

*Document Room*

CONTROLLED DISTRIBUTION

6D-108-2

Sheet 1 of 59 Sheets

Subject: List of Slides, 35mm. Slides, and Vu-Graphs  
To: Distribution List  
From: Division 6 Document Room, C-133  
Date: 31 December 1957

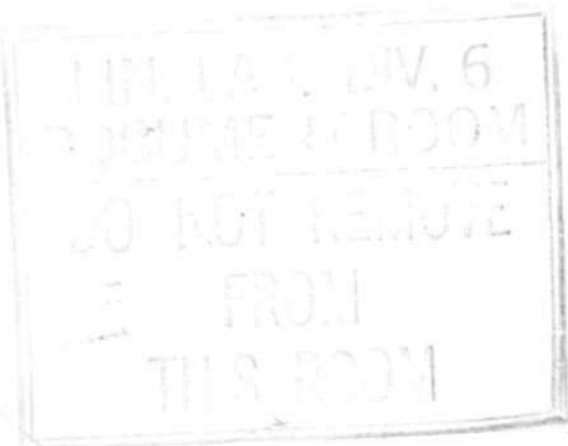
The slides and Vu-Graphs listed here are available on a loan basis from the Division 6 Document Room subject to security regulations. The Document Room has a card file of positive prints of these slides for ready reference.

Attachments:

Slide List  
35mm Slide List  
Vu-Graph List

Distribution List

D. L. Bailey  
Ann Beatrice  
S. Bemis - Barta  
W. J. Canty  
A. M. Falcione  
C. W. Farr  
J. H. Gilman  
S. Grover  
F. E. Heart  
A. P. Hill  
L. McHenry - WE  
Joan Sullivan  
Alice Welch



MITRE ACCOUNTABILITY













6D-108-2

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-121	F-760	A-34158		Insurance	U	See SN-275
S-122	F-759	A-34157		Calculation	U	See SN-277
SC-123				Arithmetic Element (8 digits) (Too Dark)	U	No prints or drawings
SC-124				Arithmetic Element (8 digits) (Better Exposure) R-S	U	See SC-281
SC-125	F-471	A-35601		B Register-Tube Side B Reg/In-Out Reg.View Prod.Model	U	See S-102
SC-126	F-470	A-35600		B Register-Component Side Prototype	U	See S-103
SC-127	F-496	A-35603		B Register - Corner Detail	U	See S-104
SC-128				Test Console	U	See SC-128A
SC-129				Arithmetic Element (1 digit)	U	No print or drawing
S-130	F-749	A-34134		Speed storage Diagram of Computer Rating	U	
S-131	F-751			WWI on a 16x16 S.T.Pattern	U	(5-5-53) Declassified 2/8/57
S-132	F-748	A-34155		Sonar & Radar Relative Location Flow-Diagram	C	
S-133	F-736	A-34144		Two Measurements of Known Proc.	U	
S-134	F-795			Central Control Racks c7-c15	U	See SC280
S-135	F-3772			Equations - 1,2,3, (Aircraft Flight Equations)	U	
S-136	F-3773			Equations - 4,5,6, (Aircraft Flight Equations)	U	
S-137	F-3774			Equations - 7,8,9, (Aircraft Flight Equations)	U	
S-138	F-3775			Equations - 10, 11, 12, (Aircraft Flight Equations)	U	
S-139	F-3776			Equations - 13, 14, 15, 16, 17, 18 (Aircraft Flight Equations)	U	
S-140	F-3777			Equations - 19,20,21 (Aircraft Flight Equations)	U	







APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

10

6D-108-2

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-181	F842			Plot of $x, x^2$ and $x^3$	U	
S-182	F921			Cubic Curve with Axes	U	
S-183	F507			5 Digit Multiplier (complete)	U	
S-184	F997	A-35706		Plate Current Waveform - Deteriorated Tube	U	
S-185	F999	A-35707		Plate Current Waveform - Good Tube	U	
S-186	F1000	A-35697		Pulse Amplifier Circuit Schematic	U	
S-187	F1001	A-35704		Difference in Two Lots of 7AD7's	U	
S-188	F1002	A-35702		Circuit For Determining Static Characteristics Maintaining Approx. Zero Grid-to-Cathode Potential		
S-189	F968	B-35535		Pictorial Schematic of the Storage Tube Components	U	See S-227,258,259
S-190	F1003	A-35705		Plate Current Waveforms for Different Filament Voltages-Deteriorated Tube	U	
S-191	F1004	A-35700		Plate Current Waveforms for Different Filament Voltages-Good Tubes	U	
S-192	F1005	A-35698		Cathode Characteristics of Deteriorated 6AG7 Tubes	U	
S-193	F1006	A-35701		Characteristics of 6AG7 Tubes with Approx. Zero Grid-to-Cathode Potential	U	
S-194	F1007	A-35699		Spectrographic Analyses of Cathodes	U	
S-195	F1008	A-35703		Pulse Method for Determining Equivalent Cathode Resistance	U	
S-196	F1009	A-35625		Section Through Cathode with Interface	U	
S-197	F1010	A-35613		Typical Secondary Emission Curve	U	
S-198	F1012	A-35634		Holding Gun Operation Near Positive Stability	U	
S-199	F967	A-35353		Marginal Checking of Gate Circuit	U	
S-200	F1011	A-35633		Holding Gun Operation Near Negative Stability	U	















6D-108-2

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-321 S-322	F1281	A-36614		Best Ferritic Core Number Cancelled	Obsolete (WNP)	U See S-311 Destroyed 12/...
SN-323	F1289			Speed-Complete Arithmetic Operations/sec VS High Speed Storage Equivalent Binary Digits		U See 323A
S-324	F1297			WWI Display of Polynomial Roots		U
SN-325	F1283	A-36726		Tube Failures in WWI During 1950, 3034 Filament Hrs.		U
SN-326	F1284	A-36721		7AK7 Failures, 3034 Filament Hours, 1950		U
SN-327	F1285	A-36722		7AD7 Failures, 3034 Filament Hours, 1950		U
SN-328	F1286	A-36723		Misc. Type Tube Failures, 3034 Filament Hours, 1950		U
SN-329	F1287	A-36724		Crystal Failures in WWI During 1950, 3034 Operating Hrs.		U
SN-330	F1288	A-36725		Other Component Failures in WWI During 1950, Operating Hours		U
S-331	F1291	A-45238		Unstable: Negative Damping (F1280)		U
S-332	F1291	A-45238		Stable: Positive Damping (F1272)		U
S-333	F1292	A-45239		Stable Solution (F1269)		U
S-334	F1292	A-45239		Unstable Solution (F1271)		U
S-335	F1294	A-45241		Adaption of Digital Computers to Control Systems		U
S-336	F1295	A-45242		A Typical Feedback Control System		U
S-337	F1296	A-45243		Amplitude Variation of Integration Operators		U
SC-338	F506			Five Digit Multiplier, Complete, Cabinet Doors On, Taylor		U
S-339	F1331	A-36822		Computer Specifications (C.Adams)		U
S-340	F1332	A-36823		Information Processing (C.Adams)		U

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

18

6D-108-2

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-341	F1333	A-36824		Numerical Integration (C.Adams)	U	
S-342	F1363	A-45387		A Digital Computer Filtering A Continuous Input	U	
SN-343	F1364	A-45388		Time Domain-Frequency Domain: Continuous Signal, Sampled Output	U	
SN-344	F1365	A-45389		Time Domain-Frequency Domain: Computer Input, Computer Output	U	
SN-345	F1366	A-45390		Time Domain-Frequency Domain: Computer Output, Continuous Output	U	
SN-346	F1367	A-45391		Time Domain-Frequency Domain: Approximating the Derivative Locus of $F_s$ for $S = j\omega$	U	
SC-347	F1352			Test Control Looking Into Computer	U	
SC-348	F1403			Plug-In Decoder Panel	U	
S-349	F-1395			Antenna Problem Display, Initial Condition	U	
S-350	F1396			Antenna Problem Display, Intermediate Condition	U	
S-351	F1406			Antenna Problem Display, Final Condition	U	
S-352	F1404			Oil Reservoir Problem Display, Tape #611	U	
S-353	F1409	B-50609		Control	U	
S-354	F1402	C-50953		Flip Flop D-C Coupled to its Load	U	
SN-355	F1408	A-50632		Whirlwind I Computer	U	
SN-356	F1410	B-50629		Digital Computer Cost-Performance Criteria	U	
SN-357	F1411	B-50628		Storage Cost-Performance Criteria	U	
SC-358	F1443			16 x 16 Metallic Array, I	U	
SC-359	F1444			16 x 16 Ceramic Array, I, Closeup	U	See SC-359-A,B
S-360	F1445			Air Defense Group, Flight Test Scope Photo	C	DAB,5-6-53 (Slide Only)







APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

22

6D-108-2

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
SN-421	F1629	A-52765		Derived Waveforms of Resistance-Loaded Saturable Inductor Using Idealized Cores	U	
SN-422	F1630	A-52766		Observed Waveforms of Resistance Loaded Saturable Inductor Using Deltamax Cores (After T.G.Wilson)	U	
SN-423	F1631	A-52785		Single-Core Saturable Transformer	U	
SN-424	F1632	A-52786		Two-Core Saturable Transformer	U	
SN-425	F1633	A-52783		Effect of Feedback on Magnetic Amplifier Operation	U	
SN-426	F1634	A-52761		Saturable Inductor with External Feedback	U	
SN-427	F1635	A-52762		Saturable Transformer with External Feedback	U	
SN-428	F1636	A-52763		Saturable Inductor with Internal Feedback	U	
SN-429	F1638	A-52748		Two-Core Saturable Inductor with Internal Feedback For A.C. Load	U	
SN-430	F1639	A-52749		Two-Core Saturable Inductor with Internal Feedback for D.C. Load	U	
SN-431	F1640	A-52754		Half-Cycle Response Time Saturable Inductor (After Remy)	U	
SN-432	F1641	A-52755		Half-Cycle Response Time Saturable Transformer (Pulse-Operated)	U	
SN-433	F1642	A-52756		Pulse-Operated Saturable Transformer in Computer Service	U	
SN-434	F1643	A-52828		Magnetic Stepping Register (Harvard)	U	
SN-435	F1644	A-52800		Magnetic Metals of Current Interest for Magnetic Amplifiers	U	
SN-436	F1646	A-52760		Bridge-Connected Saturable Condensers	U	
SN-437	F1647	A-52829		Ferroelectric Stepping Register (Anderson)	U	
SN-438	F1648	A-52741		Saturable Inductor Equivalent Circuit	U	
SN-439	F1649	A-52742		Saturable Transformer Equivalent Circuit	U	
SN-440	F1650	A-52743		Series Saturable Condenser Equivalent Circuit	U	





APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

24

6D-108-2

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
SN-461	F1683	A-53055		Whirlwind I- Word Structure	U	
SN-462	A1684	A-53056		Semi-Automatic Digital Computation	U	
SN-463	F1685	A-53057		Automatic Digital Computation	U	
S-464	F1686			Thinking Machine Seen Replacing Man, Boston Traveler, April 12, 1949	U	
S-465	F1604			16 Stage Counter	U	
SN-466	F1774	A-53381		Destructive Sensing	U	
SN-467	F1775	A-53382		Magnetic Memory Core	U	
SN-468	F1776	A-53383		Non-Destructive Sensing of Pulsed Ribbon	U	
SN-469	F1777	A-53384		Quadrature Flux Path	U	
SN-470	F1778	A-53385		Vector Representation of Non-Destructive Sensing	U	
SN-471	F1779	A-53386		Vector Representation of Hollow Toroid Sensing	U	
SN-472	F1780	A-53387		Hollow Toroid Geometry	U	
SN-473	F1781	A-53388		Pulsed-Ribbon Geometry	U	
SN-474	F1782	A-53389		Easy Directions of Magnetization	U	
SN-475	F1783	A-53565		One or Zero from Selected Toroid	U	See SN-475-A
SN-476	F1784	A-53566		Hysteresis Loops of General Ceramics Body MF-1118	U	
SN-477	F1785	A-53567		Flux-Current Characteristics of Ferrite Toroid	U	See SN-477-A & B
SN-478	F1786	B-53624		Air Defense System Surrounding One Computer Center	U	
				TM-20-1	U	Slide Only (NP) 11/12/54 See SN-478A & B) Declassified 2/8/57
SN-479	F1787	A-53196		Air Defense Sector Network	S	Slide Only (NP) 11/12/54 See SN-479 A & B
SN-480	F1788	A-53599		Operating Rooms and Equipment at Computer Center	U	
				TM-20-3	U	Slide Only (NP) 11/12/54 See SN-480 A & B) Declassified 2/8/57

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2  
Page 25

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-481	F-1789	B-53600	Information Flow Channels in Computer Center	TM-20-9	U 11-12-54
SN-482	F-1790	B-53601	Data Transmission for FPS-3 Radar	TM-20-10	S 11-12-54
SN-483	F-1791	A-53598	Radar Mapping Station	TM-20-30	U 11-12-54
SN-484	F-1792	A-53614	Radar Filtering Before Computer	TM-20-11	U 11-12-54
SN-485	F-1793	C-53644	Filtering of Radar Data in the Computer	TM-20-21	S "
SN-486	F-1794	A-53638	Standard Display Unit	TM-20-4	U "
SN-487	F-1690		Experimental Display Equipment	TM-20-5	U "
SN-488	F-1693		Display of Geographical Reference Marks	TM-20-7	U "
SN-489	F-1795	B-53642	Track Generation	TM-20-38	U "
SN-490	F-1796	B-53631	Weapon-Control Information Flow	TM-20-19	U "
SN-491	F-1797	B-53608	Digital Computer	TM-20-40	U "
SN-492	F-1798	B-53596	Random Access Storage vs. Aircraft Track Capacity	TM-20-47	S "
SN-493	F-1799	A-53597	Computer Time vs. Aircraft Track Capacity	TM-20-48	S "
SN-494	F-1800	B-53632	Sub-Division of Major Computing Cycle	TM-20-20	S "
SN-495	F-1804	B-53613	Time Schedule	TM-20-58	U "
SN-496	F-1802		Slowed-Down-Video Phone Line Signals	TM-20-21A	U "
SN-497	F-1803		Comparison of Normal Radar Video and SDV	TM-20-21B	U "
SN-498	F-1801		Evolution of the Digital Computer in Air Defense	TM-20-59	U "
S -499			Lincoln Laboratory Channel of Responsibility		U "
S -500			Lincoln Laboratory-MIT Mission of Responsibility		U "







APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

29

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-561	F1909	A-54714		Nucleation of a Domain of Reverse Magnetization at a Grain Boundary	U	
S-562	F1910	A-54723		Nucleation by Closure Domain Rotation	U	
S-563	F1911	A-54742		Growth of a Domain of Reverse Magnetization Away from an Inclusion in Lattice with One Axis of Easy Magnetization	U	
S-564	F1912	A-54747		Hysteresis Loop of 68 Permalloy Under 4 kg/mm <sup>2</sup> Tension	U	
S-565	F1913	A-54748		Starting Field & Zero Wall Velocity as a Function of Tensile Stress for 78.5 Permalloy	U	
S-566	F1866			Memory Test Computer Showing Console, Computer & Storage	U	
SC-567	F1866			Memory Test Computer 7 Showing Console, Computer & Storage	U	
SC-568	F1842			MTC Arithmetic Rack, Rear View	U	
SN-569	F1943			Summary Report #27, Fig. 4-2	U	
S-570	F1942			Dark Spot on Storage Surface (TV-774 film)	U	
S-571	F1944			Storage Tube Deflection Shift Droop	U	
S-572	F1928			800-Series Storage Tube	U	
S-573	F1722			Holding Gun with Ion Collector, Target Side	U	
S-574	F1723			Holding Gun with Ion Collector	U	
SN-575	F1945	A-55260		Equivalent Circuit B	U	
SN-576	F1946	A-55268		Equivalent Circuit A	U	
SN-577	F1947	A-55261		"T" Equivalent Circuit B	U	
SN-578	F1948	A-55262		"T" Equivalent Circuit, Junction Transistor at High Freq.	U	
SN-579	F1949	A-55266		Large Signal Equivalent Circuit	U	
SC-580	F1967			Closeup MTC Memory Array	U	



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

31

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
SN-601	F1989	B-55736		Transistor Life Data	U	
SN-602	F1990	C-55716		Contel System for Transistor Accumulator	U	
SN-603	F1991	C-55733		Accumulator & "A" Register	U	
S-604	F1725			Four-Digit Transistor Accumulator & Control Equipment	U	
S-605	F1957			Direction Center, Overall View East	U	Slide Only See S-606-A
S-606	F1960			Masking Clutter & Unwanted Data from Radar Mapper	U	
S-607	F1999			Multiple Radar Data on Mapper	U	Declassified 2-8-57
S-608	F2000			Combat Data Director ( Scope in "E" Position Room 222)	U	
S-609	F2001			Track Initiator/Monitor (Scope in "F" Position Room 222)	U	
S-610				Reversible Voltage Signal	U	
S-611				Types of Magnetization Curves	U	
S-612				Regions of Varying Magnetization Curves for Case		
					$\frac{t}{\mu} = \frac{2}{3}$	U
S-613				Paramagnetic Susceptibility Curve	U	
S-614				Susceptibility of Ferrites in Paramagnetic Region	U	
S-615	F2003			64/64 Memory Plane (diagonal)	U	
S-616	F2004			64/64 Memory Plane (straight) (one copy dest. 2/10/54)	U	Obsolete (WND)
S-617	F2010			Multiple Radar Data	C	
S-618	F2011			Multiple Radar Data	C	
S-619	F2012			Multiple Radar Data	C	
S-620	F2013			Multiple Radar Data	C	





APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

33

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-641	F2130	A-57024		Typical Weapons Assignment Display (16 inch)	C	See SN-641-A
SN-642	F2131	A-56997		Output Information from the Cape Cod Direction Center	C	See SN-642-A
SN-643	F2132	A-56974		Present Capabilities of the Cape Cod Direction Center	C	See SN-643-A
SN-644	F2133	B-56970		Track Symbols for Weapons Direction	C	See SN-644-A
SN-645	F2134	B-56995		Simplified Block Diagram of Weapons Assignment	C	See SN-645-A
SN-646	F2135	B-56982		Objectives of the Cape Cod System	C	See SN-646-A
SN-647	F2136	B-57018		Map of the Cape Cod System	C	See SN-647-A
SN-648	F2137	B-57005		FSQ-7 Prototypes	C	See SN-648-A
SN-649	F2138	B-47042		Simplified Block Diagram of Track-While-Scan	C	See SN-649-A
SN-650	F2139	C-56996		System Capacity (-3 made or R.E. by LCS 1-5-54)	C	See SN-650-A,B,C
SN-651	F2140	C-56964		Flow of Information in the Cape Cod System	C	See SN-651-A
SN-652	F2141	C-56973		Weapons Director and Sub-Sector Commander	C	See SN-652-A
SN-653	F2142	A-57027		Hysteresis Loop & Pulse Response of Ferrite DCL-2-134A	-1 U	
S-654	F2143	A-57068		Hysteresis Loops of Ferrite Memory Cores	U	
S-655	F2144	A-57067		Pulse Response of Ferrite Memory Cores	U	
SN-656	F2145	B-56368-1		Interpretation of Hysteresis-Loop-Squareness	U	
SN-657	F2146	B-56130-1		Compositions Investigated in the MgO.MnO.Fe <sub>2</sub> O <sub>3</sub> Oxide	U	
SN-658	F2147	B-57061		Switching Time at Maximum Loop Squareness, Microseconds	U	
SN-659	F2148	B-57060		Data of McCurdie, Sullivan & Mauer Journal of Rsch. of NBS 45, 35, (1950) Research Paper No. 2111	U	
SN-660	F2149	B-57071		Magnetic Induction in the System MgO.Fe <sub>2</sub> O <sub>3</sub> -Mn <sub>3</sub> O <sub>4</sub>	U	
Means that Cards typed for slides have been checked with this record up to and including this number and found correct						2-7-55







APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-102-2

37

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
SN-721	F2211	R-57710		Electronic Digital Computer	U	For C. Adams Block Diagram
SN-722	F2212	A-57744		Sample Problems for Digital Computer	U	"
SN-723	F2213	A-57745		Final Program	U	
SN-724	F2214	A-57742		Preliminary Program	U	
SN-725	F2215	A-57743		Digital Computer Instructions	U	
SN-726	F2216	A-57746		Number Storage for Sample Problem	U	
S-727	F1535			Test Equipment Plug-In-Mounting Panel	U	For W. Ogden
S-728	F1717			Memory Test Control Elements	U	For W. Ogden
S-729	F2047			Ferranti Photoelectric Tape Reader	U	For W. Ogden
S-730	F2049			MTC Plugboard Storage Panel	U	For W. Ogden
SN-731	F2225	A-57923		MTC Memory (Chart)	U	For W. Ogden
S-732	F2241	A-57957		Precipitated MgO in a Ferrite Matrix (DCL-2-162B)	U	For F. Vinal
S-733	F2242	A-57956		Tinned Structure of Mn <sub>3</sub> O <sub>4</sub> (DCL-2-280)	U	"
S-734	F2243	A-57955		Structure of Ferrite Suitable for Memory Cores (DCL-1-180)	U	"
S-735	F2244	A-57954		Lamellar Sheets of Precipitated $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> (DCL-3-624)	U	"
S-736	F2276	A-58223		Measurement Circuit	U	For H. Frost
S-737	F2277	B-58256		Collector Voltage for $4 \times 10^{-7}$ Amp. Collector Current as a Function of Pulsed Cathode Current	U	"
S-738	F2278	B-58257		Collector Current During Pulses and Gates, RT 414	U	"
S-739	F2279	B-58259		Cathode Coating Conductivity vs. Reciprocal Temperature RT 414, for Pulsed Currents	U	"
S-740	F2280	C-58271		Potential Diagrams of Resistance Measurement Tubes	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

38

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-741	F2281	A-58272		V <sub>A</sub> -I <sub>K</sub> Plot, RT 410, Pulses and Gates	U	For H. Frost
SN-742	F2324	A-57742-1		Preliminary Program	U	
SN-743	F2325	A-57743-1		Digital Computer Instruction	U	
SN-744	F2326	A-57744-1		Sample Problem for Digital Computer	U	
SN-745	F2327	B-57745-1		Final Program	U	
SN-746	F2328	A-57746-1		Number Storage for Sample Program	U	
SN-747	F2329	C-58363		Proposed Flow of Data for Automatic Processing	U	
SN-748	F2330	A-58368		"THE PROGRAM -- THE PROCESS --"	U	
SN-749	F2331	A-58369		"BOARD OF DIRECTORS, MANAGEMENT, OFFICE, FACTOR-----"	U	
SN-750	F2332	A-51247		Simplified Flow Diagram of Merchandise	U	
SN-751	F2333	B-51253		Simplified Flow Diagram of Sales Check, Orders & Invoices	U	
SN-752	F1505	A-51443		Perpetual Record of Inventory	U	
SN-753	F1523	A-52303		Central Records Transmitter	U	
SC-754	F2222			Rm.222, Direction Center, Stations Manned,Overall, February 19, 1954	C	Slide Only
SC-755	F2129			WWI Magnetic Core Storage Stalls	U	See S-692 & SC-755-A
SC-756				64 x 64 Magnetic Core Digit Plane (MIC Type)	U	See SC-756-A, B, & C
SC-757	F2356			64 x 64 Magnetic Core Digit Plane (MIC Type) (size comparison closeup)	U	
SC-758				TM-20, 2nd Draft	S	Slide Only
SC-759				Charles Report, Vols, I,II, III	S	Slide Only
SN-760	F2357			S.S. Com. Station Manned	C	Slide Only See SC-760A
SN-761	F2359	A-58647		FSQ-7 Systems for First Operational Sector	C	Slide Only See SC-760A

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

39

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
SN-761	F-2359	A-58617		FSQ-7 System for First Operation Sector	C	
SN-762	F2360	C-58648		Direction Center	Declassified 2/8/57	Slide Only See S-762-A
S-763	F2361			Transition System Boundaries	U	Slide Only See S-763-A
S-764	F2362			Paragraph 4109 pg. 113 Vol. I, Charles Report	S	Slide Only See S-764-A
SN-765	F2363	B-58405		Sense Bias vs. Drive Currents 64 x 64 Memory (MTC Mod.II)	U	
SN-766	F2364	B-58404		Sense Bias vs. Strobe Time 64 x 64 Memory (MTC Mod.II)	U	
SN-767	F2394	D-58826		Organization of Comprehensive System	U	
S-768	F2395			WWI Utility Routine--Selector Panel	U	
SN-769	F2367	B-58518		Comparison of Some Tetragonal Spinels	U	
SN-770	F2368	B-58519		Precipitate Formation at a Twinning Surface	U	
SN-771	F2369	B-58520		Distortion at Tetrahedral Site	U	
SN-772	F2370	B-58524		Some Observed Oxides with Spinel Structure	U	
SN-773	F2371	B-58533		Separation of Three Mn-Rich Tetragonal Spinels into Cubic and Tetragonal Phases (After Mason)	U	
S-774	F2396			Terminal Equipment Characteristics of MIT Whirlwind I Computer	U	For C. Adams
S-775	F2397			General Users of WWI for S & E Computation	U	For C. Adams
S-776	F2398			Examples of Algebraic Notation used by Lansing & Zierler	U	For C. Adams
S-777	F2399			SS Typescript	U	For C. Adams
S-778	F2400			CS Results	U	For C. Adams
S-779	F2401			SS Post Mortem	U	For C. Adams
S-780	F2402			CS Post Mortem	U	For C. Adams











APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

44

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
SC-861	F2665			64 x 64 Magnetic Core Memory Plane, Closeup with Glass	U	See SC-861A (Made for R. Horn)
SN-863	F2671	A-58815		3-Dimensional Write	U	
SN-864	F2672	A-61950		Typical Memory Core Hysteresis Loop	U	
SN-865	F2673	A-61951		Pulse Sequences Required for Driving Memory	U	
SN-866	F2674	A-61952		Combined Outputs to Produce R-Wo and R-W Cycles	U	
SN-867	F2675	A-61953		Three Core Cell	U	
SN-868	F2676	A-61954		Theoretically Usable Switch and Memory Core Loops	U	
SN-869	F2677	A-61955		2 x 2 Memory Plane Using Three Cores/Cell	U	
S-870	F2678	A-61997		Typical Cell Voltages (0.1 msec/cm)	U	
S-871	F2679	A-61998		Memory Core Output, Zeros and Ones for Three Cases of Improper Design	U	
SN-872	F2682	B-62119		Whirlwind System Performance	U	
SN-873	F2683	B-62120		Interrupting-Failure Categories	U	
SN-874	F2684	B-62121		Comparison of Failure Categories	U	
SN-875	F1939			Polynomial Display-Tabulated Roots	U	
SN-876	F1941			Display System as Output Printer	U	
S-877	F2700			Air Defense SAGE System	S	Made for A. P. Hill
S-878	F2701			Track Monitor Display Symbols	C	"
S-879	F2702			Typical Weapons Assignment Display (16")	C	"
S-880	F2703			Simplified Block Diagram of Weapons Assignment	C	"
*SC-862	F-2668			Elements of a Real-Time Control System	U	





APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

47

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-921	F2737	A-62516		Grain Structure of DCL-2-810, Sintering Time-10 hrs.	U	1300° C (made for F.Vinal 5/13/55)
S-922	F2738	A-62517		Grain Structure of DCL-2-833, Sintering Temp.1400°C	U	"
SN-923	F2739	B-62502		Compositional Limits for Loop Squareness in the MgO. MnO. Fe <sub>2</sub> O <sub>3</sub> System	U	"
SN-924	F2740	B-62513		Sintering of Ferrite Memory Cores, Coercive Force vs Peak Temp.	U	"
SN-925	F2741	B-62512		Sintering of Ferrite Memory Cores, Switching Time vs Peak Temp.	U	"
SN-926	F2742	B-62514		Sintering of Ferrite Memory Cores, Saturation Coercive Force vs. Average Grain Size	U	"
SN-927	F2743	B-62515		Sintering of Ferrite Memory Cores, Undisturbed One Output vs. Peak Temp.	U	"
SN-928	F2747	B-62628		Transformation of Compositional Coordinates	U	"
SN-929	F2748	B-62629		Room Temperature Switching Coefficient vs. Compositional Parameters, a, $\beta$ , $\delta$	U	"
SN-930	F2749	B-62630		Room Temperature Coercive Force vs. Compositional Parameters, a, , .	U	"
SN-931	F2750	B-62639		Curie Temperature vs. Compositional Parameters, a, $\beta$ , $\delta$ , U	U	"
SN-932	F2751	B-62640		Magnetic Moment vs. Compositional Parameters, a, $\beta$ , U	U	"
SN-933	F2752	B-62641		Room Temperature Saturation Flux Density vs. Compositional Parameters, a, $\beta$ , $\delta$ .	U	"
SN-934	F2753	B-62656		Magnetic Moment vs. Temperature	U	Made for F. Vinal 5-13-55
SN-935	F2754	B-62657		Magnetic Moment vs. Composition	U	"
SN-936	F2755	A-61496		Hysteresis Loop Terminology	U	"
SN-937	F2756	C-61186-1		Maximum B-H Loop Squareness (R <sub>S</sub> ) as a Function of Composition	U	"
S-938	F2757			Tracking Supervisor's Expanded Display	C	Made for Lt.R.Stiers 5-17-55
S-939	F2758			Weapons Director's Position Showing ADIZ	C	"
S-940	F2759			Identification Supervisor's Position	C	"



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-106-2

48

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-941	F2760			Weapons Directors' Position	C	Made for Lt. R. Stiers, 5-17-55
S-942	F2761			Identification Officer's Position	C	"
S-943	F2762			Tracking Indicator and Monitor Showing Airstrips	C	"
S-944	F2763			Tracking Initiator and Monitor	C	"
S-945	F2764			Intercept Director's Position	C	"
S-946	F2765			Intercept Director's Position	C	"
S-947	F2766			Intercept Director's Position	C	"
S-948	F2788	B-62780		Cost vs. Speed of Computation	U	Made for JWF
SN-949	F2789	B-62794		Voltage Output from A 1/8 Mil. Mo-permalloy Core after Prepulse	U	
SN-950	F2790	B-62795		Voltage Output from Al326B Ferrite Core after Prepulse Conditions	U	
SN-951	F2791	A-62796		Variation of $S_w F$ with Temperature	U	
SN-952	F2792	A-62797		Output Voltage from Two 1/4 mil. 4-79 Mo-permalloy Ribbons	U	
SN-953	F2793	B-62798		Switching Coefficient of Tape Wound 4-79 Mo-permalloy Cores at Room Temperature	U	
SN-954	F2794	B-62799		Variation of Magnetization with Temperature	U	
SN-955	F2795	B-62800		Variation of Switching Coefficient with Tape Thickness as Function of Temperature	U	
S-956	F2697			Evolution of Cryotron Design	U	
S-957	F2698			20 - Cryotron Clock	U	
S-958	F2699			Cryotron Assembly Details	U	
S-959		3-6-1463		Relationship of SAGE to the Air Defense System	S	OP Fig. 1
S-960	C60-21/3-1	3-6-1464		Continental Air Defense Command (Operational Structure)	S	OP Fig. 2

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

49

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-961	C60-92/3-1	3-6-1465		Direction Center Operational Crew Composition	S	OP Fig. 3
S-962	C60-52/3-1	3-6-1466		Combat Center Operational Crew Composition	S	OP Fig. 4
S-963	C60-26/3-1	6-1467		Air Defense Boundaries (Manual)	S	OP Fig. 5
S-964	C60-30/3-1	6-1468		Air Defense Boundaries (SAGE)	S	OP Fig. 6
S-965	C60-55/3-1	3-6-1478		Installation of Direction Centers and Combat Centers In Order of Priority	S	OP Fig. 7
S-966	C60-44/3-1	3-6-1469		Air Defense Command (Organizational Structure)	S	OP Fig. 8
S-967	C60-73/3-1	3-6-1470		Air Defense Division Headquarters Organization	S	OP Fig. 9
S-968	C60-54/3-1	3-6-1471		Air Defense Wing Headquarters Organization	S	OP Fig. 10
S-969	C60-90/3-1	6-1472		Direction Center Communications Circuits (SAGE)	S	OP Fig. 11
S-970	C60-118/3-1	6-1316		SAGE System Direction Center Facility Requirements	S	OP Fig. 12
S-971	C60-41/3-1	6-1529		Direction Center and Power Building	<del>S</del> U	OP Fig. 13
S-972	C60-56/3-1	6-1526		First Floor Plan of Direction Center Building	<del>S</del> U	OP Fig: 14
S-973	C60-40/3-1	6-1525		Second Floor Plan of Direction Center Building	<del>S</del> U	OP Fig. 15
S-974	C60-31/3-1	6-1527		Third Floor Plan of Direction Center Building	<del>S</del> U	OP Fig. 16
S-975	C60-34/3-1	6-1537		Fourth Floor Plan of Direction Center Building	<del>S</del> U	OP Fig. 17
S-976	C60-29/3-1	6-1528		Power Building for Separate Direction Center	<del>S</del> U	OP Fig: 18
S-977	C60-36/3-1	6-1530		Direction Center-Combat Center and Power Building	<del>S</del> U	OP Fig. 19
S-978	C60-53/3-1	6-1531		First Floor Plan of Combat Center Building	S	OP Fig. 20
S-979	C60-97/3-1	6-1532		Second Floor Plan of Combat Center Building	S	OP Fig. 21
S-980	C60-35/3-1	6-1533		Third Floor Plan of Combat Center Building	S	OP Fig. 22

Declassified  
2-8-57  
Declassified 9-16-57

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

50

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-981	C60-75/3-1	6-1534		Power Building for Combined Direction Center and Combat Center	S	OP Fig. 23
S-982	C60-84/3-1	3-6-1473		McGuire Subsector Schedule	S	OP Fig. 24
S-983	C60-98/3-1	3-6-1474		Over-all Schedule (SAGE System)	S	OP Fig. 25
S-984	C60-63/3-1	3-6-1475		Estimated Funding Requirements for SAGE System	S	OP Fig. 26
S-985	C60-46/3-1	3-6-1278		Floor Plan of the Cape Cod Direction Center	<del>S</del> U	OP Fig. 27 Declassified 2-8-57
S-986	C60-93/3-1	3-6-1365		Map of the 1954 Cape Cod System	S	OP Fig. 28
S-987	C60-85/3-1	3-6-1476		Experimental SAGE Subsector	S	OP Fig. 29
S-988	C60-57/3-1	3-6-1477		Schedule for the Experimental Subsector	S	OP Fig. 30
S-989	C60-70/3-1	6-1289(a)		Clutter Reduction by Use of MTT	S	OP Fig. 31a
S-989	C60-70/3-1	3-6-1289(b)		Clutter Reduction by Use of MTT	S	OP Fig. 31b
S-990	C60-45/3-1	6-1277		(a) Linear Polarization (b) Circular Polarization	S	OP Fig. 32
S-991	C60-69/3-1	6-1277		(c) Linear Polarization (d) Circular Polarization	S	OP Fig. 32
S-992	C60-71/3-1	6-1251		Filtering of Radar Data by Mapping	S	OP Fig. 33 See S-992-A, B.
S-993	C60-62/3-1	6-1251		Filtering of Radar Data by Mapping	S	OP Fig. 33
S-994	C60-88/3-1	3-6-1479		Major Paths of Information Flow in Subsector	<del>S</del> U	OP Fig. 34 Declassified 9-16-57
S-995	C60-47/3-1	3-6-1480		Major Means of Communication Between Automatic Equipment and Operating Personnel	<del>S</del> U	OP Fig. 35
S-996	C60-78/3-1	3-6-1481		Facilities at a Typical Situation-Display Console	<del>S</del> U	OP Fig. 36 Declassified 2-8-57
S-997	C60-33/3-1	3-6-1482		Auxiliary Console	<del>S</del> U	OP Fig. 37
S-998	C60-95/3-1	3-6-1513		Situation Display Messages	S	OP Fig. 38
S-999	C60-61/3-1	3-6-1462		Off-Centering and Expansion Facilities of Situation-Display	S	OP Fig. 39
S-1000	C60-32/3-1	3-6-1506		Typical Digital Information Display	S	OP Fig. 40



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

52

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-1021	C60-67/3	-1 3-6-1511		Weapons Status Situation and Digital Information Displays	U	OP Fig. 61 Declassified 2-8-57
S-1022	C60-81/3	-1 3-6-1510		Console, Tactical Action Displays	U	OP Fig. 62 Declassified 2-8-57
S-1023	C60-39/3	-1 3-6-1507		Base Weather Summary	S	OP Fig. 63
S-1024	C60-23/3	-1 3-6-1509		Detailed Weather for Individual Bases	S	OP Fig. 64
S-1025	C60-82/3	-1 3-6-1516		Weapons Assignment Display	S	OP Fig. 65
S-1026	C60-27/3	-1 3-6-1390		Intercept Director Display	S	OP Fig. 66
S-1027	C60-24/3	-1 6-1537		Training and Battle Simulation Room	S	OP Fig. 67
S-1028	C60-77/3	-1 6-1526		Subsector Command Post	S	OP Fig. 68 See S-1028-A, B.
S-1029	C60-96/3	-1 6-1526		Subsector Command Post	S	OP Fig. 69 See S-1029-C, D
S-1030	C60-91/3	-1 3-6-1538		Raid Forming	S	OP Fig. 69 See S-1030-A
S-1031	C60-38/3	-1 3-6-1538		Raid Forming	S	OP Fig. 69 See S-1301-B
S-1032	C60-58/3	-1 3-6-1517		Summary Display at Subsector Command Post	S	OP Fig. 70
S-1033	C60-94/3	-1 3-6-1508		Principal Lines of Data Flow to Combat Center	S	OP Fig. 71
S-1034	C60-68/3	-1 6-1535		Command Post at Combat Center	S	OP Fig. 72 See S-1034-A, B
S-1035	C60-25/3	-1 6-1535		Command Post at Combat Center	S	OP Fig. 72 See S-1035-C
S-1036	C60-51/3	-1 3-6-1521		Chief and Senior Controllers' Display	S	OP Fig. 73
S-1037	C60-66/3	-1 3-6-1518		Typical Air Surveillance Officer's Display at the Combat Center	S	OP Fig. 74 See S-1037-A
S-1038	C60-50/3	-1 3-6-1518		Typical Air Surveillance Officer's Display at the Combat Center	S	OP Fig. 74
S-1039	C60-89/3	-1 3-6-1522		Typical Controller's Display	S	OP Fig. 75
S-1040	C60-99/1	-1 3-6-1485		Coverage at 8000 ft. Within the McGuire Subsector	S	OP Fig. 76

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

53.

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-1041	C60-100/	1-1 3-6-1486		Coverage at 8000 ft. Within the McGuire Subsector	S	OP Fig. 77
S-1042	C60-101/	1-1 3-6-1487		Combined Coverage at 8000 ft. Within the McGuire Subsector	S	OP Fig. 78
S-1043	C60-102/	1-1 6-1417		Texas Towers	S	OP Fig. 79
S-1044	C60-103/	1-1 3-6-1488		Functional Organization of Coordinate Data Transmitting Set, AN/FST-2	S	OP Fig. 80
S-1045	C60-104/	1-1 6-1536		Floor Plan of Addition to Long-Range Radar Sites	S	OP Fig. 81
S-1046	C60-105/	1-1 P230-11		Fine-Grain Data Equipment (part of AN/FST-2)	U	OP Fig. 82 Declassified 2-8-57
S-1047	C60-106/	1-1 3-6-1489		Data Flow in FGD Component	S	OP Fig. 83
S-1048	C60-107/	1-1 P256-2		Semiautomatic Height-Finding Equipment	S	OP Fig. 84
S-1049	C60-108/	1-1 3-6-1490		Data Flow in Semiautomatic Height-Finding Equipment	S	OP Fig. 85
S-1050	C60-110/	1-1 3-6-1491		Data Flow in Mark X with Selective Identification Feature	S	OP Fig. 86
S-1051	C60-109/	1-1 6-1398		Typical Gap-Filler-Site Floor Plan	S	OP Fig. 87
S-1052	C60-111/	1-1 P49-29		Experimental Model of SDV, Power Supply and Data Transmitter	U	OP Fig. 88 Declassified 2-8-57
S-1053	C60-112/	1-1 3-6-1399		SDV Block Diagram	S	OP Fig. 89
S-1054	C60-113/	1-1 6-1426		Comparison of Normal Radar Video and Slowed-Down Video	S	Op Fig. 90
S-1055	C60-114/	1-1 3-6-1493		Information Flow in the Direction Center	S	OP Fig. 91
S-1056	C60-115/	1-1 3-6-1494		Outline of Input System and Input Buffer Drum	S	OP Fig. 92
S-1057	C60-117/	1-1 3-6-1495		Outline of Radar Mapper	S	OP Fig. 93
S-1058	C60-118/	1-1 3-6-1496		Light Gun	U	OP Fig. 94 ) Declassified.
S-1059	C60-119/	1-1 6-1497		O20 Card Punch	U	OP Fig. 95 } 2-8-57
S-1060	C60-120/	1-1 6-1540		Computer Time Cycle	S	OP Fig. 96



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

55

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-1081	F2806	A-75481		The MISP Data Source Simulator	C	
S-1082	F2807	A-75482		The MISP Control Section	C	
S-1083	F2808	B-75483		Preparation of Direction Center and Combat Center Master Computer Programs	C	
S-1084	F2809	B-75485		The MISP System Simulator	C	
S-1085	F2810	B-75486		The MISP Evaluation Section	C	
S-1086	F2811	B-75487		Basic Components of a Simulation Program	U	
S-1087	F2812	B-75484		Recorded Data on IBM Card for Each Run	C	
S-1088	F2813	C-75488		Equipment Schedule	S	
S-1089	F2820	B-62957		40-Cycle Vibrator	U	For D. Smith
S-1090	F2821	A-62931		Compound Coil and External Circuit	U	For D. Smith
S-1091	F2822	A-62932		Field Pattern and Coil Flux for Flat, Parallel Pole Pieces	U	For D. Smith
SN-1092	F2823	A-62933		Principle of the Vibrating-coil Magnetometer (VCM)	U	For D. Smith
SN-1093	F2824	A-62934		Oblate Spheroid of Magnetite	U	For D. Smith
SN-1094	F2825	B-62977		VCM-System Block Diagram	U	For D. Smith
SN-1095	F2826	A-63008		Anisotropy Constant K, vs. Temperature for Magnetite	U	For D. Smith
SN-1096	F2827	B-63010		M-H Curves Near the Curie Point for Magnetite Single Crystal	U	For D. Smith
SN-1097	F2829	B-63011		$M_x/M_y$ vs. $T/T_c$ for Magnetite	U	For D. Smith
SN-1098	F2830	B-63012		Room Temperature M-H Curves for Magnetite Single Crystal	U	For D. Smith
SN-1099	F2831	B-63009		Spontaneous Magnetization of Magnetite Near the Curie Point	U	For D. Smith
SN-1100	F2832	A-62828		Reversible Voltage Signal	U	For S. Childress



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

56

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
SN-1101	F2833	B-62926		Ferramic S-1 Material	U	For J. Childress
SN-1102	F2834	B-62935		Reversible Voltage Signal Peak Amplitude vs. Field Pulse Rise Time	U	For J. Childress
SN-1103	F2835	B-62936		Sy. Time and Peak Time vs. Field Pulse Duration Ferramic S-1 Material	U	For J. Childress
SN-1104	F2836	B-62937		"Delta" vs. Field Pulse Duration	U	For J. Childress
SN-1105	F2837	B-62938		Incremental Permeability at Remanence vs. Field Pulse Duration	U	For J. Childress
SN-1106	F2838	B-62939		Incremental Permeability at Remanence vs. Field Pulse <del>Duration</del> Amplitude	U	For J. Childress
SN-1107	F2839	B-62940		Incremental Permeability at Remanence vs. Number of Half-Amplitude Demagnetizing Field Pulses	U	For J. Childress
SN-1108	F2840	B-62941		Incremental Permeability at Remanence vs. Field Pulse Amplitude	U	For J. Childress
SN-1109	F2841	A-62943		Storage of Binary Information in a Magnetic Core	U	For J. Childress
SN-1110	F2842	A-62944		Trapezoidal Field Pulse/Core Output Voltage	U	For J. Childress
SN-1111	F2843	A-62996		Magnetic Lattice for $x=1$ : Type G	U	For J. Goodenough
SN-1112	F2844	A-62997		Magnetic Lattice for $x=0$ : Type A	U	For J. Goodenough
SN-1113	F2845	B-62999		Predicted Phase Diagram for System $(La,M(II)) M_nO_3$	U	For J. Goodenough
SN-1114	F2846	B-63000		Low Energy Magnetic Lattice for $x=0.5$ : Type CE	U	For J. Goodenough
SN-1115	F2847	B-63002		Semicovalent Model for the Magnetic Coupling of $M_n$ Ions	U	For J. Goodenough
S-1116	B-36			Study of Ground Observer Corps Data	U	TM-20 Fig. 34 } Declassified
S-1117	B-37			Experimental Manual Input Box	U	TM-20 Fig. 35 } 2-8-57
S-1118	B-38			Superimposed Radar Data	S	TM-20 Fig. 36
S-1119	B-41			Experimental Data	S	
S-1120	B-43			Block Diagram of Computer	U	TM-20 Fig. 41 ) Declassified 2-8-57



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2 58

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE		REMARKS
S-1141	B-29			Data Transmission for CPN-18 Radar	S	TM-20 Fig. 27
S-1142	B-30			Network for GCI Radar Plus Gap Fillers	S	TM-20 Fig. 28
S-1143	B-31			Alternate Network	S	TM-20 Fig. 29
S-1144				Remote Data Display	S	
S-1145	C20-3/2-	1		Sector Operating Normally	S	
S-1152	B-63			Command Structure within the Sector	S	See S-1152A TM-20 Fig. 2
S-1153	B-59			Preparation, Cape Cod Radar Data Receiving Equipment	U	TM-20 Fig. 57 Declassified 2-8-57
SN-1154	C60-1/1-	B-59600		Results of Interception Tests 1953 CCS	C	
SN-1155	C60-2/1-	1 B-59599		Interception Failures 1953 CCS	C	
S-1156	C60-136/	1-1 P245-130		Typical Computer Frame	U	OP. Fig. 111 } Declassified
S-1157	C60-137/	1-1 3-6-1501		Console Telephone Equipment	U	OP. Fig. 112 } 2-8-57
S-1158	C60-127/	1-1 3-6-1502		Signals Through Digital Data Transmitters & Receivers	S	OP. Fig. 113
S-1159	C60-116/	1-1 6-1503		Typical Signal on Data Circuit	U	OP. Fig. 114 Declassified 2-8-57
S-1160	F2853	A-63136-1		Major Components for the WWI Computer	U	For F. Helwig
S-1161	F2854	A-63138		The Problem Organization Process	U	For F. Helwig
S-1162	F2855			Structure of the Post-Mortem Request Tapes	U	
S-1163	F2856			Types of Syllables in the Comprehensive System		
S-1164	F2857			Word Structure in the Comprehensive System	U	
S-1165	F2858			General Features of the Comprehensive System		
S-1166	F2859			Types of Words in the Comprehensive System	U	
S-1167	F2860			Structure of the Automatic Output Requests	U	
S-1168	F2861	A-63086		Resistance as a Function of Temperature for Material which Exhibit Superconductivity	U	
SN-1169	F2862	A-63087		Threshold Magnetic Field as a Function of Temperature for a Superconductor	U	
SN-1170	F2863	A-63088		Cryotron Bistable Element (Flip-Flop)	U	

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

60-108-258a

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S-1116			Encoder-Development Model, G.E.	U	
S-1117			Frequency Multiplex Equipment-Surchannel Modulator G.E.	U	
S-1118			Airborne Translator Decoder-Long Time Storage Unit G.E.	U	
S-1119			Converter Signal Data	U	
S-1150			G.E. Pre-Production Data Link Converter Prototype of CV-282	U	
S-1151			G.E. Ground Control Data Link System with GRC Transmitter		
			(Complete Ground Station)	U	

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2

59

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE	REMARKS
SN-1171	F2864	A-63090		Cryotron Flip-Flop with Read-In Cryotrons and Read-Out Cryotrons	U
SN-1172	F2865	B-63091		Cryotron Gate Resistance vs. Control Current	U
S-1173	F2910	3-6-1439		Number Systems: Decimal	U See S-1173 A thru L
S-1174	F2904			Comparison of Analog and Digital Devices	U See S-1174 A thru M
S-1175	F2897	3-6-1440		Number Systems: Binary	U See S-1175 A thru O
S-1176	F2891			Binary Arithmetic	U See S-1176 A thru N
S-1177	F2900	3-6-1442		Comparison of Basic Elements of Computing Systems	U See S-1177 A thru M
S-1178	F2901	3-6-1444		Basic Computer Element-Storage	U See S-1178 A thru N
S-1179	F2905	3-6-1443		Basic Computer Element-Arithmetic Element	U See S-1179 A thru N
S-1180	F2903	3-6-1445		Basic Computer Elements-Control	U See S-1180 A thru N
S-1181	F2902	3-6-1459		Basic Computer Elements Input and Output	U See S-1181 A thru M
S-1182	F2894	3-6-1451		Typical Magnetic <del>(Base)</del> Drum Characteristics	U See S-1182 A thru N
S-1183	F2893	3-6-1450		Typical-Magnetic- Tape Characteristics	U See S-1183 A thru N
S-1184	F2892	3-6-1449		Typical Magnetic-Core Characteristics	U See S-1184 A thru N
S-1185	F2913	3-6-1461		Tube Life-Whirlwind Computer	U See S-1185 A thru M
S-1186	F2895	3-6-1446		Examples of Scientific & Engineering Applications of	U See S-1186 A thru M
S-1187	F2908	3-6-1447		Examples of Data Processing Applications of <sup>WWI</sup> Digital Computers	U See S-1187 A thru M
S-1188	F2898	3-6-1448		Examples of Real-Time Control Applications of Digital Computers	U See S-1188 A thru M
S-1189		3-6-1452		Elements of a Real-Time Control System	U See S-1189 A thru K
S-1190	F2899	3-6-1454		Physical Situation	U See S-1190 A thru N











APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DL-60

6D-108-2 Page 64

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE	REMARKS
SN-1271	F-3025	A-63962		Direction Center Identification Room	U F. Carth
S-1272	F-3028	A-64091		Murphy Army Hospital, Waltham, Mass.	U A. P. Hill
S-1273	FC60-115/1-1	A-60833		A Scope-Wide Pulse	C
S-1274	FC60-114/1-1	A-60834		A Scope-Narrow Pulse	C
SN-1275	FC60-118/1-1	A-63450-1		Special Expanded Display	C F. Carth
SN-1276	FC60-117/1-1	A-63452-1		Upper Rt. Wing Unit Switches (IDO)	C " "
SN-1277	FC60-116/1-1	A-63453-1		Lower Rt. Wing Unit Switches (IDO)	C
S-1278	F-3029			First Floor Plan Bldg. F	U
S-1279	F-3030			Second Floor Plan Bldg. F	U
S-1280	F-3031			Basement Floor Plan Bldg. F	U
S-1281	F-2870			Motor Generator Sets, Basement	U
S-1282	F-2871			Maintenance Console	U
S-1283	F-2874			Display Generator & Console (Closeup-2 Scopes)	U
S-1284	F-2882			Video Mapper Room	U
S-1285	F-2885			View Above Expanded Metal Ceiling	U
S-1286	F-2889			Situation Display Generator Frame & Test Control	U
S-1287	F-2890			Weapons Directions Room Right	C
S-1288	FC60-134/1-1	6-1104	(A&B)	Etched Wiring Circuits	§ U Declassified 2-8-57
S-1289	FC60-135/1-1	6-1505		9 Tube Pluggable Unit	§ U Declassified 2-8-57
S-1290	F-3069	C-75700		Subprogram Timing-Sequencing of the Direction Center Program	C
S-1291	F-3070	C-75701		Sage System	C
S-1292	F-3071	C-75702		Data-Processing Flow	C
S-1293	F-3072	C-75703		A Sage Direction Center Accomplishment	S
S-1294	C60-13/1-1	3-6-1526(D)		Sub-Sector Command Post	§ U Declassified 2-8-57
S-1295	F-3082	C-75613		Computer Time Allocation XD-1	C C. R. Wieser
S-1296	F-3083	C-75615		Computer Time Allocation XD-1	C C. R. Wieser

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE	REMARKS
3N-1297	F-3097	C-64841		Switching Time vs. Control Current	U D. Buck
3N-1298	F-3098	B-64844		Cryotron $I_C$ vs. $I_C$	U "
3N-1299	F-3099	B-64843		Cryotron (Switching Time)-1 vs. Control Current	U "
3-1300	060-164	B-75483-1		Prep. of Direction Center & Combat Center Master Comp. Prog.	C P. Bragar
3N-1301	060-173	D-75891		Command Post	U J. Giordano (SN-1301)
3N-1302	F-3119	B-65191		Digital Computer Chronology	U D. Brown
3C-1303	F-3112			8-BT Stage Cryotron Clock	U D. Buck
3C-1304	F-3113			8 Stage Cryotron Clock Close-up	U "
3N-1305	F-3120	B-65206		Computer Features	U H. D. Benington
3N-1306	F-3121	A-65218		Utility Operation	U "
3N-1307	F-3122	A-65219		Utility System	U "
3N-1308	F-3123	A-65229		Program Input Process	U "
3N-1309	F-3124	A-65227		Sample Executive Program	U "
3N-1310	F-3125	A-65228		Sample Flow Chart	U "
3N-1311	F-3132	A-65320		Memory Capacity	U D. Brown
3N-1312	F-3133	A-65321		Average Time Between Failures	U "
3N-1313	F-3145	C-65534		Tristimulus Photometer (Simplified)	U W. H. Highleyman
3N-1314	F-3146	C-65533		Chromaticity-Coordinate Computer (Simplified)	U "
3N-1315	F-3147	C-65457		Chromaticity-Coordinate Plotter (Simplified)	U "
3N-1316	F-3148	A-65458		CIE Chromaticity Diagram	U "
3N-1317	F-3149	A-65563		Proposed Chromaticity Coordinate Computer	U "
3N-1318	F-3170	B-65706		Operation of Magnetic Core Switch	U N. Taylor
3N-1319	F-3171	A-65692		Operation of Switch Core	U "
3N-1320	F-3172	B-65707		Memory Capacity Compound with Electronic Complexity	U "
3N-1321	F-3174	B-65717		Output Voltage	U K. Olsen
3N-1322	F-3175	B-65718		Rise Time	U "
3N-1323	F-3176	B-65719		-10 Volt Supply Margins	U "

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE	REMARKS
S-1324	F-3177	B-65720		-3 Volt Supply Margins	U K. Olsen
S-1325	F-3178	B-65721		Pulse Margins	U "
S-1326	F-3179	B-65722		Margins with B Variations	U "
S-1327	F-3180	B-65366		TX-O Flip-Flop	U "
S-1328	F-3181	B-63369		Circuit Schematic TX-O Flip Flop	U "
S-1329	F-3184	B-65729		Trigger Sensitivity	U "
S-1330	F-3185	B-65727		Temperature Margins	U "
S-1331	F-2916	None.		Brass Jig - Pressing Mold	U "
S-1332	F-2925	None		Core Loading	U "
S-1333	F-2935	None		Wiring a Mat	U "
S-1334	F-2939	None		64 x 64 Module Mat	U "
S-1335	F-2940	None		Dip Soldering	U "
S-1336	F-2943	None		Core Loading	U "
S-1337	F-2945	None		Core Form Holding Fixture	U "
SN-1338	F-3190	C-65870		Diode Matrix Switch	U P. Griffith
SN-1339	F-3191	B-65871		Cascade Circuit	U "
SN-1340	F-3192	C-65872		Sixteen Pos. Multiposition Switch (Zero Select)	U "
SN-1341	F-3193	C-65873		Sixteen Pos. "And" Control Switch (Zero Select)	U "
SN-1342	F-3194	B-47229		Block Diagram of Multiposition Selection Switch	U "
SN-1343	F-3195	C-65874		Sixteen Position "Or" Matrix Switch (ECC Select)	U "
SN-1344	F-3196	C-65875		Eight Position "And" Control Switch (Zero Select)	U "
SN-1345	F-3197	C-65876		Eight Position "Or" Control Switch (Zero Select)	U "
SN-1346	F-3198	C-65877		Eight Position "Or" Control Switch (ECC Select)	U "
S-1347				IBM Kingston N. Y. Construction of Test Cell #1	U J. Arnold 5-2-55
S-1348				IBM Kingston N. Y. Duplex Maintenance Console	U " 12-16-55
S-1349				IBM Kingston N. Y.	U " 10-20-55
S-1350				IBM Kingston N. Y. Test Cell #1	U " 12-30-55

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE	REMARKS
S-1351				IBM Kingston N. Y.	U J. Arnold 1-11-55
S-1352				IBM Kingston N. Y. Card Etching	U " 8-22-55
S-1353				IBM Kingston N. Y. Cell #1	U " 12-30-55
S-1354				IBM Kingston N. Y.	U " 12-16-55
S-1355				IBM Kingston N. Y. Auto Fab	U " 6-1-55
S-1356	F-3206	A-65355		Basic Direct Coupled Switching Circuit - Basic Re-coupled Switching Circuit	U K. Konkle 4-20-56
S-1357	F-3207	A-65914		Fig. 2(a) "Or" Circuit (Part of A-65356)	U " "
S-1358	F-3208	A-65915		Fig. 2(b) "And" Circuit (Part of A-65356)	U " "
S-1359	F-3209	A-65916		Fig. 2(c) Flip-Flop with Set & Clear Inputs	U " "
SN-1360	F-3210	B-65917		Vc-Ic and Vb-Ib Characteristics for a Typical SBT	U " "
SN-1361	F-3211	A-65944		Output Waveforms of 64 Position Switch	U P. Griffith
SN-1362	F-3212	B-65976		Ternary Diagram of $Fe_2O_3:Li_2O:NiO$	U D. L. Brown 4-25-56
SN-1363	F-3213	B-65977		Maximum Squareness Ratio, Rs vs. Composition	U " "
SN-1364	F-3214	B-65978		The Effects of Sintering Temperature on the Maximum Squareness Ratio of Lithium-Nickel Ferrites	U " "
S-1365	F-3215	A-65979		Comparison Between a Lithium-Nickel Ferrite and a Magnesium Manganese Ferrite	U " "
S-1366	F-3216	A-65980		B-H Loop for Various Lithium-Nickel Ferrites	U " "
S-1367	F-3217	A-65981		Pulse Response	U " "
SN-1368	F-3220	B-66106		Saturated Emitter Follower	U K. Olsen 5-3-56
SN-1369	F-3221	B-66104		Inverters	U " "
SN-1370	F-3222	B-66105		RC Coupled Characteristics	U " "
SN-1371	F-3223	B-66106		Turn-Off Time	U " "
SN-1372	F-3224	B-66107		Memory Timing Chart	U J. Mitchell 5-7-56
SN-1373	F-3225	B-66108		Magnetic Core Switch Driving Circuit	U " "
SN-1374	F-3226	C-63655-1		System Diagram of the TX-O Computer	U W. Clark 5-8-56

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE	REMARKS
SN-1375	F-3227	B-66173		Circuit Tolerance to Tube Perveance	U H. Boyd 5-9-56
SN-1376	F-3228	B-66174		Triggering Characteristics	U H. Boyd "
SN-1377	F-3229	A-66175		Divider Resistor Tolerances vs. Trigger Amplitude	U " "
SN-1378	F-3230	A-66176		Circuit Margins vs. Trigger Amplitude	U " "
SN-1379	F-3231	A-66177		Marginal Check Voltage vs. Tube Perveance Deviation	U " "
SN-1380	F-3232	B-66178		Marginal Check. Volt. vs. -30 v. Diode Back Resistance	U " "
SN-1381	F-3233	B-66179		Marg. Check. Volt. vs. Divider Resistor Deviations	U " "
SC-1382				View of Console and Arithmetical Element TX-0 Computer	U K. Olsen 5-10-56
SC-1383				View of Several Registers of Plug-in Units of TX-0 Computer	U " "
SC-1384				Close-up of Plug-in Units of TX-0 Computer	U " "
SN-1385	F-3234	A-66191		Typical Eccles-Jordan Flip-Flop	U H. Boyd 5-11-56
SN-1386	F-3235	A-66221		Marginal-Check Voltage vs. Cathode-Resistor Tolerance	U " "
SN-1387	F-3236	A-66196		TX-0 Flip-Flop Package	U K. Olsen "
SN-1388	F-3237	A-54678-2		High-Speed Flip-Flop	U H. Boyd 5-11-56
SN-1389	F-3238	B-66225		Max. Squareness Ratio Contours for the Lithium: Ferrite: Nickel Ferrite: Zinc Ferrite System	U D. L. Brown 5-15-56
SN-1390	F-3239	A-64974-1		Typical Memory Core Hysteresis Loop	U G. Davidson 4-13-56
SN-1391	F-3240	B-64903-1		Base Parameters for NPN Germanium Transistors	U " "
SN-1392	F-3241	B-64905-1		Base Parameters for PNP Germanium Transistors	U " "
SN-1393	F-3242	A-66239		fn vs. n (Turn-Off)	U " "
SN-1394	F-3243	A-66240		fn vs. dn (Turn-Off)	U " "
SN-1396	F-3245	A-65023-1		Potential Diagram for Section through Emitter, Base & Collector	U " "
SN-1397	F-3246	B-65025-1		Punch Through Effect	U " 5-17-56

SLIDE SERIAL NO.	FILM NO.	DRAWING NO.	FILM POS.	TITLE	REMARKS
SN-1398	F-3217	B-61955-1		Experimental Transistor-Cate Level Amp.	U G. Davidson 5-17-56
SN-1399	F-3261	C-66282		Selection System for Core Memory	U "
SN-1100	F-3262	C-65652-1		Inputs-Outputs and Storage Allocation	U D. Israel
SN-1101	F-3263	C-65651-1		Basic Elements of a Real-Time Control System	U "
SN-1102	F-3264	C-65653-1		Preparation of Simulated Non-Controllable Inputs on Magnetic Tape	U D. Israel
SN-1103	F-3265	C-65654-1		Simulation of Feedback Inputs	U "
SN-1104	C-22-101/1-1	-----		AN/FSQ-7 & AN/FSQ-8 Production Machines Schedule	S W. Wells 5-28-56
SN-1105	F-3266	A-66358		Parallel Inverters	U K. Olsen "
SN-1106	F-3267	A-66359		Parallel Emitter Followers	U " "
SN-1107	F-3268	B-66376		Series Inverters	U " "
SN-1108	F-3269	C-66362		Direct Coupled Cascade -- RC Coupled Cascade	U " "
SN-1109	F-3270	B-66046-1		Saturated Emitter Follower	U " "
SN-1110	F-3271	A-66157		Tau Margins	U " "
SN-1111	F-3272	A-66356		Beta Margins	U " "
SN-1112	F-3273	B-66355		McGuire Subsector	S N. Jones
SN-1113	F-3274	B-66364		FGD System Rejection of ECM Strobe Lines	S "
SN-1114	F-3275	A-65718-1		Rise Time	U K. Olsen 5-28-56
SN-1115	None	None		TX-O Back Panel	U K. Olsen 6-22-56
SC-1116	None	None		TX-O Console Close-ups	U " "
SC-1117	None	None		TX-O Console	U " "
SC-1118	None	None		TX-O Computer (Front View)	U " "
SC-1119	None	None		Operator at TX-O Console	U " "
S-1120	None	None		Block Diagram TM-1 Control	U " "
SN-1121	F-3277	A-66604		Production of a System Program	U H. Benington 6-25-56
SN-1122	F-3278	B-66605		Program Production	U " "
SN-1123	F-3279	B-66606		Test Instrumentation	U " "

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1124	F-3280	A-66607	Typical Control System	U	H. Penington 6-25-56
SN-1125	F-3281	B-66608	Static Program Organization	U	"
SN-1126	F-3282	A-66609	Dynamic Program Operation	U	"
SN-1127	F-3283	B-66611	Production Cost	U	"
SC-1128	None	None	64 x 64 Memory Plane Module 256 x 256 Memory	U	K. Olsen 7-10-56
SC-1129	None	None	3-Bay Rack 256 x 256 Memory May 1956	U	"
SC-1130	None	None	Magnetic Core Switch P.I.U. 256 x 256 Memory	U	"
SC-1131	None	None	Vacuum Tube Plug-in-Unit 256 x 256 Memory	U	"
SC-1132	None	None	Memory Stall 256 x 256 Memory May 1956	U	"
SN-1133	F17-44	None	Prototype 256 x 256 Memory Plane	U	
SN-1134	None	None	Texas Tower at Georges Shoal	U	
SN-1135	None	None	Texas Tower at Georges Shoal	U	
SN-1136	None	None	Texas Tower at Georges Shoal	U	
SN-1137	None	None	Texas Tower at East Boston 8/55	U	
SN-1138	None	None	Texas Tower At Georges Shoal	U	
SN-1139	None	None	Drill Barge for First Texas Tower Leaving N.Y.C. 6/55	U	
SN-1140	None	None	Drill Barge for First Texas Tower Working 6/55	U	





APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
1161					
1162					
1163					
1164					
1165					
1166					
1167					
1168					
1169					
SN-1170	P-479-5		Paper 1-Bit Counter	U	R. Mayer 8-31-56
SN-1171	P-479-3		3 Registers of Cardboard Memory	U	" "
SN-1172	P-479-4		8-Bit Cardboard Register	U	" "
SN-1173	P-479-2		8-Bit Paper Register	U	" "
S -1174	060-215/1-1	A-58717	Early Maneuver (turn 40 Sec. before Expected Interception)		
			Speed 360 Knots	S	J. Bartee
S -1175	060-216/1-1	A-58731	Early Maneuver (turn 40 Sec. before expected Interception:		
			Speed 720 Knots	S	"
SC-1176	None	None	TX-O Computer	U	K. Olsen 9-21-56
SC-1177	None	None	Shower Stall	U	"
SC-1178	None	None	256 x 256 Memory	U	"
SN-1179	F-3331	A-67574	Lockhead F-104A Maximum Speed Summary	S	R. Fallows 9-26-56
SN-1180	F-3332	A-67576	Speed Loss in 180° Turn	S	"
SN-1181	F-3333	A-67575	Sidewinder 1A Launching Area	S	"
SN-1182	F-3334	B-67577	F-104 Multiple Interceptors vs. Mass Raid	S	"
SN-1183	F-3335	A-67565	F-89J Arrangement View From aft of Interceptor	S	"
SN-1184	F-3336	B-67564	F-89 Maximum Range Profile	S	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 73

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1185	F-3337	B-67562	F-89 Intermediate Range Profiles	S	R. Fallows 9-26-56
SN-1186	F-3338	B-67561	F-89 High Speed Profile	S	"
SN-1187	F-3339	A-66373	Airspeed vs. Altitude	C	"
SN-1188	F-3340	A-67579	Nike I Command Guidance System	S	"
SN-1189	F-3341	A-67580	Typical Nike Missile Trajectories	S	"
SN-1190	F-3342	A-66372	Fuel Consumption vs. Altitude	C	"
S -1191	F-2412	-	TFDO I WWI Silver Ion Migration Between Panel Lugs	U	N. Taylor
S -1192	F-3400	-	Open Bottom Filament Weld Tube #2420	U	N. Taylor 10-17-56
S - 1193	F-3401	"	Open Grid Lead to Connector Weld Tube #2420	U	N. Taylor "
S -1194	F-3402	-	Open Cathode to Stem Lead Weld Tube #2420	U	N. Taylor "
SN-1195	F-3329	B-67586	Communication Links in Materials Engineering	U	J. Goodenough 9-27-56
SN-1196	F-3330	B-67595	Schematic Diagram of a 180° Domain Wall	U	"
SN-1197	F-3343	-	8 Flip-Flop Cryotron Ring Circuit Waveform	U	C. Corderman
S -1198	F-3344		Memotron Tube		
S -1199	F-3345		C 19 K Charactron Yoke, Coil and Tube Assembly		C. Corderman
S -1500	F-3346		Farnsworth Iatron		"
S -1501	F-3347		Typotron Character Display Storage Tube		"
S -1502	F-3348		Deflection Voltage Waveforms Used to Produce Trace Pattern		"
S -1503	F-3349		Arabic Numerals Produced by Blanking Segments of Basic Pattern		"
S- 1504	F-3350		Farnsworth Iatron Schematic Drawing		"
S -1505	F-3351		Drawing of C 19 K Tube and Coil Assembly		"
S -1506	F-3352		P-11 Charactron Test October 21, 1954 #2		"
S -1507	F-3353		WWI Printoutput from 35 mm. film		"
S -1508	F-3354		MTC Distribution Curves (Holst) 35 mm. film		"
S -1509	F-3355		Numbers Display on 19" Scope (Sutro) 35 mm. Film		"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 74

SLIDE N O.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S -1510	F-3356		MTC Numbers Printout (Test for Ziegler) 35 mm. Film		C. Corderman
S -1511	F-3109		5" Charactron Tube		"
S -1512	F-3131		Charactron Matrix-Model XI		"
SN-1513	F-3361	A-67600	Method of Making Vacuum-Evaporated Magnetic Films	U	D. Smith 10-9-56
SN-1514	F-3362	A-67601	Static Model of an Anisotropic Thin Film	U	"
SN-1515	F-3363	B-67602	Theoretical Hysteresis Loops	U	"
SN-1516	F-3364	A-67677	Equations for Quasistatic Relaxation	U	"
SN-1517	F-3365	A-67670	Landau-Lifshitz Equation with Film in the x-y Plane	U	"
SN-1518	F-3366	A-67676	Solution of the Landau-Lifshitz Equation	U	"
S -1519	F-1307	-	Computer Magnetic Tape Mechanism (Raytheon Tape Unit)	U	J. A. O'Brien
S -1520	F-3357	-	Raytheon Magnetic Tape Head (Closeup of Ass'y and Gap)	U	"
SN-1521	F-3359	C-67636	Some Practical Uses for Ferromagnetic Material	U	J. Goodenough
SN-1522	F-3360	B-67668	Various Magnetic States	U	J. Goodenough
SN-1523	F-3367	A-67669	Barkhausen Jumps in Longitudinal Direction (10 CPS)	U	D. Smith 10-9-56
SN-1524	F-3368	A-67671	Impulse Apparatus	U	"
S -1525	F-3369	A-67861	Experimental Hysteresis Loops at 1000 CPS	U	"
SN-1526	F-3370	B-67675	Impulse Relaxation Behavior	U	"
SN-1527	F-3371	B-67674	Rotational Coercive Force $H_c^R$ vs. Transverse Field $H_t$	U	"
SN-1528	F-3372	B-67828	Theoretical Longitudinal Hysteresis for Various Transverse Fields $H_t$	U	"
S -1529	F-3373	A-67851	Asymmetrical Static Model	U	"
S -1530	F-3374	C-67856	Theoretical Asymmetrical Hysteresis Loops	U	"
S -1531	F-3375	A-76128	Component Failures - XD-1 -- October 1955 - May 1956	U	W. Canty 10-11-56
S -1532	F-3376	A-76129	XD-1 Central Computer Failures August 1, 1956 to 30 Aug. '56	U	"
S -1533	F-3377	A-76130	Summary of Equipment Failures, WWT August 1956	U	"
S -1534	F-3378	A-76131	The P.S.P. Design Concept	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 75

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S -1535	F-3379	A-76132	Component Studies	U	W. Canty 10-11-56
S -1536	F-3381	A-67845	Patterns for Minimum DiPole-DiPole Energies	U	U. Goodenough 10-11-56
S -1537	F-3382	A-67846	A Triangular Spin Configuration	U	"
S -1538	F-3383	A-66457	Schematic Energy Levels for Orbital Site of a Rock-Salt-Type Lattice	U	"
S -1539	F-3384	A-67847	Typical Hysteresis Loop	U	"
S -1540	F-3385	A-67848	Theoretical Loops for Magnetic Films	U	"
S -1541	F-3386	B-67849	Hysteresis Loops of 68 Permalloy Under Tension	U	"
S -1542	F-3387	A-67850	Magnetic Poles Induced on 180° Domain Walls	U	"
SN-1543	F-3399	C-67921	$2\alpha K(A\tau)\theta$ vs. $h_s$ for various $h_\perp$ $2\alpha K(A\tau)\theta$ vs. $h_\perp$ for various $h_s$	U	D. Smith
SN-1544	F-3388	B-67980	Room Temperature Contours of Maximum Squareness	U	D. Goodenough
SN-1545	F-3389	A-67981	Variations in Switching Characteristics with Sintering Time at 1350° C.	U	"
SN-1546	F-3390	A-67982	Variations in Switching Characteristics with Temperature at 10 Hr. Sinter	U	"
SN-1547	F-3391	B-67983	Effect of an External Compressive Stress on B-H Loop of Ferroxcube 4-B	U	"
SN-1548	F-3392	A-67984	Voltage-Output Wave Forms for a Magnesium-Manganese Memory Core	U	"
SN-1549	F-3393	B-67985	Effect of Compressive Stress on Several Properties of a Ferroxcube 103 Core	U	"
SN-1550	F-3394	A-67986	Temperature Limitations for a $M_{0.8}Mn_{0.5}Fe_{1.7}O_4$ Core Used as a Memory Element in a two-to One Selection Scheme	U	"
SN-1551	F-3395	A-67987	Schematic Energy Levels for Cation d Orbitals	U	"
SN-1552	F-3396	A-67988	Schematic Representation of Indirect Semicovalent Exchange	U	"
SN-1553	F-3397	A-67989	Table III: Order of Cation Stability in a Sites of Oxygen Spinel	U	"
SN-1554	F-3398	C-67990	Table IV: Some Tetragonal Spinel	U	"
S -1555	F-3403	-	Foreign Material in Grid of TS 438	U	N. Taylor 10-17-56

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 76

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S -1556	F-3104	-	Particle From Type #2420 Tube	U	N. Taylor 10-17-56
SN-1557	F-3105	A-68007	Static Cryotron Characteristics	U	D. Buck
SN-1558	F-3106	A-68008	B-H Loop of an Inductor Containing a Superconductive Core	U	"
SN-1559	F-3107	A-68009	Switching Locus for H <sub>2</sub> H <sub>0</sub>	U	"
S -1560	C60-3/1-1	3-6-1366	Experimental SAGE Subsector	S	
S -1561	F541-1	-	2 Watt Resistors	U	N. Taylor 10-19-56
S -1562	F268-3	-	A Fine Wire Coil Damaged During Mfg.	U	"
S -1563	F192-39	-	Distortion of Grid Laterals	U	"
S -1564	C60-249	3-62-1639	High Speed Flip-Flop	U	W. Canty 10-19-56
S- 1565	F17-53	-	TX-0 Big Memory and Plane	U	W. Papian
S -1566	F17-55	-	TX-0 Finished Big Plane	U	"
SN-1567	C60-328	C-47236	Block Diagram 256 x 256 Memory	U	J. Mitchell 12-7-56
SN-1568	F-3411	A-68010	A Single Bit. Two Bits	U	W. Papian
SN-1569	C60-325	A-68011	Sense Winding Connection Schematic for one Sense Winding		
			256 x 256 Memory Plane	U	J. Mitchell 12-7-56
SN-1570	C60-326	A-68016	Magnetic Core Switch Schematic	U	J. Mitchell "
SN-1571	C60-327	A-68012	Digit Plane Winding Connection Schematic 256 x 256 Memory Plane	U	"
SN-1572	C60-329	A-67992	Switch Driver Current Margins	U	"
SC-1573	-	*	X-Memory Plane 64 x 38 Complete	U	
SC-1574	-	-	X-Memory Plane Enlarged	U	
SN-1575		C-47236-1	Block Diagram 256 x 256 Memory, TX-0	U	J. Mitchell 12-13-56
SN-1576		A-67992	Switch Driver Current Margins	U	"
S -1577	F-3165	-	Bldg. F Air Surveillance Room West Wall	U	B. Gurley 12-18-56
SC-1578	F-3446	-	Arc Discoloration on IRM CAM of Typotron #20660	U	T. Clough 12-21-56
S -1579	F-3450	C-69153	Mask Generation by Orthographic Projection	U	A. Guidtz 12-31-56
S -1580	F-3451	C-69257	Generation of Coil Mask by Orthographic Projection	U	A. Guidtz 1-3-57

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 77

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1581	C60-358	A-69397	Emitter Follower	U	K. Olsen 2-8-57
S -1582	F-1458	-	Visualization of Pulses on Magnetic Tape	U	J. A. O'Brien 10-25-56
SN-1583	C60-361	A-69399	Inverter	U	K. Olsen 2-8-57
SN-1584	C60-362	A-69396	Parallel Emitter Followers	U	K. Olsen 2-8-57
SN-1585	C60-359	A-69395	Parallel Inverters	U	K. Olsen 2-8-57
SN-1586	C60-360	A-69398	Series Inverters	U	"
SN-1587	C60-357	A-69400	TX-2 Carry Circuit	U	"
SC-1588	-	-	Address Decoder, TX-2	U	M. Storm 1-10-57
SC-1589	-	-	High Speed Flip-Flop, TX-2	U	"
SN-1590	C60-291	A-68169	Display Area Check	C	J. Shay 11-7-56
SN-1591	C60-290	A-68165	Semi-Automatic Equipment	C	"
SN-1592	C60-289	A-68164	External Communications of a Direction Center	C	"
SN-1593	C60-298	A-52000-1	(a) Read	U	W. Papian
SN-1594	C60-299	A-52000-1	(b) Write	U	"
SN-1595	C60-302	A-51063	Circuit Schematic, Read-Record Switch Panel	U	J. A. O'Brien 11-9-56
SN-1596	C60-300	A-68377	Manual Switching Circuit (a) Balanced Switching	U	" Part of A-36785
SN-1597	C60-301	A-68378	(b) Single Ended Switching Manual Switching Circuits	U	" Part of A-36785
SN-1598	C60-303	E-37320-2	Block Diagram, In-Out Control, 410, WWI	U	"
SN-1599	F-3435	A-67132-1	Inverse Switching Speed as Function of Current Control	U	D. Buck 11-7-56
SC-1600	-	-	Vertical Shim Soldering (256 <sup>2</sup> Core Memory)	U	D. Ellis "
SC-1601	-	-	Top View of Partially Completed Stack (256 <sup>2</sup> Core Memory)	U	"
SC-1602	-	-	Front View of Partially Completed Stack (256 <sup>2</sup> Core Memory)	U	"
SC-1603	-	-	Placing A 256 <sup>2</sup> Memory Plane in Position for Vertical Connection	U	"
SC-1604	-	-	Simultaneous Vertical Skim Soldering and Inspection (256 <sup>2</sup> Core Memory)	U	"
SC-1605	-	-	Corner View of Partially Completed Stack (256 <sup>2</sup> Core Memory)	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 78

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S -1606	060-277/1-1	-	Page 9 of Memo 6M-3960 Second Draft	C	
SC-1607	-	-	Back Panel Wiring, TX-2	U	M. Storm
SC-1608	-	-	8 Transistor Emitter Follower TX-2	U	"
S -1609	-	-	Simulated Data Tracks, ESS Shakedown, Mission #10, Part I		
			Blip/Scan Ratio 0.7 Olmstead Model	U	N. Jones 12-31-56
S -1610	-	-	Simulated Data Tracks Ess Shakedown, Mission #10, Part 2		
			Blip/Scan Ratio 0.7 Olmstead Model	U	"
S -1611	-	-	Same title as S-1609 Part 3	U	"
S -1612	-	-	Same title as S-1609 Part 4	U	"
S -1613	-	-	Same title as S-1609 Part 5	U	"
S- 1614	-	-	Same title as S-1609 Part 6	U	"
S -1615	-	-	Same title as S-1609 Part 7	U	"
S- 1616	-	-	Same title as S-1609 Part 8	U	"
S -1617	-	-	Same title as S-1609 Part 9	U	"
S -1618	-	-	Same title as S-1609 Part 10	U	"
S -1619	"	-	Same title as S-1609 Part 11	U	"
S-1620	P99-28	-	MTC Magnetic Drum	U	J. A. O'Brien 11-20-56
S -1621	060-378	B-69366	Steps in the Lincoln TX-2 Development Program	U	K. Olsen 1-27-57
S -1622	060-380	Part of C-69385	(a) (1111, 36) Configuration	U	"
			(b) (1111, 9,999) Configuration	U	"
S -1623	060-381	Part of C-69385	(c) ( , 18, 18) Configuration	U	"
			(d) ( , 9, 9, 9, 9) Configuration	U	"
S -1624	060-376	A-69362	TX-2 Instruction Word Structure	U	"
S -1625	060-379	C-69367	TX-2 Configuration (a) Quartering Permutation Paths and		
			Activity Flip-Flops Shown (b) Paths in Exchange Element	U	"
S -1626	060-382	Part of C-69361	(a) Consecutive Load Type Instructions - Instructions and		
			Operands in Different Memories	U	"



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 79

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S -1627	C60-383	Part of C-69361	(b) Consecutive Store Type Instructions	U	K. Olsen 1-27-57
S -1628	C60-384	Part of C-69361	(c) Instruction and Operand in Same Memory	U	"
S -1629	C60-385	Part of C-69361	(d) Change Sequence	U	"
S -1630	C60-377	B-69408	TX-2 System Schematic Showing Principal Paths Enabling Index Adding and Storing and Loading Prog. Count.	U	"
SN-1631	F-3568	A-67635	DC Power Supply Transfer Characteristics for Disturbances of Various Durations	U	J. Gano 6- -57
SN-1632	F-3569	A-67632	Arrangement of Diesel Generating Station Having No Utility Tie Each Generator 650 KW, 0.8 P.F.	U	"
SN-1633	F-3570	A-67633	Arrangement of Generating Station Having Utility Tie Each Generator 1250 KW, 0.8 A.F. Each Transformer 1500 KVA	U	"
SN-1634	F-3571	B-67634	DC Power Supply -- Equivalent Circuit	U	"
SN-1635	F-3572	B-67944	DC Power Supply -- Block Diagram	U	"
SN-1636	F-3573	A-67895	Estimated Computer Errors Per Year Resulting From Electrical Faults (1) D-C Power Sup. Performance Etc.	U	"
SN-1637	F-3574	C-67902	Power System Without Motor-Generator Sets	U	J. Gano 6- -57
SN-1638	F-3575	C-67901	Power System with Motor-Generator Sets Power Distribution General	U	"
SN-1639	F-3576	C-67903	Arithmetic Average of Line to Line Voltages at Generator Bus #1 in Percent of Normal, for Etc.	U	"
SN-1640	F-3577	C-67907	Estimated Occurrence Rates of Voltage Dips at Generator Buses for Equipment and Cable Faults	U	"
SN-1641	F-3578	C-67900	Power System with Motor-Generator Sets Computer Power Distribution	U	"
SN -1642	F-3579		Table I: Computer D-C Voltage Margins	U	"
SN-1643	F-3580		Table IIIa Estimated Probabilities of Fault Occurrences in Equipment as Used in Studies of Comp. Errors	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 80

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1614	F-3581		Table IV: Estimated Relative Distribution of Types of Faults as Used in Studies of Computer Errors	U	J. Gano 6- -57
SC-1615	-	-	3 Bay and 5 Bay Racks, Memory Stall, 256 x 256 Memory	U	M. Storm 1-17-57
SC-1616	-	-	Front View of Completed Stack (256 <sup>2</sup> ) Core Memory (Closeup)	U	"
SN-1617	C60-390	A-69528	Current Switch	U	B. Curley
SN-1618	C60-389	A-69527	Weighted Current Decoder	U	"
SN-1619	C60-391	A-69479	Current Source	U	"
SN-1650	C60-393	A-69478	Deflection Amplifier	U	"
SN-1651	C60-392	A-69477	Multiplying Decoder	U	"
SN-1652	C60-391	A-69529	Absolute Value Decoder	U	"
S -1653	C60-161	A-69811	Circuit Schematic	U	F. Sandy 3-1-57
S -1654	C60-163	A-69816	Current Response - Effect of Filament Load Etc	U	"
S -1655	C60-162	A-69815	Voltage Response Effect of Filament Load Etc.	U	"
S -1656	C60-161	A-69817	Current Response Effect of Number of Thermistors in Series Etc.	U	"
S -1657	C60-160	A-69818	Voltage Response - Effect of Number of Thermistors in Series Etc.	U	"
S -1658	C60-159	A-69849	Current Response Upon Application of Full Voltage	U	"
S -1659	C60-158	B-69947	Table I: Number of Thermistors Required for Various Filament Loads	U	"
S -1660	C60-157	A-69948	Typical Current Response Input to Power Transformer	U	"
S -1661	C60-156	A-69949	Typical Voltage Response Input to Power Transformers	U	"
S -1662	C60-155	B-69950	Static Volt-Ampere Characteristics	U	"
S -1663	C60-154	-	Thermistor Mounting	U	F. Sandy 3-1-57
SC-1664	-	-	X-Memory Frame, TX-2	U	M. Storm
SN-1665	C60-105	C-69666	Use of Radar Data By SAGE Tracking Programs	U	J. Arnow/J. Fletcher
SN-1666	C60-106	C-69658	Sequence of Tracking Program	U	"
SN-1667	C60-107	C-69664	Track Symbology (B Feature Selected)	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 81

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CAS	REMARKS
SN-1668	C60-404	A-69656	Association of Returns with Tracks	U	J. Arnow/J. Fletcher
SN-1669	C60-356	A-65366-1	TX-2 Flip-Flop (Waveform)	U	K. Olsen 1-30-57
SN-1670	C60-375	D-63369-1	TX-2 Flip-Flop (Circuit)	U	"
S -1671	C60-408	A-67123-2	Pulse Response Comparison on Computer Waveforms	U	A. Hingston 2-4-57
S -1672	C60-343	B-69428	TX-2 Memory Element Showing Method of Using Two Address Registers and Two Buffer Registers to Simultaneously Operate Two out of Four Memories	U	J. Frankovich 2-4-57
S -1673	C60-345	B-69393	TX-2 Program Element Showing Paths Enabling Index Adding and Storing and Loading Program Counter From the Index Memory and the Exchange Element	U	J. Frankovich 2-4-57
S -1674	C60-346	B-69404	TX-2 Configuration Selection	U	"
S -1675	C60-344	B-69416	Circuits and Transfer Paths (General) of Any TX-2 Arithmetic Element Forms	U	"
SN-1676	C60-419	C-69380-1	(a) ith Quarter Coupling Units. (b) Coupling Unit Connections. (c) TX-2 Configuration-Arithmetic Elements and Operand Word Structure	U	"
S -1677	C60-372	C-69411	TX-2 Shift Path Arrangements	U	"
SN-1678	C60-422	C-69367-1	TX-2 Configuration: (a) Quartering Permutation Paths and Active Flip-Flop Shown. (b) Paths in Exchange Element	U	"
S -1679	C60-423	Part of C-69385-1	(a) (P0, 36) Configuration. (b) (P0, 9,9,9,9) Configuration	U	"
S -1680	C60-424	Part of C-69385-1	(c) (P2, 18, 18) Configuration. (d) (P2, 9,9,9,9) Configuration.	U	"
SN-1681	C60-421	B-69404-1	TX-2 Configuration Selection	U	"
SN-1682	C60-420	A-69363-1	Winding Configuration, Index Memory	U	D. Best 2-4-57
S -1683	C60-370	C-69435	64 x 64 x 38 Pluggable TDCM	U	"
S -1684	C60-350	A-69412	Timing, T Memory	U	"
S -1685	C60-398	C-69406-1	Register Selection Circuit X Memory	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 82

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S -1686	C60-351	A-69403	Digit Plane Driver, T Memory	U	D. Best 2-4-57
S -1687	C60-349	A-69402	One Channel Emitter Follower and Inverter & Gates, T. Memory	U	"
S -1688	C60-352	A-69401	One Channel, Selection Line Driver, T Memory	U	"
S- 1689	C60-355	A-69384	Write Driver, X Memory	U	"
S -1690	C60-353	A-69379	Read-Write Driver (2Needed) T Memory	U	"
S -1691	C60-354	A-69378	Sense Amplifier, T Memory	U	"
S -1692	C60-348	A-69364	Timing Diagram, Index Memory	U	"
S -1693	C60-395	B-47247-1	Block Diagram, X Memory	U	"
S -1694	C60-368	B-47246	Block Diagram, T Memory	U	"
S -1695	C60-367	B-47245	Block Diagram, S Memory	U	"
S -1696	C60-366	B-69407	Read Driver, X Memory	U	"
S -1697	C60-397	B-69405-1	Digit Driver, X Memory	U	"
S -1698	C60-396	B-69394-1	Sense Amplifier, X Memory	U	"
SN-1699	F-3475	A-80906	Step Response of Unterminated Coax	U	A. Hingston
SN-1700	F-3476	A-80907	Attenuator-Equalizer Effect	U	"
SN-1701	F-3477	A-80908	Conventional Attenuator Table Drive	U	"
SN-1702	F-3478	A-80909	Reduction of Overshoot	U	"
SN-1703	F-3479	A-80910	Bulge and Dip Compensation	U	"
SN-1704	F-3482	B-80919	227 Foot Passive Probe Gun	U	"
SN-1705	F-3480	A-80920	Probe Selection Board (Photo of Maintenance Console, XD-1 with Scope and Probe	U	"
SN-1706	F-3481	A-80912	Long Passive Probe Performance	U	"
SC-1707	-	-	TX-0 and TX-2 Computers	U	M. Storm
S -1708	C60-448	B-69905	TX-2 Quartering	U	J. Frankovich 2-21-57
S -1709	C60-447	B-69862	TX-2 Instruction Word Structure	U	"
S -1710	C60-442	B-66913	TX-2 Operand Word Structure	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 83

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S- 1711	C60-449	B-69906	TX-2 System Schematic	U	J. Frankovich 2-21-57
S -1712	C60-446	B-69907	Configuration Number 0	U	"
S -1713	C60-444	B-69909	Configuration Number 11	U	"
S -1714	C60-445	B-69908	Configuration Number 4	U	"
S -1715	C60-443	B-69910	Configuration Number 9	U	"
S -1716	C60-371	C-69383	TX-2 In-Out Element	U	J. Forgie 2-19-57
S -1717	C60-373	C-69382	TX-2 Sequence Selector Stage	U	"
S -1718	C60-323/1-1	A-68514	SAGE Status	C	R. R. Everett 2-19-57
S -1719	C60-451	A-69944	TX-2 System Specifications	U	J. Frankovich 2-19-57
S -1720	C60-441/1-1	-	SAGE #6 Installation Schedule	S	R. R. Everett 2-20-57
S -1721	P533-1	-	Airplane View of McGuire D. C. Building	U	"
S -1722	F17-53	-	TX-2 Memory	U	"
S -1723	P249-89	-	ESS Shakedown - T.B.S.	U	"
S -1724	P249-90		ESS Shakedown - T.B.S.	U	"
S -1725	P249-91		ESS Shakedown - A.S.	U	"
S -1726	C60-450/1-3	6P-184	1960 Revision of SAGE Computer Program	S	J. Jacobs 2-20-57
SN-1727	C60-452		Transfer Gate	U	K. Olsen 2-20-57
S -1728	C63-25	A-80057	TX-2 Core Memories	U	M. Storm 2-21-57
S -1729	C63-26	A-80058	Shmoos, TX-2	U	"
S -1730	C63-24	A-80059	Flip-Flop Waveforms, TX-2.	U	"
S -1731	C60-453	A-80085	ESS Shakedown Schedule, Phase I	C	H. Mercer 2-25-57

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S-1732	C60-556 F-3466	B-80243	Quadrant Inhibit Winding, Print-Wired Memory Plane	U	A. Guditz 3-5-57
S-1733	C60-557 F-3467	B-80244	Quadrant Sense Winding, Print-Wired Memory Plane	U	A. Guditz 3-5-57
S-1734	C-60-563 F-3468	B-80242	Printed Wiring Exposures Using Collimated Light	U	"
S-1735	C-60-562 F-3469	B-69431	Printed Wiring Exposures Using Random & Collimated Light	U	"
S-1736	C60-558 F-3470	B-80245	Co-ordinate Drive Wirings, Print-Wired Memory Plane	U	"
S-1737	F-3471	B-80169	Sense or Inhibit Winding, Print-Wired Memory Plane	U	"
S-1738	P488-22	-	Overall View of TX-0 of TX-0 Room	U	M. Storm 3-5-57
SC-1739	-	-	Photograph of Address Decoder	U	K. Olsen 3-6-57
S-1740	C60-475	C-80371	Power Supplied To Filaments	U	F. Sandy 3-8-57
S-1741	C22-168	-	Projected Monitor Assignment Study	U	F. Heart 3-12-57
S-1742	C22-175	-	Percentage of Errors As A Function of Noise Density For Normal And Expanded Modes	U	"
S-1743	C22-169	-	Stimulus Card For Track Perception	U	"
S-1744	C22-167	-	Pattern Detection Study	U	"
S-1745	C22-172	-	Tad -- An Sop In Picture Form (2. Specific Uses of the Picture)	U	"
S-1746	C22-171	-	Tad -- An Sop In Picture Form - (1. What the Picture Shows)	U	"
S-1747	C22-170	-	1. Description of Operator Task (No Title)	U	"
S-1748	C22-176	-	(Organization Chart) (No Title)	U	"
S-1749	C22-173	-	Intercept Equations-Monitoring-Continuing Evaluation (No Title)	U	"
S-1750	C22-174	-	Evaluation Research & Development (No Title)	U	"
S-1751	C22-165/1-1	-	Fig. 2A Sage Task Analysis Diagram-Height Supervisor	C	"
S-1752	C22-166/1-1	-	Fig. 2B Sage Task Analysis Diagram-Height Supervisor	C	"
S-1753	-	-	Wetting Behavior of Sodium Silicate Glass $\gamma_1 = 275$	U	J. Goodenough

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	STATUS	REMARKS
SN-1754	F-3472	B-80457	2nd Floor, Bldg. F	U	S.H. Dodd 3-19-57
SN-1755	F-3474	A-80444	System Testing	C	" 3-20-57
SN-1756	F-3473	A-80445	System Testing	C	"
SN-1757	C60-497	A-69671	3-D Printed Board With No Soldered Connections	U	A. Guditz 3-20-57
S-1758	F-2942	-	4096 - Core, TX-O Memory Plane	U	A. Guditz 3-27-57
S-1759	F-3248	-	Oblique View, 16 - Core Printed Plane	U	A. Guditz 3-27-57
SN-1760	F-3483	A-80911	Probe Responses to Computer Wave Forms	U	W. Santelman 3-29-57
SN-1761	F-3487	A-80937	Program Package Test Cycle	U	D. Bailey
SN-1762	F-3486	A-80936	DCA Program Packages	C	"
SN-1763	F-3488	A-80938	Phases of Program Production	C	"
SN-1764	F-3485	A-80935	DCA Program Structure	U	"
S-1765	F-3489	-	ESS Tracking K-H Frame #26	C	H. Mercer
S-1766	F-3490	-	ESS Tracking K-H Frame #44	C	"
S-1767	F-3491	-	ESS Tracking K-H Frame #64	C	"
S-1768	F-3492	-	ESS Tracking K-H Frame #91	C	"
S-1769	F-3493	-	ESS Tracking K-H Frame #102	C	"
S-1770	F-3494	-	ESS Tracking MH #7	U	"
SN-1771	-	C-69659	Rear Mask Printed Memory Pattern	U	G. Heidler 4-10-57
SN-1772	-	C-69660	Pattern Separation into Vertical & Horizontal Line Segments	U	"
SN-1773	-	A-69661	Line & Selective Mask	U	"
SN-1774	-	A-69662	Finished Selective Mask	U	"
SN-1775	-	A-69663	Position For Exposure	U	"
SN-1776	-	A-69733	Bleed Line Exposure	U	"
SN-1777	F-3506 C60-560	B-66028-1	Exploded View, Printed Plane For Rectangular Pegs	U	A. Guditz 4-10-57
SN-1778	F-3507	C-81129	Method of Printing A 3-D Toroidal Winding	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 86

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1779	C60-555 F-3508	B-81125	Formation of Light Beams With Lenses	U	A. Guditz 4-10-57
SN-1780	-	C-76162	A Functional Diagram of the Sage System	U	W. Canty 4-12-57
S -1781	C60-518	A-81027	The AN/FSQ-7 (XD-1) Central Computer	U	"
SN-1782	C60-559 F-3509	C-81127	Exploded View, Setup For Printing Toroidal Pulse Trans- former	U	A. Guditz 4-16-57
SN-1783	C60-502	A-80941	Program Preparation & Testing Order	U	R.R. Everett 4-17-57
SN-1784	C60-503	A-80944-1	Proposed 59 Computer Program Revision	S	"
SN-1785	C60-505	B-81059	Sage System - Schedule #6	S	"
SN-1786	C60-504	A-81058	First 3 Sectors - Sage System	S	"
SN-1787	F-3495	-	Reflectance & Transmission Equation	U	D. Buck 4-21-57
S -1788	F-3496	-	Table I Example of Results Typed & Labeled by WWI	U	"
SN-1789	F-3510	A-81123	"Ground" Grid Amplifier	U	B. Gurley 4-23-57
SN-1790	F-3511	A-81122	Multiplying Decoder	U	"
SN-1791	F-3512	A-81128	TX-2 Deflection System	U	"
SN-1792	C22-180/1-2	-	Track Life vs. B (Random Tracks)450 Knots)	C	J. Watson 4-30-57
SN-1793	C22-181/1-2	-	Total Track Life vs. $\lambda$ (Random Tracks)	C	"
SN-1794	C22-182/1-2	-	Total Track Life vs. $d$ (Random Tracks)	C	"
S -1795	F-3513	A-81251	Generation of Collemated Light	U	A. Guditz 5-3-57
SN-1796	C60-561 F-3514	B-81250	Exposure of Printed Toroidal Windings	U	"
SN-1797	F-3515	B-81255	Pictorial Sense Winding, 16 - Core Printed Plane	U	"
SN-1798	F-3516	B-81254	Pictorial Inhibit Winding, 16 - Core	U	"
SC-1799	F-3517	C-81270	Proposed Packaging For Print-Wired Circuits	U	"
S -1800	-	-	(A Photo of D. Buck holding a Cryotron)	U	-
SN-1801	F-3531	A-81297	C.C. Command Post Elevation	U	F. Hazel 5-13-57
SN-1802	F-3551	C-81586	Dynamic Flow Diagram: Music; Sheet D of E	U	R. Meyer 6-5-57
SN-1803	F-3552	C-81587	Dynamic Flow Diagram Short Flow: Music	U	"



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 87

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1804	F-3553	B-81588	Example of "Similar Presentation" in Block Diagrams	U	R. Meyer 6-5-57
SN-1805	F-3554	B-81589	Example of "Interconnected Elements" in Block Diagrams	U	"
SN-1806	F-3555	B-81590	Example of Repetitive Parts in Block Diagram	U	"
SN-1807	F-3556	A-81591	Simple Example of Dynamic Flow Diagram	U	"
SN-1808	F-3557	B-81592	Loops in a Dynamic Flow Diagram	U	"
SN-1809	F-3558	C-81593	Additional Symbols	U	"
SN-1810	F-3559	C-81594	Multiple Paths, & Subroutines in a Dynamic Flow Diagram	U	"
SN-1811	F-3560	B-81595	Example of a Unified System in Computer Diagrams	U	"
SN-1812	F-3582	-	Utility Network Equivalent Circuit	U	J. Cano 6-5-57
SN-1813	F-3583	C-81583	Circuit Breaker Sequence	U	"
SC-1814	F-3584	-	Utility Distribution Network	U	"
SN-1815	F-3561	A-81617	Kutta's Fourth Order Process	U	L. Earnest 6-7-57
SN-1816	F-3562	A-81618	Kutta's Fourth Order Equations	U	"
SN-1817	F-3563	A-81619	Two Fourth Order Methods	U	"
SN-1818	F-3564	A-81620	Truncation Error Equations	U	"
SN-1819	F-3565	A-81621	Truncation Error Estimates for Two Methods	U	"
SN-1820	F-3566	A-81622	Irreversible Process	U	"
SN-1821	F-3567	A-81623	Example of Reversible Fourth Order Runge - Kutta Method	U	"
S -1822	F-3585	B-81653	Geometric & Karnaugh Maps for Close-Packed Cation Structure	U	A. Loeb 6-12-57
S -1823	F-3586	C-81654	Magnetic Dipole Interactions in Rock Salt Structures	U	"
SC-1824	F-3587	B-81655	Same Minimum energy Dipole Arrangements in Adjacent YZ- Planes	U	"
SC-1825	F-3588	B-81656	A Low Energy Configuration as Seen Along The 111 - Axis	U	"
S -1826	F-3589	B-81657	Comparison With Results of Neutron Deffraction	U	"
S -1827	F-3590	A-81658	Component Lattices in Structures with Close - Packed Anions	U	"
SC-1828	F-3591	B-81659	Generation of Spirel	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 88

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SC-1829	F-3592	B-81660	Generation of Olivene	U	A. Loeb 6-12-57
SN-1830	-	A-81681	Basic Symbols for Dynamic Flow Diagrams	U	" 5-11-57
SN-1831	F-3593	A-76188	Typical XD-1 Component Failure Dates	U	W. Canty 6-19-57
SN-1832	F-3601 F-3594	A-76187-1 A-76187	XD-1 Reliability Aug. 1956 - 24 Jan. 1957	U	"
S -1833	C60-506	A-80494	Sage System, Radar Sites & Sector Boundaries	U	-
SN-1834	C40-64	A-76189	XD-1 Reliability Summary 1-25-57 - 4-18-57	U	W. Canty 6-20-57
SN-1835	-	B-67294	Frequency Margins	U	J. Gilmore 6-25-57
SN-1836	F-3595	B-81994	Sage - Missile Master System Data Flow Chart (Mode I or II)	S	J. Shay 6-25-57
S -1837	C60-258	-	Direction Center Computer Program Cycle	C	-
S -1838	C60-255	-	Programming Effort	U	-
S -1839	P543-1	-	No Title - Roll of Tape & Program Sheets	U	-
SN-1840	F-3600 F-3599	A-82011-1 A-82011	Acceleration Before of After The Final Turn (Interceptor Type F-106A)	S	C.F. Overhage 6-28-57
SC-1841	-	-	Pictures of Computer Equipment	U	G. O'Brien 6-28-57
SC-1842	-	-	Pictures of Computer Equipment	U	"
SC-1843	-	-	Pictures of Computer Equipment	U	"
SC-1844	-	-	Pictures of Computer Equipment	U	"
SC-1845	-	-	Pictures of Computer Equipment	U	"
SC-1846	-	-	Pictures of Computer Equipment	U	"
SC-1847	-	-	Pictures of Computer Equipment	U	"
S -1848	-	-	Shakedown Test	U	C. Farr 7-8-57

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2  
Page 89

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S-1848			Shakedown Test	U	C. W. Farr 7-8-57
SN-1849	F-3605	C-82536	ESS Interception	U	H. P. Bridge 8-1-57
SN-1850	F-3606	C-82570	ESS Interception, Slide A	U	H. F. Mercer 8-7-57
SN-1851	F-3607	C-82571	ESS Interception, Slide B	U	" "
S-1852			Never Issued		
SC-1853	F-3637	A-82689	System Design (doesn't appear on the slide)	U	F. E. Heart 8-7-57
SN-1854	F-3608		Target Identified	U	H. P. Bridge 8-8-57
SN-1855	F-3609		Interceptor Scrambled	U	" "
SM-1856	F-3610		Interceptor Airborne	"	" "
SN-1857	F-3611		Midcourse	"	" "
SN-1858	F-3612		Starting Final Turn	"	" "
SN-1859	F-3613		Lock-on	"	" "
SN-1860	F-3614		Target Dropped, Interceptor RTB	"	" "
SC-1861	F-3638	B-83718	Harbor - 1 Systems Analysis	"	F. E. Heart 9-20-57
SN-1862	F-3639	B-83719	Sine 3 Flow of Logic and Arithmetic	"	" "
SC-1863	F-3640	A-83720	Sine 4 Programming	"	" "
SN-1864	F-3641	A-83721	Consider 2 Problems	"	" "
SN-1865	F-3642	A-83722	Programming - Coding	"	" "
SN-1866	F-3643	A-83723	Harbor 3 Systems Analysis	"	" "
SN-1867	F-3644	A-83724	Sine 2 Logical and Mathematical Statement Numerical	"	" "
			Processes of Solution		
SN-1868	F-3645	A-83725	Sine 5	"	" "
SN-1869	F-3646	A-83726	Sine 1 Systems Analysis	"	" "
SN-1870	F-3647	A-83727	Harbor 4 Demands on in-out System and Computer	"	" "
SN-1871	F-3648	A-83728	Numerical Analysis	"	" "
SN-1872	F-3649	A-83729	Harbor - 2 Systems Analysis	"	" "

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2  
Page 90

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1873	F-3650	B-83742	Switching Facilities	U	P. R. Vance 9-20-57
SN-1874	F-3651	C-83734	Intercommunication Facilities	"	" "
SN-1875	F-3652	B-84154	Time Pulse Distributor	"	Corgan 10-1-57
SC-1876	F-3653	B-84174	Program Counter	"	" "
SN-1877	F-3654	A-84153	Logical Symbols	"	" "
SN-1878	F-3655	C-84158	Block Diagram of a Typical Programmer	"	" "
SN-1879	F-3656	A-84168	Instruction Sequence	"	" "
SN-1880	F-3657	B-84161	Operation Decoding Matrix	"	" "
SN-1881	F-3658	A-84162	Address Register	"	" "
SN-1882	F-3659	C-84167	Control Pulse Generation	"	" "
SN-1883	F-3660	A-84159	Electronics - Transistors	"	F. E. Heart 10-1-57
SN-1884	F-3661	A-84160	Electronics - Tubes	"	" "
SC-1885	F-3662	A-84173	Problem - System Operation	"	" "
SC-1886			Power Racks, TX-2 Front View	"	M. Storm 10-18-57
SC-1887			Power Racks, TX-2 Rear View	"	" "
SN-1888	F-3663	C-84512	Vibrator Drive System	"	C. Dwight 10-21-57
SN-1889	F-3664	C-84513	Coil Configuration	"	" "
SN-1890	F-3665	C-84514	Signal Detection System	"	" "
SN-1891	F-3666	C-84515	Operation of the Vibrating Coil Magnetometer	"	" "
SN-1892	F-3667	B-84531	Near-Neighbor Symmetry in Cubic Lattices	"	J. Goodenough 10-24-57
SN-1893	F-3668	C-84532	Crystal Structures of the Metals of the First, Second and Third Long Periods	"	" "
SN-1894	F-3669	B-84533	Symmetry of the Atomic d Wave Functions	"	" "
SN-1895	F-3681	A-84534	Six Outer Electrons	"	" "
SN-1896	F-3682	A-84535	Eight Outer Electrons	"	" "
S-1897					

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S-1898	C60/499	C-80964	Capability of Initial Programs	S	J. Jacobs 10-24-57 VG-261
S-1899	C60-399		Index Memory: Operating Path on the Hysteresis Loop	U	F. E. Heart 10-28-57
SN-1900	F-3684		Instruction Element	"	D. G. Wickham 10-28-57
SN-1901	F-3685	B-80470	Composition vs. Unit-Cell Volume of $Li_x Ni_{1-2x}^{++} Ni_x^{+++} O$	"	" "
SN-1902	F-3685	C-80471	Idealized Crystal Structure of $Li_{0.5} Ni_{1.5}$	"	" "
SN-1903	F-3687	B-82108-1	Ordering Parameter $Z = 1 - \frac{(2y)}{x}$ as a Function of X for the System, etc.	"	" "
SN-1904	F-3688	B-82109-1	Curie Temperature $T_c$ Magnetization $M_B$ in Bohr Magnetons per Molecule, etc.	"	" "
SN-1905	F-3689	A-82364	Cation Lattice for Ordered $Cu_{0.25}^{++} Co_{0.75}^{++} O$	"	" "
SN-1906	F-3690	A-83019	Magnetization $M_B$ in Bohr Magnetons per Molecule and Ordering, etc.	"	" "
SN-1907	F-3691	A-84600	General Compositional Formula	"	" "
SN-1908	F-3692	A-84601	High Spin State $Ni^{+++}$	"	" "
SN-1909	F-3693	A-84602	Low Spin State $Ni^{+++}$	"	" "
SN-1910	F-3709	C-84633	Comparison of Ferrite Cores and Thin Magnetic Films for Use in a Computer Memory	"	D. Smith 10-31-57
SN-1911	F-3694	C-84658	Gain vs. Frequency for VCM Amplifiers	"	C. Dwight 10-31-57
SN-1912	F-3695	C-84659	Curie Point Determination	"	" "
SN-1913	D-3696	C-84665	VCM Tracking	"	" "
SN-1914	F-3697	C-84666	Magnetization Curves	"	" "
SN-1915	F-3698	C-84667	VCM Noise and Signal Levels	"	" "
SN-1916	F-3699	B-84668	Calculated Switching Response	"	D. Smith 11-1-57

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1917	F-3700	A-84657	Flux Pattern Around Spider Pattern	U	E. Huber 11-1-57
SN-1918	F-3701	A-84664	Theoretical and Experimental Resonant Frequencies	"	D. Smith 11-4-57
SN-1919	F-3702	B-84663	Reciprocal of Switching Time vs. Driving Field with DC, etc	"	" "
SN-1920	F-3703	B-84669	Bitter Pattern Shift	"	E. Huber "
SN-1921	F-3704	A-84605	Theoretical Thin Film Hysteresis Loops	"	D. Smith "
SN-1922	F-3705	B-84621	Anisotropic Thin Film Related to Spherical Coordinates	"	" "
SN-1923	F-3706	A-84606	Theoretical Assymetrical Hysteresis Loop	"	" "
SN-1924	F-3707	A-84195-1	Applied Fields Upward and Downward	"	J. Goodenough 11-4-57
SN-1925	F-3708	A-84194-1	Domain I and II	"	" "
SN-1926	F-3710	B-84675	Anisotropy vs. Temperature	"	C. Dwight "
SN-1927	F-3711	C-84673	Experimental Resonance Curves	"	D. Smith 11-5-57
SN-1928	F-3712	B-84748	Switching Threshold $h_c$ vs. Transverse Field $h_t$	"	" "
SN-1929	F-3713	A-84733	Pulse Detection	"	G. Weiss "
SN-1930	F-3714	A-84734	Steady - State Detection	"	" "
SN-1931	F-3715	A-84735	Wide-Band rf Bridge for Pulsed and Steady - State Measurements	"	" "
S-1932	F-3716	A-84752	Etch Patterns for Films Annealed in Out of Phase Pulsed 60r Fields at right Angled to Each Other	"	D. Smith "
S-1933	F-3717	B-84751	Positive and Negative Magnetos-Friction	"	" "
SN-1934	F-3718	A-84736	Ferromagnetic $O_1^{3+}$ - $Mn^{3+}$ Interaction	"	J. Goodenough 11-4-57
SN-1935	F-3719	B-84671	Calibration of a Pulsed Magnetic Field	"	G. Weiss
SN-1936	F-3720	A-84672	$n_D$ vs. $\frac{O}{O}$ Cv or Ti $\rightarrow$	"	J. Goodenough
SN-1937	F-3721	A-84737	$n_D$ ( $M_B$ ) vs. $\frac{O}{O} m_n^{4+}$	"	" 11-4-57
SN-1938	F-3722	A-84740	$1/x_m$ vs. $T^{uR}$	"	" "

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1939	F-3723	C-84738	Magnetization vs. Temperature for Sample #141 ( $11^+$ $Ni$ $0.483$ $Ni$ $0.034$ $Ni$ $0.483$ $0$ )	U	J. Goodenough 11-4-57
SN-1941	F-3725	A-84741	Direction Center	"	F. Hazel 11-6-57
SN-1940	F-3724	B-84680	Damping Parameter $\lambda$ vs. Frequency	"	D. Smith
SN-1942		A-84685	Sector Schematic	"	F. Hazel 11-6-57
SN-1943	F-3727	B-84759	1000 CPS Hysteresis Loops of a 4000 Å, 83-17 Permalloy Film	"	D. Smith "
SN-1944	F-3728	C-84750	Theoretical and Experimental Resonant Frequencies	"	" "
SN-1945	F-3729	C-84749	Effect of Damping in the Switching Response	"	" "
SN-1946	F-3730	B-84747	Ordering of Empty $d_{x^2y^2}$ Orbitals	"	J. Goodenough "
SN-1947	F-3731	C-84760	Experimental and Theoretical Switching for Film II	"	D. Smith 11-7-57
SN-1948	F-3732	B-84809	Some Crystallographic and Magnetic Properties, etc.	"	J. Goodenough "
SN-1949	F-3733	B-84808	(Switching Time) <sup>-1</sup> vs. Switching Field with $J_c$ field as a Parameter	"	D. Smith 11-13-57
SN-1950	F-3726	A-84190-1	Ferrite Core Switching by a Coherent Rotation	"	" "
SC-1951			Fanciful Computer, by Artist Artybasheff	"	F. Heart 11-7-57
SN-1952			Sector Schematic	"	W. Canty 11-13-57
SN-1953	F-3744	A-84830	Wall Coercive Force in Thin Films	"	E. Huber 11-15-57
SN-1954	F-3745	A-84241	Height Finding	C	H. Mercer 10-4-57
SN-1955	F-3746	A-84244	Intercept Directions	"	" "
SN-1956	F-3747	A-84245	Weapons Assignment	"	" "
SN-1957	F-3748	A-84246	Track Detection and Initiation	"	" "
SN-1958	F-3749	A-84247	Automatic Tracking and Track Monitoring	"	" "
SN-1959	F-3750	A-84258	Identification	"	" "





APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 1

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
35SN-1	C60-257	B-68018	35 mm. Slides Only Drum System	U	J. Arnow Symposium
35SN-2	C60-255	A-68024	Programming Effort	U	"
35SN-3	C60-258/1-1	C-68019	Direction Center Computer Program Cycle	C	"
35SN-4	C60-256	B-66605	Program Production	U	"
35S -5	C67-1	-	Page of Coding Specs.	U	L. Linehan Symposium
35S -6	P398-12	-	Group 67 Card Room Facility - Key Punch	U	" 10-23-56
35S -7	P543-3	-	Illustration of Programmer Checking Assembly Test Data	U	"
35S -8	P543-2	-	Group 67 CS File	U	"
35S -9	P543-1	-	A Coded Program	U	"
35S -10	P398-10	-	Group 67 Card Room Facility - A	U	"
35S -11	P398-11	-	Group 67 Card Room Facility - B	U	"
35S -12	P377-63/3-1	-	Aircraft Instrument Installation for GE Data Link	C	E. S. Rich 10-24-56
35S -13	P377-61/3-1	-	Airborne Equipment Installation for GE Data Link	C	"
35S -14	F10-21-146	-	GE Data Link Transmitter at So. Truro	U	"
35S -15	F162-207	-	Voice-Radio Transmitter Site in ESS	U	"
35S -16	F10-22-22	-	UHF Radar Antenna at Bath Maine	U	"
35S -17	C60-264/1-1	A-68213	C.C.Command Post Elevation	C	W. S. Attridge 11-7-56
35S -18	C60-265/1-1	A-68126	Combat Center Command Post Liaison Level	C	"
35S -19	C60-266/1-1	A-68124	Combat Center Command Post Staff Level	C	"
35S -20	C60-273/1-1	A-68260	Combat Center Command Post Level	C	"
35S -21	C60-274/1-1	B-68250	Personnel Organization for CC - DC	C	"
35S -22	C60-267/1-1	A-68125	Combat Center Outputs	C	"
35S -23	C60-268/1-1	C-68189	Combat Center Inputs	C	"
35SC-24	-	-	Radar Mapper	U	J.A.O'Brien 11-14-56
35SC-25	-	-	Drum Units	U	"
35SC-26	-	-	Air Surveillance Room	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 2

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
35SC-27	-	-	Maintenance Control Console	U	J.A.O'Brien 11-11-56
35SC-28	-	-	Training and Battle Simulation	U	"
35SC-29	-	-	Subsector Command Post	U	"
35SC-30	C-38-6/1-2	-	Power Cycling Equipment	U	"
35SC-31	-	-	Telephone Switchboard	U	"
35SC-32	-	-	Telephone Patch Panel	U	"
35SC-33	-	-	Angle View-Kelvin & Hughes Camera	U	"
35SC-34	*	-	Detail Kelvin & Hughes Camera	U	"
35SC-35	-	-	Manual Inputs Patch Panel	U	"
35SC-36	-	-	Kelvin & Hughes Camera	U	"
35S -37	C60-434	C-69665	Training & Battle Simulation	C	A. Hill 11-26-57
35S -38	C60-432	C-69541	Track Detection & Initiation	U	"
35S -39	C60-431	C-69542	Radar Data Inputs	U	"
35S -40	C60-417/3-1	C-69543	Primary Air Surveillance Information Flow	C	"
35S -41	C60-418/3-1	C-69544	Information Flow in Track Monitoring	C	"
35S -42	C60-416/3-1	C-69063	Information Flow in Automatic Tracking	C	"
35S -43	C60-437	B-69060	Cut-off Interception Course	C	"
35S -44	C60-440	B-69061	Lead-Pursuit Interception Course	C	"
35S -45	C60-436	B-69090	(a) Foldback Course for Final Turn (Beam Attack)	C	"
35S -46	C60-435	B-69089	(b) Foldback Course for Cut-Off Tactics	C	"
35S -47	C60-439	B-69768	Final-Turn, 15-Mile Collision Beam Attack Course	C	"
35S -48	C60-438	B-69769	Final-Turn 110°, 5-Mile Pursuit Course	C	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

DIVISION 6 DOCUMENT ROOM  
VU-GRAPH LIST

6D-108-2

Page 1

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE		REMARKS
VG-1	3032	B-63752	Leased Circuit Installation	C	B. Paine ADFS-NY Meeting
2	3033	D-75185-3	Site Location in Sage Subsector	S	J. Carson "
3	3034	D-75168-2	Radar & Radio Coverage in the Experimental Subsector (SAGE)	S	" "
4*	3035	C-75611	Equipment Schedule	S	B. Paine "
5	3036	E-75613	Computer Time Allocation XD-1 1955	C	J. Carson "
6	3037	E-75615	Computer Time Allocation XD-1 1955-1956	C	" "
7	3038	D-75616	Site Location in Sage Experimental Subsector	S	B. Paine "
8	3039	C-75618	Program Preparation Schedule	C	J. Carson "
9	3040	C-75619	Functional Flow Chart AN/FSC-7, XD-1 Time Utiliz. Control	U	" "
10	3041	B-75620	Element of Test Program	S	" "
11	3042	A-75621	Personnel to be Trained for Sage	C	Col. Sagerstrom "
12	3043	A-75622	Tentative ARDC Training Program at Lincoln Laboratory	C	" "
13	3044	B-75623	Instr. Training for Sage Oper. Train. Program	U	" "
14	3045	C-75624	Phase I Training Site Utilization Schedule	C	" "
15	3046	B-75625	Function of the Sage Operation Training Part I Train. Req.	C	" "
16	3047	B-75626	Plan. Sched. for Devel. of Sage Oper. Train. Part I TR	C	" "
17	3048	B-75627	Function of the Sage Oper. Train. Part II Support Require.	U	" "
18	3049	B-75628	Planning Sched. for Dev. of Sage Oper. Train. Part II SR	C	" "
19	3050	C-75629	Time Phasing - ESS Test	S	J. Carson "
20	3051	B-75630	Sheet 1 Function Flow Chart for Sage Exp. Subsector Test	U	" "
	3052	"	Sheet 2 Same title Program	U	" "
21	3053	B-75631	ESS Electronic Sub-System Test	C	" "
22	3054	C-75632	ESS Facility Chart	S	" "
23	3073	C-75633	Equipment Acceptance Test	C	" "
	3074	"	Same title	C	" "
24	3055	C-75634	Prop. Initial Sched. AD Evaluation	C	" "

VG-1: Downgraded from Secret to Confidential by J. J. Carson March 12, 1956

DL-1316

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 2

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASSIFICATION	REMARKS
VG-25	3056	C-75635	Equipment Test & Integr. Schedule	S	B. Paine ADES-111 Meeting
26	3057	B-75639	Comp. Prog. for Dir. Centers Part I	C	J. Jacobs "
27	3058	B-75640	Comp. Prog. for Dir. Centers Part II	C	" "
28	3059	B-75641	Comp. Prog. for Dir. Centers Part III	C	" "
29	3060	B-75642	Comp. Prog. for Dir. Centers Part IV	C	" "
30	3061	B-75643	Comp. Prog. for Combat Centers Part I	C	" "
31	3062	B-75644	Comp. Prog. for Combat Centers Part II	C	" "
32	3063	B-75645	Line-Rand Responsibilities & Personnel Requirements	C	" "
33	C60-140/1-1	C-75681	Proposed Weapon Integr. Schedule	C	Col. LaMontagne-SAGE
34	C60-139/1-1	A-75682	Acceptance Test AN/FSQ-7 (XD-1) Centr. Comp.	C	" Hdqts. ARDC Balt. MD
35	C60-141/1-1	A-75683	Explained Comp. Fail.	C	" "
36	C60-138/1-1	D-75684	Site Loc. in Sage Exp. Subs. (Amend. #1)	S	" "
37	C60-142	B-75630-1	Funct. Flow Chart for Sage Exp. Subsector Test Prog.	U	" "
	C60-143	"	Sheet 2		
38	C60-150/1-1	B-64258	The Oper. Crew in a Dir. Center	C	J. P. Haverty - Talk @
	C60-152/1-1	"	4 Sheets Same title		Murphy Army Hospital
	C60-153/1-1	"	Same title		"
	C60-155/1-1	"	Same title		"
39	C60-154/1-1	C-64221	Continental Air Defense Comm. (Oper. Structure)	C	"
40	C60-151/1-1	B-64117	Dir. Center Oper. Crew Comp.	C	"
41	C60-149/1-1	C-64257	Syracuse Sector	S	"
42	3064	A-75689	SSCP - Liaisons Observer Level	U	P. Bragar
43	C60-156/1-1	A-75690	SSCP - Command & Staff Level	C	"
44	3065	A-75691	SSCP - Sectional View	U	"
45	C60-157/1-1	None	Relationship of the Sage System in Air Defense	C	K. McVicar-Copied from OPI
46	C60-158/1-1	C-47221	SAGE System Block Diagram	C	" "

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 3

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASSIFICATION	REMARKS
VG-47	C60-159/1-1	None	Identification Function Identification Categories	C	B. Johnson
48	C60-160/1-1	None	Identification Function Special Expanded Display	C	"
49	C60-161/1-1	None	Identification Function Situation Displays	C	"
50	C60-162/1-1	None	Identification Function Organization & Responsibilities	C	"
51	C60-163/1-1	None	Identification Function Multiple Corr. Ident. System & ADIZ	C	"
52	Zerox VG No film used	B-75760	Air Defense Identification Zones and Defense Areas	U	Art Hill
53	C60-166/1-1	D-75857	Site Locations Sage Experimental Subsector	S	B. Morriss- Joint Service
54	C60-165/1-1	C-75856	Sage Time Schedule	S	" Advisory Committee
55	3102	A-75858	High Frequency Section	U	J. Carson 1-10-56
56	3103	A-75859	Simplex FGD & SAHF	U	" "
57	3104	A-75860	McGuire Air Base Wrightstown, N. J. (Date taken 12-23-55)	U	" "
58	3105	A-75861	McGuire Air Base Wrightstown, N. J. (Date Taken 12-23-55)	U	" "
59	3106	A-75862	Stewart Air Force Base, Newburgh, N. Y. 12-25-55	U	" "
60	C60-167/1-1	B-75863	Computer Programming Efforts Part 1	C	D. Israel
61	C60-168/1-1	B-75864	Computer Programming Efforts Part 2	C	"
62	C60-170/1-1	B-75865	Computer Programming Efforts Part 3	C	"
63	C60-171/1-1	B-75866	Computer Programming Efforts Part 4	C	"
64	C60-171/1-1	B-75867	Computer Programming Efforts Part 5	U	D. Israel
65	C60-172	A-75885	Sage-Bomarc Compatibility Tests	S	Lt. D. Temme - LPO
66	Zerox Mach.	A-75890	AN/FSQ-7 (XD-1) Reliability 13 June, 1955, 1 January 1956	U	R. Mildram
67	Zerox Mach.	B-75886	Proposed Integration Procedure	U	
68		B-65173	Flip-Flop Plug-In Unit, TX-0	U	K. Olsen
69			Syracuse A. F. S. Syracuse, N. Y. Nov. 28, 1955	U	J. Carson from W. E.
70	C60-176	D-75869	Sage System Flow Diagram	U	A. Hill Declassified 4-16-57
71	3140	D-63369	TX-0 Flip-Flop	U	K. Olsen
72	C60-181/1-1	A-75934	Direction Center Requirements for Weather Service	U	Col. Stiles-6420th

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	STATUS	REMARKS
VG-73	C60-180/1-1	A-75935	Weather Data Flow	U	Col. Stiles-6420th
74	C60-179/1-1	A-75936	Sage Subsector Weather Network	C	"
75	C60-178/1-1	A-75937	Computer Display of Weather Information	C	"
76	C60-177/1-1	A-75938	Winds Aloft Forecast for Computer	C	"
77	Zerex	A-75939	Master Program Preparation	U	A. Shoolman-Prog.-AD @ MAH
78	Zerex	A-75940	Central Programs	U	"
79	Zerex	A-75941	Operational Programs	U	"
80	Zerex	A-75942	Combat Center Programs Direction Center Programs	U	"
81	Zerex	A-75943	AN/FSQ-7 Tasks	U	"
82	Zerex	A-65366	TX-O Flip-Flop	U	K. Olsen
83		A-64010	Suggested Possible Schemes for Semiautomatic En Route Etc.	U	Col. LaMontagne
84	C60-182	A-75870	Functional Block Diagram of Simulation	C	H. Anderson - MAH
85	C60-183	A-75872	Experimental Sub-Sector Target Tracks	C	H. Anderson - MAH
86	C60-184	B-75948	Block Diagram of Test Configuration	C	"
87	C60-186	B-75930	System Description Schedule	S	"
88	C60-187	B-75931	Simulation Schedule	S	"
89	C60-185	B-75873	Block Diagram of Sage/IM-99 System	C	"
90	C60-188	C-75929	Broad Schedule	S	"
91	C60-189	C-75932	Experimental Flight Test Schedule	S	"
92	C60-197	A-65584	ESS Summary Schedule	C	E. Rich 3-7-56
93	C60-190	B-65579	Average Explained Failures Weekly-From Normal Usage	U	H. Bowker-IBM 3-7-56
	C60-191				(3 Sheets)
	C60-192				
94	C60-195	C-75971	Tentative XD-1 Computer Time Allocation 3-1-56--1-1-57	C	Col. LaMontagne
95	C60-196	C-75973	XD Time Requir. for 1957 and 1958	C	Col. LaMontagne
96	C60-198	A-65582	ESS Summary Schedule Part 1 and 2	C	E. Rich (2 Sheets)

C60-199

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 5

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASSIFICATION	REMARKS
97	060-207	A-65886	North Truro Long Range Radar Site	U	J. Arnold
98	060-193	C-75972	Program Statistics		J. Jacobs
99	060-194	C-75974	Initial Direction Center Program	C	J. Jacobs
100	060-202	A-30353	Basic Computer Elements	U	Col. LaMontagne
101	060-201	A-30340-1	Desk Machine Calculation - Basic Elements	U	" "
102	060-203	D-75977	XD-1 Time Requirement for 1957 & 1958	C	" "
103	060-204	E-75979	SAGE: Implementation & Cost	S	P. Gray
104	060-210	A-65887	McGuire A. F. Base Wrightstown, N. J.	U	J. Arnold
105	060-209	A-65888	Stewart A. F. Base Newburgh, N. Y.	U	J. Arnold
106	060-212	A-65889	Syracuse A. F. S. Syracuse N. Y.	U	J. Arnold
107	060-211	A-65890	Fort Lee Petersburg, Virginia	U	J. Arnold
108	060-208	A-65891	Topsham, Maine	U	J. Arnold
109	060-213	A-65892	Fort Custer, Battle Creek Michigan	U	J. Arnold
110	060-214	A-65893	Truax A. F. Base, Madison Wisconsin	U	J. Arnold
111	064-3/1-1	B-75913	Approx. AN/FSQ-7 (XD-1) Time Allocation for 2nd half of '56	C	Col. LaMontagne ADES-NY
112	064-2/1-1	C-75997	Requirements for AN/FSQ-7 Time 1956	C	" " "
113	064-1/1-1	C-75998	1957-1958 AN/FSQ-7 (XD-1) Time Requirements	C	" " "
114	064-6/1-1	B-75990	ESS Summary Schedule (Part 1)	C	E. Rich "
115	064-5/1-1	B-75991	ESS Summary Schedule (Part 2) VOID-Per H. Mercer 5-14-56	C	" " See VG-126
116	064-4/1-1	B-75992	ESS Summary Schedule (Part 3)	C	" " "
117	064-10/1-1	B-75993	ESS Summary Schedule (Part 4) VOID-Per H. Mercer 5-14-56	C	" " See VG-127
118	064-8/1-1	B-75994	ESS Summary Schedule (Part 5)	C	" " "
119	064-9/1-1	B-75995	ESS Summary Schedule (Part 6) VOID-Per H. Mercer 5-14-56	C	" " See VG-128
120	064-7/1-1	B-75996	ESS Summary Schedule (Part 7)	C	
121	064-11/1-1	E-65800	Artom Special Simulated Data Problem	C	
122		A-75014	Stewart AF Base Newburgh, N. Y. 1st Floor 4-25-56	U	F. Manning

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE		REMARKS
123		A-75015	Stewart AF Base Newburgh N. Y. 2nd Floor	U	F. Manning
124		A-75016	Stewart AF Base Newburgh N. Y. 4th Floor	U	" "
125		A-75017	Power Building Cooling Tower Sterart AF Base Newburgh N. Y	U	"
126	F-3258	B-75991-1	ESS Summary Schedule (Part 2)	C	E. Rich 5-14-56
127	F-3259	B-75993-1	ESS Summary Schedule (Part 4)	C	"
128	F-3260	B-75995-1	ESS Summary Schedule (Part 6)	C	"
129	C60-222/1-1	A-66481	FPS Accuracy	C	R. Weiser 6-7-56
130	C60-223/1-1	B-66491	Summary of Series II System Operation Tests	C	"
131	C60-224/1-1	C-76033	Preparation of Initial Direction Center Program	C	R. Everett 6-7-56
132	C60-225/1-1	D-76034	Installation of Programs for Production Sites	C	"
133	C60-226/1-1	A-76035	XD-1 Cape Cod Program Comparison	C	J. Jacobs 6-11-56
134	C60-227	A-76037	Diesel Motor Generator Set	U	F. Manning 6-19-56
135	C60-228	A-76038	Air Handler	U	"
136	C60-229	A-76039	Subsector Command Post	U	"
137	C60-230	A-76040	Cooling Tower Power Bldg. Direction Center	U	"
138	C60-233/1-1	C-66814	Sage on-Site A.D. Program Checkout	S	K. McVicar 7-12-56
139	C60-234/1-1	B-66827	Overhead Computer Time Study	C	B. Morriss 7-16-56
140	C-10-28	A-30354-1	Binary Notation	U	Col. Longino 8-30-56
141	C-10-29	A-30357-1	Electronic Binary Multiplication	U	"
142	C60-240-1/1	A-67080	Initial Program Production Status	C	J. Jacobs
143	C60-239-1/1	C-67081	Sage On Site A.D. Program Checkout	S	"
144	C60-259/1-1	C-68023	Site Checkout SAGE Computer Program	S	B. Morris 10-18-56
145	C60-296/1-1	A-68376	Bomarc Performance with Single Radar Azimuth Information	S	N. Taylor 11-7-56
146		A-68503	Radar Net with Improved ECM Capability	S	N. Taylor 11-14-56
147	C60-293/1-1	B-68166	Zones to be Checked for Tracking Purposes	C	J. Shay 10-7-56
148	C60-292/1-1	A-68167	Warning Check Zones	C	"



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASSIFICATION	REMARKS
149	060-295/1-1	A-68168	AOC Surveillance Areas	C	J. Shay 10-7-56
150		A-68515	Requirements for the Addition of a Passive Capability to the SAGE System	S	N. Taylor 11-16-56
151	060-294/1-1	B-68170	Layout of Switches on Overlap Technicians Wing Unit	C	"
152	060-260/1-1	A-68191	Experimental Subsector System Testing Schedules	C	R. J. Watters-BTL 11-1-56
153	060-261/1-1	A-68192	Experimental Subsector System Testing	C	"
154	060-271	A-68212	SAGE Testing	U	G. Clement
155	060-436	B-69090	a. Foldback Course for Final Turn Tactics (Beam Attack)	C	A. Hill 2-6-57
156	060-297/1-1	D-68375	Bomarc Lock-on Probability vs. Time of Target Maneuvers	S	N. Taylor 11-5-56
157	060-216/3-1	A-58731	Early Maneuver (Turn 40 Sec. before Expected Interception) Speed 720 Knots	S	" Made from 060-216
158	060-272/1-1	-	AN/FST-2	C	"
159	C20-114	-	AN/FST-1	U	"
160	060-288/1-1	-	Requirements for the Addition of a Passive Capability to the SAGE System	S	"
161	060-284	-	Simple Triangulation Illustrating Formation of Ghosts Three Targets are Present	U	"
162	060-285	-	Same Situation as Fig. 1. Note how Track Information Eliminates "Ghosts"	U	"
163	060-287	-	Tracing of Actual Raid Plot. True Target Positions are Represented by X's. Six Plane Raid 30 Second Data Rate, Etc.	U	"
164	060-286/1-1	-	The Development of a Raid as Seen by a Passive Surveillance System. Intervals Between Frames Represent Etc.	S	"
165	Copied from 35 mm. roll	-	Histograms of X and Y Components of Deviations from Simulated Tracking	U	"
166	" "	-	Histograms of Stable & Total Track Lives from Simulated Tracking	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 8

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
167	Copied from 35 mm roll	-	Typical Simulated 300-Knot Track Making a Random Maneuver. (Square Box is 20 H.M. Wide)	U	H. Taylor 11-5-56
168		A-68516	Fig. 78. Combined Coverage at 8000 ft. Within the McGuire Subsector from Radar Within and Adjacent to Subsector	S	N. Taylor 11-15-56
169		A-68514	SAGE Status	C	"
170	F10-22-21	-	Bath Radar	U	"
171	060-434	C-69665	Training and Battle Simulation	C	A. Hill 11-26-56
172	060-432	C-69541	Track Detection and Initiation	U	A. Hill 1-3-57
173	060-431	C-69542	Radar Data Inputs	U	"
174	060-417/2-1	C-69543	Primary Air Surveillance Information Flow	C	"
175	060-418/2-1	C-69544	Information Flow in Track Monitoring	C	"
176	060-416/2-1	C-69063	Information Flow in Automatic Tracking	C	"
177	060-437	B-69060	Cut-off Interception Course	C	"
178	060-440	B-69061	Lead-Pursuit Interception Course	C	"
179	060-435	C-69089	Foldback Course for Cut-off Tactics	C	"
180	060-332	D-69386	System A. SAGE Data Intercom. to Air Defense Force and Conad COC's. Sh. 1 (Basic) Sh. 2 (Overlay)	U	Col. Longino-LFO 1-11-57
181	060-334	D-69387	System B. SAGE Data Intercomm. to Air Defense Force and Conad COC's. Sh. 1 (Basic) Sh. 2 (Overlay)	U	"
182	060-336	D-69388	System C. SAGE Data Intercomm. to Air Defense Force and Conad COC's. Sh. 1 (Basic) Sh. 2 (Overlay)	U	"
183	060-438	B-69769	Final Turn, 110°, 5-Mile Pursuit Course	C	A. P. Hill 2-6-57
184	060-439	B-69768	Final Turn, 15-Mile Collision (Beam Attack Course)	C	"
185	-	A-69938	Intercept and Fuel Loci	U	L. Jeffrey 2-18-57
186	060-337	D-69389	Manual Inputs to Conad	U	Col. Longino 1-11-57
187	060-338	A-69351	Automatic System Advantages	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D 108-2 Page 9

VU NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
188	060-339	A-69352	Assumptions	U	Col. Longino 1-11-57
189	-	A-69637	Continental Air Defense (Chart 2)	S	J. Mitchell 1-28-57
190	-	A-69638	USAF Directed Responsibilities in SAGE (Chart 3)	U	" Obsolete-See VG-212
191	-	A-69640	Introduction (Chart 1)	U	" " VG-213
192	-	A-69642	Major Items Evaluated as of January 1957 (Chart 6a)	S	" " VG-210
193	-	A-69643	Items not Completely Evaluated as of January 1957 (Chart 6b)	S	" " VG-209
194	-	A-69644	Action Items for Air Defense with ESS and SAGE (Chart 7-1,		" VG-215
			7-2) 2 sheets	S	"
195	-	A-69645	Conclusions (Chart 11-1, 11-2)	S	" " VG-218
196	-	A-69641	Schedule of SAGE Type Systems Tests (Chart 4)	S	" " VG-207
197	-	A-69646	Equipment in Air Defense Systems (Chart 5)	S	"
198	-	A-69647	Anticipated ESS System Performance by October 1957		Obsolete-See VG-214
			(Chart 8-1, 8-2) 2 sheets	S	"
199	-	A-69648	Anticipated McGuire System Performance by July 1958		" VG-217
			(Chart 9-1, 9-2) 2 sheets	S	"
200	-	A-69649	Anticipated McGuire System Performance by January 1960		" VG-216
			(Chart 10-1, 10-2) 2 sheets	S	"
201	-	A-69650	Agenda (Chart 0)	U	J. Mitchell " VG-211
202	C-3-34/2-1	A-69727	Relationship of SAGE to the Air Defense System (Chart 3)	S	"
203	060-412	A-69730	ESS Program and Functions (Chart 1)	C	M. DiCarlo-Cottone-BTL
204	060-413	A-69731	ESS Equipment and Facilities (Chart 2)	C	"
205	060-411	A-69732	ESS System Test - Phase 1 Schedule (Chart 3)	C	" Obsolete-See VG-219
206	060-473	B-69728-1	Semi-Automatic Air Defense Systems Development (Chart 6)	S	J. Mitchell 2-1-57 Dup-A
207	-	A-69641-2	Schedule of SAGE Type System Tests (Chart 5)	S	"
208	060-466	A-69729-1	Status of Air Defense Evaluation as of March 1957.		
				S	" Dup-A

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	Process	REMARKS
VG-209		A-69643-1	Items of Air Defense Capability not Evaluated as of January 1957 (Chart 7c)	S	J. Mitchell 2-1-57 (Sepia-3-25-57)
210	C60-472	A-69642-2	Status of Air Defense Evaluation as of March 1957	"	" Dup-A
211	C60-471	A-69650-2	Agenda (Chart 1)	U	" Dup-A
212		A-69638-1	USAF Directed Test Responsibilities in SAGE (Chart 4)	"	" (Sepia) Dup-A
213	C60-465	A-69640-2	Introduction (Chart 2) - March 1957	"	Dup-A
214	C60-470	A-69647-2	Anticipated ESS System Performance by October 1957 (Chart 9)	S	" Dup-A
215	C60-469	A-69644-2	Action Items for Air Defense Implementation (Charts 8-1, 8-2) 2 shts.	"	" Sht 2 Dup-A
216	C60-468	A-69649-2	Anticipated McGuire System Performance by January 1960 (Chart 11)	"	" Dup-A
217	C60-467	A-69648-2	Anticipated McGuire System Performance by July 1958 (Chart 10)	"	" Dup-A
218		A-69645-2	Summary (Chart 12-1, 12-2, 12-3) 3 shts.	"	" Dup-A
219	C60-411/1-1	A-69732-1	ESS System Test - Phase 1 Schedule (Chart 3)	C	M. Dicarlo-Cottone 2-5-57
220		A-69914	Interception Program Capabilities	"	C. Zraket 2-18-57
221		A-69915	Lead-Pursuit Intercept Course	"	"
222		A-69916	Cut-Off Intercept Course	"	"
223		A-69917	Final-Turn Intercept	"	"
224		A-69918	Information Flow in Interception Program	"	"
225		A-69919	List of Function Performed for SAGE Intercept Direction	"	"
226		A-69920	Weapons Direction Capacities in 1957 Direction Center Programs	S	"
227		A-69921	List of Changes to be Made Next Year	"	"
228		A-69922	Characteristics of Interception Program	C	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 11

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
229	-	A-69923	Tracking of Interceptors	S	C. Zraket (Obsolete)
230	-	A-69924	Fig. 12. Pursuit Course Geometry	U	L. V. Jeffrey 2-18-57
231	-	A-69925	Fig. 3. Restricted Zones MB-1	S	"
232	-	A-69926	Fig. 4 Snake Attack Phase 1	C	"
233	-	A-69927	Fig. 5 Snake Attack Phase 2	C	"
234	-	A-69928	Fig. 6 Snake Attack Phase 3	C	"
235	-	A-69929	Fig. 7 3 Cruise-Control-Missions F106A	S	"
236	-	A-69930	Fig. 8 Military Power vs. Afterburners Climb-F106A	S	"
237	-	A-69931	Fig. 9 Speed vs. Altitude F-106A	S	"
238	-	A-69932	Fig. 10 Afterburner and Military Power Missions F-106A	S	" (Sheet 1 of 2)
239	-	A-69932	Fig. 10A Comparison of With a Mixed-Speed Mission	S	" (Sheet 2 of 2)
240	-	A-69933	Fig. 11 A Final Turn Interception	C	" (Sheet 1 of 2)
241	-	A-69933	Fig. 11A Offset Point Motion In	C	" (Sheet 2 of 2)
242	-	A-69934	Fig. 14 Probability of Hit for a Single GAR-1 Falcon	S	"
243	-	A-69935	Fig. 15 Effect of Random Response Delay on Vectoring Accuracy	U	" (Sheet 1 of 2)
244	-	A-69935	Fig. 15A Same title as Sheet 1 VG-243	U	" (Sheet 2 of 2)
245	-	A-69936	Fig. 17 Interception Geometry for Collision Course	U	"
246	-	A-69937	Fig. 16 Altitudes Vulnerable to Snap-up F-102A/MG-10/Falcon	S	"
247	-	A-69939	Fig. 2 Mission Summary for Tail Attack F-106A	S	"
248	*	A-69940	Fig. 1 Acceleration Before or After Final Turn-A Comparison	S	"
249	-	A-69941	Fig. 13 Geometry of Constant Lead-Angle Course	C	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 12

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
VG-250	C60-474	A-80086	Retrofit Schedule Expanded Core Memory - Plan A	S	T.R. Parkins 3-7-57
VG-251	C60-450	6P-184	1960 Revision of Sage Computer Program	S	"
VG-252	C60-477	A-80494	Sage System, Air Division & Air Defense Sector Boundaries	U	A.P. Hill 3-28-57
VG-253	C60-502	A-80941	Program Preparation & Testing Order	U	B. Morriss 4-4-57
VG-254	-	A-80942	Computer Program Schedule McGuire Direction Center	C	"
VG-255	C60-522	B-80943	Proposed Gunter Employment	S	J.F. Jacobs 4-4-57
VG-256	-	A-80944-1	Proposed 59 Computer Programs (Revision)	S	"
VG-257	C60-519	A-80950-1	Assumptions & Actions Required	S	"
VG-258	C60-520	A-80951-1	Gunter Computer Time Allocation	S	"
VG-259	C60-523	A-80952-1	Gunter	U	"
VG-260	C60-521	A-80953-1	Sage / Weapons Objectives At Gunter	S	"
VG-261	C60-409	C-80964	Capability Of Initial Program	S	"
VG-262	C60-536	B-69850	Track Symbology (A Feature Selected)	U	A.P. Hill 4-24-57
VG-263	C60-537	B-69851	Track Symbology (B Feature Selected)	U	"
VG-264	C60-501/1-1	A-80325	Sage System - Schedule #6	S	J.F. Jacobs 5-1-57
VG-265	-	A-81364	Bomarc / Sage Data Link Sub System	C	Lt. D. Temme 5-15-57
VG-266	-	-	Time Division Data Link	S	J.F. Jacobs 7-17-57
VG-267	-	D-81520	Initial Bomarc / Sage Capability	S	"
VG-268	C60-587	-	Sample Conditions of the FF's in the Char. Pos. Counted for a Tab. Mis.	C	G.M. Brown 6-19-57
VG-269	C60-588	-	Sample Conditions of the FF's in the Car. Pos. Counted for a Vector Mis.	C	"
VG-270	C60-589	-	Situation Display Generator Element. El. Dia.	"	"
VG-271	C60-590	-	Situation Display Ind. Section Block Diagram	C	"
VG-272	C60-591	-	Input Switch Section (4.1.1.1.) Logical Diagram	C	"
VG-273	C60-592	-	Word Storage Section (4.1.3) Logical Diagram	C	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 13

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	STATUS	REMARKS
VG-274	C-60-593	-	Word Storage (4.1.3.1) Logical Diagram	C	G.K. Brown 6-19-57
VG-275	C60-594	-	XY Register & Drivers Section (4.1.5.1) Logical Diagram	C	"
VG-276	C60-595	-	Vector & Format Generator Section (4.1.9) Logical Dia	C	"
VG-277	C60-596	-	Vector Reg. (4.1.9.1) X FF's Logical Dia	C	"
VG-278	C60-597	-	Char. Counter & Position (4.1.9.2) Logical Dia.	C	"
VG-279	C60-598	-	On-Off Control & OD Destrib (4.1.8.1) Logical Dia	C	"
VG-280	C60-599	-	Misc. Control (4.1.8.14) Logical Dia	C	"
VG-281	C60-600	-	Radar Data Control (4.1.8.13) Logical Dia	C	"
VG-282	C60-601	-	Symbol Sequencer (4.1.8.4) LogicalDia	C	"
VG-283	C60-602	-	Gate Generator (4.1.8.3) Logical Diagram	C	"
VG-284	C60-603	-	A. Feature (4.1.8.5) Logical Diagram	C	"
VG-285	C60-604	-	B. Feature (4.1.8.6) Logical Diagram	C	"
VG-286	C60-605	-	Vector Control (4.1.8.12) Logical Diagram	C	"
VG-287	C60-606	-	Timing & Control Section Fcn Block Diagram	C	"
VG-288	C60-607	-	Master Control, Logical Diagram	C	"
VG-289	C60-608	-	Character Timing & Intensity Logical Dia.	C	"
VG-290	C60-609	-	Control Bit Sensing, Logical Dia	C	"
VG-291	C60-610	-	Erase Gate, Logical Diagram	C	"
VG-292	C60-611	-	Slot Counter & Slot Line Driver, Logical Dia	C	"
VG-293	C60-612	-	X - Position Counter & Shift Control, Logical Diagram	C	"
VG-294	C60-613	-	Y - Position Counter, Logical Diagram	C	"
VG-295	C60-614	-	Situation Display Generator Element (4.1) Logical Diagram	C	"
VG-296	C60-615	-	Character Register (4.1.7.1) Logical Diagram	C	"
VG-297	C60-616	-	Timing Diagram, Situation Display Generator Element.	C	"
VG-298	C60-617	-	Timer (4.1.8.2) Logical Diagram	C	"
VG-299	-	A-76190	XD-1 Time Requirements for 1958	C	J.F. Jacobs 6-23-57

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2 Page 14

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	Category	REMARKS
VG-300			Proposed XD-1 Computer Time Allocation	C	C. W. Farr 7-10-57
301		A-82798-1	I Manual /TTY System	S	G. C. Reed 8-13-57
302		A-82728-1	II Initial SAGE / Missile Master System	"	" "
303		A-82722-1	III SAGE / Missile Master Integrated System	"	" "
304	C60-718	A-82796	IV Time Requirements for Army Personnel Support of Developmental Test Periods	"	" "
305		A-82913	Test Design - Missile Launchings	U	K. E. McVicar 8-21-57
306		A-82914	System Testing Qualifications	"	" "
307		A-82915	Sequence of Direction Center Operations	"	" "
308	P10.21-159/4-2		South Truro Communications Site (Inside)	C	A. P. Hill 9-5-57
309	P10.21-190		Prototype Fine Grain Data System - South Truro	H	" "
310	P9-182		North Truro Tropospheric Scatter Relay Station (Inside)	"	" "
311	P10.21-182		AN/FPS-20 Antenna Inside Radome, South Truro	"	" "
312	P9-173		Back-to-Back Antennas - North Truro Tropo Relay Station	"	" "
313	P231-8		Navy RC 121 Aircraft - AEW	"	" "
314	P533-1		McGuire Direction Center Building (Aerial View)	"	" October 57
315	P9-162		North Truro Direction Center Building, Manual Site	"	" "
316	C60-740	B-83264	Mask Construction	C	J. W. Smay 9-9-57
317	C60-743	B-83263	Program Battery Selection Logic	S	" "
318	C60-738	A-83237	Positional Calculations	C	" "
319	C60-737	A-83238	SAGE Atabe Data Flow	"	" "
320	C60-736	A-83241	Examples of Tracks in Each AA Category	"	" "
321	C60-742	A-83242	Firepower Distribution Scales	S	" "
322	C60-739	B-83243	Positional Priority Table	C	" "
323	C60-735	A-83275	SAGE Missile Master System	C	" "
324	C60-741	B-83276	Track Selection and Category Assignment	"	" "



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 15

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
VG-325		A-83294	Normal Collision Course Computation (3 sheets)	U	L. R. Jeffery 9-11-57
326		A-83295	Automatic Profile Selection	C	" "
327		A-83296	Interceptor - Target Minimum Approach Distance	U	" "
328		A-83300	Nike	S	D. R. Brown "
329		A-83301	Manned Interceptor	"	" "
330		A-83302	BOMARC	"	" "
331		A-83342	Manned Interceptors (F-86-D, F-89-D, F-84H etc.)	"	" "
332		A-83343	Nike (Nike I and Nike B)	"	" "
333		A-83344	BOMARC (IM-99A) September 1959	"	" "
334		A-83299	Typical Intercept Mission	U	Davis 9-12-57
335		A-84154-1	Experimental SAGE Sector - Phase I (4 sheets)	C	H. F. Mercer 10-1-57
336	P9-202/1-2		AN/GPA-37 Computer Tracker and Intercept Control Group for the GPA-23	"	" "
337	P9-203/1-2		GPA-37 (Same as above, different view)	"	" "
338	P9-204/1-2		AN/GPA-37 "Converter Group"	"	" "
339	P9-206/1-2		Height Finding Room, North Truro	"	A. P. Hill
340	P9-201/1-2		Duplex AN/FST-2 at North Truro	"	H. F. Mercer 10-1-57
341	P9-207/1-2		AN/GPA-37 : GPA-23 Controller's Console	"	" "
342	P9-208/1-2		AN/GPA-37 Ground-to-Air Data Link Assignment Panel and the Senior Director's GPA-23 Assignment	"	" "
343	P9-209.1-2		Manual GCI Site "Operations Room"	"	" "
344	P9-197		Ariel View of North Truro GCI Site	"	" "
345		A-84241	Height Finding	"	" 10-4-57
346		A-84244	Intercept Directions	"	" "
347		A-84245	Weapons Assignment	"	" "
348		A-84246	Track Detection and Initiation	"	" "

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2

Page 16

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	Category	REMARKS
VG-349		A-84247	Automatic Tracking and Track Monitoring	C	H. F. Mercer 10-4-57
350		A-84248	Identification	"	" "
351		A-84249	Antiaircraft Direction	"	" "
352		A-84251	Test Time Summary - ESS System Shakedown Testing		
353		A-84250	Radar Inputs		
354		A-84258	Computer Program Installation Schedule	Cg	N. K. Demas 10-7-57
355		A-84259	Computer Program Installation Schedule for Detroit Team	S	" "
356	C60-773	C-84485	Project BOSCO Equipment Configuration	C	K. E. McVicar
357	C60-783		Configuration and Instrumentation for the Initial IM-99/SAGE Experimental, etc.	"	"
358		C-84124	Computer Program Installation Schedule (4 shts.)	"	B. E. Morriss 10-25-57
359		C-84125	SAGE Installation Schedule (2 shts.)	"	" "
360		A-84611	BOSCO Test Sequence	U	K. E. McVicar
361		A-84611	Simplified Functional Block Diagram BOSCO Project	C	" 10-28-57
362		A-84614	Simplified Functional Block Diagram GPA-35 System	"	" "
363	C60-796/1-1	A-84526	Comparison of Information Flow, GPA-35 and BOSCO	"	" "
364		B-84595	Search Radar Site	S	" "
365		B-84596	Systems and Sub-Systems	"	" "
366		B-84597	SOC and Gat Sites		
367		B-84598	Direction Center	S	" "
368					
369		A-84662	BOSCO Implementation Schedule	"	" 10-4-57
370			Organizational Chart for Continental Air Defense	U	A. P. Hill "
371	P10.21-87		FPS-6 Radar	"	J. Dowski - IBM Kingston
372	C20-144		First Production Model of AN/FST-1 at Clinton	"	" "
			(Same as VG-159)		



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

CONTROLLED DISTRIBUTION

6D-108-2, S#1

Sheet 1 of 10 Sheets

Subject: List of Slides and VuGraphs  
To: Distribution List  
From: Division 6 Document Room, C-133  
Date: 11 July 1958

This Supplement completes the Slide and VuGraph List as of 7 July 1958. Please attach these pages to your copy of 6D-108-2, dated 31 December 1957.

The slides and VuGraphs listed here are available on a loan basis from the Division 6 Document Room subject to security regulations. The Document Room has a card file of positive prints of these slides for ready reference.

Attachments:

Slide List  
VuGraph List

Distribution List

D. L. Bailey  
S. Benis - Barta  
P. Bragar  
W. J. Canty  
A. M. Falcione  
C. W. Farr  
J. H. Gilman - DC  
S. Grover  
F. E. Heart  
A. P. Hill  
Joan Sullivan  
Alice Welch  
J. Sciulli - WE

MITRE ACCOUNTABILITY

LIN. LAB. DIV. 6  
DOCUMENT ROOM  
DO NOT REMOVE  
FROM THIS ROOM  
THIS ROOM

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE		REMARKS
SC-1966			DC Duplex Computer	U	F. Hazel
SN-1967	C60-912	A-85704	Yesterday	U	R. Everett 2-13-58
SN-1968	C60-914	C-85709	Today	U	"
SN-1969	C60-913	B-85705	Tomorrow	U	"
S-1970	F-3164		Building F Inputs Room	U	F. Hazel 12-2-57
S-1971	F-3318-1		Command Post Building F - Col. Urquhart	C	"
S-1972	C70-79	A-84824	Mechanical Vibrator for the VCM	U	K. Dwight 12-2-57
S-1973	F-532-1		Simple Strip Line with DC Coils	U	D. Smith 12-2-57
S-1974	F-532-2		Simple Strip Line	U	"
S-1975		A-84758	Pulse Outputs	U	"
S-1976		A-85528	Shakedown Test Objectives January - July 1958	C	H. Mercer 1-8-58
S-1977		A-85529	Test Time Summary - BSS System Shakedown Testing Phase II	C	"
SN-1978	F-3757	B-80575	$K_1/M$ and $K_1^1/M$ vs. Temperature in (100) Disk	U	N. Manyuk 1-17-58
SN-1979	F-3758	B-80574	$K_1/M$ and $K_1^1/M$ vs. Temperature in (110) Disk	U	"
SN-1980	F-3759	A-80580	In (110) Disk	U	"
SN-1981	F-3803	A-80579	Orientation of Samples	U	"
SN-1982	F-3804	A-80581	$K_1/M + K_1^1/M$ vs. Magnetic Anneal Direction	U	"
SN-1983	F-3805	A-80582	$K_1^1/M$ vs. T after Magnetic Anneal along Principal Axes	U	"
SN-1984	F-3806	C-85610	Temperature Dependence of Resistance	U	"
SN-1985	F-3807	C-85606	$-K_1/M_S$ vs. Temperature "Normal"	U	"
			Fe $1.00^{\uparrow\uparrow}$ [Ni $0.79$ Fe $0.36$ Fe $0.90^{\uparrow\uparrow}$ ] $O_4$		
SN-1986	F-3808	C-80588	$-K_1/M_S$ vs. Temperature "Anomalous"	U	"
			Fe $1.50^{\uparrow\uparrow}$ [Ni $0.79$ Fe $0.36$ Fe $0.90^{\uparrow\uparrow}$ ] $O_4$		
SN-1987	F-3809	C80594	Operation of Vibrating Coil Magnetometer Typical	U	"
			Anisotropy Data		
SN-1988	F-3810	A-80590	Deliberate Attempts to Sw Crystal	U	"
			Fe $1.50^{\uparrow\uparrow}$ [Ni $0.79$ Fe $0.36$ Fe $0.90^{\uparrow\uparrow}$ ] $O_4$		

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1 Page 96

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-1989	F-3811	C-80605	Temperature Variation of Resistance in Fe <sup>+++</sup> 1.00 [Ni <sup>++</sup> 0.79 Fe <sup>++</sup> 0.36 Fe <sup>+++</sup> 0.90] O <sub>4</sub>	U	K. Dwight 1-20-58
SN-1990	F-3812	B-80607	Fe <sup>+++</sup> 1.00 [Ni <sup>++</sup> 0.79 Fe <sup>++</sup> 0.36 Fe <sup>+++</sup> 0.90] O <sub>4</sub> In Liquid N <sub>2</sub> Bath	U	"
SN-1991	F-3813	B-85366-1	E, Zf', F'' vs. X	U	J. Goodenough
SN-1992	F-3814	A-80591	Table I Idealized Scheme for Chromium Sub in Fe <sub>3-x</sub> ( <sup>n</sup> x <sup>0</sup> ) <sub>4</sub>	U	"
SN-1993	F-3815	B-80589-1	Fraction of B Sites Occupied by Cr <sup>2</sup> and Fraction of A Sites Occupied by Fe <sup>II</sup> f'' for the System NiCr <sub>4</sub> Fe <sub>2-1</sub> O <sub>4</sub>	U	"
SN-1994	F-3816	C-80592-1	Table II Observed Curie-Weiss Constants	U	"
SN-1995	F-3817	A-85607	SAGE Computing System	U	R. Everett
SN-1996	F-3818	A-85608	Duplex System	U	"
SN-1997	F-3819	A-85609	Duplex System Interchanged	U	"
SN-1998	F-3820	B-80595	Air Surveillance	U	"
SN-1999	F-3821	B-80596	Weapons Control	U	"
SN-2000					
SN-2001					
SN-2002	C60-854	B-85619	Interceptor Control	U	"
SN-2003	C60-853	A-80631	Air Surveillance	U	"
SC-2004	C60-900		Duplex Computer, SAGE Plastic Model	U	F. Hazel 2-12-58
SN-2005	C60-901	A-85703	Yesterday - Tomorrow	U	R. Everett 2-13-58
SN-2006	C60-911	A-85710	Seward Extension	U	"
SN-2007	C60-902	A-80560	SAGE System Data Flow	U	"
SN-2008	C60-906	A-85624	Gunter Schedule Bomarc-SAGE Demonstration	S	"
SN-2009	C60-904	A-85363	Pattern Patrol	S	"
SN-2010	C60-903	A-85362	Search-While-Go	S	"
SN-2011	C60-905	A-85365	Strobe Riding	S	"
SN-2012	C60-907	B-85232	Surveillance Requirements for Maximum Range Intercept	S	"

DL - 60-1

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-109-2, S#1 Page 97

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-2013	C22-254		Time to Initial Identification	S	T. Bartee 2-13-58
S-2014	C22-255		Identification - Briefing - Lincoln	C	"
S-2015	C22-257		Flow Diagram on Tracking	C	"
S-2016	C22-259		Flight Plan Input	C	"
S-2017	C22-260		% of Tracks, Hostile and Friendly	C	" (2 chrt)
S-2018	C22-258		I.D. - % of Total Track Life	C	"
S-2019	C22-256		Lack of Flight Plan Information	C	"
SN-2020	C60-909	A-85706	Bomarc Integration System Design Implementation	U	R. Everett 2-13-58
SN-2021	C60-908	A-85707	Bomarc	U	"
SN-2022	C60-910	A-85708	Bomarc Integration Problems	U	"
S-2023	F-3826	C-85811	The MIT TX-O Computer	U	
S-2024	F-3825	B-85807	Average Response Computation	U	"
S-2025					
SN-2026	F-3829	B-85907	Qualitative of Band Structure for f.c.c. Transition Metals Under the Assumption that the Cartesian Reference Coordinates for the Atomic Wave Functions, etc.	U	
SN-2027	F-3830	B-85912	Qualitative Features of Band Structure for b.c.c. Transition Metals Under the Assumption that the Cartesian Reference Coordinates for the Atomic Wave Functions, etc.	U	
SN-2028	F-3831	C-85914	Qualitative Features of Band Structure for f.c.c. $\rightarrow$ f.c. tet. Transition Metals Under the Assumption the Cartesian Reference Coordinates for the Atomic Wave Functions, etc.	U	
SN-2029	F-3832	B-85915	Qualitative Features of Band Structure for h.c.p Transition Metals	U	
SN-2030	F-3833	B-85887	Density-of-States Curves in b.c.c. Transition Elements	U	
SN-2031	F-3834	A-85910	Splitting f, d Orbital Energy Levels in Crystalline Fields	U	

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 98

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-2032	F-3835	B-85911-1	Fraction of A Sites Occupied by $Fe^{2+}$ ( $Fe_A^{2+}$ ) + by $Ni^{2+}$ ( $Ni_A^{2+}$ ) for the System $NiCr_0.4Fe_{2.6}O_4$ Given the Reduction of Iron by the H-Site Nickel	U	
SN-2033	F-3836	A-85909	Schematic Diagrams for Proposed A Sites $Ni^{2+}$ Energy Level	U	
SN-2034	F-3837	A-85203	Paramagnetic Moment $\mu_{eff}^+$ Saturation Magnetization nb	U	
SN-2035	F-3838	B-85428-1	Saturation Magnetization nb + Lattice Constant $a_0(25^\circ C)$	U	
SN-2036	F-3839	B-85429-1	Saturation Magnetization nb + Lattice Constant $a_0(25^\circ C)$	U	
S-2037	P310-4		ESS Core Memory	U	
S-2038	P249-59		Situation Display ( N. E. Coastline)	U	
S-2039	P249-38		ESS Drum Frames	U	
S-2040	P249-67		Unmanned Display Console - Figure 6	U	
SN-2041	F-3840		Film #57D - Hr = 3.5 oer Hw = 2.9 oer	U	
SN-2042	F-3841		Film #52G - Hr = 9.9 oer Hw = 3.1 oer	U	
SN-2043	F-3842	C-85977	Film Memory Assembly	U	
SN-2044	F-3843	C-85978	Switch Core with Windings	W	
SN-2045	F-3844	C-85979	Single Film Cell	U	
SN-2046	F-3845	B-85980	For $J \approx 0 \frac{H_L}{H_K} = \frac{H_S}{H_K} \tan \theta + \sin \theta$	U	
SN-2047	F-3846	B-85990	Sw Curve for Zinc Core	U	
SN-2048	F-3847	A-85992	$E_k = Ksm^2 \theta \vec{J} : \vec{M} \times \vec{H}$	U	
SN-2049	F-3848	A-85981	Film #131-3B - Skew Test	U	
SN-2050	F-3849	A-85982	Film E1313b - Output Test	U	
SN-2051	F-3850	A-85983	Film #131-2B - Skew Test	U	
SN-2052	F-3851	A-85984	Film #131-2B - Output Test	U	
SN-2053	F-3852	C-85985	Relative Field Distribution Due to Parallel Wires	U	
SN-2054	F-3853	A-85991	Switch-time Tester	U	
SN-2055	F-3854	A-85993	Ideal Rotational Film Loop	U	



APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1 Page 99

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-2056	F-3855	C-86031	SAGE Design Control B.D.	U	
S-2057		A-86033	Lincoln SAGE Work Which is Essentially Completed	U	
S-2058		A-86034	Production SAGE	U	
S-2059		A-86040	Plan as Outlined to JSAC Last Fall - Modification and Assumption	C	
S-2060		A-86041	SAGE Deployment	C	
S-2061		A-86042	ESS System Test	U	
S-2062		A-86043	Production SAGE	U	
S-2063		A-86044	ESS System Test	U	
S-2064	P488-45		TX-O TDCM - View 3	U	W. Clark
S-2065	P488-44		TX-O TDCM - View 2	U	"
S-2066	P676-5		Array Tester - Far	U	J. Raffel
S-2067			Array Tester - Close	U	?
S-2068			Film Array - Photo	U	"
S-2069	P676-1		Evaporator - Far	U	"
S-2070			Evaporator - Closeup	U	"
S-2071	P676-6		B. H. Looper Rack	U	"
S-2072	P676-4		Looper Coils	U	"
SN-2073			Domain Pattern	U	"
S-2074			Register Thin Film Memory	U	"
S-2075	P676-2		Evaporator for Thin Films with Technician	U	"
S-2076	C20-180		SAGE System - Schedule #7	S	
S-2077	3-DO-1286a	CDO-166	1. Establish the Air Defense Objective	U	
S-2078	CDO-167	3-DO-1286b	2. Develop Detailed System Specifications	U	
S-2079	CDO-168	3-DO-1286c	3. Perform Experimental Tests	U	
S-2080	CDO-169	3-DO-1386d	4. Prepare Implementation Schedules	U	

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 100

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
S-2081	F-3860	A-86303	The System $Y Fe(x) Cr(1-x) O_3$	U	A. Wold 4-11-58
S-2082	F-3861	A-86304	The System $Nd Fe(x) Cr(1-x) O_3$	U	"
S-2083	F-3862	A-86305	The System $Sm Fe(x) Cr(1-x) O_3$	U	"
S-2084	F-3863	A-86306	The System $La Fe(x) Cr(1-x) O_3$	U	"
S-2085	F-3864	A-86277	System $La Fe O_3 - La Cr O_3$	U	"
S-2086	F-3865	A-86276	System $Nd Fe O_3 - Nd Cr O_3$	U	"
S-2087	F-3866	B-86302	System $Sm Fe O_3 - Sm Cr O_3$	U	"
S-2088	F-3867	B-86301	System $Y Fe O_3 - Y Cr O_3$	U	"
S-2089	F-3868	A-86363	Single Cryotron Insulated .003 Inch Niobium Wire Wound on Bare .009 Inch Tantalum	U	D. Buck
SN-2090	F-3869	B-86522	Magnetic Properties of Ideal Macroscopic Superconductors	U	"
SN-2091	F-3870	A-86523	Surface Current in the Gate Wire of and Ideal Wirebound Cryotron	U	"
SN-2092	F-3871	A-86524	Penetration of Magnetic Field and Surface Screening Current into a Superconducting Foil or Film	Uq	"
SN-2093	F-3872	B-86525	Structure of the Intermediate State in a Tin Sphere	U	"
S-2094	F-3873	B-86526	Intermediate State Pattern on a Polycrystalline Tin Plate	U	"
SN-2095	F-3874	A-86527	Derivative of Energy Difference with Respect to Radius, etc	U	"
SN-2096	F-3875	A-86528	Superconducting Cylinder with Positive Surface Energy	U	"
SN-2097	F-3876	A-86529	Superconducting Cylinder with Negative Surface Energy	U	"
SN-2098	F-3877	C-86530	B-H Curve (Theoretical) for a Superconducting Cylinder	U	"
SN-2099	F-3878	A-86531	Normal Conducting Cylinder with Trapped Flux	U	"
S-2100	F-3879	C-86532	Trapped Flux Spots in a Tin Single Crystal	U	"
SN-2101	F-3880	A-86533	Normal Conducting Cylinder with Trapped Flux and Negative Surface Energy	U	"
SN-2102	F-3881	A-86534	B-H Curve a Superconducting Cylinder in a Normal Conducting Region	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 101

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-2103	F-3882	A-86535	S-T Curve of a Normal Conducting Cylinder in a Superconducting Region	U	D. Buck
SN-2104	F-3883	A-86536	Current-Carrying Superconducting Cylinder	U	"
SN-2105	F-3884	A-86537	Current-Carrying Superconducting Cylinder with Negative Surface Energy	U	"
SN-2106	F-3885	A-86538	Maximum Current vs. Temperature for a Superconducting Cylinder for Several Values of Surface Energy	U	"
SN-2107	F-3886	B-86539	Maximum Current for a Superconducting Cylinder Showing Effect of Surface Energy	U	"
SN-2108	F-3887	A-86540	Current-Carrying Superconducting Cylinder in a Longitudinal Magnetic Field	U	"
SN-2109	F-3888	A-86541	Current-Carrying Superconducting Cylinder with Positive Surface Energy and in a Longitudinal Magnetic Field	U	"
SN-2110	F-3889	A-86542	Locus of Field Penetration Points in H-I for a Superconducting Cylinder	U	"
SN-2111	F-3890	B-86543	Current-Carrying Superconducting Cylinder with Negative Surface Energy and in a Longitudinal Magnetic Field Greater than $H_c$	U	"
SN-2112	F-3891	B-86544a	Superconducting Cylinder in Equilibrium under Constant Flux Conditions	U	"
SN-2113	F-3892	B-86545	Superconducting Cylinder in Normal Conducting Metal in Constant Magnetic Flux	U	"
SN-2114	F-3893	B-86546	Current Distribution Over an Elliptical Cylinder vs. Interior Angle	U	"
SN-2115	F-3894	B-86547	Magnetic Field Intensity vs. Distance from Center of Foil	U	"
SN-2116	F-3895	B-86548	Normal Component of Magnetic Field vs. Distance from Center of Foil	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 102

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-2117	F-3896	B-86549	Comparison of Maximum Values of Tangential, Normal, and Resultant Fields vs. Foil Width	U	D. Buck
SN-2118	F-3897	C-86550	Normal Component of Magnetic Field Intensity in the Space Between Control Foil and Gate Foil	U	"
S-2119	F-3898	C-86551	Velocity of Normal Boundary Region vs. Current for 12.7y Tantalum Foil of Various Widths	U	"
S-2120	F-3899	B-86581	Maximum Current vs. Width for Tantalum Foil of Three Thickness T-4.21K	U	"
S-2121	F-3900		MPI Video Showing Sun Strobe and Atmospheric Phenomena	U	J. O'Brien 4-8-58
S-2122	F-3901		Otto Map Output	U	"
S-2123	F-3902		Map Outline of Sun Strobe and Phenomena, Bath, Maine	U	"
S-2124	F-3917		Figure 2 - Typical Secondary Emission Curve	U	M. Cantella 4-1-58
S-2125	F-3918		Figure 1.3 - Energy Distribution of Secondary Electrons Emitted by Silver	U	"
S-2126	F-3919		Maximum Secondary Electron Emission Yield	U	"
S-2127	F-3920		Maximum Electron Yields from Some Metal Compounds	U	"
S-2128	F-3921		Secondary Electron Emission Yield of Soot	U	"
S-2129	F-3922		Secondary Emission Yield vs. Angle of Incidence of the Primary Electrons	U	"
SN-2130		A-86320	Ordering $fdz^2$ Orbitals for the Compounds $LaMnO_3$ , $MnF_3$ + Ordered $CuCo_2O_4$	U	J. Goodenough 4-18-58
SN-2131		A-86312	Schematic Diagrams for Three Different Types of Indirect $Mn^{3+}$ - $Mn^{3+}$ Magnetic	U	"
SN-2132		A-86323	Room Temperature Lattice Parameters for Pseudo Cubic Cell of $LaMnO_3 \lambda$	U	"
SN-2133		A-86324	Schematic Coupling Scheme for Three Different Spinels	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 103

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	U	REMARKS
SN-2134		A-86275	Proposed Unit Cell for $\text{LiMnO}_2$ Arrows Indicate Direction	U	J. Goodenough
SN-2135		B-86325	Saturation Magnetization Expressed as the Number of Bohr Magnetons	U	"
SN-2136		B-86311	Schematic Diagram of Splitting of 3d Levels for $3d^4$ Ions	U	"
SN-2137		A-86314	Transition Temperature $T_T$ for Martinstic Tetragonal to Cubic Phase Change	U	"
SN-2138	F-3923	B-86573	Periodic Table of the Elements	U	"
SN-2139	F-3924	C-86574	Average Atomic Volume ( $a_3$ ) vs. Atomic Number Showing the Range of Superconductive Elements	U	"
SN-2140	F-3925	C-86575	Average Atomic Vlume ( $a_3$ ) vs. Average Atomic Weight Showing the Location of Superconductors	U	"
SN-2141	F-3926	A-86576	Variation of Superconducting Transition Temperature	U	"
S-2142	F-3927	B-86577	Intermediate State Pattern on a Pure Tin Single Crystal	"	
SN-2143	F-3928	B-86578	Maximum Current vs. Width for Film with Ellipsoidal Superconducting Cylinder Inscribed	U	
SN-2144	F-3929	A-86579	The Intermediate State in a Current Carrying Superconductor	U	
SN-2145	F-3930	C-86580	Maximum Current vs. $H_i/H_c$ for a Superconducting Cylinder with Negative Surface Energy	U	
SN-2146		B-47270	Block Diagram - Speech Input System	U	J. Forgie
SN-2147		A-86497	Tape Transport Mechanism	U	
SN-2148		A-86443	Motor Control	U	
SN-2149		A-86486	Speed Sensing Waveforms	U	
SN-2150		A-86495	Speed Sensing Logic	U	
SN-2151		A-86444	Read, Write, Switch and Write Circuit	U	
SN-2152		A-86442	Read Amplifier	U	
SN-2153		A-86565	Timing Waveforms	U	

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1 Page 104

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	U	REMARKS
SN-2154		A-86566	Phase Modulated NRZ Waveforms	U	J. Forgie
SN-2155		A-86567	Go Forward, Controlled Slips	U	"
SN-2156		A-86568	Stop	U	"
SN-2157	F-3955	B-86582	Superconducting Fiber Model for a Current-Carrying Foil	U	
SN-2158	F-3956	C-86583	Propagation Velocity of a Normal Conducting Region in a Superconducting Foil vs. Current Density	U	
SN-2159	F-3957	C-86584	Maximum Gate Current vs. Control Current for a Crossed-Foil Cryotron	U	
SN-2160	F-3958	B-67042	Locus of Threshold Points for Wirewound Cryotron	U	
SN-2161	F-3959		VgVSIg for Various Ic Showing Domain Structure Changes in Tantalum Foil	U	
SN-2162	F-3960	A-86587	Some Central Computer Characteristics	U	W. Papian 5-14-58
SN-2163	F-3961	A-86588	Room-Temperature Lattice Parameters for Several Mn <sup>3+</sup> - Containing Spinels	U	J. Goodenough
SN-2164	F-3962	A-86589	Room-Temperature Lattice Parameters for Several Mn <sup>3+</sup> - Containing Spinels	U	"
SN-2165	F-3963	A-86590	Same Title as above	U	"
SN-2166	F-3964	A-86591	Same Title as above	U	"
S-2167	F-3965		Experimental Crossed Foil Cryotron	U	
S-2168		A-57013	Test-Core Outputs	U	W. Papian
S-2169		A-59644	A Redundant Selection System	U	"
S-2170		A-59644	With the Z Coordinate Removed	U	"
SN-2171	P64-4		An 8 x 8 Film Plane		
SN-2172	F-3967	B-86689	Lattice Parameters for NiCr+Fe <sub>2</sub> O <sub>4</sub> AT ≈ 15°C Below Tetragonal Transition	U	J. Goodenough 5-14-58
SN-2173	F-3968	B-86690	Lattice Parameters for NiCr+Fe <sub>2</sub> O <sub>4</sub> AT ≈ 15°C Below Orthogonal Transition	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1 Page 105

SLIDE NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
SN-2174	F-3969	B-86717	Spontaneous Magnetization at 0°K, $n_p$ , Curie Temperature $T_c$ , and Room-Temperature Lattice Parameters, etc.	U	J. Goodenough
SN-2175	F-3970	A-86718	Lattice Parameters of Compositions $FeFe_{2-x}Cr_xO_4$	U	"
SN-2176	F-3971	A-86719	Lattice Parameters of $Fe_{1.4}Cr_{1.6}O_4$	U	"
SN-2177	F-3972	A-86720	Lattice Parameters - at 183°C for Compositions $FeFe_{2-x}Cr_xO_4$	U	"
SN-2178	F-3973	A-87055	Phase Equilibria in the System $Fe_2O_4-Mn_2O_4$	U	" 6-19-68
SN-2179	F-3974	A-84926	Crossover	S	F Heart 5-20-58
SN-2180	F-3975	A-87056	Variation of Cell Dimensions with Composition	U	J. Goodenough 6-19-58
SN-2181	F-3976	C-87079	Transition Temperature of $LaMnO_3$ vs. $Mn^{+3}$ Content	U	R. Arnott "
SN-2182	F-3977	C-87080	Orthorhombic Cell Dimensions vs. Composition for $LaMn_{1-x}Ni_xO_3$	U	"
SN-2183	F-3978	A-87094	Comparison of Unidentified Lanthanum Nickel Oxide Phase at 1100°C with $LaNiO_3$ and $La_2NiO_4$	U	"
SN-2184		A-86694	ALRI System Block Diagram #1 - Airborne Vehicle -- Rotodome Aircraft	S	C. Zraket 5-13-58
SN-2185		A-86702	ALRI System Block Diagram #2 - Ground Receiving System	S	"
SN-2186		A-86693	ALRI System Block Diagram #3 - Direction Center Computer Program	S	"
SN-2187		A-86695	ALRI West Coast Deployment	S	"
SN-2188		A-86099	ALRI East Coast Deployment	S	"
SN-2189		A-86700	ALRI Production System Implementation sheet 1	S	"
SN-2190		A-86700	ALRI Production System Implementation sheet 2	S	"
SN-2191		A-86700	ALRI Production System Implementation sheet 3	S	"
SN-2192		A-86363	The System $LaFe_{(x)}Co_{(1-x)O}$ (Prepared at 1100°C)	U	
S-2193	P488-43		Ty - 0 - TDCM View I	U	
SC-2194			View of Jape Transport Mechanism	U	





APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 19

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	STATUS	REMARKS
VG-400		A-85533	Gunter Schedule - Bomarc-SAGE Demonstration	S	D. R. Brown (2 shts.)
401		A-85531-1	Availability Dates of Programs for 1960 SAGE System	S	" "
402		A-85532-1	Mode II Emergency Capability (September 1959)	U	" (4 shts.)
403	P10.21-139		Communications Network - South Truro	U	A. P. Hill 1-13-58
404	P10.19-13		Aerial View of GFD Site - Clinton FPS-14	U	"
405	P10.22-309		EPS-6 Radar - Bath, Maine	U	"
406	P10.21-168		Aerial View of South Truro FPS-20 Radar	U	"
407		A-80689	Initial Sector Phasing	S	P. Bragar (3 shts.)
408		A-80692	Program Model 2	S	"
409		A-80691	Program Model 3	S	"
410		A-85671	Retrofit Kit Delivery Schedule	U	
411		A-80703	Initial SAGE Capability	S	
412		A-85687-1	Large Memory Retrofit	U	
413	C60-921	C-85893	Examples of Teletype Input and Output Messages	U	D. R. Israel 3-14-58
414	C60-917	B-85853	CHARM Geography	U	"
415	C60-920	C-85894	Further Examples of Teletype Input and Output Messages	"	"
416	C60-922	C-85847	Information Flow for CHARM System	U	"
417	C60-918	B-85809	Typical Remote Monitor Display	U	"
418	C60-919	B-85810	Typical Track Monitor Display	U	"
419			ESS Reliability	U	W. O. Glass 3-18-58
420		A-86065-1	Track Monitor Actions	U	D. R. Israel 3-24-58
421		A-86074	Input Teletype: Error Detection Aids and Features	U	"
422		A-86074	Input Teletype: Message Types	U	"
423		A-86076	Input Teletype: Flight Plans	U	"
424		A-86077	Input Teletype: Route Specification	U	"
425		A-86078	Input Teletype: Position Reports	U	"

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 20

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	STATUS	REMARKS
VG-426		A-86079	Output Teletype: Message Types	U	D. R. Israel
427		A-86354	Assumptions Used in Study	S	J. W. Shay 4-10-58
428		A-86357	Mode I	S	"
429		A-86358	Mode II	S	"
430		A-86356	Mode III	S	"
431		A-86355	Mode IV	S	"
432		A-86359	Approval Phase and Planning Phase	S	"
433		A-86353	Experimental Phase	S	"
434		A-86352	Implementation Phase	S	"
435		A-86361	Planned SAGE AA Computer Program for 1960	S	"
436		A-86367	Figure 4 - SAGE-Sabre-Battery Communications	C	"
437		A-86368	Figure 3 - Proposed SAGE AA Communications	C	"
438		A-86369	Figure 2 - Planned SAGE AA Communications	C	"
439		A-86360	Figure 5 - Operational Capability	S	"
440		A-86370	Missile Master Cost	S	" (2 shts)
441		A-86371	Sabre Costs	S	"
442		A-86372	Estimated Total Cost of Purchase and Installation of Sabres and FUIF's at AA Complexes in the U.S.	S	"
443		A-86373	Chart 1 - Estimated Schedule for Sabre	S	K. E. McVicar 4-11-58
444		B-86211	Figure 1 - ALRI System Block Diagram	S	"
445		B-86280	IM-99B Base	S	"
446		A-86213	Search Capability Low Altitude	S	"
447		A-86214	Figure 2 - Flight Profile of IM-99B (Model 631)	S	"
448		R-85657-1	SAGE Search Radar Coverage @ 40,000 ft.	S	"
449		C-85964	Figure 3 - Approximate Extension of High and Low Altitude	S	"
450		C-86349	SAGE System Data Flow	U	"

DL-1316

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1 Page 21

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	Person	REMARKS
VG-451		A-86099	Figure 11 - ALRI Deployment (East Coast)	S	K. E. McVicar
452		B-85922	Figure 17 - AEW Operational Concepts	C	"
453		B-86279	Proposed Side-Lobe Elimination System	S	"
454		B-86377	SAGE Netting - Mode II	S	"
455		A-86376	SAGE Netting - Mode I	S	"
456		C-86459	ALRI Production System Implementation	S	C. A. Zraket 4-18-58
457		A-86561	Mode II - Emergency Capability	S	"
458	C60-952		F108 Aircraft	S	"
459		A-86597	SAGE Weapon Assignment Process	C	J. W. Shay
460		A-86598	Direction Center Target Commitment Rates	S	"
461		A-86599	Initial System - Improved System	S	"
462		A-86600	Commitment of Weapons by Weapons Director	S	"
463		A-86601	Assignment of Target to Weapons Directors by Senior Weapon Director	C	"
464		A-86595	Weapons Direction	C	"
465	C60-957	A-86602	Proposed Forwardtelling and Crosstelling Output Capacities in the '59 Program	S	H. K. Rising 5-5-58
466	C60-958	A-86603	Frame Time as a Function of Tracks in System	S	"
467		A-86604	Major Assumptions Used in Setting Parameters	S	(2 shts)
468		A-86605	Frame Time as a Function of Track Capacity Under Medium Heavy Load	S	"
469		A-86609	Frame Time as a Function of Track Capacity - '59 Program	S	"
470		A-86607	Proposed Forwardtelling and Crosstelling Output Capacities in the '59 Program	S	"
471		A-86608	Proposed Storage Capacity of System Elements for 300- Track System	S	" (2shs)

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S/I Page 22

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
VG-472		A-86609	WWA	C	H. K. Rising (2 shts)
473		A-86631	Summary of Computer Stops ESS Tests - June thru Dec. 1957	U	W. O. Glass 5-2-57
474		A-86634	Program Capacity	S	D. R. Brown 5-5-58
475	C60-956	A-86272	Frame Time as a Function of Tracks in System - '59 Program	S	H. K. Rising "
476	C60-955	A-86271	Frame Time as a Function of Tracks in System - Medium Heavy Load	S	"
477	C60-953	A-86273	Core Storage Allocation for Various Track Capacities - '59 Program	"	"
478	C60-954	A-86274	AM Drum Storage Requirements as a Function of Track Capacity '59 Program	S	"
479		A-86668	Description of Air Situation	S	"
480		A-86670	Initial SAGE Problem Areas	S	R. Shorey 5-6-58
481		A-86700	ALRI Production System Implementation (Component, Aircraft Search Radar) (Sht. 1 of 3)	S	
482		A-86700	ALRI Production System Implementation (Height Finding Mark X, Airborne Data Processor & Navigation) (Sht. 2 of 3)	S	
483		A-86700	ALRI Production System Implementation -(Communication, SAGE Direction Center Equipment, SAGE Direction Center Capacity) (Sht. 3 of 3)	S	
484			ALRI System Block Diagram #1	S	
485			ALRI System Block Diagram #2	S	
486			ALRI System Block Diagram #3	S	
487		A-86675	IM-99B Range Capability	S	
488		A-86696	ALRI Low-Altitude Coverage	S	
489		A-86701	IM-99B Employment Features	S	
490		A-86674	Noise Jamming 'STROBES'	S	

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 23

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
VG-491		A-86695	ALRI West Coast Deployment	S	
492		A-86673	Intercept Envelope in Horizontal Plane	S	
493		A-86711	Search-While-Go Mechanism of the Patrol Tube	S	
494		A-86710	Active-Passive Surveillance Systems	S	
495		A-86712	Search Radar Coverage (40,000 ft.)	S	
496		A-86691	Interception Sequence	S	
497		A-86692	Mission Sequence	S	
498		A-86697	Time Division Data Link Site Addressing and Beam Orientation	S	
499		A-86721	SAGE/Bomarc System	S	
500		A-86520	ALRI Extension of Radar Coverage	S	
501		A-47267	AN/FST-2 Block Diagram	S	
502		A-86722	Interceptor Configuration	S	
503		A-86498	Elimination of "Ghosts"	E	
504		A-86460	Pattern Patrol	S	
505		A-86723	Tactical Example	S	
506	C60-976	B-84952	SAGE System Equipment Associated with Automatic I/O Channels of AN/FSQ-7	S	A. P. Arneth 5-21-58
507	C60-974	B-86562	SAGE/Missile Data Flow Channels	U	"
508	C60-973	B-86563	Mark X SIF Data Flow in SAGE System	U	"
509	C60-975	B-86632	SAGE/Bomarc Data Flow Channels	U	
510	C60-983	A-86849	Selection of Combat Altitude	C	A. P. Hill
511		A-86455	Layout of Track Monitor Switch Panels	U	D. R. Israel
512		A-86338	Further Examples of Track Monitor Actions	U	"
513		B-86339	Examples of Track Monitor Actions	U	"
514		C-87015	Lincoln Laboratory Group #68 - System Office	U	D. R. Brown

APPROVED FOR PUBLIC RELEASE. CASE 06-1104.

6D-108-2, S#1

Page 24

VG NO.	FILM OR COPY NO.	DRAWING NO.	TITLE	CLASS	REMARKS
VG-515	C60-984	A-86948	Stereographic Projection Logic to Reference Data to Common Set of XY Coordinates	U	A. P. Hill
516	C60-985	B-80699	Intercept Computation for Profile Selection	C	A. P. Hill
517					
518		A-77016	Phase 0 System Diagram	C	W. J. Canty
519		A-77017	Digital Target Detector - System Diagram	C	"
520		A-77018-1	Phase II Breadboard ALRI System - System Diagram	C	"
521		A-77020-1	Phase I Breadboard ALRI System - System Diagram	C	"
522		A-77019	Rough Schedules ALRI Experimental Effort	C	"
523		A-87240	Azimuth Error Distribution	U	J. A. O'Brien @Jul58
524		A-87239-1	Range Error Distribution	U	"
525		A-77900	Possible Phase II ALRI Schedule	C	"
526		A-77901-1	Proposed Time Schedule Phase I ALRI Retrofit and Related Schedules	S	"
527		A-77902	ALRI Coverage without Texas Tower Relay	S	C. A. Zraket 7-2-58
528		A-77906	Airborne Long Range Input System	S	"
529		A-77905	ALRI Environment	S	"
530		A-77903	ALRI Costs	C	"
531		A-77907	ALRI System Concept	S	"
532		A-77908	ALRI System Capabilities and Characteristics - Phase II	S	"
533		A-77909	ALRI System Capabilities and Characteristics - Phase I	S	"
534		A-77904-1	Actions Required for Implementation of the ALRI Program	C	J. A. O'Brien
535		6P-387	Tracking	U	J. A. O'Brien
536		A-77910	ALRI Retrofit and Related Schedules	S	"
537			Rappi Presentation of FGN Processed AEW Data	U	"
538			Rappi Presentation of FGN Processed AEW Data	U	"