DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

Declassification--
OSRD 8-E

CONFIDENTIAL

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
1530 P Street, N. W.
Washington 25, D. C.

Dual OSRD

OSRD MEMORANDUM NO. 121

December 26, 1945

SUBJECT: LISTS OF DECLASSIFIED PROJECTS, CONTRACTS, AND REPORTS

Because of the large amount of paper work involved, it will not be possible for the OSRD to notify individually all persons who may be interested, of the declassification of projects, contracts, and reports. It has been decided, therefore, to issue in bulletin form, as often as the volume may warrant, lists of projects, contracts and reports which have been declassified. The lists will cover declassification actions for a designated period, and will be numbered consecutively in the order issued.

Additional copies may be obtained from the OSRD Procedures Section, 1530 P Street, N. W., Washington 25, D. C. The distribution, which will not be listed on future bulletins, will be as follows, except for any additions which may be requested.

Lee Anna Embrey
Administrative Officer

Bulletin Distribution

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   c. Office of the Executive Secretary
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   d. Liaison Office
   e. Section T

2. National Defense Research Committee
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7. Naval Research Laboratory

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

List No. 1
Nov. 1 - Dec. 14, 1945
PROJECTS

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
1530 P Street, N. W.
Washington 25, D. C.

DECLASSIFIED PROJECTS, CONTRACTS, AND REPORTS

DECLASSIFIED PROJECTS*

Project No.	Project No.
AC-93	CWS-30
AC-236.01	CWS-31
AC-236.02	CWS-32
CE-4	CWS-33
CE-7	CWS-34
CE-8	NS-115
CE-10	NS-366
CE-18	Carrier Cargo M-29C developed under Project OD-65
CE-28	OD-179
Extensions 1, 3 and 4 to CWS-1	QMC-5
CWS-5	QMC-7
CWS-8	QMC-12
CWS-9	QMC-28
Extension to CWS-10, "Establishment of a Group for the Evaluation of Flame Throwers"	QMC-30
CWS-11	QMC-35
CWS-12	QMC-43
CWS-13	SC-90
CWS-17	SC-92.12
CWS-21	SC-96.02
Extension 1 to CWS-21	SC-98.98
CWS-22	SC-99
Extension 1 to CWS-22	SC-101
CWS-23	SC-101.02
CWS-26	SC-101.03
	SC-106.05

* Unless otherwise indicated the declassification of a project covers all of the extensions. Please note, however, that in some instances extensions have been declassified without regard to the overall project which remains classified. Titles of extensions are given only where there is no other means of identifying them.

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

List No. 1
Nov. 1 - Dec. 14, 1945
NDRC CONTRACTS

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
1530 P Street, N. W.
Washington 25, D. C.

DECLASSIFIED NDRC CONTRACTS

Declassification of Entire Contract

NDCrc-154
University of Illinois

OEMsr-25
Harvard University

OEMsr-57
Brown University

OEMsr-113
University of Chicago

OEMsr-167
Factory Mutual Research Corp.

OEMsr-179
Harvard University

OEMsr-183
Standard Oil Development Co.

OEMsr-198
Monsanto Chemical Co.

OEMsr-234
Massachusetts Institute of Technology

OEMsr-257
Factory Mutual Research Corp.

OEMsr-296
Victor Chemical Works

OEMsr-354
Standard Oil Development Co.

OEMsr-362
Purdue University

OEMsr-388
University of Pennsylvania

OEMsr-470
Gilbert and Barker Mfg. Co.

OEMsr-661
Factory Mutual Research Corp.

OEMsr-677
Nuodex Products Co., Inc.

OEMsr-774
E. I. duPont de Nemours & Co.

OEMsr-847
Harshaw Chemical Co.

OEMsr-850
Bakelite Corp.

OEMsr-882
Ferro Drier and Chemical Co.

OEMsr-898
Texas Co.

OEMsr-916
Shell Oil Co., Inc.

OEMsr-943
C. F. Braun

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

Declassification of Entire Contract

OEMsr-1011
Standard Oil Co. (Indiana)

OEMsr-1057
Stanford University

OEMsr-1170
Ford, Bacon and Davis, Inc.

OEMsr-1266
Davey Compressor Co.

OEMsr-1281
Ferro Drier and Chemical Co.

OEMsr-1364
Morgan Construction Co.

OEMsr-1468
California Research Corp.

Declassification of Parts of Contracts

OEMsr-102 - University of Illinois
Work concerned with DDT dispersal

OEMsr-260 - Princeton University
Supplement II only

OEMsr-830 - Psychological Corp.
Information concerning code actuated printer

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DECLASSIFIED REPORTS (CONT.)

NDRC Division 10, Contract NDCRc-154, University of Illinois

Informal Report LXXXII	"Substitutes for Gas Mask Absorbents. The Use of Wyolite as an Inert Carrier for Absorbents" - - - - - - - - 2-10-42
Informal Report XCVII	"Substitutes for Gas Mask Absorbents. The Use of Wyolite as an Inert Carrier for Absorbents" - - - - - - - - 4-15-42
Informal Report CXXV	"Substitutes for Gas Mask Absorbents. The Use of Wyolite as an Inert Carrier for Absorbents" - - - - - - - - 5-15-42
Informal Report CXXXIX	"Substitutes for Gas Mask Absorbents. The Use of Wyolite as an Inert Carrier for Absorbents" - - - - - - - - 6-15-42
Final Report	"Substitutes for Gas Mask Absorbents. The Use of Vormiculite as an Inert Carrier for Absorbents" - - - 12-8-43

NDRC Division 14, Contract OEMsr-362, Purdue University

D1-115	"Investigation of Crystal Rectifier DC Characteristics" - - - - - - - 12-3-42
14-129	"The Diffusion Theory of Crystal Rectifiers" - - - - - - - - - - - 9-10-42
14-133	"On the Theory of Noise in Conductors, Semiconductors, and Crystal Rectifiers" - - - - - - - - - - - - - - - - - - 5-12-43
14-143	"Determination of Logarithmic Constants of Crystal Rectifiers with the Oscilloscope" - - - - - - - - - 4-20-43
14-144	"Measurement of Conversion Gain with a Modulated Oscillator" - - - 4-20-43
14-167	"Crystal Noise as a Function of DC Bias and 30 Mc Impedance Measured with a Diode Noise Source" - - - - - - 6-25-43
14-168	"Theory of Contact Rectifiers"6-15-43
14-259	"The Theory of Crystal Mixers in Terms of Measurable Mixer Constants"3-24-44

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DECLASSIFIED REPORTS*

OSRD NO.	OSRD NO.
495	3821
615	3829
619	3830
637	3830A
983	3914
1113	3923
1388	3928
1389	3929
1857	3930
1893	3943
2066	3958
2066A	3964
2058	3993
2090	3994
3239	3995
3330	3996
3353	4029
3354	4051
3366	4158
3410	4175
3419	4177
3428	4193
3436	4194
3437	4195
3480	4211
3481	4434
3501	4980
3508	4981
3551	5039
3557	5125
3558	5126
3574	5127
3593	5209
3603	6011
3605	6012
3616	6014
3670	6190

* Titles of reports are shown only where it is necessary in order to identify them fully.

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

DECLASSIFIED REPORTS (CONT.)

14-284	"High Frequency Characteristics of Rectifiers" - - - - - - - - - - - 5-5-44
14-285	"Quantitative Spectroscopic Analysis of Impurities in Germanium and Silicon" - - - - - - - - - - - - - - - - - - 5-5-44
14-286	"Theory of Small Deviations from Pure Diode Behavior" - - - - - - - - 5-5-44
14-341	"Preparation of High Voltage Germanium Crystals" - - - - - - - - - - -11-1-44
14-342	"The High Voltage Germanium Rectifiers" Section I - - - - - - - - - - 11-1-44
14-375	"The High Voltage Germanium Rectifier" Section II - - - - - - - - - 12-26-44
14-394	"Test Equipment for Germanium Second Detector Units" - - - - - - - 1-25-45
14-413	"Properties of Germanium High-Back Voltage Rectifier Units"- - 3-19-45
14-416	"Dependence of Performance of Germanium Second Detector Units on Bias and Video Load" - - - - - - - - - - - - - 3-28-45
14-404	"The Scattering of Electromagnetic Radiation by a Narrow Rectangular Strip of Infinite Conductivity" - 12-28-44

NDRC Division 14, Contract OEMsr-388, University of Pennsylvania

Final Report No. 562	"Research and Development of Crystal Rectifiers" - - - - - - - - - 10-22-45
Forty-nine Interim Reports	Listed on pages 34-37, inclusive, of Final Report No. 562

NDRC Division 17, Contract OEMsr-734, Duke University

Informal Communication IC-2	"Discussion of Army Ground Forces Reports C-Misc-30, ETO, and C-Misc-29, ETO"

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OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED PROJECTS, CONTRACTS AND REPORTS

List No. 2

December 17-31, 1945

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

List No. 2
Dec. 17-31, 1945
PROJECTS

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
1530 P Street, N. W.
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DECLASSIFIED PROJECTS, CONTRACTS, AND REPORTS

DECLASSIFIED PROJECTS*

Project No.
OD-03
SC-126
SC-126.1
SC-126.2
SC-126.3
SC-126.4
SC-126.5
SC-126.6
SC-126.7
SC-127
SC-127.1
SC-127.2
SC-128
SC-128.1
SC-128.2
SC-129
SC-129.1
SC-130

* Unless otherwise indicated the declassification of a project covers all of the extensions.

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DECLASSIFIED CMR CONTRACTS

Declassification of Entire Contract

OEMcmr-29
Gorgas Memorial Institute of Tropical and Preventative Medicine, Inc.

OEMcmr-265
The Christ Hospital

OEMcmr-394
City of Baltimore

OEMcmr-416
E. I. duPont de Nemours & Co.

DECLASSIFIED NDRC CONTRACTS

Declassification of Entire Contract

NDCrc-42
Bakelite Corp.

NDCrc-95
Hazeltine Electronics Corp.

OEMsr-52
Bakelite Corp.

OEMsr-446
Bakelite Corp.

OEMsr-522
Massachusetts Institute of Technology

OEMsr-691
Radio Corp. of America

OEMsr-833
Brush Development Co.

OEMsr-892
Barber-Colman Co.

OEMsr-899
Bristol Co.

OEMsr-1139
E. I. duPont de Nemours & Co.

OEMsr-1377
General Electric Co.

OEMsr-1408
Western Electric Co.

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DECLASSIFIED REPORTS*

OSRD NO.	OSRD NO.	OSRD NO.	OSRD NO.
31	1245	1944	4210
32	1323	1976	4249
33	1333	3066	4472
34	1404	3075	4488
274	1493	3384	4513
309	1495	3667	4847
624	1543	3668	4883
881	1566	3677	4957
969	1763	3904	5053
1174	1838	4044	5067
			5098

NDRC Division 7, Contract OEMsr-892, Barber-Colman Co.

"Description and Operating Instructions for Computing Sight T-62" - - - - - - -3/44

NDRC Division 7, Contract OEMsr-893, Bristol Co.

"Description and Operating Instructions for Tenney Plotting Board"- - - - - - -9/43

NDRC Division 14, Contract OEMsr-391, Radio Corp. of America

Division 14
Report No. 179 — "Propagation of Signals on 45.1, 474 and 2800 Mc from Empire State Building to Hauppauge and Riverhead," L. I., N. Y.- - - - - -7/20/43

Division 14
Report 2?8 (Final Report) — "Propagation of Signals on 45.1, 474 and 2800 Mc from Empire State Building to Hauppauge and Riverhead," L. I., N. Y.- - - - - -7/31/44

NDRC Division 14, Contract OEMsr-1139, E. I. duPont de Nemours & Co.

Division 14
Report No. 386 (Final Report) — "Sintering or Melting of Boron and Preparation of Hyperpure Germanium"

All interim reports prepared under the contract

* Titles of reports are shown only where it is necessary in order to identify them fully.

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OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 14, Contract OEMsr-1377, General Electric Co.

Division 14
Report No. 427 (Final Report) "K-Band Germanium Crystals" - - - 3/26/45

NDRC Division 14, Contract OEMsr-1408, Western Electric Co.

Division 14
Report No. 555 (Final Report) "Preparation of High Back Voltage Germanium Rectifiers" - - - - - 10/25/45

All interim reports prepared under the contract

NDRC Division 14, Massachusetts Institute of Technology Radiation Laboratory Reports

New Nos.	Old Nos.	Titles
2	A-2S	Report on XP-61 Mock-up
6	B-1S	Special Report on Data Transmission by Means of Selsyns
7	B-2S	Special Report on Bolometer Blind Landing System
8	B-3S	Report on Preliminary Results with the XT-1
9	B-4S	Errors in Range Measurement with A Circular Sweep
10	B-5S	Improvements in the Spot Error Indicator
11	B-6S	Tuning the RF Components of a System (Lawson Technique)
12	B-7S	Selsyns
13	C-1	Microwave Interference Patterns
14	C-2	Transmission on 3000 MC Over Sea Water
15	C-3	Transmission on 100 MC Over Sea Water
17	C-5	Transmission on 500 MC Over Sea Water
18	C-6	Relation of Radar Range to Frequency and Polarization
19	C-7	Change of Polarization as A Means of Gap Filling
20	C-8	Properties of the Diffracted Wave Field Intensity
21	C-9	Radar Height Finding
22	C-10	Transmission at Low Altitudes Over Sea Water
23	C-11	Field Intensity Formulas
24	D-1	Advance Development 3.3 CM. System
25	D-2	3-CM System Group Report
26	D-3	Measuring Instruments for Three Centimeters
27	D-4	Airborne 3 Cm. Radar Equipment for Al and ASV Applications
29	F-1S	Beacon Discrimination Circuit
31	G-2	Thyratron Serve Control Circuit for Spinners
32	O-1	Present Status of the Radiation Laboratory Program
34	OP-1	Maintenance Experience with ASV Equipment
37	R-1S	Roof System Report Initial Development February 15 - April 1 1941
39	R-3S	Roof Section
40	R-VIII-1	Regular Report on The Maintenance Group

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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 14, Massachusetts Institute of Technology
Radiation Laboratory Reports
(Cont'd)

New Nos.	Old Nos.	Titles
41	R-I-2	Regular Report on The Components Testing System
42	R-I-3	Regular Report on The Components Testing System
43	R-I-4	Regular Report on The Components Testing System
44	R-I-2-S	Special Report on Buffered Multiple Phase Box
45	R-II-2	Regular Report on The Operation of the Screen Cage
46	R-II-3	Regular Report on The Advanced Development System
47	R-III-2	Regular Report on Indicators and Synchronizers
48	R-III-3	Regular Report on Indicators and Synchronizers
49	R-III-4	Indicators and Synchronizers
50	R-IV-4	Regular Report on The U.S.S. Semmes 3000 Megacycle Operations
51	R-IV-5	Regular Report on The U.S.S. SEMMES 3000 Megacycle Operations
53	R-V-2	Regular Report on The X-JO-3
54	R-V-4	Regular Report on The X-JO-3
55	R-V-5	Regular Report on The Navy Dirigible K-3
56	R-VI-2	Regular Report on Spinners and Radiators
57	R-VI-3	Regular Report on Spinners and Radiators
58	R-VII-2	Regular Report on The XT-3
59	R-VII-3	Regular Report on The XT-3
60	R-VIII-2	Regular Report on The Maintenance Group
61	R-VIII-3	Regular Report on The Maintenance Group
62	R-IX-2	Regular Report on The B-24
63	R-IX-3	10 Cm. ASV Equipment on LB 30 Airplanes
64	R-X-2	Regular Report on The PBM-1
65	R-X-3	Regular Report on The CXBH-1 (The PBM-1)
69	4-Sec.I	Modulators and Sychronizers
70	5-Sec.I	Modulators
71	6-Sec.I	Report of the Modulator Group
72	7-Sec.I	Regular Report of Modulator Group
73	8-Sec.I	Peak Currents from Carbonized Thoriated Tungsten Cathodes by W. H. Bostick
74	I-1S	Instruction Manual Browning Type "A" Synchronizer
75	I-2S	Report of Activities of Synchronizer Section
76	I-3S	Test Set for Raytheon Service Modulator, Instructions for Operation and Testing
77	I-4S	R.F. Envelope Indicator
78	I-5S	Instruction Manual for Raytheon Service Modulator
83	II-5	Transmitter Tube Section
85	II-7	Transmitter Tube Section
86	II-1S	Special Report on Guide to the Operation of 10 Cm Standard Magnetrons
88	II-3S	Special Report on Note on the Design of Magnetrons
89	II-4S	Special Report on Wave Guide Termination for Measuring Power at 3.2 CM.

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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 14, Massachusetts Institute of Technology
Radiation Laboratory Reports
(Cont'd)

New Nos.	Old Nos.	Titles
90	II-5S	Special Report on Cathode Temperatures in Magnetrons
91	III-1	Report of Parabola Section
92	III-2	Report of Parabola Section
93	III-3	Report of Parabola Section
97	III-7	Report of the Antenna Group
101	IV-2	Receivers
103	IV-4	Receivers, T-R Boxes, Measurements
104	IV-5	Receivers
106	IV-2S	Special Report on Receivers
108	IV-5S	Special Report on Signal-to-Noise Measurements on Receivers
109	IV-6S	Special Report on A 30 MC Pulsed Signal Generator
110	IV-7S	Special Report on Comparative Signal Noise Measurements on Crystal Mixers and Grounded Grid Tube Mixers
111	IV-8S	A 1 CM. Oscillator
112	IV-9S	I.F. Amplifier Design
116	V-3S	Impedance in Transmission Lines and Wave Guides
117	V-4S	Report on Night Fighter Pursuits
118	V-5S	Theory of the Magnetron Oscillator
119	V-6S	Coincidence Method of Noise Reduction
124	V-11S	Report on Junction Effects in Wave Guides
125	V-12S	Ideal Frequency Response of A Receiver for Square Pulses
126	V-13S	Correction of the Scanning of Ship Borne Radar Systems for Roll and Pitch of the Ship
127	V-14S	Theory of the Split-Anode Magnetron
128	V-15S	Theory of Diffraction by Small Holes
135	VI-1S	Special Report for the Cathode-Ray Tube Section
136	VI-2S	Special Report
137	VI-4S	Excitation and Decay of Luminescence under Electron Bombardment
137	VI-4Sa	(abridged) Luminescence of RCA Cathode Ray Tube with Cascade Screen
138	VI-5S	Indicator Components as Used in a Complete Aircraft Interception Installation
141	VII-0S	Design and Test of Concentric Transmission Lines
143	VII-2S	Special Report on Tunable Cavities
144	VII-3S	Special Report on Transmission Characteristics of Suggested Airplane Nose Materials
147	VII-6S	Special Report on Design Data for 50 OHM Rigid Coaxial Line
148	VII-7S	Special Report on Theory of A "Black Body" produced by a Combination of a Thin Screen and A Perfect Mirror

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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 14, Massachusetts Institute of Technology
Radiation Laboratory Reports
(Cont'd)

New Nos.	Old Nos.	Titles
150	VII-9S	Transmit-Receive Switch
151	VII-10S	R F Components List No. 1
152	VII-11S	Tests on Undercut Beads in a Concentric Line
153	VII-12S	Crystals
156	VII-15S	Scattering of 10 Cm. Radiation by a Model Airplane
160	41-1	Tune-Up Procedure for 3 CM. R.F. System
161	41-2	Matching, Losses, and Frequency Sensitivity of A 3 CM. R. F. System
162	41-3	Polarization Effects in A Circular Wave Guide at 3 CM
163	41-4	3 CM Magnetron Cold Impedance
164	41-5	Losses and Reflections Introduced by Joints and Plungers in 3 CM Wave Guides
165	41-6	Wave Guide Components and Instruments for the 1.25 CM Region
166	41-7	Various 3 CM TR Box Characteristics
167	41-8	Measurements with A Frequency-Modulated Oscillator at 3 CM
168	41-9	A Method For Measuring The Absolute Gain of Microwave Antennas
169	41-10	Rear Rectangular Guide Antenna Feed
170	41-11	Illumination and Phases of Antenna Feeds
171	41-12	Round Guide Rear Antenna Feeds
173	42-2	Radar Echoes From Atmospheric Phenomena
174	43-1	Propagation in Wave Guides Partly Filled with a Dielectric
175	43-2	The Atmospheric Absorption of Microwaves
176	43-3	Outline for a Theory of the Space Charge in an Oscillating Magnetron
177	43-4	Radiation Resistance of Antennas inside Wave Guides of Arbitrary Cross-Sections
178	43-5	A New Approach Procedure for Night Fighting
178	43-5a	A New Method in Night Fighting
180	43-7	T-Junctions in Rectangular Wave Guides Part II: Final Formulas and Curves
182	43-9	Resonant Modes of the Magnetron
183	43-10	The Susceptance of Asymmetrically Located Windows in Rectangular Wave Guides
184	43-11	Theory of High Frequency Rectification by Silicon Crystals
185	43-12	Theory of the Boundary Layer of Crystal Rectifiers
186	43-14	General Relations Determining the Range of a Radar System
187	43-15	Effect of Routine Evasive Action on the Calculated Approach Procedure (A Supplement to Report 43-5, A New Approach Procedure For Night Fighting)

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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 14, Massachusetts Institute of Technology
Radiation Laboratory Reports
(Cont'd)

New Nos.	Old Nos.	Titles
188	43-16	Forced Oscillations in Cavity Resonators
189	43-17	Reflections from Sections of Tapered Transmission Lines and Wave Guides, N. H. Frank
190	43-18	Input Impedance and Tuning of Magnetron Cavities
191	43-19	Kinetic Derivation of the Thermal Noise Formula
192	43-20	Statistics of Circuit Noise
193	43-21	The Comparison Between Signal and Noise
194	43-22	Lumped Constants for Small IRISES
195	43-23	Microwave Radar Reflections
196	43-24	Possible Measurement of Radar Echoes by Use of Model Targets
197	43-25	Coupling between Inductive Windows in Wave Guides
198	43-26	Formal Theory of Wave Guides of Arbitrary Cross Section
199	43-27	Theory of Side Windows in Wave Guides
200	43-28	Theory of Magnetron Operation
201	43-29	A Numerical Calculation of Space Charge Behavior and Power in the Magnetron
202	43-30	Excitation of Cavities Through Windows
203	43-31	The Application of Corner Reflectors to Radar (Theoretical)
204	43-32	Use of the Range Clock in Night Fighting with AI Equip.
205	43-34	The Theory of Obstacles in Resonant Cavities and Wave Guides
206	43-35	Theory of Circular Bends in Rectangular Wave Guides
207	50-1	Spark Gap Colloquim at Radiation Laboratory MIT July '42
208	50-2	Modulator Colloquim April 16-17, 1943
209	51-8	Rotary Spark Gap Modulators
210	51-9	Tests on Five Types of Triggered Switch Modulators
211	51-10	Report on Some Tubes Used in Hard Tube Modulators
212	51-11	Report on Hard Tube Modulators and Drivers
213	51-12	Pulse Transformers
214	51-13	A Line-Controlled Blocking Oscillator
215	51-14	The Measurement and Design of D.C. Resonant Charging Chokes
216	51-15	Modulated Pulse Communication
217	51-16	Pulse Transformers by Winston H. Bostick, P. Roger Gillette, and Harold L. Rohkopf
218	51-17	Oscilloscope Presentation of Hysteresis Loops at 60 Cycles and Under Pulse Conditions
219	51-18	Test Equipment for Pulse Transformers
220	52-1	Preliminary Report on Frequency Shift vs. Magnetron Box Temperature

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221	52-2	R. F. Loading of 10 CM Magnetrons
222	52-3	Strapping Tolerance for Magnetrons
223	52-4	Magnetron Strapping Wavelength Calculations for Strapped Magnetrons
224	52-5	Fourier Analysis of Pulses with Frequency Shifts During the Pulse
225	52-6	Frequency and Spectrum Characteristics of Standard Magnetrons and the Effect of Change of Shape of Current Pulse
226	52-7	Practical Considerations of Magnetron Design
227	52-8	Performance Characteristics of the Magnetron Under Conditions Simulating Beacon Operation Tube Types 2J38 and 2J22
228	52-9	Spectra of Magnetrons for Long Pulses
229	52-10	Analysis of Magnetron Performance Part 1: Equivalent Circuit, Method, Applications
230	52-11	Field Patterns in Cold Magnetrons, Including Correlation with Tube Performance and Tunable Design
231	53-1	Transmission Line Construction Details
232	53-2	Stub Supports in 7/8" Coaxial Lines
233	53-3	Operating Characteristics of the 707A Reflex Oscillator (McNally Tube)
234	53-3a	Operating Characteristics of the 707A Reflex Oscillator (McNally Tube)
235	53-4	Operating Characteristics of the 417 Reflex Klystron
236	53-5	Temperature-Compensated 707-A (McNally Tube)
237	53-6	Phase Distortion in Broad-Band Stub Supports
238	53-7	Preplumbing of Tees for G-Band
239	53-8	Microwave Wattmeter
240	53-9	Loss Measurement by Two Probe Power Reversal Method
241	53-10	X-Band Low Pressure Tests
242	53-11	An S-Band Crystal Mixer
243	53-12	Rotary Joints with E_0 Stub Transformers
244	53-13	Dielectric Transmission Measurements
245	53-14	Design Characteristics of Spinner Housing Materials
246	53-15	Microwave Wattmeter II 3 CM. and 1 CM.
247	53-16	Comparison of the Frequency Sensitivities of Series and Shunt T, R. Junctions
248	53-17	Report on Corrosion of Copper, Brass, and Aluminum by Gaseous Dielectrics
249	53-18	Measurements of 721A TR Tube Leakage Power
250	53-20	X-Band Measurements at Low Pressure
251	53-21	Operating Characteristics of the 419 Klystron

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New Nos.	Old Nos.	Titles
252	53-22	A method of Measuring the S Band Characteristic Impedance of Coaxial Cable
253	53-23	A Simplified Analysis of Conversion Loss of Crystal Converters
254	53-24	Pre-Ignition Transmission through Gas-Switching Tubes, and its Contribution to Crystal Failures
255	53-25	Capacity (Choke) Couplings as Rigid and Non-Rigid Waveguide Connectors
256	53-26	Testing of 1N21 Navy Crystal Rectifiers
257	53-28	Conversion Loss Measuring Apparatus for Crystals in the 3 CM. Band
258	54-9	Effect of Paraboloid Size and Shape on Beam Patterns
260	54-12	Pill Box Antenna For Glide Path
261	54-13	Some Matching Properties of Antenna Feeds
262	54-14	3 CM Bolometer Detector Suitable for Field Measurements (Type Y)
263	54-15	Horizontally Polarized, 9.1 cm, Biconical Horn, Beacon Antenna
264	54-16	Information on Corrugated Coaxial Lines and Wave Guides
265	54-17	Rapid Scanning, High Resolution Antennas - Preliminary Report
266	54-18	An Automatic Recorder for Microwave Antenna Pattern Measurements
267	54-19	45° Microwave Reflector
268	54-20	Gratings and Screens as Microwave Reflectors
269	54-21	Information on Standard Radiation Laboratory Paraboloid Reflectors
270	54-22	A Simple Method for Determination of the Law of A Crystal
271	54-23	Antenna Feeds for 7/8" Stub-Supported Coaxial line
272	54-24	Synthesis of Microwave Diffraction Patterns with Application to $\csc^2\theta$ Patterns
273	54-25	Double Dipole Rectangular Wave Guide Antennas
274	54-26	Antenna Feeds from 5/16" Coaxial Line
275	54-27	Report of Conference on Rapid Scanning
276	54-28	The Antenna Slide Rule - Series L
277	55-1	The Resonant Echo Box
278	55-2	Multiple Pulse Generator
279	55-3	General Report on Low Level Power Measurement at 10 CMS in Coax
280	55-4	The Application of Corner Reflectors to Radar (Experimental)
281	56-1	Temperature Rise in A.T.R. Racks

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282	56-2	Production Sources of Self-Synchronous Units
283	61-1	Conference on Standardization of Intermediate Frequency
285	61-3	Impulse and Square-Pulse Response of Various Filters
286	61-4	Committee on Centimeter Receiving Tubes and Resonators
287	61-5	Theory of Radar Mixers
288	61-6	A 10-20 Centimeter Bolometer
289	61-7	Noise Measurements on Microwave Converters
292	61-10	Lighthouse Tube Anode Contracts
293	61-11	Theory of Noise Measurements on Crystals as Frequency Converters
294	61-12	The Use of the Temperature-Limited Diode in Measurements of Noise Figures of Crystals
295	61-13	Notes on Measurement of Noise, Gain and Noise Figure of Converters
296	61-14	Noise Temperature Measuring Apparatus for Crystals as 10,000 to 30 Megacycle Converters
297	61-15	Low Level Crystal Detectors
298	61-16	S Band A.S.V. Marker
299	61-17	Fine Grid Technique
300	61-18	A Reciprocity Theorem and its Application to Measurement of Gain of Micro-Wave Crystal Mixers
301	61-19	A 30 MC. Schering Bridge
302	61-20	A Video Delay Line
303	61-21	Characteristics of the Present Production of MC Nally Tubes
304	61-22	Noise from Local Oscillators
305	61-23	Action of Linear Detector on Signals in the Presence of Noise
306	61-24	The Radiation Laboratory S-Band Amplifier Preliminary Report
307	61-25	A 70 mc Wide IF Amplifier
308	62-1	Plan Position Indicators
309	62-2	Proposed Performance Specifications for the P7 Long-Persistence Cascade Screen
310	62-3	Report on Measurements of British CR Tubes with Long Persistence Screens
311	62-4	All Indicators
312	62-5	Plan Position Indicator Using A Sinusoidal Potentiometer
313	62-6	Linearity of Standard Wire-Wound Volume-control-type Potentiometers
314	62-7	Conference on P7 Cathode Ray Tubes held April 5 and 6, 1943, Rad. Lab. M.I.T.

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315	62-8	A Shipborne Mechanical Rotation Plan Position Indicator
316	62-9	Specification of Performance Tests for PPI Sinusoidal Potentiometers Types RL10E and RL14
317	62-10	Indicators for a Ground-Controlled Approach System
318	62-11	Present Status of Potentiometer Projects in the Radiation Laboratory
319	63-1	Precision Timing Calibrator and Range Measuring System
320	63-2	A Precision Delay Multivibrator for Range Measurement
321	63-4	Medium Precision Self-Synchronous Range Circuit Model 1
322	63-5	Circular Sweep Precision Range System Model 4
325	63-8	Simplified Circular Sweep Range System
326	63-9	Antiaircraft Artillery Board Test on the Simplified Circular Sweep Range
327	63-10	Hand Radar Ranging Circuit
328	63-11	Errors in Circular Sweeps Due to Decentering and Ellipticity of the Circle
329	63-12	Frequency Division with Blocking Oscillator Pulse Transformers
330	63-13	Line Controlled Blocking Oscillator Marker Generator A.R.O. Calibrator
331	63-14	ARO Range Follow-Up Unit
332	63-15	A.R.O. Range Unit
333	63-16	Model II Calibrator
334	63-17	A Voltage Compensated Delay Multivibrator
335	63-18	Externally Triggered Circular Sweep Amplifiers
337	63-20	Delayed Sweep for SCR-582-X
338	63-21	An Adaptation of the Phantastron Delay Multivibrator Circuit to the 6SA7 Tube
339	63-22	A Condenser Phase Shifter Range Circuit with Sine Wave Tracking Suitable for Microwave Height Finding Stations
340	63-23	Pulsed Oscillator and Phase Shifter
342	63-29	H_2X Range Unit for Navigation and Bombing
343	63-30	Type J and A Test Unit
344	64-1	The Standing Wave Detector
345	64-2	Elimination of the "Trombone" Between Transmitter and Junction in a Duplexing System
346	64-3	Measurement of Impedance with the Standing Wave Detector
347	64-4	The T-R Box
348	64-5	The Photography of Successive Pulse Reflections from a Moving Target
349	64-6	Measurement of the Q-Value of a T-R box

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350	64-7	Comparison of Performance of 10 cm and 3 cm Advanced Development Systems
351	64-8	Altitude Determination by Means of a "Vertical PPI"
352	64-9	Direct Coupling in the T-R Box
353	64-10	A Definition of Maximum Range on Aircraft and its Quantitative Determination
354	64-12	Supplementary Report on Altitude Determination by Means of an Expanded Elevation Indicator ("Vertical PPI")
355	64-13	Performance of 3 cm System (D2-1)
356	64-14	The Time Fluctuations of a Rotary Spark Gap Modulator
358	65-2	BGS 10 CM. Radar Beacon
359	72-1	Maximum Power Limitations of Silicon Crystals
360	72-2	Progress Report on T-R Tubes
361	72-3	Transmission of Higher Harmonics through a TR Cavity
362	72-4	Some Experiments in Determining the Power Transmission and Recovery Time of TR Boxes
363	72-5	Maximum Allowable Negative Backswing After Pulses
364	72-6	Infinite Rejection Filters
365	72-7	Recent Performance of the 3 cm Advanced Development System (D2-1)
366	73-1	Micro-wave Linear Radiators
367	81-1	Conical Scanning
368	81-2	Report of A.A.B. Test on XT-1 at Ft. Monroe, Virginia February-March, 1942
370	81-4	Data on SCR-584 Control Equipment
372	81-6	Servo Mechanisms
373	82-3	Performance Report of the High Power Ground System
374	9-1	Report on the Aircraft Radio Sight
375	9-2	Radar Target Contrast
376	9-3	Airborne Radar Projects in Division 9
377	9-4	Pictorial Brief of an Experimental AGL-1 Installation
378	91-1	Tests on Radar Echoes from Cylinders
380	93-1	The Balancing of Spiral-Scan Spinners
381	93-2	Photographs of the PPI Indicator Tube with 3 cm ASV Over Water and Land
382	93-3	Photographic Polarization Tests
383	10-1	Survey of 10 Cm. Radar Installation in PBM-1 Flying Boat
384	10-2	Comparison of Reflectivities of Approximately Similar Plastic and Metal Airplanes

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New Nos.	Old Nos.	Titles
386	102-1	Development of a Flexible Relay Servo Mechanism and Application to Sector Scanning Spinner Controls
387	102-2	Tactical devices based on Superposition of a Plotting Board on the PPI Pattern
388	102-3	Geared Selsyns
389	102-4	Some Photographic Measures of PPI Linearity and Addendum
390	102-5	Vibration and Shock Comparison Tests of 7" Cathode Ray Tubes in Two Different Type Mounts
391	103-1	Operational Report on B-24, No. 1 in the British Isles: March to June 1942
392	103-2	Report on the First Radar System Installed on a "K" Type Air Ship
394	103-6	Features and Operations of Radio Set SCR-582
395	103-8	Laboratory and Field Tests with Stabilized Spinners
397	105-1	AI-10 Trainer Simulation at I.F. Level
398	105-2	AI-10 Bench Trainer Simulation at Video Level
399	105-3	Land Mass Simulator
101		Surface Targets (Clip figures 10,15,16,17,18, table II on page 18, and paragraphs 3,4,5 on page 13, which remain classified.)
402		Corner Reflector Tests at Langley Field
404		R.F. Attenuators
405		Studies of British Phosphors of the Type "C", "H", "K", and "L"
406		An Introduction to Microwave Propagation
408		Comparison of the Usual Methods of Measuring Conversion Loss of Crystals and a New Empirical Method
409		Potentiometer Type RL-3 for Azimuth and Elevation
		I Indication on Magnetically Deflected CRT's
410		Bridge Methods in Low and Medium Level RF Power Measurement
411		Antenna for High Altitude Bombing (H_2X)
412		Adjustment of Magnetron Frequency by an External Tuner
413		Measurements on 446 "Lighthouse" Tubes
415		LRASV (AN/APA-2) Antenna
416		S/N Measurements on the CV-58
417		Details of an X-Band High Level TR Tube Test Bench
418		Range Height Indicator
419		Half Beacon Antenna
421		Measurement of Electrical Tuning Ranges of 707 Tubes
422		A Note on Pulse Distortion by Rejection Filters
423		Sinusoidal Potentiometers Types RL10C3, RL10CD, RL10E, and RL14

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New Nos.	Old Nos.	Titles
424		Reports on Type A and Type B Pulse Transmission Cables and Connectors by Harry J. White and Joseph R. Perkins
425		Report on Western Electric 717 A Modulator Type D-150442 and Radio Frequency Unit Type D-150452
426		One-sided Inductive Irises and Quarter-Wave Capacitative Transformers in Wave Guide
427		Characteristics of Recent 723A Tubes (X-Band Local Oscillators)
429		Lighthouse Tube Transmitter-Receiver LHTR Mk I
431		Reduction of Radar-Radio Interference from Modulators by L. W. Hallach
432		Measurement of Pressure in Gas Tubes by A Radio-Frequency Method
433		Optical Theory of the Corner Reflector
434		Synchro Test Equipment Procedure
435		Amplidyne Servo for SCR-598 Surface Fire Control Set
436		Radar Trainer Equation-Solvers for the Relative Motion of Two Moving Objects in Space
437		Training Apparatus for Radio Set SCR-584
438		Ground Controlled Approach
439		A Report on ASB-1 B Scope Photography
440		Low Level Crystal Detectors, Effect of Heat and Cold
441		Analysis of Condenser Charging in Line Type Modulators. Part I. For Linear Reactor Elements by Harry J. White
442		Contribution of the Dish to the Impedance of an Antenna
443		Simplified Measurement of Receiver Sensitivities (S-Band Noise Source)
444		MEF Mobile Height Finder Modified SCR-615
445		Cold Resonance Theory of the Waveguide Tunable Magnetron
447		The Effect of Atmospheric Refraction on Short Radio Waves
448		A One-Tube, One Selsyn Sector-Scanner
451		Analysis of Magnetron Operation Part 2
454		Theory of Random Processes
456		Brief Description of AN/TPG-1, AN/FPG-1, and SCR-598 Developmental Seacoast Gun-Laying Radar Sets
457	63-31	Differential to Single Ended Potential Converters

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New Nos.	Old Nos.	Titles
458		The Depolarization of Microwaves (Clip figure 3 which remains classified)
459		Sinusoidal Potentiometers Types RL11, RL15, RL204.
461		Simplified Methods of Field Intensity Calculations in the Interference Region
462		Cooling of Pressure-Tight Containers
463		Leakage Inductance and Distributed Capacitance of Various Types of Pulse Transformer Windings
464		Tests on A 13B1 Oil Gear and An Amplidyne Servo for the SCR-598 Control Problem
465		On the Fluctuations in Signals Returned by many Independently Moving Scatterers
466		On the Appearance of the A-Scope When the Pulse Travels Through A Homogeneous Distribution of Scatterers by A. J. F. Siegert
468		Propagation Over Short Paths and Rough Terrain At 200 MC/S
469		A Cathode Follower Employing Two Tubes to Obtain Extremely Low Output Resistance
470		Pulse Transformer Core Material Measurements
471		Shielding of Microwave Receivers against Interference at Intermediate Frequencies
473		Magnetron Stabilizing Tuner
474		Truck-Mounted SCR-582 Mk III General Purpose Microwave Set
476		Climate in Relation to Microwave Radar Propagation in Panama
478		Preliminary Measurements of 10-CM Reflection Coefficients of Land and Sea At Small Grazing Angles
479		Paraboloid Antenna Characteristics As A Function of Feed Tilt
482		Remote Position Control by Direct Frequency Variation
483-1		Radome Bulletin Number 1
483-2		Radome Bulletin Number 2, An Outline of the Electrical Properties of Radomes
483-3		Radome Bulletin Number 3, Ice Formation on Ship-Borne Radomes
483-4		Radome Bulletin Number 4, Transmission and Reflection of Single Plane Sheets
483-5		Radome Bulletin Number 5, Recent Dielectric Constant and Loss Tangent Measurements
483-6		Radome Bulletin Number 6, Radomes and System Performance
483-7		Radome Bulletin Number 7, The Measurement of High Reflections at Low Power

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New Nos.	Old Nos.	Titles
483-8		Radome Bulletin Number 8, X-Band Sandwiches at Variable Angles of Incidence
483-9		Radome Bulletin Number 9, The Matching of High Standing Wave Ratios
483-10		Radome Bulletin Number 10, The Measurement of Small Reflections
483-11		Radome Bulletin Number 11, Electrical Properties of Double Wall and Sandwich Radomes
483-12		Radome Bulletin Number 12, Transmission and Reflection of Parallel Plane Sheets
483-13		Radome Bulletin 13, Elliptical Polarization Produced by Streamlined Radomes
483-16		Radome Bulletin Number 16, Some Electrical Aspects of Microwave Sandwich Radome Design
483-19		Radome Bulletin Number 19, Dielectric Constant and Loss Tangent Computation
484		Lighthouse Tube Superregenerative Receivers
485		Model 7 - Experimental Hydrogen Thyratron Modulator
486		A Simplified Search Antenna for Radio Set AN/APN-1
487		Instruments and Methods for Measuring Temperature and Humidity in the Lower Atmosphere
488		Qualitative Survey of Meteorological Factors Affecting Microwave Propagation
489		X-Band Horizontally Polarized non-Directional Antennas
490		Results of Tests Performed on "Synchro" Units and Systems
492		Comparative Photographs of 1 and 5 Microsecond Signals
493		The Resonant Modes of Magnetron Cavities
494		The Theory of Corrugated Transmission Lines and Waveguides
496		Operation of 1N23 Crystal Rectifiers
497		The Range Calculator
498		Colloquium on Pulse Transformer Design
499		Elements of Loran
501		Manufacturing Procedure for the Radiation Laboratory High Burn-Out Crystals
502		The Two-Disc D.C. Thermistor Bridge Circuit
509		Magnetron Starting Time
511		Adjustment of Loran Antennas and Antenna Coupling Units at Frequencies Between 1700 and 2000 Kilocycles
512		Impedance Characteristics and Equivalent Circuits for Vertical Radiators
513		Pulse Transformers Designed at Radiation Laboratory and Produced by General Electric Company and Westinghouse Electric and Mfg. Company

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New Nos.	Old Nos.	Titles
514		High-Ambient Life Test of an Oil-Filled Pulse Transformer
515		Proposed Method for Measuring Instantaneous Magnetron Input Impedance with the Aid of a Delay Network
516		A Condenser Phase Shifter Range Unit with Sine Wave Tracking for AN/TPG-1, AN/FPG-1 and SCR-598
517		S-Band Horizontally Polarized NonDirectional Antennas
518		Pulse Shapes and RF Spectra for Combinations of Stromberg-Carlson Mark I and Mark II Modulators with 2J22, 2J21 and 725A Magnetrons
521		A Diode-Type Pulse Voltmeter
523		Voltage Pulse Rate-of-Rise Measurements
524		Stagger-Tuned IF Amplifiers
525		Thyrite Bridge Controlled Voltage Regulator
527		Effect on Current Pulse of Resistance in Series with the Magnetron
528		The Effect on Noise Figure of Placing the Gain Control on the First I.F. Stage
529		High Impedance Cable
533		Observations of Life Rafts Equipped with Corner Reflectors
534		Space Charge Between Parallel Plane Grids
535		A Hard Tube Servo Amplifier for Fractional Horsepower DC Motors
538		Performance of Coupling for 1½"x3" Waveguide
539		Stagger-Damped Double-Tuned Circuits
540		A Range Measuring System Using an RC Linear Sweep
542		Lighthouse R.F. Envelope Indicator
543		Crystal Life Tests Under Flat Pulses
544		Frequency Division with Blocking Oscillators
545		The Evaluation of An Equivalent Circuit for a Pulse Transformer
546		Analysis of the Influence of Pulse Transformers on Current Pulse Shape
547		Microwave Transmission over Water and Land under Various Meteorological Conditions
548		A Littelfuse Direct Reading Wattmeter
549		Model 6 Modulator Performance Tests
550		Equalized Delay Lines
551		Nomograms for Computation of Modified Index of Refraction
555		Servos with Torque Saturation
557		Leaky Waveguide Rapid Scanner

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New Nos.	Old Nos.	Titles
558		A 60 MC. Parallel Schering Bridge
561		Wave Form Analysis
564		Rieke Diagrams and Probe-Plate Plunger Charts of Lighthouse Tubes in A Re-Entrant Cavity
565		Stabilized High Voltage Supply
566		N^2 Gate Attachment for SCR-584
567		Magnetron Tuning and Stabilization
568		Further Measurements of 3 and 10 CM Reflection Coefficients of Sea Water at Small Grazing Angles
569		Preliminary Report on the Fluctuations of Radar Signals
570		Characteristics of Recent 723A/B Tubes
572		Clamping Tubes
574		Vertebrae Type Flexible Waveguide
575		Revision of General Radio Type 605-B Signal Generator For Pulsing
580		A Survey of High Vacuum Diodes Used for Surge Limiting Operation in Modulators
582		Simple Computation of Distance on the Earth's Surface
584		An H+B Impact Predicting Computer Assuming Constant Indicated Airspeed for Use with AN/APS-15a Radar
585		Corners Bends and Twists in Rectangular Waveguide
586		Effects of Variation of Vane Width and Cathode Size on the Operation of Magnetrons
587		Dielectric Windows in Waveguide
588		Performance Characteristics of Army-Navy Preferred Type Electrostatic Cathode Ray Tubes
589		Summary of Life Test Data on Sylvania 4C35 Hydrogen Thyratrons
592		Servos with Torque Saturation Part II
593		Chemical Methods for Maintaining the Partial Pressure of Water Vapor in TR Tubes
594		The 1B27 TR Tube
599		Standards for Microwave Frequencies
600		G.E. GL2C40 Taut Grid Lighthouse Tubes
601-1		Antenna Measuring Equipment
601-2		Antenna Measuring Equipment, High Power CW Transmitter for S-Band
601-3		Antenna Measuring Equipment, 100db Linear Audio Amplifier
601-4		Antenna Measuring Equipment, Automatic Antenna Pattern Recorder
603		Microwave Radar Volume I Theory and Practice of Pulsed Circuits by Donald G. Fink
604		Video Stretching as a Method for Improving X-Band Beacon Reception

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605		Trigger Requirements of the 4C35 and 3C45 Hydrogen Thyratrons
608		Corner Reflectors for Life Rafts
609		Cathodes for Pulsed Magnetrons
610		Matching Resistance Curves by Means of Two Linear Ganged Potentiometers and A Three Terminal Resistance Network
611		Testing of Fixed-Tuned, Low-Q ATR Tubes
613		Modification of the Amplifier of the AN/APN-2 to Give Sharp Cut - Off Wide Band Response
615		Low Altitude Navigation Antennas Developed in Connection with AN/APS-10
616		Effects of Line and Cathode Follower Terminations on Pulse Shape
617		Life Test of Contact on Standard Linear Wire Bound Potentiometers (In Preparation)
618		A Method of Virtual Displacements for Electrical Systems with Applications to Pulse Transformers
619		Energy Loss in Copper Under Pulse Conditions
620		Stability of Magnetrons Operated by Spark Gap Modulators
622		Influences of Pulse Transformer Design on 4J31-35 Magnetron Stability
623		S-Band Vertically Polarized Non-Directional Antennas
626		An Extension of Lagrange's Equations to Electromagnetic Field Problems; Equivalent Networks
627		Comparison of Theoretical and Experimental Requirements for Microwave Beacon Transmitter Power and Receiver Sensitivity
629		A Treatment of Echo Box Problems by Lagrangian Procedures
630		Theory of Ringing Time of Tunable Echo Boxes
631		Design of An Improved X-Band Echo Box
633		Errors in the Condenser Type Continuous Phase Shifter
634		Reduction of Power Line Noise in Modulators
637		Realizability of Filters
641		1B38 Pre - TR
645-1		QA-2B Servo Adaptor
645-2		Q1-2 and Q-3 Servo Amplifiers
645-3		H-3 Trigger Unit
645-4		The I-3 Signal Unit
645-5		The J-2 Modulator Unit
645-6		The H-2 Trigger Unit
→625		The Future of Hyperbolic Navigation

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New Nos.	Old Nos.	Titles
645-7		The I-2 Signal Unit
649		Over-Water Transmission Measurements, 1944 Part I: Preliminary Analysis of Radio and Radar Measurements
651		Modified Index Distribution Close to the Ocean Surface
652		Frequency - Wavelength Conversion Tables
653		Flared Box Horn
655		Shaping the Primary Pattern of a Horn Feed
661		Reflections from Smooth Curved Surfaces
663		Frequency Drift of Certain X Band Magnetrons
664		Further Theoretical Investigations on the Atmospheric Absorption of Microwaves
666		Equivalent Circuit of A Pulse Transformer Core
667		A Feedback Circuit For Measuring Output Noise Ratio of Crystal Rectifiers
668		A Conversion Loss Set for Testing K-Band Crystal Rectifiers
669		A Simple Trainer for GCA Approach Controller
674		Deflection Yoke Design Information
675		Low Power RF Switch
676		The Trainer for Radio Set AN/APN-1
679		Information on Radiation Laboratory Paraboloid Reflectors
680		Theory of Characteristic Functions in Problems of Anomalous Propagation
681		TFX - 29RL Frequency Comparator
682-1		Dissipation in Series Spark Gaps and Voltage-Current Relationships During the Discharge
683		Cathodes for Pulsed Magnetrons Part II
684		The Absorption of One-Half Centimeter Electromagnetic Waves in Oxygen
686		Primary Feeds in Cylindrical Parabolas
687		Some Automatic Frequency Control Circuits
689		Radar Echoes from Precipitation Layers
691		Double Curvature Surfaces for Beam Shaping with Point Source Feeds
692		Colloquium on Pulse Forming Networks
693		A Proposed Standard Test Cavity for the 707B Tube
694		Frequency Discontinuities of Local Oscillator Tubes Due to High Q Load Circuits
696		A Treatment of Echo Box Problems by Lagrangian Procedures Part II
697		The Regulation Obtainable in the Operation of a Hard Tube Modulator with Magnetron Load

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New Nos.	Old Nos.	Titles
698		Calculation of Pulse Forming Networks having Slow Rates of Voltage Rise
702		Field Intensity Contours in Generalized Coordinates
704		Pulse Characteristics of Common Receiver Type Tubes
706		Altitude Return in the AN/APS-6
707		Sea-Return Effects and their Elimination in AN/APS-6
709		Notes on the Reflex Oscillator
711		Nonlinear Networks as Voltage Regulators
715		Tokyo H_2X Photographs, Comparison of Operational PPI Photographs with PPI Predictions of the Ultrasonic Radar Trainer
716		Link Conversion Unit for Ground Controlled Approach Trainer
717		Notes on Load Effects in Reflex Oscillators
718		Memorandum on the Activation of Various Surfaces by Evaporation from A Heated Oxide Cathode
721		On Servos with Pulsed Error Data
722		Pulse Transformer Committee Standard Test Methods for Pulse Transformer Cores
726		Waveguides Without Metal Walls
728		Echoes from Tropical Rain on X-Band Airborne Radar
730		Two Proposed Methods of Recording the Position of a Moving Link Crab
732		Operational Characteristics of 2C43 Tubes as Pulsed Oscillators in A Re-Entrant Cavity
734		Equivalent Network for the 232-BW Pulse Transformer
735		Based on the Method of Virtual Displacements
740		The Relation between Absorption and the Frequency Dependence of Refraction
742		Synchro Units and Their Characteristics
746		Operation and Testing of Reflex Oscillators
748		Receiver Noise Figures and Their Measurement
754		An Electronic Modulator for CW Magnetrons
760		Attenuation of RG-9/U Cable As A Function of Temperature and Frequency in the X-Band
764		Parallel Plate Bends
765		A Low-Voltage K-Band Oscillator
770		Analysis of Line Modulator Behavior with A Sparking Magnetron Load
774		Broad-Band Coaxial-Line Horn
781		Electronic Tuning of Reflex Oscillators
785		Static Frequency Modulation Characteristics of the Reflex Klystron
		Electrical and Physical Characteristics of Some Commercial Feed-Through Filters

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786		A Method of Shielding for Filter Insertion Loss Measurements
788		Dielectric Phase Shifters for Waveguide
790		Moisture-Proofing of Button Mica Capacitors
793		Present Status of High Power at S-Band
798		R-F Mechanical Modulator for S-Band
799		Graphs for Computing the Diffraction Field with Standard and Superstandard Refraction
809		Mode Selection in Magnetrons
818		The Generation of Harmonics by Silicon and Germanium Crystals
831		3-CM Vertebrae Flexible Waveguide
832		Flexible Waveguides
833		Noise Filtering Properties of Third Detectors
847		Broad Band Test Loads
876		A Navigational Radar for Naval Auxiliaries and Merchant Marine (Clip paragraphs 2 and 3 on page 3 which remain classified.)
S-1		Testing of Skiatrons
S-1		Supplement Testing of Skiatrons
S-3		Walworth Waveguide Bends
S-9		Comparison of P-7 Screen Test Methods
S-11		Servo Generator Life Tests
S-17		Focus Coil Control For Cathode Ray Tubes
S-18		Model 5 Synchroscope
S-29		X-Band Waveguide Corrosion Proofing
M-99		Special Radio Equipment for ASV - 318
M-108		Operating Instructions for the Model 417 Klystron for Use As A Local Oscillator in Radar Receivers
M-109		Instructions for Type "E" Self-Synchronous Oscilloscope
M-114		3 CM. Magnetron Test Bench Construction and Operation
M-115		Instruction Manual Spectrum Analyzer (Type 103) for Pulsed Oscillators at 3,000 Mc/Sec.
M-117		Instruction Manual Pulsed Oscillator 3,000 MC/SEC (Model #1)
M-118		Instruction Manual Model P4 Synchroscope
M-120		Tentative Instruction Manual M.I.T. Radiation Lab. Test Set (Type A)
M-124		Model P4-E Synchroscope and R.F. Envelope Indicator Supplement to M126
M-126		Instruction Manual Revised Model P4 Synchroscope
M-127		Spectrum Analyzer (Type 105) for X Band Pulsed Oscillators and Spectrum Analyzer (Type 107) for S Band Pulsed Oscillators

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New Nos.	Old Nos.	Titles
M-133		Handbook of Maintenance Instructions for Type TTX-1BL Test Set (Type B)
M-141		Instructions For TGS-2SE, TGS-3BL and TGS-5BL Signal Generators
M-142		Instructions for Type TSK-1SE Spectrum Analyzer
M-143A		Instructions for TGX-2BL and TGX-3BL Signal Generators
M-153		Instruction Manual for Model 6 Modulator
M-169		Instructions For TTX-6RH and TTX-10RH Test Sets
M-173		Instructions for TSX-2 Spectrum Analyzer
M-173C		Instructions for TSX-2 and Specifications on TSX-4SE and TSS-4SE Spectrum Analyzers
M-174		Instructions for Types TMS-5 and TMS-5EV Battery Operated Wattmeters (Preliminary Models of TS-125/AP)
M-176A		Instructions for Types TFK-2HU, TFK-3HU and TFK-6HU Frequency Meters
M-176B		Instructions for Types TFK-2HU, TFK-3HU and TFK-6HU Frequency Meters
M-177		1N21 Loss Tester Type 7556
M-186A		Instructions for TMN-3EV Thermistor Bridge
M-188		Operating Instructions for Sweep Calibrator, Model B
M-193A		Handbook of Operating and Maintenance Instructions for Test Set TS-259(XR-1)/AP with Supplements on Test Sets TS-259(XR-2)/AP and TS-259(XR-3)/AP and Signal Generator TS-259/AP
M-194		Handbook of Operating and Maintenance Instructions for Echo Boxes TES-8MK and TES-9MK
M-195A		Operating Instructions for Model G Synchronizer
M-207		TFX-34RL Fixed Frequency Standard
M-208		TFX-35RL Fixed Frequency Standard
M-209		TFX-36RL Fixed Frequency Standard
M-212		Operating Instructions Radiation Laboratory Model 5 Synchroscope
M-217		Instructions for Types TFX-17GA, TFX-18GA, TFX-19GA, TFX-30EC, TFX-31EC, Model 51 and Similar Types of Micrometer Frequency Meters
T-2		Notes on Microwaves by W. W. Hanson (Chap.1 thru 13)
T-2		Hansen Lectures (Chap. Nos. 13 to 23)
T-2		Hansen Lectures (Chap. Nos. 23 to 30)
T-5		Transmission Lines and Wave Guides: Similarities and Differences
T-6		Explanation of Impedance Matching
T-7		Paraboloid Diffraction Patterns from the Standpoint of Physical Optics
T-9		Wave Guide Handbook
T-9		Wave Guide Handbook Sect. II Attenuation in Wave Guides

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New Nos.	Old Nos.	Titles
T-9		Wave Guide Handbook Sect. III Obstacles in Wave Guides
T-9		Wave Guide Handbook Sect. IV Bends and T-Junctions in Wave Guides
T-9		Wave Guide Handbook Sect. V. Dielectric Structures in Wave Guides
T-10		The Theory of Impedance and Admittance Diagrams and Allied Subjects
T-11		Reflection Coefficients and Impedance Charts
T-13		Microwave Technique, As of May 1943
T-14		Use and Derivation of A Z, O Chart
T-15		Modulator Text Second Edition
T-16		Shock Mounting and Vibration
T-17		Introduction to Alternating Currents, Q Values, and Transmission Lines
T-18		General Lecture Series on Radar Components
TCAW-1 and -2		Technical Requirements for G.C.I. Search Systems
TCAW-3		Technical Requirements for Early Warning Radar Systems
		Low Angle Coverage of Early Warning Radar Systems

NDRC Division 16, Contract No. NDCrc-95, Hazeltine Electronics Corp.

Division 16 Progress Report No. 160		12/29/41
Division 16 Progress Report No. 181		2/6/42
Division 16 Progress Report No. 227		4/29/42
Division 16 Progress Report No. 228		5/7/42
Division 16 Two Reports.	"Describing construction of an airborne radio set"	11/13/41 and 1/6/42

NDRC Division 17, Contract No. OEMsr-241, University of Illinois

Division 17 Report D3-214	"Progress Report No. 1"	5/1/42
Division 17 Report D3-243	"Progress Report No. 2"	7/1/42
Division 17 Report D3-278	"Final Report on 3 to 20 Million Volt Radiography"	9/1/42

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NDRC Division 17, Contract No. OEMsr-241, University of Illinois (cont'd)

Division 17 Report D3-314	"First Bi-Monthly on 3 to 20 Million Volt Radiographic Work"- - - - - -	11/1/42

NDRC Division 17, Contract No. OEMsr-294, Massachusetts Institute of Technology

Division 17 Report D3-167	"First Bi-Monthly Report Regarding the Project in High Voltage Radiography"- - - - - - - - - - - - - - - -	1/1/42

Applied Mathematics Panel, Contract No. OEMsr-1066, Brown University

AMP 70.1M	"Guns on Pitching and Rolling Ships"-	5/44
AMP 36.3R	"On a Problem of Colliding Oscillators"- - - - - - - - - - - - - -	10/43
AMP 36.6R	"An Electrical Analogue to the Spring Hammer Box"- - - - - - - - - -	3/45

Applied Mathematics Panel, Transfer of Funds to National Bureau of Standards

AMP 113.1R	"Binomial Distribution Functions"- -	5/44

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SC-92.07

* Unless otherwise indicated the declassification of a project covers all of the extensions.

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DECLASSIFIED NDRC CONTRACTS

Declassification of Entire Contract

OEMsr-6
Massachusetts Institute of Technology

OEMsr-870
General Motors Corp.

OEMsr-1223
Comstock & Wescott, Inc.

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67	677	1202	1670	3507
68	685	1208	1702	3522
93	739	1209	1716	3761
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108	796	1221	1752	3763
118	799	1254	1781	3772
124	809	1261	1797	3785
129	824	1284	1824	3795
139	825	1294	1825	3876
142	831	1320	1826	4045
149	835	1345	1855	4068
162	837	1356	1869	4167
173	840	1357	1899	4202
174	847	1358	1911	4205
175	852	1371	1952	4263
187	854	1378	1960	4374
190	855	1379	1961	4405
275	856	1381	2024	4432
276	858	1390	2047	4468
302	864	1401	2048	4469
314	867	1437	2056	4521
326	871	1438	2057	4522
327	880	1439	2078	4601
332	893	1444	3003	4784
379	899	1502	3064	4784A
382	933	1504	3065	4797
401	941	1516	3067	4862
407	942	1517	3068	4983
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432	991	1533	3078	5254
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451	1017	1548	3111	5443
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493	1058	1568	3161	5711
504	1059	1570	3168	5757
507	1060	1576	3179	5765
534	1062	1583	3193	5925
548	1075	1591	3195	6114
570	1094	1594	3196	6182
577	1111	1630	3228	6235
580	1123	1631	3249	6237
587	1150	1652	3269	6266
657	1173	1663	3506	

* Titles of reports are shown only where it is necessary in order to identify them fully.

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NDRC Division 11 - All Informal Reports Under the Following Contracts*

OEMsr-25
Harvard University

OEMsr-57
Brown University

OEMsr-113
University of Chicago

OEMsr-167
Factory Mutual Research Corp.

OEMsr-179
Harvard University

OEMsr-183
Standard Oil Development Co.

OEMsr-198
Monsanto Chemical Co.

OEMsr-234
Massachusetts Institute of Technology

OEMsr-257
Factory Mutual Research Corp.

OEMsr-296
Victor Chemical Works

OEMsr-354
Standard Oil Development Co.

OEMsr-470
Gilbert & Barker Mfg. Co.

OEMsr-661
Factory Mutual Research Corp.

OEMsr-677
Nuodex Products Co. Inc.

OEMsr-744
E.I.duPont de Nemours & Co.

OEMsr-847
The Harshaw Chemical Co.

OEMsr-882
Ferro Drier and Chemical Co.

OEMsr-898
The Texas Co.

OEMsr-916
Shell Oil Co. Inc.

OEMsr-943
C.F.Braun & Co.

OEMsr-1011
Standard Oil Co. (Indiana)

OEMsr-1057
Stanford University

OEMsr-1170
Ford, Bacon & Davis, Inc.

OEMsr-1266
Davey Compressor Co.

OEMsr-1281
Ferro Drier and Chemical Co.

OEMsr-1364
Morgan Construction Co.

OEMsr-1468
California Research Corp.

* Formal reports under these contracts are listed by number on page 3 of this list.

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NDRC Division 11, Contract OEMsr-6, Massachusetts Institute of Technology

Final Report No. 278 — "Evaporation of Falling Drops"- - - 12/6/41

NDRC Division 14, Contract OEMsr-191, Massachusetts Institute of Technology

Report No. 121 — "Progress Report on Ultra-High Frequency Dielectrics" by A. von Hippel - - - 1/43

Report No. 122 — "The Interaction between Electromagnetic Fields and Dielectric Materials" by A. von Hippel and R. G. Breckenridge-1/43

Report No. 142 — "The Measurement of Dielectric Constant and Loss with Standing Waves in Coaxial Wave Guides" by A. von Hippel, D.G.Jelatis and W. B. Westphal- - - - - - - - - - -4/43

Report No. 210 — "Auxiliary Equipment for the M.I.T. Coax Instrument and Its Use" by A. von Hippel, D. G. Jelatis, W. B. Westphal, M. G. Haugen and R. F. Charles- - - - - - - - - - -11/43

Report No. 237 — "Tables of Dielectric Materials I" by Staff of the Laboratory for Insulation Research- - - - - - - - - - - - - - - -2/44

Report No. 276 — "The Polystyrene Plastics as High-Frequency Dielectrics" by A. von Hippel, L. G. Wesson and S. L. Whitcher- - - - - - - - - -5/44

Report No. 300 — "High Dielectric Constant Ceramics I" by A. von Hippel, R. G. Breckenridge, A. P. de Bretteville Jr., J. M. Brownlow, F. G. Chesley, G. Oster, L. Tisza, and W. B. Westphal- - - - - - - - - - - -8/44

Report No. 425 — "Tables of Dielectric Materials II" by the Staff of the Laboratory for Insulation Research- - - - - - - - - - - - - - - -6/45

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Report No. 490	"Techniques and Calculations Used in Dielectric Measurements on Shorted Lines" by W. B. Westphal- - - - - - - - - - - - - - - - 8/45
Report No. 539	"Low Thermal Expansion Plastics" by A. von Hippel, S. M. Kingsbury, and L. G. Wesson-10/45
Report No. 540	"High Dielectric Constant Ceramics II" by A. von Hippel, R. G. Breckenridge, A. P. de Bretteville, Jr., J. M. Brownlow and F. G. Chesley- - - - - - - - - - - - - 10/45
Report No. 541	"The Design of Equipment for the Measurement of Dielectric Constant and Loss with Standing Waves in Wave Guides" by M. G. Haugen and W. B. Westphal - - - - - - - - - 10/45
Report No. 542	"An Apparatus for Determining Heat Distortion Characteristics of Plastics" by P. F. Ast- - - - - - - - - - - - - - - - 10/45
Report No. 543	"Preliminary Oscillographic Studies of R. F. Build-Up in Magnetrons" by R. C. Fletcher (Radiation Laboratory) and G. M. Lee (Laboratory for Insulation Research)-11/45

NDRC Division 15 Report

Report No. 966-6C	"Propagation Curves"- - - - - - - - - -10/44

Applied Mathematics Panel, Contract OEMsr-860, Princeton University

Note No. 24	"Miscellaneous Probability and Statistical Tables"- - - - - - - - - 10/45

Applied Mathematics Panel, Contract OEMsr-945, New York University

Note No. 15	"Complex Roots of Polynomial Equations"-8/44

Applied Mathematics Panel Report

Note 14	"Miscellaneous Probability Tables"- - -7/44

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Applied Psychology Panel, Contract OEMsr-700, University of Pennsylvania

Memo No. 19	"Psychological Principles in the Design and Operation of Synthetic Trainers with Particular Reference to Anti-Aircraft Gunnery"
Memo No. 25	"An Investigation of the Scoring Characteristics of the Machine Gun Trainer Mark 1"
Memo No. 28	"Interviewer's Recommendation Chart"
	MANUAL ON "HOW TO TEACH GUNNERY" prepared by Naval Operating Base, Norfolk, Virginia, with the cooperation of NDRC Project NR-106, Contract OEMsr-700, which accompanies Memorandum No. 11, Project N-105

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DECLASSIFIED PROJECTS*

Project No.	Project No.
OD-02	OD-109
OD-05	OD-152
OD-1	Extension to OD-161, "Furnish a total of 1200 rocket, SAP, 4.5 'T78, and Rocket HE, 4.5' T83, for experimental and development purposes"
OD-2	OD-162
OD-3	OD-164
OD-4	OD-165
OD-6	OD-170
OD-7	OD-171
OD-9	OD-172
OD-10	OD-187
Extension to OD-14, "Investigations of squib igniter performance in the 2.36 'rocket' "	OD-200
OD-44	SC-20
OD-58	SC-38
OD-66	SC-105
OD-79	SC-137
OD-98	

* Unless otherwise indicated the declassification of a project covers all of the extensions.

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OSRD NO.	OSRD NO.	OSRD NO.
3444	5121	5507
3613	5324	5508
3908	5458	5521
4973	5459	5535
5090	5505	6177

NDRC Division 18 Reports

Memo No. 4	"How to Teach Engineering: A Short Course in Effective Teaching Methods for Engineering Instructors"- - - - - - - - - - - - - - - - 7/44
	Manual on "How to Teach Engineering," Prepared by Naval Operating Base, Norfolk, Va., with the cooperation of NDRC Project NR-106, which accompanies Memorandum 4
Memo No. 5	Memorandum: "The Use of Ship Models in Classroom Instruction"
Memo No. 6	Manual "Lesson Plan Outlines for Progressive Engineering, Stage I"- - - - - - - - - -10/44
Memo No. 7	"Lesson Plan Outlines for Stage II of the Progressive Engineering Course Combatant Ships," "A," "B," "M"- - - - - - - - - - - - - - -"A"-11/44 "B"-12/44 "M"- 1/45

Committee on Propagation, Contract CEMsr-728, State College of Washington**

1 - SWP-3.2 OFS	"Report on OSRD" (Project PDRC-647)- - 11/2/44
2 - SWP-3.2 OFS	- 1/7/45
1 - WSC	"The Propagation of 10CM Waves on a 52 Mile Optical Path Over Land. The Correlation of Signal Patterns with Radiosonde Data" (NDRC Division 14 Report 151)- - - - - - - - - - - -6/10/43

* Titles of reports are shown only where it is necessary in order to identify them fully.
** Please note that NDRC Division 14 was associated with this contract which accounts for the Division 14 report numbers shown after some of the report titles.

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Committee on Propagation, Contract OEMsr-728, State College of Washington

2 - WSC	"Radiotelephone Communication on 3000 Megacycles" (NDRC Division 14 Report 152)- - - - - - - - -6/12/43
3 - WSC	"The Captive Radiosonde and Wired Sonde Techniques for Detailed Low-Level Meteorological Sounding" (NDRC Division 14 Report 192)- - - - - - - - 10/4/43
4 - WSC	"The Propagation of 10 CM Waves Over Land Paths of 14, 52, and 112 Miles" (NDRC Division 14 Report 202)- - - - - - - - - - - - - - - - - -10/26/43
5 - WSC	"The Propagation of 10 CM Waves Over an Inland Lake. Correlations with Meteorological Soundings" (NDRC Division 14 Report 212)- - - - - - -11/12/43
6 - WSC	"Low Level Meteorological Soundings and Radar Correlations for the Panama Canal Zone"- -6/12/44
7 - WSC	"Notes on Operational Use of Low Level Meteorological Sounding Equipment" - - - - - - - - 6/15/44
8 - WSC	"Operating Instructions for the WSC Low Level Atmospheric Sounding Equipment"- - - - - -7/10/44
9 - WSC	"Results of Low Level Atmospheric Soundings in Southwest and Central Pacific Oceanic Areas- -2/27/45

Committee on Propagation with Columbia University

PC - 1	"Bibliography of Reports on Tropospheric Propagation"- - - - - - - - - - - - - - - - -5/18/44
WPG - 2	"Bibliography of Reports on Tropospheric Propagation", Second Edition- - - - - - - -8/44
WPG - 3	"Meteorological Equipment for Short Wave Propagation Studies"- - - - - - - - - - - -8/44
WPG - 4	"The Influence of Ground Contour on Air Flow," by Paul Queney- - - - - - - - - - - - - - -9/44
WPG - 5	"Tropospheric Propagation and Radio-Meteorology" -9/44

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

DECLASSIFIED REPORTS (CONT'D)

Committee on Propagation with Columbia University

WPG - 6	"Bibliography of Reports on Tropospheric Propagation," Third Edition- - - - - - 11/44
WPG - 7	"Wave Propagation Analysis With the Aid of Non-Euclidian Spaces"- - - - - - - - - - 12/44
WPG - 8	"Tables for Computing the Modified Index of Refraction M"- - - - - - - - - - - - - - - 3/45
WPG - 9	"Bibliography of Reports on Tropospheric Propagation," Fourth Edition-- - - - - 3/45
WPG - 10	"Siting and Coverage of Ground Radars"- 5/45
WPG - 11	"Absorption and Scattering of Microwaves by the Atmosphere"- - - - - - - - - - - - - 5/45
WPG - 12	"Perturbation Theory for an Exponential M Curve in Non-Standard Propagation"- - - 7/45
WPG - 14	"Bibliography of Reports on Tropospheric Propagation," Fifth Edition- - - - - - 8/45
WPG - 15	"Electrical Constants of the Ground, Sea and Fresh Water in the Microwave Range"- - 9/45
	"First Conference on the Theory of Non-Standard Propagation," Empire State Building, New York City- - - - - - - - - - - - - - - 3/15,16/45
	"Second Conference on the Theory of Non-Standard Propagation," Empire State Building, New York City- - - - - - - - - - - - - - - 6/26,27/45
	"Anomalous Propagation in Case of a Bilinear Modified Index Curve," by C. L. Pekeris
	"Conference on Propagation," Empire State Building, New York City- - - - - - - - -2/10,11/44
	"Third Conference on Propagation," Washington, D.C. -11/16,17,18/44
	"Final Report on Contract OEMsr-1207 Wave Propagation Group"- - - - - - - - - - - -10/11/45
	"Wave Propagation Study for Line of Sight Communication and Navigation (AC 230.04)"-9/45

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DECLASSIFIED PROJECTS, CONTRACTS AND REPORTS

List No. 5

January 21-25, 1946

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

List No. 5
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PROJECTS

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED PROJECTS, CONTRACTS AND REPORTS

DECLASSIFIED PROJECTS*

Project No.	Project No.
OD-16	OD-129
OD-17	OD-131
OD-24	OD-133
OD-25	OD-134
OD-26	OD-138
OD-42	OD-140
OD-61	OD-144
OD-63	OD-145
OD-69	OD-149
OD-72	OD-150
OD-73	OD-151
OD-80	OD-155
OD-86	OD-173
OD-102	OD-180
OD-108	OD-181
OD-113	SC-10
OD-114	[redacted]
OD-115	SC-108
OD-116	SC-135
OD-117	SC-138
OD-119	SC-140
OD-123	SC-141
OD-128	SC-148

* Unless otherwise indicated the declassification of a project covers all of the extensions.

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

List No. 5
Jan. 21-25, 1946
NDRC CONTRACTS

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED NDRC CONTRACTS

Declassification of Entire Contract

NDCrc-18
College of the City of New York

NDCrc-28
Princeton University

NDCrc-49
University of Illinois

NDCrc-71
University of Chicago

NDCrc-208
University of Michigan

OEMsr-131
General Electric Co.

OEMsr-142
Servel, Inc.

OEMsr-236
The Regents of the University of California

OEMsr-251
University of Michigan

OEMsr-345
Owens-Corning Fiberglas Corp.

OEMsr-603
Distillation Products, Inc.
(General Mills Inc.)

OEMsr-1360
University of Michigan

Declassification of Part of Contract

OEMsr-335
Polytechnic Institute of Brooklyn
(Declassification does not apply to test equipment developed under the contract and subsequently adopted by the Army and Navy for Military requirements and still retained in a classified status.)

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

List No. 5
Jan. 21-25, 1946
REPORTS

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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Washington 25, D. C.

DECLASSIFIED REPORTS*

OSRD NO.	OSRD NO.	OSRD NO.	OSRD NO.
73	4311	4701	5245
153	4325	4702	5247
375	4335	4703	5285
414	4385	4716	5390
468	4410	4717	5423
537	4411	4782	5430
939	4412	4798	5434
980	4413	4834	5451
1107	4414	4835	5452
1122	4460	4836	5467
1131	4470	4837	5468
1248	4494	4839	5470
1287	4531	4840	5561
1337	4532	4841	5669
1339	4533	4843	5977
1692	4535	4852	6042
1717	4536	4853	6043
1723	4538	4854	6044
1772	4546	4855	6045
1871	4585	4880	6046
1892	4586	4888	6047
3213	4600	4984	6048
3367	4604	4989	6051
3467	4615	5002	6054
3620	4627	5003	6059
3620A	4637	5026	6061
3653	4639	5027	6119
4218	4662	5075	6183
4272	4676	5076	6184
4303	4677	5077	6208
4304	4678	5146	6224
4306	4679	5147	6226
4308	4681	5169	6241
4309	4682	5180	6269
4310	4683	5181	6325
			6357

* Titles of reports are shwon only where it is necessary in order to identify them fully.

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List No. 5
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REPORTS

DECLASSIFIED REPORTS (CONT'D)

NDRC Division 14, Contract OEMsr-335, Polytechnic Institute of Brooklyn

REPORT NO.	TITLE AND DATE
14-360	"Metallized-Glass Attenuators & Miscellaneous R-F Test Accessories"- - - - - - - - - 4/45
14-521	"Precision Metallization of Glass"- - 10/31/45
14-522	"Fixed Value Metallized Glass Coaxial Attenuators" - 10/31/45
14-523	"Variable Metallized Glass Coaxial Attenuators" - 10/31/45
14-524	"Metallized-Glass Bolometers"- - - - 10/31/45
14-525	"The Development of Metallized-Glass Attenuating Elements for X-Band Wave Guide"- - - 10/31/45
14-526	"Metallized-Glass Wave Guide Attenuators"-10/31/45
14-527	"The Development of Metallized-Glass Attenuators for Test Set TS-147/UP"- - - - - - - - 10/31/45
14-528	"R-F Components for Microwave Bridges"-10/31/45
14-529	"Microwave Power Measurement with Bolometers" - 10/31/45
14-530	"Type "N" Connector Design and Tests"-10/31/45
14-531	"Microwave Attenuation Standards"- - 10/31/45
14-532	"Microwave Attenuation Measurement" - 10/31/45
14-533	"Development of Miscellaneous R-F Line Components"- - - - - - - - - - - - - - - 10/31/45
14-534	"Precision Metallized Glass Resistor Units" - 10/31/45
14-535	"Final Report for OSRD Contract OEMsr-335" - 10/31/45

NDRC Division 14, Contract OEMsr-1360, University of Michigan

Report No. NDRC 14-320	"Rotational Line Width in the Absorption Spectrum of Atmospheric Water Vapor"- 10/10/44 (including supplement dated February 1, 1945)

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

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DECLASSIFIED PROJECTS, CONTRACTS AND REPORTS

List No. 6

January 28-February 1, 1946

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

List No. 6
Jan.28-Feb.1,1946
PROJECTS

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DECLASSIFIED PROJECTS, CONTRACTS AND REPORTS

DECLASSIFIED PROJECTS*

Project No.	Project No.
OD-18	OD-93
OD-19	OD-101
OD-20	OD-104
OD-30	OD-105
OD-35	OD-111
OD-36	OD-120
OD-37	OD-121
OD-38	OD-122
OD-40	OD-127
OD-41	OD-137
OD-47	OD-139
OD-51	OD-143
OD-56	OD-153
OD-62	OD-175
OD-78	OD-182
OD-89	OD-202
OD-91	OD-203
OD-92	SC- 92.11

* Unless otherwise indicated, the declassification of a project covers all of the extensions.

DECLASSIFIED E.O. 11652, Sec 3(E) and 5(D) or (E) NND# 740132

List No. 6
Jan.28-Feb.1,1946
NDRC CONTRACTS

OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED NDRC CONTRACTS

Declassification of Entire Contract

NDCrc-82
Massachusetts Institute of Technology

NDCrc-129
The Regents of the University of California

NDCrc-182
Massachusetts Institute of Technology

NDCrc-198
The Regents of the University of California

NDCrc-200
California Institute of Technology

NDCrc-206
Air Reduction Co. Inc.

OEMsr-4
Massachusetts Institute of Technology

OEMsr-122
Massachusetts Institute of Technology

OEMsr-232
Yale University

CEMsr-269
Arthur D. Little Inc.

OEMsr-279
The Regents of the University of California

OEMsr-326
California Institute of Technology

OEMsr-355
Yale University

OEMsr-365
M. W. Kellog Co.

OEMsr-370
Clark Bros. Co. Inc.

OEMsr-395
The Regents of the University of California

OEMsr-454
Linde Air Products Co.

OEMsr-499
American Machine Defense Corp.

OFMsr-584
California Institute of Technology

OEMsr-604
E. I. duPont de Nemours & Co.

OEMsr-685
Pennsylvania State College

OEMsr-903
Monsanto Chemical Co.

OEMsr-934
The University of Pennsylvania

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OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED REPORTS*

	OSRD NO.		OSRD NO.
NDRC Division 9	66	NDRC Division 11	1011
	151		1018
	157		1238
	163		1327
	186		1424
	723		1426
	748		1443
	752		1448
	1023		1507
	1743		1539
	1787		1579
	1792		1580
	1958		1581
	1959		1616
	3163		1620
	3590		1722
	4111		1850
			1851
NDRC Division 11	75		1913
	87		1951
	95		3359
	99		3369
	107		3482
	121		3483
	122		3484
	126		3523
	182		3524
	291		3652
	403		3699
	409		3760
	439		3768
	450		3800
	491		3861
	574		3972
	613		4141
	779		4142
	780		4143
	876		4161
	921		4206
	945		4207
			4302

* Titles of reports are shown only where it is necessary in order to identify them fully.

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DECLASSIFIED REPORTS (CONT'D)

	OSRD NO.
NDRC Division 11 (cont'd)	4340
	4361
	4493
	4516
	4555
	4623
	4732
	4780
	4792
	4844
	4845
	4879
	5040
	5150
	5151
	5152
	5153
	5154
	5214
	5329
	5407
	5927
	5928
	6052
	6302
NDRC Division 13	1411
	1807
	1907
	3595
	6442

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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 13, Contract OEMsr-92, Oregon State College

"The Radio-Influence Characteristics of a Radioactivated Point Discharger"- 7/ 8/42

Progress Report 1	6/12/41 - 7/31/41
Progress Report 2	8/1/41 - 9/30/41
Progress Report 3	10/1/41 - 11/30/41
Progress Report 4	12/1/41 - 1/31/42
Progress Report 5	2/1/42 - 3/31/42
Progress Report 6	4/1/42 - 5/31/42
Progress Report 7	6/1/42 - 7/31/42
Progress Report 8	8/1/42 - 9/30/42
Progress Report 9	10/1/42 - 11/30/42

NDRC Division 13, Contract OEMsr-678, University of New Mexico

Progress Reports	10/2/42 11/30/42 1/31/43 4/3/43

NDRC Division 13, Contract OEMsr-848, The State College of Washington

Progress Report 1	10/15/42 - 1/31/43
Progress Report 2	2/1/43 - 3/31/43
Progress Report 3	4/1/43 - 5/31/43
Progress Report 5	6/1/43 - 7/31/43
Progress Report 5	8/1/43 - 9/30/43
Progress Report 6	10/1/43 - 11/30/43

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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 13, Contract OEMsr-893, United Air Lines Transport Corporation

Progress Reports	1/29/43
	3/31/43
	5/28/43
	7/27/43

NDRC Division 13, Contract OEMsr-1431, Purdue Research Foundation

Progress Report 1	3/31/45
Progress Report 2	5/20/45

NDRC Division 13, Contract OEMsr-1475, General Electric Company

Progress Report 1	7/16/45
Progress Report 2	9/15/45

NDRC Division 13, Contract OEMsr-1485, University of New Mexico

	"Sferics & Meteorological Phenomena - 7/10/45
Progress Report	6/1/45

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DECLASSIFIED PROJECTS AND REPORTS

List No. 7

February 4 - 8, 1946

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List No. 7
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PROJECTS

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DECLASSIFIED PROJECTS AND REPORTS

DECLASSIFIED PROJECTS*

Projects

OD-5
OD-8
OD-11
OD-13
OD-15
OD-21
OD-22
OD-23
OD-29
OD-31
OD-32
OD-34 (Except Extensions 4, 9 and 11 which remain classified)
OD-43
OD-45
OD-70
OD-71
* Extension to OD-87, "Fatigue Testing on nine special additive agent steels from the Caterpiller Tractor Co. project which is sponsored by the SAE War Engineer Board".
OD-94
SC-22

Sub-projects

SC-15.01
SC-21.01
SC-23.01
SC-31.01
SC-31.02

* Unless otherwise indicated, the declassification of a project covers all of the extensions. Please note, however, that in some instances extensions have been declassified without regard to the overall project which remains classified.

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OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED REPORTS*

NDRC Division 14, Contract OEMsr-358, The Franklin Institute of the State of Pennsylvania

Report No.	Title and Date
14-148	"Magnetron Cathode Studies," Progress Report - 5/1/43
14-169	"Magnetron Cathode Studies," Progress Report - 7/1/43
14-176	"Certain Matter Concerning Sealing in the Magnetron"- - - - - - - - - - - - - - - - 8/6/43
14-187	"Magnetron Cathode Studies," Progress Report - 9/1/43
14-209	"Magnetron Cathode Studies," Progress Report - 11/1/43
14-251	"Magnetron Cathode Studies," Progress Report - 1/1/44
14-295	"Cathode Sparking: Effect of Superimposed D.C. and Role of Coating Resistance" 7/12/44
14-296	"Sparking of Oxide Coated Cathodes"- 7/15/44
14-309	"Back Bombardment of Magnetron Cathodes" - - - - - - - - - - - - - - - - 8/25/44
14-310	"Secondary Electron Emission from Oxide Coated Cathodes" - - - - - - - - - - - 8/25/44
14-514	"Cathode Coating Resistance as Measured by Embedded Probes" - - - - - - - - - - - 10/31/45
14-515	"Secondary Electron Emission from Oxide Coated Cathodes" - - - - - - - - - - - 10/15/45
14-516	"A General Survey of Sparking Phenomena in High Vacuum Thermionic Tubes"- - - 10/31/45

* Titles of reports are shown only where it is necessary in order to identify this fully.

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OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 14, Contract OEMsr-358, The Franklin Institute of the State of Pennsylvania

Report No.	Title and Date
14-518	"An Attempt to Observe the Influence of Barium Strontium Carbonate Particle Size on the Electron Emission from Oxide Coated Cathodes" - - - - - - - - - - - - 10/31/45
14-519	"Preparation of Barium Carbonate Very Low in Strontium and Strontium Carbonate Very Low in Barium" - - - - - - - - - - - - - 10/31/45
14-520	"A Note in Nitrocellulose Binders"- - 10/31/45
	Informal progress reports not related to thoria developments.

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List No. 8

February 11-15, 1946

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List No. 8
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DECLASSIFIED PROJECTS, CONTRACTS AND REPORTS

DECLASSIFIED PROJECTS

Projects

CWS-22*

Extension to CWS-22, "Examination of the Propelling Change of the 4.2-Inch Chemical Mortar," dealing with M6 Propellant only

Extension to CWS-22, "500-7.2-Inch Chemical Rockets"

QMC-4

* Project CWS-22 and the extensions to project CWS-22 listed herein are declassified; all other extensions remain classified. This supersedes information regarding project CWS-22 shown in List 1, "Declassified Projects," dated November 1-December 31, 1945; and in OSRD Memorandum No. 121, Amendment 1, "Corrected List of Declassified Projects," dated January 3, 1946.

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List No. 8
Feb. 11-15, 1946
CMR, NDRC CONTRACTS

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DECLASSIFIED CMR CONTRACTS

Declassification of Entire Contract

CEMcmr-395
Princeton University

DECLASSIFIED NDRC CONTRACTS

Declassification of Entire Contract

NDCrc-190
Precision Castings Co., Inc.

CEMsr-249
Precision Castings Co., Inc.

CEMsr-823
Hathaway Instrument Co.

CEMsr-919
Yale University

CEMsr-920
Purdue Research Foundation

CEMsr-1041
Eastman Kodak Co.

CEMsr-1076
Marmon-Herrington Co.

CEMsr-1211
White Research Associates

CEMsr-1234
Carnegie Institute of Technology

CEMsr-1241
Johns Hopkins University

CEMsr-1311
California Institute of Technology

CEMsr-1502*
The Jam Handy Organization, Inc.

* The sound motion picture prepared under this contract may also be declassified.

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OFFICE OF SCIENTIFIC RESEARCH AND DEVELOPMENT
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DECLASSIFIED REPORTS*

	OSRD NO.
NDRC Division 16	3403
NDRC Division 17	1642
	1688
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	3216
	3321
	3322
	3627
	4197
	4344
	4520
	4576
	4869
	4937
	5004
	5165
	5674

NDRC Division 14, Contract CEMsr-1311, California Institute of Technology

Report No.	Title and Date
14-317	"A New Method for the Precision Measurement of Wave Guide Discontinuities" - - - - - - - - 10/44
14-460	"Precision Measurement of Wave Guide Discontinuities" - - 7/45
14-461	"A New and Practical Method for Matching Two Obstacles in a Wave Guide" - - - - - - - - - - 7/45

NDRC Division 16, Contract NDCrc-190, Precision Castings Co., Inc.

D-3-95	"Metal Searchlight Mirror Development" - - - - - - - - - - 8/13/41

* Titles of reports are shown only where it is necessary in order to identify them fully.

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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 16, Contract NDCrc-190, Precision Castings Co., Inc. (Cont'd)

Report No.	Title and Date
D-3-124	"Metal Searchlight Mirror Development" - - - - - - - - - 10/2/41
D-3-147	"Metal Searchlight Mirror Development" - - - - - - - - - 12/5/41
D-3-185	"Metal Searchlight Mirror Development" - - - - - - - - - 2/16/42

NDRC Division 16, Contract OEMsr-249, Precision Castings Co., Inc.

D-3-239	"Metal Searchlight Mirror Development" - - - - - - - - - 6/15/42

NDRC Division 16, Contract OEMsr-1041, Eastman Kodak Co.

16.5-33	"Metal Mirror Problems"- - - - 5/24/43

NDRC Division 17, Contracts NDCrc-111 and OEMsr-178, Johns Hopkins University

D3 84	7/31/41
D3 197	1/31/42
D3 282	8/1/42
- - - - - - -	4/1/43

NDRC Division 17, Contract OEMsr-920, Purdue Research Foundation

	"Design and Construction of a Cathode Ray Oscillograph" - - 4/30/43

NDRC Division 19, Contract OEMsr-850, Bakelite Corporation

20	"Adhesives for Special Army and Navy Uses" - - - - - - - - - - - - - - 12/6/44

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DECLASSIFIED REPORTS (CONT'D)

Applied Mathematics Panel, Contract OEMsr-618, Columbia University

Report No.	Title and Date
SRG Memo No. 197	"Proposal for the Solution of Certain Linear Algebraic Equations" - 5/19/44

Committee on Propagation, Contract OEMsr-1207, Columbia University

WPG-13	"Preliminary Investigation of Instrumental Errors in the AACS Radio Direction Finders" by L. M. Poast - - - - - - - - - 8/45

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DECLASSIFIED PROJECTS, CONTRACTS AND REPORTS

List No. 9
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List No.9
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PROJECTS

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DECLASSIFIED PROJECTS, CONTRACTS AND REPORTS

DECLASSIFIED PROJECTS

Project

OD-14, and all extensions thereto

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List No. 9
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NDRC CONTRACTS & SUBCONTRACTS

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DECLASSIFIED NDRC CONTRACTS

Declassification of Entire Contract

NDCrc-187
Carnegie Institution of Washington

OEMsr-205
University of Pennsylvania

OEMsr-211
Bakelite Corporation

OEMsr-340
Monroe Calculating Machine Company

OEMsr-426
International Business Machines Corporation

OEMsr-871
University of Pittsburgh

OEMsr-1185
Waugh Equipment Company

OEMsr-1210
Pennsylvania State College

OEMsr-1292
Leeds & Northrup Company

OEMsr-1335
Rutgers University

OEMsr-1356
George Washington University

OEMsr-1366
Lawrance Aeronautical Corporation

OEMsr-1389
Harvard University

OEMsr-1425
Bakelite Corporation

OEMsr-1479
Johns Hopkins University

OEMsr-1484
The Agricultural Experiment Station of the Alabama Polytechnic Institute

OEMsr-1488
Rensselaer Polytechnic Institute

DECLASSIFIED NDRC SUBCONTRACT

Declassification of Entire Subcontract

DIC-188422
California Institute of Technology
(Under contract OEMsr-262, which remains classified)

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DECIASSIFIED REPORTS*

	OSRD No.		OSRD No.
NDRC Division 1	1714	Applied Mathematics Panel	4057
	3209		4741
	3421		5388
	3465		
	3868	Applied Psychology Panel	1273
	4550		1290
	6513		1314
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NDRC Division 2	3864		1931
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* Titles of reports will be shown only where it is necessary in order to identify them fully.

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DECLASSIFIED REPORTS (CONT'D)

NDRC Division 1, Contract OEMsr-516, The Catholic University of America

Monthly progress reports (interim reports) up to and including the report for the period 5/9 to 6/9/45

NDRC Division 17, Contract NDCrc-187, Carnegie Institution of Washington

- - - - - - - - - - - - - - - - - - 1/16/42

- - - - - - - - - - - - - - - - - - 1/16/43

Applied Mathematics Panel, Contract OEMsr-1007, Columbia University

Memorandum 85.1M — "The Smoothing Effect of a Follow-up Motor" AMG-C No. 257 (R)- - - - - - - - 10/45

Applied Mathematics Panel Reports

104.1R)
104.1R Revised) — "The Relative Effectiveness of Cal.0.50, Cal.0.60, and 20 mm Guns as Armament for Multiple Anti-aircraft Machine Gun Turrets"

Applied Psychology Panel, Contract OEMsr-614, National Academy of Sciences

Informal Memorandum No. 1 — "Selection and Reliability of Criterion"

Informal Memorandum No. 2 — "Reliability of Apparatus Tests"

Informal Memorandum No. 3 — "Selection of Final Test Battery"

Applied Psychology Panel, Contract OEMsr-705, College Entrance Examination Board

Memorandum No. 1 — "Preparation of a Preliminary Form of an Officers' Selection Test"

Memorandum No. 2 — "Suggestions for the Revision of the United States Navy Mechanical Aptitude Test - Form T"

Memorandum No. 3 — "Preparation of an Experimental Form of a Spatial Relations Test"

Memorandum No. 4 — "Preparation of Norms for the Officer Qualification Test - Form 1"

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Applied Psychology Panel, Contract OEMsr-705, College Entrance Examination Board (Cont'd)

Memorandum No. 5 — "Comparison of the Officer Qualification Test - Form 1 and the United States Navy Aptitude Test - Form E-2"

Memorandum No. 6 — "An Evaluation of a Method of Combat Officer Selection Developed by the Grant Study"

Memorandum No. 7 — "Preparation of the United States Navy General Classification Test - Form 1 and the United States Navy Tests of Reading and Arithmetical Reasoning - Form 1"

Memorandum No. 8 — "Preparation of Experimental Forms of the United States Navy General Classification Tests and the United States Navy Tests of Reading and Arithmetical Reasoning"

Memorandum No. 9 — "Preparation of Norms for Women for the Officer Qualification Test - Form 1"

Applied Psychology Panel, Contract OEMsr-830, The Psychological Corporation

Memorandum No. 4 — Memorandum on the Relation Between Loudness of Voice and the Intelligibility of Airplane Communication (Based on OSRD Report No. 3313) - 2/44

Informal Communication 1 — "Modified Airplane Noise Generator" - - 1/24/44

Miscellaneous Publications — Facts About Voice Communication

Applied Psychology Panel, Contract OEMsr-834, Brown University

Informal Memorandum 1 — Progress Report of Study of Adaptation to Battle Noise

Informal Memorandum 2 — "Battle Noise Equipment and Screening of Fleet Groups, Preliminary Tabulations"

Informal Memorandum 3 — "Battle Noise Equipment and Screening of Recruit Groups, Preliminary Tabulations"

Informal Memorandum 4 — "Battle Noise Equipment Study of Use in Selecting Emotionally Unstable Men When Noise is Accompanied by Moving Pictures: A Preliminary Report"

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Applied Psychology Panel, Contract OEMsr-834, Brown University

Informal Memorandum 5	"Battle Noise Equipment, Noise Accompanied by Moving Pictures, Study of Use in Selecting Emotionally Unstable Men. Procedure Applied to Cases on the Neuropsychiatric Ward."

Applied Psychology Panel, Contract OEMsr-1171, University of Wisconsin

Informal Memorandum 3	"Frequency Distributions of Ocular Focus Settings Made by a Navy Population"

Applied Psychology Panel, Contract OEMsr-1298, Pennsylvania State College

	"Item Differentiation and Derivation of a 50-Item Scoring Key for the Officer Personal Inventory, Form 1"
	"Preliminary Summary Results of the Study of the Effectiveness of the Classification Procedure for Officers, Amphibious Training Command, U. S. Atlantic Fleet."

Applied Psychology Panel, Contract OEMsr-1340, Stanford University

Informal Memorandum No. 1	"The Use of Proficiency Tests in the Classification of Personnel"
Informal Memorandum No. 2	"Validation of Personnel Specifications for Gun Stations"- - - - - - - - - - - - - - 9/7/45
Informal Memorandum No. 3	"A Study of Interviewing Techniques"- 9/19/45

Tropical Deterioration Administration Committee, Contract OEMsr-205, University of Pennsylvania

Interim Reports	" Fungus Fouling of Ortical Surfaces"
No. 9	- - - - - - - - - - - - - - -9/44
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No.11	- - - - - - - - - - - - - - 11/44
No.12	- - - - - - - - - - - - - - 12/44
No.13	- - - - - - - - - - - - - - -1/45
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Tropical Deterioration Administration Committee, Contract OEMsr-205, University of Pennsylvania (Cont'd)

Interim Reports

"Fungus Fouling of Optical Instruments"
- - - - - - - - - - - - - - - -4/45
- - - - - - - - - - - - - - - -5/45
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- - - - - - - - - - - - - - - -7/45
- - - - - - - - - - - - - - - -8/45

21 Bi-Monthly Reports - Panama Test Station

Progress Report of NDRC Subcommittee on Coordination of Test Methods for Tropicalization of Service Materials- - - -9/30/44

Report of the Subcommittee on Coordination of Test Methods for Tropicalization of Service Materials- - - - - - - - -11/44

Progress Report on Work on Contract No. OEMsr-205 on Coordination of Test Methods in Cooperation with Subcommittee on Coordination of Test Methods, TDAC- - - - - - - - 12/44

Progress Report on Work on Contract No. OEMsr-205 on Coordination of Test Methods in Cooperation with Subcommittee on Coordination of Test Methods, TDAC- - - - - - - - 1/45

Further Work on Hookup Wires by the Subcommittee on Coordination of Test Methods, Army-Navy-NDRC Tropical Deterioration Steering Committee 2/27/45 to 3/9/45

Interim Reports

"Coordination of Test Methods"
- - - - - - - - - - - - - - - -4/45
- - - - - - - - - - - - - - - -5/45
- - - - - - - - - - - - - - - -6/45
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Tropical Deterioration Administration Committee, Contract OEMsr-871, University of Pittsburgh

University of Pittsburgh Tropical Testing Program
- - - - - - - - - - - - - - - -8/44
- - - - - - - - - - - - - - - -9/44
- - - - - - - - - - - - - - - 10/44
- - - - - - - - - - - - - - - 11/44
- - - - - - - - - - - - - - - 12/44
- - - - - - - - - - - - - - - 1/45

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Tropical Deterioration Administration Committee, Contract OEMsr-871, University of Pittsburgh (Cont'd)

Final Technical Report - - - - - - - - - - - - - - - - - - 4/17/45

Tropical Deterioration Administration Committee, Contract OEMsr-1356, The George Washington University

"Tropicalization News"
Issue No. 1- - - - - - 8/30/44
Issue No. 2- - - - - - 12/1/44
Issue No. 3- - - - - - 6/1/45

Report No. 1 "Importance of Enzyme Production by Micro-organisms to the Problem of Tropical Deterioration of Service Materials"- - 7/44

Report No. 2 "Preservation of Leather for Use in the Armed Services"- - - - - - - - - - 7/44

Report No. 3 "Some Factors in Testing Mildew and Rot Resistance Fabrics"- - - - - - 8/44

Report No. 4 "Some Excerpts about Tropical Deterioration from Recent Files of the Office of Field Service and Certain Other War Agencies"-9/44

Report No. 5 "Prevention of Corrosion of Metals"- - -10/44

Report No. 6 "United States Specifications Relating to Tropical Deterioration"- - - - - - - - - 11/44

Report No. 7 Bibliography - "Textiles and Cordage"- -12/44

Report No. 8 " Fungicides for Preventing Tropical Deterioration"- - - - - - - - - - - - - - - - - - -1/45

Report No. 9 Bibliography: "Textiles and Cordage Patents" - 1/45

Report No.10 "United States Specifications Incorporating Fungi Test Methods"- - - - - - - - - - - 4/45

Report No.10A (Revised) "United States Specifications Incorporating Fungus Test Methods"- - - - - - - - - -6/45

Report No. 11 Bibliography: "Leather"- - - - - - - - -4/45

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Tropical Deterioration Administration Committee, Contract OEMsr-1356, The George Washington University (Cont'd)

Report No.12	Bibliography: "Leather Patents "- - - 5/45
Report No.13	Bibliography: "Wood and Paper"- - - -10/45
Report No.14	Pibliography: "Wood and Paper Patents"-10/45
Report	"The American-British Tropical Testing Mission" - - - - - - - - - - - - - - -8/18/45 to 10/15/45
Final Report	- - - - - - - - - - - - - - - -12/1/45

Tropical Deterioration Administration Committee, Contract OEMsr-1389, Harvard University

Report of Activities	- - - - - - - - - - - - - - - -10/44
Reports	"Tropical Fungus Culture Collection"
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	- - - - - - - - - - - - - - - -11/44
	- - - - - - - - - - - - - - - -12/44
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	- - - - - - - - - - - - - - - - 7/45
Condensed Summary Report	"Activities of Tropical Fungus Culture Collection"- - - - - - - - - - - 8/45

Tropical Deterioration Administration Committee, Contract OEMsr-1425, Pakelite Corporation

Monthly Reports	"Deterioration of Plastics by Microbial Action"
	- - - - - - - - - - - - - - - - 9/44
	- - - - - - - - - - - - - - - -10/1-31/44
	- - - - - - - - - - - - - - - -11/1-30/44
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Tropical Deterioration Administration Committee, Contract OEMsr-1425, Bakelite Corporation (Cont'd)

Interim Reports	"Fungus Resistance of Plastics"	
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		-8/45

Tropical Deterioration Administration Committee, Contract OEMsr-1479, The Johns Hopkins University

Interim Reports	"The Effect of Moisture and Fungus on Electrical Insulating Materials"	
		-7/45
		-8/45
		-9/45

Tropical Deterioration Administration Committee, Contract OEMsr-1484, The Agricultural Experiment Station of the Alabama Polytechnic Institute

Interim Reports	"Pacterial Culture Collection"	
		-6/45
		-7/45
Progress Reports		8/45
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		10/45

Tropical Deterioration Administration Committee, Contract OEMsr-1488, Rensselaer Polytechnic Institute

Interim Reports	"Fungus Growth on Hookup Wire"	
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Tropical Deterioration Administration Committee Reports Other Than Contract Reports

Summary Progress Reports	Tropical Deterioration Committee	
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Tropical Deterioration Administration Committee Reports Other Than Contract Reports (Cont'd)

Summary Account of Activities	Tropical Deterioration Steering Committee and Tropical Deterioration Administrative Committee during the period from 3/44 to 6/1/45 (This report is in the form of a letter to Dr. James B. Conant.)	
Tropical Deterioration Administrative Committee Meeting Minutes		7/12/44
		8/16/44
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Tropical Deterioration Steering Committee Meeting Minutes		3/28/44
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Subcommittee on Coordination of Test Methods Meeting Minutes		11/27/44
		2/23/45
		6/5/45

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Tropical Deterioration Administration Committee Reports Other Than Contract Reports (Cont'd)

Subcommittee on Electrical and Electronic Equipment Meeting Minutes	- - - - - - - - - - - - - - - - - - - -	-8/16/44
	- - - - - - - - - - - - - - - - - - - -	-9/29/44
	- - - - - - - - - - - - - - - - - - - -	12/7/44
	- - - - - - - - - - - - - - - - - - - -	-2/21/45
	- - - - - - - - - - - - - - - - - - - -	-4/19/45
	- - - - - - - - - - - - - - - - - - - -	-5/1/45
	- - - - - - - - - - - - - - - - - - - -	-6/8/45
	- - - - - - - - - - - - - - - - - - - -	10/3/45
Subcommittee on Optical Instruments Meeting Minutes	- - - - - - - - - - - - - - - - - - - -	10/17/44
	- - - - - - - - - - - - - - - - - - - -	-1/8/45
	- - - - - - - - - - - - - - - - - - - -	-5/7/45
	- - - - - - - - - - - - - - - - - - - -	-6/21/45
Subcommittee on Photographic Equipment and Supplies Meeting Minutes	- - - - - - - - - - - - - - - - - - - -	-5/29/45
	- - - - - - - - - - - - - - - - - - - -	-6/28/45
	- - - - - - - - - - - - - - - - - - - -	-7/26/45
	- - - - - - - - - - - - - - - - - - - -	-8/30/45
Subcommittee on Textiles and Cordage Meeting Minutes	- - - - - - - - - - - - - - - - - - - -	-8/8/44
	- - - - - - - - - - - - - - - - - - - -	-9/29/44
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Subcommittee on Synthetic Resins, Plastics, and Plasticizers Meeting Minutes	- - - - - - - - - - - - - - - - - - - -	10/20/44
	- - - - - - - - - - - - - - - - - - - -	12/11/44
	- - - - - - - - - - - - - - - - - - - -	-2/14/45
	- - - - - - - - - - - - - - - - - - - -	-6/6/45
	- - - - - - - - - - - - - - - - - - - -	-9/6/45

Report No. 1	"Acceptance Test for Method of Testing Fungus Resistance of Hookup Wires"
Report No. 2	"Acceptance Test for Fungus Resistance of Coating Lacquers and Varnishes"
Report No. 3	"Method for Determining the Relative Fungus Resistance of Plastic Materials"
Conference Minutes	"Biological Testing and Test Organisms" - - - - - - - - - - - - - - - - - - -4/17/45
	"Deterioration of Material Due to Climatic Factors", by L. A. Chambers- - -3/45

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Tropical Deterioration Administration Committee Reports Other Than Contract Reports (Cont'd)

	"Trip to Panama" by W. G. Hutchinson - - - - - - - - - - - - - - - 10/7/44 to 11/11/4
Conference Report	"Deterioration of Equipment and Material Under Tropical Conditions" (First Meeting on Steering Committee with Project Liaison Officers)- - - - - - - - - - 4/11/44
Minutes of Meeting	Liaison Officers to Joint Army-Navy-NDRC Tropical Deterioration Steering Committee - - - - - - - - - - - - - - -11/30/44

Tropical Deterioration Administration Committee, Symbol 5421, Soil Conservation Service, U.S.Department of Agriculture

Interim Reports	"Bacteria Culture Collection" - - - - - - - - - - - - - - - 3/45
	- - - - - - - - - - - - - - - 4/45
	- - - - - - - - - - - - - - - 5/45

Tropical Deterioration Administration Committee, Contract OFMsr-205, The University of Pennsylvania

	Report of Experimental Work, 8/1/44 to 3/1/45, University of Pennsylvania, for Subcommittee on Coordination of Test Methods, Joint Army-Navy-NDRC Tropical Deterioration Steering Committee
	Report of Experimental Work 3/1-31/45, by the Subcommittee on Coordination of Test Methods, Army-Navy-NDRC Tropical Deterioration Steering Committee

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NDRC CONTRACTS
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DECLASSIFIED NDRC CONTRACTS

Declassification of Entire Contract

NDCrc-100
Ohio State University Research Foundation

NDCrc-137
California Institute of Technology

NDCrc-189
The University of Pennsylvania

OEMsr-89
Farnsworth Television and Radio Corporation

OEMsr-266
Gulf Research and Development Company

OEMsr-285
Federal Telephone and Radio Corporation

OEMsr-626
Western Electric Company, Incorporated

OEMsr-747
Westinghouse Electric Corporation

OEMsr-861
California Institute of Technology

OEMsr-923
General Radio Company

OEMsr-1034
Federal Telephone and Radio Corporation

OEMsr-1060
Radio Corporation of America

OEMsr-1107
Westinghouse Electric Corporation

OEMsr-1138
Panoramic Radio Corporation

OEMsr-1176
Ballantine Laboratories, Incorporated

OEMsr-1179
Midwest Radio Corporation

OEMsr-1243
The State University of Iowa

OEMsr-1278
Princeton University

OEMsr-1309
Westinghouse Electric Corporation

OEMsr-1310
Westinghouse Electric Corporation

OEMsr-1430
Federal Telephone and Radio Corporation

OEMsr-1446
Solar Aircraft Company

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Declassification of Part of Contract

NDCrc-126
University of California
(Declassify only those portions of NDCrc-126 referring to meteorology and field studies of chemical warfare agents.)

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* Titles of reports will be shown only where it is necessary in order to identify them fully.

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63-6	Medium Precision, Self-Synchronous Automatic Range Tracking Circuit Model 4
63-7	Photoelectric Automatic Range Tracking Unit
63-19	Calibrator for Low Altitude Bombing Equipment
65-1	A Racon Prospectus with a Pictorial Brief of BGS (Experimental SCR-620 Racon Installation)
103-3	Comprehensive Report on the U.S.S. Semmes Radar Installation
407	Search Scans and System Performance
414	Report on the Microwave Antenna Conference July 19-24, 1943
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460	Rosebud Microwave Beacon Equipment
467	Semi-Automatic Tactical Plotting Board
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477	Overinterrogation Control of Microwave Beacons
483-15	Radome Bulletin Number 15-The Measurement of Dielectric Constants in the one Centimeter Band

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483-17	Radome Bulletin 17-Current Progress on RF Research
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522	Tests of Beacon Receiver on V-Beam
531	Rotating Corrugated Eccentric Line Antennas
541	An Automatic Frequency Control and Frequency Selection System for Magnetrons
556	Fading Simulator
559	Final Report on SMIR (January, 1944)
571	Effect of Pulse Length on System Performance and Operation
581	Ultra-Portable Microwave Radar Beacons as Beam Approach Aides in Aircraft Landing
590	Siting and Range of Microwave Beacons
595	The SCR 584 Plotting Table System
596	Florida Tests on Rosebuds Against SCR-582 SCR-615 MEW
598	A "Range Only" set for "Close-In Seeing"
602	The Statistics of Beacon Interrogation
621	Increasing Stability of Operations of 4J31-35 Magnetrons in the AN/CPS-1 System
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658	A Microfilm Chart Projector for Radar Navigation
662	A Microwave Frequency Discriminator
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815	An Electronic Frequency Stabilization System for CW Microwave Oscillators
816	Interference Between SCR-584's Tracking APN-19 Beacons
IV-6 Sec R	Regular Report on the USS Sommes 3000 Megacycle Operations
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	A Model Method for Determining Tank Antenna Patterns
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100-3	Modeling the Direction Finding Loop Antenna: Application to a Model of A B-24 Aircraft
	Effects of the Airplane Structure on the Polarization of Airborne Antennas
100-4	Final Report on Contract NDCrc-100

NDRC Division 15, Contract OEMsr-759, Ohio State University Research Foundation

759-1	Note on the Patterns of Cone Antennas
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759-21	B-24 Bomber at 100 mc. Reflection Patterns
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759-23	Antenna Radiation Patterns for the HS-293
759-24	A Square Foot Amplifier
759-26	Summary of Antenna Radiation Patterns for Antennas on the PB4Y-2
759-29	Antenna Radiation Patterns for 1,000 mc. Measured on the SB2C
759-31	Modeling Slot Antennas
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89-1	Developmental Model of an Interference Generator for the 2 to 20 Megacycle Spectrum
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89-3	Progress Report #1. . . . . July 31, 1941
89-4	Progress Report #2. . . . . September 3, 1941
89-5	Progress Report #3. . . . . October 3, 1941
89-6	Progress Report #4. . . . . December 4, 1941
89-7	Status Memo: NDRP #58. . . . . January 21, 1942
89-8	Progress Report #5. . . . . February 5, 1942

NDRC Division 15, Contract OEMsr-285, Federal Telephone and Radio Corporation

285-1	Development Model of an Interference Generator for the 15 to 30 Megacycle Spectrum
285-2	Type NLS 516 Interference Generator
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NDRC Division 15, Contracts OEMsr-411 and OEMsr-1045, Harvard University

1045-MR-1	Modifications to the Hallicrafter S-27-D Receiver to Cover the 17 to 28 Mc. Band
1045-MR-13	Modification of AN/APA-11 Pulse Analyzer to Include Elliptical Time Base for PRF Measurement
1045-1	Elimination of Enemy Radar Interference From SCR-522 Receiver BC-624-A
1045-3	Modifications to Make RC-156-A "Carpet" Transmitter Operate in the 335-415 Mc Band

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1045-TM-5	Installation of Anti-Jamming Devices in the German Ground Radar Equipment Fuse 62
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411-6	Operating Instructions for Type D101 Tuning Unit
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411-11	A Wide-Range Microwave Oscillator (A-1501)
411-13	The RC-160 Receiver (Auto-Search)
411-14	B502 Jamming Signal Generator
411-15	100 MC Airborne Jamming Transmitter (B1700) (Navy: CXCE)
411-16	Operating Instructions for Type D104-A Tuning Unit
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411-26	Calculated Frequency Spectrum of RCA 931 Noise Sourc
411-28	Design Information for Several U.H.F. Filters
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411-40	The AN/APQ-3 (A-2600) and AN/APQ-4 (A-2700) Wide-Range Microwave Superheterodyne Receivers
411-45	The F-902 (Carpet I) Airborne Jamming Transmitter (RRL prototype of Army RC-156, Navy CXCD)
411-48	Enemy Radar Characteristics

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411-57	Operating Characteristics of the 931 Phototube in the Frequency Range 50 to 5000 kc
411-62	F-2500 Higher Power Carpet Transmitter (Carpet III) (RRL prototype of AN/APQ-9)
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411-86	Theory of the Visual vs Aural or Meter Reception of Radar Signals in the presence of Noise
411-86A	Note on the Theory of Square-Law Rectification of a Modulated Carrier in the presence of Noise
411-89	Constant Field Strength Ground Plane for Receiver R.F. Response Measurements
411-90	A Calculation of the Effect of Rectification and Clipping on the Spectra of the Output of the 6D4, 884, 178A, and 2D21 Noise Sources
411-92	Noise Output of the Sylvania 6D4 Gas Triode at Audio and Supersonic Frequencies (25 cps to 100 kc)
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411-116	A Triode Oscillator - Tripler
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