

Index #	Document Number	Document Title	Authors, Compilers, or Editors	Date (M/D/Y), (M/Y) or (Y)	Location, Site, or Company	Status Markings	Keywords	Format/Copy/Condition	Ensure Availability Codes:	Notes
									N=ORNL/NCS; Y=NTIS/OSTI, J-5700=Johnson Collection-ORNL-Bldg-5700; T-CSIRC=Thomas Collection, LANL/CSIRC.	ORNL/ Nuclear Criticality Safety Group,865-574-1931; NTIS/OSTI is the DOE Information Bridge:http://www.osti.gov/bridge/
1	A-7.390.22	Critical Conditions in Cylindrical Vessels	J. W. Morfitt, R. L. Murray, G. W. Schmidt	01/28/1947	Y-12	Secret, declassified 12/12/1956	computational method/data (1)	report, original, good	N	Early hand calculation methods to estimate process limits for HEU solution
2	A-7.390.25	Calculation of Critical Conditions for Uranyl Fluoride Solutions	R. L. Murray	03/05/1947	Y-12	Secret, declassified 11/18/1957	computational method/data (1), experiment plan/design	report, original, good	N	Use of early hand calculation methods to predict critical conditions. Done to assist design of K-343 solution experiments.
3	A-2489	Fabrication of Zero Power Reactor Fuel Elements Containing 233U3O8 Powder		4/1/44	ORNL	Unknown	U-233 Fabrication	CSIRC/Electronic	T-CSIRC, Vol-3B	Early work with U-233, Available through CSIRC/Thomas CD Vol 3B
4	A-3683	Outline of Experiments for the Determination of the Critical Mass of Uranium in Aqueous Solutions of UO2F2	C. Beck, A. D. Callihan, R. L. Murray	01/20/1947	ORNL	Secret, declassified 10/25/1957	experiment plan/design	report, original, good	Y	Contains plans for solution preparation, experiment apparatus, and experiment facility. Potentially useful for benchmarking of K-343 experiments.
5	A-4207	Feasibility Report for the Zero Power Pile at the Sacandaga Laboratory	F. E. Crever, G. Dessauer, W. H. Ellis, L. L. Gorman, J. H. Germer, D. Jacob, F. G. LaViolette, H. Schultz, T. M. Snyder, V. C. Wilson	05/16/1947	KAPL	Secret, declassified 10/25/1957	experiment plan/design	report, original, good	N	Plans for a general-purpose split table experimental assembly to simulate a breeding power reactor with HEU fuel, Be moderator, Na coolant, and DU reflector/breeding blanket. Intermediate-energy spectrum.
6	AAEC/E123	Buckling and Integral Measurements in U235/BeO Sub-Critical Assemblies	P. Duerden, D. B. McCulloch, E. Brittliff	07/1964	Australian Atomic Energy Commission	Unclassified	experimental criticality data	report, original, good	N	Material buckling measurements by the exponential method at four BeO/U-235 ratios from ~ 1500 to ~8800. U-235 enrichment of 89.4%.
7	AAEC/E146	Buckling and Integral Spectrum Measurements in U235 Fuelled Sub-Critical Assemblies Moderated by BeO/Fertile Material Mixtures	D. B. McCulloch, P. Duerden, E. Brittliff	12/1965	Australian Atomic Energy Commission	[None]	experimental criticality data	report, original, good	N	Similar to AAEC/E123, except that the BeO moderated is mixed with either natural uranium oxide or thorium oxide. BeO/U-235 ratios ranged from ~ 1500 to ~5700.
8	AECD-2201	Elementary Pile Theory	H. Soodak, E. C. Campbell	08/04/1948	ORNL	Declassified	computational method/data (1)	report, original, good	N	Monograph of lecture series provided to physicists, chemists, and engineers during a 1-year assignment at ORNL (Clinton Laboratories) during 1946-1947.
9	AECD-3740	Interaction of Enriched Uranium Assemblies	H. F. Henry	11/23/1949	K-25	Unclassified	computational method/data (1)	report, original, good	N	Genesis of solid angle methodology.
10	AEC-tr-4708	Experimental Investigation of Effects of Interaction of Two Subcritical Reactors	A. V. Kamaev, B. G. Dubovskii, V. V. Vavilov, G. A. Popov, Yu. D. Palamarchuk, S. P. Ivanov	1960	Russia (USSR); unspecified site	[None]	experimental criticality data	report, copy, fair	N	Summary of experimental results for pair of identical cylinders of uranyl nitrate solution [U(90)], air-spaced. Also, pairs of U(2) and U(10) heterogeneous metal assemblies, spaced in water. Details of configurations are not provided.
11	AEC-tr-4712	Critical Masses of Aqueous Mixtures of Uranium and Plutonium Compounds	G. I. Marchuk, G. A. Ilyasova, V. E. Kolesov, V. P. Kochergin, L. I. Kuznetsova	1960	Russia (USSR); unspecified site	[None]	computational method/data (1)	report, copy, fair	N	Translation by AEC. Hand methods to extrapolate critical mass data to differing enrichments, using data for water-moderated UO ₂ or UO ₂ +PuO ₂ .

12	AEC-tr-4713	Critical Masses of Uranium-Beryllium Reactors	G. I. Marchuk, G. A. Ilyasova, V. E. Kolesov, V. P. Kochergin, L. I. Kuznetsova, E. I. Pogudalina	1960	Russia (USSR); unspecified site	[None]	computational method/data (1)	report, copy, fair	N	Similar to AEC-tr-2712, with U-Be as the fissile material and Be as the reflector.
13	AEC-tr-4714	Approximate Method of Calculation of Critical Masses of Spherical Reactors with Infinite Reflector	G. I. Marchuk, V. P. Kochergin	1960	Russia (USSR); unspecified site	[None]	computational method/data (1)	report, copy, fair	N	Similar to AEC-tr-2712, various fissile mixture and reflector conditions.
14	AEC-tr-4715	Critical Masses of Uranium-Graphite Reactors	G. I. Marchuk, G. A. Ilyasova, V. E. Kolesov, V. P. Kochergin, L. I. Kuznetsova, E. I. Pogudalina	1960	Russia (USSR); unspecified site	[None]	computational method/data (1)	report, copy, fair	N	Similar to AEC-tr-2712, with U-C as the fissile material and C as the reflector.
15	AED-Conf-63-048-54	Fission Cross Section of Pu ²³⁸	D. K. Butler, R. K. Sjoblom	04/22/1963	ANL	[None]	nuclear data/measurement	conference paper, copy, fair	N	Early Pu ²³⁸ cross section measurements, 0.4 to 1.4 MeV. Copy printed from microfiche.
16	AERE-M 601	Processing in Limited Geometries - Part One	K. D. B. Johnson, R. F. Taylor	01/07/1960	Harwell A.E.R.E. (U.K.A.E.A.)	©, Official Use Only	equipment/process design	report, original, good	Y	Overview of many steps for chemical processing of U and Pu, discussion of equipment design areas where geometric control may be applied.
17	A.E.R.E. R/R 2051	Critical Assemblies of Aqueous Uranyl Fluoride Solutions Part I Experimental Techniques and Results	W. G. Clarke, C. C. Horton, M. F. Smith	09/20/1956	Harwell A.E.R.E. (U.K.A.E.A.)	Unclassified	experimental criticality data	report, original, good	Y	Experiments with U ²³³ solution and with intermediate-enrichment U ²³⁵ solution [U(44.6)], various concentrations, 12-inch diameter reactor, unreflected, water-reflected and cadmium-water reflected conditions.
18	AERE R/R 2358	The Interpretation of Approach-to-Critical Experiments with Application to Organic Liquid Moderated Systems	L. G. Sanders, A. K. McCracken	12/1957	Harwell A.E.R.E. (U.K.A.E.A.)	©, Unclassified	experimental criticality data	report, original, good	N	Configurations are highly subcritical and consist of 1.2-inch diameter U(1.0), U(1.3) and U(1.6) rod lattices with organic liquid moderator.
19	AERE R/R 2703	Critical Assemblies with Heavy Water Solutions of Uranyl Fluoride (H.A.Z.E.L.) Part 2 Physics	J. R. Harrison, M. F. Smith, W. G. Clarke, A. M. Mills, Miss J. A. Dyson	11/1958	Harwell A.E.R.E. (U.K.A.E.A.)	©, Unclassified	experimental criticality data	report, original, good	Y	Experiments with 44.6% enrichment U ²³⁵ solution in D ₂ O at various concentrations, with graphite reflector about a 2-ft diameter cylindrical tank.
20	AERE R/R 2731	Critical Assemblies with Heavy Water Solutions of Uranyl Fluoride (H.A.Z.E.L.) Part 3 Theoretical Analysis	C. Carter, P. K. H. Lang, G. Myatt	07/1959	Harwell A.E.R.E. (U.K.A.E.A.)	©, Unclassified	computational method/data (1)	report, original, good	N	Two-group diffusion theory analysis of experiments of AERE R/R 2703. Also, early computer modeling with multigroup methods (6-groups).
21	AERE-R 2914	Criticality	C. M. Nicholls, E. R. Woodcock, A. H. Gillieson	03/1959	Harwell A.E.R.E. (U.K.A.E.A.)	©, Official Use Only	handbook	report, original, good	Y	Document is comparable to early U. S. criticality safety/data handbooks, with somewhat greater focus on criticality theory and criticality safety applications than data.
22	AHSB (S) HANDBOOK 5	Handbook of Experimental Criticality Data PART 2 - Chapters 5 and 6	F. Abbey	1968	U.K.A.E.A	©, Unclassified	handbook	report, original, good	Y	Collected results from critical experiments; Chapter 5 covers single units of hydrogen-moderated ²³⁵ U, and Chapter 6 covers single units of hydrogen-moderated Pu
23	AHSB Report 17	Critical Assemblies of Infinite Slabs of Highly Enriched Uranium and Water	E. R. Woodcock	07/1959	U.K.A.E.A	©, Unclassified	computational method/data (1)	report, original, good	N	Computations are for idealized 1-D configurations, very little information on computer code method is provided.
24	AHSB (S) R28	Criticality of Interacting Arrays of Fissile Material Part 1: General Theory	D. C. Dowson	10/1961	U.K.A.E.A	©, Unclassified	computational method/data (1)	report, original, good	N	Uses matrix algebra to determine if an array of units is subcritical, critical, or supercritical; obsolete methodology; does not directly result in k _{eff} predictions.
25	AHSB (S) R29	Criticality of Interacting Arrays of Fissile Material Part 2: Unreflected Air-Spaced Arrays of Spheres	D. C. Dowson, F. Abbey	10/1961	U.K.A.E.A	©, Unclassified	computational method/data (1)	report, original, good	N	Elaboration of AHSB (s) R28 techniques for special conditions. Requires knowledge of "surface multiplication" of units and solid-angle. Obsolete methodology

26	AHSB (S) R30	Criticality of Interacting Arrays of Fissile Material Part 3: Reflected Air-Spaced Arrays of Spheres	D. C. Dowson	11/1962	U.K.A.E.A	©, Unclassified	computational method/data (1)	report, original, good	N	Like AHSB (S) R29, except for arrays with reflectors.
27	AHSB (S) R92	Review of U.K.A.E.A. Criticality Detection and Alarm Systems 1963/64 Part 1: Provision and Design Principles	K. J. Aspinall and J. T. Daniels	1965	U.K.A.E.A	©, Unclassified	criticality accident	report, original, good	Y	Addresses basic design issues for criticality alarm systems and evacuation zone selection
28	No report number	Review of U.K.A.E.A. Criticality Detection and Alarm Systems 1963/64 Part 1: Provision and Design Principles Amendment of Proposals Concerning Plutonium Systems	K. J. Aspinall and J. T. Daniels	11/1965	U.K.A.E.A	[None]	criticality accident	report, original, good	Y	Modifies some recommendations of AHSB (S) R92
29	A.H.S.B.(S)M.126	Operating Instructions for the Monte Carlo Neutronics Program GEM1 and the Associated Programs CHECK and POND	P. J. Hemmings, T. C. Longworth	11/1964	U.K.A.E.A	NOT FOR PUBLICATION	computational method/data (2)	report, mimeograph, marginal	N	Document copy is poor but legible; numerous handwritten markings are present throughout.
30	ANCR-1002	A Summary of ETR Critical Facility Safety Analysis Information	D. W. Knight, N. C. Kaufman, J. W. Henscheid	07/1971	National Reactor Testing Station, Idaho Falls ID	U	experiment safety analysis	report, original, good	N	
31	ANCR-1034	The Potential of a Laser-Induced Fusion Device as a Thermal Neutron Source	R. M. Brugger	11/1971	National Reactor Testing Station, Idaho Falls ID	[None]		report, original, good	N	Evaluates the practicality of a pulsed-fusion source of neutrons for time of flight measurements. Errata sheet included.
32	ANCR-1066	Self-Shielding in Stacked Foils	R. G. Nisle, Y. D. Harker	11/1972	National Reactor Testing Station, Idaho Falls ID	[None]	nuclear measurement/data	report, original, good	N	Provides theoretical and experimental measurements of self-shielding in stacked gold foils. Application is to measure neutron energy spectra, particularly for epithermal reactors.
33	ANL-4971	Technical Review of ZPR-I Accidental Transient -- The Power Excursion, Exposures, and Clinical Data	R. O. Brittan, R. J. Hasterlik, L. D. Marinelli, F. W. Thalgott	01/1953	ANL	Secret, declassified 05/15/59	criticality accident	report, original, good	Y	Physics and consequence analyses of the June 2, 1952 critical experiment accident with ZPR-1
34	ANL-6254	A Pulsed Neutron Source	R. Siems, M. Melissaropoulos	11/1960	ANL	[None]	nuclear measurement/data	report, original, good	N	Use of a pulsed neutron source to measure diffusion theory parameters (D or L)
35	ANL-6271	Safety Analysis Report Argonne Fast Critical Facility (ZPR-VI)	W. Y. Kato, G. J. Fischer, L. R. Dates	12/1963	ANL	[None]	experiment safety analysis	report, original, good	N	
36	ANL-6408	Hazard Evaluation Report on the Fast Reactor Zero Power Experiment ZPR-III	R. O. Brittan, B. Cerutti, H. V. Lichtenberger, J. K. Long, R. L. McVean, M. Novick, R. Rice, F. W. Thalgott	10/1961	ANL	[None]	experiment safety analysis	report, original, good	N	
37	ANL-6732	Critical Studies of a 440-Liter Fast-Reactor Core Fueled with Uranium Enriched to 17 Percent (ZPR-3 Assembly 41)	A. L. Hess, J. M. Gasdlo, J. K. Long, P. I. Amundson, W. P. Kenney	06/1971	ANL	[None]	experiment data/analysis	report, original, good	N	Presentation and analysis of data obtained from ZPR-3 Assembly 41, for application of data to other experiments and reactor design
38	ANL-7049	Safety Analysis of the Operation of ZPR-3 with Fuel Loadings Up to 430 kg of Plutonium (Addendum to ANL-6504, Safety Analysis of Plutonium Loadings in ZPR-III)	J. K. Long, L. R. Kelman, R. L. McVean, M. Novick, A. B. Shuck, F. W. Thalgott	12/1965	ANL	[None]	experiment safety analysis	report, original, good	N	Focus areas: (1) re-evaluate Pu release fraction and consequence due to a fire, and (2) re-evaluate maximum core temperature due to Pu decay (so as to not exceed Na melting temperature)
39	ANL-7203	High Conversion Critical Experiments	A. R. Boynton, Q. L. Baird, K. E. Plumlee, W. C. Redman, W. R. Robinson, G. S. Stanford	11/1967	ANL	[None]	experimental criticality data	report, original, good	Y	Some lattices are considerably undermoderated and are outside the range of benchmarks in the IHECSBE.
40	ANL-7411 Supplement 1	Argonne Code Center: Compilation of Program Abstracts	M. K. Butler, Marianne Legan, L. Ranzini	10/1968	ANL	[None]	computational method/data (2)	report, original, good	N	This document consists of replacement pages for the initial issue of ANS-7411 (01/1968)
41	ANL-7411 Supplement 1	Argonne Code Center: Compilation of Program Abstracts	M. K. Butler, Marianne Legan, L. Ranzini	04/1969	ANL	[None]	computational method/data (2)	report, original, good	N	This document consists of replacement pages for the initial issue of ANS-7411 (01/1968)
42	ANL-7416	Argonne Code Center: Benchmark Problem Book Numerical Determination of the Space, Time, Angle, or Energy Distribution of Particles in an Assembly	Benchmark Problem Committee of the Mathematics and Computational Division of the American Nuclear Society	02/1968	ANL	[None]	computational method/data (2)	report, original, good	N	This document contains three benchmarks (one a critical experiment, the other two are hypothetical) plus several code results for each, for use in reactor physics code comparisons.

43	ANL-7545	Thickness Corrections for Neutron-Activated Gold Foils	George S. Stanford, James H. Seckinger	02/1969	ANL	[None]	nuclear measurement/data	report, original, good	N	This document addresses the theory and experimental data analysis methods for use of gold foils in critical experiments to determine flux spectra and distribution.
44	ANL-7911	Comparison of a Two-Dimensional Hydrodynamics Code (REXCO) to Excursion Experiments for Fast Reactor Containment	J. E. Ash, R. T. Julke	01/1972	ANL	[None]	computational method/data (3)	report, original, good	N	The code's purpose is to predict shock waves, expansion, and bubble formation within liquid sodium coolant due to fast reactor transients. Code performance is demonstrated using non-nuclear (explosive charge) test results.
45	APED-5555	Impact Testing on Collet Assembly for Control Rod Drive Mechanism 7RDB144A	J. E. Benecki	11/1967	General Electric (San Jose, CA)	[None]	operational/test/material data	report, original, good	N	Results of mechanical testing on reactor control rod drive components
46	APEX-715	Aircraft Nuclear Propulsion Department Nuclear Safety Guide	William A. Pryor	08/1961	General Electric, Nuclear Materials and Propulsion Operation (Cincinnati, OH)	Unclassified	handbook	report, original, good	N	A brief design and operational safety handbook, with focus on enriched ²³⁵ U with hydrogen and/or beryllium moderation. For use with GE operations for fabrication of test reactor fuel for aircraft propulsion systems.
47	AWRE O-14/60	Infinite Slab Criticality Calculations	E. R. Woodcock, J. B. Parker	05/1960	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified	computational method/data (2)	report, original, good	N	Monte Carlo - computed results for simple 1-D infinite slabs of ²³⁵ U, various reflector conditions.
48	AWRE NR/A-1/62	Critical Mass Measurements with Thin Discs of 45.5% Enriched Uranium	J. R. Dominey, R. C. Lane, A. F. Thomas	03/1962	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Circulation	experimental criticality data	report, original, good	Y	Assemblies of U(45.5) metal, various reflector conditions, performed on the "Atlas" machine. 17 configurations total. (This is Reference 2 of IHECSBE report IEU-MET-FAST-019, which contains 2 of these configurations. Also is Ref 138 of LA-13860-MS.)
49	AWRE O-21/64	The Calculation of Neutron Surface Multiplications of Transport Containers	E. D. Pendlbury, Patricia E. Garrett	07/1964	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified	computational method/data (1)	report, original, good	N	Obsolete methodology
50	AWRE O 32/68	A Measurement of the Critical Size of a Homogeneous Mixture of Plutonium and Natural Uranium Oxides with Polythene	R. C. Lane, O. J. E. Perkins	07/1968	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	experimental criticality data	report, original, good	Y	H:Pu ~ 18.6, U:Pu ~ 1, ~ 5.9% ²⁴⁰ Pu
51	AWRE NR 1/66	Measurement of the Critical Mass of 37% Enriched Uranium in Reflectors of Wood, Concrete, Polyethylene and Water	R. C. Lane, O. J. E. Perkins	02/1966	Aldermaston A.E.R.E. (U.K.A.E.A.)	©, Unclassified	experimental criticality data	report, original, good	Y	
52	BAW-150	Nuclear Safety of UO ₂ -ThO ₂ -H ₂ O Systems	D. B. Wehmeyer, K. E. Roach	1960	The Babcock and Wilcox Company, Lynchburg VA	[None]	computational method/data (1), equipment/process design	report, original, good	N	Two-group diffusion theory method application to available experiments, plus derivation of safe operating limits
53	BAW-207	SAFETY A Simplified Criticality Program	D. B. Wehmeyer	06/1963	The Babcock and Wilcox Company, Lynchburg VA	[None]	computational method/data (1)	report, copy from microcard, poor	N	Two-group diffusion theory incorporated into a Fortran program, instructions for use of the program
54	BAW-1231	Spectral Shift Control Reactor Basic Physics Program Critical Experiments on Lattices Moderated by D ₂ O-H ₂ O Mixtures	T. C. Engelder, N. L. Snidow, R. H. Clark, C. E. Barksdale, R. H. Lewis, M. N. Baldwin	12/1961	The Babcock and Wilcox Company, Lynchburg VA	[None]	experimental criticality data	report, original, good	Y	Report contains detailed descriptions for each assembly, some configurations are moderated only by H ₂ O, some configurations use U(93)O ₂ -ThO ₂ fuel.
55	BAW-3492-1	Lumped Burnable Poison Program - Final Report	R. H. Clark, M. L. Batch, T. G. Pitts	11/1966	The Babcock and Wilcox Company, Lynchburg VA	[None]	experimental criticality data	report, original, good	Y	Report contains detailed descriptions for each LEU lattice assembly, burnable poison rods are B ₄ C or glass.
56	BAW-3647-1	Physics Verification Program Quarterly Technical Report No. 1 January - June 1966		08/1966	The Babcock and Wilcox Company, Lynchburg VA	[None]	experimental criticality data	report, original, good	Y	
57	BMI-1086	A Wire-Activation Technique for Reactor-Flux-Profile Measurements	Alton E. Klickman, George W. Cunningham, Joel W. Chastain, Donald L. Keller, Sherwood L. Fawcett	04/25/1956	Battelle Memorial Institute	[None]	nuclear measurement/data	report, original, good	N	This document addresses the theory and experimental data analysis methods for use of wire in critical experiments to determine flux spectra and distribution.

58	BNL 404 I 16	Resonance Escape Probability Measurements	R. Sher	05/07/1956	BNL	[None]	nuclear measurement/data	memo, original-issue copy, good	N	Mathematical expressions for the ²³⁸ U resonance escape probability are provided; an experimental measurement approach is described and applied to the BNL reactor.
59	BNL 410 I 17	The Effect of Epi-Thermal Fissions on the Neutron Cycle	R. Sher, H. Kouts	08/08/1956	BNL	[None]	computational method/data (1)	memo, original-issue copy, good	N	Derivation of 3-group diffusion equations such that epithermal ²³⁵ U fission cannot be inferred from experimentally measured reactor parameters.
60	BNL 486	Experimental Studies of Slightly Enriched Uranium, Water Moderated Lattices Part 1. 0.600-in.-Diameter Rods	Herbert Kouts, Rudolph Sher	09/1957	BNL	[None]	experimental criticality data	report, original, good	N	Demonstration of how various experimental measurements of reactor parameters can be used to infer input data/constants for reactor physics calculations/power reactor design.
61	BNL 818 (T-317)	Optical Model Analysis of Inelastic Scattering of Neutrons by Heavy Nuclei	S. O. Moore, E. H. Auerbach	08/1963	BNL	[None]	nuclear measurement/data	report, original, good	N	Nuclear physics modeling to predict inelastic scatter
62	BNL 897 (T-365)	Analysis of (n,2n) Cross Sections for Nuclei of Mass A > 30	S. Pearlstein	12/1964	BNL	[None]	nuclear measurement/data	report, original, good	N	Nuclear physics modeling to predict (n,2n) reactions
63	BNL 904 (N-8)	Optical Model Analysis of Neutron-Sodium Cross Section in the 1-4 MeV Range	T. J. Krieger, S. Pearlstein	01/1965	BNL	[None]	nuclear measurement/data	report, original, good	N	
64	BNL 918 (T-377-92-94-2)	Least Squares Analysis of the 2200 m/sec Parameters for U ²³³ , U ²³⁵ , and Pu ²³⁹	Rudolph Sher, Joan Felderbaum	03/1965	BNL	[None]	nuclear measurement/data	report, original, good	N	
65	BNL 961 (T-401)	The Neutron Cross Section of Sodium Below 40 keV	Thomas E. Stephenson	12/1965	BNL	[None]	nuclear measurement/data	report, original, good	N	
66	BNL 982 (T-415)	Cross Sections for Transuranium Production	S. Pearlstein	05/1966	BNL	[None]	nuclear measurement/data	report, original, good	N	
67	BNL-1785	Reactivity Coefficient Measurement of Buckling	Kenneth W. Downes, Herbert J. Kouts	03/18/1954	BNL	Unclassified	experimental criticality data	report, original, good	N	
68	BNL-1992	Thermal Utilization Measurement	G. A. Price	08/19/1954	BNL	Unclassified	nuclear measurement/data	report, original, good	N	
69	BNL-2016	Buckling of a Natural Uranium Light Water Moderated Lattice	K. Downes	08/23/1954	BNL	Unclassified	experimental criticality data	report, original, good	N	
70	BNL-2094	Exponential Measurements on Light Water Moderated 1 Per Cent U-235 Lattices	H. J. Kouts, J. Chernick, I. Kaplan	11/28/1952	BNL	Unclassified	experimental criticality data	report, original, good	N	
71	BNL-2184	Buckling of Light-Water Moderated Lattices of .387" Diameter, 1.027% Enriched Uranium Rods	H. Kouts, G. Price, K. Downes, R. Sher, V. Walsh	02/07/1955	BNL	Unclassified	experimental criticality data	report, original, good	N	
72	BNL-2119	Migration Areas of Fission Neutrons in Uranium-Water Lattices	H. Kouts, G. Price, K. Downes, R. Sher, V. Walsh	12/15/1954	BNL	Confidential, declassified 03/24/1960	experimental criticality data	memo, original-issue copy, good	N	Measurements of migration areas for LEU rod lattices are compared to various diffusion theory models.
73	BNL-2754	Thermal Utilization, 0.387" Diameter, 1.15% Enriched Uranium Rods in Light Water	H. Kouts, G. Price, V. Walsh	04/03/1956	BNL	Confidential, declassified 12/20/57	experimental criticality data	memo, original-issue copy, good	N	Measurements of thermal utilization for LEU rod lattices.
74	BNL-2840	Thermal Utilization, 1.3% Enriched, 0.600" Diameter Uranium Rods in Light Water	Herbert J. Kouts	07/10/1956	BNL	Confidential, declassified 12/20/57	experimental criticality data	memo, original-issue copy, good	N	Measurements of thermal utilization for LEU rod lattices.
75	BNL-2849	Thermal Utilizations of .600" Diameter, 1% Uranium Rod Lattices	H. Kouts, G. Price, V. Walsh	05/24/1956	BNL	Confidential, declassified 12/20/57	experimental criticality data	report, original, good	N	Measurements of thermal utilization for LEU rod lattices.
76	BNL-3145	Critical Assemblies of Light Water Moderated, Slightly Enriched Uranium Rod Lattices at Brookhaven Hazards Report	Herbert Kouts	02/28/1956	BNL	Unclassified	experiment plan/design	report, original, good	N	Experiment design, plan, accident analysis, and safety requirements for LEU rod lattice experiments
77	BNL-3145 (Suppl.)	Critical Assemblies of Light Water Moderated, Slightly Enriched Uranium Rod Lattices at Brookhaven Supplement to Hazards Report	Herbert Kouts	09/11/1956	BNL	Unclassified	experiment plan/design	report, original, good	N	Expanded scope of BNL-3145 to cover smaller-diameter fuel rods.
78	BNL 11636	Safety Analysis of the Brookhaven National Laboratory Critical Assembly Facility	A. Court, K. W. Downes, H. J. C. Kouts	08/01/1967	BNL	Distribution of this document is unlimited	experiment plan/design	report, facsimile copy, good	Y	Comprehensive experiment analysis for Brookhaven thermal and fast critical experiments.
79	BNL 50035 (T-449)	Uranium-Water Lattice Compilation Part I, BNL Exponential Assemblies	Glenn A. Price	12/30/1966	BNL	[None]	experimental criticality data	report, original, good	Y	Organized presentation of a large body of experimentally-determined assembly parameters, includes several BNL reports as appendices.
80	BNL 50045 (T-455)	Multilevel Analysis of the U ²³⁵ Total and Fission Cross Sections in the Energy Range Below 37 eV	D. B. Alder, F. T. Adler	03/1967	BNL	[None]	nuclear measurement/data	report, original, good	N	

81	BNL 50060 (T-463)	Evaluation of the Neutron Cross Section of Manganese for the ENDF/B Library	T. Stephenson, A. Prince, S. Pearlstein	06/1967	BNL	[None]	nuclear measurement/data	report, original, good	N	
82	BNL 50151 (T-520)	Optical Model Analysis of the Elastic Scattering of Neutrons by the Lead Isotopes and Bismuth at 0.5, 1.0 and 2.5 MeV	S. O. Moore	10/1968	BNL	[None]	nuclear measurement/data	report, original, good	N	
83	BNL-RP-6 (F)	CEPFR-1A Measurements and Assembly Description	J. P. Phelps, A. J. Court, K. W. Downes	09/22/1969	BNL	Official Use Only, limited distribution	experimental criticality data	report, original, good	N	First assembly to be taken critical in the Pulsed Fast Reactor facility - reports critical configuration and various measured reactor physics values.
84	BNL-RP-8 (F)	Pu-Al-H ₂ O Buckling Measurements	G. A. Price, H. H. Windsor	10/01/1969	BNL	Official Use Only, limited distribution	experimental criticality data	report, original, good	N	Exponential measurements of buckling for Pu-Al rods in water
85	BNWL-3	A Monte Carlo Study of Homogeneous Plutonium and Uranium Mixtures	L. L. Carter, C. R. Richey	12/1964	PNNL	Unrestricted distribution	computational methods/data (2)	report, original, good	N	Monte Carlo code developed for infinite systems was used to calculate k-infinity, limiting critical concentration, etc., as well as physics/diffusion theory parameters (e.g., neutron age)
86	BNWL-19	Subcritical Measurements with Storage Containers of Plutonium Nitrate Solution	R. C. Lloyd, E. D. Clayton	01/1965	PNNL	Unrestricted distribution	experimental criticality data	report, original, good	N	1/M measurements were performed. The number of containers was adequate to support operational limits but not benchmark data.
87	BNWL-52	Exponential Measurements and Neutron Multiplication Measurements with 1.25 wt% Enriched N-Reactor Fuel Elements in Light Water	C. L. Brown, R. C. Lloyd, S. R. Bierman, E. D. Clayton	03/1965	PNNL	Unrestricted distribution	experimental criticality data	report, original, good	N	The number of elements (in a water lattice) was adequate to support operational limits but not benchmark data.
88	BNWL-222	Physics Research Quarterly Report October, November, December 1965	Staff	01/14/1966	PNNL	Unrestricted distribution	multiple topics, TOC scanned	report, original, good	N	
89	BNWL-340	Reactor Physics Department Technical Activities Quarterly Report July, August, September 1966	Staff	10/15/1966	PNNL	Unrestricted distribution	multiple topics, TOC scanned	report, original, good	Y	Includes summaries for in-progress critical experiments (PuO ₂ -UO ₂ rods in water, arrays of ²³³ U solution in poly bottles, Pu nitrate solution in slab geometry), and k-infinity measurements (graphite-moderated heterogeneous assemblies of Pu-Al-ThO ₂).
90	BNWL-775	Reactor Physics Department Technical Activities Quarterly Report January, February, March 1968	Staff	07/1968	PNNL	Unrestricted distribution	multiple topics, TOC scanned	report, original, good	Y	Includes summaries for in-progress critical experiments (Pu nitrate solution in slab geometry, PuO ₂ polystyrene compacts), and k-infinity measurements (graphite-moderated heterogeneous assemblies of Pu-Al-ThO ₂). Also, has a description of the manufacturing process of Al-clad, Pu-Al fuel plates/assemblies.
91	BNWL-921	Reactor Physics Quarterly Report July, August, September 1968	Staff	12/1968	PNNL	Unrestricted distribution	multiple topics, TOC scanned	report, original, good	Y	Includes summaries for in-progress critical experiments (Pu nitrate solution in slab geometry).
92	BNWL-1053	Reactor Physics Quarterly Report January, February, March 1969	Staff	05/1969	PNNL	Unrestricted distribution	multiple topics, TOC scanned	report, original, good	Y	Includes summaries for in-progress critical experiments (PuO ₂ polystyrene compacts and depleted uranium, in alternating layers, Pu nitrate solution in slab geometry).
93	BNWL-1150	Reactor Physics Quarterly Report April, May, June 1969	Staff	08/1969	PNNL	Unrestricted distribution	multiple topics	report, copy, fair	Y	copy includes only section 5 (Critical Mass Physics) and 6 (Publications). Includes summaries for in-progress critical experiments (PuO ₂ compacts plus PuO ₂ polystyrene compacts and heterogeneous neutron absorbers). Also includes an assessment of criticality safety impacts on design of large-scale plants manufacturing PuO ₂ -UO ₂ fuel (LMFBR).

94	BNWL-1240	Reactor Physics Quarterly Report July, August, September 1969	Staff	11/1969	PNNL	Unrestricted distribution	multiple topics	report, copy, fair	N	Copy includes only Section 5 (Critical Mass Physics) and 6 (Publications). Section 5 content is primarily results of code calculations (with comparisons to critical experiment data).
95	BNWL-1304	Reactor Physics Quarterly Report October, November, December 1969	Staff	02/1970	PNNL	Unrestricted distribution	multiple topics, TOC scanned	report, original, good	Y	Includes summaries for in-progress critical experiments (PuO ₂ -UO ₂ rods in water. Also, computed criticality data for higher actinides (e.g., ANS-8.15 actinides).
96	BNWL-1381-2	Reactor Physics Quarterly Report April, May, June 1970	Staff	08/1970	PNNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Includes summaries for in-progress critical experiments (PuO ₂ -UO ₂ rods in water, Pu-Al rods in water).
97	BNWL-1433	BMC-1: The Battelle Monte Carlo Code	D. H. Thomsen, T. M. Traver	06/1970	PNNL	[None]	computational method/data (2)	report, original, good	N	
98	BNWL-1434	BRT-1: Battelle-Revised-THERMOS	C. L. Bennett, W. L. Purcell	06/1970	PNNL	[None]	computational method/data (2)	report, original, good	N	
99	BNWL-1512	Criticality Safety Analysis -- Model 60 Shipping Package for FFTF Driver Fuel Pins	C. L. Brown	11/1970	PNNL	[None]	transport safety analysis	report, original, good	N	
100	BNWL-1522-3	Technical Activities Quarterly Report AEC Reactor Development and Technology Programs April, May, June 1971	Staff	10/1971	PNNL	[None]	multiple topics, TOC scanned	report, original, good	N	
101	BNWL-1522-4	Technical Activities Quarterly Report AEC Reactor Development and Technology Programs July, August, September 1971	Staff	12/1971	PNNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Includes summaries for in-progress critical experiments (Pu nitrate solution, Pu consists of 43% ²⁴⁰ Pu and 10.9% ²⁴¹ Pu).
102	BNWL-1522-5	Technical Activities Quarterly Report AEC Reactor Development and Technology Programs October, November, December 1971 January, February, March 1972	Staff	05/1972	PNNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Includes data/evaluation for Pu polystyrene compact critical experiments and for high-burnup Pu solution experiments (43% ²⁴⁰ Pu and 10.9% ²⁴¹ Pu).
103	BNWL-1607	DRAFT A Computer Code for the Calculation of Fission Product Activity Ratios	D. R. Oden, G. D. Seybold	06/1971	PNNL	[None]	computational method/data (3)	report, original, good	N	
104	BNWL-1656	Uncertainties in the Analysis of Plutonium Fueled Light Water Moderated Assemblies	R. C. Liikala, V. O. Uotinen, U. P. Jenquin	05/1973	PNNL	[None]	experimental criticality data	report, original, good	N	Includes a section discussing the influence of experiment and data uncertainties on the ability to calculate keff for critical experiments.
105	BRL MR 2217	Nuclear Engineering Problems of a Burning Rocket Motor Neutron Irradiation	A. H. Kazi, J. L. Watson	08/1972	Aberdeen Proving Ground	Distribution limited to U. S. Government agencies	operational/test/material data	report, original, good	N	Irradiation test of a (miniature) rocket motor with solid propellant. A fast reactor pulse is performed as the rocket motor is firing, with the motor and reactor in very close proximity.
106	CEA No. 204	Mesure Des Densités de Neutrons Par Autoradiographie De Détecteurs	A. Ertaud, E. Zaleski	1953	Commissariat Á l'Énergie Atomique, Centre D'Études Nucléaires (Saclay, France)	[None]	nuclear measurement/data	report, original, good	N	In French. Use of photographic film to measure neutron flux distribution for experiments.
107	CEA-N-1291	Surete - Criticite Recommendations Concernant Les Stockages De Matière Fissile	Le Groupe de Travail n° 4 de la Sous-Commission des Masses Critiques	06/1970	Commissariat Á l'Énergie Atomique (Paris, France)	[None]	facility, process or storage analysis	report, copy from microfiche, poor	N	In French. General guidelines for storage of fissile material.
108	CC-2092	Properties of Uranyl Fluoride	G. R. Dean	09/11/1944	Metallurgical Laboratory (Manhattan Project section at the University of Chicago)	Secret, declassification indicated but no date provided	operational/test/material data	report, original, good	N	Material preparation, solubility, conductivity, chemical properties
109	CEND-121	Studies on Low Enriched Cores Containing Simple Nuclear Superheat Elements Part I - Critical Experiments	J. S. Crudele, C. O. Dechand, P. G. Klann, W. B. Wright Jr.	02/01/1966	Combustion Engineering, Inc., Nuclear Division, Windsor CT	[None]	experimental criticality data	report, copy from microcard, good	Y	

110	CP-2842	Water Lattice Experiments	A. M. Weinberg, Haydn Jones	10/26/1945	ORNL	Secret, declassified 05/23/1955	experimental criticality data	report, original, good	N	Attempts to determine if criticality could be attained with normal enrichment uranium (uranium as metal rods in lattice). Exponential measurements done in a water tank located on top of the Oak Ridge Graphite Reactor.
111	CP-3364	Exponential Measurements with D ₂ O and Solutions of UO ₂ F ₂	A. Wattenburg	02/02/1946	Metallurgical Laboratory (Manhattan Project section at the University of Chicago)	Secret, declassified 01/18/1955	experimental criticality data	report, original, good	N	Exponential measurements performed in a tank located on top of reactor CP-2. Measurements were done on near-pure D ₂ O and uranyl fluoride in D ₂ O solution. Includes critical experiment summaries.
112	CNR/PR/1	Weapons Group Nuclear Research Division Progress Report 1st. January 1963 - 30th. June 1963	Staff	02/1964	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	Includes critical experiment summaries for VERA assemblies using either enriched uranium (effective enrichment of 32% ²³⁵ U) or Pu (5% ²⁴⁰ Pu). Some U assemblies contained some polythene. Also summaries for Pu-polythene assemblies at H- ²³⁹ Pu of 0, 3.0, and 6.1.
113	CNR/PR/2	Weapons Group Nuclear Research Division Progress Report 1st. July 1963 - 31st. December 1963	Staff	04/1964	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	Includes one additional critical experiment summary for a VERA Pu assembly, of the experiment series described in CNR/PR/1. Also, notes on evaluation of Pu-polythene assemblies.
114	CNR/PR/3	Weapons Group Nuclear Research Division Progress Report 1st. January 1964 - 30th. June 1964	Staff	10/1964	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	
115	CNR/PR/4	Weapons Group Nuclear Research Division Progress Report 1st. July 1964 - 31st. December 1964	Staff	03/1965	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	
116	CNR/PR/5	Weapons Group Nuclear Research Division Progress Report 1st. January 1965 - 30th. June 1965	Staff	09/1965	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	
117	CNR/PR/6	Weapons Group Nuclear Research Division Progress Report 1st. July 1965 - 31st. December 1965	Staff	03/1966	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	
118	CNR/PR/7	Weapons Group Nuclear Research Division Progress Report 1st. January 1966 - 30th. June 1966	Staff	10/1966	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	
119	CNR/PR/9	Weapons Group Nuclear Research Division Progress Report 1st. January 1967 - 30th. June 1967	Staff	09/1967	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	
120	CNR/PR/10	Weapons Group Nuclear Research Division Progress Report 1st. July 1967 - 31st. December 1967	Staff	04/1968	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified, Limited Distribution	multiple topics	report, original, good	N	
121	CTC-5	KENO - A Multigroup Monte Carlo Criticality Program	G. E. Whitesides, N. F. Cross	09/10/1969	ORNL (Computing Technology Center), Union Carbide Corporation	[None]	computational method/data (2)	report, original, good	N	
122	DC-51-9-11	Report on Critical Experiments for a Water Moderator (CA-2)	J. A. Hunter (*)	1951	General Electric Company	Secret, declassified 12/04/1961	experimental criticality data	report, original, good	Y	Experiments performed at ORNL Bldg 9213. Thin plates of U(93) metal interspersed with graphite and plexiglas blocks to simulate aircraft reactor concepts. The author's name does not appear in the report (see ORNL-1175 p. 7, footnote)
123	DEG Report 25 (R)	Critical Mass Data for Low-Enriched Uranium Systems	F. R. Charlesworth	1959	U.K.A.E.A. (Risley, Lancashire)	©, Official Use Only	computational method/data (1), equipment/process design	report, original, good	N	

124	DEG Report 82 (R)	The Effect of Isotopic Content on the Criticality of Plutonium-Water Systems	D. E. J. Thornton	1960	U.K.A.E.A. (Risley, Lancashire)	Not to be communicated ... to any person not authorized to receive it.	computational method/data (1)	report, original, fair	N	Discusses need for Pu integral data to support credit for ²⁴⁰ Pu content, for design/operation of processing facilities.
125	DEG Report 153 (R)	Criticality Data for Homogeneous Uranium-Water Mixtures of Enrichments in the Range 5 to 93%	M. A. Perks	1960	U.K.A.E.A. (Risley, Lancashire)	Not to be communicated ... to any person not authorized to receive it.	computational method/data (1), equipment/process design	report, copy, fair	N	Uses diffusion theory, buckling conversions, etc. to calculate simple-geometry limits for design applications.
126	D.E.G. Memorandum 329 (R)	Criticality Guide to the Choice of Safe Vessel Dimensions for the Processing and Storage of U ²³⁵ and Pu ²³⁹	F. R. Charlesworth	11/23/1959	U.K.A.E.A. (Risley, Lancashire)	Not to be communicated ... to any person not authorized to receive it.	computational method/data (1), equipment/process design	report, original, good	N	Uses computed results from U.K.A.E.A. report IG Memorandum 462 to provide guidance for designs of dissolvers and solution storage vessels.
127	D.E.G. Memorandum 417 (R)	Criticality of Homogeneous Uranium Systems of Enrichment Below 2.5%	M. A. Perks, D. E. J. Thornton	02/1960	U.K.A.E.A. (Risley, Lancashire)	Official Use Only	computational method/data (1), equipment/process design	report, original, good	N	Uses U. S. and British LEU experiments, applies diffusion/buckling methods to calculate simple-geometry limits for chemical plant designs.
128	DEG Memorandum 663(D)	Criticality of 30% Enriched Uranium Solutions in Cylindrical Geometry - Interim Report	J. C. Smith, A. V. Parker, J. G. Walford, C. White	03/1960	U.K.A.E.A. (Risley, Lancashire)	Unclassified, Not to be communicated ... to any person not authorized to receive it.	experimental criticality data	report, copy, fair	Y	Experiments are similar to those of IHESCBE report IEU-SOL-THERM-002, but in cylindrical geometry.
129	DEG Memorandum 812 (R)	Lattice Calculations for Slightly Enriched Uranium Oxide - Light Water Assemblies	S. Barnett	04/1960	U.K.A.E.A. (Risley, Lancashire)	Not to be communicated ... to any person not authorized to receive it.	computational method/data (1), equipment/process design	report, copy, fair	N	Buckling relationships were derived/applied to three sets of LEU rod experiments of differing enrichments, then used to predict critical parameters within the enrichment range and lattice parameters.
130	DP-163	Neutron Age in Mixtures of Light and Heavy Water	James W. Wade	06/1956		Unclassified	nuclear measurement/data	report, original, good	N	Experimental measurements for D ₂ O-H ₂ O mixtures ranging from 92 to 100% D ₂ O.
131	DP-132	Interaction of Subcritical Components	H. K. Clark	11/1958	SRNL	[None]	computational method/data (1), equipment/process design	report, original, good	N	Empirical relationships derived and fitted to experiment data to provide guidance for criticality designs.
132	DP-644	Nuclear Parameters of Massive Uranium Rods in D ₂ O	F. E. Kinard	11/1961	SRNL	[None]	experimental criticality data	report, original, good	N	Measurements of lattice physics parameters for a lattice of 3-inch dia U(3) metal rods in D ₂ O, with 18-in triangular pitch
133	DP-608	A Study of Thermal and Resonance Neutron Flux Detectors	G. M. Jacks	08/1961	SRNL	[None]	nuclear measurement/data	report, original, good	N	Measurements of cadmium ratios and self-shielding for foils of gold, indium, tungsten, eropium, manganese, lutecium, and dysprosium.
134	DP-868	Comparison of a Simple Theoretical Treatment of Critical Arrays of Fissionable Units with Experiment	H. K. Clark	01/1964	SRNL	[None]	computational method/data (1)	report, original, good	N	The correlation method uses diffusion theory, solid angle, and albedoes.
135	DP-1031	Interaction of Fissile Units A Computer Code - INTERACT	H. K. Clark	06/1966	SRNL	[None]	computational method/data (1)	report, original, good	N	The FORTRAN code implements a computational method similar to that of DP-868.
136	DP-1122	Lattice Experiments with Simulated Burned-Up Fuel for D ₂ O Power Reactors	N. P. Baumann, J. L. Crandall, R. L. Olson, G. F. O'Neill, D. J. Pellarin, V. D. Vandervelde	02/1968	SRNL	[None]	experimental criticality data, nuclear measurement/data	report, original, good	N	RODS were fabricated of PuO ₂ mixed with depleted UO ₂ to simulate heavy metal oxide content of irradiation natural uranium fuel. Measurements included buckling, temperature effects on buckling, thermal neutron distributions, conversion ratios, etc.

137	DP-1125	Zero Power Experiments with ²³⁵ U-Enriched Thoria and Thorium Metal Lattices for the HWO CR	D. J. Pellarin, N. P. Baumann, J. L. Crandall, G. F. O'Neill, R. M. Satterfield	11/1967	SRNL	[None]	experimental criticality data, nuclear measurement/data	report, original, good	N	Measurements involving only rods containing thorium were far subcritical and limited to lattice physics parameters. The critical experiments involved substitution measurements where only a fraction of the fuel rods contained thorium. "HWO CR" was an ANL acronym for Heavy Water Organic-Cooled Reactor."
138	DP-1168	Quantitative Analysis of Reactor Safety	L. M. Arnett	11/1968	SRNL	[None]	experiment safety analysis	report, original, good	N	Development of a generalized computational model (and computer code) to perform probabilistic analysis.
139	DP-1238	Calculation of Relative Reaction Rates in Interacting Cylindrical Cells	H. K. Clark	09/1970	SRNL	[None]	computational method/data (2)	report, original, good	N	Development of computational method (and computer code) to model neutron interaction in large, heterogeneous, thermal nuclear reactors (e.g., the Savannah River Plant reactors).
140	DP-1315	Termination of Nuclear Transients in the Nuclear Test Gauge	J. P. Church, W. S. Durant	01/1973	SRNL	[None]	experiment safety analysis	report, original, good	N	The Nuclear Test Gauge was used to confirm reactivity of inserted fuel items or assemblies; it was intended to remain subcritical in all operating modes. The consequences of a potential criticality accident (due to insertion of off-specification items) are evaluated.
141	DPST-59-445	Extrapolating Data and Margins of Safety	H. K. Clark	03/1959	SRNL	[None]	facility/process/storage analysis	paper, original, good	N	Paper was presented at a nuclear safety conference held at Savannah River Laboratory in March 1959, copy transmitted by memo to Dixon Callihan.
142	D-RL-902	Oralloy Hydride Critical Assemblies	H. C. Paxton, J. D. Orndoff, G. A. Linenberger	05/22/1950	SRNL	Secret, declassified 05/01/1973	experimental criticality data	report, original but with excerpted sections, good	Y	This document is LA-1159. Wording referring to "hydride weapons" and the document distribution list have been removed (cut out). The current LANL website version of LA-1159 is marked "Approved for Public Release." This appears to have been a declassified version provided to Callihan by Savannah River Laboratory.
143	D-RL-903	Critical Masses of Oralloy at Reduced Concentrations and Densities	J. D. Orndoff, H. C. Paxton, G. E. Hansen	05/01/1951	LANL	Secret, declassified 05/01/1973	experimental criticality data	report, original but with excerpted sections, good	Y	This document is LA-1251. Wording referring to tamper "compression" and the document distribution list have been removed (cut out). LA-1251 was not found on LANL external website. This appears to have been a declassified version provided to Callihan by Savannah River Laboratory.
144	D-RL-904	Precision Critical-Mass Determinations for Oralloy and Plutonium in Spherical Tuballoy Tampers	G. E. Hansen, D. P. Wood	01/01/1951	LANL	Secret, declassified 05/01/1973	experimental criticality data	report, original but with excerpted sections, good	Y	This document is LA-1356(Del). Distributed as Reference 135 of the LA-10680-MS reference set. Some words within the document and the document distribution list have been removed (cut out). LA-1356(Del.) was not found on the LANL external website. This appears to have been a declassified version provided to Callihan by Savannah River Laboratory.

145	GA-4488	Hazards Summary Report for the Metal Assembly	J. R. Brown, J. L. Russell	08/15/1963	John Jay Hopkins, Laboratory, General Atomic, San Jose CA	Reproduction ... is permitted for any purpose of the United States Government.	experiment plan/design	report, original, good	N	Plans for short-term use of a bare assembly of HEU metal from Oak Ridge, to be pulsed by accelerator-produced neutrons. Purpose is to design a similar metal assembly for the GA accelerator to testing of transient radiation effects on electronics.
146	GA-4873	Feasibility Study of the Accelerator Pulsed Fast Assembly Technical Summary Report October 1, 1962 through September 30, 1963	J. L. Russell, Jr., J. R. Brown, D. F. Herring, H. A. Kazi, J. U. Koppel, H. D. Smith, W. P. Wallace, P. B. Wilson	12/31/1963	John Jay Hopkins, Laboratory, General Atomic, San Jose CA	Official Use Only	experiment plan/design	report, original, good	N	Similar to GA-4488 except the primary focus is on the final GA assembly (which would likely be a ²³³ U metal assembly).
147	GAT-189	Critical Geometries for Bare Cylinders	J. A. Pond	07/20/1956	Portsmouth GDP	[None]	computational method/data (1)	report, original, good	N	Uses diffusion theory, buckling, four-factor formulas, and solid-angle methods to provide computed results for bare solution cylinder/cylinder array criticality requirements.
148	GAT-532-67-66	A Re-Study of the Uranium Concentration or Density Values Over the Full Range of Hydrogenous Moderations, for UF ₆ and UO ₂ F ₂	J. L. Feuerbacher	05/24/1967	Portsmouth GDP	[None]	operational/test/material data	memo, original, good	N	Correlations of U density and H:U atom ratio for moderated uranyl fluoride mixtures.
149	GAT-DM-639, Add. 1	A New Study of Nuclear Hazards of Process Gas Coolers, Add. 1	J. L. Feuerbacher	09/17/1959	Portsmouth GDP	[None]	computational method/data (1), equipment/process design	memo, original, good	N	Proposes increases in enrichment limits for gas coolers in the Portsmouth diffusion plant.
150	GAT-DM-769	Safe Geometries and Mass at Assays Below Five Per Cent U ²³⁵	J. L. Feuerbacher	05/18/1959	Portsmouth GDP	[None]	computational method/data (1), equipment/process design	memo, original, good	N	Proposes increased geometric and mass limits in the noted enrichment range. Folder includes a carbon-copy of a "Memo to File" recording phone conversations wherein Oak Ridge recipients of the memo expressed concern to Portsmouth management re technical content and mass limit increases of GAT-DM-769.
151	GAT-DM-1127	Increased Safe Pipe Diameter and Annulus Thickness Based on the Use of Neutron Absorber Shields or Alloys	J. L. Feuerbacher	11/27/1968	Portsmouth GDP	[None]	computational method/data (2), equipment/process design	memo, original, good	N	Uses ANISN calculations to justify increased dimensional limits for process vessels.
152	GAT-DR-275	Reflector Savings for Homogeneous Aqueous Solutions of U-235	John A. Pond	01/13/1958	Portsmouth GDP	[None]	computational method/data (1), equipment/process design	memo, original, good	N	Extrapolation length values are calculated for various reflector and other conditions, based on two-group theory.
153	GAT-T-551	Estimated Minimum Critical Mass and Safe Parameters of Uranium Below 5% U-235 Assay in Mixtures of Uranyl Fluoride and Water	J. L. Feuerbacher	09/11/1958	Portsmouth GDP	[None]	computational method/data (1), equipment/process design	memo, original, good	N	Proposes higher safe/subcritical mass limits for moderated uranyl fluoride at 2.0 and 1.2 % enrichment based on diffusion/buckling techniques.
154	GAT-T-670/Rev. 1	Rapid Calculation of Maximum Nuclear Reactivity of Homogeneous Uranyl Fluoride - Water Mixtures at All U-235 Enrichments	J. L. Feuerbacher	10/15/1959	Portsmouth GDP	[None]	computational method/data (1), equipment/process design	memo, original, good	N	Method is simple calculation of geometric buckling, application of leakage and tabulated k-infinity terms.
155	GAT-T-673	Moderating Ratios and Poisoning Ratios of the Elements and Some Compounds	J. L. Feuerbacher	09/01/1959	Portsmouth GDP	[None]	computational method/data (1)	report, original, good	N	Basic use of thermal cross sections and atom masses to tabulate the noted ratios. No guidance on usage.
156	GAT-T-692	Practical Methods for Calculating Reactivity of Homogeneous Uranium Compounds	J. L. Feuerbacher	10/15/1959	Portsmouth GDP	[None]	computational method/data (1)	report, original, good	N	Basic use of a six-factor formula, with terms read from graphs or calculated, to perform keff estimates.
157	GEAP-3001	Neutron Thermalization Calculations for a Heterogeneous Lattice Containing Uranium and Plutonium Fuel in Water	P. Greebler, W. H. Harker, J. M. Harriman	04/14/1958	Vallecitos Atomic Laboratory, General Electric, Pleasanton CA	[None]	computational method/data (1)	report, original, good	N	Assessment of methods/data used to account for non-1/v absorption effects in Pu-239.
158	GEAP-3882	AEC Superheat Criticals - A Comparison of Experiment and Theory on Uniform Lattices	G. T. Petersen, F. G. Warzek	01/1962		[None]	computational method/data (1)	report, original, good	N	

159	HASL TM 72-3	HASL Studies at the Oyster Creek Nuclear Electricity Generating Station	H. Beck, G. Burke, J. DeCampo, C. Gogolak, F. Hajnal, W. Lowder, J. McLaughlin, P. Raft	07/1972	Health and Safety Laboratory, U.S. Atomic Energy Commission, New York, NY	[None]	nuclear measurement/data	report, original, good	N	Measurements and analysis for normal-operations radionuclide releases from a BWR plant.
160	HASL-262	Absolute Intensities of Gamma Rays from the Decay of ²³⁸ U and ²³² Th	Harold L. Beck	10/1972	Health and Safety Laboratory, U.S. Atomic Energy Commission, New York, NY	[None]	nuclear measurement/data	report, original, good	N	²³⁸ U and ²³² Th are significant contributors to background radiation and thus interfere with the ability to accurately measure normal reactor emissions.
161	HEDL-TME 86-3	Reaction Rate Measurements on the CFRP/PNC Criticality Experiments Program (Task 20)	R. Gold, J. H. Roberts, L. S. Kellogg, W. Y. Matsumoto, W. N. McElroy, C. C. Preston, R. L. Simons	05/1987	Hanford Engineering Development Laboratory	Applied Technology: "... further distribution of this document ... to third parties representing foreign interests ... should be coordinated with the USDOE..."	experimental criticality data, nuclear measurement/data	report, original, good	N	Limited description of the critical experiments is provided.
162	HS/CR/1095/RB15	Health and Safety Branch, Technical Section Criticality Results Bulletin No. 15, Some Critical Arrays of Spherical Fissile Units in Air	A. J. Roskell, D. W. Tattersall, T. Murphy, E. R. Woodcock	10/26/1962	U.K.A.E.A.	Official Use Only	computational method/data (1)	report, original, fair	N	Uses the code "GEM." Folder includes three pages labeled "Comparison with ORNL Results". It is not clear whether these pages are part of the technical bulletin/report.
163	HS/CR/1095/RB27	Health and Safety Branch, Theoretical and Computing Section Results Bulletin No. 27, Pu ²⁴⁰ Poisoning in Aqueous Plutonium Solutions	E. R. Woodcock	12/1964	U.K.A.E.A.	NOT FOR PUBLICATION	computational method/data (1)	report, original, fair	N	Uses the code "GEM." Folder includes three pages labeled "Comparison with ORNL Results". It is not clear whether these pages are part of the technical bulletin/report.
164	HW-19112	Results of Critical Mass Studies for Hanford at K-25	Paul F. Gast	10/11/1950	Hanford Works, General Electric, Richland, WA	Secret, declassified 01/30/1958	equipment/process design	report, original, fair	N	Outlines application of K-643 experimental results for criticality concerns at Hanford.
165	HW-24327	A Study of the Radiation Burst in the Hanford Homogeneous Reactor	B. R. Leonard, Jr.	05/02/1952	Hanford	Secret, declassified 12/27/1957	criticality accident	report, original, good	N	Report describing the criticality accident of November 16, 1951, during critical experiments with a spherical tank of Pu solution.
166	HW-24454	Proposed Method for Treating Hydrogen Displacement Effects in Critical Mass Measurements	P. F. Gast	05/19/1952	Hanford	Confidential, declassified 05/31/1960	computational method/data (1)	report, negative photostatic copy, fair	N	Uses diffusion theory methods.
167	HW-24514 DEL	Critical Mass Studies of Plutonium Solutions	F. E. Kruesi, J. O. Erkman, D. D. Lanning	05/19/1952	Hanford	Unclassified	experimental criticality data	report, original, good	Y	HW-24514 was originally issued in 1952 as a classified document. The copy in Callihan's files is the declassified ("DEL") reissue of 02/15/1960.
168	HW-32791	Summary Report of the Reactor Hazards for the Prototype Physical Constants Testing Reactor	D. J. Donahue, D. D. Lanning, W. A. Horning, R. L. Dickeman	09/16/1954	Hanford	Secret, declassification indicated but no date provided	experiment plan/design, experiment safety analysis	report, negative photostatic copy, fair	N	
169	HW-35038	Correlation of Exponential Pile Lattice Measurements with Theory	E. D. Clayton, C. R. Richey	02/08/1955	Hanford	Secret, declassified 09/29/1955	computational method/data (1)	report, original, good	N	Pages 2 and 3 are missing from this copy of the report. Various formulas for lattice/reactor parameters are presented and compared to measured values.
170	HW-36174	Exponential Pile Measurements with Hollow Slugs in Graphite-Uranium Lattices	E. D. Clayton	04/12/1955	Hanford	Secret, declassified 06/24/1960	experimental criticality data	report, original, good	N	
171	HW-39433	A Proposed Nuclear Safety Indicator for Contact Maintenance Purposes	G. M. Muller, N. Ketzlach	10/10/1955	Hanford	Secret, declassified 04/06/1960	experimental criticality data	report, original, good	N	For solution process equipment not designed to be subcritical under personnel reflection, a process for use of neutron sources and detectors is outlined. The process would allow verification of safe conditions (concentration) to allow maintenance.

172	HW-40930	Exponential Pile Measurements in Water Moderated Lattice with Enriched Uranium Rods; Buckling Calculations for One Per Cent Enriched Uranium-Water Rod Lattices	E. D. Clayton, H. Neumann	01/16/1956	Hanford	Secret, declassified 04/12/1957	experimental criticality data, computational method/data (1)	report, original, good	N	
173	HW-41899	Nuclear Safety of Vessels in Arrays	N. Ketzlach	03/13/1956	Hanford	Secret, declassified 08/29/1960	computational method/data (1)	report, original, good	N	
174	HW-43463	Nuclear Safety of Right Elliptic and Right Annular Cylinders	N. Ketzlach	06/01/1956	Hanford	Unclassified	computational method/data (1)	report, copy, poor	N	A portion of the first page (header information) was (deliberately) obscured in generation of this hard copy, possibly for classification reasons. All text of report body is present.
175	HW-43579	Nuclear Safety Considerations in Reactor Fuels Processing Plant Design	N. Ketzlach	06/11/1956	Hanford	Unclassified	equipment/process design	report, copy, good	Y	
176	HW-44525	Physics Research Quarterly Report April, May, June 1956	Staff	07/25/1956	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
177	HW-47012	Nuclear Physics Research Quarterly Report July, August, September 1956	Staff	11/05/1956	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
178	HW-48893	Nuclear Physics Research Quarterly Report October, November, December 1956	Staff	03/06/1957	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
179	HW-50598	Nuclear Physics Research Quarterly Report January, February, March 1957	Staff	05/31/1957	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
180	HW-51168	Progress Report on Experiments to Determine Infinite Multiplication Factors of Enriched UO ₃ - H ₂ O Mixtures	H. E. Handler	07/01/1957	Hanford	Confidential, declassified 01/22/1958	experimental criticality data	report, original, good	N	Preliminary PCTR results and interpretations are presented. Callihan's folder includes notes re k-infinity estimates for uranyl nitrate solution at low enrichment, a GE plot of k-infinity for 3% enrichment UO ₃ as a function of H/U ratio, and an un-numbered (un-issued?) copy of the final report by H. E. Handler and R. E. Trumble, Jr.
181	HW-51364	Nuclear Safety in Processing Uranium Solutions of All Enrichments	N. Ketzlach	07/15/1957	Hanford	Unclassified	computational method/data (1)	report, original, good	N	Basic use of a four-factor formula and age theory to compute criticality data.
182	HW-51983	Nuclear Physics Research Quarterly Report April, May, June 1957	Staff	08/14/1957	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
183	HW-53492	Nuclear Physics Research Quarterly Report July, August, September 1957	Staff	11/06/1957	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	Summarizes PCTR measurements to determine the minimum critical enrichment of U-235 oxide (~1.03% as UO ₃) homogeneously mixed with water.
184	HW-54591	Nuclear Physics Research Quarterly Report October, November, December 1957	Staff	03/05/1958	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
185	HW-55879	Nuclear Physics Research Quarterly Report January, February, March 1958	Staff	04/29/1958	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
186	HW-56423	Nuclear Safety of Iron-Encased Fuel Elements	N. Ketzlach	06/17/1958	Hanford	Unclassified	experimental criticality data, computational methods/data (1)	report, original, good	N	
187	HW-56919	Nuclear Physics Research Quarterly Report April, May, June 1958	Staff	07/21/1958	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
188	HW-57861	Nuclear Physics Research Quarterly Report July, August, September 1958	Staff	10/20/1958	Hanford	Unclassified	multiple topics	report, copy, fair	N	Copy includes only section "Critical Mass Physics".
189	HW-58049	Nuclear Safety in Processing Less Than 5.0% U-235 Enriched Reactor Fuels	N. Ketzlach	11/11/1958	Hanford	Unclassified	equipment/process design	report, copy, fair	N	
190	HW-59066	The Nuclear Safety of Fissile Materials	E. D. Clayton	02/11/1959	Hanford	Unclassified	equipment/process design	report, copy, fair	Y	
191	HW-59126	Physics Research Quarterly Report October, November, December 1958	Staff	01/20/1959	Hanford	Unclassified	multiple topics	report, copy, fair	N	Copy includes only section "Critical Mass Physics" and the Reference list.
192	HW-59301	Random Loading of E-Metal Dissolver	N. Ketzlach	02/25/1959	Hanford	Unclassified	facility/process/storage analysis	report, original, good	N	Considers possible reduction in critical mass requirement due to random packing of LEU metal slugs in water.
193	HW-60220	Nuclear Physics Research Quarterly Report January, February, March 1959	Staff	04/20/1959	Hanford	Unclassified	multiple topics	report, copy, fair	N	Copy includes only section "Critical Mass Physics".
194	HW-61181	Nuclear Physics Research Quarterly Report April, May, June 1959	Staff	07/29/1959	Hanford	Unclassified	multiple topics	report, copy, fair	N	Copy includes only section "Critical Mass Physics".

195	HW-62727	Nuclear Physics Research Quarterly Report July, August, September 1959	Staff	10/20/1959	Hanford	Unclassified	multiple topics	report, copy, fair	N	Copy includes only section "Physics of Nuclear Safety".
196	HW-64866	Nuclear Physics Research Quarterly Report January, February, March 1960	Staff	04/20/1960	Hanford	Unclassified	multiple topics, TOC scanned	report, original, good	N	
197	HW-65327	Comments on Eurochem Technical Report 36	E. D. Clayton	05/24/1960	Hanford	Unclassified		report, copy, fair	N	Comments on a report by W. Schüller titled "The Reactivity of Heterogeneous-Homogeneous Systems".
198	HW-65328	Nuclearly Safe Mass Limits, Volume Limits, Infinite Cylinder Diameters and Slab Thicknesses for Slightly Enriched Uranium Rods in Light Water	E. D. Clayton	05/24/1960	Hanford	Unclassified	computational methods/data (1), equipment/process design	report, copy, poor	N	
199	HW-66266	Hazards Summary Report for the Hanford Plutonium Critical Mass Laboratory	W. A. Reardon, E. D. Clayton, C. L. Brown, R. H. Masterson, T. J. Powell, C. R. Richey, R. B. Smith, J. W. Healy	08/01/1960	Hanford	[None]	experiment safety analysis	report, original, good	Y	
200	HW-66266 SUP1 REV	Hazards Summary Report for the Hanford Plutonium Critical Mass Laboratory Supplement No. 1 The Remote Split-Table Machine	C. R. Richey, E. D. Clayton, R. H. Odegaard, J. D. White, W. A. Reardon	10/1963	Hanford	Unrestricted distribution	experiment safety analysis	report, original, good	Y	
201	HW-66215	Nuclear Physics Research Quarterly Report April, May, June 1960	Staff	07/20/1960	Hanford	[None]	multiple topics	report, copy, fair	N	Copy includes only section "Critical Mass Physics".
202	HW-66882	k_{∞} of Three Weight Per Cent U^{235} Enriched UO_3 and $UO_2(NO_3)_2$ Hydrogenous Systems	V. I. Neeley, J. A. Berberet, R. H. Masterson	09/1961	Hanford	[None]	computational method/data (1), process/equipment design	report, original, good	Y	Results based on PCTR measurements. Referenced in footnote of ANSI/ANS-8.1-1998.
203	HW-67179	Measurement of the Negative k_{∞} for a Graphite Uranium Lattice in the PCTR	E. Z. Block, D. E. Wood	12/01/1960	Hanford	[None]	experimental criticality data	report, original, good	N	Technique for measuring k_{∞} in the PCTR when the value is less than unity.
204	HW-67691	Leakage of Neutrons from Bare Subcritical Plutonium Systems	B. C. Clark, J. L. Carter	12/05/1960	Hanford	[None]	computational method (1)	report, original, good	N	Interest is in the possibility for detecting hazardous (i.e., slightly subcritical) systems in process environments.
205	HW-68389	Physics Research Quarterly Report October, November, December 1960	Staff	01/20/1961	Hanford	[None]	multiple topics	report, copy, fair	N	The copy consists of only the title page and table of contents.
206	HW-68405	A Semi-Empirical Method of Estimating Material Bucklings for Slightly Enriched Uranium-Water Lattices	C. L. Brown	02/1961	Hanford	[None]	experimental criticality data, computational method (1)	report, original, good	N	
207	HW-68929	Nuclear Safety in Chemical and Metallurgical Processing of Plutonium	E. D. Clayton	04/1961	Hanford	[None]	equipment/process design	report, original, good	Y	Good outline of a series of processing steps for plutonium fuel element manufacture, criticality data, and application of criticality controls. Also outlines needed data that form the objectives of the to-be-started Hanford Pu Critical Mass Laboratory.
208	HW-69273	Calculated Critical Parameters for Slightly Enriched Uranium Rods in Light Water	C. L. Brown	04/1961	Hanford	[None]	experimental criticality data, computational method (1)	report, original, good	N	
209	HW-69475	Physics Research Quarterly Report January, February, March 1961	Staff	04/20/1961	Hanford	[None]	multiple topics	report, copy, fair	N	The copy consists of only the title page, table of contents, and one article regarding PCTR k_{∞} measurements for low enriched (3%) uranium oxide with hydrogen moderation.
210	HW-69525	Material Buckling Measurements on Graphite-Uranium Systems at Hanford: A Summary Tabulation	D. E. Wood	05/1961	Hanford	[None]	experimental criticality data	report, original, good	Y	Over 300 subcritical measurement configurations are described in detail, several good-quality photos included.
211	HW-70310	Measurement of Multiplication Constant for Slightly Enriched Homogeneous UO_3 -Water Mixtures and Minimum Enrichment for Criticality	V. I. Neeley and H. E. Handler	08/21/1961	Hanford	[None]	experimental criticality data	report, original, good	Y	Analysis of PCTR measurements. Referenced in footnote of ANSI/ANS-8.1-1998.
212	HW-70716	Physics Research Quarterly Report April, May, June 1961	Staff	07/20/1961	Hanford	[None]	experimental criticality data	report, copy, fair	N	The copy consists only of the title page and one article regarding use of pulsed neutron sources to infer k_{eff} .
213	HW-71747	Physics Research Quarterly Report July, August, September 1961	Staff	10/13/1961	Hanford	[None]	multiple topics	report, copy, fair	N	The copy consists only of the title page and articles from the section titled "Critical Mass Physics." Summarizes the first experiments performed at the Hanford Pu Critical Mass Lab.

214	HW-72586	Physics Research Quarterly Report October, November, December 1961	Staff	01/31/1962	Hanford	[None]	multiple topics	report, copy, fair	N	The copy consists only of the title page and articles from the section titled "Critical Mass Physics."
215	HW-75228	Physics Research Quarterly Report July, August, September 1962	Staff	10/15/1962	Hanford	[None]	multiple topics	preprint, copy, fair	N	These copies appear to be pre-prints of individual articles to be included in HW-75228. May have been advance copies provided directly to Callihan by Hanford staff.
216	HW-76128	Physics Research Quarterly Report January, February, March 1963	Staff	04/1963	Hanford	[None]	experimental criticality data	preprint, copy, good	N	Preprint of an article to be included in HW-76128, involving Pu solution experiments in 14-inch diameter spheres. Includes cover letter from E. D. Clayton to A. D. Callihan dated April 4, 1963.
217	HW-77089	The Limiting Critical Concentrations for Pu ²³⁹ and U ²³⁵ in Aqueous Solutions	R. H. Masterson, J. D. White, T. J. Powell	03/27/1963	Hanford	Unrestricted distribution	experimental criticality data	report, original, good	Y	
218	HW-77871	Physics Research Quarterly Report April, May, June 1963	Staff	07/1963	Hanford	[None]	multiple topics	preprint, copy, fair	N	Preprints of 3 articles to be included in HW-77871.
219	HW-79054	Physics Research Quarterly Report July, August, September 1963	Staff	10/1963	Hanford	[None]	multiple topics	preprint, copy, good	N	Preprint of 1 article to be included in HW-79054.
220	HW-80020	Physics Research Quarterly Report October, November, December 1963	Staff	01/15/1964	Hanford	[None]	multiple topics, TOC scanned	report, copy, good	N	
221	HW-83187	Physics Research Quarterly Report April, May, June 1964	Staff	07/1964	Hanford	Unclassified	multiple topics	preprint, copy, good	N	Preprints of 2 articles to be included in HW-83187.
222	HW-SA-2750	Criticality and Nuclear Safety of Slightly Enriched Uranium	E. D. Clayton, C. L. Brown	09/11/1962	Hanford	[None]	handbook	report, copy from microcard, fair	N	
223	HW-SA-3310	Nuclear Safety Standardization at the International Level	M. C. Leverett	01/02/1964	Hanford	Unclassified	standards	conference paper, copy from microcard, fair	N	Presented at the 14th National Conference on Standards, Washington DC, Feb. 17-19, 1964.
224	IC-51-2-7	Calculation, ANP Critical Assembly	AO Mooneyham	2/6/51	AEC/ANP	Unknown				See Notes on NEPA-1769 re: availability, also in T-CSIRC, Vol-1A
225	ICRP/63/MC-27	Report on Radiation Accident, Mexico, November 1962	International Commission on Radiological Protection	06/21/1963	Mexican National Nuclear Commission	[None]		memo, copy, fair	N	Cover memo w English translation of a Mexican report. Multiple fatalities in a family resulted from inadvertent presence of a 5 curie Co ⁶⁰ source which remained in the residence for almost four months.
226	IDO-16114	A Non-Destructive Method for Fuel Assaying	S. G. Forbes	09/22/1953	Phillips Petroleum Company, Idaho Falls, ID	Unclassified		report, original, good	N	Use of a reactor-generated neutron beam to induce fissions in MTR fuel elements and infer the fissile content.
227	IDO-16280	Criticality Calculation with Regard to the Dissolution of 2% Enriched Slugs	J. W. Webster	06/22/1955	Phillips Petroleum Company, Idaho Falls, ID	Confidential, declassified 07/29/1960	computational method/data (1), equipment/process design	report, negative photostatic copy, fair	N	
228	IDO-17095	A Correlation of Interaction Data with Calculations Using the Geller Model	J. K. Fox	08/1965	Phillips Petroleum Company, Idaho Falls, ID	[None]	computational method/data (1)	report, original, good	N	Method is similar to solid-angle method.
229	IG Report 142 (RD/R)	A Comparison of Simple Interaction Theory with Experiment	R. T. Ackroyd, E. J. Burton, M. A. Perks	07/29/1959	U.K.A.E.A.	[None]	computational method/data (1), equipment/process design	report, copy, good	N	
230	I. G. Memo 244 (RD/R)	Criticality of Plutonium Metal-Water Systems	M. A. Perks, F. R. Charlesworth, D. E. J. Thornton	no date	U.K.A.E.A.	Not to be communicated ... to any person not authorized to receive it.	computational method/data (1), equipment/process design	report, original, good	N	
231	IG Memorandum 462 (RD/R)	Criticality Data for Homogeneous Uranium-Water Solutions and Mixtures	M. A. Perks	06/10/1959	U.K.A.E.A.	Not to be communicated ... to any person not authorized to receive it.	computational method/data (1), equipment/process design	report, negative photostatic copy, fair	N	

232	IGR-TN/R.421	Proposed Safety Factor to Allow for Heterogeneity of Fissile Solutions	M. A. Perks	11/1956	U.K.A.E.A.	Not to be communicated ... to any person not authorized to receive it.	computational method/data (1), equipment/process design	report, original, good	N	
233	IN-1120	Comparison of ORNL Clean Critical Experiments with Calculations	J. K. Fox	09/1967	Idaho Nuclear Corporation, Idaho Falls, ID	[None]	computational method/data (2)	report, original, good	N	
234	IN-1173	Criticality Aspects of the Revised Zirconium Dissolution System at the Idaho Chemical Processing Plant	W. G. Morrison	02/1968	Idaho Nuclear Corporation, Idaho Falls, ID	[None]	computational method/data (2), equipment/process design	report, original, good	Y	
235	ISO-174	Calculated Critical Parameters of Low Enrichment UNH and UO ₃ -H ₂ O Mixtures	K. R. Ridgway	02/01/1966	Isochem, Inc., Richland WA	Official Use Only	computational method/data (2)	report, copy from microcard, good	N	
236	ISO-SA-4	Calculated Nuclear Safety Parameters of Low Enriched Uranium	K. R. Ridgway	05/17/1966	Isochem, Inc., Richland WA	Unclassified	computational method/data (2)	report, original, good	N	
237	K-27	Radioactivity Hazards Precautions and Instructions	S. Visner, C. Beck	07/23/1947	K-25	Restricted		report, original, fair	N	Presentation of alpha, beta and gamma hazards of uranium, safety guidance and plant policy
238	K-126	Critical Mass Studies, Part II	C. K. Beck, A. D. Callihan, R. L. Murray	01/23/1948	K-25	Secret, declassified 08/1957	experimental criticality data		Y	FOLDER IS EMPTY
239	K-240	Methods for the Preparation of Cubes Containing Uranium Compounds and the Recovery of the Uranium Salts	W. L. Maroney, B. J. Massey, J. G. Schaffner, E. Staple, E. A. Wiggin, A. D. Callihan, S. Visner	07/07/1948	K-25	Secret, declassified 06/25/1958	experimental criticality data	report, original, fair	Y	Describes manufacture of fissile material for the experiments described in K-126, plus tolerance measurements. Includes original (hand-written) 9-page fabrication procedure, 1-page (hand-written) cost estimate for fabrication and material recovery.
240	K-317	U-234 Specific Alpha Activity	G. B. Knight, A. S. Golin, P. A. Macklin, R. L. Macklin	12/08/1948	K-25	[None]		report, original, fair	N	
241	K-320	Feasibility Study of Uranium Experiments for Obtaining Data Needed in Hanford Operations	C. K. Beck, A. D. Callihan, E. Grueling, J. W. Morfitt	04/19/1949	K-25	Secret, declassified 06/25/1958	experiment plan/design	report, original, good	N	Much of the data requested by Hanford was determined in the K-643 experiment effort.
242	K-343	Critical Mass Studies, Part III	C. K. Beck, A. D. Callihan, J. W. Morfitt, R. L. Murray	04/19/1949	K-25	Secret, declassified 05/08/1958	experimental criticality data	report, original, good	Y	File in includes A. D. Callihan's personal notes regarding the experiments.
243	K-375	Radiation Dosage from Chain Reactions	M. C. Edlund, S. Visner	03/23/1949	K-25	Secret, declassified 01/22/1957	criticality accident	report, original, good	N	Assumes a nearly fully 55 gallon drum of solution, most of water in drum must evaporate to terminate reaction. Predicts a 500 rad dose radius at 215 ft.
244	K-406	Critical Mass Studies, Part IV	D. Callihan, D. F. Cronin, J. K. Fox, R. L. Macklin, J. W. Morfitt	11/28/1949	K-25	Secret, declassified 01/13/1958	experimental criticality data	report, original, good	Y	
245	K-643	Critical Mass Studies, Part V	D. Callihan, D. F. Cronin, J. K. Fox, J. W. Morfitt	06/30/1950	K-25	Secret, declassified 01/13/1958	experimental criticality data	report, original, good	Y	Immediately following this hanging file folder is an unlabelled folder, contain primarily notes and calculations by Callihan of the reported H/U-235 atom ratios for the K-643 and other experiments.
246	K-644	Criticality Test on P-10 Alloy Slugs	D. Callihan, J. D. McClendon, J. W. Morfitt	07/11/1950	K-25	Secret, declassified 08/04/1960	experimental criticality data	report, original, good	Y	
247	K-666	Effect of Interaction on Critical Mass	R. L. Macklin	08/31/1950	K-25	Issued as Official Use Only, OUO markings stamped over and "declassified" stamps added.	computational method/data (1)	report, original, good but several sections of text have been cut out.	N	
248	K-709	A Proposed Method of Evaluating Critical Mass Hazards at Low Assays	R. L. Macklin	12/27/1950	K-25	Secret, declassified 06/24/1960	computational method/data (1)	report, original, good	N	
249	K-736	The Energy Spectrum of the Leakage Neutrons from a Homogeneous Reactor	R. C. Rohr, H. F. Henry	07/05/1951	K-25	Secret, declassified 03/12/1956	dosimetry	report, original, good	N	Early development work for criticality accident dosimeters using indium foil irradiations performed as part of K-343 experiments.

250	K-740	A Test of Neutron Multiplication by Slightly Enriched Uranium	A. D. Callihan, D. F. Cronin, R. L. Macklin, J. W. Morfitt, D. V. P. Williams	03/28/1951	K-25	Secret, declassified 01/21/1959	experimental criticality data	report, original, good	N	Measurements of multiplication for large cylinders of unmoderated UF_6 at 2% enrichment. Folder includes drawings of tank, cylinders for UF_6 , Cd control blade, material analyses.
251	K-905	Cylindrical Reactor Dimensions of the Water Tamped Enriched Uranyl Fluoride-Water System as a Function of Concentration	R. L. Macklin	05/09/1952	K-25	Secret, declassified 01/22/1958	computational method/data (1)	report, original, good	N	Hyperbolic curve fit relationships for height and diameter of critical solution cylinders.
252	K-1019 5th Revision	Criticality Data and Nuclear Safety Guide Applicable to the Oak Ridge Gaseous Diffusion Plant	H. F. Henry, A. J. Mallet, C. E. Newlon, W. A. Pryor	05/22/1959	K-25	[None]	equipment/process design	report, original, good	Y	
253	K-1141	Water Boiler Calculations of Critical Parameters	H. F. Henry, C. E. Newlon	08/13/1954	K-25	Secret, declassified 01/22/1958	computational method/data (1)	report, original, good	N	
254	K-1260	Criticality Calculations for Hydrogenous Systems	J. R. Knight	11/25/1955	K-25	Confidential, declassified 01/22/1958	computational method/data (1)	report, original, good	N	
255	K-1309	General Application of a Theory of Neutron Interaction	H. F. Henry, J. R. Knight, C. W. Newlon	12/15/1956	K-25	Confidential, declassified 12/16/1957	computational method/data (1)	report, original, good	N	
256	K-1345	A Special Purpose Slide Rule for Computing Solid Angles	J. R. Knight	12/19/1957	K-25	Unclassified	computational method/data (1)	report, original, good	N	Folder includes notes and graphs regarding application of solid angle methodology.
257	K-1370	Extension of the Safe Geometric Parameters to Slightly Enriched Uranium	C. E. Newlon	11/23/1958	K-25	Unclassified	computational method/data (1)	report, original, good	N	
258	K-1380	Studies in Nuclear Safety	H. F. Henry (Compiler)	08/14/1958	K-25	Unclassified	handbook	report, original, good	Y	Lectures presented at the Nuclear Safety Training School, June 3 - 14, 1957.
259	K-1436	Prevention and Handling of Radiation Emergencies	K. W. Bahler, A. F. Rupp, R. H. Lafferty Jr., J. W. Wachter, L. S. O'Rourke, C. R. Milone	12/22/1959	K-25	Unclassified	criticality accident	report, original, good	Y	May be viewed as a comprehensive lessons-learned from the 1958 Y-12 accident.
260	K-1470	Is All Radiation Harmful?	H. F. Henry	05/02/1961	K-25	Unclassified		report, original, good	N	
261	K-1478	Extensions of Neutron Interaction Data	H. F. Henry, C. E. Newlon, J. R. Knight	07/11/1961	K-25	Unclassified	computational method/data (1)	report, original, good	N	Solid angle methodology
262	K-1550	The Effect of Uranium Density on the Safe U-235 Enrichment Criterion	C. E. Newlon	10/11/1962	K-25	Unclassified	computational method/data (1), equipment/process design	report, original, good	N	Applies various nuclear analysis methods to the PCTR measurements; established a subcritical enrichment limit of 0.95 weight % U-235 for the Oak Ridge Diffusion Plant.
263	K-1582	A Nuclearly Safe 12-1/4-in. I.D. Packed Liquid Entrainment Separator	H. F. Henry, C. E. Newlon	10/17/1963	K-25	[None]	equipment/process design	report, original, good	N	
264	K-1619	The Elements of Neutron Interacting Arrays - Part 1	C. E. Newlon	10/13/1964	K-25	[None]	computational method/data (1), equipment/process design	report, original, good	N	Notes that for equal-volume arrays of individually subcritical air-spaced units, minimum critical array U-235 mass occurs at enrichments substantially less than 93% enrichment.
265	K-1629	Minimum Critical Cylinder Diameters of Hydrogen Moderated U(4.9) Systems	C. E. Newlon	03/15/1965	K-25	[None]	computational method/data (1), equipment/process design	report, original, good	N	Uses experiment results and 16-group transport calculations. Concludes that the minimum critical diameter for ~ 5% enrichment is ~ 12 inches.

266	K-1649	ORGDP Reprocessing Studies Summary Progress Report Fiscal Year 1964 Through Fiscal Year 1965	S. H. Smiley, D. C. Brater, J. H. Pashley	10/29/1965	K-25	[None]	equipment/process design	report, original, good	Y	Reprocessing via fluoride volatility methods are assessed from a variety of engineering standpoints, including criticality safety. Flow diagrams, equipment designs, etc. addressed.
267	K-1661	Fissile-Material Container and Packaging Development and Testing Program	A. J. Mallett, S. J. Wheatley	04/01/1966	K-25	[None]	transport safety analysis	report, original, good	N	Design efforts for UF ₆ transport containers.
268	K-1663	Hydrogen Moderation - A Primary Nuclear Safety Control for Handling and Transporting Low-Enrichment UF ₆	C. E. Newlon, A. J. Mallett	05/31/1966	K-25	[None]	transport safety analysis	report, original, good	N	
269	K-1669	ORGDP Reprocessing Studies Summary Progress Report July Through December, 1965	S. H. Smiley, D. C. Brater, J. H. Pashley	06/28/1966	K-25	[None]	equipment/process design	report, original, good	Y	
270	K-1714	Protective Shipping Packages for 8- and 12-Inch Diameter UF ₆ Cylinders	A. J. Mallett, C. E. Newlon	04/20/1967	K-25	[None]	equipment/process design, transport safety analysis	report, original, good	N	
271	K-1716	Protective Shipping Package for 5-Inch Diameter UF ₆ Cylinder	A. J. Mallett, C. E. Newlon	06/14/1967	K-25	[None]	equipment/process design, transport safety analysis	report, original, good	N	
272	K-1734	Nuclear Safety Studies for Low Enrichment Fluoride Volatility Fuel Reprocessing Plants	K. E. Habiger, D. L. Breton	09/04/1968	K-25	[None]	facility/process/storage analysis	report, original, good	Y	
273	KAPL-1464	A Measurement of Eta and Other Fission Parameters for U-233, Pu-239, and Pu-241, Relative to U-235 at Sub-Cadmium Neutron Energies	D. E. McMillan, M. E. Jones, J. B. Sampson, E. R. Gaerttner, T. M. Snyder	12/15/1955	KAPL	Unclassified	nuclear measurement/data	report, original, good	N	
274	KAPL-1787	Environmental Hazard Evaluations for Critical Assemblies	J. J. Fitzgerald, R. J. Feinberg	12/05/1956	KAPL	Unclassified	experiment safety analysis	report, original, good	N	
275	KB-751	Radiation Emergencies Steering Committee Summary Report	K. W. Bahler, A. F. Rupp, R. H. Lafferty Jr., J. W. Wachter, L. S. O'Rourke, C. R. Milone	04/1959	Union Carbide Corporation and Goodyear Atomic Corporation (K-25 and Portsmouth)	Not to be released to the public or given external distribution ... without approval ..	criticality accident	report, original, good	N	Similar scope/content as K-1436.
276	K-C-768	A Mobile Manipulator for Use in Controlling Radiation Emergencies	A. F. Becher	04/05/1965	K-25	[None]	criticality accident	report, copy, fair	N	Includes engineering specifications for a remotely controlled robot, for purpose of achieving secure termination of a criticality accident.
277	KD-1766	Critical Interaction Potentials for Water Moderated UF ₆ Arrays	C. E. Newlon	11/30/1962	K-25	[None]	computational method/data (1)	report, original, good	N	
278	K-D-1810	A Triangular Slab Abrasive Slurry Tank for Handling Enriched Uranium	R. J. Clouse, A. J. Mallett, C. E. Newlon	03/19/1964	K-25	[None]	computational method/data (1), equipment/process design	report, original, good	N	Has numerous hand-written notes by J. T. Thomas. Develops geometric buckling values for a segment of a right circular cylinder.
279	K-D-1817	Approval Letter No. 143 Criteria Change: In-Plant Moderation Controlled UF ₆ Cylinders	A. D. Callihan, A. P. Huber, R. L. Macklin, A. J. Mallett	04/03/1964	K-25	Confidential, declassified 02/01/1966	equipment/process design	memo, copy, fair	N	Increased the allowable enrichment limits for in-plant UF ₆ cylinders.
280	K-D-1858	Nuclear Safety Analysis of Low Enrichment Uranium Oxide Shipment to Savannah River Plant	A. J. Mallett	06/23/1965	K-25	[None]	transport safety analysis	memo, original, good	N	
281	K-D-1893	Rail Shipment of 10-Ton Cylinders Containing 2.1% Enriched UF ₆	A. J. Mallett	01/28/1966	K-25	[None]	transport safety analysis	memo, original, good	N	
282	K-D-1912	Conceptual Design Report for Critical Assembly Bay ELA	Staff (of the Engineering Division)	06/15/1966	K-25	[None]	experiment plan/design	report, original, good	N	Engineering design for a critical mass lab to be co-constructed with the Oak Ridge Electron Linear Acceleration (ORELA).
283	K-D-1912 Revised	Conceptual Design Report for Critical Assembly Bay ELA	Staff (of the Engineering Division)	07/29/1966	K-25	[None]	experiment plan/design	report, original, good	N	
284	K-D-1918	Criteria Change: Protective Structural Package for 30-in. diam UF ₆ Cylinder	A. D. Callihan, A. P. Huber, R. L. Macklin, A. J. Mallett	07/22/1966	K-25	[None]	transport safety analysis, operational/test/material data	memo, original, good	Y	Authorizes off-site shipment of 30-inch UF ₆ cylinders with up to 4.5% enrichments. Includes photos and descriptions of experiments involving 7 cylinders under water submersion, performed at the Oak Ridge Critical Experiments Facility.
285	K-D-1925	Use of Nonapproved Equipment for UF ₆ Transfer August 1966 - Significant Noncritical Incident No. 31	A. J. Mallett	08/25/1966	K-25	[None]		memo, original, good	N	Unauthorized installation and use of a UF ₆ gas transfer line.

286	K-D-1987	Water Immersion Test of UF ₆ Cylinders with Simulated Damage	A. J. Mallett	11/07/1967	K-25	[None]	operational/test/material data	report, copy, fair	Y	A good-quality original-issue report is present in the H. R. Dyer collection.
287	KFK-153	Theory of Delayed Supercritical Excursions to Determine Coefficients of Fast Reactors	K. Ott	06/1963	Institute for Neutron Physics and Technology, Kernforschungszentrum, Karlsruhe, West Germany	[None]	experiment safety analysis	report, copy, fair	N	
288	K-L-3082	Safe Separation Distances for BONUS Fuel Assemblies in Water	C. E. Newlon	10/30/1968	K-25	[None]	computational method/data (2)	report, original, good	N	
289	K-L-1780, Part 9	ORGDP Fuel Reprocessing Studies Progress Report for Period Ending June 30, 1965	S. H. Smiley	07/28/1965	K-25	Not to be released to the public or given external distribution ... without approval ...	equipment/process design	report, copy, good	N	
290	K-L-6210	New End-Loading Shipping Container for Unirradiated Fuel Assemblies	A. J. Mallett, C. E. Newlon	10/1968	K-25	[None]	computational method/data (2), transport safety analysis	report, copy, good	N	Addresses use of overpack containers for 30-inch UF ₆ cylinders, for shipment of BONUS fuel assemblies.
291	K-L-6243	Nuclear Safety Analysis of 48- and 30-Inch Heavy-Wall UF ₆ Cylinders	C. E. Newlon, R. G. Taylor	10/03/1969	K-25	[None]	computational method/data (2), transport safety analysis	report, original, good	N	
292	K-L-6249	Fissile Class I Shipment of UF ₆ "Heel" Cylinders	C. E. Newlon, R. G. Taylor	12/19/1969	K-25	[None]	computational method/data (2), transport safety analysis	report, original, good	N	
293	K-L-6252	Activity Determination for Uranium Hexafluoride Shipping Containers	C. E. Newlon, R. G. Taylor	03/10/1970	K-25	[None]	transport safety analysis	report, original, good	N	
294	K-L-6255	Nuclear Safety Analysis of Moderation-Controlled 48-In.-ID Heavy-Wall UF ₆ Cylinders	C. E. Newlon, R. G. Taylor	08/10/1970	K-25	[None]	computational method/data (2), transport safety analysis	report, original, good	N	
295	K-L-6316	Monitoring for Uranium Accumulations in Diffusion Plant Equipment	R. G. Taylor	05/21/1973	K-25	[None]	safety guidance	report, original, good	N	Explains technical issues, monitoring equipment, and practices/program to detect uranium accumulations.
296	KOA-794	Average Solid Angles for Spheres	D. W. Burton	04/25/1961	K-25	[None]	computational method/data (1)	report, original, good	N	
297	KR-185	The Effect of Density on the Safe U-235 Enrichment Criterion	C. E. Newlon	04/11/1962	K-25	[None]	computational method/data (1)	report, original, good	N	Similar to K-1550.
298	KS-230	Notes on Criticality of a Gaseous U-235 Slab	A. D. Callihan, H. F. Henry, R. L. Macklin	09/28/1951	K-25	Secret, declassified 07/29/1960	computational method/data (1)	report, original, good	N	
299	KS-260	Safe Pipe Dimensions	A. D. Callihan, H. F. Henry, R. L. Macklin	12/20/1951	K-25	Secret, declassified 09/02/1959	computational method/data (1), equipment/process design	report, original, good	N	
300	KS-315	U-235 Critical Mass Dependence on Moderation	A. D. Callihan, H. F. Henry, R. L. Macklin	09/22/1952	K-25	Secret, declassified 08/08/1960	computational method/data (1), equipment/process design	report, original, good	N	
301	KS-317	The Interaction of Bare Systems of Containers: Part One	L. Geller	09/26/1952	K-25	Secret, declassified 11/15/1960	computational method/data (1), equipment/process design	report, original, good	N	
302	KS-347	The Interaction of Bare Systems of Containers: Part Two	L. Geller	12/16/1952	K-25	Secret, declassified 06/30/1960	computational method/data (1), equipment/process design	report, original, good	N	
303	KS-374	Analysis of a Possible Radiation Burst	L. Geller, H. F. Henry	06/02/1953	K-25	Secret, declassified 08/08/1960	criticality accident	report, original, good	N	
304	KS-399	Variation of Critical Parameters Between U-235 Assays of 4.9 Percent and 93.4 Percent	H. F. Henry, C. E. Newlon	10/23/1953	K-25	Secret, declassified 08/08/1960	computational method/data (1), equipment/process design	report, original, good	N	
305	KSA-58	An Interaction Theory and Its Application to Criticality Problems	C. E. Newlon	08/03/1956	K-25	[None]	computational method/data (1), equipment/process design	report, original, good	N	
306	KSA-70	Use of Water for ORGDP Cascade Fire Control	H. F. Henry	01/07/1957	K-25	Unclassified	equipment/process design	report, original, good	N	
307	KSA-128	Safe Parameters for U-235 Assays Below Five Percent	C. E. Newlon	04/11/1958	K-25	[None]	equipment/process design	report, original, good	N	
308	KSA-236	Analysis of Area Dosimetry Data Obtained from Criticality Tests	H. F. Henry, J. R. Knight	04/06/1960	K-25	[None]	criticality accident	report, original, good	N	
309	KSA-236 Supplement 1	Analysis of Area Dosimetry Data Obtained from Criticality Tests	H. F. Henry, J. R. Knight	08/18/1960	K-25	[None]	criticality accident	report, original, good	N	

310	K-TL-169	Safe Concentration of Beryllium in Thin Alloy Reflectors	C. E. Newlon	05/25/1971	K-25	[None]	computational method/data (1), equipment/process design	report, original, good	N	
311	K-TL-232	30-Inch UF ₆ Cold Traps	C. E. Newlon	04/04/1972	K-25	[None]	computational method/data (2), equipment/process design	report, original, good	N	
312	K-TL-236	Nuclear Safety Analysis of the "Paducah Tiger" (Shipping Package for the 10-Ton UF ₆ Cylinder)	C. E. Newlon	05/24/1972	K-25	[None]	transport safety analysis	report, original, good	N	
313	K-TL-273	Comparison of Concrete- and Water-Reflected Uranium Hexafluoride Systems	C. E. Newlon	11/10/1972	K-25	[None]	computational method/data (2), equipment/process design	report, original, good	N	
314	KY-294	A Generalized and Consistent Method for Calculating the Critical Mass of Homogeneous Aqueous Uranyl Fluoride Solutions	O. W. Hermann	06/08/1959	Paducah	[None]	computational method/data (1)	report, original, good	N	
315	KY-500	Testing of Ten-Ton Uranium Hexafluoride Cylinders	W. R. Pedigo, V. A. Smith, S. Bernstein, W. J. Hamer, J. L. Myers	10/22/1965	Paducah	[None]	transport safety analysis	report, original, good	N	
316	KY-D-2032	Testing of Ten-Ton Capacity Uranium Hexafluoride Shipping Cylinders	J. L. Myers, W. R. Pedigo, W. J. Hamer, V. A. Smith, S. Bernstein	12/07/1964	Paducah	[None]	transport safety analysis	report, original, good	N	
317	LA-134	Water Boiler	C. P. Baker, H. K. Daglian, G. Friedlander, M. G. Holloway, D. W. Kerst, R. E. Schreiber	09/04/1944	LANL	Secret, declassified 05/01/1973	experimental criticality data	report, negative photostatic copy, fair	Y	A benchmark model is provided in IHECSBE report IEU-SOL-THERM-004.
318	LA-272	Critical Mass of a Water-Tamped 49 Solution	B. T. Feld, L. Slotin	05/14/1945	LANL	Secret, declassified 11/04/1955	experimental criticality data	report, original, fair	Y	Possibly the first critical experiments using Pu solution. Includes letter from K-25 to Los Alamo (05/22/1949) requesting certain dimensional details not contained in the report, plus a handwritten page (no date) containing the requested information.
319	LA-618	Critical Masses of Enriched Uranium Hydrides and Some Related measurement	C. P. Baker, M. G. Holloway	02/03/1947	LANL	Secret, declassified 05/01/1973	experimental criticality data	report, original, fair	Y	Original photos included.
320	LA-687	Radiation Doses in the Pajarito Accident of May 21, 1946	J. G. Hoffman	05/26/1948	LANL	Secret, declassified 12/21/1951	experimental criticality data, dosimetry	report, original, good	Y	Contains interesting assessment as to the possible causes of the observed blue glow.
321	LA-749	Polythene - 25 Critical Assembly and Neutron Distribution Studies	H. C. Paxton, G. A. Linenburger	09/30/1949	LANL	Secret, declassified 05/01/1973	experimental criticality data	report, original, fair	Y	Original photos included.
322	LA-1155	Oralloy Shape Factor Measurements	V. Josephson, R. W. Paine Jr., L. L. Woodward	08/08/1950	LANL	Secret, declassified 02/19/1958	experimental criticality data	report, original, good	Y	
323	LA-1209	Measurements on Untamped Oralloy Assembly	J. D. Orndoff, H. C. Paxton	02/08/1951	LANL	Secret, declassified 04/01/1964	experimental criticality data	report, original, good	Y	
324	LA-1251	Critical Masses of Oralloy at Reduced Concentrations and Densities	J. D. Orndoff, H. C. Paxton, G. E. Hansen	05/01/1951	LANL	Secret, declassified 02/28/1958	experimental criticality data	report, copy, poor	Y	
325	LA-1289	A Study of an Accidental Radiation Burst	R. W. Paine Jr.	03/20/1951	LANL	Secret, declassified 02/10/1958	experimental criticality data	report, original, good	Y	The accident of 02/01/1951 involving the "Aquarium" assembly device; investigation of cause.
326	LA-1441	Burst Characteristics Associated with the Slow Assembly of Fissionable Materials	G. E. Hansen	07/1952	LANL	Secret, declassification indicated but no date provided	criticality accident	report, original, good	N	
327	LA-1477	Neutron Burst from a Cylindrical Untamped Oralloy Assembly	E. C. Mallary, G. E. Hansen, G. A. Linenberger, D. P. Wood	07/22/1952	LANL	Secret, declassified 02/10/1958	experimental criticality data	report, original, good	Y	The accident of 04/18/1952 involving the "Jemima" assembly device; investigation of cause.
328	LA-1478	Neutron Distribution Measurements at Pajarito by Means of Photographic Emulsions	D. S. Young	05/15/1952	LANL	Secret, declassified 02/10/1958	nuclear measurement/data	report, original, good	N	
329	LA-1604	Practical Aspects of Pajarito Neutron Multiplication Measurements	F. F. Hart, E. C. Mallary	09/1953	LANL	Secret, declassified 03/11/1958	nuclear measurement/data	report, original, good	N	
330	LA-1614	Lady Godiva: An Unreflected Uranium-235 Critical Assembly	R. E. Peterson	09/1953	LANL	Secret, declassified 02/06/1958	experimental criticality data	report, original, good	Y	A benchmark model is provided in IHECSBE report HEU-MET-FAST-001.
331	LA-1653	Neutron Detector Traverses in the Topsy and Godiva Critical Assemblies	G. A. Linenberger, L. L. Lowry	06/1953	LANL	Secret, declassified 08/31/1957	nuclear measurement/data	report, original, good	N	

332	LA-1671	Bare Critical Assemblies of Oralloy at Intermediate Concentrations of U-235	H. C. Paxton	05/1964	LANL	Secret, declassified 03/16/1960	experimental criticality data	report, original, good	Y	Selected benchmark models are provided in IHECSBE reports IEU-MET-FAST-001 and -002.
333	LA-1708	Material Replacement Measurements in Topsy and Godiva Assemblies	L. B. Engle, G. E. Hansen, H. C. Paxton	07/1954	LANL	Secret, declassified 02/10/1958	experimental criticality data	report, original, good	Y	
334	LA-1732	Critical Masses of Graphite-Tamped Heterogeneous Oy-Graphite Systems	J. C. Hoogterp	05/1954	LANL	Secret, declassified 02/06/1958	experimental criticality data	report, original, good	Y	
335	LA-1863	Emission Probabilities of Prompt Neutrons from Spontaneous and Neutron-Induced Fission	R. B. Leachman	12/1954	LANL	Secret, declassification indicated but no date provided	nuclear measurements/data	report, original, good	N	
336	LA-1874	Calculations of the Critical Mass of UF ₆ as a Gaseous Core, With Reflectors of D ₂ O, Be and C	G. I. Bell	02/1955	LANL	Secret, declassified 02/06/1958	computational method/data (1)	report, original, good	N	
337	LA-1875	Safety Tests for the Storage of Fissile Units	E. C. Mallary, H. C. Paxton, R. H. White	02/1955	LANL	Secret, declassified 05/01/1973	experimental criticality data	report, original, good	Y	Folder also contains an original copy of the report in unclassified form, report dated 02/1955 and numbered as "LA-1875 (Deleted)".
338	LA-1958	Critical Masses of Fissionable Materials as Basic Nuclear Safety Data	H. C. Paxton	01/1955	LANL	Secret, declassified 02/10/1958	handbook	report, original, good	N	Folder also contains an original copy of the report classified as "confidential", report dated 04/1956 and numbered as "LA-1958 (Deleted)", declassified on 01/31/1957.
339	LA-1916	Fission Neutron Spectrum of U ²³⁵ from 0.2 to 3 MeV	L. Cranberg, N. G. Nereson	05/1955	LANL	[None]	nuclear measurements/data	report, original, good	N	
340	LA-1938	Paraffin Cylinders to Measure Neutron Energies	D. S. Young	07/1955	LANL	[None]	nuclear measurements/data	report, original, good	N	
341	LA-2023	Preliminary Survey of Uranium Metal Exponential Columns	J. J. Neuer, C. B. Stewart	01/1956	LANL	Confidential, declassification indicated but no date provided	experimental criticality data	report, original, good	N	
342	LA-2026	Critical Masses of Oralloy Lattices Immersed in Water	J. C. Hoogterp	11/1955	LANL	Confidential, declassified 08/04/1960	experimental criticality data	report, original, good	Y	
343	LA-2029	REPORT IS MISSING FROM FOLDER								Folder contains an indication the report was loaned to J. T. Mihalczko.
344	LA-2044	Plutonium-Metal Critical Assemblies	G. A. Jarvis, G. A. Linenberger, H. C. Paxton	05/1956	LANL	Secret, declassification indicated but no date provided	experimental criticality data	report, original, good	Y	
345	LA-2063	Nuclear Safety Guide	A. D. Callihan, W. J. Ozeroff, H. C. Paxton, C. L. Schuske	08/1956	LANL	Confidential, declassified 02/03/1958	handbook	report, original, poor	N	The report copy is extensively marked up and otherwise altered; apparently Callihan used this copy as a working copy for development of TID-7016. Other draft materials for TID-7016 and correspondence are included in the folder.
346	LA-2085	Critical Assembly of Uranium Metal at an Average U ²³⁵ Concentration of 16-1/4%	J. J. Neuer	10/1956	LANL	Confidential, declassified 03/16/1960	experimental criticality data	report, original, good	Y	A benchmark model is provided in IHECSBE report IEU-MET-FAST-002.
347	LA-2141	Beryllium-Reflected, Graphite-Moderated Critical Assemblies	G. E. Hansen, J. C. Hoogterp, J. D. Orndoff, H. C. Paxton	07/1957	LANL	[None]	experimental criticality data	report, original, good	Y	See IHECSBE report HEU-MET-THERM-002 (none of the experiments are judged acceptable as benchmarks).
348	LA-2158	(n,2n) Study of Be ⁹	D. S. Young	10/1957	LANL	[None]	nuclear measurement/data	report, original, good	N	
349	LA-2177	Neutron Scattering by U ²³⁵ , Pu ²³⁹ , and U ²³⁸	L. Cranberg	01/1959	LANL	[None]	nuclear measurement/data	report, original, good	N	
350	LAMS-2537	Correlations of Experimental and Theoretical Critical Data Comparative Reliability, Safety Factors for Criticality Control	H. C. Paxton	03/1961	LANL	[None]	experimental criticality data, computational methods/data (1)	report, original, good	Y	
351	LA-2996	Numerical Formulation and Solution of Neutron Transport Problems	B. G. Carlson	11/11/1963	LANL	[None]	computational method/data (2)	report, original, good	N	
352	LA-3060	A Method of Moments for Solving the Neutron Transport Equation	B. G. Carlson	07/14/1964	LANL	[None]	computational method/data (2)	report, original, good	N	

353	LA-3219-MS	Critical Assemblies of Fissionable Materials	C. B. Mills	10/1959	LANL	[None]	experimental criticality data	report, original, good	N	Summary report of critical experiments.
354	LA-3221-MS	Reactor Minimum Critical Dimensions	C. B. Mills	10/1959	LANL	[None]	computational method/data (1)	report, original, good	N	
355	LA-3366	Criticality Control in Operations with Fissile Material	H. C. Paxton	12/1964	LANL	[None]	handbook	report, original, good	Y	
356	LA-3366 (Rev)	Criticality Control in Operations with Fissile Material	H. C. Paxton	11/1966	LANL	[None]	handbook	report, original, good	Y	
357	LA-3374	Hydro A Small, Water-Cooled, and Water-Reflected Neutron Source	W. Bernard	12/1965	LANL	[None]	experimental criticality data	report, original, good	Y	A low-power (12 kW) reactor purposefully designed to drive exponential columns.
358	LA-3527	Neutron Cross Sections for ²³⁵ U and ²³⁸ U in the Energy Range 1 keV to 14 MeV	J. -J. H. Berlijn, R. E. Hunter, C. C. Cremer	08/1968	LANL	[None]	nuclear measurement/data	report, original, good	N	
359	LA-3611	A Review of Criticality Accidents	W. R. Stratton	01/1967	LANL	[None]	criticality accident	report, original, good	Y	
360	LA-3683-MS	Development of Computational Methods for Fast Reactor Safety Analysis at LASL	C. A. Anderson Jr.	04/24/1967	LANL	[None]	computational method/data (2)	report, original, good	N	
361	LA-3741	Detection, Identification and Analysis of Fissionable Isotopes Based on Differential Group Yields and Spectra of Delayed Fission Neutrons	G. R. Keepin	01/1967	LANL	[None]		report, draft, fair	N	The document is a draft copy of the report (abstract through reference list); has a handwritten note "Later Issued as LA-3741 with minor revisions (editing only)".
362	LA-3883-MS	Critical Dimensions of Homogeneous Spheres Containing ²³⁵ U, ²³⁸ U, and Carbon for Various C/ ²³⁵ U Ratios and ²³⁵ U Enrichments	L. B. Engle, W. R. Stratton	12/15/1967	LANL	[None]	computational method/data (2), equipment/process design	report, original, good	N	
363	LA-3934	Neutron Flux Measurements in Uranium Metal Exponential Columns of 6.53% and 9.12% ²³⁵ U	R. G. Steinke	01/1968	LANL	[None]	experimental criticality data	report, original, good	N	
364	LA-4037-SOP, Rev.	Operating Procedures for the Pajarito Site Critical Assembly Machine	J. D. Orndoff, H. C. Paxton	01/1973	LANL	[None]	experiment plan/design	report, original, good	N	
365	LA-4037-SOP, Rev., Suppl. 1	Pajarito Plan for Radiation Emergency	H. C. Paxton	05/1973	LANL	[None]	criticality accident	report, original, good	N	
366	LA-4225-MS	The Data of Nuclear Reactor Physics, 1967-1968: A Bibliography	J. Furnish	09/17/1969	LANL	[None]	handbook/bibliography	report, original, good	N	
367	LA-4273	Safety Analysis for the Los Alamos Critical-Assembly Facility	W. U. Geer, P. G. Koontz, J. D. Orndoff, H. C. Paxton	05/06/1969	LANL	[None]	experiment safety analysis	report, original, good	N	
368	LA-4325	Application of S _n Calculations to the Evaluation of a Shipping Container for Small Quantities of Fissile Radioactive Material	D. R. Smith	10/24/1969	LANL	[None]	transport safety analysis	report, original, good	N	
369	LA-4484-MS	Twenty-Five Group Cross Sections Used in the Los Alamos Rover Program	J. Sapir	07/1970	LANL	[None]	nuclear measurement/data	report, original, good	N	
370	LA-4671	An Early History of Criticality Safety	R. Reider	05/1971	LANL	[None]	experimental criticality data	report, original, good	N	
371	LA-4879	Synergy and Artificial Intelligence	D. R. Conant	03/1972	LANL	[None]		report, original, good	N	
372	LA-5189-MS	Nuclear Furnace-1 Test Report	W. L. Kirk	03/1973	LANL	[None]		report, original, good	N	
373	LAMS-2240	Reactor Computing Practices	C. B. Mills	06/1958	LANL	[None]	computational method/data (1)	report, original, good	N	
374	LAMS-2255	Neutron Cross Sections for Fast and Intermediate Nuclear Reactors	C. B. Mills	10/1958	LANL	[None]	nuclear measurement/data	report, original, good	N	
375	LAMS-2288	Physics of Intermediate Reactors	C. B. Mills	01/1959	LANL	[None]	nuclear measurement/data, computational method/data (1)	report, original, good	N	
376	LAMS-2288 (Suppl. 1)	Physics of Intermediate Reactors	C. B. Mills	04/1959	LANL	[None]	nuclear measurement/data, computational method/data (1)	report, original, good	N	
377	LAMS-2415	Critical Data for Nuclear Safety Guidance	H. C. Paxton	02/1960	LANL	[None]	handbook/bibliography	report, original, good	N	
378	LAMS-2489	Critical Masses of Composites of Oy and Pu-239-240 in Flattop Geometry	D. M. Barton, W. Bernard, G. E. Hansen	12/1960	LANL	[None]	experimental criticality data	report, original, good	Y	
379	LAMS-2543	Six and Sixteen Group Cross Sections for Fast and Intermediate Critical Assemblies	G. E. Hansen, W. H. Roach	11/1961	LANL	[None]	nuclear measurement/data	report, original, good	Y	

380	LAMS-2579	Critical Mass Measurements of Oy and Pu Cores in Spherical Aluminum Reflectors	D. P. Wood, B. Pena	06/1961	LANL	[None]	experimental criticality data	report, original, good	Y	
381	LAMS-2698 Revised	Hazards Evaluation for the Los Alamos Critical Assembly Facility	W. U. Geer, P. G. Koontz, J. D. Orndoff, H. C. Paxton	04/1962	LANL	[None]	experiment safety analysis	report, original, good	N	Replaced by LA-4273
382	LAMS-2744	Reflector Savings of Moderating Materials on Large Diameter U(93.2%) Slabs	G. E. Hansen, D. P. Wood, B. Pena	06/1962	LANL	[None]	experimental criticality data	report, original, good	Y	
383	LAMS-2873	Anisotropic Scattering in the Transport Equation An Evaluation of Common Approximations	K. D. Lathrop	03/01/1963	LANL	[None]	computational method/data (1)	report, original, good	N	
384	LAMS-2883	Study of Fission Neutron Spectra with High-Energy Activation Detectors	J. A. Grundl	03/1963	LANL	[None]	nuclear measurement/data	report, original, good	N	
385	LAMS-3067	Los Alamos Critical-Mass Data	H. C. Paxton	04/1964	LANL	[None]	handbook/bibliography	report, original, good	Y	
386	MDDC-972 (LADC-409)	A Neutron Detector Having Uniform Sensitivity from 10 keV to 3 MeV	A. O. Hanson, J. L. McKibben	02/11/1947	LANL	[None]	nuclear measurement/data	report, original, good	N	
387	MLM-1395	Neutron Multiplication Experiment with Plutonium-238 Dioxide Double Sealed in Calorimeter Pressure Tubes	R. A. Wolfe, D. A. Edling, D. F. Giessing, J. B. Kahle, W. F. Stubbins	01/09/1967	Mound Laboratory	[None]	experimental criticality data	report, original, good	Y	Maximum neutron multiplication was ~ 1.025.
388	MLM-1523	Subcritical Neutron Multiplication Experiment with Four SNAP-19B (IRHS) Heat Sources Containing Plutonium-238	R. A. Wolfe, W. F. Stubbins	01/24/1969	Mound Laboratory	[None]	experimental criticality data	report, original, good	N	Maximum neutron multiplication was ~ 1.19.
389	MLM-1714	Nuclear Safety of DOT Special Permit No. 6000 Package for Large Quantities of Fissile Waste Material	R. A. Wolfe	02/20/1970	Mound Laboratory	[None]	transport safety analysis	report, original, good	N	
390	MonP-357	Critical Experiments on a Small Reactor of Enriched U-235 with an AL-H2O Moderator and D2O, Be and H2O Reflectors	MM Mann, et al	8/18/1947	K-25	Unknown	Early Small Reactor Studies	CSIRC-Electronic	T-Vol 1A	
391	MonP-454	Criticality Studies on Enriched Uranium -- Heavy Water Systems	A. H. Snell	12/15/1947	ORNL	Secret, declassified 02/10/1958	experimental criticality data	report, original, fair	Y	Original photos included. Experiments performed in what is now Building 3019 at the ORNL site. Enriched uranium (95% ²³⁵ U enrichment) in D ₂ O solution in cylinders, arranged in a lattice within a D ₂ O-filled tank.
392	N-2-1713	A Review of Criticality Accidents	W. R. Stratton	03/03/1960	LANL	[None]	criticality accident	report, original, good	N	Appears to be an informal (internal LANL) version of LA-3611, developed for a special American Nuclear Society session regarding nuclear safety.
393	NAA-SR-148	A Measurement of the Neutron Temperature Effect Using Europium Oxide Foils	A. T. Biehl, E. R. Cohen, D. Woods	09/25/1951	North American Aviation, Inc., Downey CA	Secret, declassified 03/24/1958	nuclear measurement/data	report, original, good	N	
394	NAA-SR-1076	Correction Factors for Measurements with Cadmium Covered Foils	D. H. Martin	10/15/1954	North American Aviation, Inc., Downey CA	[None]	nuclear measurement/data	report, original, good	N	
395	NAA-SR-Memo-4099	Criticality Criteria for Fabrication of 2% Enriched Uranium Hollow Slugs	T. S. Moy	07/08/1959	Atomics International, North American Aviation, Inc., location not specified	Unclassified, ... intended for internal use only, ... may not be published without the approval of ... AEC.	facility/process/storage analysis	report, copy, fair	N	Determines safe limits for four different steps in a manufacturing process.
396	NAA-SR-Memo-8195	Criticality Study, 15 w/o U-Zr Alloy	N Ketzlach	2/4/63	Atomics International, North American Aviation, Inc., location not specified	Unclassified, ... intended for internal use only, ... may not be published without the approval of ... AEC.			T-CSIRC, Vol-1A	
397										
398	NAA-SR-7087	Summary Review of the Kinetics Experiments on Water Boilers	M. S. Dunenfeld, R. K. Stitt	02/01/1963	Atomics International, North American Aviation, Inc., Canoga Park CA	Unclassified	experimental criticality data	report, original, good	Y	
399	NAA-SR-8195	FOLDER IS EMPTY								

400	NAA-SR-9771	Material Bucklings of Critical and Subcritical Uranium Carbide Fueled Graphite Assemblies Part 1 Experiment	O. R. Hillig, D. W. Latham	12/01/1964	Atomics International, North American Aviation, Inc., Canoga Park CA	Unclassified	experimental criticality data	report, original, good	Y	
401	NAA-SR-9772	Material Bucklings of Critical and Subcritical Uranium Carbide Fueled Graphite Assemblies Part 2 Theoretical Interpretation	E. R. Specht	08/01/1964	Atomics International, North American Aviation, Inc., Canoga Park CA	Unclassified	experimental criticality data	report, original, good	Y	
402	NACA RM SE57F28	NACA Zero Power Reactor Facility Hazards Evaluation	B. Lubarsky, D. J. Connolley	06/24/1957	Lewis Flight Propulsion Laboratory, National Advisory Committee for Aeronautics, Cleveland OH	[None]	experiment safety analysis	report, original, good	N	
403	NASA TN D-1102	Consistent P1 Analysis of Aqueous Uranium-235 Critical Assemblies	D. Fieno	11/1961	Lewis Research Center, National Aeronautics and Space Administration, Cleveland OH	[None]	computational method/data (1)	report, original, good	N	
404	NASA TN D-1322	Criticality Effects of Centrally Located Tubes and Rods of Aluminum, Iron, and Tungsten in a Homogeneous Reactor	D. Fieno, E. Gunn, C. Barber, T. A. Fox, D. L. Alger, R. A. Mueller	08/1962	Lewis Research Center, National Aeronautics and Space Administration, Cleveland OH	[None]	experimental criticality data	report, original, good	Y	
405	NASA TN D-3097	Critical Mass Studies with NASA Zero Power Reactor II I - Clean Homogeneous Configurations	T. A. Fox, R. A. Mueller, C. H. Ford, D. L. Alger	11/1965	Lewis Research Center, National Aeronautics and Space Administration, Cleveland OH	[None]	experimental criticality data	report, original, good	Y	
406	NASA TN D-3555	Critical Mass Studies with NASA Zero Power Reactor II II - Heterogeneous Arrays of Cylindrical Voids	T. A. Fox, R. A. Mueller, C. H. Ford	08/1966	Lewis Research Center, National Aeronautics and Space Administration, Cleveland OH	[None]	experimental criticality data	report, original, good	Y	
407	NASA TM X-2381	Criticality Study of NASA Solution Reactors with 25.4-Centimeter-Diameter Cylindrical Stainless-Steel Tanks	T. A. Fox, R. A. Mueller, D. Fieno	09/1971	Lewis Research Center, National Aeronautics and Space Administration, Cleveland OH	[None]	experimental criticality data	report, original, good	Y	
408	NEPA 1293-SER-9	Critical Experimentation Status Report	F. T. Bly, E. V. Haake, A. O. Mooneyham, F. W. Pressey, G. Thornton	02/16/1950	Fairchild Engine and Airplane Corp., Nuclear Energy for the Propulsion of Aircraft Project, Oak Ridge TN	Secret, declassification indicated but no date provided	experiment plan/design	report, original, good	N	NEPA Project: Nuclear Energy for the Propulsion of Airplanes,
409	NEPA-1743	Fission Chambers	E. V. Haake (Compiled By:)	04/02/1951	Fairchild Engine and Airplane Corp., Nuclear Energy for the Propulsion of Aircraft Project, Oak Ridge TN	Secret, declassification: TID-1268 3-6-62	experiment plan/design	report, original, good	J-5700	13 Pages describing the construction and operating characteristics of 2 fission chambers.
410	NEPA-1769	NEPA Critical Experiment Facility	F. T. Bly, J. F. Coneybear, E. V. Haake, J. A. Hunter, H. R. Kroeger	04/15/1951	Fairchild Engine and Airplane Corp., Nuclear Energy for the Propulsion of Aircraft Project, Oak Ridge TN	Secret, declassified 02/03/1958	experimental criticality data, experiment plan/design	report, original, good	Y, J-5700 Copy Missing Appendices A and C	Folder also contains a memo (NEPA IC-51 2-7) with a correction to report NEPA-1710 (NEPA-1710 not in Callihan's collection). Also, folder contains memos re declassification of NEPA reports and requests by Callihan for drawings.

411	NEPA-1827	Electrical and Mechanical Systems (Appendix A to NEPA 1769)	G. Thornton, H. R. Kroeger, D. I. Weinberg	04/15/1951	Fairchild Engine and Airplane Corp., Nuclear Energy for the Propulsion of Aircraft Project, Oak Ridge TN	Secret, declassification indicated but no date provided	experiment plan/design	report, original, good	Y	Contains many photographs of the split table hardware (main assembly, individual components, electrical and other subsystems).
412	NEPA-1828	The NEPA Critical Experiment Facility (Appendix B to NEPA 1769) INSTRUMENTS	E. V.Haake (Compiled By:)	04/15/1951	Fairchild Engine and Airplane Corp., Nuclear Energy for the Propulsion of Aircraft Project, Oak Ridge TN	Secret, declassification: AEC 7-9-57	experiment plan/design	report, original, good	J-5700	68 Pages of drawings, photos and circuitry for Fission Chambers (NEPA-1743), BF3 Proportional & Ionization (NEPA-1742), Sensory and Photomultron Chambers(NEPA-1744), various Amplifiers, Germanium Diodes and Control Panels.
413	NEPA-1829	Materials for Zero Power Reactor Experiments (Appendix C to NEPA-1769)	F. T. Bly	04/16/1951	Fairchild Engine and Airplane Corp., Nuclear Energy for the Propulsion of Aircraft Project, Oak Ridge TN	Secret, declassification indicated but no date provided	experiment plan/design	report, original, good	Y	Contains photographs of fuel and moderator items, fabrication drawings, purity information. Two copies of the report are in the folder.
414	NLCO-1086	Criticality Safety Evaluation of Slightly Enriched Uranyl Nitrate Crystals in Vermiculite Shipping Containers	D. L. Dunaway, G. E. Whitesides	11/03/1971	Fernald	[None]	transport safety analysis	report, copy from microcard, fair	N	
415	NR/P-1/59	Discrepancies in v Values	A. Moat, M. H. McTaggart, D. S. Mather	04/1959	Aldermaston A.E.R.E. (U.K.A.E.A.)	Unclassified	nuclear measurements/data	report, original, good	N	
416	NP-tr-1153	Accidents and Breakdowns at Nuclear Installations	U. Schulze	03/1964	Harwell A.E.R.E. (U.K.A.E.A.)	[None]	criticality accident	report, copy from microcard, poor	N	Translated from German, from the Karlsruhe Nuclear Research Center report KFK 68 (11/1961)
417	NYO 2980	Safety Analysis of Enriched Uranium Processing A Study of the Possible Consequences of Nuclear Accidents in Licensed Plants Processing Unirradiated Enriched Uranium	H. T. Williams, J. W. McWhirter, A. H. Chura, E. H. Wissler, R. E. Fields, M. C. Lawrence	03/18/1960	Convair, General Dynamics Corporation, Forth Worth TX	[None]	criticality accident	report, original, good	Y	NYO or NYOO: New York Operations Office of the AEC
418	NYO-3288-10	The Performance of Nuclear Reactor Operators	R. Fitzpatrick, D. W. Dysinger, V. L. Hanson	09/1968	American Institutes for Research, Pittsburg PA	[None]		report, original, good	N	
419	NYOO-90	Danger Coefficient for Impurities in Several Substances	E. Meservey	01/01/1949	Not specified	Secret, declassified 02/10/1958	nuclear measurements/data	report, original, good	N	
420	ORNL-79	Further Critical Experiments on a Small Reactor of Enriched U-235 with Al-H ₂ O Moderator and Beryllium Reflector	A. B. Martin, M. M. Mann	09/16/1948	ORNL	Secret, declassified 11/18/1960	experimental criticality data	report, original, good	Y	
421	ORNL-112	A Guide with Abstracts to Critical Masses, Laplacians, and Multiplication Factors Part 1	A. V. Masket, H. R. Kroeger	01/17/1949	ORNL	Secret, declassification indicated but no date provided	experimental criticality data, computational method/data (1)	report, original, good	N	
422	ORNL-167	Critical Experiments for the High Flux Reactor	A. B. Martin, M. M. Mann		ORNL	Secret, declassified 10/19/1960	experimental criticality data	report, original, good	Y	
423	ORNL-1147	The Unit Shield Experiments at the Bulk Shielding Facility	J. L. Meem, H. E. Hungerford	04/30/1952	ORNL	Secret, declassified 02/17/1968		report, original, good	N	
424	ORNL-1320	The Effect of Gaps on Pile Reactivity	S. Tamor, W. K. Ergen	07/14/1952	ORNL	Secret, declassified 03/09/1964	computational method/data (1)	report, original, good	N	
425	ORNL-1381	A Review of a Polonium Contamination Problem	D. Callihan, D. Ross	08/12/1952	ORNL	Confidential, declassified 07/18/1958		report, original, good	N	
426	ORNL-1493	The General Methods of Reactor Analysis Used by the ANP Physics Group	C. B. Mills	09/22/1953	ORNL	Secret, declassified 04/22/1963	computational method/data (1)	report, original, good	N	
427	ORNL-1634	Preliminary Critical Assembly for the Aircraft Reactor Experiment	D. Callihan, D. Scott	10/28/1953	ORNL	Secret, declassified 07/29/1957	experimental criticality data	report, original, good	Y	
428	ORNL-1671	Neutron Flux and Tissue Dose Studies with Fission Threshold Detectors	G. S. Hurst, J. A. Harter, P. N. Hensley, W. A. Mills, R. H. Ritchie	03/30/1954	ORNL	Secret, declassified 02/19/1962	dosimetry	report, original, good	N	

429	ORNL-1698	A Test of Neutron Multiplication by Slightly Enriched Uranium Part II	A. D. Callihan	03/16/1954	ORNL	Secret, downgraded to Confidential 07/09/1956, declassified on 10/19/1959	experimental criticality data	report, original, good	Y	Measurements of multiplication for large cylinders of unmoderated UF ₆ at 2% enrichment. Similar to K-740 experiments except HF was added to give H:U-235 = 3.7. The material was in liquid state.
430	ORNL-1715	Physics Division Semiannual Progress Report for Period Ending March 10, 1954	Staff	07/14/1954	ORNL	Secret, declassified 02/28/1961	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
431	ORNL-1770	Preliminary Critical Assemblies of the Reflector Moderator Reactor	R. M. Spencer	11/22/1954	ORNL	Secret, declassified 02/08/1962	experimental criticality data	report, original, good	Y	
432	ORNL-1726	Critical Mass Studies, Part VII	D. F. Cronin, D. Callihan	06/17/1954	ORNL	Secret, downgraded to Confidential 07/11/1956, declassified on 08/02/1957	experimental criticality data	report, original, good	Y	
433	ORNL-1820	Physics Division Semiannual Progress Report for Period Ending September 10, 1954	Staff	01/06/1955	ORNL	Secret, declassified 08/04/1961	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
434	ORNL-1891	Attenuation by Water of Radiations From a Swimming Pool Type Reactor	F. C. Maienschein, G. M. Estabrook, J. D. Flynn, E. B. Johnson, K. M. Henry	09/07/1955	ORNL	Unclassified	experimental shielding data	report, original, good	N	
435	ORNL-1926	Physics Division Semiannual Progress Report for Period Ending March 10, 1955	Staff	08/23/1955	ORNL	Secret, declassified 08/02/1957	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
436	ORNL-1947	Aircraft Nuclear Propulsion Project Quarterly Progress Report for Period Ending September 10, 1955	Staff	10/26/1955	ORNL	Secret, classification marks are obliterated/crossed-out.	multiple topics, TOC scanned	report, original, good	Y	
437	ORNL-2007	A Comparison of One-Dimensional Critical Mass Computations with Experiments for Completely Reflected Reactors	F. G. Prohammer	03/01/1956	ORNL	Unclassified	computational method/data (1)	report, original, good	N	Folder contains a memo re classification of the report, a memo from Shigekazu Yoshijima of the Tokyo-Shibaru Electric Co., and "spreadsheet" copies for early multigroup calculations.
438	ORNL-2036	A Bibliography of ORNL-BSF Reports Pertinent to Swimming Pool Type Reactor Design	F. C. Maienschein, E. B. Johnson	04/12/1956	ORNL	Confidential, declassified 10/08/1957	handbook/bibliography, reactor safety	report, original, good	N	Folder contains memo about a number of documents listed in the report being downgraded for classification.
439	ORNL-2076	Physics Division Semiannual Progress Report for Period Ending March 10, 1956	Staff	06/14/1956	ORNL	Unclassified	multiple topics, TOC scanned	report, original, good	Y	Contains no critical experiment summaries; contains pulsed-neutron technique and measurement summaries.
440	ORNL-2081	Applied Nuclear Physics Division Annual Report for Period Ending September 10, 1956	Staff	11/05/1956	ORNL	Unclassified	multiple topics, TOC scanned	report, original, good	Y	
441	ORNL-2087	Critical Experiments and Nuclear Safety at Oak Ridge National Laboratory	A. D. Callihan	08/02/1956	ORNL	Unclassified	experiment plan/design	report, original, good	Y	
442	ORNL-2128	Army Package Power Reactor Critical Experiment	D. V. P. Williams, D. W. Magnuson, M. L. Batch, W. R. Johnson, J. K. Leslie, A. D. Callihan	08/08/1956	ORNL	Confidential, declassified 07/29/1957	experimental criticality data	report, original, good	Y	
443	ORNL-2170	Tables of Solid Angles and Activations	A. V. H. Masket, R. L. Macklin, H. W. Schmitt	11/1956	ORNL	Unclassified	computational method/data (1)	report, original, good	N	
444	ORNL-2201	Two Beryllium-Moderated Critical Assemblies	E. L. Zimmerman	10/06/1958	ORNL	[None]	experimental criticality data	report, original, good	Y	Folder also contains high-quality glossy photoprints of report figures.
445	ORNL-2204	Physics Division Semiannual Progress Report for Period Ending September 10, 1956	Staff	01/29/1957	ORNL	Unclassified	multiple topics, TOC scanned	report, original, good	Y	Contains no critical experiment summaries; mostly physics and nuclear data.
446	ORNL-2256	Aqueous Homogeneous Research Reactor - Feasibility Study	P. R. Kasten, M. I. Lundin, C. L. Segaser	04/10/1957	ORNL	Unclassified	experiment plan/design	report, original, good	N	
447	ORNL-2302	Physics Division Semiannual Progress Report for Period Ending March 10, 1957	Staff	06/03/1957	ORNL	Unclassified	multiple topics, TOC scanned	report, original, good	Y	Contains no critical experiment summaries; mostly physics and nuclear data.
448	ORNL-2332	A Criticality Study of the Thorex Pilot Plant	O. O. Yarbro	08/28/1957	ORNL	Unclassified	equipment/process design, facility/process/storage analysis	report, original, good	Y	
449	ORNL-2367	Critical Mass Studies, Part IX Aqueous U ²³⁵ Solutions	J. F. Fox, L. W. Gilley, D. Callihan	02/05/1958	ORNL	Unclassified	experimental criticality data	report, original, good	Y	

450	ORNL-2389	Applied Nuclear Physics Division Annual Report for Period Ending September 1, 1957	Staff	10/18/1957	ORNL	Unclassified	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
451	ORNL-2449	Standard Operating Procedure for the Pool Critical Assembly	E. B. Johnson	08/12/1960	ORNL	[None]	experiment plan/design	report, original, good	N	
452	ORNL-2452	Radiation Excursions at the ORNL Critical Experiments Laboratory I May 26, 1954 II February 1, 1956	J. T. Thomas, A. D. Callihan	05/05/1958	ORNL	[None]	criticality accident	report, original, good	Y	Folder includes four internal-ORNL memos w details on exposures, contamination spread, radiation readings, and lessons-learned. Also present are a variety of handwritten notes, marked-up building plans, and tables of measured data.
453	ORNL-2484	Boundary Values for the Inner Radius of a Cylindrical Annular Cylinder	E. L. Zimmerman	06/05/1958	ORNL	[None]	computational method/data (1)	report, original, good	N	Folder includes a significant number of handwritten notes, mostly mathematical equations and computational results.
454	ORNL-2499	Comparison of Pool-Type Reactor Critical Experiments with Two-Group and Thirty-Group Calculations	E. G. Silver	05/21/1958	ORNL	[None]	computational method/data (1)	report, original, good	N	
455	ORNL-2536	A Zero Power Reflector-Moderated Reactor Experiment at Elevated Temperature	D. Scott, G. W. Alwang, E. F. Demski, W. J. Fader, E. V. Sandin, R. E. Malenfant	08/01/1958	ORNL	Secret, declassified 07/19/1963	experimental criticality data	report, original, good	Y	Full-scale mockup of the core and reflector of Pratt and Whitney Aircraft Reactor No. 1. Fuel was a liquid mixture of fluoride salts of Na, Zr and enriched U at 1200 to 1350 °F; reflector was Be metal.
456	ORNL-2553	The Effect of Epithermal Fission on Aqueous Homogeneous Reactors	S. Terasawa	07/23/1958	ORNL	[None]	computational method/data (2)	report, original, good	N	
457	ORNL-2575	Review of Experimental and Theoretical Studies Concerning the Age of Fission Neutrons on Heavy Water	M. Tobias	10/01/1958	ORNL	[None]	computational method/data (1)	report, original, good	N	
458	ORNL-2609	Neutron Physics Division Annual Report for Period Ending September 1, 1958	Staff	10/18/1957	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
459	ORNL-2705	Theory of Resonance Absorption of Neutrons in a Lump	K. Hasegawa	06/02/1959	ORNL	[None]	computational method/data (1)	report, original, good	N	
460	ORNL-2708	Dump Tank Criticality and Poisons for Slurry Reactors	B. E. Prince	06/26/1959	ORNL	[None]	computational method/data (1), equipment/process design	report, original, good	N	For H ₂ O or D ₂ O-moderated reactors fueled with U ²³⁵ , designed to breed U ²³³ .
461	ORNL-2739	Proceedings of the Neutron Thermalization Conference, April 28-30, 1958 Gatlinburg, Tennessee	Various Authors	09/02/1959	ORNL	[None]	multiple topics, TOC scanned	report, original, good	N	Most papers deal with computational methods or experimental measurements of neutron slowing-down in reactors or particular materials.
462	ORNL-2747	Description of the Tower Shielding Reactor II and Proposed Preliminary Experiments	L. B. Holland, C. E. Clifford	07/06/1959	ORNL	[None]	experimental criticality data, experiment plan/design	report, original, good	Y	
463	ORNL-2748	Radiation Accidents: Dosimetric Aspects of Neutron and Gamma-Ray Exposures	G. S. Hurst, R. H. Ritchie	11/02/1959	ORNL	Unclassified	criticality accident, dosimetry	report, original, good	Y	
464	ORNL-2779	The Fast-Neutron Multiplication Effect of Beryllium in Reactors	W. Häfele	09/08/1959	ORNL	[None]	computational method/data (1)	report, original, good	N	
465	ORNL-2842	Neutron Physics Division Annual Report for Period Ending September 1, 1959	Staff	11/09/1959	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
466	ORNL-3006	HFIR Preliminary Physics Report	R. D. Cheverton	10/04/1960	ORNL	[None]	reactor safety	report, original, good	Y	
467	ORNL-3016	Neutron Physics Division Annual Report for Period Ending September 1, 1960	Staff	11/30/1960	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
468	ORNL-3056	Effect of Heat Flux on the Corrosion of Aluminum by Water. Part II. Influence of Water Temperature, Velocity, and pH on Corrosion-Product Formation	J. C. Griess, H. C. Savage, T. H. Mauney, J. L. English, J. G. Rainwater	02/10/1961	ORNL	[None]	operational/test/material data	report, original, good	N	
469	ORNL-3063	The Corrosion of Aluminum Alloys in High-Velocity Water at 170 to 290 °C	J. L. English, L. Rice, J. C. Griess	06/01/1961	ORNL	[None]	operational/test/material data	report, original, good	N	
470	ORNL-3193	Neutron Physics Division Annual Report for Period Ending September 1, 1961	Staff	10/31/1961	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.

471	ORNL-3230	Effect of Heat Flux on the Corrosion of Aluminum by Water. Part III. Final Report on Tests Relative to the High-Flux Isotope Reactor	J. C. Griess, H. C. Savage, J. G. Rainwater, T. H. Mauney, J. L. English	12/05/1961	ORNL	[None]	operational/test/material data	report, original, good	N	
472	ORNL-3248	Health Physics Research Reactor Hazards Summary	M. I. Lundin	08/24/1962	ORNL	[None]	experiment safety analysis	report, original, good	Y	
473	ORNL-3272	Critical Mass Studies: Part XI. Critical Parameters of Uranium-Aluminum Alloy Slugs	J. K. Fox, L. W. Gilley	05/14/1962	ORNL	Confidential, declassified 10/14/1966	experimental criticality data	report, original, good	Y	
474	ORNL-3309	Soluble Neutron Poisons as a Primary Criticality Control in Shielded and Contained Radiochemical Facilities	J. P. Nichols	07/12/1962	ORNL	[None]	computational method/data (1), equipment/process design	report, original, good	Y	
475	ORNL-3319	Nuclear Safety Program Semiannual Progress Report for Period Ending June 30, 1962	Staff	08/17/1962	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	
476	ORNL-3360	Neutron Physics Division Annual Report for Period Ending September 1, 1962	Staff	10/08/1962	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
477	ORNL-TM-3469	Criticality Analysis: LWBR Assistance Program in Building 3019	R. W. Horton, D. W. Magnuson, W. T. McDuffee	03/1972	ORNL	[None]	computational method/data (2), equipment/process design	report, original, good	Y	
478	ORNL-3499, Vol 1	Neutron Physics Division Annual Report for Period Ending August 1, 1963	Staff	10/21/1963	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
479	ORNL-3499, Vol 2	Neutron Physics Division Annual Report for Period Ending August 1, 1963	Staff	10/30/1963	ORNL	[None]	multiple topics, TOC scanned	report, original, good	N	
480	ORNL-3519	Procedures Manual for the Health Physics Research Reactor (Including High-Level Gamma Facility)	Staff	10/24/1963	ORNL	[None]	experiment plan/design	report, original, good	Y	Folder includes a document titled "HPRR Operating Procedures for Operation BREN," no report number or cover, dated 01/25/1962
481	ORNL-3622	OSR, A General-Purpose Monte Carlo Neutron Transport Code	D. C. Irving, R. M. Freestone Jr., F. B. K. Kam	02/1965	ORNL	[None]	computational method/data (2)	report, original, good	Y	
482	ORNL-3691	Nuclear Safety Program Semiannual Progress Report for Period Ending June 30, 1964	Staff	11/1964	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress (E. B. Johnson's "1-D Reactor" series).
483	ORNL-3714, Vol. I	Neutron Physics Division Annual Report for Period Ending August 1, 1964	Staff	12/1964	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
484	ORNL-3714, Vol. II	Neutron Physics Division Annual Report for Period Ending August 1, 1964	Staff	12/1964	ORNL	[None]	multiple topics, TOC scanned	report, original, good	N	
485	ORNL-3757	Speculations on the Interpretation of Neutron Noise Experiments	R. K. Osborn	01/1965	ORNL	[None]	computational method/data (2)	report, original, good	N	
486	ORNL-3650	Oak Ridge National Laboratory 1963	Staff	02/1965	ORNL	[None]		report, original, good	N	Summary of ORNL activities during 1963, including critical experiments, Oak Ridge School of Reactor Technology.
487	ORNL-3858, Vol. I	Neutron Physics Division Annual Report for Period Ending August 1, 1965	Staff	11/1965	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
488	ORNL-3858, Vol. II	Neutron Physics Division Annual Report for Period Ending August 1, 1965	Staff	11/1965	ORNL	[None]	multiple topics, TOC scanned	report, original, good	N	
489	ORNL-3973, Vol. I	Neutron Physics Division Annual Report for Period Ending May 31, 1966	Staff	09/1966	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
490	ORNL-3973, Vol. II	Neutron Physics Division Annual Report for Period Ending May 31, 1966	Staff	09/1966	ORNL	[None]	multiple topics, TOC scanned	report, original, good	N	
491	ORNL-4093	Adjoint and Importance in Monte Carlo Application	R. R. Coveyou, V. R. Cain, K. J. Yost	04/1967	ORNL	[None]	computational method/data (2)	report, original, good	N	
492	ORNL-4134	Neutron Physics Division Annual Report for Period Ending May 31, 1967	Staff	08/1967	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
493	ORNL-4255	Evaluation of the Two-Detector Cross-Correlation Technique for Shutdown Margin Measurements of Power Reactors	R. C. Kryter, D. N. Fry, D. P. Roux	09/1968	ORNL	[None]	computational method/data (2)	report, original, good	N	
494	ORNL-4263	Critical Experiments for the Repetitively Pulsed Reactor SORA	G. Kistner, J. T. Mihalcz	06/1968	ORNL	[None]	experimental criticality data	report, original, good	Y	
495	ORNL-4280	Neutron Physics Division Annual Report for Period Ending May 31, 1968	Staff	10/1968	ORNL	[None]	multiple topics, TOC scanned	report, original, good	Y	Contains summaries of critical experiments in-progress.
496	ORNL-4621	HFIR Core Nuclear Design	R. D. Cheverton, T. M. Sims	07/1971	ORNL	[None]	reactor safety	report, original, good	Y	Contains discussions (and certain details) about the critical experiments and decisions based on experiment results.

497	ORNL-4705	Neutron Physics Division Annual Report for Period Ending May 31, 1971	Staff	10/1971	ORNL	[None]	multiple topics, TOC scanned	report, original, good	N	Contains summaries of critical experiments in-progress.
498	ORNL-4711	Calculated Criticality Data for LMFBR (U+Pu)O ₂ - Water Systems	W. R. Cobb	01/1972	ORNL	[None]	computational method/data (2)	report, original, good	N	
499	ORNL-4938	KENO IV An Improved Monte Carlo Criticality Program	L. M. Petrie, N. F. Cross	11/1975	ORNL	[None]	computational method/data (2)	report, original, good	Y	
500	ORNL-TM-189	Reactivity Calibrations and Fission-Rate Distributions in an Unmoderated, Unreflected Uranium-Molybdenum Alloy Research Reactor	J. T. Mihalcz	05/10/1962	ORNL	not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	Y	Critical experiments to support operation of the ORNL Health Physics Research Reactor.
501	ORNL-TM-299	An Estimate of the Effect of Neutron-Energy Spectrum on Radiation Damage of Steel	H. C. Claiborne	07/27/1962	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
502	ORNL-TM-349, Rev. 1	A Safety Analysis of the Oak Ridge Critical Experiments Facility	Staff	02/1967	ORNL	... prepared primarily for internal use at the ORNL ...	experiment safety analysis, experiment plan/design	report, original, good	Y	Folder includes a marked-up report draft and related paperwork, also a copy of BNL 6415, "The Chemical and Physical Behavior of Released Fission Products," A. W. Castleman, Jr.
503	ORNL-TM-433	Neutron Multiplication by Experimental Gas Cooled Reactor Fuel Assemblies	E. B. Johnson, R. K. Reedy Jr.	11/27/1962	ORNL	not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	Y	Due to the limited availability of fuel assemblies, the maximum multiplication achieved was ~ 5. The experiments did determine the most reactive spacing for water-immersed lattices of assemblies (touching).
504	ORNL-TM-450	A Small Graphite-Reflected UO ₂ Critical Assembly	J. T. Mihalcz	12/28/1962	ORNL	Confidential, declassified 09/04/1968. not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	Y	
505	ORNL-TM-470	Prompt Neutron Decay in a Two-Component Enriched Uranium Metal Critical Assembly	J. T. Mihalcz	01/11/1963	ORNL	not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	Y	
506	ORNL-TM-499	Critical Mass Studies - Part XIII Borosilicate Glass Raschig Rings in Aqueous Uranyl Nitrate Solutions	J. T. Thomas, J. K. Fox, E. B. Johnson	02/06/1963	ORNL	not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	Y	Report contains pencil and ink notes.
507	ORNL-TM-507	Radiation Safety and Control at the Oak Ridge National Laboratory: 1960-1962	F. R. Bruce	04/05/1963	ORNL	not to be ... given public dissemination without ... approval ...	criticality accident	report, original, good	N	Describes various administrative actions/policies and facility upgrades motivated by the SL-1 accident and ORNL radiological events.
508	ORNL-TM-550	Source-Strength and Long-Counter-Response Calibrations at the BSF 300-kev Accelerator	E. G. Silver	04/08/1963	ORNL	not to be ... given public dissemination without ... approval ...		report, original, good	N	
509	ORNL-TM-561	A Small Graphite-Reflected UO ₂ Critical Assembly, Part II	J. T. Mihalcz	04/08/1963	ORNL	Confidential, declassified 09/04/1968. not to be ... given public dissemination without ... approval ...	experimental criticality data	report, copy, fair	Y	The copy in the folder is a B&W photocopy of the copy issued to J. T. Mihalcz.

510	ORNL-TM-570	The Reactor Transients Accompanying Pulsed Source Operation and Step Changes of Reactivity	C. A. Preskitt	04/18/1963	ORNL	Not to be ... given public dissemination without ... approval ...	computational method/data (1)	report, original, good	N	
511	ORNL-TM-612	The Auditing of Reactor Safety at the Oak Ridge National Laboratory	F. Kertesz	07/08/1963	ORNL	not to be ... given public dissemination without ... approval ...	safety review	report, original, good	N	
512	ORNL-TM-616	Operating Procedures for the Bulk Shielding Reactor Fifth Edition	K. M. Henry, J. D. Kington, F. C. Maienschein	07/15/1963	ORNL	not to be ... given public dissemination without ... approval ...	experiment plan/design			
513	ORNL-TM-655	A Small Beryllium-Reflected UO ₂ Assembly	J. T. Mihalcz	07/23/1963	ORNL	Confidential, declassified 08/05/1968. Not to be ... given public dissemination without ... approval ...	experimental criticality data	report, copy, fair	Y	The copy in the folder is a B&W photocopy of the copy issued to Laboratory Records.
514	ORNL-TM-681	A Guide to the Design of Shipping Casks for the Transportation of Radioactive Material	L. B. Shappert	04/1965	ORNL	not to be ... given public dissemination without ... approval ...	transport safety analysis, equipment/process design	report, original, good	N	Contains discussions regarding early 1960s regulations for transport and shipping containers of the era, ~ 20 pages focused on criticality control.
515	ORNL-TM-710	Effects of Various Reflectors on the Reactivity of the Health Physics Research Reactor	L. W. Gilley	02/1964	ORNL	not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	N	
516	ORNL-TM-719	Critical Three-Dimensional Arrays of Neutron-Interacting Units	J. T. Thomas	10/01/1963	ORNL	not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	Y	
517	ORNL-TM-738	Operating Experience with Coincident Vs. Noncoincident Reactor Safety Systems	E. P. Epler	12/12/1963	ORNL	not to be ... given public dissemination without ... approval ...	reactor safety	report, original, good	N	
518	ORNL-TM-821	The Effect of Various External Neutron Absorbers and Reflectors on the Reactivity of Solutions of ²³⁹ Pu- ²⁴⁰ Pu in Slugs	J. P. Nichols	03/31/1964	ORNL	not to be ... given public dissemination without ... approval ...	computational method/data (1), equipment/process design	report, original, good	N	
519	ORNL-TM-996	Information Centers at the Oak Ridge National Laboratory (A Study in Diversity)	F. Kertesz	11/13/1964	ORNL	not to be ... given public dissemination without ... approval ...		report, original, good	N	Discusses planned creation of several technical "centers" at ORNL, including the Criticality Data Center.
520	ORNL-TM-1022	Boundary Conditions for the Cylindrical Cell of Reactor Lattice Calculations	J. W. Webster	12/30/1964	ORNL	not to be ... given public dissemination without ... approval ...	computational method/data (1)	report, original, good	N	
521	ORNL-TM-1041	Measurement of the ²³⁵ U Neutron Capture-to-Fission Ratio, α , for Incident Neutron Energies from 3.25 eV to 1.8 keV	G. de Saussure, L. W. Weston, R. Gwin	01/26/1965	ORNL	not to be ... given public dissemination without ... approval ...	nuclear measurement/data	report, original, good	N	
522	ORNL-TM-1066	Measurement of Reactor Fluctuation Spectra and Subcritical Reactivity	C. W. Ricker, S. H. Hanauer, E. R. Mann	04/1965	ORNL	[None]	experimental criticality data	report, original, good	N	
523	ORNL-TM-1113	Interpretation of Pulsed Source Experiments	C. A. Preskitt, E. A. Nephew	04/27/1965	ORNL	[None]	experimental criticality data	report, original, good	N	Good information regarding subcritical measurement theory - not clear what measured data was employed.
524	ORNL-TM-1125	Increased Yields from Fast Burst Reactors. Part I. Effects of Increased Mass on Uranium and Uranium-Molybdenum Critical Cylinders	J. T. Mihalcz	04/30/1965	ORNL	further dissemination .. is unauthorized without ... approval...	reactor safety	report, original, good	N	
525	ORNL-TM-1136	Operating Experience of the Nuclear Safety Information Center March 1963 - March 1965	J. R. Buchanan, W. B. Cottrell	05/07/1965	ORNL	not to be ... given public dissemination without ... approval ...		report, original, good	N	Mostly describes activities similar to those of a technical library.
526	ORNL-TM-1175	The Determination of Neutron Flux in Nuclear Reactor by the Uncollided-Flux Estimator Applied to Monte Carlo Collisions	J. W. Webster	08/23/1965	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	N	
527	ORNL-TM-1192	SOURCE, a Neutron Distribution Routine for the OSR Monte Carlo Code	J. T. Mihalcz, G. W. Morrison, D. Irving	07/08/1965	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	N	
528	ORNL-TM-1195	Criticality of a Single Unit of Aqueous Uranyl Fluoride Solution Enriched to 5% in ²³⁵ U	J. W. Webster, E. B. Johnson	07/23/1965	ORNL	... prepared primarily for internal use at the ORNL ...	experimental criticality data	report, original, good	Y	
529	ORNL-TM-1207	Critical Experiments with SPERT-D Fuel Elements	E. B. Johnson, R. K. Reedy Jr.	07/14/1965	ORNL	... prepared primarily for internal use at the ORNL ...	experimental criticality data	report, original, good	Y	

530	ORNL-TM-1213	Static and Dynamic Transport Calculations for Pulsed-Neutron Experiments with Spheres of Uranyl Nitrate Solution	D. W. Magnuson	04/26/1966	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	N	
531	ORNL-TM-1220	Multiplication Factor of Uranium Metal by One-Velocity Monte Carlo Calculations	J. T. Mihalczco	08/19/1965	ORNL	not to be ... given public dissemination without ... approval ...	computational method/data (2)	report, original, good	N	
532	ORNL-TM-1245	SPCTRM - An OSR Monte Carlo Analysis Routine for Calculating the Neutron Energy Spectrum	G. W. Morrison, J. T. Mihalczco, D. C. Irving	08/26/1965	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	N	
533	ORNL-TM-1246	OSR Monte Carlo Analysis Routines for Calculating Various Mean Times in Reactor Problems	D. C. Irving, G. W. Morrison, J. T. Mihalczco	02/15/1966	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	N	
534	ORNL-TM-1268	ORNL Facilities Capable of Contributing to Plutonium Fuel Cycle Development	J. W. Ullman	11/09/1965	ORNL	... prepared primarily for internal use at the ORNL ...		report, original, good	N	Contains several photos and drawings of equipment, facilities, and fuel forms.
535	ORNL-TM-1285	A Thesaurus of Keywords on Nuclear Fuel Technology	W. H. Bridges, R. L. Pilloton	10/08/1965	ORNL	... prepared primarily for internal use at the ORNL ...		report, original, good	N	
536	ORNL-TM-1325	REACT and CONVRG FORTRAN Subroutines for Determining Source Convergence for the OSR Monte Carlo Neutron Transport Code	G. W. Morrison, J. T. Mihalczco, D. C. Irving	02/15/1966	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	N	
537	ORNL-TM-1339	The Role of Information Centers; Evaluation of Their Effectiveness	F. Kertesz	11/17/1965	ORNL	not to be ... given public dissemination without ... approval ...		report, original, good	N	
538	ORNL-TM-1448	Point-Set Representation of ²³⁸ U Cross Sections; Values and a Fortran Program for Computation	J. W. Webster	06/13/1966	ORNL	... prepared primarily for internal use at the ORNL ...	nuclear measurement/data, computational method/data (2)	report, original, good	N	
539	ORNL-TM-1488	Experimental Determination of Safe Handling Procedures for High Flux Isotope Reactor Fuel Elements Outside the Reactor	S. J. Raffety, J. T. Thomas	07/1966	ORNL	... prepared primarily for internal use at the ORNL ...	experimental criticality data, stainless steel & cadmium inserts, lead, steel and concrete reflection.	report, original, good	J-5700	
540	ORNL-TM-1566	Criticality of Lattices of Heat Transfer Reactor Experiment Fuel Elements	E. B. Johnson, R. K. Reedy Jr.	07/20/1966	ORNL	... prepared primarily for internal use at the ORNL ...	experimental criticality data	report, original, good	Y	
541	ORNL-TM-1674	ACTIVT - An OSR Monte Carlo Analysis Routine for Calculation of Activation	G. W. Morrison, J. T. Mihalczco, D. C. Irving	10/03/1966	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	N	
542	ORNL-TM-1690	Key Word Index Science and Technology Bibliographies January 1965 - June 1966	J. M. Bobb	01/1967	ORNL	... prepared primarily for internal use at the ORNL ...		report, original, good	N	Describes early efforts for computer translation from one language to another.
543	ORNL-TM-1723	BABEL - Or Translation by Man and Machine	F. Kertesz	01/1967	ORNL	... prepared primarily for internal use at the ORNL ...		report, original, good	N	
544	ORNL-TM-1736	Prompt Neutron Decay and Reactivity Measurements in Subcritical Uranium Metal Cylinders	J. T. Mihalczco	02/1968	ORNL	... prepared primarily for internal use at the ORNL ...	experimental criticality data	report, original, good	Y	From 4 to 11 each inner & outer assemblies in linear, square & triangular pitched arrays.
545	ORNL-TM-1808	Critical Lattices of High flux Isotope Reactor Fuel elements	E. B. Johnson	03/20/1967	ORNL	Inner and Outer HIFR Fuel Assemblies made critical with the Thomas & Raffety Technique (ORNL-CF-65-8-55).	experimental criticality data, HIFR Fuel	report, copy, good	J-5700	
546	ORNL-TM-2187	OSR Monte Carlo Calculations of Low-Enriched Uranium Thermal Critical Assemblies, and Evidence in Errors in ²³⁸ U Cross Sections	J. W. Webster	11/13/1968	ORNL	... prepared primarily for internal use at the ORNL ...	computational method, nuclear data	report, original, good	N	
547	ORNL-TM-2200	Estimating the Reliability of Systems	A. P. Fraas	05/1968	ORNL	... prepared primarily for internal use at the ORNL ...	reactor safety	report, original, good	N	
548	ORNL-TM-2330	Static and Dynamic Measurements with the Army Pulse Radiation Facility Reactor	J. T. Mihalczco	06/1968	ORNL	... prepared primarily for internal use at the ORNL ...	experimental criticality data	report, original, good	Y	Very interesting report addressing actual or slang names given to technical terms, processing sites, critical experiment machines, etc.

549	ORNL-TM-2367	The Language of Nuclear Science	F. Kertesz	09/17/1968	ORNL	... prepared primarily for internal use at the ORNL ...		report, original, good	N	Outlines sections of a SARP (safety analysis report for packaging) and provided guidances for the analysis and design of fissile and radioactive materials transport packages.
550	ORNL-TM-2410	Irradiated Fuel Shipping Cask Design Guide	L. B. Shappert	01/29/1969	ORNL	... prepared primarily for internal use at the ORNL ...	equipment/process design, transport safety analysis	report, original, good	N	
551	ORNL-TM-2496, Rev. 2	Nuclear Reactor Core Analysis Code: CITATION	T. B. Fowler, D. R. Vondy, G. W. Cunningham	07/1969	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	N	
552	ORNL-TM-2500	XSDRN: A Discrete Ordinates Spectral Averaging Code	N. M. Greene, C. W. Craven Jr.	07/1969	ORNL	... prepared primarily for internal use at the ORNL ...	computational method/data (2)	report, original, good	Y	
553	ORNL-TM-3334	The INDEX Data System: An Index of Nuclear Data Libraries Available at ORNL	J. L. Lucius, J. D. Jenkins, R. Q. Wright	03/29/1971	ORNL	... prepared primarily for internal use at the ORNL ...	handbook/bibliography	report, original, good	N	Crume's PhD thesis regarding fusion processes.
554	ORNL-TM-3812	Nonlinear Evolution of Flute-Like Plasma Microinstabilities	E. C. Crume Jr.	05/1972	ORNL	[None]		report, original, good	N	
555	ORNL-TM-4641	Technical Specifications Tower Shielding Reactor II	Staff	02/1979	ORNL	[None]	operating procedures/requirements	report, original, good	N	
556	ORNL-TM-4641/R1	Technical Specifications Tower Shielding Reactor II	Staff-See TM-8140 below	04/1982	ORNL	[None]	operating procedures/requirements	report, original, good	N	
557	ORNL-TM-4637	Technical Specifications Health Physics Research Reactor	Staff	02/1979	ORNL	[None]	operating procedures/requirements	report, original, good	N	
558	ORNL-TM-4637/R1	Technical Specifications Health Physics Research Reactor	Staff	11/1985	ORNL	[None]	operating procedures/requirements	report, original, good	N	
559	ORNL-TM-8140	Technical Specifications Tower Shielding Reactor II	R. G. Nicols, et al	May, 1982	ORNL	[None]	operating procedures/requirements	T-CSIRC/Electronic	T-CSIRC/Vol-3B	
560	ORNL-CF-1627	Neutron Multiplication in a Mass of Uranium Metal Problem Assignment 307-X10P "SNELL" Experiment	J. E. Brolley, F. J. Byerly, B. Feld, A. E. Olds, R. Schalett, L. Slotin, R. B. Stewart	04/01/1944	ORNL	Secret, declassified 12/11/1956	experimental criticality data	report, original, fair	Y	Effort to determine the enrichment of unmoderated U metal required for criticality. Used 34 tons of natural U metal stacked on top of the ORNL Graphite Reactor in exponential measurements.
561	ORNL-CF-53-1-294	Prediction of Criticality Behavior of a Slurry Upon Settling	P. R. Kasten	01/26/1953	ORNL	Secret, declassified 07/02/1957	computational method/data (1)	report, original, good	N	Focuses on whether the initial delayed critical becomes less reactive or prompt critical upon stopping of a stirrer motor. May be a preliminary look at the physics of a critical experiment with UO ₂ -H ₂ O slurries.
562	ORNL-CF-53-8-122	Preliminary Calculations on Storage of MTR Fuel Elements	L. Dresner	08/21/1953	ORNL	Secret, declassified 11/08/1962	computational method/data (1)	report, original, good	N	
563	ORNL-CF-53-8-146	Measurement of the Fast-Neutron Spectrum of the Bulk Shielding Reactor Using Nuclear Plates	M. P. Haydon, E. B. Johnson, J. L. Meem	08/31/1953	ORNL	Secret, declassified 05/22/1957	nuclear measurement/data	report, original, good	N	
564	ORNL-CF-53-9-139	FOLDER IS EMPTY								
565	ORNL-CF-54-12-21	FOLDER IS EMPTY								
566	ORNL-CF-54-12-114	Critical Experiments on Type AC-1 Aircraft Propulsion Reactor	D. V. P. Williams, J. J. Lynn, A. D. Callihan	12/15/1954	ORNL	Secret, declassified 10/28/1971	experimental criticality data	report, original, good	Y	Report consists of two memos, to/from D. D. Eisenhower and L. Strauss (AEC Chairman), and an agreement signed by Strauss and UK officials on 15/06/1955. Also a transmittal letter of these documents to A. M. Weinberg (ORNL Director).
567	ORNL-CF-55-10-86	Agreement for Cooperation on the Civil Uses of Atomic Energy Between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland		10/24/1955	ORNL	Unclassified		report, original, good	N	Similar content as ORNL-CF-55-10-86.
568	ORNL-CF-55-10-108	Agreement for Cooperation on the Civil Uses of Atomic Energy Between the Government of the United States of America and the Government of Belgium		10/26/1955	ORNL	Unclassified		report, original, good	N	Similar content as ORNL-CF-55-10-86.

569	ORNL-CF-55-10-121	Agreement for Cooperation on the Civil Uses of Atomic Energy Between the Government of the United States of America and the Government of Canada		10/28/1955	ORNL	Unclassified		report, original, good	N	
570	ORNL-CF-53-10-157	A Critical Size Nomogram	E. L. Zimmerman	10/23/1953	ORNL	Restricted, declassified 02/11/1963	computational method/data (1)	report, original, good	N	
571	ORNL-CF-54-4-30	Fuel Dump Tanks for HRT	S. Visner		ORNL	Secret, declassified 08/22/1956	experiment plan/design	report, original, good	N	
572	ORNL-CF-54-4-53	Reflector Moderated Critical Assembly Experimental Program	D. Scott, B. L. Greenstreet	04/08/1954	ORNL	Secret, declassified 12/30/1963	experiment plan/design	report, original, good	Y	
573	ORNL-CF-55-5-181	DOCUMENT MISSING FROM FOLDER								
574	ORNL-CF-54-5-170	DOCUMENT MISSING FROM FOLDER								
575	ORNL-CF-54-6-16	Dump Tanks for HRT Blanket	S. Visner	06/03/1954	ORNL	Confidential, declassified 06/12/1957	experiment plan/design	report, original, good	N	
576	ORNL-CF-54-6-131	Slug Processing in Continuous Dissolver	E. O. Nurmi	06/17/1954	ORNL	Secret, declassified 11/18/1957	operational/test/material data	report, original, good	N	
577	ORNL-CF-54-7-5	Reflector-Moderated-Reactor Design Parameter Study Part I: Effect of Reactor Proportions	C. S. Burtette, M. E. LaVerne, C. B. Mills	11/08/1954	ORNL	Secret, declassified 02/21/1961	experiment plan/design	report, original, good	N	
578	ORNL-CF-54-7-64	Boundary Values for the Inner Radius of a Cylindrical Annular Reactor	E. L. Zimmerman	07/10/1954	ORNL	Unclassified	computational method/data (1)	report, original, good	N	
579	ORNL-CF-54-8-221	A Report on Critical Dimensions of Cylinders	R. C. Keen	08/31/1954	ORNL	Secret, declassified 07/02/1957	computational method/data (1)	report, original, good	N	
580	ORNL-CF-54-9-89	DOCUMENT MISSING FROM FOLDER								
581	ORNL-CF-55-4-22	DOCUMENT MISSING FROM FOLDER								
582	ORNL-CF-55-6-148	DOCUMENT MISSING FROM FOLDER								
583	ORNL-CF-55-6-196	Seals and Packing Materials for Molten Fluoride Salts	W. C. Tunnell	08/29/1956	ORNL	Secret, declassified 03/26/1962	operational/test/material data	report, original, good	N	
584	ORNL-CF-55-11-104	DOCUMENT MISSING FROM FOLDER								
585	ORNL-CF-56-2-63	DOCUMENT MISSING FROM FOLDER								
586	ORNL-CF-56-2-105	Radiation Incident of February 1, 1956, A Preliminary Report	A. D. Callihan	02/15/1956	ORNL	Confidential, declassified 07/02/1957	criticality accident	report, original, good	N	
587	ORNL-CF-56-3-9	An Evaluation of Geometrical Effects in Control Rods	D. W. Magnuson	03/02/1956	ORNL	Confidential, declassified 07/03/1957	experimental criticality data	report, original, good	N	
588	ORNL-CF-56-3-159	DOCUMENT MISSING FROM FOLDER								
589	ORNL-CF-56-3-170	Neutron Self-Shielding of a Plane Absorbing Foil	J. Bengston	03/01/1956	ORNL	Unclassified	computational method/data (1)	report, original, good	N	Not critical; multiplication was ~ 10 to 12.
590	ORNL-CF-54-7-159	The First Assembly of the Small Two-Region Reflector Moderated Reactor	D. Scott	07/26/1954	ORNL	Secret, declassified 08/19/1957	experimental criticality data	report, original, good	Y	
591	ORNL-CF-54-8-180	The Second Assembly of the Small Two-Region Reflector Moderated Reactor	D. Scott	08/26/1954	ORNL	Secret, declassified 12/17/1957	experimental criticality data	report, original, good	Y	Provides flux distribution measurements and other data for the assembly described in ORNL-CF-54-8-180.
592	ORNL-CF-54-9-185	The Second Assembly of the Small Two-Region Reflector Moderated Reactor (Part II)	D. Scott, R. M. Spencer	09/27/1954	ORNL	Secret, declassified 05/19/1959	experimental criticality data	report, original, good	Y	
593	ORNL-CF-54-10-119	Reflector Moderated Critical Assembly Experimental Program - Part II	B. L. Greenstreet	10/19/1954	ORNL	Secret, declassified 12/30/1963	experimental criticality data	report, original, good	Y	
594	ORNL-CF-54-11-33	The First Assembly of the Three-Region Reflector Moderated Reactor	R. M. Spencer	11/05/1954	ORNL	Secret, declassified 12/02/1963	experimental criticality data	report, original, good	Y	
595	ORNL-CF-54-11-150	The Second Assembly of the Three-Region Reflector Moderated Reactor	R. M. Spencer, B. L. Greenstreet	11/24/1954	ORNL	Secret, declassified 11/18/1960	experimental criticality data	report, original, good	Y	
596	ORNL-CF-54-12-189	Three-Region Reflector Moderated Critical Assembly	R. M. Spencer	12/28/1954	ORNL	Secret, declassified 03/27/1961	experimental criticality data	report, original, good	Y	
597	ORNL-CF-55-1-123	Three-Region Reflector Moderated Critical Assembly with 1/16 in. Inconel Shells	R. M. Spencer	01/21/1955	ORNL	Secret, declassified 11/11/1963	experimental criticality data	report, original, good	Y	
598	ORNL-CF-55-10-142	Three-Region Reflector Moderated Critical Assembly with End Ducts and 1/8 in. Inconel Core Shells. CA-21-1 Neutron Flux Measurement.	S. Synder, J. J. Lynn, E. V. Sandin, D. Scott	10/28/1955	ORNL	Secret, declassified 12/30/1963	experimental criticality data	report, original, good	Y	

599	ORNL-CF-56-1-96	Three-Region Reflector Moderated Critical Assembly with End Ducts -- Experimental Results with CA-22, Enlarged End Duct Modification	D. Scott, J. J. Lynn, E. V. Sandin, S. Synder	01/30/1956	ORNL	Secret, declassified 12/30/1963	experimental criticality data	report, original, good	Y	
600	ORNL-CF-56-1-97	Three-Region Reflector Moderated Critical Assembly with End Ducts -- Experimental Results with CA-23, Enlarged Island Modification	D. Scott, J. J. Lynn, E. V. Sandin, S. Synder	01/30/1956	ORNL	Secret, declassified 08/22/1962	experimental criticality data	report, original, good	Y	
601	ORNL-CF-56-4-128	Three-Region Reflector Moderated Critical Assembly with End Ducts. Experiment Results with CA-21-2. Reduced Concentration.	D. Scott, J. J. Lynn, E. V. Sandin, S. Synder	04/12/1956	ORNL	Secret, declassified 12/30/1963	experimental criticality data	report, original, good	Y	
602	ORNL-CF-56-3-180	Neutron Self-Shielding of a Purely Absorbing Cylindrical Rod	J. Bengston	03/06/1956	ORNL	Unclassified	computational method/data (1)	report, original, good	N	
603	ORNL-CF-56-3-183	A Self-Shielding Factor for Uranium in a Teflon Lattice	J. Bengston	03/19/1956	ORNL	Secret, declassified 07/03/1957	computational method/data (1)	report, original, good	N	
604	ORNL-CF-56-7-148	Preliminary Report of Critical Experiments in Slab Geometry	J. K. Fox, L. W. Gilley	07/30/1956	ORNL	Confidential, declassified 02/20/1963	experimental criticality data	report, original, good	Y	
605	ORNL-CF-56-8-201	DOCUMENT MISSING FROM FOLDER								
606	ORNL-CF-57-3-48	Neutron and Gamma-Ray Attenuation for a Fission Source in Water -- Comparison of Theory with LTSF Measurements	D. R. Otis	03/12/1957	ORNL	Unclassified	computational method/data (1)	report, original, good	N	Includes papers and presentations by A. M. Weinberg and A. D. Callihan. Discusses design and operation of several ORNL-developed test reactors and supporting critical experiments, e.g., HRT, APPR and ARE. Several photographs and flow diagrams included.
607	ORNL-CF-57-6-69	Molten Fluoride Reactors	Staff	06/27/1957	ORNL	Unclassified	experimental criticality data	report, original, good	Y	
608	ORNL-CF-57-11-15	DOCUMENT MISSING FROM FOLDER								
609	ORNL-CF-57-11-39	Manual of Routine and Emergency Operating Procedures for the Tower Shielding Facility	F. N. Watson, C. E. Clifford, M. J. Welch, J. L. Hull, V. R. Cain	11/25/1957	ORNL	Unclassified	operating procedures/requirements	report, original, good	N	
610	ORNL-CF-58-3-33	Direct Measurement of the Alpha Value for U ²³³	P. R. Kasten	03/10/1958	ORNL	Unclassified	nuclear data/measurement	report, original, good	N	
611	ORNL-CF-58-4-6	Gamma-Ray and Fast-Neutron Dose Rates in Air as a Function of Distance from the TSF Reactor	F. N. Watson	04/15/1958	ORNL	External distribution limited to recipients indicated, unclassified	dosimetry	report, original, good	N	
612	ORNL-CF-58-6-49	High Flux Research Reactor Seminar, March 7, 1958 (Seminar No. 4)	J. A. Lane	06/13/1958	ORNL	... prepared primarily for internal use at the ORNL ...	experiment plan/design, reactor safety	report, original, good	N	
613	ORNL-CF-58-8-3	DOCUMENT MISSING FROM FOLDER								
614	ORNL-CF-58-8-5	DOCUMENT MISSING FROM FOLDER								
615	ORNL-CF-58-8-15	DOCUMENT MISSING FROM FOLDER								
616	ORNL-CF-58-9-40	DOCUMENT MISSING FROM FOLDER								
617	ORNL-CF-58-10-14	Some Theoretical Considerations Concerning the Measurement of Effective Resonance Integrals in the Bulk Shielding Reactor	L. Dresner	10/03/1958	ORNL	not to be ... given public dissemination without ... approval ...	computational method/data (1)	report, original, good	N	
618	ORNL-CF-65-6-70	Health Physics Research Reactor Operating Report November 1, 1964 Through April 30, 1965	L. W. Gilley, L. B. Holland	06/25/1965	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
619	ORNL-CF-65-11-75	Health Physics Research Reactor Operating Report May 1, 1965 Through October 31, 1965	L. W. Gilley, L. B. Holland	11/23/1965	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
620	ORNL-CF-66-6-6	Health Physics Research Reactor Operating Report November 1, 1965 Through April 30, 1966	L. W. Gilley, L. B. Holland	06/07/1966	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
621	ORNL-CF-67-1-5	Health Physics Research Reactor Operating Report May 1, 1966 Through October 31, 1966	L. W. Gilley, L. B. Holland	01/09/1967	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
622	ORNL-CF-67-8-42	Health Physics Research Reactor Operating Report November 1, 1966 Through April 30, 1967	L. W. Gilley, L. B. Holland	08/22/1967	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	

623	ORNL-CF-68-2-26	Health Physics Research Reactor Operating Report May 1, 1967 Through October 31, 1967	D. R. Ward, L. W. Gilley, L. B. Holland	02/19/1968	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
624	ORNL-CF-68-6-60	Health Physics Research Reactor Operating Report November 1, 1967 Through April 30, 1968	D. R. Ward, L. W. Gilley, L. B. Holland	06/17/1968	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	The operational report for May 1 through October 31, 1968 is missing.
625	ORNL-CF-69-7-3	Health Physics Research Reactor Operating Report November 1, 1968 Through April 30, 1969	D. R. Ward, F. F. Haywood, L. W. Gilley, L. B. Holland	06/17/1968	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
626	ORNL-CF-70-1-44	Health Physics Research Reactor Operating Report May 1, 1969 Through October 31, 1969	D. R. Ward, F. F. Haywood, J. W. Poston, L. B. Holland	01/30/1970	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	The first date in the report title should be November 1, 1969.
627	ORNL-CF-70-6-23	Health Physics Research Reactor Operating Report November 1, 1970 Through April 30, 1970	D. R. Ward, F. F. Haywood, J. W. Poston, L. B. Holland	01/30/1970	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
628	ORNL-CF-70-11-25	Health Physics Research Reactor Operating Report May 1, 1970 Through October 31, 1970	D. R. Ward, F. F. Haywood, J. W. Poston, L. B. Holland	11/11/1970	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
629	ORNL-CF-71-8-7	Health Physics Research Reactor Operating Report November 1, 1970 Through April 30, 1971	D. R. Ward, F. F. Haywood, J. W. Poston, L. B. Holland	08/06/1971	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
630	ORNL-CF-71-12-21	Health Physics Research Reactor Operating Report May 1, 1971 Through October 31, 1971	D. R. Ward, F. F. Haywood, J. W. Poston, L. B. Holland	12/15/1971	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
631	ORNL-CF-72-7-33	Health Physics Research Reactor Operating Report November 1, 1971 Through April 30, 1972	D. R. Ward, F. F. Haywood, J. W. Poston, L. B. Holland	07/28/1972	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
632	ORNL-CF-73-1-54	Health Physics Research Reactor Operating Report May 1, 1972 Through October 31, 1972	D. R. Ward, F. F. Haywood, J. W. Poston, L. B. Holland	01/22/1973	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
633	ORNL-CF-73-10-11	Health Physics Research Reactor Operating Report November 1, 1972 Through April 30, 1973	D. R. Ward, F. F. Haywood, L. B. Holland	10/03/1973	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
634	ORNL-CF-74-4-38	Health Physics Research Reactor Operating Report May 1, 1973 Through October 31, 1973	D. R. Ward, F. F. Haywood, L. B. Holland	04/22/1974	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
635	ORNL-CF-74-6-59	Health Physics Research Reactor Operating Report November 1, 1973 Through April 30, 1974	D. R. Ward, F. F. Haywood, L. B. Holland	06/28/1974	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
636	ORNL-CF-74-12-21	Health Physics Research Reactor Operating Report May 1, 1974 Through October 31, 1974	D. R. Ward, F. F. Haywood, H. W. Dickson, L. B. Holland	12/19/1974	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
637	ORNL-CF-75-5-20	Health Physics Research Reactor Operating Report November 1, 1974 Through April 30, 1975	D. R. Ward, F. F. Haywood, L. B. Holland	05/30/1975	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
638	ORNL/CF-76/34	Health Physics Research Reactor Operating Report May 1, 1975 Through October 31, 1975	H. W. Dickson, L. W. Gilley, L. B. Holland, D. R. Ward	01/16/1976	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
639	ORNL/CF-76/271	Health Physics Research Reactor Operating Report November 1, 1975 Through April 30, 1976	H. W. Dickson, L. W. Gilley, L. B. Holland, D. R. Ward	07/12/1976	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
640	ORNL/CF-77/5	Health Physics Research Reactor Operating Report May 1 Through October 31, 1976	H. W. Dickson, L. W. Gilley, L. B. Holland, D. R. Ward	01/06/1977	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
641	ORNL/CF-77/307	Health Physics Research Reactor Operating Report November 1, 1976 Through April 30, 1977	H. W. Dickson, L. W. Gilley, L. B. Holland, D. R. Ward	05/17/1977	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
642	ORNL/CF-77/483	Health Physics Research Reactor Operating Report May 1 Through October 31, 1977	H. W. Dickson, L. W. Gilley, L. B. Holland, D. R. Ward	12/01/1977	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
643	ORNL/CF-78/215	Health Physics Research Reactor Operating Report November 1, 1977 Through April 30, 1978	H. W. Dickson, L. W. Gilley, L. B. Holland	06/05/1978	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	

644	ORNL/CF-79/14	Health Physics Research Reactor Operating Report May 1 Through October 31, 1978	H. W. Dickson, L. W. Gilley, L. B. Holland, C. S. Sims	01/12/1979	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
645	ORNL/CF-79/228	Health Physics Research Reactor Operating Report November 1, 1978 Through April 30, 1979	L. W. Gilley, L. B. Holland	06/15/1979	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
646	ORNL/CF-80/4	Health Physics Research Reactor Operating Report May 1, 1979 Through October 31, 1979	L. W. Gilley, L. B. Holland	01/08/1980	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
647	ORNL/CF-80/204	Health Physics Research Reactor (HPRR) Operating Report November 1, 1979 Through April 30, 1980	L. B. Holland, L. W. Gilley	05/30/1980	ORNL	not to be ... given public dissemination without ... approval ...	operational data	report, original, good	N	
648	ORNL/CF-80/331	Health Physics Research Reactor (HPRR) Operating Report May 1 Through October 31, 1980	L. W. Gilley, L. B. Holland	12/08/1980	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
649	ORNL/CF-81/97	Health Physics Research Reactor (HPRR) Operating Report November 1, 1980 Through April 30, 1981	L. W. Gilley, L. B. Holland	12/1981	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
650	ORNL/CF-81/327	Health Physics Research Reactor (HPRR) Operating Report May 1, 1981 Through October 31, 1981	L. W. Gilley, L. B. Holland	12/14/1981	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
651	ORNL/CF-82/253	Health Physics Research Reactor Operating Report November 1, 1981 Through April 30, 1982	L. W. Gilley, L. B. Holland	08/19/1982	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
652	ORNL/CF-83/31	Health Physics Research Reactor Operating Report May 1 Through October 31, 1982	L. B. Holland	02/10/1983	ORNL	Internal use only	operational/test/material data	report, original, good	N	
653	ORNL/CF-83/225	Health Physics Research Reactor Operating Report November 1, 1982 Through April 30, 1983	E. G. Bailiff, L. B. Holland	06/24/1983	ORNL	Internal use only	operational/test/material data	report, original, good	N	
654	ORNL/CF-84/31	Health Physics Research Reactor Operating Report May 1 Through October 31, 1983	E. G. Bailiff, L. B. Holland	01/18/1984	ORNL	Internal use only	operational/test/material data	report, original, good	N	
655	ORNL/CF-84/363	Health Physics Research Reactor Operating Report November 1, 1983 Through April 30, 1984	E. G. Bailiff, L. B. Holland	09/18/1984	ORNL	Internal use only	operational/test/material data	report, original, good	N	
656	ORNL/CF-85/48	Health Physics Research Reactor Operating Report May 1 Through October 31, 1984	E. G. Bailiff, L. B. Holland	02/26/1985	ORNL	Internal use only	operational/test/material data	report, original, good	N	The operational report for November 1, 1984 through April 30, 1985 is missing.
657	ORNL/CF-85/493	Health Physics Research Reactor Operating Report May 1 Through October 31, 1985	E. G. Bailiff, L. B. Holland	12/31/1985	ORNL	Internal use only	operational/test/material data	report, original, good	N	Operational reports for November 1, 1985 through April 30, 1986, and May 1, 1986 through October 31, 1986 are missing.
658	ORNL/CF-87/234	Health Physics Research Reactor Operating Report November 1, 1986 Through April 30, 1987	E. G. Bailiff, L. B. Holland	07/21/1987	ORNL	Internal use only	operational/test/material data	report, original, good	N	
659	ORNL/CF-87/351	Health Physics Research Reactor Operating Report May 1 Through October 31, 1987	E. G. Bailiff, L. B. Holland	12/02/1987	ORNL	Internal use only	operational/test/material data	report, original, good	N	
660	ORNL/CF-88/218	Health Physics Research Reactor Operating Report November 1, 1987 Through April 30, 1988	E. G. Bailiff, L. B. Holland	12/31/1988	ORNL	Internal use only	operational/test/material data	report, original, good	N	Experimental tests of the Aberdeen pulse reactor (very similar to the HPRR) to determine if modified equipment/procedure could assure subcriticality in event of water immersion.
661	No report number	Critical Experiment in Support of Enhancing Security of Reactor Storage	A. H. Kazi, H. G. Dubyoski	08/21/1978	Aberdeen Proving Ground, Aberdeen MD, US Army	[None]	experimental criticality data, experiment safety analysis, reactor safety	report, copy, good	N	Same topic as above report by Kazi and Dubyoski.
662	TECOM Project 7-CO-IL8-API-001	Critical Experiment in Support of Enhancing Reactor Storage	A. H. Kazi, H. G. Dubyoski	08/1979	Aberdeen Proving Ground, Aberdeen MD, US Army	[None]	experimental criticality data, experiment safety analysis, reactor safety	report, copy, good	N	
663	ORNL-CF-59-3-7	Poison Rod Requirements for a Solid-Fuel Leacher Tank	B. E. Prince	03/02/1959	ORNL	not to be ... given public dissemination without ... approval ...	computational method/data (1), equipment/process design	report, original, good	N	
664	ORNL-CF-58-12-23	Chemical Feasibility of Homogeneous Neutron Poisons for Criticality Control in Fuel Reprocessing	J. G. Moore, R. H. Rainey	12/01/1958	ORNL	not to be ... given public dissemination without ... approval ...	equipment/material data, equipment/process design	report, original, good	N	

665	ORNL-CF-59-5-79	Design Criteria for a Pile Oscillator	L. Dresner	05/25/1959	ORNL	not to be ... given public dissemination without ... approval ...	experiment plan/design	report, original, good	N	
666	ORNL-CF-59-6-45	A Comparison of Elementary Criticality Calculations with Experimental Results	C. W. Nestor Jr.	06/11/1959	ORNL	not to be ... given public dissemination without ... approval ...	computational method/data (1)	report, original, good	N	Calculations done with an early computer code version at LANL; same experiments are considered as for ORNL-CF-59-6-45.
667	ORNL-CF-59-7-66	Multigroup Diffusion Theory Calculations for Recent Critical Experiments	C. W. Nestor Jr.	07/21/1959	ORNL	not to be ... given public dissemination without ... approval ...	computational method/data (1)	report, original, good	N	
668	ORNL-CF-59-7-87	Multiplication Measurements with Highly Enriched Uranium Metal Slabs	J. T. Mihalcz, J. J. Lynn	07/27/1959	ORNL	External transmittal authorized. Also, ... not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	Y	
669	ORNL-CF-59-12-30	DOCUMENT MISSING FROM FOLDER								
670	ORNL-CF-60-2-84	Manganese Bath Measurements of η of U^{233} and U^{235}	R. L. Macklin, G. deSaussure, J. D. Kington, W. S. Lyon	03/15/1960	ORNL	External transmittal authorized. Also, ... not to be ... given public dissemination without ... approval ...	nuclear measurement/data	report, original, good	N	Addresses reprocessing of spent fuel by salt dissolution coupled with conversion of the uranium to hexafluoride form followed by cold-trapping. Contains numerous flow diagrams, drawings, and equipment photographs.
671	ORNL-CF-60-3-74, Rev. 1	Volatility Pilot Plant -- Hazards Review	R. P. Milford, W. H. Carr Jr., G. I. Cathers, R. W. Horton, S. Mann, F. W. Miles, J. B. Ruch, C. L. Whitmarsh	07/26/1960	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ... Several pages originally marked as confidential but crossed out.	equipment/process design	report, original, good	Y	
672	ORNL-CF-60-3-103	The Applicability of Packed Glass Raschig Rings for Nuclear Safety in Large Vessels	J. P. Nichols	03/24/1960	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	computational method/data (1), operational/test/material data	report, original, good	N	
673	ORNL-CF-60-4-12	Critical Experiments for Reactor Physics Studies	R. Gwin, D. W. Magnuson	09/16/1960	ORNL	External transmittal authorized. Also, ... not to be ... given public dissemination without ... approval ...	experimental criticality data, nuclear measurement/data	report, original, good	Y	Note in folder stating "CF-60-4-24 W. Webster has 4-7-66"
674	ORNL-CF-60-4-24	DOCUMENT MISSING FROM FOLDER								
675	ORNL-CF-60-5-121	Use of Silicon Surface-Barrier Counters in Fast-Neutron Detection and Spectroscopy	T. A. Love, R. B. Murray	05/31/1960	ORNL	External transmittal authorized. Also, ... not to be ... given public dissemination without ... approval ...	dosimetry	report, original, good	N	
676	ORNL-CF-60-6-20	Hazards Summary and Safety Procedures for Reactor Controls Plutonium-Beryllium Neutron Source	J. L. Kaufman	06/08/1960	ORNL	Unclassified. Also, ... not to be ... given public dissemination without ... approval ...	operating procedures/requirements	report, original, good	N	
677	ORNL-CF-60-7-32	Neutron Thermalization and Diffusion in Pulsed Media	S. N. Purohit	07/11/1960	ORNL	External transmittal authorized. Also, ... not to be ... given public dissemination without ... approval ...	computational method (1)	report, original, good	N	
678	ORNL-CF-60-8-58	Use of Glass Raschig Ring Packing in Nuclear Safety Control - Report of Trip to Rocky Flats Plant	R. E. Brooksbank, J. P. Nichols	08/19/1960	ORNL	Confidential, declassified 05/31/1961. Also, ... not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	

679	ORNL-CF-61-4-33	Neutron Multiplication Experiments with Enriched Uranium Metal in Slab Geometry	J. T. Mihalcz, J. J. Lynn	04/10/1961	ORNL	External transmittal authorized. Also, ... not to be ... given public dissemination without ... approval ...	experimental criticality data	report, copy, fair	Y	
680	ORNL-CF-61-5-90	The Laboratory Director's Review Committees at ORNL	F. Kertesz	05/10/1961	ORNL	External transmittal authorized.	safety review	report, original, good	N	
681	ORNL-CF-61-8-71	Oak Ridge National Laboratory Fast Burst Reactor: Critical Experiments and Calculations	W. E. Kinney, J. T. Mihalcz	08/24/1961	ORNL	External transmittal authorized. Also, ... not to be ... given public dissemination without ... approval ...	experimental criticality data, computational method/data (1)	report, copy, fair	Y	
682	ORNL-CF-61-9-52	DOCUMENT MISSING FROM FOLDER								
683	ORNL-CF-62-10-55	Limiting Critical Concentrations of Nitrate Solutions of Enriched Uranium and U ²³⁵ -Th ²³²	J. P. Nichols	10/12/1962	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	computational method/data (1)	report, original, good	N	Evaluates samples of the aluminum alloy being used at the time for HFIR fuel elements. Gallium at 4 times the specification limits was found, but the level presented only a small contribution to the macroscopic absorption cross section.
684	ORNL-CF-63-2-5	Analytical Results and Macroscopic Thermal Neutron Absorption Cross-Section Values for Impurities in Type 6061 Al	R. J. Beaver	02/04/1963	ORNL	Distribution limited to recipients only. For internal use only.	operational/test/material data	report, original, good	N	
685	ORNL-CF-63-6-56	Limiting Critical Concentrations of Aqueous Nitrate Solutions of Fissile and Fertile Isotopes	J. P. Nichols	06/25/1963	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	computational method/data (1)	report, original, good	N	
686	ORNL-CF-64-9-21	Report on a Recent Conference on Scientific Information Problems, Number 2	F. Kertesz	09/11/1964	ORNL	Distribution limited to recipients only. For internal use only.		report, original, good	N	
687	ORNL-CF-63-9-49	Concrete Shield Calculations	D. K. Trubey	09/20/1963	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	computational method/data (1)	report, original, good	N	
688	ORNL-CF-64-10-2	Operating Safety Limits for the Oak Ridge National Laboratory Bulk Shielding Facility Reactors (BSR-I, BSR-II, and PCA)	J. D. Kington, F. C. Maienschein, C. C. Webster	10/02/1964	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	operating procedures/requirements	report, original, good	N	
689	ORNL-CF-65-2-17	1964 RORC Review of the Tower Shielding Facility	Staff	02/10/1965	ORNL, Union Carbide Corporation	Distribution limited to recipients only. For internal use only.		report, copy, fair	N	
690	ORNL-CF-65-4-3	Tower Shielding Reactor II Operating Report November 1, 1963 Through October 31, 1964	L. B. Holland	04/01/1965	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	
691	ORNL-CF-65-6-72	Criticality Safety Tests for a Proposed Irradiation Facility	E. B. Johnson	06/30/1965	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	N	MPRE - Medium-Power Reactor Experiment
692	ORNL-CF-65-10-9	Summary of Reports and Technical Papers That Have Been Issued or Are Being Prepared in Connection with the MPRE Program	A. P. Fraas	10/11/1965	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	handbook/bibliography	report, original, good	N	
693	ORNL-CF-65-11-49	Tower Shielding Reactor II Operating Report May 1, 1965 Through October 31, 1965	J. L. Hull, L. B. Holland, J. J. Manning	11/23/1965	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	Duplicate report copy/folder (listed above)

694	ORNL-CF-65-11-75	Health Physics Research Reactor Operating Report May 1, 1965 Through October 31, 1965	L. W. Gilley, L. B. Holland	11/23/1965	ORNL	not to be ... given public dissemination without ... approval ...	operational/test/material data	report, original, good	N	Report on I.A.E.A. Symposium on Criticality Control of Fissile Materials and Visits with French and English Groups Concerned with Criticality. Many details of current experimental activities.
695	ORNL-CF-65-12-42	Report of Foreign Travel	J. T. Thomas	12/13/1965	ORNL	Official Use Only		report, original, good	N	
696	ORNL-CF-65-8-55	DOCUMENT MISSING FROM FOLDER								
697	ORNL-CF-68-4-70	Preliminary Proposal for Experiments with a Repetitively Pulsed Assembly	J. T. Mihalcz	04/22/1968	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	experiment plan/design	report, original, good	N	
698	ORNL-CF-75-9-13	The Reactivities of High-Flux Isotope Reactor Fuel Elements 148 Through 162, Memo No. 16	E. B. Johnson	09/22/1975	ORNL	Internal use only. Also, not to be ... given public dissemination without ... approval ...	experimental criticality data	report, original, good	N	
699	ORNL/CSD/TM-58	Nuclear Criticality Safety Assessment of Oak Ridge Research Reactor Fuel Element Storage	J. T. Thomas	06/1978	ORNL	[None]	facility, process or storage analysis	report, original, good	N	
700	ORNL/CSD-7	Users Guide to MORSE-SGC	S. K. Fraley	03/1976	ORNL	[None]	computational method/data (2)	report, original, good	N	
701	ORNL/CSD/TM-4	A 218-Group Neutron Cross-Section Library in the AMPX Master Interface Format for Criticality Safety Studies	W. E. Ford III, C. C. Webster, R. M. Westfall	07/1976	ORNL	[None]	nuclear measurement/data	report, original, good	N	
702	ORO-651 Revision 2	Uranium Hexafluoride Handling Procedures & Container Criteria		11/1968	Oak Ridge Operations Office, U. S. Atomic Energy Commission	[None]	operating procedures/requirements, equipment/material data, equipment/process design	report, original, good	N	
703	PG Report 97 (R) 2nd Edition	An Empirical Correlation of the Experimental Data on Homogeneous Critical Assemblies of Uranium and Hydrogen of All Enrichments	B. G. Owen	11/1960	U.K.A.E.A. (Risley, Lancashire)	[None]	experimental criticality data, handbook, computational method/data (1)	report, original, good	N	
704	PR/OP/1	Design Basis for the Aldermaston Pulsed Reactor	H. Goodfellow, W. B. McCormick, M. H. McTaggart, V. G. Stupart, E. G. Warnke, J. W. Weale	02/1964	Aldermaston A.E.R.E. (U.K.A.E.A.)	Official Use Only	experiment plan/design, reactor safety	report, original, good	N	
705	PTR-359	Design Principle to Ensure Safety in Shipping and Storing Fissile Material	R. W. Thomas, R. L. Doan, J. P. Lyon, J. R. Huffman, F. H. Tingey, J. B. Philipson, B. F. Boardman, M. H. Bartz, W. B. Lewis	11/24/1958	Philips Petroleum Company and Idaho Operations Office of the U. S. A. E. C.	[None]	criticality safety analysis, design guidance	report, original, good	N	
706	PWAC-475	Operating Limits and Safety Analysis for Split-Table, Dry, Flexible Critical Experiments at the Canel Nuclear Physics Laboratory	E. L. Paradis, W. F. Welsh, L. E. Kapinos	09/1965	Canel Nuclear Physics Laboratory, Middletown CT, Pratt & Whitney Aircraft	Unclassified	experiment safety analysis	report, original, good	N	Contains several penciled notes. Maximum observed multiplication was ~ 3. Examined effect of personnel reflection on air-spaced HEU metal arrays.
707	RFP-51	Neutron Multiplication Measurements of Oralloy Units in Arrays	C. L. Schuske	06/29/1955	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 05/06/1961	experimental criticality data	report, original, good	Y	Many types of materials/configurations evaluated. Maximum observed multiplication was ~ 2.
708	RFP-58	Industrial Criticality Measurements on Oralloy and Plutonium	C. L. Schuske, M. G. Arthur, D. F. Smith	01/24/1956	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 03/22/1972	experimental criticality data	report, original, good	Y	Includes situation where two planar arrays are separated by a concrete wall. Maximum observed multiplication was ~ 3 to 4.
709	RFP-59	Neutron Multiplication Measurements in Parallel Arrays of Oralloy Units	C. L. Schuske	02/06/1956	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 08/29/1960	experimental criticality data	report, original, good	Y	Maximum observed multiplication was ~ 10.
710	RFP-63	Criticality Measurements on Plutonium Metal Preliminary to the Design of a Melting Crucible	C. L. Schuske, M. G. Arthur, D. F. Smith	06/01/1956	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 06/21/1963	experimental criticality data	report, original, good	Y	Part of the introduction is excerpted. Maximum observed multiplication was ~ 10.

711	RFP-66	Neutron Multiplication Measurements on Oralloy Slabs Immersed in Solutions	C. L. Schuske, M. G. Arthur, D. F. Smith	08/06/1956	Rocky Flats Plant, The Dow Chemical Company	Secret, downgraded to Confidential 01/28/1964, stamped as declassified but final declassification date not indicated.	experimental criticality data	report, copy, fair	Y	Maximum observed multiplication was ~ 15.
712	RFP-69	Neutron Multiplication Measurements on Oralloy Slabs Immersed in Solutions Part II	C. L. Schuske, M. G. Arthur, D. F. Smith	10/25/1956	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 07/29/1960	experimental criticality data	report, original, good	Y	Maximum observed multiplication was 2 to 3. Material was $UO_4 \cdot xH_2O$ with H/U values of ~ 20 to 30, at approximately 90% ^{235}U enrichment.
713	RFP-91	In Situ Neutron Multiplication Measurements on a Calcining Furnace	M. G. Arthur, C. L. Schuske, D. F. Smith	12/08/1957	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 08/29/1960	experimental criticality data	report, original, good	Y	Analyzes operational data for U inventory estimates for materials to be salvaged, estimates the probability for a criticality accident, makes recommendations.
714	RFP-104	Criticality Control in Enriched Uranium Recovery Operations	A. Goodwin Jr., A. N. Nickel	04/18/1958	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 06/21/1963	operational/test data	report, original, good	N	
715	RFP-108	Method for Calculating U^{235} Metal Storage Arrays	C. L. Shuske	05/07/1958	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 06/21/1963	computational method/data (1)	report, original, good	N	
716	RFP-123	Plutonium Graphite Assemblies	A. Goodwin Jr., C. L. Schuske	09/29/1958	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 08/13/1959	experimental criticality data, computational method/data (1)	report, original, good	Y	Document does not appear to be a formal report, no formal cover page or issue date (date indicated is a stamped date of receipt). Includes a copy of a memo from Callihan to Goodwin date 07/10/1964, transmitting ORNL experimental data.
717	No report number	Nuclear Safety of Pyrex Glass Poisoned Systems	A. Goodwin Jr.	07/10/1964	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (1)	document, copy, good	N	
718	RFP-149	An Empirical Interpretation of Annuli Critical Mass Data	C. L. Schuske, G. H. Bidinger	10/26/1959	Rocky Flats Plant, The Dow Chemical Company	Unclassified	computational method/data (1)	report, original, good	N	Multiplication experiments.
719	RFP-158	Plutonium Graphite Assemblies Part II	A. Goodwin Jr., C. L. Schuske	08/10/1959	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 01/14/1960	experimental criticality data, computational method/data (1)	report, original, good	Y	
720	RFP-169	Isolation Thickness of Water for UO_2F_2 Solution Systems	C. L. Schuske, A. N. Nickel	12/21/1959	Rocky Flats Plant, The Dow Chemical Company	Unclassified	computational method/data (1)	report, original, good	N	Multiplication experiments.
721	RFP-174	Interaction of Two Metal Slabs of Plutonium in Plexiglas	C. L. Schuske, A. Goodwin Jr., G. H. Bidinger, D. F. Smith	12/28/1959	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 03/16/1960	experimental criticality data	report, original, good	Y	Maximum observed multiplication was ~ 10.
722	RFP-178	Plutonium Plexiglas Assemblies	C. L. Schuske, G. H. Bidinger, A. Goodwin Jr., D. F. Smith	01/20/1960	Rocky Flats Plant, The Dow Chemical Company	Secret, declassified 03/16/1960	experimental criticality data	report, original, good	Y	Multiplication experiments.
723	RFP-182	Criticality Studies of Enriched Uranium Metal in $UO_2(NO_3)_2$ Solutions	A. Goodwin Jr., G. H. Bidinger, C. L. Schuske	01/28/1960	Rocky Flats Plant, The Dow Chemical Company	Unclassified	experimental criticality data, computational method/data (1)	report, original, good	Y	Multiplication experiments.
724	RFP-190	Plutonium Plexiglas Assemblies Part II	G. H. Bidinger, C. L. Schuske, D. F. Smith	07/27/1960	Rocky Flats Plant, The Dow Chemical Company	Unclassified	experimental criticality data, computational method/data (1)	report, original, good	Y	Multiplication experiments.
725	RFP-201	Nuclear Safety Experiments on Plutonium and Enriched Uranium Hydrogen Moderated Assemblies Containing Boron	G. H. Bidinger, C. L. Schuske, D. F. Smith	10/13/1960	Rocky Flats Plant, The Dow Chemical Company	Unclassified	experimental criticality data, computational method/data (1)	report, original, good	Y	Multiplication experiments.
726	RFP-213	Plexiglas Reflected Assemblies of Plutonium	C. L. Schuske, D. F. Smith, C. L. Bell	01/10/1961	Rocky Flats Plant, The Dow Chemical Company	Unclassified	experimental criticality data, computational method/data (1)	report, original, good	Y	General discussion of two subcritical measurement techniques - 1/M measurements and pulsed-neutron source measurements.
727	RFP-245	Criticality Measurements Performed In Situ	C. L. Schuske	11/15/1961	Rocky Flats Plant, The Dow Chemical Company	Unclassified	experiment plan/design	report, original, good	N	Multiplication experiments.

728	RFP-246	Nuclear Safety Measurements on Systems Containing Boron and Enriched Uranium	C. L. Schuske, G. H. Bidinger	10/24/1961	Rocky Flats Plant, The Dow Chemical Company	Unclassified	experimental criticality data, computational method/data (1)	report, original, good	Y	Multiplication experiments. Folder contains four handwritten pages of calculations and graphs, several of which have Schuske's initials and dates in late 1961.
729	RFP-248	Industrial Criticality Measurements on Oralloid and Plutonium Part II	C. L. Schuske, C. L. Bell, G. H. Bidinger, D. F. Smith	01/10/1962	Rocky Flats Plant, The Dow Chemical Company	Unclassified	experimental criticality data	report, original, good	Y	
730	RFP-258	Empirical Analysis of Critical Mass Data Involving Enriched Uranium Metal in Water	C. L. Schuske, C. L. Bell	03/21/1962	Rocky Flats Plant, The Dow Chemical Company	Unclassified	computational method/data (1)	report, original, good	N	May not be a formally issued report; no report cover or date are included. Contains an inserted note page from "JERE" stating that "Clarence gave me this report at the ACS Meeting. ..."
731	RFP-285	Durability Tests on Pyrex Raschig Rings	C. L. Schuske, H. W. King		Rocky Flats Plant, The Dow Chemical Company	[None]	operational/test/material data	report, copy, good	N	Folder contains memos to/from Schuske and J. T. Thomas.
732	RFP-315	Empirical Analysis of Critical Bare Arrays of Cylinders Containing Enriched $UO_2(NO_3)_2$	C. L. Schuske, B. B. Ernst, H. W. King	05/29/1963	Rocky Flats Plant, The Dow Chemical Company	Unclassified	computational method/data (1)	report, original, good	N	May not be a formally issued report; no report cover or date are included. Contains several handwritten notes
733	RFP-325	Two Experimental Sub Critical Arrays of $Pu(NO_3)_4$ Solution	C. L. Schuske		Rocky Flats Plant, The Dow Chemical Company	[None]	experimental criticality data	report, original, good	Y	
734	RFP-329	Manual for the Use of Borosilicate Raschig Rings as a Fixed Nuclear Poison	W. E. Schunter, R. W. Woodward	10/03/1963	Rocky Flats Plant, The Dow Chemical Company	Unclassified	operating procedures/requirements	report, original, good	N	Data for HEU metal annular spheres/hemispheres for various reflector/internal material conditions.
735	RFP-898-A	Research and Quarterly Progress Report November, December, 1966, and January 1967 Nuclear Safety	C. L. Schuske	02/23/1967	Rocky Flats Plant, The Dow Chemical Company	Official Use Only	experimental criticality data	report, original, good	Y	
736	RFP-936	Calculated Critical Radii of Spheres of Plutonium 239 and Uranium 233 with Various Spherical Reflectors	D. R. Ferguson, D. C. Coonfield	06/09/1967	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (2)	report, original, good	N	
737	RFP-939	Empirical Analysis of Spherical and Hemispherical Assemblies of Enriched Uranium Metal	B. B. Ernst, C. L. Schuske, H. W. King	06/09/1967	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (1)	report, original, good	N	Data for HEU metal annular spheres for various reflector/internal material conditions.
738	RFP-956	Research and Quarterly Progress Report February, March, and April 1967 Nuclear Safety	C. L. Schuske	02/23/1967	Rocky Flats Plant, The Dow Chemical Company	Official Use Only	experimental criticality data	report, original, good	Y	Mathematical routine for empirical fits, Fortran programming.
739	RFP-968	Polynomial Curve Fit by Least Squares	H. E. Clark, D. C. Coonfield, L. E. Jackson	07/11/1967	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (3)	report, original, good	N	
740	RFP-977	Plutonium Handling Safety Analysis of the Rocky Flats Nuclear Safety Facility	D. C. Hunt, G. Tuck	11/08/1967	Rocky Flats Plant, The Dow Chemical Company	[None]	experiment safety analysis, experiment plans, operating procedures/requirements	report, original, good	N	
741	RFP-1017	Critical Masses of Oil Reflected, Enriched Uranium Metal Assemblies with Polyurethane Centers	B. B. Ernst	09/06/1967	Rocky Flats Plant, The Dow Chemical Company	[None]	experimental criticality data, computational method/data (2)	report, original, good	Y	
742	RFP-1133	The Effects of Spatial Resolution on Critical Mass Calculations	D. C. Coonfield, D. C. Hunt	05/31/1968	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (2)	report, original, good	N	
743	RFP-1134	Collision Probability Criticality Calculations	D. C. Hunt	04/16/1969	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (2)	report, original, good	N	
744	RFP-1186	Collision Probability Calculations of Multiplication Factors for Lattices	D. C. Hunt	01/10/1969	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (2)	report, original, good	N	
745	RFP-1206	Criticality Parameters Affecting Equipment Design for Fluoride Volatility Process	D. R. Ferguson, C. Lee Schuske	08/29/1968	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (2), equipment/process design	report, original, good	N	Maximum multiplication ~ 20
746	RFP-1242	Neutron Multiplication Measurements of Plutonium Ingots in Arrays	D. R. Ferguson	12/15/1968	Rocky Flats Plant, The Dow Chemical Company	[None]	experimental criticality data	report, original, good	Y	
747	RFP-1314	Critical Parameters of a Uranium Solution Slab-Cylinder System	G. Tuck, H. E. Clark	12/16/1970	Rocky Flats Plant, The Dow Chemical Company	[None]	experimental criticality data, computational method/data (2)	report, original, good	Y	

748	RFP-1327	The Effects of Energy Self-Shielding in Reflected and Moderated Uranium Metal Critical Mass Calculations	D. C. Hunt, D. C. Coonfield	12/29/1969	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (2)	report, original, good	N	
749	RFP-1489	Mixtures of Plutonium and Enriched Uranium in Slab Geometry	C. L. Schuske, D. C. Coonfield	08/10/1971	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (2)	report, original, good	N	
750	RFP-1585	Models for the Safe Storage of Fissile Metal	S. J. Altschuler, C. L. Schuske	09/24/1971	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (1)	report, original, good	N	
751	RFP-2034	Criticality Calculations for Plutonium Nitrate Solutions	D. Dickinson	05/09/1973	Rocky Flats Plant, The Dow Chemical Company	[None]	computational method/data (2)	report, original, good	N	
752	2012-68PE	RFD Container Model 55/30	F. E. Adcock	09/1968	Rocky Flats Plant, The Dow Chemical Company	[None]	transport safety analysis	report, original, good	N	
753	RM-847	A Brief Description of Some RAND Reactor Studies	G. Safonov	05/21/1952	The RAND Corporation, Santa Monica CA	Secret, declassified 07/06/1960	computational method/data (1)	report, original, good	N	
754	RM-1520	The Criticality and Some Potentialities of "Cavity Reactors"	G. Safonov	07/17/1955	The RAND Corporation, Santa Monica CA	Secret, declassified 09/18/1959	computational method/data (1)	report, original, good	N	Does not contain data; describes input types and format for a data bank primarily intended for deployed weapons components.
755	SCDR 312-60	Environmental Data Bank	R. Corn Jr.	12/1960	Sandia National Laboratory, Sandia Corporation	... not to be reproduced, in whole or in part, without written permission ...	operational/test/material data	report, original, good	N	
756	SC-RR-66-2706	SPR II Safety Analysis Report	R. L. Coats, P. D. O'Brien	01/1967	Sandia National Laboratory, Sandia Corporation	[None]	experiment safety analysis	report, original, good	N	EDNA: Electron Driven Nuclear Assembly. This report examines the potential use of an extremely-short-duration electron pulse to generate source neutrons within a just subcritical, fast-spectrum fissile assembly.
757	SC-RR-70-64	Potential EDNA Performance Characteristics	R. L. Coats	05/1970	Sandia National Laboratory, Sandia Corporation	[None]		report, original, good	N	Test evaluation of EDNA techniques using the Gulf General Atomics (GGA) Accelerator Pulsed Fast Assembly (AFPA).
758	SC-RR-71-0399	Electron Induced Neutron Production in Uranium Targets	R. L. Coates	06/1971	Sandia National Laboratory, Sandia Corporation	[None]		report, original, good	N	The report does not identify the site or company associated with the report.
759	SERM-78	Control Rod Calibration Methods	F. W. Pressey	03/31/1950	Fairchild Engine and Airplane Corp., Nuclear Energy for the Propulsion of Aircraft Project, Oak Ridge TN	Secret, declassified 12/19/1963	experiment plan/design	report, original, good	N	Based on neutron physics and fabrication issues, recommends a 10-mil HEU metal foil thickness for the early critical experiments for the NEPA project.
760	SERM-93	Fuel Heterogeneity and Thickness of Fuel Disks	J. F. Coneybear	12/07/1950	Fairchild Engine and Airplane Corp., Nuclear Energy for the Propulsion of Aircraft Project, Oak Ridge TN	Secret, declassified 12/19/1963	experiment plan/design	report, original, good	N	Paper submitted to IAEA Symposium on Exponential and Critical Experiments, Amsterdam. Two glossy B&W photos of the split table assembly.
761	SM 42/19	Operating Experience with the Zero-Energy Reactor VERA	J. W. Weale, M. H. McTaggart, H. Goodfellow, W. Paterson	09/1953	Aldermaston A.W.R.E. (U.K.A.E.A.)	[None]	experimental criticality data, experiment plan/design	report, original, good	Y	In folder labelled "SORA Critical Experiments (Euratom)"
762	ORNL-CF-68-4-5	Criticality Committee Review of the Oak Ridge Rotating Reflector Reactor (SORA)	Staff	04/03/1968	ORNL, Union Carbide Corporation	Internal use only. Also, not to be ... given public dissemination without ... approval ...	safety review	report, original, good	N	In folder labelled "SORA Critical Experiments (Euratom)"
763	No report number	AEC-ENEA Seminar on Intense Neutron Sources Session IIIa The SORA Reactor: Design Status Report	J. A. Larrimore, R. Hass, K. Giegerich, V. Raievski, W. Kley	09/1966	EURATOM, Ispra, Italy	[None]	experiment plan/design	report, original, good	N	In folder labelled "SORA Critical Experiments (Euratom)"

764	No report number	The SORA Reactor	V. Raievski	03/1964	EURATOM, Ispra, Italy	[None]	experiment plan/design	report, original, good	N	In folder labelled "SORA Critical Experiments (Euratom)". More than 45 memos regarding the ORNL SORA reactor program, to/from ORNL, AEC, and EURATOM staff, dating from 1965 to 1968.
765	No report number	See note	See note	See note	See note	[None]	experiment plan/design	memos, originals and copies, mostly good	N	
766	STEWS-TE-E	Report of Reactor Excursion During Test of Modified Core FBRF Operations Report No. 2	R. L. Long	07/1965	White Sands Missile Range, Army Missile Test and Evaluation Directorate	Reproduction of this report in whole or in part is prohibited except with permission of the Army Missile Test and Evaluation Directorate ...	criticality accident	report, original, good	Y	Memo from E. Grueling to Bengt Carlson and Carson Mark. No formal report cover, report number handwritten on first page of memo.
767	T-169	Recalculation of the Critical Masses of U and Pu Water Tamped Solutions	E. Grueling	09/01/1949	Not specified	Secret, declassified 02/25/1957	computational method/data (1)	memo, negative photostatic copy, fair	N	
768	TID-7016 Rev. 1	Nuclear Safety Guide	ANS-8 Standards Subcommittee, A. D. Callihan (Chair)	1961	Goodyear Atomic Company	[None]	handbook/bibliography	report, original, good	N	
769	TID-7019	Guide to Shipment of U-235 Enriched Uranium Materials	H. F. Henry	1959	Oak Ridge Operations Office, U. S. Atomic Energy Commission	[None]	transport safety analysis, equipment/process design, operating procedures/requirements	report, original, good	N	
770	TID-7028	Critical Dimensions of Systems Containing U-235, Pu-239, and U-233	H. C. Paxton, J. T. Thomas, Dixon Callihan, and E. B. Johnson	June 1964	LASL and ORNL	[None]	Single Units & Arrays, Poisons, Reflectors, Complex Shapes, Metals & Solutions	report, original, good	J-5700	145 pages, 130 references, 27 tables, 96 figures. Some normalization of geometry features.
771	TID-14844	Calculation of Distance Factors for Power and Test Reactor Sites	J. J. DiNunno, F. D. Anderson, R. E. Baker, R. L. Waterfield	03/23/1962	Division of Licensing and Regulation, U. S. Atomic Energy Commission	[None]		report, original, good	N	Guidance for compliance to Code of Federal Regulations requirements. Discusses "maximum credible accident," reactor siting criteria, dose limits to the public, and estimation of potential doses to the public.
772	TID-10068	An Interpretation of Data on Enriched Hydrogenous Thermal Reactors	M. Danzker	01/09/1951	Naval Reactor Program, Westinghouse Electric Corporation, Pittsburg PA	Confidential, declassified 05/23/1960	computational method/data (1)	report, original, good	N	
773	TID-10073	Energy Spectrum of Neutrons from Thermal Neutron Fission of U ²³⁵ and From an Untamped Multiplying Assembly of U ²³⁵	G. M. Freye Jr., J. H. Gammel, L. Rosen	05/1954	Los Alamos Scientific Laboratory (now LANL), University of California	Confidential, declassified 02/10/1958	nuclear measurement/data	report, original, good	N	
774	TID-21995	The Nuclear Aspects of the Accidental Criticality at Wood River Junction, Rhode Island July 24, 1964	F. R. Nakache, M. M. Shapiro	11/12/1964	United Nuclear Corporation	[None]	criticality accident	report, copy from microcard, fair	Y	
775	TID-22268	Operational Accident and Radiation Exposure Experience Within the United States Atomic Energy Commission 1943-1964	Staff	04/1965	Division of Operational Safety, U. S. Atomic Energy Commission	[None]	operational/test/material data	report, copy from microcard, fair	N	
776	TRG Information Series 17	DOCUMENT MISSING FROM FOLDER								English translation of the French report describing critical experiment facilities and programs at Saclay. Paper was presented at the O.E.E.C.- E.N.E.A. Symposium on Criticality Control, Karlsruhe, May 1961.
777	TRG Information Series 223 (D)	The Organisation of Experimental Criticality Research	J. Bertrand, D. Breton, R. Caizergues, C. Clouet d'Orval, E. Deilgat, M. Molbert, P. Verriere	1963	U.K.A.E.A. (Risley, Lancashire)	Unclassified	experiment plan/design	report, original, good	N	

778	TNCC (UK)-54	Preliminary Pile Oscillator Data for Oak Ridge Pu ²⁴⁰	S. K. Pattenden, R. B. Tattersall	08/1959	Harwell A.E.R.E. (U.K.A.E.A.)	Official use only. Not to be communicated ... to any person not authorized to receive it.	nuclear measurement/data	report, copy, good	N	
779	UCRL-4957	Spherical and Cylindrical Plutonium Critical Masses	F. A. Kloverstorn	09/1957	Radiation Laboratory, Livermore Site (now LLNL), University of California	[None]	experimental criticality data	report, original, good	Y	
780	UCRL-4975	DOCUMENT MISSING FROM FOLDER								
781	UCRL-4983-T	Studies of Enriched Uranium Graphite Reactor Systems	A. J. Kirschbaum	11/01/1957	Radiation Laboratory, Livermore Site (now LLNL), University of California	[None]	experimental criticality data	report, original, good	Y	
782	UCRL-5255	DOCUMENT MISSING FROM FOLDER								
783	UCRL-5349	Critical Parameters of Spherical Systems of Alpha-Phase Plutonium Reflected by Beryllium	H. R. Ralston	09/10/1958	Radiation Laboratory, Livermore Site (now LLNL), University of California	[None]	experimental criticality data	report, original, good	Y	
784	UCRL-6105	Hazards Summary Report The Kukla Prompt Critical Assembly	E. R. Christie, B. W. Mar	02/24/1960	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experiment safety analysis	report, original, good	N	
785	UCRL-6504	Preliminary Results of High-Temperature Bare U ²³⁵ -C Critical Assembly Measurements	R. G. Finke	06/06/1961	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experimental criticality data	report, original, good	Y	
786	UCRL-6729	Reactivity Effects of Various Reflectors on Near-Homogeneous, BeO-Moderated, Orally-Fueled Systems	J. R. Morton, F. J. Shon, T. F. Weirich, L. L. Gardner	01/02/1962	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experimental criticality data	report, original, good	Y	
787	UCRL-6901	Room Temperature Critical Measurements on Thorium-Loaded, Graphite-Moderated, Orally-Fueled Systems	G. M. Benson, R. H. Fox	06/30/1962	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experimental criticality data, nuclear data	report, original, good	Y	
788	UCRL-6980	High-Temperature Bare BeO Critical Experiments: General Description and Preliminary Results	R. G. Finke	06/29/1962	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experimental criticality data	report, original, good	Y	
789	UCRL-7345	Health Physics Following a Nuclear Excursion: The LRL Incident of 26 March 1963	R. L. Kathren, W. C. Day, D. H. Denham, J. L. Brown	06/03/1963	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	criticality accident	report, copy, fair+1779	Y	
790	UCRL-7695	Safety Analysis Report for the Super Kukla Prompt Burst Reactor	W. S. Gilbert, F. A. Kloverstorn, F. Rienecker Jr.	02/04/1964	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experiment safety analysis	report, original, good	Y	The report cover gives the same issue date as the initial version (02/04/1964) but an interior page identifies the revision date as 04/12/1966.
791	UCRL-7695 Rev. I	Safety Analysis Report for the Super Kukla Prompt Burst Reactor	W. S. Gilbert, F. A. Kloverstorn, F. Rienecker Jr.	02/04/1964	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experiment safety analysis	report, original, good	N	
792	UCRL-8417	Notes on Statistics for Physicists	J. Orear	08/13/1958	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	computational method/data (1)	report, original, good	N	Mathematical routine for empirical fits.
793	UCRL-8523	A Practical Guide to the Method of Least Squares	P. Cziffra, M. J. Moravcsik	10/17/1958	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	computational method/data (3)	report, original, good	N	Mathematical routine for empirical fits.

794	UCRL-8523 Rev.	A Practical Guide to the Method of Least Squares	P. Cziffra, M. J. Moravcsik	06/05/1959	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	computational method/data (3)	report, original, good	N	
795	UCRL-14174	Reconditioning of Plastic-Coated Fuel Elements	D. Freitas	05/1965	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	operational/test/material data	report, original, good	N	
796	UCRL-14413	The FRAN Prompt Burst Reactor	D. B. Stillman, S. W. Mead	09/29/1965	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experiment plan/design	report, original, good	N	Benchmark models for some of the experiments are provided in IHECSBE report PU-MET-FAST-003, -004, and -017.
797	UCRL-50175	Summary Report of Critical Experiments Plutonium Array Studies, Phase I	J. R. Morton III, G. A. Pierce, L. L. Gardner. C. J. Ball	12/22/1966	Lawrence Radiation Laboratory (now LLNL), University of California	[None]	experimental criticality data	report, original, good	Y	
798	WAPD-117	Reactor Properties of Water Moderated Slightly Enriched Uranium Lattices	J. R. Brown, B. H. Noordhoff, A. E. Profio, W. O. Bateson	11/1954	Westinghouse Electric Corporation, Pittsburgh PA	Secret, declassified 02/19/1958	experimental criticality data	report, original, good	Y	
799	WAPD-128	Critical Experiments on a Highly Enriched Homogeneous Reactor	J. R. Brown, B. H. Noordhoff, W. O. Bateson	05/1955	Westinghouse Electric Corporation, Pittsburgh PA	Confidential, declassified 10/06/1958	experimental criticality data	report, original, good	Y	
800	WAPD-134	Measurements of Thermal Utilization, Resonance Escape Probability, and Fast Fission Factor of Water Moderated Slightly Enriched Uranium Lattices	A. Z. Kranz	09/1955	Westinghouse Electric Corporation, Pittsburgh PA	Confidential, declassified 12/29/1955	experimental criticality data	report, original, good	Y	Note in folder stating "John Mihalcz 8-6-1958 WAPD-151"
801	WAPD-151	DOCUMENT MISSING FROM FOLDER								
802	WAPD-176	Kinetic and Buckling Measurements on Lattices of Slightly Enriched Uranium and UO ₂ Rods in Light Water	J. R. Brown, D. R. Harris, F. S. Frantz, J. J. Volpe, J. C. Andrews, B. H. Noordhoff	01/1958	Westinghouse Electric Corporation, Pittsburgh PA	[None]	experimental criticality data	report, original, good	Y	
803	WAPD-185	DOCUMENT MISSING FROM FOLDER								
804	WAPD-195	Monte Carlo Methods and Their Application to Neutron Transport Problems	J. Spanier	07/1959	Westinghouse Electric Corporation, Pittsburgh PA	[None]	computational method/data (2)	report, original, good	N	
805	WAPD-TM-621	Annular Seed-Blanket Reactor Critical Experiments	G. G. Smith, J. W. Beck, S. S. Glickstein, P. G. Johnson, J. D. Korsmeyer, P. H. Lehmann, S. Milani, J. A. Mitchell, C. D. Russell, S. H. Weiss, L. L. Wheat	02/1967	Westinghouse Electric Corporation, Pittsburgh PA	[None]	experimental criticality data	report, original, good	Y	
806	WAPD-MRP-45	DOCUMENT MISSING FROM FOLDER								Describes method to determine total power generation in a fissile assembly.
807	WAPD-TM-74	Absolute Power Calibration of a Flexible Survey Assembly	R. N. Olcott, D. Brown	08/1957	Westinghouse Electric Corporation, Pittsburgh PA	[None]	operational/test/material data	report, original, good	N	
808	WAPD-TM-244	Nuclear Analysis of Thermal Reflected Cylindrical Homogeneous Critical Assemblies	G. P. Rutledge, P. A. Kantorczyk	11/1960	Westinghouse Electric Corporation, Pittsburgh PA	[None]	computational method/data (1)	report, original, good	N	
809	WAPD-TM-614	Small Uranium-233 Fueled Seed-and-Blanket Critical Experiments (LWBR-LSBR Development Program)	S. Milani, S. H. Weiss	11/1967	Westinghouse Electric Corporation, Pittsburgh PA	[None]	experimental criticality data	report, original, good	Y	
810	WAPD-TM-621	Annular Seed-Blanket Reactor Critical Experiments	G. G. Smith, J. W. Beck, S. S. Glickstein, P. G. Johnson, J. D. Korsmeyer, P. H. Lehmann, S. Milani, J. A. Mitchell, C. D. Russell, S. H. Weiss, L. L. Wheat	02/1967	Westinghouse Electric Corporation, Pittsburgh PA	[None]	experimental criticality data	report, original, good	Y	
811	WAPD-TM-896	An On-Line Solid-State Reactivity Computer for Reactor Physics Testing	D. J. Miller, W. A. Shaughnessy	08/1970	Westinghouse Electric Corporation, Pittsburgh PA	[None]	operational/test/material data	report, original, good	N	

812	WAPD-TM-933	An Analytical Study of the Minimum Critical Mass of Highly Enriched U ₂₃₅ When Reflected by Natural Uranium and Water Mixtures in Optimized Lattices	A. W. Gray, L. L. Jones Jr.	03/1970	Westinghouse Electric Corporation, Pittsburg PA	[None]	computational method/data (1)	report, original, good	N	
813	WASH-183	An Economic Approach to Sample Size	M. N. Hudson	10/1954	Division of Production, U. S. Atomic Energy Commission	[None]	computational method/data (3)	report, original, good	N	
814	WASH-740	Theoretical Possibilities and Consequences of Major Accidents in Large Nuclear Power Plants	C. K. Beck, F. P. Cowan, K. W. Downes, J. A. Fleck, J. B. H. Kuper, J. McLaughlin, I. Singer, M. Smith	03/1957	Division of Civilian Application, U. S. Atomic Energy Commission	[None]	reactor safety	report, original, good	N	
815	WASH-1055	DOCUMENT MISSING FROM FOLDER								
816	WASH-1066	Reactor Physics Efforts Required in Support of the Fast Breeder Development Program		01/1966	Division of Reactor Development and Technology, U. S. Atomic Energy Commission					
817	WASH-1126	Cost-Benefit Analysis of the U. S. Breeder Reactor Program		04/1969	Division of Reactor Development and Technology, U. S. Atomic Energy Commission	[None]		report, original, good	N	
818	WCAP-1136	DOCUMENT MISSING FROM FOLDER								Only cover/title page and tables of critical experiment configurations (Tables I, XII, and XIII) are included. A copy of this report is at the ORNL library (252 p.)
819	WCAP-1433	Reactivity and Neutron Flux Distribution Studies in Multi-Region Loaded Reactor Cores	W. J. Eich, W. P. Kovacik	06/1961	Westinghouse Electric Corporation, Pittsburg PA	[None]	experimental criticality data	report, copy, incomplete	Y	
820	WCAP-2020	Westinghouse Atomic Power Division Reactor Evaluation Center Reactor Operations Procedure Manual	D. F. Hanlen	05/1962	Westinghouse Electric Corporation, Pittsburg PA	[None]	operating procedures/requirements	report, original, good	N	
821	WADC 58-88	Inelastic Scattering of Fast Neutrons from Nitrogen and Oxygen	N. A. Bostrom, I. L. Morgan, J. T. Prud'Homme, P. L. Okhuysen, A. R. Sattar	02/1958	Wright Air Development Center, Texas Nuclear Corporation	[None]	nuclear measurement/data	report, original, good	N	
822	WASH-1022	A Critical Review of the Cross Section and Fission Parameters of U ²³⁵ Below 1 eV	G. J. Safford, W. W. Havens Jr.	05/18/1959	Columbia University, Dept. of Physics, New York City NY	[None]	nuclear measurement/data	report, original, good	N	
823	WCAP-1316	Safety Report for the Critical Reactor Experiment Facility	D. F. Hanlen, D. Hunter, P. W. Davison	10/01/1959	Westinghouse Electric Corporation, Pittsburg PA	[None]	experiment safety analysis, experiment plan/design, operating procedures/requirements	report, original, good	N	
824	XDC-59-9-117	DOCUMENT MISSING FROM FOLDER								
825	XDC-60-1-157	DOCUMENT MISSING FROM FOLDER								
826	XDC-60-3-195	DOCUMENT MISSING FROM FOLDER								
827	Y-533	An Empirical Study of Some Critical Mass Data	C. L. Schuske, J. W. Morfitt	12/06/1949	Y-12	Secret, declassified 03/04/1958	computational method/data (1)	report, original, good	N	
828	Y-801 (Del.)	Critical Mass Studies, Part VI	A. D. Callihan, D. F. Cronin, J. K. Fox, J. W. Morfitt, E. R. Rohrer, D. V. P. Williams	08/08/1951	Y-12	Original report reissued as declassified with deletions	experimental criticality data	report, copy, fair	Y	
829	Y-829	Empirical Studies of Critical Mass Data Part II	C. L. Schuske, J. W. Morfitt	12/05/1951	Y-12	Secret, declassified 03/04/1958	computational method/data (1)	report, original, good	N	
830	Y-839	Empirical Studies of Critical Mass Data Part III	C. L. Schuske, J. W. Morfitt	01/16/1952	Y-12	Secret, declassified 06/21/1960	computational method/data (1)	report, original, good	N	
831	Y-853	Application of Criticality Information to Y-12 Plant Problems	C. L. Schuske	03/11/1952	Y-12	Secret, declassified 06/15/1960	equipment/process design	report, original, good	N	
832	Y-897	Potential Hazards of Criticality Accidents	C. L. Schuske	08/05/1952	Y-12	Secret, declassified 03/04/1958	criticality accident	report, original, good	N	Contains good-quality photos of experimental components.

833	Y-881	A Graphite Moderated Critical Assembly -- CA-4 Selected Properties of 2-Furaldehyde A Literature Search	E. L. Zimmerman	12/07/1952	Y-12	Secret, declassified 09/26/1957	experimental criticality data	report, original, good	Y	
834	Y-951	Minimum Critical Mass and Uniform Thermal Neutron Core Flux in an Experimental Reactor	F. L. Sachs	04/09/1953	Y-12	Unclassified	operational/test/material data	report, original, good	N	
835	Y-1023	Neutron Dose Calibration of Indium Personnel Dosimeters for Prompt-Critical Metal Bursts	J. W. Morfitt	12/01/1953	Y-12	Secret, declassified 01/22/1958	computational method/data (1)	report, original, good	N	
836	Y-1092	Response of Radiation Monitors to Prompt-Critical Bursts	J. W. Wachter, L. C. Emerson	03/01/1956	Y-12	Confidential, declassified 09/11/1962		report, original, good	N	
837	Y-1182	DOCUMENT MISSING FROM FOLDER	J. W. Wachter, B. J. Youngblood, S. F. Groothuis	04/08/1958	Y-12	Unclassified	criticality accident	report, original, good	N	
838	Y-1234	Criticality Considerations in the Design of Plants Using U ²³⁵	J. D. McClendon	01/20/1959	Y-12	Unclassified	equipment/process design	report, original, good	N	
840	Y-1248	Critical Assemblies of Uranium Metal	R. Gwin, W. T. Mee	03/26/1959	Y-12	Unclassified	computational method/data (1)	report, original, good	N	
841	Y-1273	DOCUMENT MISSING FROM FOLDER								
842	Y-1371	The Application of Data Processing Techniques to a Maintenance Work Control Program	J. D. Westbrook	08/07/1963	Y-12	[None]	operational/test/material data, operating procedures/requirements	report, original, good	N	
843	Y-1388	Concentration of Boron or Cadmium in U-235 Solutions for K _{eff} = 1	F. G. Welfare	06/05/1962	Y-12	Unclassified	computational method/data (1)	report, original, good	N	
844	Y-1460	A Nuclearly Safe Container for Class II Shipments of Dry Uranium Compounds	W. T. Mee, F. G. Welfare	11/26/1963	Y-12	[None]	transport safety analysis, computational method/data (2)	report, original, good	N	Overview of computational methods circa 1970 in use for Y-12 criticality safety applications.
845	Y-1703	Analysis of Fissile Material Storage and Shipping at the Y-12 Plant	E. C. Crume Jr.	01/08/1970	Y-12	[None]	transport safety analysis, computational method/data (2)	report, original, good	N	
846	Y-1793	An Eddy-Current Distance Gage for Precise Static Measurements	J. F. Ellis	08/02/1971	Y-12	[None]	operational/test/material data	report, original, good	N	
847	Y-1858	Validation Checks of the "ANISN" and "KENO" Codes by Correlation with Experimental Data	G. R. Handley, C. M. Hopper	11/20/1972	Y-12	[None]	computational method/data (2)	report, original, good	N	
848	Y-1948	Validation of the "KENO" Code for Nuclear Criticality Safety Calculations of Moderated, Low-Enriched Uranium Systems	G. R. Handley, C. M. Hopper	06/13/1974	Y-12	[None]	computational method/data (2)	report, copy, good	N	
849	Y-A2-71	Critical Mass Tests on Orallo Machine Turnings	D. F. Cronin, J. F. Fox, J. D. McLendon, J. W. Morfitt, C. L. Schuske, P. E. Wilkinson	02/29/1952	Y-12	Secret, declassified 03/27/58	experimental criticality data	report, original, good	Y	
850	Y-A2-124	Critical Assemblies of Orallo	R. Gwin, W. T. Mee	12/08/1953	Y-12	Secret, declassified 07/24/1964	computational method/data (1)	report, original, good	N	See ORNL-CF-65-12-42 for J. T. Thomas' report for the same events.
851	Y-A2-285	Trip Report: The OEEC-ENEA Symposium on Criticality Control, Karlsruhe, Germany, May 2-5, 1961 and Visits to Nuclear Installations in the United Kingdom, May 8-12, 1961	J. W. Wachter	06/19/1961	Y-12	[None]		report, original, good	N	YAEC: Yankee Atomic Electric Company.
852	YAEC-142	Two-Region Critical Experiments with Water Moderated Slightly Enriched UO ₂ Lattices	P. W. Davison, V. E. Grob, D. F. Hanlen, R. D. Leamer, H. Ritz, E. Sandandrea	11/30/1959	Westinghouse Electric Corporation, Pittsburg PA	[None]	experimental criticality data	report, original, good	Y	
853	Y-B23-2	Preliminary Direct Cycle Reactor Assembly - Part II	A. D. Callihan	05/21/1952	ORNL	Secret, declassified 09/12/1961	experimental criticality data	report, original, good	Y	
854	Y-DD-19	Evaluation of the M-101 and M-102 Shipping Containers in Vermiculate-Filled 55-Gallon Drums	G. R. Handley, E. C. Crume Jr., W. T. Mee	08/26/1968	Y-12	[None]	transport safety analysis, computational method/data (2)	report, original, good	N	Document lacks a formal Y-12 cover sheet. Little "analysis" or technical basis is presented.
855	Y-DD-49	Criticality Safety Analysis of Fissile Material Storage Areas in Building 9213	W. T. Mee	11/05/1969	Y-12	[None]	criticality safety analysis	report, copy, good	N	Contains a brief discussion of fixed nuclear accident dosimeters. Folder includes a "memo of conversation" between Calliahn and Roberts; this memo contains additional details on the dosimetry equipment.
856	Y-DD-112	Nuclear Accident Dosimeters Table of Locations	R. C. Hentchel, J. D. McClendon, E. Roberts Jr.	03/16/1972	Y-12	[None]	dosimetry	report, original, good	N	The source was immersed in water.

857	Y-DR-1	Thermal Neutron Flux Distribution from a ²⁵² Cf Spontaneous-Fission Neutron Source	D. W. Magnuson	10/17/1968	Y-12	[None]	nuclear measurement/data	report, original, good	N	Addresses Ventilation, Fissile Materials, Controls & Safety Systems, Super-Prompt Critical, Radiation Monitors and Administrative Requirements
858	Y-DR-3	OPERATIONAL SAFETY LIMITS for the OAK RIDGE CRITICAL EXPERIMENTS FACILITY	ORCEF Staff	11/08/1968 (Revised)	Y-12	(None)	8 Pages of Safety Significant Limits in 7 operational areas	report, original, good	J-5700	Figure 1 shows Ground Floor & Second Floor Plans & 3 Exclusion Areas
859	Y-DR-4	OAK RIDGE CRITICAL EXPERIMENTS FACILITY PERSONNE LACCESS CONTROL PROCEDURES	ORCEF Staff	11/08/1968	Y-12	(None)	7 pages of Exclusion Areas, Access Control, Assembly Areas & Administrative Procedures	report, original, good	J-5700	
860	Y-DR-11	Calculated Critical Radii for Bare Spheres of Uranyl Nitrate-Nitric Acid Solutions and Uranium-Water Mixtures	D. W. Magnuson	03/15/1969	Y-12	[None]	computational method/data (2)	report, original, good	N	Figure 1. shows the staff elements internal to ORCEF, their lines of supervision and integration into the Y-12 Technical Division & Program Review Committees
861	Y-DR-53	OAK RIDGE CRITICAL EXPERIMENTS FACILITY ADMINISTRATIVE MANUAL	ORCEF Staff	06/26/1971	Y-12	[None]	11 pages of text covering Philosophy of Operations, Facility Organization, Periodic Reviews, Fissile Material Storage & Handling, and Quality Assurance	report, original, good	J-5700	Figures 1. & 2. show the Evacuation Routes for the Ground & Second Floors, resp.
862	Y-DR-68	OAK RIDGE CRITICAL EXPERIMENTS FACILITY EMERGENCY PROCEDURES	ORCEF Staff	06/09/1971	Y-12	[None]	8 pages describing Policy, General Information, Evacuation Routes & Assembly Points, Procedures, & Subsequent Action	report, original, good		
863	Y-DR-83	Critical Three-Dimensional Arrays of Neutron-Interacting Units: Part III Arrays of U(93.2) Metal Separated by Various Materials	D. W. Magnuson	05/15/1972	Y-12	[None]	experimental criticality data	report, original, good	Y	
864	Y-DR-91	Calculated Critical Mass for Spheres of ²³⁵ UO ₂ -H ₂ O Mixtures for Nuclear Criticality Safety Evaluations	D. W. Magnuson	09/29/1972	Y-12	[None]	computational method/data (2)	report, original, good	N	
865	Y-DR-92	Limiting Critical Plutonium Concentrations for Plutonium-Uranium-Water Mixtures	D. W. Magnuson	11/20/1972	Y-12	[None]	computational method/data (2)	report, original, good	N	
866	Y-DR-107	Calculated Criticality of Water Moderated Oxides of Uranium-233, Thorium-232, and Carbon Mixtures	J. T. Thomas	04/30/1973	Y-12	[None]	computational method/data (2)	report, original, good	N	
867	Y-DR-109	Critical Three-Dimensional Arrays of Neutron-Interacting Units: Part IV Arrays of U(93.2) Metal Reflected by Concrete and Arrays Separated by Vermiculite and Reflected by Polyethylene	D. W. Magnuson	04/30/1973	Y-12	[None]	experimental criticality data	report, original, good	Y	
868	Y-F10-45	Criticality Calculations for the U-235 Be Experiment	G. M. Safanov	04/03/1951	Y-12	Secret, declassified 06/21/1960	computational method/data (1)	report, original, good	N	
869	Y-F10-55	The Contribution of the (n,2n) Reaction to the Beryllium Moderated Reactor	C. B. Mills, N. M. Smith Jr.	06/05/1951	Y-12	Secret, declassified 04/12/1957	computational method/data (1)	report, original, good	N	
870	Y-F10-66	Numerical Technique for Criticality Calculations on Hydrogen Moderated Reactors	J. W. Webster	08/20/1951	Y-12	Secret, declassified 04/22/1957	computational method/data (1)	report, original, good	N	Scoping calculations to determine the inventory of materials needed, includes chemical analysis of some materials to be used.
871	Y-F10-108	The ARE Critical Experiment	C. Mills, D. Scott	08/08/1952	ORNL	Secret, declassified 03/29/1961	computational method/data (1), experiment plan/design	report, original, good	N	This is a translation of a Norwegian report by same title, dated 09/06/1951.
872	Y-F33-2	The Uranium Reactor at Kjeller and Its Prospective Radioisotope Production	C. E. Saland	01/17/1952	ORNL	Unclassified		report, original, fair	N	
873	Y-KB-22	Tests of a Proposed Uranium Container	J. D. McClendon	12/03/1962	Y-12	[None]	operational/test/material data, transport safety analysis	report, original, good	N	
874	Y-KB-35	Meeting of International Organization for Standardization, Technical Committee 85, Subcommittee 3, Working Group 5 and Trip Report - AWRE, Aldermaston and UKAEA, Risley	J. D. McClendon	11/13/1963	Y-12	[None]	standards	report, original, good	N	
875	Y-KC-28	A Nuclearly Safe Container for Class II Shipments of Dry Uranium Compounds	W. T. Mee, F. G. Welfare	11/26/1963	Y-12	[None]	transport safety analysis, computational method/data (2)	report, original, good	N	
876	Y-KC-96	DOCUMENT MISSING FROM FOLDER								

877	Y-KC-106	Evaluation of a Shipping Container for Enriched Uranium Metal and Dry Compounds	E. C. Crume Jr., G. R. Handley, R. H. Pletz	10/11/1967	Y-12	[None]	transport safety analysis, computational method/data (2), operational/test/material data	report, original, good	N	
878	Y-KC-109	Evaluation of a Shipping Container for Enriched Uranium Solution	E. C. Crume Jr., G. R. Handley, W. T. Mee, R. H. Pletz	12/18/1967	Y-12	[None]	transport safety analysis, computational method/data (2), operational/test/material data	report, original, good	N	