UCRL-8587

UNIVERSITY OF
CALIFORNIA

Radiation Laboratory

BERKELEY, CALIFORNIA

DISCLAIMER

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

UCRL-8567

UNIVERSITY OF CALIFORNIA

Lawrence Radiation Laboratory
Berkeley, California

Contract No. W-7405-eng-48

LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED BY THE UCRL INFORMATION DIVISION DURING THE PERIOD OF DECEMBER 16 - 31, 1958

January 6, 1959

LIST OF CODES FOR REPORT NUMBERS

ACCO	-American Cyanimid Company
AEP	-Monsanto Chemical Company
AERE	-Gt. Brit. Atomic Energy Research Establishment,Harwell,Berks.England
ALCO	-American Locomotive Company
AMF	-American Machine & Foundry Co.
ANL	-Argonne National Laboratory
ANP	-Aircraft Nuclear Propulsion Project
APEX	-General Electric Company,ANP Project
ASTIA	-Armed Services Technical Information Agency,Dayton,Ohio
BAW	-Babcock & Wilcox
BDX	-Bendix Aviation Corp., Detroit
BMI	-Battelle Memorial Institute
BNL	-Brookhaven National Lab.
BRB	-Bridgeport Brass Company
BSC	-Bethlehem Steel Company
CENP	-Combustion Engineering, Inc.
CERN	-European Organization of Nuclear Research, Geneva
COO	-Chicago Operations Office
CU	-Columbia University
DCDE	-Atomic Power Development Associates
DLWK	-Duquense Light Co-Walter Kidde
DOW	-Dow Chemical Company
DP	-E.I.duPont deNemour & Co.
FWE	-Foreign Weapons Effects
GAT	-Goodyear Atomic Corporation
GEAP	-General Electric Company
GEL	-General Electric Co., General Engineering Laboratory
HEC	-Hooker Electrochemical Co.
HO	-Hanford Operations Office
HW	-Hanford Works, Richland
IDO	-Idaho Operations Office
ISC	-Iowa State College
K	-Carbide and Carbon Chemicals Co. (K-25 Plant)
KAPL	-Knolls Atomic Power Laboratory
KLX	-The Vitro Corporation of America
KLXS	-Vitro Corporation of America (Study Group)
KY	-Carbide and Carbon Chemicals Co. (C-31 Plant)
LA&LAMS	-Los Alamos Scientific Lab.
MCW	-Mallinckrodt Chemical Works
MIT	-Massachusetts Inst. of Tech.
MLM	-Mound Laboratory
NAA-SR	-North American Aviation, Inc.
NBL	-New Brunswick Laboratory
NBS	-National Bureau of Standards
NEA	-Foster Wheeler-Pioneer Service
NLCO	-National Lead Company of Ohio
NMI	-Nuclear Metals Inc.
NNSD	-Newport News Shipbuilding and Dry Dock Co.
NPG	-Commonwealth Edison Co. (Nuclear Power Group)
NRL	-Naval Research Laboratory,Washington D.C.
NYO	-New York Operations Office
ORINS	-Oak Ridge Institute of Nuclear Studies

ORNL	-Carbide & Carbon Chemicals Co. (ORNL)
ORO	-Oak Ridge Operations Office
PWAC	-Pratt & Whitney Aircraft Division of the United Aircraft Corp.
RFP	-Rocky Flats Plant
RME	-Grand Junction Operations Office
RMO	-Division of Raw Materials
SAN	-San Francisco Operations Office
SC	-Sandia Corporation
SEP	-Sylvania Electric Products, Inc.
SFO	-Santa Fe Operations Office
SRO	-Savannah River Operations Office
SO	-Schenectady Operations Office
TEI(M)	-U. S. Geological Survey Trace Elements Reports
TID	-Technical Information Service
TVA	-Tennessee Valley Authority
UCLA	-University of California Medical Research Laboratory
UCRL	-University of California Radiation Laboratory
UR	-University of Rochester
USNRDL	-U.S.Naval Radiological Lab., San Francisco,Calif.
UWFL	-University of Washington Applied Fisheries Laboratory
WAPD	-Westinghouse Electric Corp.,Bettis Plant
WASH	-AEC,Washington
WEC	-Westinghouse Electric Company Industrial Atomic Power Group
WIN	-National Lead Co., Inc. Winchester
WT	-Weapon Test Reports
Y	-Carbide and Carbon Chemicals Company (Y-12 Plant)

Many prefixes used for research and development reports cover a number of installations. NP ("Non-Project") numbers are assigned by the Technical Information Service at Oak Ridge to those reports which it received from sources not under contract to the Atomic Energy Commission. The UCRL Information Division gives "Misc" numbers to any others received here that do not bear an identifying number. Many reports are grouped together under numbers corresponding to an AEC division or operations office. Some of these are as follows:

CO,COO	-Chicago Operations Office
IDO	-Idaho Operations Office
NYO,NYOO	-New York Operations Office
ORO	-Oak Ridge Operations Office
RMO	-Raw Materials Division
WASH	-Atomic Energy Commission, Washington

In our semimonthly "List of Reports Received" the originating installation will be placed in the author column whenever the report code number does not indicate a specific laboratory, or is obsolete or not given in the list.

Two series of translations are currently received, one sponsored by the AEC (AEC-tr), the other by the National Science Foundation (NSF-tr).

LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED BY THE UCRL INFORMATION DIVISION DURING THE PERIOD OF DECEMBER 16 - 31, 1958

Lawrence Radiation Laboratory
University of California
Berkeley, California

January 6, 1959

Index Number	Title	Author	Date
	BIOSCIENCES		
[illegible]-tr-1986	The Cumulative Effects of Thermonuclear Explosions on the Surface of the Earth, by Charles-Noël Martin. Trans. from Académie des Sciences, Paris. Comptes Rendus 239, 1287-9 (1954).		
[illegible]-tr-1997	Physiopathology of Mast Cells. (Heparin Storage and Elimination), by Ruth Frick. Trans. from Acta Haematologica 4, 97-109 (1950).		
[illegible]-tr-2088	Pharmacodynamic Properties of the Chlorhydrate of Chloro-3 (Dimethylamino-3' Propyl)-10-Phenothiazine (4.560 R.P.). Experimental Study of a New Compound Used in Potential Anesthesia and Artificial Hibernation, by Simone Courvoisier, Julien Fournel, René Ducrot, Madeleine Kolsky, and Pierre Koetschet. Trans. from Archives Internationale de Pharmacodynamie et de Thérapie 92, 305-61 (1953).		
	[illegible] Effect of the Length of X-Ray Waves on the Frequency [illegible]ible Mutations in Drosophila Melanogaster, by [illegible]uncus and J. L. Schechtmann. Trans. from Biolo[illegible] Zhurnal 4, 923-8 (1935).		
	[illegible] Metabolism in the Skeleton Analyzed [illegible] Roentgen Rays, by R. Amprino. Trans. [illegible] 11, 173-83 (1952).		

[illegible]EC-tr-2817	Uranium Concentration of Related Organs; Hypophysis, Thyroid, Generative Glands, Adrenal Gland, and Pancreas, by Joseph Hoffmann. Trans. from Biochemische Zeitschrift 315, 26-30 (1943).		
[illegible]EC-tr-2818	Cytochemical Demonstration of Polysaccharides in the Blood Cells and in the Haemopoietic Tissues, by Fritz Heckner. Trans. from Acta Haematologica 16, 1-10 (1956).		
[illegible]EC-tr-3186	Effect of the Tumor Extracts on the Catalase and Coenzyme A of the Liver of Normal Mice, by A. M. Kusin, K. S. Sharukhova, and I. A. Chudinova. Trans. from Biokhimiia 20, 126-8 (1955).		
[illegible]EC-tr-3353	Reviews on Radiobiology. A. M. Kuzin, ed. Trans. of the Book Ocherki Po Radiobiologii. Moscow, Akademiia Nauk S.S.S.R. Institut Biologicheskoi Fiziki, 1956, 312p.		
[illegible]U-3781	Upper Atmosphere Monitoring Program. Quarterly Report Covering Period October 1, 1957 Thru January 31, 1958. Report No. 1863.	S. Stern, S. Jones, A. Schekman, et al. Gen. Mills, Inc., Minn.	n.d.
[illegible] IP/R 2606	Relation Between Measurements of Deposited Activity After the Windscale Accident of October, 1957.	A. C. Chamberlain	9-58
[illegible] R-[illegible]26	The Effects of Ionising Radiations on Enzymes. A Review.	A. Marples, G. Glew	10-58
[illegible]	Influence of Environmental Factors on the Microbicidal Effect of Ionising Radiations.	B. A. Bridges, T. Horne	1958
	[illegible]diation Microbiology as Applied to Foods. United Nations [illegible] and Agricultural Organisation Food Irradiation Con[illegible] (Held at) A.E.R.E. Harwell, November, 1958.	T. Horne, B. A. Bridges	11-58

[illegible]-I/R-2734	Some Effects of Ionising Radiations on Liquid Whole Milk and Whey Protein. United Nations Food and Agriculture Organisation Food Irradiation Conference (Held at) A.E.R.E. Harwell, November, 1958.	G. Glew	11-58
[illegible]-I/R-2736	Effects of Radiations on Aqueous Systems Under Aerobic and Anaerobic Conditions. United Nations Food and Agricultural Organisation Food Irradiation Conference (Held at) A.E.R.E., Harwell, November, 1958.	J. Weiss	11-58
[illegible]-I/R-2737	The Chemical Action of Gamma Radiation on Aqueous Solutions of Carbohydrates. United Nations Food and Agriculture Organisation Food Irradiation Conference (Held at) A.E.R.E., Harwell, November, 1958.	G. O. Phillips, G. J. Moody	11-58
[illegible]/R-2738	The Irradiation of Ware Potatoes. United Nations Food and Agricultural Organisation Food Irradiation Conference (Held at) A.E.R.E., Harwell, November, 1958.	W. G. Burton, W. H. de Jong	11-58
[illegible]/R-273[illegible]	Destruction by Irradiation of Parasites Transmitted to Man Through Butchers' Meat. United Nations Food and Agricultural Organisation Food Irradiation Conference (Held at) A.E.R.E., Harwell, November, 1958.	E. L. Taylor	11-58
[illegible]-2[illegible]	Some Notes on the Wholesomeness of Irradiated Potatoes Fed to Pigs. United Nations Food and Agriculture Organisation Food Irradiation Conference (Held at) A.E.R.E. Harwell, November, 1958.	T. Horne, J. R. Hickman	11-58
	Bacteriological Investigation of Liquid Milk Irradiated in [illegible] Source. United Nations Food and Agricultural [illegible] Food Irradiation Conference (Held at) A.E.R.E., [illegible] November, 1958.	B. M. Freeman	11-58
	[illegible] Dairy. United Nations Food and [illegible] Organisation Food Irradiation Conference [illegible] Harwell, November 1958.	D. B. Dove	11-58

ERE-I/R-2747	Economics of Gamma Radiation Processing. United Nations Food and Agricultural Organisation Food and Irradiation Conference [Held at] A.E.R.E., Harwell, November 1958.	G. S. Murray	11-58
ERE-I/R-2748	The Disinfestation of Foods, Particularly Grain. United Nations Food and Agricultural Organisation Food Irradiation Conference [Held at] A.E.R.E., Harwell, November, 1958.	P. B. Cornwell	11-58
ERE-I/R-2749	Possible Applications of Ionizing Radiations in the Fruit, Vegetable and Related Industries. United Nations Food and Agricultural Organisation Food Irradiation Conference [Held at] A.E.R.E., Harwell, November, 1958.	I. D. Clarke	11-58
RE MED/R-2643	Monitoring for Carbon Monoxide and Carbon Dioxide.	A. Holmes	8-58
E-MED/R-2700	A Report on a Suggested Method for the Rapid Determination of "The Total Leucocyte Count".	C. Sanders, R. Cox, J. B. Sharples	10-58
-5919	Radiological Physics Division Semiannual Report [for] January Through June, 1958.		9-58
-2.5	Annual Progress Report.	C. N. Stover, Jr., ed. Utah Univ., Salt Lake City. Radiobiology Lab.	3-31-58
F.40-2	Some Notes on Safe Handling Practices for Beryllium.	W. Hedge Battelle Memorial Inst., Defense Metals Info. Center, Columbus, Ohio	9-22-58
	External Environmental Radiation Measurements in the United States.	L. R. Solon, W. M. Lowder, A. V. Zila, et al. N. Y. Oper. Office. Health and Safety Lab., AEC	3-11-58

JPRS/DC-210	Various Studies on the Use of Radioactive Substances in Medicine. Trans. from Meditsinskaia Radiologiia 2, 14-95 (1957).		
MISC-1958-491	Application of Radioisotopes to the Quantitative Chromatography of Fatty Acids. Report No. 35/V;XRB.	A. Z. Budzyński, Z. J. Zubrzycki, I. G. Campbell Instytut Badań Jadrowych, Warsaw	9-58
NM-SUMMARIES OF RESEARCH Jan. 1,-June 30, 1958	Summaries of Research for January 1 - June 30, 1958.	Naval Med. Res. Inst., Bethesda, Md.	n.d.
NM-SUMMARIES OF RESEARCH July 1, - Dec. 31, 1957	Summaries of Research for July 1 - December 31, 1957.	Same	n.d.
CBA-430	Radiation Induced Reactions of Ferriprotoporphyrin in Aqueous Alkaline Solution.	L. S. Myers, Jr., M. Rothschild, M. Kersten, et al.	11-24-58
USARDL-TR-271	Specific Hemagglutinins in X-Irradiated, Bone Marrow Treated Mice Following Differential Immunization of Host and Donor.	R. M. Garver, G. W. Santos, L. J. Cole	10-13-58
USNRDL-TR-278	Effect of Whole-Body X-Irradiation on Glucose Oxidation by Rat Small Intestine Mucosa *In Vitro*.	R. E. Kay, C. Entenman	11-4-58

CHEMISTRY

[illegible]	Some Comments on the Effect of the Degree of Dispersion and Density of Phases Upon Equilibrium, by V. A. Kireev. Trans. from Akademiia Nauk S.S.S.R. Institut Obshchei i Neorganicheskoi Khimii. Sektor Fizико-Khimicheskogo analiza. Izvestiia 19, 134-42 (1949).		

AEC-tr-1984 The Electroreduction of Anions, by A. N. Frumkin and G. M. Florianovich. Trans. from Akademiia Nauk S.S.S.R. Doklady 80, 907-10 (1951).

AEC-tr-1987 Rapid Extraction of Pure Lanthanum Oxide from the Earths, by Felix Trombe. Trans. from Académie des Sciences, Paris. Comptes Rendus 225, 1156-8 (1947).

AEC-tr-1991 Asymmetry of Action of the Radicals H and OH in Oxidation and Reduction Caused by Ionizing Radiations, by Moise Haissinsky and Marc Lefort. Trans. from Académie des Sciences, Paris. Comptes Rendus 230, 1156-8 (1950).

AEC-tr-1996 The Activity of Solution Components in Liquid Hydrogen Fluoride. Report No. 1, by N. S. Nikolaev and I. V. Tananaev. Report No. 2. The Activity of Fluorides of the Alkali Metals in Liquid Hydrogen Fluoride, by N. S. Nikolaev. Report No. 3. The Activity of Hydrogen Fluoride in Solutions of Ammonium Bases, by N. S. Nikolaev and I. V. Tananaev. Trans. from Akademiia Nauk S.S.S.R. Institut Obshchei i Neorganicheskoi Khimii. Sektor Fiziko-Khimicheskogo Analiza. Izvestiia 20, 184-211 (1950).

AEC-tr-2000 Generalization of the Experimental Data on the Heat Transmission at the Boiling of Liquids Under the Conditions of Free Convection, by G. N. Kruzhilin. Trans from Akademiia Nauk S.S.S.R. Otdelenie Tekhnicheskikh Nauk. Izvestiia 1949, 701-12.

AEC-tr-2060 Heat Transmission from a Heating Surface to a Boiling One-Component Liquid at Free Convection, by G. N. Kruzhilin. Trans. from Akademiia Nauk S.S.S.R. Otdelenie Tekhnicheskikh Nauk. Izvestiia 1948, 967-80.

AEC-tr-2074 Concerning Aqueous Solutions Concentrated with Nitric Acid. Effect of the Addition of Mineral Nitrates (Vapor Tension, Colorimetry), by Jean Chedin, René Leclerc, and Robert Vandom. Trans. from Académie des Sciences, Paris. Comptes Rendus 225, 734-6 (1947).

AEC-tr-2080 The Isomeric Transitions, In^{115}, In^{113}, and Sr^{87}, by I. A. Antonova and I. V. Estulin. Trans. from Akademiia Nauk S.S.S.R. Seriia Fizicheskaia. Izvestiia 18, 79-87 (1954).

AEC-tr-2113 Hydrogen Isotope Exchange in Hydrocarbons in Liquid Deuterium Fluoride, by Ia. M. Varshavskii and A. I. Shatenshtein. Trans. from Akademiia Nauk S.S.S.R. Doklady 95, 297-9 (1954).

AEC-tr-2159 On the Mechanism of Self-Diffusion in Liquids and Its Singularity in Water, by O. Ia. Samoilov. Trans. from Akademiia Nauk S.S.S.R. Doklady 101, 125-8 (1955).

AEC-tr-2168 On the Crystalline Structure of Compounds of Rare Earths and Metalloids of Group V; Nitrides of Lanthanum, Cerium, and Praseodymium. Paper No. II., by A. Iandelli and E. Botti. Trans. from Accademia Nazionale dei Lincei, Roma. Atti. Classe di Scienze Fisiche, Matematiche e Naturali. Rendiconti, Ser. 6, 25, 129-32 (1937).

AEC-tr-2169 On the Crystalline Structure of Compounds of Rare Earths and Metalloids of Group V; Arsenides and Antimonides of Lanthanum, Cerium, and Praseodymium. Paper No. III, by A. Iandelli and E. Botti. Trans. from Accademia Nazionale dei Lincei, Roma. Atti. Classe di Scienze Fisiche, Matematiche e Naturali. Rendiconti, Ser. 6, 25, 498-502 (1937).

AEC-tr-2170 On the Crystalline Structure of Compounds of Rare [Earths] and Metalloids of Group V; Neodymium Compounds. Paper No. IV, by A. Iandelli and E. Botti. Trans. from Accademia Nazionale dei Lincei, Roma. Atti. Classe di Scienze Fisiche, Matematiche e Naturali. Rendiconti, Ser. 6, 25, 638-40 (1937).

AEC-tr-2174 Emission of Ultraviolet Radiation in Gaseous Mixtures Exposed to the Action of Alpha Particles, by Solange Cormenu-Loustau. Trans. from Académie des Sciences, Paris. Comptes Rendus 240, 768-70 (1955).

AEC-tr-2550	Ion-Exchange Resins Used in Analytical Chemistry. XV. Application of High-Frequency Analysis to Ion-Exchange Resins, by Masatake Honda. Trans. from Bunseki Kagaku 2, 456-60 (1953).		
AEC-tr-2881	Investigation of the Natural Circulation of an Organic Heat-Carrier with High Boiling-Point, by F. F. Bogdanov. Trans. from Akademiia Nauk S.S.S.R. Izvestiia 3, 374-85 (1950).		
AEC-tr-3107	Excerpt from "The Alleged Isomerism of Potassium Chloro Salts", by R. Charonnat. Trans. from Annales de Chimie, Ser. 10, 16, 25-6 (1931).		
AEC-tr-3168	Study of the $BiCl_3 + 3Ag \rightleftharpoons 3AgCl + Bi$ System, by T. I. Sokolova. Trans. from Akademiia Nauk S.S.S.R. Institut Obshchai i Neorganicheskoi Khimii. Sektor Fiziko-Khimi-Cheskogo Analiza. Izvestiia 21, 159-71 (1951).		
AEC-tr-3181	Production of Single Crystals of Barium Titanate, by Hubert Eustache. Trans. from Académie des Sciences, Paris. Comptes Rendus 244, 1029-31 (1957).		
AEC-tr-3182	Raman Spectrum of Potassium Cuprocyanide, by Paolo Chiorboli and Corrado Testa. Trans. from Annali di Chimica 47, 639-45 (1957).		
AEC-tr-3204	The Electrolytic Regeneration of Sulfuric Acid Iron Pickle Solutions, by H. Hohn, E. Pfitzer, and G. Jangg. Trans. of Special Issue from Beiztechnik 6, no. 10, 109-13 (1957).		
ASCU-3748	Thermodynamic and Transport Properties of Gaseous Carbon Dioxide.	L. H. Chen, Gen. Dynamics Corp. Elec. Boat Div., Groton, Conn.	7-57

records

AECU-3750	Zircex Uranium Sublimate Loss.	T. R. Jaworowski, C. J. King, III Mass. Inst. of Tech., Oak Ridge, Tenn. Eng. Prac. School	1-24-58
AECU-3751	Zircex Kinetics and Uranium Loss Study.	T. J. Carter, Jr., R. A. Stone Same	11-13-58
AECU-3752	Carbon Dioxide Adsorption on Thoria. Technical Report No. 1.	C. H. Pitt, M. E. Wadsworth Utah Univ., Salt Lake City. Inst. for the Study of Rate Processes	2-15-58
AECU-3753	Precise Vapor Pressure Measurement at High Temperature.	R. E. Machol, E. F. Westrum, Jr. Michigan, Univ., Ann Arbor	[11-57]
AECU-3759	A Kinetic Study of CO_2 Desorption from Thoria. Technical Report No. II.	C. H. Pitt, M. E. Wadsworth Utah. Univ., Salt Lake City. Inst. for the Study of Rate Processes	4-15-58
AECU-3772	Progress Report No. 52 [for] December 1, 1957 Through February 28, 1958.	Mass. Inst. of Tech., Cambridge. Lab. for Nuclear Science	2-28-58
AECU-3780	Resin Attrition.	G. R. Seiler, P. R. Ammann, A. B. Newey Mass. Inst. of Tech., Oak Ridge, Tenn. Eng. Practice School	4-9-58

ECU-3785	On the Calculation of Properties of Gases at High Temperatures. Technical Report No. 2.	I. Amdur, J. Ross, Mass. Inst. of Tech., Cambridge and Brown Univ. Providence	8-1-58
AECU-3786	Temperature and Phase Effects on the Photolysis of Ethyl Iodide.	R. H. Luebbe, Jr., J. E. Willard, Wisconsin Univ., Madison.	[1958]
AECU-3789	Progress Report [for] July, 1958. Technical Report, No. 3.	Anderson Physical Lab., Champaign, Ill.	n.d.
ECU-3795	The Determination of Dissolved Argon in Water.	E. L. Shirley, C. F. Pachucki, L. K. Lolos Knolls Atomic Power Lab., Schenectady, N. Y.	[10-7-57]
RE-C/M-358	An Electrochemical Separation Process for Use in Polarography.	R. L. Faircloth	10-58
RE-C/M-359	The Separation of Beryllium from Polyvalent Cations with a Diallyl Phosphate Complexing Resin.	J. Kennedy, V. J. Wheeler	9-58
RE-C/R-2686	The Extraction of Nitrates by Phosphorylated Reagents Part I. The Relative Extraction Rates and Solvating Mechanisms for Uranyl Nitrate.	T. V. Healy, J. Kennedy	9-58
CE/M-227	The Efficiency of Hydraulic Cyclones for Homogeneous Aqueous Reactor Fuel Processing.	D. Bradley	8-58
CE/R-2618	The Chemical and Physical Interaction of Sodium and Graphite.	R. C. Asher	8-58
R-2707	Optimum Conditions for the Use of Vermiculite in the Decontamination of Radio-Active Effluent.	T. D. Wright, J. Monahan	10-58

RE-EL/R-2696	The γ-Ray Spectra of Uranium and Thorium in Equilibrium with Their Radioactive Decay Products.	P. Iredale	10-58
ERE-I/R-2656	A Precision Microphotometer for Use with a Vickers Projection Microscope.	S. M. Makin, G. T. Rogers	9-58
RE-M/R-2672	A Neutron Diffraction Study of Potassium Cobalticyanide.	N. A. Curry, W. A. Runciman	9-58
EA-635	Analysis of Mixtures of Light and Heavy Water by Means of a Simple Infrared Photometer. (In French.) Reprinted from Chimie Analytique 39, 102-3 (1957).	A. Berton, M. Ceccaldi France. Commissariat à l'Énergie Atomique, Paris	1957
EA-660	Study Using Radioactive Tracers of Corrosion of Instruments by Tungsten Carbide. (In French.) Reprinted from Revue Générale de Mécanique 41, 1-8 (1957).	H. Creuzot, P. Lévêque Same	1957
-58-9-35	HRP. Preliminary Studies of the Fluidized Bed Denitration of Thorium Nitrate.	H. L. List Oak Ridge Nat'l Lab., (Tenn.)	9-30-58
-58-10-111	HRT. Chemical Plant Run 16 Summary.	O. O. Yarbro Same	10-9-58
-58-11-31	Explosive Reactions During Reprocessing of Reactor Fuels Containing Uranium and Zirconium or Niobium.	T. A. Gens Same	11-13-58
30331 Rev.	Determination of NO_2 and NO in Air.	W. E. Gill	9-17-58
56506	Multicolor Pyrometry.	B. B. Brenden, H. W. Newkirk, Jr.	9-1-58
-57873	The Use of Anion Exchange in the Spectrographic Determination of Impurities in Plutonium.	R. Ko	10-20-58
-58201	Pressure Control of Static-Type, Glove-Operated Hoods (A Preliminary Report)	C. D. Swanson	11-4-58

GO-AM/S-44	The Absorptiometric Determination of Chromium in Uranium Metal.	U.K.A.E.A. Industrial Group. Springfields Works, Springfields, Lancs, England	1958
GO-AM/S-49	A Rapid Method for the Absorptiometric Determination of Iron in Uranium Metal.	Same	1958
GO-AM/S-119	The Absorptiometric Determination of Manganese in Uranium Metal.	Same	1958
GO-AM/S-122	The Absorptiometric Determination of Phosphorus in Uranium Metal.	Same	1958
IS-941	Relative Apparent Molal Heat Contents of Some Rare Earth Chlorides and Nitrates in Aqueous Solutions.	R. E. Eberts, F. H. Spedding Ames Lab., Ames, Iowa	7-57
SC-1056	Ion-Exchange Separation of Metals by a Single-Pass Method	R. T. Oliver, J. S. Fritz Same	6-58
SC-1074	Crystal Structure and Magnetic Properties of $LeCuCl_3.2H_2O$	P. H. Vossos, R. E. Rundle Same	8-58
SC-1958-484	Preparation of Pure Boron Trifluoride. Report No. 28/III.	J. T. Riedel Instytut Badań Jadrowych, Warsaw	6-58
SC-1958-487	Spectrographic Analysis of Concentrations of Impurities in Discharges from Metal Electrodes in Sparks. (In German.) Report No. 31/VIII.	J. Czakow, T. Stociak, O. Szczerbiński Same	6-58
SC-1958-488	Preparation of Large Metallic Single Crystals for Neutron Diffraction. Report No. 32/I-B.	A. Modrzejewski, B. Buras, R. Czarnecki Same	8-58

MTSC-1958-489	Precipitation of Ammonium Diuranate from Uranyl Nitrate Solutions in 40% TBP, Mopasine. Report No. 33/IV.	W. Korpak, C. Deptula Instytut Badań Jadrowych, Warsaw	8-58
MTSC-1958-490	Liquid Ionites for Sorption of Uranium. Report No. 34/IV.	W. Korpak, C. Deptula, S. Goszczyński Same	8-58
MTSC-1958-492	The Deposition of Trace Amounts of Radioactive Cations on Metal Surfaces. Report No. 36/V.	J. Siejka, I. G. Campbell Same	9-58
MTSC-1958-493	Separation of Uranium from Accompanying Metals by Means of the Carbonate Method. (In German.) Report No. 37/VIII.	L. Wódkiewicz Same	10-58
MTSC-1958-494	Quantitative Measurements of Colloidal Vibration Potentials. Technical Report No. 20.	J. Dereska, E. Yeager, F. Hovorka Western Res. Univ., Cleveland. Ultrasonics Research Lab.	12-1-58
MTSC-1958-496	A Dynamically-Adjustable Chuck Mounting for Centering Work in a Glassblowing Lathe. Technical Report No. 453-2.	H. A. Menoses, M. D. Hare Stanford Univ., Calif. Stanford Elec. Labs.	10-17-58
Photograph 2734	The Nonlinear Behavior of Ferrites at High Microwave Signal Levels. Reprinted from Institute of Radio Engineers, New York. Proceedings 44, 1270-84 (1956).	H. Suhl, Bell Tel. Labs., Inc., N.Y.	10-58
Photograph 3049	The Study of High Polymers by Nuclear Magnetic Resonance. Reprinted from Fortschritte der Hochpolymeren-Forschung 1, 35-74 (1958).	W. P. Slichter Same	10-58

..nograph 3092	Magnetic and Crystallographic Properties of Substituted Yttrium-Iron Garnet, $3Y_2O_3 \cdot x\ M_2O_3 \cdot (5-x)Fe_2O_3$. Reprinted from Physical Review 110, 73-78 (1958).	M. A. Gilleo, S. Geller Bell Tel. Labs., Inc., N.Y.	10-58
..nograph 3116	Oxides of the 3D Transition Metals. Reprinted from Bell System Technical Journal 37, 1047-84 (1958).	F. J. Morin Same	10-58
..nograph 3119	Rate Limitation for Impurity Diffusion in Semiconductors. Reprinted from Physical Review.	F. M. Smits, R. C. Miller Same	11-58
..A-SR-2942	Cryoscopic Measurements in Molten Mercuric Chloride Solutions.	S. W. Mayer	9-1-58
..A-SR-2964	Dissociation Pressure and Stability of Beryllium Carbide.	B. D. Pollock	11-1-58
..A-SR-3043	The Synthesis of Biphenyl-3, 3', 5, 5'-d_4 and Biphenyl-d_{10}.	R. I. Akawie	10-15-58
WORD-6132	Effects of Extremely High Temperatures on Magnetic Properties of Core Materials.	M. Pasnak, R. H. Lundsten Naval Ordnance Lab., White Oak, Md.	7-10-58
..BL-147	Semiannual Progress Report for the Period January, 1958 Through June, 1958.	New Brunswick Lab., AEC, N. J.	11-58
..B-6232	Fluorine Substitution in Hydrous Silicates and Related Minerals. Quarterly Report for Period Ending September 30, 1958.	A. Van Valkenburg, C. E. Weir, E. N. Bunting Nat'l Bureau of Standards, (Washington, D. C.)	9-58
..-7067	Quarterly Report No. 2. Development of an Advanced Nuclear Radiation-Resistant Hydraulic Fluid.	Calif. Research Corp., Richmond, Calif.	8-31-58
.. 5225	High-Temperature Lubricants from Aromatic Acids and Fluoroalcohols.	C. M. Murphy, J. G. O'Rear, H. Ravner, et al.	11-5-58

[illegible]O-7922	Investigation of Ultrasonic Potentialities in Fluid Flow Promotion.	N. Maropis, J. B. Jones, C. D. Twardowski Aeroprojects, Inc., West Chester, Penna.	6-58
[illegible]YO-7962	Ionic Conductivity of Gamma Irradiated Sodium Chloride.	H. S. Ingham, Jr. Carnegie Inst. of Tech., Pittsburgh	9-58
[illegible]NL-2592	The Recovery of Uranium and Plutonium from Stainless Steel Sulfate Decladding Solutions by Ion Exchange.	W. J. Neill, I. R. Higgins	12-11-58
[illegible]NL-2628	Tables of the Activity Coefficient of A 1-1 Electrolyte and Its Derivatives Calculated Using a Modified Debye-Hückel Equation.	M. H. Lietzke	12-15-58
[illegible]-CM-15	Chemistry and Metallurgy Division Progress Report [for the Period] July 1, 1958 - September 30, 1958.	Atomic Energy of Canada Ltd. Chalk River Project, Chalk River, Ont.	n.d.
[illegible]-3153	Radiometric Analysis of Uranium Content in Ores.	P. E. Damon, H. W. Feely Isotopes, Inc., Westwood, N. J.	7-31-57
[illegible]-3156	A Laboratory Investigation of Induced Polarization. Interim Report for 1957-58.	T. R. Madden, D. J. Marshall Massachusetts Inst. of Tech., Cambridge	8-26-58

ENGINEERING

[illegible]CU-3771	The Influence of the Molecular Mean Free Path on the Performance of Hydrodynamic Gas Lubricated Bearings.	A. Burgdorfer Franklin Inst. Labs. for Res. and Dev., Phila.	6-58

[illegible]ecard

ERE-A/R-2684	A Water Level System to Monitor Foundation Settlements.	R. B. Clay	9-58
RN-56946	Methods for Investigating Critical Discharge Phenomena with Saturated Water.	E. D. Waters	8-29-58
TOR-R/CA-285	Pivoted-Pad Journal Bearings Lubricated by Gas.	L. N. Snell U.K.A.E.A. Industrial Group. Capenhurst Works, Capenhurst, Ches., England	1958
MISC-1958-174 #28	Accession List No. 18. Covering the Period November 1 to November 30, 1958.	Battelle Memorial Inst., Rad. Effects Info. Center, Columbus, Ohio	12-15-58
MISC-1958-497	The Effect of Nuclear Radiation on Transistors. Technical Memorandum No. 5.	K. E. Hassler, Jr., J. F. Hansen, E. N. Wyler Same	11-30-58
MISC-1958-498	Effect of Nuclear Radiation on Electric Transformers and Transformer Materials. Technical Memorandum No. 7.	J. F. Hansen Same	11-30-58
MISC-1958-499	The Effect of Nuclear Radiation on Seals, Gaskets, and Sealants. Technical Memorandum No. 8.	N. J. Broadway, S. Palinchak Same	11-30-58
MISC-1958-500	The Effect of Nuclear Radiation on Glass. Technical Memorandum No. 9.	W. C. Riley, W. G. Copping, W. H. Duckworth Same	11-30-58
MISC-1958-501	The Effect of Nuclear Radiation on Hydrocarbon Fuels. Technical Memorandum No. 11.	L. J. Hillenbrand Same	11-30-58
TM-[illegible]-55	Study of the Hydromechanics of Sustaining Cyclones for Steam Boilers, by O. M. Baldina. Trans. from Energo-Mashinostroenie 2, no. 10, 13-17 (1956).		

[illegible]

ORNL-2603	An Investigation of Thermal-Transient Decay at a Fluid-Solid Interface and in Turbulent Flow Through Circular Ducts.	J. J. Keyes, Jr., J. E. Mott	12-16-58
RM-2194(& Abs.)	Some Fundamental Considerations Relating to Advanced Rocket Propulsion Systems.	J. H. Huth, B. W. Augenstein, R. D. Holbrook Rand Corp., Santa Monica, Calif.	3-11-58

GEOSCIENCES

CEA-742	A New Mining Prospect in Madagascar. Monazite Sands. (In French.) Reprinted from Echo des Mines et de la Métallurgie 1957, 591-6.	J. J. Lecoq France. Commissariat à l'Énergie Atomique, Paris	1957

METALLURGY AND CERAMICS

MEC-tr-1321	Method of Measuring Interphase Tension at High Temperatures, by S. I. Popel, O. A. Esin, and P. V. Gel'd. Trans. from Akademiia Nauk S.S.S.R. Doklady 74, 1097-1100 (1950).
MEC-tr-2064	Thickness Gages Particularly for Measuring Band Thicknesses in Rolling. I. Induction and X-Ray Types, by N. DeBall. Trans. from Archiv für technische Messen und Industrielle Messtechnik 213, 219-22 (1953).
MEC-tr-2095	Effect of Slot-Streams on Intensity of Cavitation Corrosion, by K. K. Shal'nev. Trans. from Akademiia Nauk S.S.S.R. Doklady 91, 1043-5 (1952).
MEC-tr-2097	Resistance of Metals to Cavitation Corrosion in Fresh Water and Sea Water, by K. K. Shal'nev. Trans. from Akademiia Nauk S.S.S.R. Doklady 95, 229-32 (1954).

Microcards

EC-tr-2105	On the Determination of the Number of Vacancies and the Energy of Vacancy Formation in Metals and Alloys, by S. S. Gertzriken. Trans. from Akademiia Nauk S.S.S.R. Doklady 98, 211-3 (1954).
C-tr-2115	The Use of Electrolytic Polishing for the Removal of Layers of Metals and Alloys for the Determination of Diffusion Coefficients, by M. B. Neiman and A. Ia. Shiniaev. Trans. from Akademiia Nauk S.S.S.R. Doklady 96, 315-8 (1954).
AEC-tr-2120	On the Suitability of Electrolytically Polished Specimens for the Metallographic Investigation of Aluminum and Its Alloys, by H. Rohrig and W. Schneider. Trans. from Aluminium 23, 281-4 (1951).
AEC-tr-2128	Fundamentals of the Theory of Extrusion, by F. Gatto. Trans. from Alluminio 23, 533-45 (1954).
C-tr-2157	Precipitation in Plastic Deformed Mixed Crystals, by Hermann Schumann. Trans. from Metallurgie und Giessereitechnik 4, 474-85 (1954).
EC-tr-2343	The Hot Pressing of Lightmetals in Dies, by W. Brunnckow. Trans. from Anzeiger für Maschinenwesen 57, 38-40 (1935).
EC-tr-2995	Observation of Uranium with a Field-Emission Microscope, by Micheline Sternberg. Trans. from Académie des Sciences, Paris. Comptes Rendus 242, 1307-9 (1956).
EC-tr-3100(Pt.I) &(Pt.II)	Uses of Radioactive Isotopes in Metallurgy. Symposium XXXIV. I. N. Kidin, ed. Trans. of a Publication of Institut Stali, Moscow, 1955. Pt. I, 270p. Pt. II, 56p.
C-tr-3198	New Method of Controlling Welded Joints of a Steam Pipe of Austenitic Steel, by M. R. Gubanova and V. P. Pushkin. Trans. from Energo-Mashinostroenie 3, 22-25 (1957).

...ocards

AEC-tr-3199	Corrosion of Stainless Steels in Solutions Containing Hydrofluoric Acid, by N. M. Kurtepov and A. S. Griaznova. Trans. from Akademiia Nauk S.S.S.R. Komissiia po Bor'be s Korrozisi Metallov. Trudy 2, 59-68 (1956).		
AEC-tr-3201	Amalgam Metallurgy of Titanium, by Hans Hohn, E. Fitzer, and H. Hofbauer. Trans. from Berg- und hüttenmännische Monatshefte 101, 277-85 (1956).		
AEC-tr-3479	Rare Earth Metals, by Felix Trombe. Trans. from Revue de Métallurgie 52, 2-33 (1956).		
AECU-3729	Further Studies on the Mechanism of Oxidation of Uranium Dioxide. Research Report 100FF942-R3.	J. Weissbart, P. E. Blackburn, E. A. Gulbransen Westinghouse Elec. Corp. Res. Labs., East Pittsburgh, Pa.	6-6-57
AECU-3762	Seamwelding Development Program on Zirconium Can End Closures. Final Report from June 1, 1956 to August 31, 1956.	F. R. Koepenick H. Goodley, ed. Sciaky Bros., Inc. Res. Div., L. A.	9-1-56
AECU-3784	Progress Report No. XXIII.	Massachusetts Inst. of Tech., Cambridge. Lab. for Insulation Research	6-58
AERE-Lib/Trans-747	The Mechanism of Corrosion Cracking of Austenitic Steels, by A. V. Riabchenkov and V. M. Nikiforova. Trans. from Metallovedenie i Obrabotka Metallov 1956, no. 8, 2-11.		
AERE-M/M-210	A Re-Determination of the Volume Changes on Solidification and Fusion of Lead Bismuth Alloys Near to Eutectic Composition.	C. T. Preston, G. H. Broomfield	10-58
AERE-M/R-2584	Cathodic Bombardment Etching of Metals with Particular Reference to Uranium, Thorium and Their Alloys.	D. Armstrong, P. E. Madsen, E. C. Sykes	6-58

[illegible] cards

AERE-M/R-2640	Dislocation Loops in Quenched Aluminium.	P. B. Hirsch, J. Silcox, R. E. Smallman, et al.	7-58
AERE-M/R-2646	The Autoclave Testing of Zircaloy.	O. Flint	7-58
AERE-M/R-2648	The Plastic Deformation of Uranium Oxides Above 800°C.	A. R. Hall, R. Scott, J. Williams	8-58
AERE-M/R-2649	The Mechanical Properties of Irradiated Niobium.	M. J. Makin, F. J. Minter	8-58
AERE-M/R-2652	Textures in Hot and Warm Extruded Beryllium Rods and Tubes.	N. A. Hill, J. Williams	9-58
AERE-M/R-2654	The Uranium Monocarbide/Uranium Mononitride System.	R. A. J. Sambell, J. Williams	9-58
AERE-M/R-2665	The Thorium-Aluminium System.	J. R. Murray	9-58
AERE-M/R-2685	The Effects on Heating Neutron Irradiated Beryllium.	J. B. Rich, G. B. Redding, R. S. Barnes	9-58
AERE-M/R-2714	Mass-Transport and Corrosion of Iron-Based Alloys in Liquid Metals.	G. W. Horsley	10-58
AERE-M/R-2705	The Effect of Segregation on the Diffraction From a Face-Centred cubic Alloy with Deformation Faults.	B. T. M. Willis	9-58
CEA-734	Study of Intermetallic Diffusion Processes Phenomena in the Uranium-Zirconium System. (In French.) Reprinted from Revue de Métallurgie 54, 597-610 (1957).	Y. Adda, J. Philibert, H. Faraggi France. Commissariat à l'Énergie Atomique, Paris	1957

CEA-746	Process for the Metallographic Study of Uranium. (In French.) Reprinted from Vide 12, 215-9 (1957).	M. Englander, J. Stohr, J. Laniesse France. Commissariat à l'Énergie Atomique, Paris	1957
ORNL-58-10-86	Depletion of Minor Constituents from Coast Metals No. 52 (89Ni - 5 Si - 4 B - 2 Fe) and No. 53 (81 Ni - 8 Cr - 4 B 4 - Si - 3 Fe) Brazing Alloys During Various Exposures.	D. H. Jansen Oak Ridge Nat'l Lab., Tenn.	10-23-58
DMIC-46E	Department of Defense Titanium Sheet-Rolling Program. Thermal Stability of the Titanium Sheet-Rolling-Program Alloys.	E. S. Bartlett, D. N. Williams, H. R. Ogden, et al. Battelle Memorial Inst. Defense Metals Info. Center, Columbus, Ohio	11-25-58
DMIC-106	Beryllium for Structural Applications. A Review of the Unclassified Literature.	W. Hodge Same	8-15-58
DMIC-MEMO-3	Memorandum on Recent Advances in Titanium Technology.	Same	10-24-58
[illegible]-57903	Recovery of Lattice Expansion of Irradiated Molybdenum.	D. L. Gray	11-1-58
IDO-16487	Recording Profilometer.	T. J. Boland Phillips Pet. Co. Atomic Energy Div., Idaho Falls, Idaho	11-12-58
MSC-1958-481	An Investigation of Scaling of Zirconium at Elevated Temperatures. Quarterly Status Report [for] September 6, 1958 to December 5, 1958.	H. B. Probst, E. B. Evans, W. M. Baldwin, Jr. Case Inst. of Tech., Cleveland	12-5-58
[illegible]-SR-2776	Moderator Graphite Experiments in the SRE.	R. E. Taylor	11-15-58

NMI-1193	Metallography of Thorium.	H. P. Roth	6-17-58
NMI-1207	The Solid Solubilities of Iron and Nickel in Beryllium.	S. H. Gelles, R. E. Ogilvie, A. R. Kaufmann	7-29-58
NYO-7430	A Search for Low Angle Scattering of X-Rays by Dislocations in Plastically Deformed Single Crystals.	W. H. Robinson Carnegie Inst. of Tech., Pittsburgh	6-10-58
ORNL-2544	Correlation of Cavitation Inception Data for a Centrifugal Pump Operating in Water and in Sodium Potassium Alloy (NaK)	A. G. Grindell	12-11-58
SCNC-277	Quantitative Determination of Uranium Loading of Aluminum-Clad Fuel Plates by X-Ray Densitometry.	S. Priceman Sylvania-Corning Nuclear Corp., Bayside, N.Y.	10-58
TID-7017	Reactor Material Specifications.	R. M. Evans, ed. Oak Ridge Nat'l Lab., (Tenn.)	10-29-58
WAPD-BT-10	Bettis Technical Review. Reactor Metallurgy.	Westinghouse Elec. Corp. Bettis Plant, Pittsburgh	10-58

PHYSICS

AEC-tr-1962	A High-Resolution Emission Electron Microscope, by G. V. Spivak and A. M. Rosenfeld. Trans. from Akademiia Nauk S.S.S.R. Seriia Fizicheskaia. Izvestiia 15, 317-22 (1951).
AEC-tr-2071	Measurement of Mean Free Course of Transport of Thermal Neutrons in Heavy Water by Means of a Modulated Source, by Victor Raievski and Jules Horowitz. Trans. from Académie des Sciences, Paris. Comptes Rendus 238, 1993-5 (1954).

Microcards

AEC-tr-2094	Criterion for the Incidence of Break-Away Cavitation on a Cylindrical Profile, by K. K. Shal'nev. Trans. from Akademiia Nauk S.S.S.R. Doklady 61, 799-802 (1948).		
AEC-tr-2096	Shapes of the Cavitation Region on a Transverse Foil in a Normally Incident Stream, by K. K. Shal'nev. Trans. from Akademiia Nauk S.S.S.R. Doklady 94, 1017-22 (1954).		
AEC-tr-2098	The Kinematic Structure of Break-Away Cavitation on a Circular Profile, by K. K. Shal'nev. Trans. from Akademiia Nauk S.S.S.R. Doklady 97, 785-8 (1954).		
AEC-tr-2109	Angular Distribution of Cosmic Ray Particles in the Stratosphere, by S. N. Vernov and A. M. Kulikov. Trans. from Akademiia Nauk S.S.S.R. Doklady 61, 1013-5 (1948).		
AEC-tr-2145	The Oscillographic Method of Studying Gaseous Discharge by Means of Probes, by A. M. Bonch-Bruevich. Trans. from Akademiia Nauk S.S.S.R. Doklady 81, 371-4 (1951).		
AEC-tr-2178	High Voltage Electrostatic Generator in Compressed Gas, by B. V. Baev, P. E. Vorotnikov, B. M. Gokhberg, N. I. Sidorov, A. B. Shuf, and G. B. Ian'kov. Trans. from Akademiia Nauk S.S.S.R. Doklady 101, 637-9 (1955).		
AEC-tr-2179	Hyperons as Excited States of Nucleons. A Possible Mechanism of Multiple Formation of Particles, by A. A. Markov. Trans. from Akademiia Nauk S.S.S.R. Doklady 101, 449-52 (1955).		
AECU-3734	Evaluation of Foreign Multiplier Phototubes.	J. Belakas, P. G. Parker Du Mont (Allen B.) Labs. Inc., Tube Oper. Eng. Passaic, N. J.	[1958]

Microcards

*AECU-3749	Theory of the Constant Gradient Linear Electron Accelerator.	R. B. Neal Stanford Univ., Calif. Microwave Lab.	5-58
*AECU-3754	Transient Beam Loading in Linear Electron Accelerators.	R. B. Neal Same	5-57
*AECU-3758	A Monte Carlo Study of Neutron Thermalization.	H. D. Brown Du Pont de Nemours (E. I.) and Co. Savannah River Lab., Augusta, Ga.	[1957]
*AECU-3765	Electrical and Optical Investigation of Charge-Carrier Trapping in Rutile Single Crystals. Technical Report No. 27.	K. G. Srivastava Mass. Inst. of Tech., Cambridge. Lab. for Insulation Res.	6-58
*AECU-3794	The Effect of Temperature on High-Vacuum Electrical conduction (Thesis).	E. K. Storms Washington Univ., St. Louis	8-58
AECU-3862	Engineering Study on Reactor Shielding.	L. A. Tarbox, C. Beck Division of Construction and Supply, AEC	4-58
AERE-A/R-2711	The Optical Design of Beam Matching Systems.	T. R. Walsh	10-58
AERE-EL/M-100	Two Ionisation Chambers for Activity Measurements on Wires Used for Neutron-Flux Scanning.	W. Absen, M. Awcock	9-58
AERE-EL/R-2671	Digital Data-Recording for Nuclear Experiments.	R. C. M. Barnes	9-58
AERE-HP/R-2644	A Neutron Monitor for Energies Above 20 Mev.	P. D. Holt, A. B. Clare	8-58

*Microcards

AERE-R/M-181	Flux and Slowing Down Measurements with a Disc Source.	J. G. Tyrer	10-58
AERE-R/M-198	Resonance Absorption in a Slab with a Parabolic Temperature Distribution.	A. Keane	9-58
AERE-R/R-2687	Cross-Sections at Various Distances in Water for Several Fast Neutron Detectors.	R. N. Glover, K. Maddocks	9-58
AERE-R/R-2688	Absolute Fast Neutron Flux Measurements in Water	R. N. Glover	9-58
AFOSR-TN-58-383	On the Development of Gaseous Detonation. I. Appraisal of the Problem. Technical Note DR 1.	A. K. Oppenheim, R. A. Stern California. Univ., Berkeley	6-58
AFOSR-TN-58-384	On the Development of Gaseous Detonation. II. Analysis of Wave Interaction Phenomena. Technical Note DR 2.	A. K. Oppenheim, Same	7-58
APAE-38	Plant Transient Analysis of the APPR-1 by Analog Computer Methods. Task No. IV.	J. O. Brondel, J. R. Tomonto Alco Products, Inc., Schenectady, N. Y.	10-1-58
APEX-387	Shielding Computer Programs.	M. A. Capo	11-21-58
BNL-JPB-11	On the Design of Quadrupole Focusing Systems.	J. P. Blewett	10-2-58
CERN-58-26	Production of Antihyperons and Tests of Global Symmetry. (In French.)	B. d'Espagnat, J. Prentki	10-58
CF-58-11-99	A Study of Germanium Surface Barrier Counters.	F. J. Walter, J. W. T. Dabbs, L. D. Roberts, et al. ORNL, (Tenn.)	11-28-58
HW-56919	Nuclear Physics Research. Quarterly Report for April, May and June, 1958.		7-21-58

MISC-1958-476	Lectures on the Theory and Design of an Alternating-Gradient Proton Synchrotron Presented by Members of the CERN Proton Synchrotron Group at the Conference on the Alternating-Gradient Proton Synchrotron, Held at the Institute of Physics of the University of Geneva, October 26-27-28, 1953.	M. H. Blewett, ed. European Council for Nuclear Research, Geneva. Proton Synchrotron Group	n.d.
MISC-1958-477	Nuclear Physics Works from the Institute for Physics at the Kaiser Wilhelm Institute for Research Work in Medicine, Heidelberg, by Walther Bothe. Trans. from Zeitschrift für Technische Physik 19, 565-9 (1938).		
MISC-1958-478	Nuclear Photo-Effects with γ-Rays from $B^{11}(p, \gamma)$, by Wolfgang Gentner and Walther Bothe. Trans. from Naturwissenschaften 26, 497-8 (1938).		
MISC-1958-479	Fast and Slow Mesotrons in Cosmic Rays, by Walther Bothe. Trans. from Naturwissenschaften 27, 305-12 (1939).		
MISC-1958-480	Theory of the Photodisintegration of the Deuteron and n-p Capture.	J. J. de Swart Rochester, N. Y. Univ.	10-31-58
MISC-1958-482	Heavy Meson-Hyperon Relative Parity and the Sign of the Coulomb Interference in $K^- - p$ Scattering.	E. Galzenati, B. Vitale Naples. Università. Istituto di Fisica Teorica	[1958]
MISC-1958-483	Beta-Decays and Time Reversal. Report No. 27/VII.	J. Wrzecionko Instytut Badań Jadrowych, Warsaw	6-58
MISC-1958-485	Phenomenological Theory of the S Matrix and T, C and P Invariance. II. Report No. 29/VII.	J. Werle Same	6-58
MISC-1958-486	Nuclear Interactions in the Energy Region 10^{10} EV - 10^{14} EV. Report No. 30/VI.	P. Ciok, T. Coghen, J. Gierula, et al. Instytut Badań Jadrowych, Warsaw and Československá Akademie Věd. Fysiky Ústav, Prague.	6-58

MISC-1958-495	A 2 - 8 kMc Bifilar Helix Backward-Wave Oscillator. Technical Report No. 382-1.	R. W. Grow, D. A. Dunn Stanford Univ., Calif. Stanford Electronics Labs.	9-29-58
MISC-1958-502	The Transmission Secondary Emission Image Multiplier. Research Report 8-1043-R12.	M. M. Wachtel, A. E. Anderson Westinghouse Elec. Corp. Research Labs., East Pittsburgh, Penna.	12-16-57
MIT-RLE-QPR-October 15, 1958	Fifty-First Quarterly Progress Report [for the Three-Month Period Ending August 31, 1958.]	J. B. Wiesner, G. G. Harvey, H. J. Zimmermann	10-15-58
Monograph 2787	Selection and Ranking Problems with Binomial Populations.	Bell Tel. Labs., Inc., N.Y.	12-57
Monograph 2982	Certain Results in Coding Theory for Noisy Channels. Reprinted from Information and Control 1, 6-25 (1957).	C. E. Shannon Same	6-58
Monograph 3060	Diffused Silicon Diodes. Design, Characteristics, and Aging Data. Reprinted from Institute of Radio Engineers, New York. IRE WESCON Convention Record 1, Pt. 3, 80-9 (1957).	H. E. Hughes, J. H. Wiley, P. Zuk Same	8-58
Monograph 3062	A New Method of Designing Low Level, High-Speed SemiConductor Logic Circuits. Reprinted from Institute of Radio Engineers, New York. IRE WESCON Convention Record 1, Pt. 2, 3-9 (1957).	W. B. Cagle, W. H. Chen Same	8-58
Monograph 3065	Transistor Characteristics for Direct-Coupled Transistor Logic Circuits. Reprinted from IRE Transactions on Electronic Computers EC-7, 6-16 (1958).	J. W. Easley Same	8-58
Monograph 3071	Parametric Theory of $\Delta u + k^2 u = 0$. Reprinted from Archive for Rational Mechanics and Analysis 1, 139-53 (1957).	W. L. Miranker Same	8-58

Monograph 3072	Heat Loss of Circular Electric Waves in Helix Waveguides. Reprinted from IRE Transactions on Microwave Theory and Techniques MTT-6, 173-7 (1958).	J. A. Morrison Bell Tel. Labs., Inc., N.Y.	8-58
Monograph 3090	Coherent Excited States in the Theory of Superconductivity; Gauge Invariance and the Meissner Effect. Reprinted from Physical Review 110, 827-35 (1958).	P. W. Anderson Same	10-58
Monograph 3096	Communication Theory Applied to Television Coding. Reprinted from Optica Acta 5, (Oct., 1958) and Acta Electronica 2, sec. 1-2, (1957-58).	R. E. Graham Same	10-58
Monograph 3109	Transmission Characteristics of a Three-Conductor Coaxial Transmission Line with Transpositions. Reprinted from Bell System Technical Journal 37, 835-76 (1958).	G. Raisbeck, J. M. Manley Same	10-58
Monograph 3110	Synthesis of Series-Parallel Network Switching Functions. Reprinted from Bell System Technical Journal 37, 877-98 (1958).	W. Semon Same	10-58
Monograph 3111	Circular Waveguide Taper of Improved Design. Reprinted from Bell System Technical Journal 37, 899-912 (1958).	H. Unger Same	10-58
Monograph 3112	The Nonuniform Transmission Line as a Broadband Termination. Reprinted from Bell System Technical Journal 37, 913-24 (1958).	I. Jacobs Same	10-58
Monograph 3114	Nonstationary Velocity Estimation. Reprinted from Bell System Technical Journal 37, 1009-22 (1958).	T. M. Burford Same	10-58
Monograph 3115	Amplitude Modulation Suppression in FM Systems. Reprinted from Bell System Technical Journal 37, 1023-46 (1958).	C. L. Ruthroff Same	10-58
Monograph 3117	Pressure Broadening of Spectral Lines at General Pressures. Reprinted from Conference on Broadening of Spectral Lines, Pittsburgh, 1955. Proceedings, 29-61 (1956).	P. W. Anderson, J. D. Talman Same	10-58

NAA-SR-2234	Results of Preliminary Shield Analysis for the 45.5 Mw OMR.	D. S. Duncan	11-15-58
NAA-SR-2557	The Calculation of Gamma-Ray Heating in Target Samples Located in the BSR Shield.	D. S. Duncan	11-1-58
NAA-SR-2953	Analysis of Neutron Flux in the Shielding of the Sodium Reactor Experiment.	F. L. Fillmore, R. J. Doyas	10-15-58
NP-7051	Conversion of Radiation Data to Common Denominators.	W. T. Harper Lockheed Nuclear Products, Marietta, Ga.	10-58
NP-7070	NRL Quarterly on Nuclear Science and Technology. Progress Report for the Period July - October, 1958.	Naval Research Lab., (Washington, D. C.)	10-1-58
NRL-5200	Strong Shock Waves in Helium-Hydrodynamic Calculations I.	C. E. Faneuff, A. D. Anderson, A. C. Kolb	10-31-58
NRL-5213	Naval Research Laboratory Research Reactor. Part IX. Measurement of Fast-Neutron Beam Currents.	F. E. Jablonski, A. F. DiMeglio	11-4-58
NYO-2269	Amplification of Transient Images in High-Gain Photo-Cathode-Phosphor Image-Intensifier Systems.	A. Roberts Rochester, N. Y. Univ.	10-1-58
NYO-2271	Collective Motion in Nuclei. (Notes Taken at series of Lectures Delivered by Dr. J. P. Elliott at University of Rochester.)	M. H. Macfarlane, comp. Same	9-17-58
NYO-2272	Alternative Method for Comparing Pion-Proton Scattering Data with Dispersion Equations.	H. J. Schnitzer, G. Salzman Same	10-16-58
NYO-7905	Plasma Oscillations with Diffusion in Velocity Space.	A. Lenard, I. B. Bernstein Princeton Univ., N. J. Project Matterhorn	7-22-58

NYO-8059	Reaction Cross Section for 4 Mev Deuterons on Cu^{63}.	I. Slaus, W. P. Alford Rochester, N. Y. Univ.	11-12-58
NYO-8674	A Non-Random Sampling Method, Based on Congruences, for "Monte Carlo" Problems.	R. D. Richtmyer N. Y. Univ., N. Y. Atomic Energy Commission Computing Facility	9-26-58
NYO-8793	Weak Interactions. (A Series of Lectures given at the University of Rochester during the summer 1958 by E. C. G. Sudarshan)	J. Nilsson, S. Bose, comps. Rochester, N. Y. Univ.	12-3-58
USNRDL-TR-279	Calculation of the Penetration of Gamma Rays Through The Edges of a 1/2-in. diameter Lead Collimator.	C. S. Cook	11-24-58
USNRDL-TR-280	Cross Section for the $Li^6(n,t)He^4$ Reaction for 12.5-to 18.3-Mev. Neutrons.	B. D. Kern, W. E. Kreger	11-25-58

REACTOR SCIENCE

AEC-tr-3437	Nuclear Energetics, by David Israelevich Voskoboinik. Trans. of the book Iadernaia Energetika. Moscow, State Publishing House for Technical-Theoretical Literature, 1956.		
*AECU-3747	Specification for Cleaning Metal Components and Systems for Liquid - Metal Cooled Power Reactors. Specification No. 10-16.	L. R. Kovac Atomic Power Dev. Assoc., Inc., Detroit	1-13-58
*AECU-3763	Mechanical and Thermal Problems of Water-Cooled Nuclear Power Reactors.	N. J. Palladino, J. Sherman Westinghouse Elec. Corp. Atomic Power Div., Pittsburgh	[1955?]

*Microcards

*AECU-3776	Final Stress Analysis of PWR Seed 1, Core 1. Report No. 9561-3.	R. Mark, ARDE Assoc., Newark, N.J.	10-57
*AECU-3777	The Sodium-Cooled, D_2O-Moderated Reactor (SDR). Status Report.	K. Goldmann, C. K. Leeper Nuclear Dev. Corp. of Amer. White Plains, N. Y.	[1958]
*AECU-3792	Feasibility Study of Superflux Reactor.	J. C. Bolger, S. F. D'Urso, R. O. Maak Mass. Inst. of Tech., Oak Ridge, Tenn. Eng. Practice School	12-20-56
*AECU-3910	Pathfinder Atomic Power Plant. Technical Progress Report for July 1, 1958 - September 30, 1958.	Allis Chalmers Mfg. Co., Milwaukee	10-15-58
AERE-CE/M-228	Specification of the Equilibrium Composition of an HAR Fuel Solution with Continuous Processing.	D. Bradley	8-58
AERE-CE/M-241	Steam Cycles for Homogenoous Aqueous Reactors.	W. S. Cumming, C. L. Brown	7-58
AERE-CE/R-2615	Homogenoous Aqueous Power Reactors Core Fluid Processing Rates.	R. G. Tongue, T. R. Jenkins	9-58
AERE-CE/R-2624	Critical Assemblies with Heavy Water Solutions of Uranyl Fluoride (H.A.Z.E.L.) Part I. Fuel System.	D. T. King, G. P. Wall, W. C. J. White	9-58
AERE-EL/M-105	The Use of Induced N^{16} Activity in a Reactor Coolant for the Determination of Neutron Flux Distributions.	A. Goodings	1958
AERE-M/L-2 (2nd Ed.)	The Manufacture of DIDO Fuel Elements. Text of paper given at the Symposium on Fuel Elements, Paris, November, 1957.	H. Lloyd	8-58

*Microcard

AERE-R/M-209	A Simple Theory for Flux Depressions Caused by Loops in a Reactor.	C. Carter	9-58
AERE-R/R-2568	Neutron Streaming in Gas-Cooled Reactors.	I. S. Grant	10-58
AERE-R/R-2597	Exponential Experiments with Natural and Slightly Enriched Uranium, Graphite Moderated Systems.	D. J. Lockey, H. Pearson, A. L. Pope, et al.	5-58
AERE-R/R-2658	Composite Reactor Lattices.	A. N. Buckler, C. Carter	9-58
AERE-R/R-2681	The Use of the Pile Oscillator in Thermal Reactor Problems.	H. Rose, W. A. Cooper, R. B. Tattersall	9-58
ANL-5873	The Calculation of Radial Temperature Distributions in Cylindrical Fuel Specimens During Neutron Irradiation.	F. R. Taraba	11-58
ANL-5940	EBR-II Fuel Irradiation Facilities.	R. J. Schiltz, J. H. Monaweck, E. S. Sowa	11-58
ASAE-S-7	Reactor Physics of H_2O-Moderated Power Reactors.	I. W. Richardson, J. W. Webster, E. J. Leshan, et al. American-Standard. Atomic Energy Div., Mountain View, Calif.	2-1-58
BNL-525	Reactor Operations. Monthly Report for May, 1958.	R. W. Powell, C. L. Osborne	5-58
BNL-527	Reactor Operations. Monthly Report [for] September 1958.	R. W. Powell, C. L. Osborne	10-58
CEND-0005-RS-41	Summary of Progress in Unclassified Areas of Reactor Technology.	Combustion Eng., Inc. Nuclear Div., Windsor, Conn.	10-15-58

CF-58-8-3	Critical Experiments with 2.09% U^{235}-Enriched Uranium Metal Plates in Water.	J. K. Fox, J. T. Mihalczo, L. W. Gilley ORNL, (Tenn.)	8-3-58
CF-58-9-1	Design and Analysis of a Mechanical Transistion Joint Between Dissimilar Materials. Application to HRT.	R. D. Cheverton, T. H. Mauney Same	9-15-58
CF-58-10-37	U^{233} Breeders. Commentary and General Remarks.	W. K. Ergen ORNL., (Tenn.)	10-8-58
DP-315	Heavy Water Moderated Power Reactors. Quarterly Progress Report [for] May, June, and July, 1958.	L. Isakoff, Comp.	9-58
LA-2261	Fuel Level Detector.	L. H. Thacker	12-11-58
NAA-SR-2561	Interim Report on Nuclear Analysis of SGR Fueling.	T. J. Connolly	10-15-58
NP-tr-62	Application of Nuclear Energy in Shipbuilding and Ship Propulsion, by F. Richter. Trans. from Bremen. Handelskammer. Mitteilungen 1957, no. 11, 187-90.		
NYOO-8753 Vol. I	Design and Feasibility Study of a Pebble Bed Reactor-Steam Power Plant.	Sanderson and Porter, New York	5-1-58
PR-RRD-15	Reactor Research and Development Division. Progress Report for July 1, 1958 - September 30, 1958.	Atomic Energy of Canada Ltd., Chalk River Project, Chalk River, Ont.	n.d.
TID-7557	Fifth International Congress and Exhibition of Electronics and Atomic Energy [Held At] Rome, Italy, June 16-30, 1958. U. S. Papers.		12-58
WAPD-MRP-76	Pressurized Water Reactor (PWR) Project. Technical Progress Report for the Period August 24, 1958 to October 23, 1958.		n.d.

YAEC-87	Quarterly Progress Report for the Period April 1, 1958 to June 30, 1958.	I. H. Coen, R. W. Garbe Westinghouse Elec. Corp. Atomic Power Dept., Pittsburgh	7-30-58

MISCELLANEOUS

*AEC-tr-2084	Effect of Radioactive Decay on the Thermal Regime of the Earth, by E. Liubimova. Trans. from Akademiia Nauk S.S.S.R. Seriia Geofizikaia. Izvestiia 1952, 3-14. 18p. and The Role of Thermal Conductivity in the Thermal Regime of the Earth, by E. Liubimova. Trans. from Akademiia Nauk S.S.S.R. Seriia Geofizikaia. Izvestiia 1953, 523-5.		
AEC-tr-3433	Report on the Egyptian Atomic Energy Commission for the Year 1957. Its Creation, Programs, and Activities. Trans. of a report issued by Egypt. Atomic Energy Commission, 1957.		
AECL-717	The Debate in the House of Commons on the Atomic Energy Estimates for 1958-1959.	Atomic Energy of Canada Ltd., Chalk River Project, Chalk River, Ont.	9-3-58
AERE-ES/M-81	Master Slave No. 8. Manipulators. Extra Long.	W. K. Curtis	10-58
ASTIA-U58-20	Technical Abstract Bulletin. Bulletin No. U58-20.		12-15-58
CEA-756	Cumulative List of CEA Reports Published by the French Atomic Energy Commission (November, 1956 - November, 1957). (In French.)	France. Commissariat à l'Energie Atomique, Paris	11-57
CEA-756(Suppl.)	Cumulative List of CEA Reports Published by the French Atomic Energy Commission, January, 1958 - June, 1958. (In French.)	Same	6-58

*Microcard

LA-2265	Short Bibliography on Organic Scintillators and Their Applications.	R. M. Henrickson, Comp.	12-19-58
MISC-1958-50, No. 24(Index)	Index to the Twenty-Fourth Semiannual Report to Congress [of the Atomic Energy Commission for the Period] January - June, 1958.	Atomic Energy Commission, (Washington, D. C.)	1958
MIT-LNS-APR-June 1, 1957-May 31, 1958	Annual Progress Report [Covering] Researches During the Period June 1, 1957 to May 31, 1958.		n.d.
*RM-77(RAND)	Two Russian Articles on the Ballistic Missile.	Rand Corp., Santa Monica, Calif.	
TID-4022(4th Rev.)	Consolidated Availability Listing of Confidential Reports Announced to the Civilian Application Program.		10-1-58
TID-4023(4th Rev.)	Consolidated Availability Listing of Secret Reports Announced to the Civilian Application Program.		10-1-58

*Microcard

UCRL REPORTS ISSUED DURING DECEMBER 16 - 31, 1958

UCRL-8213	Lectures on Continuous Groups and Reflections in Quantum Mechanics Given by Wolfgang Pauli at the University of California, Spring Term, 1958, No. 1 Thru No. 28.	R. J. Riddell, Jr.	10-58
UCRL-8524	Energy Reception and Transfer in Photosynthesis.	M. Calvin	9-23-58
UCRL-8540	A 10Mc/sec Pulse-Amplitude Discriminator.	J. Moy	11-10-58
UCRL-8549	Forces Between Nucleons and Antinucleons.	G. F. Chew	11-25-58
UCRL-8551	The Production of Cascade Particles by 5.5-Bev/c Pions.	W. B. Fowler, W. M. Powell, J. I. Shonle	11-24-58
UCRL-8572	Λ Interactions in Hydrogen.	F. S. Crawford, Jr., M. Cresti, M. L. Good, F. T. Solmitz, M. L. Stevenson, H. K. Ticho	12-15-58
UCRL-8577	List of Unclassified Reports Received and Issued by the UCRL Information Division During the Period of December 1 - 15, 1958.		12-16-58
UCRL Translation 434	Part of Lecture 5. Results of Experiments on Scattering of Nucleons by Nucleons. and All of Lecture 8. Hyperons and Antinucleons, by Ia. A. Smorodinskii. Trans. from Scattering of Particles of High Energies. Lectures Read at Summer Conference of Yugoslavian Physicists at Loshin Island, July 13-27, 1957. Issued by Ob"edinennyi Institut Iadernykh Issledovanii. Laboratoriia Teoreticheskoi, Moscow, 1957, p. 20-21 and p. 33-4.		

UCRL Translation 436(L)	Concerning the Method of Preparation of Nuclear Track Emulsions by Use of Dilute Solutions, by A. Narath and G. Heimann. Trans. of a paper presented at the International Colloquium on Corpuscular Photography. 2d, Montreal, 1958.
UCRL Translation 437(L)	Production of Emulsions with High Ratio of AgHal/Gel. Trans. of a paper presented at the International Colloquium on Corpuscular Photography. 2d, Montreal, 1958.
UCRL Translation 438	Occurrence and Importance of Erythropoetine in Erythroblastosis Foetalis, by H. Althoff and H. Werner. Trans. from Acta Haematologica 18, 126-36 (1957).
UCRL Translation 439	Effect of Erythropoetine on Humans, by H. Althoff and H. Werner. Trans. from Klinische Wochenschrift 34, 1197-8 (1956).
UCRL Translation 440	The Properties of Photoreduced Forms of Chlorophyll, Protochlorophyll, and Hematoporphyrin as Dependent on the Conditions of Acid Base Equilibria, by A. A. Krasnovskii and E. V. Pakshina. Trans. from Akademiia Nauk S.S.S.R. Doklady 120, 581-4 (1958).
UCRL Translation 441	An Investigation of Plant Leaf Fluorescence in the 400-850 Mμ Region, by F. F. Litvin and A. A. Krasnovskii. Trans. from Akademiia Nauk S.S.S.R. Doklady 120, 764-7 (1958).

INFORMAL REPORTS ISSUED

Available From				
Mech. Eng.	UCID-506 (4320-01 M2)	Density of Hydrogen at Operation Conditions of 15" BC.	L. Reed, R. Tripp	10-30-58
Mech. Eng.	UCID-507 (7910-58 M3)	15" Hydrogen Bubble Chamber Expansion System Valve Schematic - Progress Report.	J. Mark	9-10-57
Mech. Eng.	UCID-508 (7910-58 M4)	Equipment Fabrication - Berkeley 15" Bubble Chamber Pressure Tests of the System.	J. Mark	10-16-57
Mech. Eng.	UCID-509 (7910-58 M5)	15" Hydrogen Bubble Chamber Expansion System Compressor.	K. Mirk	4-2-57
Mech. Eng.	UCID-510 (7910-58 M6)	15" Hydrogen Bubble Chamber Expansion Compress - Weights.	K. Mirk	4-19-57
Mech. Eng.	UCID-511 (7910-58 M7)	Equipment Fabrication - Berkeley 15" Bubble Chamber Discussion of First Run - November 23 - December 2, 1957.	H. P. Hernandez	12-10-57
Mech. Eng.	UCID-512 (7911-10 M3)	72" Hydrogen Bubble Chamber Magnet Assembly - Rigging Instructions.	W. F. Eaton	3-6-57
Mech. Eng.	UCID-513 (7911-11 M5)	72" Hydrogen Bubble Chamber Coil Boxes, Backing Bars, etc.	L. P. Henderson	9-17-56
Mech. Eng.	UCID-514 (7911-11 M7)	72" Hydrogen Bubble Chamber, Fabrication - Magnet Coil - First Progress Report: Coil Winding Operation, P. O. J-31916.	J. Hart	11-19-56
Mech. Eng.	UCID-515 (7911-11 M9)	72" Hydrogen Bubble Chamber - Magnet Coils Butt Solder Joints in 60° Bus Joint 7N5663.	W. Eaton, T. Perkins	6-18-57

Mech. Eng.	UCID-516 (7911-14 M1)	72" Hydrogen Bubble Chamber Fabrication Magnet Carriage - Magnet Transport System Hydraulic Fluid Requirements.	F. H. Bierlein	2-22-56
Mech. Eng.	UCID-517 (7911-14 M2)	72" Hydrogen Bubble Chamber Fabrication Magnet Carriage - Machinability of Post Cylinder Forging 7N9153.	F. H. Bierlein	2-25-57
Mech. Eng.	UCID-518 (7911-14 M3)	72" Hydrogen Bubble Chamber Magnet Carriage - Hydraulic System Gas Leak Test of Hydraulic Tubing Circuits.	F. H. Bierlein	3-5-58
Mech. Eng.	UCID-519 (7911-14 M4)	72" Hydrogen Bubble Chamber Magnet Carriage - Hydraulic System - Method for Bleeding and Filling Lines and Components.	F. H. Bierlein	12-30-57
Mech. Eng.	UCID-520 (7911-20 M2)	72" Hydrogen Bubble Chamber, Vacuum Tank, Tightness Test.	J. Hart	11-21-56
Mech. Eng.	UCID-521 (7911-20 M3A)	72" Hydrogen Bubble Chamber - Vacuum System Ion Gage Test No. 1.	J. Hart	11-28-56
Mech. Eng.	UCID-522 (7911-20 M4)	72" Hydrogen Bubble Chamber - Tests on 6" Vacuum Valves - Valves are Sold by Consolidated Vacuum Corp. Type STV-6.	J. Hart	9-25-57
Mech. Eng.	UCID-523 (7911-20 M5)	72" Hydrogen Bubble Chamber Vacuum System - Vacuum Tank and Cover Hydrostatic Test.	D. Nestor	10-7-57
Mech. Eng.	UCID-524 (7911-20 M6)	72" Hydrogen Bubble Chamber Vacuum System - Pressure Test of Pressure Alarm Switch PA2V.	F. Tanforan	4-8-58
Mech. Eng.	UCID-525 (7911-30 M1)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Two Side Expansion 1/2 Hole Plate.	P. Hernandez	10-8-56
Mech. Eng.	UCID-526 (7911-30 M2)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Thickness Required for Beam Window in 72" BC Chamber.	H. Heard	10-10-56

Mech. Eng.	UCID-527 (7911-30 M3)	72" Hydrogen Bubble Chamber Glass Cooldown Calculation. Effect of Gas Pressure and Heat Transfer Coefficient.	H. Hoard	10-8-56
Mech. Eng.	UCID-528 (7911-30 M4A)	72" Bubble Chamber Fabrication - Chamber Assembly - Expansion Line Design.	H. P. Hernandez	10-18-56
Mech. Eng.	UCID-529 (7911-30 M5)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Proposed Chamber Design - Stress Calculations - Window Flange.	H. Hoard	10-19-56
Mech. Eng.	UCID-530 (7911-30 M6)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Coefficient of Friction of Lead Gaskets on Glass.	H. Hoard	10-19-56
Mech. Eng.	UCID-531 (7911-30 M7)	72" Hydrogen Bubble Chamber Fabrication - Chamber Mixing.	H. P. Hernandez	11-15-56
Mech. Eng.	UCID-532 (7911-30 M8)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Joy Tube Heat Transfer and Friction Factor.	F. Barrera	11-20-56
Mech. Eng.	UCID-533 (7911-30 M9)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Summary of Some Copper Welding Tests.	J. Mark	11-29-56
Mech. Eng.	UCID-534 (7911-30 M11)	72" Bubble Chamber Fabrication - Chamber Assembly - Expandable Gasket Test.	H. Hoard	12-11-56
Mech. Eng.	UCID-535 (7911-30 M13)	72" B. C. Chamber Assembly - 10" B. C. Expansion Line Studies.	H. P. Hernandez	1-2-57
Mech. Eng.	UCID-536 (7911-30 M15)	72" Bubble Chamber - Expansion Line - Temp. Distribution - St. St Conduction 20 to 300°K.	H. Hoard	1-11-57
Mech. Eng.	UCID-537 (7911-30 M17)	72" Hydrogen Bubble Chamber - 5" Window Lifting Fixture.	L. R. Lucas	3-4-57

Mech. Eng.	UCID-538 (7911-30 M19)	72" Hydrogen Bubble Chamber - Glass Window Flatness.	L. R. Lucas, R. G. Smits	3-19-57
Mech. Eng.	UCID-539 (7911-30 M21)	72" Hydrogen Bubble Chamber - Stress Analysis - H_2 Shield Walls.	H. Hoard	12-14-56
Mech. Eng.	UCID-540 (7911-30 M28)	72" Bubble Chamber - Vapor Pressure Thermometer.	F. Misch	6-17-57
Mech. Eng.	UCID-541 (7911-30 M29)	72" Bubble Chamber - Liquid N_2 Level Indicator.	F. Misch	6-18-57
Mech. Eng.	UCID-542 (7911-30 M30)	72" B. C. Preliminary Control Analysis.	F. Misch	7-11-57
Mech. Eng.	UCID-543 (7911-30 M32)	72" Hydrogen Bubble Chamber - Insulation for Cold Liner Plate - Top Plate Joint.	L. R. Lucas	10-29-57
Mech. Eng.	UCID-544 (7911-30 M34)	72" H_2 Bubble Chamber, S. S. Chamber Body, Hydro Test.	J. Hart	11-15-57
Mech. Eng.	UCID-545 (7911-30 M35)	72" Hydrogen Bubble Chamber - Allowance Radiation on Window.	L. R. Lucas	10-11-57
Mech. Eng.	UCID-546 (7911-30 M37)	72" Hydrogen Bubble Chamber - Assembly Stand.	L. R. Lucas	6-12-57
Mech. Eng.	UCID-547 (7911-30 M40)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Cool Down - Calculations.	L. R. Lucas	9-10-57
Mech. Eng.	UCID-548 (7911-30 M44)	72" Hydrogen Bubble Chamber - Homalite Reflector Mounting.	L. R. Lucas	2-14-58
Mech. Eng.	UCID-549 (7911-30 M45)	72" Bubble Chamber, Chamber Assembly Hydrostatic Test.	J. Hart, F. Tanforan, L. R. Lucas	3-3-58
Mech. Eng.	UCID-550 (7911-30 M46)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - 72" B. C. Expansion Plate.	H. P. Hernandez	4-23-58

Mech. Eng.	UCID-551 (7911-30 M48)	72" Hydrogen Bubble Chamber - Inflatable Gasket Test with 1-1/4" Glass; 3" Aluminium Plate.	L. R. Lucas	1-24-58
Mech. Eng.	UCID-552 (7911-30 M49)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Power Dissipation in 72" B. C. Due to Flux Decay.	L. R. Lucas	4-2-58
Mech. Eng.	UCID-553 (7911-30 M51)	72" Bubble Chamber - Chamber Assembly - Hydraulic Jack Test.	R. Smits, F. Tanforan	7-15-58
Mech. Eng.	UCID-554 (7911-01 M42)	72" Hydrogen Bubble Chamber - Hydrostatic Test 22' 3" Diameter Sphere.	W. Eaton	10-27-58
Mech. Eng.	UCID-554 Rev. (7911-01 M42A)	72" Hydrogen Bubble Chamber - Hydrostatic Test 22' 3" Diameter Sphere.	W. Eaton	10-27-58
Mech. Eng.	UCID-555 (4313-03 M5)	72" Hydrogen Bubble Chamber Operation - Operation With Liquid Nitrogen in the Chamber.	J. Mark	11-4-58
Mech. Eng.	UCID-555Rev. (4313-03 M5A)	72" Hydrogen Bubble Chamber Operation - Operation with Liquid Nitrogen in the Chamber and Hydrogen in the Refrigerator.	J. Mark	11-4-58
Mech. Eng.	UCID-556 (7911-30 M56)	72" Hydrogen Bubble Chamber Fabrication - Chamber Assembly - Heat Transfer in the Chamber.	H. Hoard	10-30-56