

*File somewhere  
in the library*

Schenectady, May 28, 1946

FM Bailey  
CJ Biver  
JH Campbell  
KC DeWalt  
TA Elder

AC Gable  
DW Jenks  
WL Jones  
WC Kirk  
FH Miller

✓ RW Newman  
DS Peck  
EF Peterson  
OW Pike  
RO Poag

EF Russell  
HC Steiner  
RP Watson  
GT Waugh  
CR Knight

*PSS 8/5  
CWA  
JN MG  
CWA  
NAB VD  
M PBN  
GLC  
RWB*

Attached is a listing, by date, of the Data Folders and Engineering Reports that have been issued since December, 1939 by Tube Division Engineering. This supplements the subject classification maintained in the Technical Data Section and outlined in the addendum to Tube Engineering Instruction ETE 3.04 dated August 3, 1945. The subject classification provides a convenient subject index to data that has been written on any phase of electronic tube theory, design, or application. The accompanying list provides a chronological list without any attempt at subject classification.

*Please check those which you believe are  
may be interested in — I've marked some*  
*A. J. Walsh*

WJ Walker:rtm  
Tel. 3685

Enc.

BUFFALO TUBE WORKS	
R.O.P.	W.E.M.
W.L.P.	R.F.H.
J.M.S.	C.H.S.
MAY 29 1946	
R.H.B.	C.H.
W.H.B.	F.J.F.
W.C.L.	
R.W.N.	E.F.S.

ENGINEERING  
TUBE DIVISION

ELECTRONICS DEPARTMENT

Tube Division - Engineering

DATA FOLDERS - 1939


JNM

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Memorandum on Design of FG-259-A	E.F. Peterson	12-4-39	71106
Vacuum Tube Dept. Survey	O.W. Pike H.E. Thomson	12-7-39	71107
GL-889 Air Cooled	K.C. DeWalt	12-13-39	71108
ZG-415 Tests on Proposed Bldg. 69 Cooling Clamps	J.H. Hutchings	12-18-39	71109

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ENGINEERING REPORTS - 1939




<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
FG-235-A Ignitor Characteristics	J. H. Hutchings	1-4-39	19554
Design of Fin Type Coolers for Vacuum Tubes	K. C. DeWalt	2-7-39	19555
Continuously Pumped Demountable High-Vacuum Tubes	E. D. McArthur	6-12-39	19556
An Oscillographic Method of Obtaining Diode Characteristics	O. W. Livingston	4-25-39	19557 
The Electron Capacitor Tube	E. D. McArthur	6-12-39	19558

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<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
GL-814 Production	R. T. Pennoyer	1-15-40	71110
Timing Circuit Used to Measure Time of Voltage Pulses Such As Ignitor Voltage Time, Time to Fire Rectifier, Etc.	C. Lawry	1-18-40	71111
Ignitor Life Tests	H. C. Steiner	1-29-40	71112
Complaint Report - 1939	D. A. Mullaney	2-14-40	71113
Picture Contrast in Cathode-Ray Tubes	C. H. Backman	2-15-40	71114 → ★
Test Results - Westinghouse Thermal Relay	O. W. Livingston J. H. Hutchings	2-20-40	71115
Welder Panel Water Failure Protection	J. H. Hutchings	2-21-40	71116 ★
Comparison Tests on Western Electric 242C, 261A & 276A Types	K. C. DeWalt	2-29-40	71117
Manufacturing Loss Procedure	R. M. Larson	3-8-40	71118 ✓
Memo. on Tests of GL-415 As An Air-Cooled Rectifier Tube	E. F. Peterson	3-11-40	71119
GL-866A Cost Estimate	A. C. Gable	3-12-40	71120
Manufacture of ZA-32 Vacuum Gaps	W. H. Teare	3-22-40	71121
Short-Circuit Tests - RG-238-A	E. F. Peterson	4-1-40	71122
Memo. on Camden Trin - GL-880 and 889	K. C. DeWalt	4-23-40	71123
Report of Visit to RCA Plant at Harrison, April 18, 1940	R. T. Pennoyer F. R. Linehan	4-24-40	71124 → ★

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Welding Control Ignitrons - Complaints First Four Months 1940	J. H. Hutchings	4-30-40	71125
Contact With Nela Park Regarding Fluorescent Lamp Switch	H. A. Jones O. W. Pike	5-6-40	71126
Visit to RCA Mfg. Co. at Harrison, May 10, 1940	R. T. Pennoyer	5-15-40	71127 
Formula for Determination of Ignitor Immersion in Mercury	G. M. White	5-14-40	71128
The Shape of the Mercury Meniscus	G. M. White	5-20-40	71129
Ignitron Tubes - Substitution for Stainless Steel Tubing	J. H. Hutchings	5-29-40	71130
Test Procedure & Limits for Ignitors Supplied to Aluminum Co. of America	G. M. White	5-31-40	71131
Percentage Testing of Ignitron Tubes	J. H. Hutchings	6-4-40	71132
New Design 2.5 Ampere Cathode Tubes	H. T. Maser	6-5-40	71133
Ignitor Characteristics & Their Determination	G. M. White	6-13-40	71134
Visit to Harrison - June 17, 1940	R. T. Pennoyer	6-19-40	71135 
GL-814 Trial Lot	R. T. Pennoyer	6-18-40	71136
Operation of 166 Tubes in Pittsfield Battery Chargers	J. L. Zehner	7-17-40	71137
Report on Mfg. Losses	E. F. Peterson	8-5-40	71138
Driver-Harris Nickel Alloys for Oxide-Coated Cathodes	H. C. Steiner	8-6-40	71139 
Report on GE & Westinghouse Ignitors Returned from N. Y. Board of Transportation	T. A. Elder	8-9-40	71140

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
FG-235-A and FG-271 Cavity in Intermittent Rectifier Service	J.H. Hutchings	8-21-40	71141
Induction Heating Equipment	C.T. DeGroat	8-21-40	71142 —
Trip to Bell Tel. Lab.	H.T. Masser H.C. Steiner	8-29-40	71143 —
Report on Mfg. Losses VT-4C August, 1940	E.F. Peterson	9-9-40	71144
Memo. on Resistance Brazing at West Lynn Works	J.H. Hutchings	9-11-40	71145
Static & Oscillation Aging Equipment	C.T. DeGroat	9-16-40	71146
GL-860; 50 Watt & Smaller Tube Testing Equipment	C.T. DeGroat	9-16-40	71147 —
Testing Equipment for P.J. Type Tubes	C.T. DeGroat	9-16-40	71148
Automatic Exhaust Machines	C.T. DeGroat	9-16-40	71149
"Sealing-In" Machine (Kahle)	C.T. DeGroat	9-16-40	71150
FG-105; FG-17 and Smaller Thyratron Testing Equipment (Aging and Test)	C.T. DeGroat	9-16-40	71151 —
Bench Exhaust Equipment FP-265; FG-17; PJ Types	C.T. DeGroat	9-16-40	71152 — ★
Bench Welding Equipment	C.T. DeGroat	9-16-40	71153
Resistance Welding Data	J.H. Hutchings	9-18-40	71154 — ★
Mfg. Losses on Stems	E.F. Peterson	10-2-40	71155 —
Reallocation Program	C.T. DeGroat	10-3-40	71156
Memo. on Welding New Cathode Headers in FG-259A Tubes	L.F. Hutchins	10-22-40	71157

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Welding Control Ignitrons Effect of Thermal Capacity on Ratings	J. H. Hutchings	11-7-40	71158
Memo. on Kenotron Applications in Paint Spraying	K. C. DeWalt	11-12-40	71159 —
Mfg. Losses - PN-5385 - FP-265	E. F. Peterson	11-12-40	71160
Report on Study of Coated Cathode Flaking	H. C. Steiner	11-29-40	71161 — ☆
Visit to RCA Mfg. Co. at Harrison, November 29, 1940	R. T. Pennoyer	12-2-40	71162 — ☆

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<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Characteristics & Ratings of Welding Ignitrons	L.F. Hutchins	7-16-40	19559



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DATA FOLDERS - 1941

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Mfg. Losses on VT-4C - December 1940	E.F. Peterson	1-8-41	71163
Report of Visit to Swissvale January 15, 1941	R.T. Pennoyer	1-18-41	71164 —
Vacuum Tube Department Mfg. Losses - 1940	E.F. Peterson	1-22-41	71165
Investigation of High Drop & Anode Overheating in Cable Testing Equipment of Con- solidated Edison Co.	D.A. Mullaney	1-27-41	71166
Report on Study of Coated Cathode Flaking (Modified DF-71161)	H.C. Steiner	2-6-41	71167 — ★
Mfg. Losses on VT-4C - January 1941	E.F. Peterson	2-11-41	71168
Leak Test Report for Months of Nov. and Dec. 1940	E.J. Buksa	3-5-41	71169
Mfg. Losses on VT-4C - February 1941	E.F. Peterson	3-10-41	71170
Report of Visit to Swissvale March 10, 1941 - 32 Volt T.C. Amplifier	R.T. Pennoyer	3-17-41	71171 —
Ignitron Anode Lead Design	R.E. Franklin	3-25-41	71172
Operating Experience with Sealed-Off Power Rectifier Ignitron Tubes	L.C. Kunz H.C. Steiner	4-2-41	71173
Mfg. Losses on VT-4C - March 1941	E.F. Peterson	4-7-41	71174

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Ignitron Welding Control Business	J.H. Hutchings	4-15-41	71175
GL-851 Mfg. Losses on PN-5512	E.F. Peterson	4-16-41	71176
Air-Cooled Operation of Ignitron GL-415	R.E. Franklin	4-19-41	71177
Sciaky Intermittent Recti- fier Tests on FG-271 & 235-A	R.E. Franklin	4-26-41	71178
Parallel Operation of the FG-238-A & FG-238-B in Various Combinations	R.E. Franklin	4-29-41	71179
High Current Tests on the GL-415 with a Low Duty Cycle & Several Water Cooling Devices	R.E. Franklin	5-3-41	71180
Mfg. Losses on VT-4C - April 1941	E.F. Peterson	5-5-41	71181
Report of Visit at Swissvale May 15, 1941	R.T. Pennoyer	5-16-41	71182
1940 Complaint Report	D.A. Mullaney	5-23-41	71183
Test Installation of Two GL-870A Phanotrons in FBJ Transmitter at Naval High Power Radio Station, Annapolis	T.A. Elder	6-5-41	71184
Mfg. Losses on VT-4C - May '41	E.F. Peterson	6-11-41	71185
Ignitron Rectifiers for Circuit Breaker D-C Closing Coils	J.H. Hutchings	6-13-41	71186
Report on IRE Convention at Detroit 6-24-41 & Visit at Nela Park 6-25-41	R.T. Pennoyer	6-27-41	71187
Report on Vacuum Tube Dent. Presented to M.J. Hammer, J. Johnson. W.G. Davis, Lamp Dent.		7-1-41	71188

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Radio Frequency Tests on Glass-Metal Seals	F.M. Bailey	7-1-41	71189 —
Manufacturing Losses on VT-4C - June 1941	E.F. Peterson	7-14-41	71190
Air-Cooled Operation of Ignitron GL-415 With & Without an Anode Heater	J.E. Holcomb	7-16-41	71191
Rating of Ignitron GL-415	J.E. Holcomb	7-16-41	71192
Memo. on Application of FG-166 Tubes in Pittsfield Battery Chargers	D.A. Mullaney H.C. Steiner	12-10-41	71193
Calculation of Voltage and Current Relationships for Common Rectifier Circuits	K.W. Cochran	7-18-41	71194 —★
Vacuum Tube Dept. - Losses for First Half of 1941	E.F. Peterson	7-23-41	71195
Theory & Operation of Ignitor Control Panel for Welding Test Set	K.W. Cochran	8-11-41	71196 ★
Mfg. Losses on VT-4C - July 1941	E.F. Peterson	8-13-41	71197
Rectifier Tubes Vs. Copper Oxides	J.H. Hutchings	8-16-41	71198 —
GL-841 (VT-51) Development	R.T. Penoyer	8-29-41	71199
Arc Beck Indicator 200 Kw - 220 V for 3 Phase Ignitron Test Set	S.G. Ringland	8-28-41	72100
Temperature and Torque Tests on Bases Using Durite Basing Compound	R.A. Remington	9-3-41	72101 —
Rectifier Operation of ZG-440	S.G. Ringland	9-5-41	72102
Mfg. Losses on VT-4C - Aug. 1941	E.F. Peterson	9-10-41	72103

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Size of Tube Vs. Cost Per Amperes	J.H. Hutchings	9-19-41	72104
History & Status of the Sealed Ignitron Rectifier Installations	H.C. Steiner	9-24-41	72105
Electrical Leakage of VT-4C Tubes with 21 R Insulators	R.A. Remington	9-25-41	72106
Rectifier & Inverter Operation of ZG-419 Ignitron	M.W. Martin	9-26-41	72107
Mfg. Losses on VT-4C - September 1941	R.R. Rottier	10-7-41	72108
Visit to High Power Naval Radio Station, Annapolis	H.L. Thorson	10-31-41	72109
Mfg. Losses on VT-4C - Oct. 1941	B.R. Twist	12-10-41	72110
Mfg. Losses on VT-4C - Nov. 1941	E.F. Peterson	12-5-41	72112
Memo. on Factory Tests of ZP-426 Air-Cooled Ignitron for D-C Transmitter	J.L. Zehner	12-13-41	72113

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<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Mfg. Losses on VT-4C - December 1941	E. F. Peterson	1-6-42	72114
Plating Procedures	K. G. Frisbee	1-27-42	72115 —
Technical Information on Weltronic 230 & 272 (United Electronic 973 & 967)	P. W. Cramchettes	1-30-42	72116
Promosed Expansion Program for Manufacture of Receiving Tubes	W. F. Hardgrave	2-9-42	72117 —★
Technical Information on Cetron Tubes	P. W. Cramchettes	2-19-42	72118 ★
Visit to High Power Naval Radio Station at Annapolis	H. L. Thorson	3-30-42	72119
Test of United Electronics 975A & Fed. Tel. N-375A Mercury Vapor Rectifiers	A. W. Coolidge	4-9-42	72120
Technical Information on Western Electric Types 355A & 323A	E. F. King	4-23-42	72121
Report on Development Work on Pulse Thyatron Type ZG-473	A. C. Gable	5-6-42	72122
GL-414 Development Tube Final Report	R. R. Rottier	5-15-42	72123
Visit to Western Electric Co., F. B. J. Transmitter at Annapolis & RCA at Camden	H. L. Thorson	5-28-42	72124

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Report on Tube Service at the American Gas & Electric Corp.	R. A. Black	6-2-42	72125
Fernico Seal Practice	H. C. Steiner	6-5-42	72126 <del>☆</del>
Trip to WLS for Installation of New Design GL-898 Tubes	H. L. Thorsen	6-22-42	72127
FG-166 - Visit to Pittsfield Battery Chargers - 6-22-42	J. L. Zehner	7-2-42	72128
Ohio Power Co. - Torrey Substation Electronic Exciter and Regulator	H. C. Steiner	7-6-42	72129 ☆
Progress Report on ZG-515 Pulse Thyatron (OSR Contract OEMsr180 Symbol No. 1310)	A. C. Gable P. W. Crapuchettes	7-15-42	72130
Shield Grid Characteristics of Thyatron FG-97	C. W. Brown	7-16-42	72131 <del>☆</del>
Trip to WCKY to Install Two New Design GL-862's	H. L. Thorsen	8-5-42	72132
Measurement of the Resistivity of Glass at High Temperatures	C. C. Kirchenbauer	8-6-42	72133 —
Libbey Glass Test	C. C. Kirchenbauer	8-10-42	72134 —
Life Test of ZA-503 Vacuum Switch on Supercharger Application	L. M. Hertz	7-8-42	72135 —
Progress Report on H <sub>2</sub> -Filled Thyatrons	P. W. Crapuchettes	8-18-42	72136
An Industrial Tube Tester Based Upon Cathode Emission	C. W. Brown	8-21-42	72137 —
Prevention of Reverse Current & Arcback on the Holding Anode of an Ignitron by the Use of Inductance	R. A. Black	9-1-42	72138

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Operation of FG-238-B When Tilted from Vertical Position	E.H. Dinger	10-5-42	72139
ZG-502	A.W. Coolidge	10-9-42	72140 —
Emission Pulser	J.M. Cooper	10-15-42	72141
Vapor Borating	W.O. Alston	10-31-42	72142
393-A Development	D.S. Peck	11-18-42	72143 —
575 and 110-220 Volt Power Dissipation System #39	C.T. DeGreat	12-18-42	72145 ★
Report on "G-489" s Produced in Buffalo	P.W. Crapuchettes	12-23-42	72146

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<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Technical Information on Sylvania Micro-Thyratron	P.W. Crapuchettes	1-1-43	72147
Rating Tests of FG-271 Ignitrons in the Sciaky Rectifier Circuit	R.R. Rottier	2-11-43	72148
Charging Cycle for Thyratron Pulsar	P.W. Crapuchettes	2-12-43	72149
Ratings of the Sylvania Type 747 Thyratron	P.W. Crapuchettes	3-26-43	72150
Investigation of Heating & Cooling Cycle of Vacuum Furnace in Building 5	A.C. Cooley R.A. Black	3-27-43	72152 —
Final Report on Pulse Thyratrons (OSRD Contract OEMar180 Symbol No. 1310)	P.W. Crapuchettes	4-10-43	72153
Technical Report ZG-489	A.E. Rankin		72154
Investigation of Ex. Schedule (FG-172) SI-12112-91 11th Issue, 4-1-43	R.R. Rottier C. Brodell	5-20-43	72155
A Mutual Conductance Measuring Test Circuit	W.E. Cronberg	6-11-43	72156 —
Electrolysis of Block Seals	P.W. Crapuchettes	7-1-43	72157
Oxide-Coated & Thoriated Tungsten Filaments In a Small Thyratron	A.E. Rankin P.W. Crapuchettes	7-21-43	72158
Final Report on ZG-489	P.W. Crapuchettes A.E. Rankin	8-6-43	72159
Tests on Sylvania 204 Thyratron	P.W. Crapuchettes	9-13-43	72160



<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
The Preliminary Report on the Preparation & Activation of Oxide-Coated Cathodes	E.E. Hafkemeyer R.E. Roth	5-24-44	72161 <i>believe we have</i>
Redesign of Small Thyratrons	D.S. Peck	10-29-43	72162
A Review of Disc Tube Application	F.M. Bailey	7-28-43	72163
Oscillographic Method of Measuring Positive Grid Characteristics	C.W. Bleichner S. Ringland	8-26-43	72164 <i>Try for THIS CMT</i>
Design Details on XC-728-A Thyatron (Japanese Tube)	P.W. Crapuchettes	9-14-43	72165
Summary to Date of Tests on Modified Designs of KC-4 (ZP-624)	H.L. Thorson	4-1-44	72166
Properties and Handling of Hydrofluoric Acid	C.C. Kirchenbauer	9-15-43	72167 —
Report on WG-238-B Ignitrons Returned From Cardox Corp., Claremore, Okla.	R.A. Black	9-25-43	72168
Design Data for Lighthouse Tube Cathodes	W.F. Hardgrave	10-2-43	72169
Report on the Convention of the Glass Division of the Ceramic Society, Sept. 15-16, 1943	H.C. Steiner	9-30-43	72170
Constant Current Emission Test Record	B.S. Angwin	10-20-43	72171 <i>CMT</i>
Technical Information on Raytheon RX-233-A	C.J. Cleary	11-2-43	72172
GL-414 Investigation of Exhaust Schedule S-12112-160	R.R. Rottier	11-18-43	72173
Determination of Oscillator Losses	C.E. Sturtevant C.W. Bleichner	12-1-43	72174 <i>*</i>

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Low Power Ignitor Firing Circuit	C.E. Pfund	12-7-43	72175



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<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Development of GL-872-A/872	D.S. Peck	4-3-44	72176
Capacity Measurements of Cavity of K-Band Oscillator	H.C. Hertha	1-14-44	72177
The Organization of a Functional Group for Electronic Tube Engineering	R.E. Roth	1-19-44	72178 -
Fluorescence of Glass	R.I. Iles	2-1-44	72179 ->
The Regulation of Thyatron Line-Up Type Modulators	P.W. Crapuchettes	2-15-44	72180
Tests on the Ability of the Welding Ignitrons When Operating from Stiff Power Circuits	R.R. Rottier	2-26-44	72181 ★
Engineering Design Testing Program	A. Hendry L.D. Bishop	3-3-44	72182
Engineering on Lynn Thyatrons and Phanotrons	D.S. Peck		72183 -
Automatic Aging Control for Pulse Thyatrons	J. Waitkenous	3-20-44	72184
Rating the Vacuum Capacitor	O.P. Taylor	3-2-44	72185
Investigation of GL-846 Power Output	C.W. Bleichner	4-11-44	72186
GL-889 Glass Tests (50mc)	C.W. Bleichner	4-18-44	72187
Design Details of TR-595-A (Japanese Tube)	T. G. Crawford	4-26-44	72188

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Inter-Electrode Capacity Measuring Test for Lighthouse Tubes	W.E. Cronburg	5-2-44	72189
Summary of Filament Design Tests on ZP-624	H.L. Thorson D.H. Beck	5-5-44	72190
Sampling Inspection with Analysis of Data Promotes Better Quality Ceramic Insulators	F.C. Sarchet	6-10-44	72191
Report on Eimac 527	C.W. Bleichner	5-5-44	72192
U.H.F. Power Measurement	C.E. Sturtevant	5-15-44	72193
Air-Cooled Load Limit Tests on GL-415	R.R. Rottier	5-30-44	72194
Amplification Factor-Mutual Conductance Test Set for Lighthouse Tubes	W.C. Cronburg R.O. Ringsmith	6-8-44	72195
GL-813 Oscillation Screen Grid Current Tests	W.E. Brush C.W. Bleichner	6-20-44	72196
An Actuator For General Electric Vacuum Switches	H.W.A. Chalberg	6-27-44	72197
Progress Report on GL-860 Exhaust Schedule in Bldg. 269	S.R. Bowen D.H. Beck	7-12-44	72198
Report on the Development of the ZP-577	F.M. Bailey	7-20-44	72199
Reflection Reducing Coatings	E.B. Fehr	7-29-44	77800
Use of Pure Grain Alcohol and Possible Substitutes for Cleaning Tube Parts	P.B. Parker	11-22-44	77801
Summary of GL-813 Development	D.W. Hawkins.	10-31-44	77802
Frequency Determining Factors in GL-5J29	M.C. Schramm P.W. Crapuchettes	11-1-44	77803
Development of GL-5J29	M.C. Schramm	11-1-44	77804

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Design Data on Static Characteristics of Lighthouse Tubes	T.M. Liimatsinen R.W. Freeman	11-3-44	77805
Development & Production Status of Anti-TR Tubes	G.H. Floyd	12-1-44	77806
Preliminary Report on Measuring Conversion Transconductance	E.O. Vandeven	12-4-44	77807 
Color Specification in Cathode-Ray Tubes	E.B. Fehr A. Petraitis	12-14-44	77808 
Three-Anode Sealed Ignitron Tube Cost & Comparison Study	H.C. Steiner	12-20-44	77809

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<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
Palladium Tube Method of Hydrogen Purification	C. T. DeGroat	1-25-44	19560
Organic Liquid Diffusion Vacuum Pumps	C. T. DeGroat	2-11-44	19561

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<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Number</u>
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