University
6525 N. Sheridan Road
Chicago, Illinois
Dr. Herta Spencer
 ^{45}Ca , ^{47}Ca , ^{64}Cu , $^{55-59}\text{Fe}$,
 ^{32}P , ^{65}Zn .
256. Lycoming College
Williamsport, Pennsylvania
John A. Radspinner
 ^{60}Co , ^{32}P , ^{90}Sr .
257. Lynch Radiation Services
855 N. Orlando Avenue
Los Angeles 69, California
T. W. Lynch
 ^{198}Au .
258. Maine, University of
Room 204 Library
Orono, Maine
Henry L. Doten
Business Mgr.
 $^{55-59}\text{Fe}$, ^{32}P .
259. Mallinckrodt Chemical Works
3600 N. Second Street
St. Louis 7, Missouri
L. W. Powitzky
 ^{125}Sb , ^{133}Ba , ^{109}Cd , ^{60}Co ,
 ^{59}Fe , ^{65}Zn , ^{95}Zr .

260. Manhattan College
Riverdale
New York 71, New York
Raymond C. Braile
 ^{131}I , ^{32}P , ^{35}S .
261. Marathon Oil Company
539 South Main Street
Findlay, Ohio
Kent B. Johnson
 ^{59}Fe .
262. Marine Biological Laboratory
Woods Hole, Massachusetts
Homer P. Smith
 ^{45}Ca , ^{32}P , ^{35}S .
263. Martin Company
Baltimore 3, Maryland
D. F. Sacha, Buyer
 ^{85}Sr .
264. Maryland, University of
6 South Greene Street
Baltimore 1, Maryland
C. R. Plummer, Director
of Procurement
 ^{45}Ca , ^{14}C , ^{134}Cs , $^{55-59}\text{Fe}$,
 ^{85}Kr , ^{203}Hg , ^{32}P , ^{42}K , ^{86}Rb ,
 ^{24}Na , ^{85}Sr , ^{89}Sr , ^3H .
265. Massachusetts Eye and Ear
Infirmary
243 Charles Street
Boston, Massachusetts
Dr. Ephraim Friedman
 ^{85}Kr .
266. Massachusetts General Hospital
Fruit Street
Boston 14, Massachusetts
Eileen M. McLaughlin
 ^{45}Ca , ^{36}Cl , ^{60}Co , ^{131}I .
J. F. Balcus
 $^{99\text{m}}\text{Tc}$ (B).
267. Massachusetts Institute of
Technology
Box 69
Cambridge 38, Massachusetts
John L. Sargeant
 ^{124}Sb , ^{140}Ba , ^{45}Ca , ^{198}Au , ^{114}In ,
 ^{59}Fe , ^{203}Hg , ^{86}Rb , ^{75}Se , ^{111}Ag ,
 ^{110}Ag , ^{89}Sr , ^{99}Tc , ^{170}Tm ,
 ^3H , ^3H targets.
268. Massachusetts, University of
Amherst, Massachusetts
W. R. Haney
 ^{14}C , ^{36}Cl , ^{131}I , ^{59}Fe , ^{32}P ,
 ^{42}K .
269. The Matheson Company, Inc.
P. O. Box 85
East Rutherford, New Jersey
A. L. Mossman
 ^{47}Ca .
270. Mayo Clinic
Rochester, Minnesota
E. G. Southwick,
Purch. Agent
 ^{45}Ca , ^{47}Ca , ^{132}I (B), ^{106}Ru ,
 ^{90}Y (B), ^{91}Y , ^{65}Zn .
271. McLean Hospital
Belmont 78, Massachusetts
George Hauser
 ^{32}P .
272. The Mead Corporation
Corner 8th and Hickory Streets
Chillicothe, Ohio
W. C. Rutledge
 ^{198}Au .
273. Medical College of Georgia
Talmadge Memorial Hospital
Augusta, Georgia
Dr. Sam A. Singal
 ^{32}P , ^{86}Rb , ^{35}S .

274. Medical College of the State of South Carolina
Charleston, South Carolina
M. G. Weidner
 ^{85}Kr .
275. Medical College of Virginia
12th and Clay Streets
Richmond 19, Virginia
Marie F. Marten
 ^{36}Cl , ^{32}P , ^{133}Xe .
276. Mellon Institute
4400 Fifth Avenue
Pittsburgh 13, Pennsylvania
Dr. R. H. Schuler
 ^{82}Br , ^{131}I , ^{32}P .
277. Merck and Company
Rahway, New Jersey
A. R. Braunmuller
 ^{109}Cd , ^{45}Ca , ^{137}Cs , ^{51}Cr ,
 ^{60}Co , ^{125}I , ^{129}I , ^{131}I , ^{32}P ,
 ^{42}K , ^{35}S .
278. Miami, University of
P. O. Box 8066
Coral Gables, Florida
Edward J. Davis
 ^{45}Ca , ^{60}Co , ^{32}P , ^{46}Sc , ^{65}Zn .
279. Miami University of Ohio
Oxford, Ohio
Russell G. Young
 ^{32}P .
280. Miami Valley Hospital
1 Wyoming Street
Dayton, Ohio
Dalores Mowry
 ^{59}Fe .
281. Michigan Technological University
Houghton, Michigan 49931
R. S. Sibilsky
 ^{32}P , ^{86}Rb , ^{75}Se .
282. Michigan State University
East Lansing, Michigan
W. B. Richards
 ^{125}Sb , ^{82}Br , ^{45}Ca , ^{14}C , ^{36}Cl ,
 ^{51}Cr , ^{60}Co , ^{59}Fe , ^{32}P , ^{86}Rb ,
 ^{103}Ru , ^{85}Sr , ^{89}Sr , ^{90}Sr , ^{35}S ,
 ^{204}Tl , ^{113}Sn , ^{65}Zn .
283. Michigan, University of
Ann Arbor, Michigan
H. J. Fanning, Purch. Agent
 ^{125}Sb , ^{82}Br , ^{134}Cs , ^{60}Co ,
 ^{60}Co (B), ^{192}Ir , ^{55}Fe , ^{85}Kr ,
 ^{28}Mg (B), ^{63}Ni , ^{32}P , ^{24}Na ,
 ^{35}S , ^{99}Tc , ^3H .
284. Mine Safety Appliance Company
201 North Braddock Avenue
Pittsburgh 8, Pennsylvania
R. C. Baird, Purch. Agent
 ^{131}I .
285. Minnesota Mining and Manufacturing Company
P. O. Box 3121
St. Paul 6, Minnesota
Robert J. King
 ^{140}Ba , ^{45}Ca , ^{134}Cs , ^{137}Cs ,
 ^{131}I , ^{85}Kr , ^{203}Hg , ^{63}Ni ,
 ^{147}Pm , ^{106}Ru , ^{46}Sc , ^{85}Sr , ^{90}Sr ,
 ^{35}S , ^{204}Tl , ^3H , ^{65}Zn , ^{95}Zr ,
fission products.
286. Minnesota Mining and Manufacturing Company
2501 Hudson Road
St. Paul, Minnesota
Willis J. Olson
 ^{210}Po (M).
287. Minnesota, University of
402 Morrill Hall
Minneapolis, Minnesota
Hugh M. Lampert, Buyer
 ^{45}Ca , ^{14}C , ^{144}Ce , ^{134}Cs , ^{137}Cs ,
 ^{36}Cl , ^{60}Co , ^{131}I , ^{192}Ir , ^{55}Fe ,
 ^{59}Fe , ^{32}P , ^{42}K , ^{86}Rb , ^{103}Ru ,
 ^{106}Ru , ^{46}Sc , ^{24}Na , ^{85}Sr , ^{89}Sr ,
 ^{90}Sr , ^{35}S , ^{204}Tl , ^{113}Sn , ^{65}Zn .

288. Mississippi, University of
Jackson, Mississippi
Emmett J. Johnson
 ^{45}Ca , ^{58}Co , ^{42}K , ^{86}Rb , ^{24}Na ,
 ^{65}Zn .
289. Missouri, University of
Columbia, Missouri
Harry J. Fields, Director
of Purchasing
 ^{45}Ca , ^{144}Ce , ^{59}Fe , ^{203}Hg ,
 ^{99}Mo , ^{32}P , ^{75}Se , ^{99}Tc , ^{65}Zn ,
 ^{95}Zr .
290. Monsanto Chemical Company
800 North Lindbergh Boulevard
St. Louis 66, Missouri
 ^3H , ^{133}Xe .
291. Monsanto Research Corporation
1515 Nicholas Road
Dayton 7, Ohio
Harold A. Malson
 ^{140}Ba , ^{109}Cd , ^{137}Cs , ^{58}Co ,
 ^{60}Co , ^{203}Hg , ^{63}Ni , ^{95}Nb ,
 ^{147}Pm , ^{90}Sr , ^{204}Tl , ^{170}Tm ,
 ^{113}Sn , ^{95}Zr , ^{241}Am .
J. L. Richmond
 ^{210}Po (M).
292. Montana State University
Bozeman, Montana
Reed Howald
 ^{32}P , ^{86}Rb .
293. Montefiore Hospital
E. 210th St. and Bainbridge
Ave.
Bronx 67, New York
J. Jacobson, Purch. Exec.
 ^{131}I .
294. Motorola, Inc.
5005 East McDowell Road
Phoenix 8, Arizona
Willard M. Jones
 ^{198}Au , ^{63}Ni , ^3H .
295. The Mount Sinai Hospital
Fifth Avenue and 100th Street
New York 29, New York
Louis R. Wasserman
 ^{55}Fe , ^{59}Fe .
296. National Bureau of Standards
Connecticut Ave. and Van
Ness St., N.W.
Washington, D. C.
C. B. Kipps, Chief,
Procurement Section
 ^{82}Br , $^{115\text{m}}\text{Cd}$, ^{144}Ce , ^{51}Cr ,
 ^{58}Co , ^{64}Cu , ^{114}In , ^{129}I ,
 ^{59}Fe , ^{203}Hg , ^{89}Sr , ^3H , ^3H
targets.
297. National Dairy Products Corp.
801 Waukegan Road
Glenview, Illinois 60025
Ira B. Whitney
 ^{140}Ba , ^{45}Ca , ^{106}Ru .
298. National Lead Company
P. O. Box 58
South Amboy, New Jersey
M. C. Christensen,
Purchasing Agent
 ^{95}Nb , ^{35}S .
299. Nebraska, University of
42 and Dewey
Omaha, Nebraska
Dr. E. P. Rack
 ^{131}I .
300. Nebraska Wesleyan University
50th and St. Paul Streets
Lincoln 4, Nebraska
R. B. Johnson, Purch. Agent
 ^{137}Cs , ^{32}P .
301. Nevada, University of
Reno, Nevada
Robert M. Moyers
 ^{134}Cs .

302. New England Deaconess Hospital
194 Pilgrim Road
Boston 15, Mass.
Dr. Shields Warren
 ^{131}I .
303. New England Institute for Medical Research
Ridgefield, Connecticut
Dr. J. H. Heller
 ^{131}I .
304. New England Nuclear Corp.
575 Albany Street
Boston, Massachusetts
Charles B. Killion
 ^{133}Ba , ^{109}Cd , ^{14}C , ^{134}Cs ,
 ^{137}Cs , ^{36}Cl , ^{60}Co , ^{129}I ,
 ^{63}Ni , ^{147}Pm , ^{75}Se , ^{90}Sr , ^3H ,
 ^{65}Zn , ^{241}Am .
305. New Hampshire University
Durham, New Hampshire
A. R. Amell
 ^{35}S .
306. New Mexico State University
University Park, New Mexico
 ^{32}P .
307. New Mexico Highlands University
Las Vegas, New Mexico
R. A. Deering
 ^{32}P .
308. New Mexico; University of Albuquerque, New Mexico
Dr. M. L. Riedesel
 ^{51}Cr , ^{131}I , ^{32}P , ^{35}S , ^{65}Zn .
309. New York City Dept. of Hospitals
Francis Delafield Hospital
99 Fort Washington Ave.
New York 32, New York
 ^{24}Na .
310. New York Eye and Ear Infirmary
218 Second Avenue
New York, New York
Dr. L. Previte
 ^{42}K (B).
311. New York Hospital
525 E. 68th Street
New York, New York
Dr. Marion Erlandson
 ^{28}Mg (B).
312. New York State Dept. of Health
Office of Fiscal Management
84 Holland Avenue
Albany 8, New York
Eleanor M. Plum
 ^{32}P , ^{85}Sr .
313. State University of New York Downstate Medical Center
450 Clarkson Avenue
Brooklyn 3, New York
D. Thompson
 ^{124}Sb , ^{45}Ca , ^{47}Ca , ^{14}C , ^{134}Cs ,
 ^{36}Cl , ^{131}I , ^{85}Kr , ^{28}Mg (B),
 ^{32}P , ^{42}K , ^{86}Rb , ^{35}S , ^{113}Sn .
314. New York University Medical Center
550 First Avenue
New York 16, New York
W. C. Hanlon
 ^{125}Sb , ^{140}Ba , ^{45}Ca , ^{144}Ce , ^{51}Cr ,
 ^{131}I , ^{59}Fe , ^{147}Nd , ^{32}P , ^{42}K ,
 ^{103}Ru , ^{106}Ru , ^{24}Na , ^{89}Sr , ^{35}S ,
 ^{95}Zr .
315. North American Aviation, Inc.
831 N. Douglas St.
El Segundo, California
G. D. Goodfellow
 ^{36}Cl , ^{32}P , ^{35}S .

316. North American Aviation
Science Center
8437 Fallbrook Avenue
Canoga Park, California
G. A. Baldini
 ^{185}W .
317. North American
Aviation
Space and Information
Systems Div.
Downey, California
E. E. Sach
 ^{210}Po (M).
318. North Carolina Baptist
Hospital
300 S. Hawthorne Road
Winston-Salem, N. C.
Dr. Witcofski
 $^{99\text{m}}\text{Tc}$ (B).
319. North Carolina State College
107-1911 Building
Raleigh, North Carolina
John C. Williams
Purch. Agent
 ^{51}Cr , ^{64}Cu , ^{59}Fe , ^{85}Kr , ^{32}P ,
 ^{86}Rb , ^{85}Sr , ^{35}S , ^{65}Zn .
320. North Carolina, University of
Chapel Hill, North Carolina
Harold W. Dark
 ^{14}C , ^{36}Cl , ^{60}Co , ^{198}Au , ^{181}Hf ,
 ^{85}Kr , ^{32}P , ^{110}Ag , ^{35}S .
321. North Dakota State University
State University Station
Fargo, North Dakota
Dr. Clifton E. Miller
 ^{45}Ca , ^{131}I , ^{59}Fe , ^{32}P , ^{35}S .
322. North Dakota, University of
Grand Forks, North Dakota
Dr. Harold D. Bale
 ^{60}Co , ^{32}P .
323. Northern States Power Company
15 South 5th Street
Minneapolis, Minnesota 55402
K. Schwebach
 ^{51}Cr .
324. North Georgia College
Dahlonega, Georgia
C. M. Yager
 $^{115\text{m}}\text{Cd}$, ^{45}Ca , ^{32}P , ^{35}S .
325. Northrop Space Laboratories
3901 West Broadway
Hawthorne, California 90250
A. J. Throckmorton, Buyer
 ^{137}Cs .
326. North Texas State University
Box 5135
Denton, Texas
Dr. James R. Lott
 ^{85}Kr , ^{86}Rb .
327. Northwest Community College
Powell, Wyoming
A. L. Mickelson
 ^{32}P .
328. Northwestern University
619 Clark Street
Evanston, Illinois
T. M. Johnson
 ^{45}Ca , ^{131}I , ^{86}Rb .
329. Notre Dame, University of
Notre Dame, Indiana
J. J. Sechowski
 ^{86}Rb .
330. A. P. Noyes Institute
105 Pleasant Street
Concord, New Hampshire
Malcolm Siegel
 ^{131}I .

331. Nuclear Advisors, Inc.
33-61 Crescent Street
Long Island City 6, New York
 ^{131}I , ^{35}S .
332. Nuclear-Chicago Corporation
333 E. Howard Avenue
Des Plaines, Illinois
Robert B. Young
 ^{124}Sb , ^{133}Ba , ^{109}Cd , ^{45}Ca ,
 ^{134}Cs , ^{137}Cs , ^{60}Co , $^{152-}$
 ^{154}Eu , ^{55}Fe , ^{59}Fe , ^{203}Hg ,
 ^{32}P , ^{42}K , ^{147}Pm , ^{24}Na , ^{35}S ,
 ^{182}Tl , ^{204}Tl , ^{170}Tm , ^{65}Zn .
333. Nuclear Consultants Corp.
9842 Manchester Road
St. Louis 19, Missouri
David S. Rudolf, Mgr.
Purchasing
 ^{45}Ca , ^{47}Ca , ^{134}Cs , ^{51}Cr ,
 ^{114}In , ^{125}I , ^{131}I , ^{59}Fe ,
 ^{197}Hg , ^{203}Hg , ^{32}P , ^{86}Rb ,
 ^{46}Sc , ^{85}Sr , ^{35}S , ^{133}Xe , ^{65}Zn ,
fission products.
334. Nuclear Corporation of
America
2 Richwood Place
Denville, New Jersey
R. Kurkewicz, Purch. Agent
 ^{24}Na , ^{90}Sr , ^{204}Tl .
335. Nuclear Materials and
Equipment Corporation
Seventh and Warren Avenue
Apollo, Pennsylvania
C. W. Flint
 ^{241}Am , ^{137}Cs , ^{210}Po (M), ^{90}Sr .
336. Nuclear Research Associates,
Inc.
35-01 Queens Blvd.
Long Island City 1, New York
Miss Mabel Newark, Book-
keeper
 ^3H .
337. Nuclear Research Chemicals, Inc.
100 North Crystal Lake Drive
Orlando, Florida
Dr. Glen A. Greathouse
 ^{36}Cl .
338. Nuclear Science and Engineering
Corporation
P. O. Box 10901
Pittsburgh 36, Pennsylvania
Peter A Weston
C. R. Wilson
 ^{57}Co , ^{129}I , ^{131}I , ^{59}Fe , ^{147}Pm ,
 ^{84}Rb , ^{90}Sr , ^{99}Tc , ^{133}Xe .
339. Nucleonic Corporation of
America
196 De Graw Street
Brooklyn 31, New York
Dr. Benjamin Schloss
 ^{133}Ba , ^{109}Cd , ^{51}Cr , ^{60}Co , ^{131}I ,
 ^{32}P , ^{35}S .
340. Oak Ridge Institute of Nuclear
Studies
P. O. BOX 117
Oak Ridge, Tennessee
H. E. Elliott, Purch. Agent
 ^{124}Sb , ^{76}As , ^{133}Ba , ^{45}Ca , ^{14}C ,
 ^{144}Ce , ^{134}Cs , ^{137}Cs , ^{51}Cr ,
 ^{58}Co , ^{60}Co , ^{68}Ga (B), ^{130}I ,
 ^{52}Fe (B), ^{55}Fe , ^{59}Fe , ^{140}La ,
 ^{99}Mo , ^{147}Nd , ^{32}P , ^{42}K , ^{86}Rb ,
 ^{106}Ru , ^{153}Sm , ^{75}Se , ^{110}As , ^{24}Na ,
 ^{85}Sr , ^{35}S , $^{99\text{m}}\text{Tc}$ (B), ^{204}Tl , ^3H ,
 ^{65}Zn .
341. Oak Ridge National Laboratory
P. O. Box X
Oak Ridge, Tennessee 37831
J. E. Rattledge
 ^{60}Co (S). Also see note, page 45.
342. Ohio Agricultural Experiment
Station
Wooster, Ohio
W. R. Vaughn, Comptroller
 ^{14}C , ^{137}Cs , ^{131}I , ^{59}Fe , ^{32}P ,
 ^{42}K , ^{86}Rb , ^{46}Sc , ^{85}Sr , ^{35}S .

343. Oberlin College
Oberlin, Ohio
James L. Powell
 ^{36}Cl , ^{89}Sr .
344. Ohio State University
190 N. Oval Drive
Columbus, Ohio
J. E. Medley
Dir. of Purchasing
 ^{133}Ba , ^{82}Br , ^{109}Cd , ^{45}Ca ,
 ^{14}C , ^{137}Cs , ^{60}Co , ^{125}I ,
 ^{131}I , ^{32}P , ^{86}Rb , ^{75}Se ,
 ^{89}Sr , ^{35}S , ^3H , ^3H targets,
 ^{65}Zn .
345. Oklahoma State University
Stillwater, Oklahoma
John B. West
 ^{45}Ca , ^{137}Cs , ^{131}I , ^{59}Fe , ^{90}Sr ,
 ^{182}Ta , ^3H .
346. Oklahoma Medical Research
Foundation
825 N. E. 13th Street
Oklahoma City 4, Oklahoma
Reece McGee, Business Adm.
 ^{35}S .
347. Oklahoma, University of
Norman, Oklahoma
D. R. Kimrey,
Dir. of Purchasing
 $^{115\text{m}}\text{Cd}$, ^{36}Cl , ^{32}P , ^{110}Ag .
348. Olin Mathieson Chemical Corp.
275 Winchester Avenue
New Haven, Connecticut
C. E. Michelson
 ^{45}Ca , ^{36}Cl , ^{60}Co , ^{64}Cu , ^{32}P ,
 ^{35}S , ^{65}Zn .
349. Oregon State University
Corvallis, Oregon
Lila Shore, Aut. Agent
 ^{122}Sb , ^{109}Cd , ^{14}C , ^{144}Ce ,
 ^{51}Cr , ^{203}Hg , ^{32}P , ^{103}Ru ,
 ^{106}Ru , ^{46}Sc , ^{75}Se , ^{35}S , ^{182}Ta ,
 ^{113}Sn , ^{65}Zn , ^{95}Zr .
350. Oregon State Board of Health
P. O. BOX 231
Portland, Oregon 97207
D. R. Swanson
 ^{89}Sr , ^{90}Sr .
351. Oregon, University of
Eugene, Oregon
Aaron Novick
 ^{134}Cs , ^{36}Cl , ^{58}Co , ^{60}Co , ^{131}I ,
 ^{63}Ni , ^{32}P , ^{42}K , ^{75}Se , ^{110}Ag ,
 ^{24}Na , ^{90}Sr , ^{204}Tl , ^{65}Zn .
352. Oregon, University of
Medical School
3181 S. W. Sam Jackson
Park Road
Portland, Oregon
Dr. Monte A. Greer
 ^{132}I (B).
353. Owens-Illinois Technical Center
1700 N. Westwood Avenue
Toledo, Ohio
L. F. Riley
 ^{45}Ca , ^{147}Pm .
354. Palo Alto Research Foundation
860 Bryant Street
Palo Alto, California
James A. Patterson
 ^{131}I , ^{32}P , ^{42}K .
355. Pan American World Airways
Guided Missiles Range Div.
Patrick Air Force Base, Fla.
J. E. Lindquist
F. B. ZuVenda (project orders)
 ^{140}Ba , ^{82}Br , ^{144}Ce , ^{131}I , ^{99}Mo ,
 ^{103}Ru , ^{95}Zr .
356. Parke-Davis and Company
2800 Plymouth Road
Ann Arbor, Michigan
D. D. Ewing
 ^{133}Ba

357. Pennsylvania, University of
3025 Walnut Street
Philadelphia, Pennsylvania
H. Jamison Swartz
 ^{140}Ra , ^{45}Ca , ^{134}Cs , ^{36}Cl ,
 ^{60}Co , ^{199}Au , ^{125}I , ^{131}I ,
 ^{203}Hg , ^{32}P , ^{42}K , ^{35}S , ^{204}Tl ,
 ^3H , ^3H targets, ^{65}Zn .
358. Pennsylvania, University of
Hospital
8th and Spruce Street
Philadelphia 7, Pennsylvania
Dr. Gilbert N. Ling
 ^{51}Cr , ^{42}K , ^{86}Rb , $^{99\text{m}}\text{Tc}$ (B),
 ^{91}Y .
359. Pennsylvania State University
University Park, Pennsylvania
Dale A. Baker
 ^{124}Sb , ^{210}Bi , ^{45}Ca , ^{14}C , ^{114}In ,
 ^{203}Hg , ^{63}Ni , ^{32}P , ^{75}Se , ^{90}Sr ,
 ^{35}S , ^{113}Sn , ^3H , ^3H targets.
360. Peter Bent Brigham University
721 Huntington Avenue
Boston 15, Massachusetts
Dr. Richard Corlin
 $^{115\text{m}}\text{Cd}$, ^{85}Kr , ^{32}P , ^{133}Xe ,
 ^{65}Zn .
361. Philco Corporation
Ford Road
Newport Beach, California
J. E. Walsh, Buyer
 ^{32}P , ^{35}S .
362. Phillips Petroleum Company
Bartlesville, Oklahoma
John N. Romine
 ^{124}Sb , ^{140}Ra , ^{210}Rn , $^{115\text{m}}\text{Cd}$,
 ^{45}Ca , ^{144}Ce , ^{137}Cs , ^{51}Cr ,
 ^{181}Hf , ^{114}In , ^{131}I , $^{55-59}\text{Fe}$,
 ^{59}Fe , ^{203}Hg , ^{95}Nb , ^{32}P , ^{42}K ,
 ^{143}Pr , ^{147}Pm , ^{86}Rb , ^{103}Ru ,
 ^{106}Ru , ^{75}Se , ^{85}Sr , ^{182}Ta ,
 ^{99}Tc , ^{170}Tm , ^{185}W , ^{91}Y , ^{95}Zr .
363. Picker X-Ray Corporation
17325 Euclid Avenue
Cleveland 12, Ohio
James Dunn
 ^{137}Cs , ^{147}Pm
364. Piper Well Surveys
Box 261
Bradford, Pennsylvania
Duane J. Piper
 ^{46}Sc .
365. Pipeweld X-Ray Corporation
P. O. Box 31
Perrysburg, Ohio
Charles Earle, Jr.
 ^{192}Ir .
366. Pittsburgh, University of
Pittsburgh 13, Pennsylvania
P. J. Riley
 ^{133}Ba , ^{45}Ca , ^{51}Cr , ^{60}Co ,
 $^{152-154}\text{Eu}$, ^{131}I , ^{59}Fe , ^{203}Hg ,
 ^{32}P , ^{85}Sr , ^{89}Sr , ^{35}S , ^{99}Tc ,
 ^{170}Tm , ^{65}Zn , fission products.
367. Polytechnic Institute of
Brooklyn
333 Jay Street
Brooklyn 1, New York
Dr. Irving Cohen
 ^{140}Ba , ^{45}Ca , ^{14}C , ^{32}P , ^{35}S .
368. Pomona College
747 N. Dartmouth Ave.
Claremont, California
T. F. Sherman
 ^{32}P , ^{42}K .
369. Portland, University of
5000 N. Willamette Blvd.
Portland, Oregon
Carl W. Bonhonst
 ^{75}Se .

370. Potter and Brumfield
Princeton, Indiana
C. Robert Stove
 ^{85}Kr .
371. Presbyterian Medical Center
Clay and Webster Streets
San Francisco, California
Dr. Jerold M. Lowenstein
 ^{86}Rb .
372. Presbyterian-St. Luke's
Hospital
1753 W. Congress Parkway
Chicago 12, Illinois
E. R. Blomquist
 ^{137}Cs , ^{55}Fe .
373. Princeton University
Princeton, New Jersey
R. A. Winters
 ^{137}Cs , ^{51}Cr , ^{203}Hg , ^{32}P ,
 ^{90}Sr , ^{35}S .
374. Procter and Gamble Co.
P. O. Box 175
Groesbeck Station
Cincinnati, Ohio
Harry W. Lamp
 ^{45}Ca , ^{131}I , ^{55}Fe , ^{32}P , ^{35}S ,
 ^3H .
375. The Public Health Research
Inst. of the City of New
York, Inc.
Foot of East 16th Street
New York, New York 10009
Florence M. Zulbert
 ^{45}Ca , ^{131}I , ^{32}P , ^{35}S .
376. Puget Sound, University of
Tacoma 6, Washington
Martin E. Nelson
 ^{32}P .
377. Puerto Rico, University of
P. O. Box 516
Rio Piedras, Puerto Rico
Julian Roldan-Regus
 ^{45}Ca , ^{137}Cs , ^{51}Cr , ^{60}Co ,
 $^{55-59}\text{Fe}$, ^{59}Fe , ^{95}Nb , ^{32}P ,
 ^{89}Sr , ^{90}Sr , ^{35}S , ^{182}Ta , ^{65}Zn .
378. Purdue University
Lafayette, Indiana
Paul L. Ziemer
 ^{122}Sb , ^{124}Sb , ^{76}As , ^{77}As ,
 ^{140}Ba , ^{45}Ca , ^{47}Ca , ^{134}Cs , ^{51}Cr ,
 ^{60}Co , ^{198}Au , ^{130}I , ^{131}I , ^{55}Fe ,
 ^{59}Fe , ^{140}La , ^{203}Hg , ^{99}Mo , ^{95}Nb ,
 ^{32}P , ^{42}K , ^{86}Rb , ^{85}Sr , ^{90}Sr ,
 ^{35}S , ^{204}Tl , ^{113}Sn .
379. Radiation Applications, Inc.
36-34 - 37th Street
Long Island City 1, New York
Jacques J. Weinstock
 ^{85}Sr .
380. Radiation Research Corporation
1150 Shames Drive
Westbury, New York
Phylles Chiuchiolo
 ^3H .
381. Raytheon Manufacturing Co.
Industrial Components Div.
55 Chapel Street
Newton, Massachusetts
T. W. Stuart
 ^{137}Cs .
382. Rensselaer Polytechnic
Institute
110-8th Street
Troy, New York
David Howells II,
Mgr. of Purchasing
 ^{125}Sb , ^{140}Ba , ^{137}Cs , ^{36}Cl ,
 ^{64}Cu , ^{72}Ga , ^{131}I , ^{32}P , ^{106}Ru ,
 ^{75}Se , ^{111}Ag , ^{85}Sr , ^{90}Sr , ^{99}Tc ,
 ^{65}Zn , ^{95}Zr .

383. Research Corporation, New York
405 Lexington Avenue
New York 17, New York
Charles H. Schauer
32p.
384. Research Triangle Institute
P. O. Box 490
Durham, North Carolina 27702
W. J. Thomas
 ^{75}Se , ^{110}Ag , ^{204}Tl , ^{113}Sn .
385. Retina Foundation
20 Staniford Street
Boston, Massachusetts
Dr. Arvid Anseth
 ^{45}Ca .
386. Reynolds Electric Engineering
Co., Inc.
P. O. Box 1360
Las Vegas, Nevada
Merl C. Rees
 ^{14}C , ^{144}Ce , ^{137}Cs , ^{60}Co , ^{131}I .
387. Reynolds Electric Engineering
co.
Mercury, Nevada
Mr. James Kimmel
 ^{133}I (B)
388. R. J. Reynolds Tobacco Co.
Winston-Salem, North Carolina
J. B. Glenn, Purch. Agent
 ^{14}C .
389. Rhode Island, University of
Narragansett Marine Laboratory
Narragansett, Rhode Island
Dr. James T. Corless
 ^{45}Ca , $^{152-154}\text{Eu}$, ^{114}In , ^{59}Fe ,
 ^{63}Ni , ^{46}Sc .
390. RIAS
7212 Bellona Avenue
Baltimore, Maryland
J. H. Pretsyman
Purch. Agent
32p, 35s.
391. Rice University
Houston, Texas
R. V. Talmage
 ^{45}Ca , ^{47}Ca , ^{35}S .
392. Riker Laboratories, Inc.
19901 Nordoff Street
Northridge, California
J. T. Finn, Buyer
 ^{35}S .
393. Richmond, University of
Richmond, Virginia
Addison D. Campbell
 ^{36}Cl , ^{32}P , ^{35}S .
394. Rochester, University of
575 Elmwood Avenue
Rochester 20, New York
Russell Hayes
 ^{45}Ca , ^{47}Ca , ^{14}C , ^{144}Ce , ^{137}Cs ,
 ^{36}Cl , ^{51}Cr , ^{60}Co , ^{131}I , ^{59}Fe ,
 ^{203}Hg , ^{63}Ni , ^{32}P , ^{42}K , ^{147}Pm ,
 ^{86}Rb , ^{24}Na , ^{90}Sr , ^{35}S , ^{204}Tl ,
 ^{113}Sn , ^{65}Zn .
395. The Rockefeller Institute
66th Street and York Ave.
New York, New York 10021
Robert M. Miller
 ^{45}Ca , ^{131}I , ^{32}P , ^{42}K , ^{86}Rb ,
 ^{24}Na , ^{85}Sr , ^{89}Sr , ^{35}S , ^{65}Zn .
396. Rose Polytechnic Institute
5500 Wabash Avenue
Terre Haute, Indiana
Ralph A. Llewellyn
 ^{137}Cs .
397. Roswell Park Memorial Institute
666 Elm Street
Buffalo 3, New York
Dr. M. A. Bender
 ^{137}Cs , ^{130}I , ^{132}I (B), ^{203}Hg .

398. Rutgers University
Wright Laboratory
New Brunswick, New Jersey
John C. Frisch, Jr.
 ^{45}Ca , ^{131}I , $^{55-59}\text{Fe}$, ^{59}Fe ,
 ^{32}P , ^{35}S .
399. St. Elizabeth's Hospital
Research Laboratories
736 Cambridge Street
Brighton, Massachusetts
Sr. M. St. Clare
 ^{59}Fe .
400. St. John's University
Jamsica 32, New York
L. A. Frey, Treasurer
 ^{203}Hg .
401. St. Louis Testing Labora-
tories, Inc.
2317 Chouteau Avenue
St. Louis 3, Missouri
C. D. Trowbridge, Director
 ^{192}Ir .
402. St. Jude Hospital
332 N. Lauderdale
Memphis 3, Tennessee
C. D. Davidson, Purch.
Agent
 ^{32}P .
403. St. Louis University
221 North Grand Blvd.
St. Louis 3, Missouri
Dr. Norman E. Melechen
 ^{45}Ca , ^{203}Hg , ^{32}P , ^{35}S .
404. St. Luke's Hospital
New York, New York
 ^{90}Y (B).
405. St. Mary's College
Winona, Minnesota
Brother L. George
 ^{45}Ca , ^{59}Fe , ^{85}Sr , ^{89}Sr .
406. St. Mary's University
San Antonio, Texas 78228
Eugene A. Gettinger
 ^{65}Zn .
407. St. Olaf College
Northfield, Minnesota
H. W. Hansen
 ^{14}C , ^{32}P .
408. St. Peter's College
2641 Hudson Boulevard
Jersey City 6, New Jersey
Thomas N. Dodd
 ^{32}P .
409. Sandia Corporation
Sandia Base
P. O. Box 5800
Albuquerque, New Mexico
J. T. Gammon, Buyer
 ^{85}Kr .
410. San Diego State College
San Diego, California 92115
S. C. Hartigan,
Business Manager
 ^{140}Ba , ^{45}Ca , ^{14}C , ^{137}Cs , ^{60}Co ,
 ^{131}I , ^{99}Mo , ^{109}Pd , ^{32}P , ^{111}Ag ,
 ^{95}Zr .
411. Sandoz Pharmaceuticals
Route 10, P. O. Box 11
Hanover, New Jersey
I. F. Moore
 ^{14}C .
412. San Francisco State College
1600 Holloway Avenue
San Francisco 27, California
L. F. Marshall
 ^{130}I , ^{131}I .
413. Schering Corporation
1011 Morris Avenue;
Union, New Jersey
G. M. Traendly
 ^{47}Ca .

414. Schlumberger Well Surveying Corp.
Old Quarry Road
Ridgefield, Connecticut
H. R. Johnson
 ^3H .
415. Sehumpert Memorial Hospital
941 Margaret Place
Shreveport, Louisiana
Thomas P. Callaghan
 ^{60}Co .
416. Schwarz BioResearch, Inc.
Mountain View Avenue
Orangeburg, New York
Robert Capodieu
 ^{14}C , ^{125}I , ^{131}I , ^{32}P , ^{35}S , ^3H .
417. Seton Hall College of Medicine
24 Baldwin Avenue
Jersey City 4, New Jersey
Timothy J. Regan
 ^{131}I , ^{85}Kr .
418. Shell Development Company
P. O. Box 481
Houston 1, Texas
S. T. Chappell, Jr.
 $^{38}\text{Ar(B)}$, ^{113}Sn , ^{185}W , ^{65}Zn .
419. Shell Development Company
1410 45th Street
Emeryville, California
K. L. Reid
 ^{14}C , ^{147}Pm , ^{35}S , ^{182}Ta , ^3H .
420. Shell Oil Company
P. O. Box 2633
Deer Park, Texas
E. W. Herrington
 ^{144}Ce , ^{51}Cr , ^{46}Sc .
421. Sloan-Kettering Institute
410 E. 68th Street
New York 21, New York
Patrick C. Wrenn
 ^{109}Cd , ^{47}Ca , ^{85}Sr , ^{89}Sr .
422. Smith College
Northampton, Mass.
Esther Carpenter
 ^{131}I .
423. Smith Kline and French Laboratories
1530 Spring Garden Street
Philadelphia 1, Pennsylvania
P. A. Geary
 ^{14}C .
424. Smithsonian Institution
Fiscal Division
Washington 25, D. C.
A. W. Wilding
 ^{32}P .
425. Socony Mobil Oil Co., Inc.
3600 Duncanville Rd.
Dallas 21, Texas
Richard L. Caldwell
 ^{45}Ca , ^{147}Pm , ^{186}Re , ^{89}Sr .
426. The South, University of
Sewanee, Tennessee
T. Felder Dorn
 ^{64}Cu , ^{35}S .
427. South Carolina, University of
Columbia, South Carolina
29208
James F. Tyler
 ^{45}Ca , ^{137}Cs , ^{36}Cl , ^{89}Sr , ^{35}S .
428. South Dakota State College
Brookings, South Dakota
W. W. Wolpert
 ^{45}Ca , ^{137}Cs , ^{32}P , ^{75}Se , ^{35}S .

429. Southeast Missouri State
College
Cape Girardeau, Missouri
E. Lawrence Bahn, Jr.
 ^{115}Cd , ^{109}Pd .
430. Southern California,
University of
Los Angeles, California
90033
D. L. McNamara
 ^{45}Ca , ^{14}C , ^{51}Cr , ^{131}I , ^{59}Fe ,
 ^{32}P , ^{86}Rb , ^{85}Sr , ^{35}S , ^{65}Zn .
431. Southern Illinois University
Carbondale, Illinois
G. A. Taberman
 ^{86}Rb , ^{65}Zn .
432. Southwestern Medical School
The University of Texas
5323 Harry Hines Blvd.
Dallas, Texas 75235
Jack A. Barnett
 ^{131}I , ^{24}Na , ^{35}S .
433. Southwestern University
Georgetown
Texas
B. A. Phillips
 ^{131}I , ^{59}Fe , ^{32}P .
434. Space Technology
Laboratories, Inc.
3700 Freeman Boulevard
Redondo Beach, California
G. A. Tompkins
 ^{85}Kr , ^3H targets.
435. Special Instruments
Laboratory, Inc.
312 W. Vine Avenue, S.W.
Knoxville, Tennessee
Gary A. Davidson
 ^{204}Tl .
436. Spindletop Research Center
2224 Young Drive
Lexington, Kentucky
Victor C. Woodworth
 ^{137}Cs , ^{90}Sr .
437. Sprague Electric Co.
North Adams, Mass.
Thomas E. Burgess
 ^{110}Ag .
438. E. R. Squibb and Sons
Div. of Olin-Mathieson
Chem. Corp.
445 West 59th Street
New York 19, New York
H. Austin
 ^{82}Br , ^{47}Ca , ^{137}Cs , ^{51}Cr , ^{60}Co ,
 ^{59}Fe , ^{203}Hg , ^{75}Se , ^{24}Na , ^{85}Sr ,
 ^3H .
- 4.39. E. R. Squibb and Sons
Georges Road
New Brunswick, New Jersey
Dr. Staum
 $^{99\text{m}}\text{Tc}$ (B).
440. Standard Oil Co.
Div. of American Oil Co.
P. O. Box 6110-A
Chicago 80, Illinois
Charles F. Smith
 ^{95}Zr .
441. Stanford Research Institute
Bldg. 324, Fourth St.
Stanford Village
Menlo Park, California
William Borden
 ^{144}Ce , ^{137}Cs , ^{103}Ru , ^{85}Sr ,
 ^{95}Zr .
442. Stanford University
300 Pasteur Drive
Palo Alto, California
M. F. Morgan
 ^{140}Ba , ^{82}Br , ^{137}Cs , ^{125}I ,
 ^{131}I , ^{59}Fe , ^{95}Nb , ^{32}P , ^{42}K ,
 ^{86}Rb , ^{90}Sr , ^{35}S , ^3H , ^3H tar-
gets.

443. Stanley Aviation Corp.
2501 Dallas St.
Denver 8, Colorado
M. J. Spencer
 ^{65}Zn .
444. Steiner American Corp.
878 East Ninth South St.
Salt Lake City, Utah 84105
L. F. Luechauer
 ^{14}C .
445. Sylvania Electric Products,
Inc.
100 Sylvan Road
Woburn, Massachusetts
B. W. Jenkins
 ^{124}Sb , $^{115\text{m}}\text{Cd}$, ^{45}Ca , ^{36}Cl ,
 ^{85}Kr , ^{99}Mo , ^{32}P , ^{35}S .
446. Syracuse University
205 University Place
Syracuse, New York 13210
Dr. James E. Smith
 ^{36}Cl , ^{131}I , ^{59}Fe , ^{32}P , ^{42}K ,
 ^{35}S , ^{65}Zn .
447. Technical Operations, Inc.
South Avenue
Burlington, Mass.
Walter G. Senior
 $^3\text{H-Ti}$
448. Tektronix, Inc.
P. O. BOX 500
Beaverton, Oregon
Dale Betz
 ^{133}Ba .
449. Temple University
Broad and Montgomery Sts.
Philadelphia 22, Pa.
W. T. Barclay
 ^{55}Fe , ^{24}Na , ^{35}S .
450. Tennessee Eastman Co.
Kingsport, Tenn.
W. H. Rozier
 ^{55}Fe .
451. Tennessee, University of
Dabney Hall
Knoxville, Tennessee
W. F. O'Tool
 ^{140}Ba , ^{82}Br , ^{45}Ca , ^{144}Ce ,
 ^{134}Cs , ^{36}Cl , ^{64}Cu , ^{125}I ,
 ^{131}I , ^{59}Fe , ^{140}La , ^{203}Hg ,
 ^{99}Mo , ^{147}Nd , ^{95}Nb , ^{32}P , ^{42}K ,
 ^{142}Pr , ^{147}Pm , ^{103}Ru , ^{46}Sc ,
 ^{75}Se , ^{24}Na , ^{85}Sr , ^{89}Sr , ^{90}Sr ,
 ^{35}S , ^{204}Tl , ^{91}Y , ^{65}Zn .
452. Tennessee, University of
Agricultural Laboratory
1299 Bethel Valley Rd.
Oak Ridge, Tennessee
Dr. Bell
 ^{132}Te (B).
453. Tennessee, University of
Medical Units
Memphis, Tennessee
G. B. Spurr
 ^{140}Ba , ^{82}Br , ^{45}Ca , ^{144}Ce ,
 ^{134}Cs , ^{36}Cl , ^{64}Cu , ^{125}I ,
 ^{131}I , ^{59}Fe , ^{140}La , ^{203}Hg ,
 ^{99}Mo , ^{147}Nd , ^{95}Nb , ^{32}P , ^{42}K ,
 ^{142}Pr , ^{147}Pm , ^{103}Ru , ^{46}Sc ,
 ^{75}Se , ^{24}Na , ^{85}Sr , ^{89}Sr , ^{90}Sr ,
 ^{35}S , ^{204}Tl , ^{91}Y , ^{65}Zn .
454. Texaco, Inc.
P. O. Box 52332
Houston, Texas 77052
B. D. Lee, Director
Biological Research
 ^{109}Cd , ^{55}Fe , ^{85}Kr , ^3H .
455. Texas A and M Research
Foundation
F. E. Box 44
College Station, Texas
Dr. W. C. Ellis
 ^{45}Ca , ^{14}C , ^{144}Ce , ^{137}Cs ,
 $^{152-154}\text{Eu}$, ^{114}In , ^{59}Fe , ^{32}P ,
 ^{106}Ru , ^{110}Ag , ^{111}Ag , ^{170}Tm ,
 ^{91}Y , fission products.

456. Texas A and M University
Cyclotron Institute
College Station, Texas
John A. McIntyre
Prof. of Physics
 ^{60}Co (B).
457. Texas Highway Dept.
Camp Hubbard
Austin, Texas 78703
A. W. Eastman
 ^{192}Ir .
458. Texas Instruments
P. O. Box 5474
Dallas 22, Texas
Millard D. Noell
Purch. Agent
 ^{64}Cu , ^{198}Au , ^{63}Ni , ^{103}Ru ,
 ^{110}Ag , ^{24}Na , ^{35}S , ^{113}Sn ,
 ^{133}Xe , ^{95}Zr .
459. Texas Nuclear Corporation
P. O. Box 9267
Allandale Station
Austin 56, Texas
Ira Lon Morgan
 ^3H .
460. Texas Technological College
Texas Agricultural Experiment Station
Lubbock, Texas
E. D. Smith
 ^{32}P .
461. Texas, The University of
Austin, Texas 78712
Earnest F. Gloyna
 ^{133}Ba , ^{45}Ca , ^{134}Cs , ^{58}Co ,
 ^{198}Au , ^{131}I , ^{203}Hg , ^{32}P ,
 ^{106}Ru , ^{46}Sc , ^{85}Sr ,
 ^{35}S , ^{99}Tc , ^{204}Tl , ^{65}Zn .
462. Texas Woman's University
Box 2906, University Hill
Sta.
Denton, Texas
Robert W. Higgins
 ^{45}Ca , ^{51}Cr , ^{59}Fe , ^{65}Zn .
463. Tison Nuclear, A Division of
RAD Science Corp.
1519 Pontius Avenue
Los Angeles, California, 90025
Mary Wallen
 ^{85}Kr .
464. Touro Infirmary
3500 Prytania St.
New Orleans 15, Louisiana
Dr. Sam B. Nadler
 ^{36}Cl , ^{42}K .
465. Tracerlab, Inc.
2030 Wright Avenue
Richmond, California
C. L. Freitas
 ^{45}Ca , ^{131}I , ^{192}Ir , ^{85}Kr , ^{203}Hg ,
 ^{42}K , ^{35}S , ^{133}Xe , $^{95}\text{ZrNb}$.
466. Tracerlab, Inc.
1601 Trapelo Road
Waltham, Mass. 02154
W. Karp
 ^{109}Cd , ^{14}C , ^{137}Cs , ^{198}Au , ^{59}Fe ,
 ^{85}Kr , ^{203}Hg , ^{63}Ni , ^{32}P , ^{106}Ru ,
 ^{85}Sr , ^{204}Tl , ^{170}Tm , ^{113}Sn , ^3H ,
 ^3H targets, ^{133}Xe .
467. Tracerlab, Inc.
2419 South Boulevard
Houston 6, Texas
Janet Staker
 ^{241}Am , $^{137}\text{CsBa}$, ^{57}Co , ^{131}I ,
 ^{55}Fe , ^{59}Fe , ^{147}Pm , ^{24}Na , ^{90}SrY ,
 ZrNb^{95} , fission products.
468. Trinity College
Washington, D. C. 20017
Sister St. John Neponucene
 ^{32}P , ^{35}S .
469. Trinity Testing Laboratories,
Inc.
P. O. BOX 3221
Corpus Christi, Texas 78404
Gus Dugger
 ^{192}Ir .

470. TRW Semiconductors Inc.
14520 South Aviation Blvd.
Lawndale, California
Harry P. Rosen
 ^{85}Kr .
471. Tufts University School of
Medicine
136 Harrison Avenue
Boston 11, Mass.
S. A. Burrow
 ^{59}Fe , ^{32}P .
472. Tulane University
New Orleans, Louisiana
70118
John U. Hidalgo
 ^{45}Ca , ^{198}Au , ^{59}Fe , ^{140}La ,
 ^{32}P , ^{42}K , ^{46}Sc , ^{85}Sr , ^{170}Tm .
473. Tuskegee Institute
P. O. Box 1239
Tuskegee Institute, Alabama
36088
J. A. Fernandes
 ^{14}C , ^{60}Co , ^{198}Au , ^{130}I , ^{131}I ,
 ^{59}Fe , ^{140}La , ^{32}P , ^{42}K , ^{24}Na ,
 ^{89}Sr , ^{90}Sr , ^{35}S , ^{65}Zn .
474. Twin City Testing Corp.
P. O. Box 95
Tonawanda, New York
John Tiebor
 ^{14}C , ^{147}Pm , ^{106}Ru , ^{99}Tc ,
 ^{204}Tl .
475. Union Carbide Chemicals Co.
P. O. Box 8261
South Charleston 3, West Va.
O. C. Lloyd
 ^{14}C , ^{198}Au , ^{131}I .
476. Union Carbide Nuclear Co.
Long Meadow Road
P. O. Box 324
Tuxedo, New York
R. W. Harrison
 ^{95}Nb , ^3H , ^3H targets.
477. Union College
Schenectady 8, New York
Charles F. Weick
 ^{137}Cs .
478. Union Oil Co. of California
P. O. Box 7600
Los Angeles 54, California
H. R. Metcalfe
 ^{204}Tl .
479. The Albany Medical College
of Union University
47 New Scotland Avenue
Albany, New York 12208
A. A. Percy
 ^{82}Br , ^{47}Ca , ^{32}P , ^{42}K , ^{24}Na .
480. United Aircraft Corp.
Silver Lane
East Hartford, Conn.
Jeanette Herbert
 ^{170}Tm , ^{133}Xe .
481. United Nuclear Corp.
5 New Street
White Plains, New York
R. Lauert
 ^{137}Cs .
482. U. S. Air Force
P. O. Box 35448
Brooks Air Force Base
Texas, 78235
Lida L. Moses
 ^{24}Na .
483. U. S. Air Force
AFSWC (SWCAM)
Kirtland AFB, New Mexico
87117
Charles G. Benes
 ^{137}Cs , ^{131}I , ^{91}Y , ^{95}Zr .

484. U. S. Air Force
SMAMA
McClellan AFB, California
Charles H. Anderson, Capt.
 ^{140}Ba , ^{51}Cr , ^{59}Fe , ^{111}Ag ,
 ^{24}Na , ^{89}Sr .
485. U. S. Air Force
MAAMA (MACAGCC)
Olmsted AFB, Pennsylvania
Orville G. Kelley
 ^{85}Kr .
486. U. S. Air Force
ASD ASCFC20
Wright Patterson AFB, Ohio
Carl L. Houston, Major
 ^{64}Cu .
487. U. S. Army
Aberdeen Proving Ground
Maryland
James C. Fulton
 ^{90}Sr .
488. U. S. Army
Edgewood Arsenal, Maryland
J. Van Gilder
 ^{144}Ce , ^{137}Cs , ^{60}Co , ^{131}I ,
 ^{132}I (B), ^{133}I (B), ^{99}Mo ,
 ^{32}P , ^{103}Ru , ^{106}Ru , ^{187}W , ^{95}Zr .
489. U. S. Army
Army Medical Center
Walter Reed Army Med. Center
Washington, D. C. 20012
John J. Degen
 ^{140}Ba , ^{115}Cd , ^{47}Ca , ^{14}C , ^{64}Cu ,
 ^{131}I , ^{55}Fe , ^{59}Fe , ^{85}Kr , ^{203}Hg ,
 ^{99}Mo , ^{32}P , ^{86}Rb , ^{75}Se , ^{110}Ag ,
 ^{24}Na , ^{90}Y .
490. U. S. Army
Dugway Proving Ground
Dugway, Utah
John Wm. Beakley
 ^{32}P .
491. U. S. Army
Walter Reed Army Medical Center
Washington 12, D. C.
John J. Degen
 ^{124}Sb , ^{140}Ba , ^{115}Cd , ^{47}Ca ,
 ^{51}Cr , ^{60}Co , ^{64}Cu , ^{198}Au , ^{131}I ,
 ^{55}Fe , ^{203}Hg , ^{99}Mo , ^{86}Rb , ^{75}Se ,
 ^{110}Ag , ^{113}Sn , ^{90}Y .
492. U. S. Army Biological Warfare
Lab.
Fort Detrick, Maryland
William A. Blumenauer
 ^{131}I , ^{32}P .
493. U. S. Army
Atlanta Army Depot
Forest Park, Georgia 30050
W. C. Howell,
Contracting Officer
 ^{55}Fe .
494. U. S. Army Ordnance Arsenal
Detroit
28251 Van Dyke Avenue
Center Line, Michigan
Michael J. Ceruenak
 ^{14}C .
495. U. S. Army
Fitzsimons General Hospital
Denver, Colorado 80240
Ora Lee Brown
 ^{45}Ca , ^{89}Sr , ^{133}Xe .
496. U. S. Army
Fort Knox, Kentucky
William J. Mahanna
 ^{32}P .
497. U. S. Army
Frankford Arsenal
Bridge and Tacony Streets
Philadelphia 37, Pennsylvania
Emily E. Fisher
 ^{85}Kr , ^{32}P .

498. U. S. Army
Lexington Army Depot
Lexington, Kentucky
Philip G. Jackson
 ^{55}Fe .
499. U. S. Army
Fort McClellan, Alabama
Mary W. Kirk
 ^{76}As , ^{198}Au , ^{181}Hf , ^{140}La ,
 ^{32}P , ^{186}Re , ^{86}Rb , ^{153}Sm .
500. U. S. Army.
Natick, Massachusetts
Violet W. Bezokas
 ^{32}P .
501. U. S. Army
Picatinny Arsenal
Dover, New Jersey
R. Hachadoorian
 ^{125}Sb .
502. U. S. Army
Rock Island Arsenal
Rock Island, Illinois
61202
Ralph G. Gerdes
 ^{59}Fe .
503. U. S. Army Support Center,
St. Louis, Missouri
Myrtle E. Hilton
 ^{124}Sb , ^{114}In , ^{46}Sc .
504. U. S. Army Tank-Automotive
Center
28251 Van Dyke Avenue
Warren, Michigan 48090
J. C. Worek,
Contracting Officer
 ^{99}Tc .
505. U. S. Army, West Point
West Point, New York
F. A. Childs
 ^{144}Ce .
506. U. S. Atomic Energy
Commission
New Brunswick Laboratory
Jersey Avenue
New Brunswick, New Jersey
C. J. Rodden
 $^{152-154}\text{Eu}$.
507. U. S. Atomic Energy
Commission
New York Operations Office
376 Hudson Street
Bay K, King St., Fifth Floor
New York, New York 10014
John H. Harley
 ^{124}Sb , ^{107}Sb , ^{133}Ba , ^{45}Ca , ^{51}Cr , ^{58}Co , ^{59}Fe , ^{203}Hg , ^{95}Nb , ^{32}P ,
 ^{42}K , ^{110}Ag , ^{89}Sr , ^{90}Sr , ^{35}S ,
 ^{113}Sn , ^{95}Zr .
508. U. S. Atomic Energy
Commission
Oak Ridge, Tennessee
 ^{82}Br , ^{60}Co , ^{90}Sr , ^{204}Tl .
509. U. S. Dept. of Agriculture
Soil and Water Conservation
Res.
Plant Industry Station
Beltsville, Maryland
E. L. Marshall
 ^{82}Br , ^{45}Ca , ^{14}C , ^{134}Cs , ^{36}Cl ,
 ^{58}Co , ^{60}Co , ^{64}Cu , ^{198}Au , ^{131}I , ^{55}Fe ,
 ^{59}Fe , ^{99}Mo , ^{32}P , ^{42}K , ^{86}Rb ,
 ^{106}Ru , ^{46}Sc , ^{75}Se , ^{110}Ag , ^{24}Na ,
 ^{85}Sr , ^{204}Tl , ^{65}Zn .
510. U. S. Dept. of Agriculture
Plum Island Animal Diseases
Lab.
Orient Point, New York
R. A. Pledger
 ^{60}Co (B).
511. U. S. Dept. of Agriculture
Animal Disease Eradication Div.
Moore Air Force Base
Mission, Texas
Dr. S. C. Gartman
 ^{60}Co (B).

512. U. S. Dept. of Commerce
National Bureau of Standards
Washington 25, D. C.
C. B. Kipps
 ^{210}Po (M).
513. U. S. Dept. of Interior
Bureau of Mines
Box 10085
Amarillo, Texas 79106
P. R. Davis
 ^{115}Cd , ^{45}Ca , ^{144}Ce , ^{137}Cs ,
 ^{51}Cr , ^{60}Co , ^{198}Au , ^{114}In ,
 ^{99}Mo , ^{95}Nb , ^{32}P , ^{42}K , ^{147}Pm ,
 ^{86}Rb , ^{106}Ru , ^{85}Sr , ^{182}Ta ,
 ^{170}Tm , ^{113}Sn , ^3H , ^{185}W , ^{65}Zn ,
 ^{95}Zr .
514. U. S. Food and Drug Admin-
istration
South Agriculture Building
12th and C Streets, S.W.
Washington, D. C.
Edwin P. Lang
 ^{140}Ba , ^{45}Ca , ^{144}Ce , ^{137}Cs , ^{51}Cr ,
 ^{59}Fe , ^{203}Hg , ^{99}Mo , ^{147}Nd ,
 ^{32}P , ^{106}Ru , ^{90}Sr , ^{91}Y , ^{65}Zn ,
 ^{95}Zr .
515. U. S. National Aeronautics
Space Administration
Ames Research Center
Moffett Field, California
94035
J. C. Delaney
 ^{60}Co , ^{198}Au , ^{55}Fe , ^{59}Fe ,
 ^{32}P , ^{89}Sr , ^{35}S , ^{185}W , ^{95}Zr .
516. U. S. Navy
Bureau of Ships
Washington 25, D. C.
E. E. Linehan
 ^{137}Cs .
517. U. S. Navy
Mare Island Naval Shipyard
Vallejo, California
G. E. Jennings
 ^{140}Ba , ^{181}Hf , ^{192}Ir .
518. U. S. Navy
National Naval Medical Center
Bethesda 14, Maryland
C. P. Armstrong
 ^{124}Sb , ^{76}As , ^{140}Ba , ^{45}Ca ,
 ^{36}Cl , ^{51}Cr , ^{60}Co , ^{64}Cu , ^{198}Au ,
 ^{131}I , ^{59}Fe , ^{197}Hg , ^{99}Mo , ^{32}P ,
 ^{42}K , ^{24}Na , ^{89}Sr , ^{35}S , ^{204}Tl ,
 ^{65}Zn .
519. U. S. Navy
Naval Air Development Center
Johnsville, Pennsylvania
G. F. Argetsinger
 ^{32}P .
520. U. S. Navy
Naval Civil Engineering Lab.
Port Hueneme, California
F. W. Brown, 111, RSO
 ^{140}Ba , ^{134}Cs .
521. U. S. Navy
Naval Explosive Ordnance
Disposal Technical Center
Indian Head, Maryland
K. P. Haus, LTJG
 ^{140}Ba , ^{86}Rb .
522. U. S. Navy
Naval Ordnance Laboratory
White Oak
Silver Spring, Maryland
Lt. H. P. Kaus
 ^{140}Ba , ^{140}La , ^{24}Na .
523. U. S. Navy
Naval Postgraduate School
Monterey, California
CW04 D. W. Silver,
Asst. Supply Officer
 ^{131}I .
524. U. S. Navy
Naval Radiological Defense Lab.
San Francisco, California
94135
A. E. Cozby

- ^{124}Sb , ^{140}Ba , ^{109}Cd , ^{115}Cd ,
 ^{45}Ca , ^{144}Ce , ^{137}Cs , ^{51}Cr ,
 ^{60}Co , ^{198}Au , ^{114}In , ^{131}I ,
 ^{132}I (B), ^{59}Fe , ^{203}Hg , ^{99}Mo ,
 ^{147}Nd , ^{95}Nb , ^{109}Pd , ^{32}P ,
 ^{42}K , ^{186}Re , ^{86}Rb , ^{106}Ru , ^{46}Sc ,
 ^{110}Ag , ^{24}Na , ^{85}Sr , ^{89}Sr , ^{90}Sr ,
 ^{35}S , ^{99}Tc , ^{132}Te (B), ^{113}Sn ,
 ^3H , ^{91}Y , ^{65}Zn , ^{95}Zr .
525. U. S. Navy
 Naval Research Laboratory
 Washington, D. C. 20390
 C. A. Clefton
 ^{137}Cs , ^{60}Co , ^{181}Hf , ^{55}Fe ,
 ^{32}P , ^{110}Ag , ^3H .
526. U. S. Navy
 Naval Submarine Base
 New London, Code 527A
 Groton, Connecticut
 E. M. Haag
 ^{131}I
527. U. S. Navy
 New York Naval Shipyard
 U. S. Naval Applied Science
 Lab.
 Brooklyn, New York 11251
 D. Gerard
 ^{32}P , ^{35}S .
528. U. S. Nuclear Corporation
 P. O. Box 208
 Burbank, California
 P. K. Schaich
 ^{133}Ra , ^{140}Ba , ^{82}Br , ^{109}Cd ,
 ^{45}Ca , ^{137}Cs , ^{130}I , ^{192}Ir ,
 ^{55}Fe , ^{59}Fe , ^{63}Ni , ^{106}Ru ,
 ^{46}Sc , ^{75}Se , ^{110}Ag , ^{89}Sr ,
 ^{204}Tl , ^3H , ^{133}Xe .
 S. M. Pilcher
 ^{210}Po (M).
529. U. S. Public Health Services
 255 E. Paces Ferry Road, N.E.
 Atlanta 5, Georgia
 James S. Paine
 ^{14}C .
530. U. S. Public Health Service
 77 Warren Street
 Brighton 35, Massachusetts
 W. G. Christie
 ^{140}Ba , ^{144}Ce , ^{134}Cs , ^{51}Cr ,
 ^{131}I , ^{103}Ru , ^{95}Zr .
531. U. S. Public Health Service
 330 Independence Avenue, S.W.
 Washington 25, D. C.
 Ada L. Conway
 ^{32}P , ^{85}Sr , ^{89}Sr , ^{90}Y .
532. U. S. Public Health Service
 P. O. Box 684
 4505 Maryland Parkway
 Las Vegas, Nevada 89101
 Norma Cox
 ^{140}Ba , ^{137}Cs , ^{60}Co , ^{131}I ,
 ^{85}Sr , ^{132}Te (B), ^{133}Xe ,
 ^{95}Zr .
533. U. S. Public Health Service
 P. O. Box 61
 Montgomery, Alabama 36101
 ^{137}Cs , ^{186}Re , ^{106}Ru , ^{85}Sr .
534. U. S. Public Health Service
 Robt. A. Taft San. Eng. Center
 4676 Columbia Parkway
 Cincinnati, Ohio 45226
 Henry C. Miller,
 Asst. Supply Officer
 ^{140}Ba , ^{58}Co , ^{60}Co , ^{131}I ,
 ^{63}Ni , ^{24}Na , ^{85}Sr , ^{89}Sr ,
 ^{90}Sr , ^{132}Te (B), ^{170}Tm ,
 ^{185}W , ^{91}Y .
535. U. S. Public Health Service
 Rocky Mountain Laboratory
 Hamilton, Montana
 Ben E. Anderson
 ^{32}P .
536. U. S. Public Health Service
 National Institutes of Health
 Bethesda, Maryland
 Joseph F. Hoffman
 ^{67}Cu (B), ^{42}K , ^{24}Na (B).

537. U. S. Public Health Service
National Institutes of Health
Baltimore City Hospitals
Baltimore 24, Maryland
E. W. High
 ^{124}Sb , ^{82}Br , ^{45}Ca , ^{47}Ca , ^{36}Cl ,
 ^{60}Co , ^{64}Cu , ^{198}Au , ^{125}I ,
 ^{131}I , ^{59}Fe , ^{85}Kr , ^{99}Mo , ^{32}P ,
 ^{188}Re , ^{86}Rb , ^{75}Se , ^{24}Na , ^{85}Sr ,
 ^{88}Sr , ^{35}S , ^{133}Xe .
538. U. S. Public Health Service
Hospital
15th Ave. and Lake Street
San Francisco, California
Dr. Kenneth H. Hyatt
 ^{28}Mg (B).
533. U. S. Radium Corporation
4150 Old Berwick Road
P. O. Box 380
Bloomsburg, Pennsylvania
J. G. MacHutchen
 ^{14}C , ^{137}Cs , ^{85}Kr , ^{63}Ni ,
 ^{147}Pm , ^{106}Ru , ^{90}Sr , ^{204}Tl ,
 ^3H , ^{241}Am .
J. F. Stauffer
 ^{210}Po (M).
540. The Upjohn Company
301 Henrietta Street
Kalamazoo, Michigan
D. B. Gauss
 ^{14}C , ^{32}P , ^{24}Na , ^{35}S , ^3H .
541. Utah State Agriculture
College
Logan, Utah
L. Jay Smith
 ^{14}C , ^{65}Zn .
542. Utah, University of
Purchasing Department
Salt Lake City 12, Utah
Robert C. Pendleton
 ^{133}Ba , ^{45}Ca , ^{36}Cl , ^{131}I ,
 ^{59}Fe , ^{32}P , ^{42}K , ^{89}Sr , ^{90}Sr ,
 ^{35}S , ^{185}W , ^{95}Zr .
543. Vanderbilt University
Business Manager's Office
Nashville 5, Tennessee
June Jenkins
 ^{140}Ba , ^{137}Cs , ^{51}Cr , ^{58}Co , ^{60}Co ,
 ^{59}Fe , ^{42}K , ^{103}Ru , ^{85}Sr , ^{65}Zn .
544. Vassar College
Purchasing Department
Poughkeepsie, New York
Horace M. Devine,
Purchasing Dept.
 ^{198}Au , ^{131}I , ^{32}P .
545. Veterans Administration Hospital
2215 Fuller Road
Ann Arbor, Michigan 48105
Charles T. Knorrpp
 ^{99}Mo .
546. Veterans Administration Hospital
150 South Huntington Avenue
Boston 30, Massachusetts
John Tobin, Supply Officer
 ^{55}Fe , ^{35}S .
547. Veterans Administration Hospital
130 West Kingsbridge Road
Bronx 68, New York
J. S. Santroni,
Procurement Agent
 ^{131}I .
548. Veterans Administration Hospital
7300 York Road
Cleveland, Ohio
Florence E. Stewart,
Asst. Chief, Purch.
 ^{131}I .
549. Veterans Administration Hospital
1200 Anastasia Avenue
Coral Gables, Florida
Dr. Frank Gollan, Chief
Radioisotope Sect.
 ^{45}Ca , ^{85}Kr , ^{24}Na , ^{133}Xe .

550. Veterans Administration
Hospital
4500 S. Lancaster Road
Dallas 16, Texas
Wm. J. Leonard, Chief
Purch.
 ^{131}I , ^{32}P .
551. Veterans Administration
Hospital
1055 Clermont Street
Denver 20, Colorado
Lee A. Beebe,
Chief Purch.
 ^{131}I , ^{85}Kr .
552. Veterans Administration
Hospital
Fulton Street and Erwin Rd.
Durham, North Carolina
Henry Kamin
 ^{35}S .
553. Veterans Administration
Hospital
Ft. Howard, Maryland 21052
Anne M. Albrecht,
Chief Purch.
 ^{133}Ba , ^{91}Y .
554. Veterans Administration
Hospital
Hines, Illinois
Walter S. Kopacz
32p
555. Veterans Administration
Hospital
1481 West Tenth Street
Indianapolis, Indiana
46207
Paul D. Dwenger
 ^{134}Cs , ^{42}K .
556. Veterans Administration
Hospital
Iowa City, Iowa
Robert W. Matson
 ^{82}Br , ^{203}Hg , ^{42}K , ^{24}Na .
557. Veterans Administration
Hospital
300 E. Roosevelt Road
Little Rock, Arkansas 72206
N. R. Shirley
 ^{82}Br , ^{131}I , ^{24}Na .
558. Veterans Administration
Hospital
5901 East Seventh Street
Long Beach, California
Dr. Ralph Bodfish
 ^{75}Se .
559. Veterans Administration
Center
Wilshire and Sawtelle Blvds.
Los Angeles 25, California
George O. Hadley
 ^{82}Br , ^{203}Hg .
560. Veterans Administration
Hospital
Zorn and Mellwood Avenues
Louisville, Kentucky
Q. A. Sims
 ^{75}Se .
561. Veterans Administration
Center
Martinsburg, West Virginia
B. G. Stotier
 ^{131}I .
562. Veteran's Administration
Hospital
54th Street and 48th Ave., S.
Minneapolis' 17, Minnesota
M. L. Novitzki
 ^{197}Hg .
563. Veterans Administration
Hospital
1310 24th Avenue South
Nashville 12, Tennessee
 ^{35}S .

564. Veterans Administration
Hospital
1601 Perdido Street
New Orleans, Louisiana 70140
W. W. Knight
 ^{24}Na .
565. Veterans Administration
Hospital
First Ave. at East 24th St.
New York 10, New York
Thomas W. Hopkins
 ^{130}I , ^{42}K (B), ^{35}S .
566. Veterans Administration
Hospital
4101 Woolworth Avenue
Omaha, Nebraska 68105
Richard E. Ogborn
 ^{14}C , ^3H .
567. Veterans Administration
Hospital
Oteen, North Carolina
Walter Radcliff, Jr.
 ^{45}Ca .
568. Veterans Administration
Hospital
University and Woodland
Avenues
Philadelphia 4, Pennsylvania
A. J. Bouio, Purch. Agent
 ^{45}Ca .
569. Veterans Administration
Hospital
Richmond, Virginia 23225
D. G. Ketcham
 ^{133}Xe .
570. Veterans Administration
Hospital
915 North Grand Avenue
St. Louis 6, Missouri
W. Donnelly
 ^{115}Cd , ^{86}Rb .
571. Veterans Administration
Hospital
4435 Beacon Avenue South
Seattle, Washington 98108
Davis K. Hirahara
 ^{45}Ca , ^{131}I .
572. Veterans Administration
Hospital
Sepulveda, California
V. W. Odom
 ^{32}P .
573. Veterans Administration
Center
Wood, Wisconsin
R. E. Franks
 ^{85}Sr , $^{99\text{m}}\text{Tc}$ (B).
574. Victoreen Instrument Company
5806 Hough Avenue
Cleveland 3, Ohio
Vernon Gittery
 ^{63}Ni .
575. Virginia Agric. Experiment
Station
Purchasing Department
Blacksburg, Virginia
R. R. Schmidt
 ^{32}P , ^{35}S .
576. Virginia Polytechnic Institute
Purchasing Department
Blacksburg, Virginia
H. W. Swink, Purch. Agent
 ^{131}I , ^{32}P , ^{35}S .
577. Virginia, University of
Purchasing Department
Charlottesville, Virginia
A. Ried Elder
 ^{45}Ca , ^{51}Cr , ^{64}Cu , ^{63}Ni , ^{32}P ,
 ^{42}K , ^{110}Ag , ^{85}Sr , ^{35}S , ^3H .

578. Volk Radiochemical Company
8260 Elmwood Avenue
Skokie, Illinois
Andrew S. Korin
 ^{134}Cs , ^{36}Cl , ^{60}Co , ^{59}Fe ,
 ^{203}Hg , ^{35}S , ^{185}W , ^{65}Zn .
579. Wabash College
Purchasing Department
Crawfordsville, Indiana
R. O. Petly
 ^{32}P , ^{89}Sr .
580. Warner-Lambert Research
Institute
170 Tabor Road
Morris Plains, New Jersey
E. J. Merrill
 ^{131}I , ^{86}Rb .
581. Washington State University
Comptroller's Office
Pullman, Washington
Robert B. Smawley, Buyer
 ^{45}Ca , ^{60}Co , ^{203}Hg , ^{32}P , ^{86}Rb ,
 ^{35}S , ^{65}Zn .
582. Washington, University of
Purchasing Department
400 Administration Bldg.
Seattle 5, Washington
Vance A. Sichler
 ^{133}Ba , ^{140}Ba , ^{45}Ca , ^{47}Ca ,
 ^{14}C , ^{134}Cs , ^{137}Cs , ^{51}Cr ,
 ^{60}Co , ^{125}I , ^{131}I , ^{59}Fe , ^{32}P ,
 ^{42}K , ^{147}Pm , ^{86}Rb , ^{106}Ru ,
 ^{153}Sm , ^{75}Se , ^{110}Ag , ^{111}Ag ,
 ^{24}Na , ^{85}Sr , ^{90}Sr , ^{35}S ,
 $^{99\text{m}}\text{Tc}$ (B), ^{204}Tl , ^{65}Zn .
583. Washington University
Business Office
Lindell and Skinker
St. Louis 30, Missouri
A. C. Wahl
 ^{45}Ca , ^{114}In , ^{130}I , ^{131}I ,
 ^{59}Fe , ^{32}P , ^{143}Pr , ^{86}Rb ,
 ^{110}Ag , ^{89}Sr , ^{35}S , ^{113}Sn ,
 ^{185}W , ^{95}Zr .
584. Wayne State University
Accounting Department
Detroit, Michigan 48202
Peter Grayson
 ^{82}Br , ^{115}Cd , ^{45}Ca , ^{51}Cr ,
 $^{152-154}\text{Eu}$, ^{129}I , ^{131}I , $^{55-59}\text{Fe}$,
 ^{59}Fe , ^{99}Mo , ^{32}P , ^{147}Pm ,
 ^{46}Sc , ^{89}Sr , ^{90}Sr , ^{35}S , ^{99}Tc ,
 ^{113}Sn .
585. Weld-Ray, Inc.
P. O. Box 276
Bowling Green, Ohio
James R. Sapp, Pres.
 ^{192}Ir .
586. Western Electric Co., Inc.
100 Central Avenue
Kearny, New Jersey
A. A. Anderson
 ^{137}Cs , ^{85}Kr .
587. Western Michigan University
Purchasing Department
Kalamazoo, Michigan
George E. Bradley
 ^{122}Sb , ^{60}Co , ^{210}Po (M).
588. Western Radiation Laboratory
1107 West 24th Street
Los Angeles 7, California
Gordon L. Locher, Owner
 ^{85}Kr , ^{32}P , ^{106}Ru , ^{89}Sr .
589. Western Reserve University
2220 Cummington Road
Cleveland 6, Ohio
Hugh D. Pallister
 ^{47}Ca , ^{134}Cs , ^{36}Cl , ^{51}Cr ,
 ^{131}I , ^{59}Fe , ^{85}Kr , ^{32}P , ^{42}K ,
 ^{86}Rb , ^{24}Na , ^{85}Sr , ^{35}S , ^{170}Tm ,
 ^{91}Y , ^{65}Zn .
590. Westinghouse Electric Corp.
Atomic Power Division
P. O. Box 355
Pittsburgh 30, Pennsylvania
W. P. Sipe
 ^{64}Cu , ^{85}Kr , ^{32}P , ^{42}K , ^{147}Pm ,
 ^{311}I , ^{91}Y .

591. West Virginia University
Purchasing, Adm. Bldg.
Morgantown, West Virginia
Dr. Homer Patrick
 ^{76}As , ^{45}Ca , ^{28}Mg (B), ^{32}P ,
 ^{75}Se , ^{35}S , ^3H .
592. Weyerhaeuser Company
Sulphite Mill
Everett, Washington
R. M. Inkster
 ^{32}P .
593. Wheaton College
501 E. Seminary Avenue
Wheaton, Illinois
George E. Bate
 ^{131}I , ^{32}P , ^{35}S , ^{204}Tl .
594. Will Rogers Memorial Hospital
Saranac Lake, New York
Stanton M. Osgood
 ^{32}P .
595. William H. Johnston Labs.,
Inc.
3617 Woodland Avenue
Baltimore 15, Maryland
William F. Keys
 ^{131}I .
596. Wills Eye Hospital
1601 Spring Garden Street
Philadelphia 30, Pennsylvania
Dr. T. W. Sery
 ^{32}P , ^{110}Ag .
597. Wilmington College
Wilmington, Ohio
Harry H. Johnson
 ^{32}P .
598. Wisconsin, University of
428 North Murray Street
Madison, Wisconsin 53706
R. L. Fransworth
 ^{45}Ca , ^{14}C , ^{64}Cu , ^{125}I , ^{129}I ,
 ^{131}I , ^{28}Mg (B), ^{32}P , ^{42}K , ^{75}Se ,
 ^{35}S , ^{99}Tc , ^3H , ^{65}Zn .
599. Woods Hole Oceanographic Inst.
Woods Hole, Massachusetts
Delmar L. Jenkins
 ^{124}Sb , ^{140}Ba , ^{14}C , ^{32}P , ^{35}S .
600. Worcester Foundation for
Experimental Biology
222 Maple Avenue
Shrewsbury, Massachusetts
Irving E. Washburn
 ^3H .
601. Wyandotte Chemical Corp.
Accounts Payable Dept.
Wyandotte, Michigan
H. H. Devereaux
 ^{45}Ca , ^{32}P , ^{35}S .
602. Yale University
20 Ashmun Street
New Haven, Connecticut
R. H. Coe, Buyer
 ^{124}Sb , ^{131}Ba , ^{133}Ba , ^{140}Ba ,
 ^{109}Cd , ^{45}Ca , ^{134}Cs , ^{137}Cs , ^{36}Cl ,
 ^{51}Cr , ^{60}Co , $^{152-154}\text{Eu}$, ^{114}In ,
 ^{125}I , ^{131}I , ^{55}Fe , ^{59}Fe , ^{85}Kr ,
 ^{203}Hg , ^{109}Pd , ^{32}P , ^{42}K , ^{85}Sr ,
 ^{89}Sr , ^{35}S , ^{113}Sn , ^{90}Y , ^{65}Zn ,
 ^{95}Zr .
603. Yardney International Corp.
50 Leonard Street
New York 13, New York
Leonard Katz
 ^{131}I
604. Yeshiva University
Albert Einstein College of Med.
110 West 57th Street
New York 19, New York
J. S. Perlestein
 ^{45}Ca , ^{131}I , ^{32}P , ^{35}S .
- Note: Since ORNL (see no. 341) distrib-
utes isotopes "in-house," these
are listed separately.
 ^{241}Am , ^{140}Ba , ^{14}C , ^{144}Ce , ^{137}Cs ,
 ^{60}Co , ^{155}Eu , ^{129}I , ^{131}I , ^{192}Ir ,
 ^{85}Kr , ^{147}Nd , ^{95}Nb , ^{147}Pm , ^{103}Ru ,
 ^{106}Ru , ^{89}Sr , ^{99}Tc , ^{135}Xe , ^{91}Y ,
 ^{95}Zr , fission products.

B. FOREIGNArgentina

605. Comision Nacional de Energia Atomica
(Gerencia de Energia)
Avda. del Libertador 8250
Buenos Aires, Argentina
Enrique J. Donadei
 ^{45}Ca , ^{47}Ca , ^{144}Ce , ^{137}Cs ,
 ^{86}Rb , ^{106}Ru , ^{85}Sr , ^{95}Zr .

Australia

606. Consul General
Australian Consulate General
636 Fifth Avenue
New York 20, New York
J. J. Slade
 ^{45}Ca , ^{59}Fe , ^{63}Ni , ^{89}Sr ,
 ^{35}S , ^{99}Tc , ^3H .

Austria

607. Institut fur Radiumforschung
der Oest. Akademik der
Wissenschaftler
Boltzmannngasse 3
Wien IX, Austria
Dr. A. Saulich
 ^{147}Pm , ^{90}Sr .
608. International Atomic Energy
Agency
Kaerntnerring 11-13
Vienna I, Austria
M. Mutru
 ^{133}Ba , ^{32}P , ^{89}Sr .

Belgium

609. M.B.L.E.
80, rue des Deux Gares
Brussels-7, Belgium
M. Nihant
 $^{137}\text{CsBa}$, ^{59}Fe .

610. Centre d'Etude de l'Energie
Nucleaire
31, rue Bellaïrd
Bruxelles, Belgium
R. Constant
 ^{37}Ar , ^{36}Cl , ^{129}I , ^{59}Fe , ^{85}Kr ,
 ^{85}Sr , ^{204}Tl , ^3H , ^{133}Xe .

611. Euratom
51, rue Bellaïrd
Bruxelles, Belgium
Mr. R. K. Applegard
 $^{144}\text{CePr}$, $^{106}\text{RuRh}$.

Canada

612. Alberta, University of
Purchasing Department
Calgary, Alberta, Canada
N. J. Klingspon
 ^{24}Na .
613. Atomic Energy of Canada Ltd.
Commercial Products Division
P. O. Box 93
Ottawa, Ontario, Canada
R. P. Slattery, Purchasing
 ^{243}Am , ^{37}Ar , ^{140}Ba , ^{45}Ca ,
 $^{144}\text{CePr}$, ^{137}Cs , ^{51}Cr , ^{59}Fe ,
 ^{197}Hg , ^{203}Hg , ^{99}Mo , ^{63}Ni , ^{95}Nb ,
 ^{86}Rb , ^{103}Ru , ^{106}Ru , ^{89}Sr , ^{99}Tc ,
 ^{204}Tl , ^{113}Sn , ^3H , ^{95}Zr , fission
products.
614. British Columbia, University of
Purchasing Department
Vancouver 8, B.C., Canada
Dr. Harold Cupp
 ^{85}Sr .
615. Canada Dept. of Agriculture
Experimental Farm
Indian Head, Saskatchewan, Canada
J. Roe Foster, Supt.
 ^{32}P .

616. Canada Dept. of Agriculture
Research Branch
Lacombe, Alberta, Canada
Dr. H. Doornenbal
 ^{133}Ba .
617. Charles E. Frosst and
Company
P. O. Box 247
Montreal, Quebec, Canada
J. Stevans
 ^{59}Fe , ^{86}Rb , ^{85}Sr .
618. McGill University
Physiology Dept
Biology Bldg.
Montreal 2, Quebec, Canada
J. V. Milligan
 ^{45}Ca .
629. McMaster University
Hamilton, Ontario, Canada
Dr. R. H. Tomlinson
 ^{129}I , ^{59}Fe , ^{63}Ni , ^{151}Sm .
620. Manitoba, University of
Comptroller's Office
Winnipeg, Manitoba, Canada
Dr. R. D. Conner
 ^{131}Ba , ^{109}Cd , ^{141}Ce ,
 $^{137}\text{CsBa}$, ^{51}Cr , ^{60}Co , ^{198}Au ,
 ^{59}Fe , ^{32}P , ^{75}Se , ^{113}Sn ,
 ^{133}Xe , $^{95}\text{ZrNb}$.
621. Montreal General Hospital
1625 Pine Avenue
Montreal 25, Quebec, Canada
Mr. Zahula
 ^{64}Cu , ^{85}Kr .
622. National Research Council
Div. of Applied Physics
Montreal Road Laboratories
Ottawa, Canada
G. A. Hughes
 ^{134}Cs , ^{51}Cr , ^{95}Nb , ^{89}Sr ,
 ^{90}SrY .
623. Ontario Agricultural College
Dept. of Soil Science
Guelph, Ontario, Canada
Dr. B. C. Mathews
 ^{32}P , ^{86}Rb .
624. Ontario Dept. of Health
Industrial Hygiene Dept.
360 Christie Street
Toronto 4, Ontario, Canada
E. O. Bratlen
 ^{45}Ca , ^{85}Sr .
625. Ontario Veterinary College
Guelph, Ontario, Canada
Dr. G. A. Robinson
 ^{99}Mo (B), $^{99\text{m}}\text{Tc}$ (B).
626. Queens University
Etherington Hall
Kingston, Ontario, Canada
Dr. J. O. Parker
 ^{85}Kr .
627. Saskatchewan, University of
Purchasing Department
Saskatoon, Saskatchewan
Canada
Thomas Smith
 ^{32}P , ^{85}Sr , ^{89}Sr , ^{170}Tm .
628. Toronto, University of
Chief Accountant's Office
Simcoe Hall
Toronto 5, Ontario, Canada
A. Stite
 ^{51}Cr , ^{203}Hg .
- Chile
629. Chile, Universidad de
Instituto de Fisica y
Matematicas-
Blanco Encalada 2008
Casilla 2777
Santiago, Chile
Jacobo Rapaport Tirk
 ^{51}Cr , ^{59}Fe , ^{86}Rb , ^{3}HZr .

China

630. Chinese Government Procurement and Services Mission
Div. for Taiwan Sugar Corp.
50 Church Street
New York 7, New York
Sandys Bao, Dir.
32p, ^{86}Rb , ^{89}Sr , ^{35}S .

631. National Tsing Hua University
110 Chin Hua Street
Taipei, Taiwan
Ko-Chung Chen
HZr-T-2.

Columbia

632. Instituto de Asuntos Nucleares
Apartado Aereo No. 8595
Bogota, Columbia, S.A.
also
(Industria Colombiana de Fertilizantes S.A.
Apartado Aereo 7096
Bogota, D.E., Colombia)
Tulpo A. Marulanda

32p.

Costa Rica

633. Radioisotopes Laboratory
I.I.C.A.
Turrialba, Costa Rica
Carl C. Mh
 ^{14}C , ^{59}Fe , ^{32}P , ^{35}S .

Denmark

634. Atomic Energy Commission
Research Establishment Riso
Roskilde, Denmark
K. Heydorn
 ^{89}Sr , ^{35}S .

Egypt

635. Middle Eastern Regional Radioisotope Center
Sh Malach El Gamaa
Dokki, Cairo, Egypt
Dr. I. B. Hazzaa
32p.

France

636. C.E.A. New York Office
972 Fifth Avenue
New York 21, New York
P. de Bellaigue, Dir.
 ^{45}Ca , ^{144}Ce , ^{60}Co , ^{59}Fe ,
 ^{95}Nb , ^{147}Pm , $^{106}\text{RuRh}$,
 ^{85}Sr , ^{90}Sr , ^3H , U.

637. C.N.R.S., Bureau 1/C
13 Quai Anatole France
Paris, France
M. Roques
 ^{38}Ar (B).

638. French Atomic Energy Commission
Boite Postale No. 2
Gif-sur-Yvette (S. and O.)
France
Kellershohn
 ^{28}Mg (B).

639. Groupment d'importation des Produits Pharmaceutiques
46 Rue de Turbigo
Paris (IIIe), France
Dr. Gest
 ^{85}Sr .

640. Institut Francais Du Petrole
1 and 4 Avenue de Bois Preau
Rue 11 Malmarson Seine and Oise), France
P. Simandoux
 ^{147}Pm

641. Institut Pasteur
25, rue du Docteur Roux
Paris 15eme, France
 ^{45}Ca .
642. Jonemann, E.T.S.
52/54 Rue Requit
Paris 19°, France
 ^{38}Ar (B).
643. Laboratories Lumina
19 Rue Henri-Martin
Colombes (Seine), France
M. Bernard
 ^3H .
Germany
644. American Holchst Corp.
777 Third Avenue
New York 1, New York
Ann R. Welch
 $^{140}\text{BaLa}$, ^{45}Ca , ^{51}Cr , ^{181}Hf ,
 ^{59}Fe , ^{75}Se , ^{204}Tl .
645. Buchler and Company
Verkaufsburo Frankfurt/Main
Vom. Radium-Chemie
Dr. V. Gorup KG
Frankfurt/Main, Untermainkai
34
Germany
Dr. W. Gorup
 ^{37}Ar , $^{140}\text{BaLa}$, ^{45}Ca , ^{14}C ,
 ^{137}Cs , ^{60}Co , ^{59}Fe , ^{237}Np ,
 ^{147}Pm , ^{75}Se , ^{89}Sr , ^{90}Sr ,
 ^{182}Ta .
646. Gesellschaft Fur Kernfor-
schung
MBH Karlsruhe, West Germany
 ^{244}Cm , ^{181}Hf , ^{95}Nb , ^{90}Sr ,
 ^{113}Sn , U.
647. Institut fur Strahlen
U. Kernphysik d. Techn.
Hochschule Darmstadt
61 Darmstadt, Schlossgartenstr. 9
Germany
Dr. Wien
 ^{133}Ba , ^{149}Eu , ^{174}Lu .
648. Isotopen-Laboratorium
Harffstr-148
Dusseldorf Eller
West Germany
Dr. Sauerwein
 ^{99}Tc .
649. Kernreaktor-Bau-u. Betriebs GmbH
Finanzabteilung
Postfach 947
Karlsruhe, Germany
J. K. Nesselmann
 ^{37}Ar .
650. Laboratorium fur Technische
Physik
der Technischen Hochschule
Munchen
8 Munchen 2
Germany
Prof. N. Riehl
 ^{171}Lu .
651. W. Maier KG
Postfach (P.O.B.) 126
722 Schwenningen a.N.
West Germany
W. Maier
 ^{147}Pm
- 651a. Siemens-Reiniger-Werke
Aktiengesellschaft
8520 Erlanger, Germany
 ^{137}Cs .
652. Max-Planck Institut fur
Biologie
Corrensstr. 38
74 Tubingen, Germany
J. H. Mattaei
 ^{14}C .

653. Physikalisches Institut
der Universität Heidelberg
Philosophenweg 12
Heidelberg, Germany
IX. H. Leutz
 ^{202}Tl
654. Physiologisch-Chemisches
Institut
der Universität Hamburg
Hamburg, (Fuhlsbüttel)
Germany
Dr. Heinrich
 ^{59}Fe .
655. Osram GmbH Einkauf
Ernst-Reuter-Platz 8
Berlin-Charlottenburg 1
Germany
 ^{85}Kr .
656. Uranerz-Verwertung
Rudolf Wickmann
2 Hamburg 36, Jungfernstieg 30
Germany
 ^{147}Pm
- Great Britain
657. Postgraduate Medical School
Duncane Road
London W.12, England
Professor Fowler
 ^{47}Ca .
658. Saunders-Roe and Nuclear
Enterprises, Ltd.
North Hyde Road
Hayes, Middlesex, England
J. R. Sutcliffe
 ^3H .
659. Special Materials Store
AERE, Narwell
Didcot, Berkshire, England
M. H. Woods
 ^{252}Cf , ^{237}Np .
660. United Kingdom Treasury and
Supply Delegation
25 Broadway
New York 4, New York
Norman Taylor
 ^{241}Am , ^{125}Sb , ^{74}As , ^{133}Ba ,
 ^{140}Ba , ^7Be , ^{207}Bi , ^{109}Cd ,
 ^{144}Ce , ^{137}Cs , ^{36}Cl , ^{57}Co ,
 ^{68}Ge , ^{55}Fe , ^{59}Fe , ^{85}Kr , ^{237}Np ,
 ^{95}Nb , ^{210}Po , (M), ^{147}Pm , ^{85}Sr ,
 ^{89}Sr , ^{90}Sr , ^{99}Tc , ^{44}Ti , ^{88}Y ,
 ^{91}Y , ^{95}Zr .
661. Westland Aircraft Ltd.
Fairey Aviation Division
Hayes, Middlesex, England
A. A. Smith
 ^{147}Pm .
- Greece
662. Greek Atomic Energy Commission
5 Merlin Street
Athens, Greece
 ^{32}P .
- India
663. Delhi, University of
Dept. of Physics and Astrophysics
Delhi 6, India
Special irradiation.
664. Electronic Instruments Industries
Parijat, Ashok Marg., "C" Scheme
Jaipur City, India
Mr. B. M. Toshnival
 ^{85}Kr .
665. India, Government of
Atomic Energy Establishment,
Trombay
Mohatta Building
Palton Road
Bombay 1, India
D. Rangarajan
 ^{244}Cm , ^{137}Cs , $^{\text{H}}\text{Zr-T-2}$, ^{147}Pm ,
 ^{99}Tc , ^3H , ^{238}U .

666. Saha Inst. of Nuclear Studies
92 Acharya Prafulla Chandra Road
Calcutta'9, India
M. Rama Rao
Special irradiation.
667. Tata Inst. of Fundamental Research
Holiday Camp, Colaba
Bombay 5, India
 ^{124}Sb , ^{131}Ba , ^{129}I , ^{121}Te ,
 ^{127}Xe .
- Israel
668. Hadussah Medical Org.
P. O. Box 499
Jerusalem, Israel
Mrs. Ruth Stein
 ^{45}Ca .
669. Israel Atomic Energy Commission
Hakiryia, Tel Aviv
Israel
J. Lavi
 ^{115}Cd , ^{36}Cl , ^{129}I , ^{203}Hg ,
 ^{147}Pm , ^3H , ^{65}Zn , fission products .
670. Jerusalem, The Hebrew Univ. of
Jerusalem, Israel
Prof. S. G. Cohen
 ^{36}Cl , ^{59}Fe .
671. Negev Inst. for Arid Zone Research
P. O. Box 1025
Beersheva, Israel
Mr. O. Lapid
 ^{36}Cl .
672. Scientific Counselor
Embassy of Israel
Washington 8, D. C.
J. Lavi
- ^{115}Cd , ^{45}Ca , ^{14}C , ^{36}Cl ,
 ^{51}Cr , ^{55}Fe , ^{59}Fe , ^{203}Hg ,
 ^{63}Ni , ^{46}Sc , ^3H , ^{65}Zn .
673. Yeda Research and Development Co. Ltd.
P. O. Box 26
Rehovoth, Israel
Mr. M. Nathanel
 ^3H .
- Italy
674. Euratom-C.C.R.
Sezione doganale d'Ispra
Ispra (Varese), Italy
Dr. M. James
 ^{137}Cs , ^{59}Fe , ^{203}Hg , ^{147}Pm ,
 ^{85}Sr , ^{89}Sr .
675. Istituto di Fisica Tecnica
Facolta di Ingegneria
Via Eudossiana, 18
Roma, Italy
Bruno Deleeleeh
 ^{147}Pm
676. Istituto di Fisica del Politecnico
P. za L. de Vinci, 32
Milano, Italy
Dr. Bruno De Michelis
 ^{203}Hg .
677. Istituto di Semeiotica Medica
Universita' di Padova
Padova, Italy
Mario Austinio
 ^{59}Fe .
678. Radiochemistry Laboratory
Universita Di Pavia
V. Le Taramelli 12
Pavia, Italy
Mario A. Rollier
 ^{237}Np .

Japan

679. Mitsubishi International Corp.
120 Broadway
New York 5, New York
K. Oka

^{124}Sb , ^{125}Sb , ^{133}Ba , ^{140}Ba ,
 ^{115}Cd , ^{45}Ca , ^{14}C , ^{137}Cs ,
 ^{36}Cl , ^{51}Cr , ^{60}Co , $^{152-154}\text{Eu}$,
 ^{55}Fe , $^{55-59}\text{Fe}$, ^{59}Fe , ^{203}Hg ,
 ^{63}Ni , ^{147}Pm , ^{75}Se , ^{110}Ag ,
 ^{85}Sr , ^{89}Sr , ^{90}Sr , ^{204}Tl ,
 ^{113}Sn , ^3H , ^{185}W , ^{65}Zn , ^{95}Zr .

680. Sumitomo Shoji Kaisha, Ltd.
8-1 Chome, Marunouchi
Chiyoda-Ku
Tokyo, Japan
K. Tsuja
 ^{90}Y (B).

681. Sumitomo Shoji New York, Inc.
149 Broadway
New York, New York 10006
S. T. Nishizaka
 ^{137}Cs , ^{60}Co , ^{85}Kr .

Korea

682. Seoul Atomic Energy Co., Ltd.
16, 2-ka, Chungmu-Ro, Central
i.p.o. Box 1104
Seoul, Korea
Kwon oh Young
 ^{45}Ca , ^{55}Fe , ^{86}Rb .

Mexico

683. Comision Nacional de Energia Nuclear
Mexico 21, D.F.
Dr. Ariel Tejera Rivera
 ^{99}Mo (B).
684. Control de Calidad, S.A.
Obrero, Mundial 556-5
Mexico 12, D.F.
Alberto Martinez
 ^{137}Cs .

685. Hospital de Enfermedades de la Nutricion
Dr. Jimenez 261
Mexico 7, D.F. Mexico
 ^{91}Y .

686. Nuclear, S.A.
Melchor Ocampo 469-605
Mexico 5, D.F. Mexico
Jean Lacombe
 ^{45}Ca , ^{75}Se , ^{204}Tl , ^{91}Y .

687. Siemens Mexicana, S.A.
Vallarta 19, Mexico
Mr. Wilms
 ^{137}Cs .

The Netherlands

688. Inst. for Atomic Sciences in Agriculture
Keyenbergesweg 6
Wageningen, The Netherlands
 ^{85}Sr .

689. Instituut voor Kernfysisch Onderzoek
Oosterringdijk, 18
Amsterdam, Netherlands
J.F.W. Jansen
 ^{237}Np , ^{204}Tl .

690. Laboratory for Mass Separation
407 Kruislaan
Amsterdam, The Netherlands
 ^3H .

691. N. V. Philips-Duphar
Apollolaan 151
Amsterdam (Holland)
The Netherlands
J. J. Arlman
 ^{36}Cl , ^{58}Co , ^{129}I , ^{59}Fe , ^{63}Ni ,
 ^{110}Ag , ^{204}Tl , ^{65}Zn .

692. Rijksingkoopbureau
(Netherlands Govt. Purchasing Office)
55 A Laan Van Meerdervoort
The Hague, Holland
H. Van Krugten
 ^{45}Ca , ^{36}Cl , ^{58}Co , ^{129}I ,
 ^{59}Fe , $^{147}\text{NdPm}$, ^{147}Pm ,
 ^{46}Sc , ^{85}Sr , ^{89}Sr ,
 ^{204}Tl , ^{168}Tm , ^3H .
- New Zealand
693. New Zealand Commercial
Counselor
Association Building
1145 - 19th St., Suite 306
Washington 6, D. C.
G. Brennan
 ^{99}Mo , ^{75}Se , ^{99}Tc .
- Norway
694. Institutt for Atomenergi
P. O. Box 40
Kjeller, Norway
Emil Skjelbred
 ^{204}Tl .
- Pakistan
695. Philips Electrical Co.
of Pakistan, Ltd.
X-Ray and Medical Equip.
Division
Karachi, Pakistan
M. J. Sidoiqui
 ^{59}Fe .
- Peru
696. Dr. Julio Bedoya
Hospital Obrero de Lima
Lima, Peru
 ^{131}I , ^{32}P .
697. Instituto Nacional de
Enfermedades
Neoplasicas
Lima, Peru
Dr. Javier Correa M.
 ^{131}I .
- Philippines
698. Philippine Atomic Energy
Commission
727 Herran Street
Manila, Philippines
Agapito M. Perez
 ^{14}C , ^{51}Cr , ^{63}Ni .
- Portugal
699. Comissao de Estudos de
Energy Nuclear
Laboratorio de Radiometria
e Isotopos
Instituto Superior Technico
Lisboa, Portugal
Americo M. Moreira
 ^{45}Ca , $^{144}\text{CePr}$.
700. Siemens-Reiniger S.A.R.L.
Rua de Santa Marta 33/1
Lisboa, Portugal
J. H. Bachmann
 ^{137}Cs .
- South Africa
701. Cape Town, University of
Department of Medicine
Observatory
Cape Town, South Africa
R. Hoffenberg
 ^{47}Ca , ^{55}Fe , ^{59}Fe .
702. The Embassy for the Republic
of South Africa
3101 Massachusetts Ave.
Washington 8, D. C.
T. Kunger
 ^{59}Fe .

703. South African Atomic Energy Board:
c/o Parry, Leon, and Hajhoe Limited
Jan Smuts Airport
South Africa
T. Kunger
 ^{59}Fe
Spain
704. Nuclear Iberica
Francisco Santos, 15
Apartado 555
Madrid 2, Spain
 ^{90}Sr .
Sweden
705. Aktiebolaget Atomenergi
Studs vik
Nykoping, Sweden
L. Olssen
 ^{252}Cf , ^3H .
706. Dr. Goran C. H. Bauer
MAS
Malmo, Sweden
 ^{85}Sr .
707. Forsvarets Forskningsanstalt
Res. Inst. of National Defence
Avdelning 1
Sundbyberg 4, Sweden
Ulla Clemedson
 ^{85}Sr .
708. Fysiska Institutionen
Thumbergsvagen F
Uppsala, Sweden
Anders Bachlin
 ^{133}Ba , ^{181}Hf , ^{113}Sn .
709. Karolinska Institute
Institute of Alcohol Research
Stockholm 60, Sweden
Prof. G. Hevesy
 ^{59}Fe .
710. Kemikaliebolaget Kebo AB
Birger Jarlsgatan 120
Stockholm 0, Sweden
Mr. Lindstrom
 ^{45}Ca .
711. Radiofysiska Avdelningen
Centrallasarettet
Boras, Sweden
c/o A. B. Olson and Wright
 ^{99}Mo .
712. Svenska AB Phillips
Box 6077
Stockholm 6, Sweden
K. Kavnitz
 ^{45}Ca , ^{85}Sr .
Switzerland
713. Eid-Institut für
Reaktorforschung
Institut Federal de
Recherches en Matiere
de Reacteurs
Würenlingen/AG
Switzerland
Dr. Tempus
 ^{59}Fe .
714. Institut de Radiophysique
Appliques
Hospital Cantonal
Lausanne, Switzerland
Dr. Pierre Lerch
 $^{140}\text{BaLa}$, ^{47}Ca , ^{59}Fe , ^{63}Ni .
715. Merz and Bentelli AG.
Berne 18; Switzerland
O. W. Thuler
 ^3H
716. Phys. Institut der Universität
Basel, Klingelbergstrasse, 82
Basel, Switzerland
Dr. P. Huber
 ^{129}I .

717. Radium-Chemie A. Zeller
and Co.
Teufen/App.
Switzerland
A. Zeller
 ^{147}Pm , ^3H .

718. Swiss Federal Inst. of
Technology
Laboratory for Solid
State Physics
Gloriastrasse 35
Zurich 7, Switzerland
Dr. H. Granicher
 ^{129}I .

Venezuela

719. Instituto Venezolano de
Investigaciones Cientifi-
cas
Apartado 1827
Caracas, Venezuela
Udo Westphal
 ^{55}Fe .

720. Venezuela, Universidad
Central de
Catedra de Fisiopatologia
Instituto de Medicina
Experimental
Caracas, Venezuela, S.A.
Francisco De Venanzi
 ^{32}P .

West Indies

721. West Indies, Univ. College
of the., Mona
Kingston 7, Jamaica
West Indies
Dr. David Picon
 ^{133}Ba , ^{45}Ca , ^{14}C , ^{85}Kr ,
 ^{42}K .

Yugoslavia

722. Institut "Ruder Boskovic"
Bijenicka Cesta 56
Zagreb, Yugoslavia
U. Sosanac
 ^{99}Tc .

11. ALPHABETICAL LIST OF ISOTOPES,
CORRELATION SET TO CUSTOMER NUMBERS

A. DOMESTIC

Americium-241

63, 163, 206, 218, 291, 304, 335, 341, 467, 539

Antimony-122

125, 189, 349, 378, 587

Antimony-124

4, 22, 23, 24, 29, 56, 63, 67, 119, 122, 181, 189, 193, 218,
222, 241, 267, 313, 332, 340, 359, 362, 378, 445, 491, 503,
507, 518, 524, 537, 599, 602

Antimony-125

24, 29, 63, 155, 163, 172, 189, 193, 220, 259, 282, 283, 314,
382, 501, 507

Argon-37

22, 63, 100, 233

Argon-38

222, 418

Arsenic-76

340, 378, 499, 518, 591

Arsenic-77

124, 378

Barium-131

1, 602

Barium-133

1, 3, 4, 22, 30, 63, 67, 84, 109, 112, 155, 168, 172, 193, 207,
218, 220, 259, 304, 332, 339, 340, 344, 356, 366, 448, 461,
507, 528, 542, 553, 582, 602

Barium-140

3, 22, 29, 40, 54, 66, 109, 125, 155, 158, 163, 172, 213, 220,
228, 254, 267, 285, 291, 297, 314, 355, 357, 362, 367, 378, 382,

Barium-140 (continued)

410, 442, 451, 453, 484, 489, 491, 514, 517, 518, 520, 521, 522,
524, 528, 530, 532, 534, 543, 582, 599, 602, 341

Barium-140 - Lanthanum-140

(See "Barium-140")

Bismuth-210

66, 163, 222, 359, 362

Bromine-82

54, 63, 67, 99, 173, 208, 228, 237, 238, 276, 282, 283, 296,
344, 355, 438, 442, 451, 453, 479, 508, 509, 528, 537, 556,
557, 559, 584

Cadmium-109

4, 22, 24, 54, 109, 122, 146, 168, 194, 218, 220, 233, 259,
277, 291, 304, 332, 339, 344, 349, 421, 454, 466, 524, 528,
602

Cadmium-115

212, 233, 429, 489, 491, 513, 524, 570, 584

Cadmium-115m

1, 23, 24, 63, 163, 165, 233, 296, 324, 347, 360, 362, 445

Calcium-45

1, 6, 18, 22, 23, 24, 28, 31, 38, 42, 50, 52, 54, 63, 64, 66, 67,
69, 70, 73, 77, 79, 81, 82, 97, 98, 100, 101, 102, 106, 109, 120,
122, 124, 125, 130, 131, 134, 144, 155, 163, 168, 189, 191,
194, 207, 208, 209, 220, 228, 229, 237, 238, 243, 252, 253,
255, 262, 264, 266, 267, 270, 277, 278, 282, 285, 287, 288,
289, 297, 313, 314, 321, 324, 328, 332, 333, 340, 344, 345,
348, 353, 357, 359, 362, 366, 367, 374, 375, 378, 385, 389,
391, 394, 395, 398, 403, 405, 410, 413, 425, 427, 428, 430,
445, 451, 453, 455, 461, 462, 465, 472, 495, 507, 509, 513,
514, 518, 524, 528, 537, 542, 549, 567, 568, 571, 577, 581,
582, 583, 584, 591, 598, 601, 602, 604

Calcium-47

1, 45, 63, 64, 85, 92, 99, 109, 173, 220, 255, 269, 270, 313,
333, 378, 391, 394, 421, 436, 479, 489, 491, 537, 582, 589

Carbon-14

1, 7, 20, 22, 28, 48, 63, 66, 67, 75, 82, 84, 85, 99, 100,
109, 118, 122, 124, 130, 139, 154, 173, 191, 201, 207, 208,
212, 218, 228, 230, 233, 237, 253, 264, 268, 282, 287, 304,
313, 320, 340, 342, 344, 349, 359, 367, 386, 388, 394, 407,
410, 411, 416, 419, 423, 430, 444, 455, 466, 473, 474, 476,
489, 494, 509, 529, 539, 540, 541, 566, 582, 598, 599, 341

Cerium-144

22, 24, 29, 44, 63, 66, 67, 69, 85, 122, 125, 149, 155, 163,
166, 176, 193, 218, 220, 222, 228, 241, 254, 287, 289, 296,
314, 340, 349, 355, 362, 386, 394, 429, 441, 451, 453, 455,
488, 505, 513, 514, 524, 530, 341

Cesium-134

1, 42, 60, 63, 67, 100, 109, 125, 155, 163, 218, 228, 235,
264, 283, 285, 287, 301, 304, 313, 332, 333, 340, 351, 357,
378, 451, 453, 461, 509, 520, 530, 555, 582, 589, 602

Cesium-137

1, 3, 16, 19, 22, 23, 25, 29, 32, 41, 44, 50, 54, 57, 59,
63, 66, 67, 69, 78, 88, 97, 101, 109, 122, 125, 141, 46, 153,
155, 163, 166, 183, 204, 206, 207, 208, 211, 216, 218, 228,
232, 238, 243, 254, 277, 285, 287, 291, 300, 304, 325, 332,
335, 340, 342, 344, 345, 362, 363, 372, 373, 377, 381, 382,
386, 394, 396, 397, 410, 427, 428, 436, 438, 441, 442, 455, 466,
467, 477, 481, 483, 488, 513, 514, 516, 524, 525, 528, 532,
533, 539, 543, 578, 582, 586, 602, 341

Cesium-137 -Barium-137

(See "Cesium-137")

Chlorine-36

1, 6, 11, 14, 22, 28, 44, 45, 54, 57, 63, 64, 65, 69, 77,
83, 88, 109, 122, 123, 125, 155, 163, 172, 173, 193, 201,
207, 218, 221, 228, 237, 242, 266, 268, 275, 282, 287, 304,
313, 315, 320, 337, 343, 347, 348, 351, 357, 382, 393, 394,
427, 445, 446, 451, 453, 464, 509, 518, 537, 542, 578, 589,
602

Chromium-51

1, 3, 6, 15, 22, 44, 52, 54, 60, 63, 66, 78, 86, 99, 122,
125, 129, 140, 147, 156, 163, 182, 191, 207, 208, 213, 220,
228, 233, 241, 243, 250, 277, 282, 296, 308, 314, 319, 323,
333, 339, 340, 349, 358, 362, 366, 373, 377, 378, 394, 420,
430, 438, 462, 484, 491, 507, 513, 514, 518, 524, 530, 543,
577, 582, 584, 589, 602

Cobalt-57

338, 467

Cobalt-58

29, 59, 63, 66, 125, 147, 158, 194, 220, 241, 252, 288, 291,
296, 340, 351, 461, 507, 509, 534, 543

Cobalt-60

22, 23, 50, 54, 80, 82, 109, 121, 122, 124, 125, 130, 146,
148, 153, 163, 166, 185, 202, 204, 218, 228, 233, 238, 241,
243, 253, 256, 259, 266, 277, 278, 282, 283, 287, 291, 304,
320, 322, 332, 339, 340, 341, 344, 348, 351, 357, 366, 377,
378, 386, 394, 410, 415, 438, 456, 473, 488, 491, 508, 509,
510, 511, 513, 515, 518, 524, 525, 532, 534, 537, 543, 578,
581, 582, 587, 602, 341

Copper-64

1, 23, 67, 74, 85, 122, 124, 146, 147, 163, 165, 208, 222,
252, 255, 296, 319, 348, 382, 426, 451, 453, 458, 486, 489,
491, 509, 518, 537, 577, 590, 598

Copper-67

536

Europium-155

341

Europium-152 -154

66, 109, 125, 150, 155, 163, 218, 238, 241, 332, 366, 389,
455, 506, 584, 602

Gallium-68

340

Gallium-72

122, 208, 212, 382

Gold-198

1, 3, 15, 23, 36, 60, 126, 150, 220, 230, 252, 257, 267,
272, 294, 320, 378, 458, 461, 466, 472, 473, 475, 491, 499,
409, 513, 515, 518, 524, 537, 544

Gold-199

1, 63, 189, 357

Hafnium-181

26, 44, 59, 63, 172, 220, 320, 362, 499, 517, 525

Indium-114

22, 23, 24, 63, 66, 93, 127, 194, 206, 238, 250, 252, 267,
296, 333, 359, 362, 389, 455, 503, 513, 524, 583, 602

Iodine-125

1, 54, 63, 67, 94, 124, 163, 228, 277, 333, 344, 357, 416,
442, 451, 453, 513, 537, 582, 598, 602

Iodine-129

22, 54, 63, 66, 67, 125, 132, 228, 241, 277, 296, 304, 338,
584, 598, 341

Iodine-130

233, 340, 378, 397, 412, 473, 528, 565, 583

Iodine-131

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217, 224, 245, 256, 276, 284, 335, 338, 357, 358, 359, 364,
366, 423, 449, 485, 497, 519, 539, 568, 590, 596

Puerto Rico

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Rhode Island

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South Carolina

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South Dakota

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Tennessee

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508, 543, 563

Texas

38, 113, 174, 199, 243, 326, 391, 406, 418, 420, 425, 432,
433, 454, 455, 456, 457, 458, 459, 460, 461, 462, 467, 469,
482, 511, 513, 550

Utah

51, 444, 490, 541, 542

Virginia

139, 164, 275, 393, 569, 575, 576, 577

Washington

44, 149, 163, 240, 376, 571, 581, 582, 592

West Virginia

475, 561, 591

Wisconsin

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Wyoming

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B. FOREIGNArgentina

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Australia

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Austria

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Belgium

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Canada612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623,
624, 625, 626, 627, 628Chile

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China

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Columbia

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Costa Rica

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Denmark

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Egypt

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France

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Germany644, 645, 646, 647, 648, 649, 650, 651, 651a, 652, 653, 654,
655, 656Great Britain

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Greece

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Japan

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Korea

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Mexico

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The Netherlands

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New Zealand

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Norway

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Pakistan

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Peru

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Philippines

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Portugal

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South Africa

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Spain

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Sweden

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Switzerland

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Venezuela

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West Indies

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Yugoslavia

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IV. AEC RADIOISOTOPE SALES, FY 1964

Isotope	Domestic			Foreign			Project			Total			Rank in revenue
	Shipments	Curies	Dollars	Shipments	Curies	Dollars	Shipments	Curies	Dollars	Shipments	Curies	Dollars	
Americium-241	27	136.04 g	204,063	14	43.28 g	64,922	26	298.41 g	349,160	67	477.73 g	618,145	1
Americium-243	1	~ 0.1 µg	100	-	-	-	-	-	-	1	~ 0.1 µg	100	98
Antimony-122	6	0.028	122	-	-	-	1	0.001	3	7	0.029	125	96
Antimony-124	30	0.170	816	3	0.014	57	12	0.096	420	45	0.280	1,293	63
Antimony-125	16	0.009	936	3	0.012	1,200	3	0.004	410	22	0.025	2,546	54
Argon-37	3	0.003	65	4	0.007	125	2	0.007	115	9	0.017	305	87
Argon-38	2	0.09 cc	600	3	0.12 cc	800	-	-	-	5	0.21 cc	1,400	62
Arsenic-76	9	0.124	265	-	-	-	14	0.070	245	23	0.194	510	78
Arsenic-77	2	0.003	50	-	-	-	-	-	-	2	0.003	50	99
Barium-131	7	0.007	420	-	-	-	-	-	-	7	0.007	420	82
Barium-133	39	0.043	4,325	9	0.016	1,610	10	0.014	1,375	58	0.073	7,310	37
Barium-140	60	0.601	1,499	21	0.570	1,096	29	0.249	822	110	1.420	3,417	49
Bismuth-210	2	0.006	70	-	-	-	3	0.020	218	5	0.026	288	88
Bromine-82	81	0.647	2,490	-	-	-	15	0.077	347	96	0.724	2,837	51
Cadmium-109	24	0.019	1,458	1	0.001	80	9	0.008	585	34	0.028	2,123	56
Cadmium-115	7	0.042	158	1	0.010	40	-	-	-	8	0.052	198	91
Cadmium-115m	16	0.027	891	4	0.006	198	5	0.071	1,563	25	0.104	2,652	52
Calcium-45	360	2.110	28,618	66	0.711	11,986	40	0.512	5,022	466	3.333	45,626	14
Calcium-47	173	0.180	37,163	37	0.016	3,172	8	0.008	1,700	218	0.204	42,035	16
Carbon-14	135	40.194	178,962	13	2.416	17,123	23	7.395	13,267	171	50.005	209,352	3
Cerium-141	28	0.154	604	1	0.005	15	13	0.051	223	42	0.210	842	72
Cerium-144	36	26.477	1,600	9	12.860	352	32	22.880	1,550	77	62.217	3,502	48
Cesium-134	35	0.500	942	1	0.005	25	14	0.203	269	50	0.708	1,236	64
Cesium-137	143	5,955.362	5,834	19	51,836.455	44,339	45	224,230.897	269,055	207	282,022.714	319,228	2
Chlorine-36	116	0.051	16,454	11	0.025	8,115	15	0.007	1,541	142	0.083	26,110	19
Chromium-51	125	4.721	8,380	23	1.995	3,314	45	0.301	566	193	7.017	12,260	32
Cobalt-58	18	0.038	700	6	0.101	2,020	12	0.027	550	36	0.166	3,270	50
Cobalt-60	75	0.912	2,116	19	0.717	1,455	18	0.103	316	112	1.732	3,887	45
Cobalt-60 (Metallic) ^a	-	-	-	-	-	-	-	-	-	21	1,242,156.0	193,818	4
Copper-64	136	4.260	5,538	-	-	-	9	0.600	775	145	4.860	6,313	40
Copper-67	1	0.001	500	-	-	-	-	-	-	1	0.001	500	79
Curium-244	1	0.001 g	100	1	0.001 g	100	-	-	-	2	0.002 g	200	90

Isotope	Domestic			Foreign			Project			Total			Rank in revenue
	Shipments	Curies	Dollars	shipments	Curies	Dollars	Shipments	Curies	Dollars	shipments	Curies	Dollars	
Europium-152, -154	12	0.073	760	1	0.002	25	13	0.066	680	26	0.141	1,465	61
Europium-155	-	-	-	-	-	-	1	0.010	25	1	0.010	25	100
Fission Products	19	0.132	351	5	0.108	240	4	0.072	165	28	0.312	756	74
Gallium-68	-	-	-	-	-	-	1	0.0005	120	1	0.0005	120	97
Gallium-72	9	0.082	328	-	-	-	-	-	-	9	0.082	328	86
Gold-198	110	111.519	6,992	-	-	-	2	0.003	-	112	111.522	6,992	38
Gold-199	8	0.140	710	4	0.020	100	6	0.033	150	18	0.193	960	68
Hafnium-181	13	0.109	265	4	0.025	78	3	0.030	45	20	0.164	388	84
Hydrogen-3 (See "Tritium")													
Indium-114	25	0.117	625	2	0.002	30	10	0.026	155	37	0.145	810	73
Iodine-125	33	0.699	3,212	7	0.610	1,400	16	15.096	15,480	56	16.405	20,092	22
Iodine-129	13	8.291	6,756	4	0.831	1,051	12	2.886	2,619	29	12.008	10,426	33
Iodine-130	38	0.866	1,096	-	-	-	8	0.084	100	46	0.950	1,196	65
Iodine-131	1,241	175.738	38,982	23	2.720	829	190	8.481	2,382	1454	186.939	42,193	15
Iodine-132	76	1.220	4,910	1	0.010	55	1	0.010	55	78	1.240	5,020	43
Iodine-133	3	0.060	180	-	-	-	-	-	-	3	0.060	180	93
Iridium-192	19	0.921	18,775	1	0.002	2	5	0.046	9,471	25	0.969	28,248	18
Iron-55	57	0.337	10,086	11	0.075	2,400	5	0.077	2,100	73	0.489	14,586	28
Iron-55, -59	8	0.007	248	1	0.001	35	3	0.003	105	12	0.011	388	84
Iron-59	292	0.896	26,723	118	0.653	19,457	54	0.137	4,125	464	1.686	50,305	12
Krypton-85	127	3,649.359	45,615	14	1,033.115	13,570	12	1,200.286	17,678	153	5,882.760	76,863	8
Lanthanum-140	15	0.148	330	1	0.010	20	34	0.308	700	50	0.466	1,050	66
Magnesium-28	118	0.0152	21,280	40	0.009	12,600	15	0.0025	3,500	173	0.0267	37,380	17
Mercury-197	41	8.060	3,646	-	-	-	1	0.001	25	42	8.061	3,671	46
Mercury-203	115	16.688	17,040	13	2.344	2,394	45	0.848	961	173	19.880	20,395	21
Molybdenum-99	39	0.336	409	6	0.045	217	35	2.179	1,367	80	2.650	1,993	58
Neodymium-147	7	0.004	208	1	0.001	50	15	0.029	1,435	23	0.034	1,693	60
Nickel-63	49	1.562	12,582	9	0.271	2,485	5	0.037	173	63	1.870	15,240	27
Niobium-95	22	0.067	673	5	0.120	695	20	0.072	721	47	0.249	2,089	57
Osmium-191	1	0.010	100	-	-	-	-	-	-	1	0.010	100	98
Palladium-109	7	0.126	126	-	-	-	4	0.034	55	11	0.160	181	92

Isotope	Domestic			Foreign			Project			Total			Rank in revenue
	Shipments	Curies	Dollars	Shipments	Curies	Dollars	Shipments	Curies	Dollars	Shipments	Curies	Dollars	
Phosphorus-32	1,914	56.979	53,664	42	4.375	4,375	199	5.836	5,540	2,155	67.190	63,579	9
Polonium-210 (Includes sources)	41	3,565.5	95,965	7	616.2	16,975	1	negl.	115	49	4,181.7	113,055	7
Potassium-42	623	6.884	12,882	-	-	-	34	0.429	948	657	7.313	13,830	29
Potassium-43	-	-	-	-	-	-	19	0.016	570	19	0.016	570	77
Praseodymium-142	-	-	-	-	-	-	4	0.050	150	4	0.050	150	94
Praseodymium-143	1	0.001	50	-	-	-	4	0.014	700	5	0.015	750	75
Promethium-147	37	524.055	3,317	70	2,378.760	8,480	14	327.164	6,175	121	3,229.979	17,972	25
Rhenium-186	2	0.152	429	-	-	-	-	-	-	2	0.152	429	81
Rubidium-86	218	4.310	2,939	23	0.830	370	19	0.903	322	260	6.043	3,631	47
Ruthenium-103	15	0.036	400	1	0.003	30	12	0.051	539	28	0.090	969	67
Ruthenium-106	42	0.304	2,630	7	0.465	2,415	13	0.168	1,205	62	0.937	6,250	41
Samarium-153	5	0.075	187	-	-	-	7	0.080	213	12	0.155	400	83
Scandium-46	42	3.375	846	2	0.007	7	6	0.024	67	50	3.406	920	69
Selenium-75	83	1.076	22,914	8	0.051	551	4	0.025	76	95	1.152	23,541	20
Silver-110	38	0.232	689	5	0.063	95	9	0.056	131	52	0.351	915	70
Silver-111	9	0.015	145	-	-	-	2	-	-	11	0.015	145	95
Sodium-24	441	2.095	10,127	-	-	-	15	0.030	161	456	2.125	10,288	34
Special Irradiations (Cyclotron)	110	-	-	32	-	-	18	-	-	160	-	126,508	6
Special Irradiations (Reactor)	339	-	-	14	-	-	118	-	-	471	-	51,687	11
Strontium-85	144	0.546	27,302	54	0.154	7,681	63	0.290	14,510	261	0.990	49,493	13
Strontium-87m	1	0.001	120	-	-	-	-	-	-	1	0.001	120	97
Strontium-89	81	0.864	3,280	33	1.481	3,108	36	0.704	2,212	150	3.049	8,600	35
Strontium-90	82	734.744	3,741	10	3,260.700	7,076	36	4,723.565	9,130	128	8,719.009	19,947	23
Sulfur-35	429	14.388	14,849	6	0.091	97	40	0.650	1,143	475	15.129	16,089	26
Tantalum-182	11	0.079	410	1	0.030	90	8	0.030	165	20	0.139	665	76
Technetium-99	22	0.721	3,276	11	0.319	1,434	19	25.296	52,570	52	26.336	57,280	10
Technetium-99m	68	6.800	3,740	2	0.100	110	53	5.250	2,915	123	12.150	6,765	39
Tellurium-132	6	0.060	330	-	-	-	1	0.010	55	7	0.070	385	85
Thallium-204	49	2.920	2,920	13	15.605	10,401	9	0.191	173	71	18.716	13,494	30

Isotope	Domestic			Foreign			Project			Total			Rank in revenue
	Shipments	Curies	Dollars	Shipments	Curies	Dollars	Shipments	Curies	Dollars	Shipments	Curies	Dollars	
Thulium-170	17	5.651	1,800	1	0.001	100	4	1.111	400	22	6.763	2,300	55
Tin-113	33	0.047	1,640	7	0.013	455	12	0.015	518	52	0.075	2,613	53
Tritium	114	61,833.481	68,873	58	50,596.652	55,846	7	3,514.061	3,261	179	115,944.194	127,980	5
Tritium Targets	53	-	-	7	-	-	60	-	-	120	-	19,700	24
Tungsten-185	14	0.059	294	4	0.018	74	7	0.022	94	25	0.099	462	80
Tungsten-187	3	0.021	145	-	-	-	1	0.001	-	4	0.022	145	95
uranium-238	2	77.66 g	2,081	6	148.91 g	2,464	1	21.50 g	409	9	248.07 g	4,954	44
Xenon-128	1	0.02 cc	100	-	-	-	-	-	-	1	0.02 cc	100	98
Xenon-133	96	206.023	6,165	14	30.000	840	18	425.011	5,633	128	661.034	12,638	51
Yttrium-90	11	0.186	659	1	0.100	220	1	0.010	30	13	0.296	909	71
Yttrium-90 (Beads)	4	65 beads	232	-	-	-	-	-	-	4	65 beads	232	89
Yttrium-91	21	0.127	551	7	0.334	730	15	0.130	586	43	0.591	1,867	59
zinc-65	126	0.827	2,539	11	0.162	405	37	3.036	4,980	174	4.025	7,924	36
Zirconium-95	76	1.826	2,331	26	1.032	2,063	26	0.273	4,672	128	3.131	5,066	42
Total	9,655	76,987	1,083,409	1,023	109,806	343,369	1,875	234,528	830,857	12,553 ^d	1,663,477 ^d	2,632,013 ^{d,e}	

^cCyclotron time not Included.

^cIncludes production of such isotopes as, ⁷⁴As, ⁷Be, ²⁰⁷Bi, ¹³⁹Ce, ¹³⁶Cs, ⁵⁶Co, ⁵⁷Co, ¹⁴⁷Eu, ¹⁴⁹Eu, ¹⁵⁰Eu, ¹⁵¹Gd, ¹⁵³Gd, ⁶⁸Ge, ¹⁹⁵Au, ¹²⁴I, ¹²⁶I, ⁵²Fe (B), ¹⁷¹Lu, ¹⁷²Lu, ¹⁷⁴Lu, ⁵⁴Mn, ¹⁰³Pd, ¹³⁵Pr, ¹³⁶Pr, ¹³⁷Pr, ¹³⁹Pr, ¹⁴⁹Pm, ⁹⁹Rh, ⁸⁴Rb, ¹⁵¹Sm, ¹⁷⁹Ta, ⁹⁵Tc, ⁹⁶Tc, ¹²¹Te, ^{123m}Te, ²⁰²Tl, ¹⁸⁸Tm, ⁴⁴Ti, ¹⁸¹W, ⁴⁸V, ⁸⁸Y, ¹²⁷Xe, ⁸⁸Zr.

^dIncludes 21 shipments and 1,242,156 curies of ⁶⁰Co, @ \$193,818 (almost entirely under "Project" category).

^eIncludes \$178,195 for reactor and cyclotron special irradiations.