

840 & 840A COMPUTERS IN THE FIELD

<u>CONTRACT</u>	<u>CUSTOMER</u>	<u>OPERATING TIME</u>	<u>JOB NUMBER</u>	<u>DESCRIPTION OF OPERATION</u>
NAS8-11841	NASA Astr. Div. Huntsville, Ala.	15 Mo.	2081	SEL 800 Data Acquisition System and analysis system which acquires, records, and reduces data while controlling dynamic testing of the Saturn V space vehicle.
230582	Johns Hopkins Silver Springs, Maryland	14 Mo.	2101	System designed for conversion of various types of data to obtain usable input for the SEL 840 and any compatible computer. Digital telemetry guidance data (DTGD) NADVAC, LORAC and punched paper tape data is also recorded in a format suitable for entry to the 840.
NAS9-5092	NASA, MSC Houston, Tex.	11 Mo.	2113	Monitors inputs from thermocouples and testing equipment from any type test cell. Any data that is wrong creates alarm.
NAS8-17699	NASA Astr. Div. Huntsville, Ala.	3 Mo.	2139	SEL 840A for checkout of programs for functional generators (2145 dynamic flight simulator for Saturn C5)
6J0960NW	Goodyear Aerospace Akron, Ohio	In Progress	4044	Monitors and records data associated with production testing of aircraft wheels and brakes.

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6L0020-TM	Goodyear Aerospace Akron, Ohio	In Progress	2153	Computer and subsystem for use in 2H87 carrier landing trainer.
222-2355	Nat'l Res. Council Ottawa, Ont., Can.	In Progress	4053	Data Processor
N00173-67-C-0313	Naval Res. Lab. Washington, D. C.	In Progress	2155	Data collection and processing system.
B 7877780540	Battelle-Northwest Richland, Wash.	In Progress	4054	In house Research
Withheld by Request	Withheld by Request	In Progress	4055	840A Direct Digital Control and 840A Supervisory Process Con- trol System
SC-010	Curtiss-Wright Corp. E. Paterson, N. J.	In Progress	2162	840A with 44K core for pro- gramming and control of C-141 Aircraft Simulators.
NAS8-18759	NASA Astr. Huntsville, Ala.	1 Mo. In Progress	2145	Flight dynamics simulator for testing the Saturn C5 1st stage booster. (2 840A's MP)
259607	General Dynamics Fort Worth, Texas	In Progress	4046	Acquires and digitizes data from 96 high-level analog inputs. The data is derived from previously recorded aircraft flight tests. System is pro- vided with digital inputs and outputs, sense lines, and control outputs.

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NAS 8-13874	NASA-Qual. Div. Huntsville, Ala.	17 Mo.	2094	Designed to simulate telemetry data received from Saturn vehicles to provide a source for checking the operation of ground receiving and processing equipment.
P. O. 163730	GM-Electro-Motive LaGrange, Ill.	14 Mo.	4024	Locomotive test metering system is designed to monitor voltage, current and temperature parameter in final testing of diesel locomotives. Replaces digital voltmeters with more flexible computer controlled CRT displays.
NAS8-11911	NASA-ASTR. Div. Huntsville, Ala.	13 Mo.	2091	Designed to provide interfacing between the DIOD of a General Electric 235 Computer, Milgo Computer, discrete device and digital incremental X-Y Plotter.
NAS8-20021	NASA-Qual. Div. Huntsville, Ala.	15 Mo.	2096	This system is a high-speed PAM and PCM data decommutator, digitizer and recorder used to check out airborne PCM, PAM and time systems on board the Saturn during various testing phases of the production boosters.

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P. O. 163733	GM Electro-Motive LaGrange, Ill.	9 Mo.	4023	High Voltage Cabinet Test System designed for use in checkout of diesel-locomotive switchgear controls. The system has the capability of automatic testing through the use of computer controlled test cabinets.
NAS 8-15388	NASA-ASTR Div. Huntsville, Ala.	14 Mo.	2098	Not available
DM 75846	GM-Detroit Diesel Detroit, Mich.	9 Mo.	4027	810 with 16K, 2-2310 disc., IBM 1442 card punch/reader. MCU-256 Channel low-level relay Mux, 76 solenoid drive output, 24 relay output, 16 frequency inputs, 5-operator console panels for display and computer communication. System tests performance of diesel and turbine engines.
DA-28-043-AMC 0-1606-CE	White Sands Missile Range, New Mexico	11 Mo.	2107	System is a computer controlled data acquisition and processing system using the SEL 810 general purpose computer as the control and processing device. The system reads analog data from

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DA-28-043-AMC 0-1606-CE	White Sands Missile Range, New Mexico	11 Mo.	2107	an external analog tape transport, converts the data to digital form and writes digital tapes which are compatible with IBM series 1400 or 7000 series computers.
A 2351S	Melpar, Inc. Falls Church, Va.	15 Mo. 13 Mo.	2110	810 with 8K memory. 300 cps paper tape reader, 110 cps paper tape punch. Interface system with the following: High level input with ADC analog to digital output Relay outputs, Relay inputs. This computer system controls and programs a helicopter simulator. Pilot controls are sensed by the interface unit, operating parameters are then calculated and applied to the output devices.
NAS8-14427	NASA-ASTR Div. Huntsville, Ala.	14 Mo.	2097	This system is an automated PCM data processing and logging system used to check out the airborne computer and PCM subsystems in the Saturn during design and launch phases of operation.
102709G RBD/alk (1/25/67)	Phillips Petroleum Bartlesville, Okla.	6 Mo.	4036	Basic 810A with 8K of memory. Computer will be used in conjunction with an acquisition system as direct digital control for a petroleum plant.

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M1182	Maecon, Inc. Santa Fe Springs, California	1 Mo.	2132	General-purpose control and recording system for liquid propellant rocket engine testing. Controls and monitors pre-fire countdown and records static test data during firing.
679220	Bell Telephone New York, N. Y.	6 Mo.	4037	This system is a completely self-contained research tool. It is used to perform high resolution testing involving millions of operations on newly developed reed relays.
N0016366C0477	U. S. Naval Avionics Indianapolis, Ind.	6 Mo.	2143	SEL 810, 8K core, High speed paper tape punch/reader, NCR ¹ Card Reader, TM-7 Tape Unit, 30-Channel high-level data acquisition system, 14-bit A/D converter, 12-channel, 12-bit $\pm 100V$ D/A converter. Part of a closed loop installation - SEL 810 System simulates airborne digital computer in R & D. Measures pace analog computer inputs and feeds back D/A information. Writes magnetic tape of measurements from pace.

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Withheld by Request	Withheld by Request	11 Mo.	4028	SEL 810, 8K core, 20 Chan. low-level Reed Relay Mux, integrating A/D converter, 16 bits, 40 contact closure outputs, 40 contact closure sense inputs, 20 digital control outputs to operator console. System is direct digital control system which measures temperatures, calculates algorithms, corrects process, logs data, and outputs alarms.
L-036535-7022	Boeing Company Huntsville, Ala.	11 Mo.	2112	Central Control System to provide video switching of the Saturn V Ground Station Signals, Ground Station and vehicle Telemetry fault isolation and checkout, and digitizing of PAM and FM signals from Saturn V Missile.
NAS8-16455	NASA, GSE Branch Huntsville, Ala.	7 Mos.	2117	System was designed to ascertain through digital computation, standard values of actual flow values acquired from external equipment.
NAS 4-956	NASA Edwards AFB California	7 Mo.	2116	This 800 channel acquisition system records thermocouple, strain gauge and displacement potentiometer data at rates that are selectable up to 12KC channel rate. The system contains a 32 channel, 21 inch bar graph, D to A converters, all controlled by the computer.

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DA18-119-AMC- 02765 (x)	Procurement Div. Ft. Geo. G. Meade Maryland	6 Mo.	2115	Withheld by Request
A36125S	Melpar, Inc. Falls Church, Va.	11 Mo. 10 Mo. 9 Mo.	2121	Refer to Description of 2110
MD509180	GM-Technical Ctr. Warren, Mich.	9 Mo.	4032	810 with 8K, NCR Card Reader, Paper Tape reader/punch MCU 36-channel random access low-level Mux, 36 logic level input, 36 relay closure inputs, 36 relay closure outputs. System used for development projects to improve manufacturing process and quality.
E-21513	Hamilton Standard Windsor Locks Connecticut	11 Mo.	4033	This is a Direct Digital control for a jet engine. The control parameters are stored in memory and applied to the engine in time sequence. Engine performance is read and control parameters are also calculated.
FNP-49163	GM-AC Electronics Milwaukee, Wisc.	3 Mo.	4034	In House Research and Development

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	Lockheed Sunnyvale California	6 Mo.	4035	810 with 8K, high-speed paper tape reader/punch, Burroughs card reader, TM-7 tape transport. MCU ND161 Nuclear Data ADC, Tektronix storage scope 56 logic level input, 8 logic level outputs, 16 relay closure outputs. System used to collect and analyze data from nuclear experiments.
FNP 60669	General Motors Corp. AC Electronics Div. Milwaukee, Wisc.	4 Mo.	4045	810A with 8K core used for In House research and development
FNP 65675	General Motors Corp. AC Electronics Div. Milwaukee, Wisc.	3 Mo.	4048	3-810A's with 8K core and one paper tape system used for in house research and development.
NAS 1-6672	NASA/Langley Hampton, Va.	In Progress	2152	Acquire, condition, and record data from rocket engine propellant, component, and materials tests.
FNP 65675	GE San Jose California	In Progress	2154	Acquire, edit, and record data from a nuclear reactor. Analyze the data off-line.
LC 6-12706-1	Los Alamos Los Alamos, N. M.	1 Mo.	2133	Process the data from, and control a linear proton accelerator. AEC studies

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546758	Argonne Nat. Labs	4 Mo.	2156	SEL 810 used as a research tool.
190500	Sylvania Electronics Needham Heights, Mass.	In Progress	2159	An SEL 810A controlled data acquisition system which accepts inputs from Tracking Radar and records this data for subsequent analysis.
67-41-RTF	ARO Inc. Arnold AF Sta. Tullahoma, Tenn.	In Progress	2160	Acquire and record data during testing of jet engines for the C5A Transport Aircraft.
N00173-67-C-0506	NRL Washington, D. C.	In Progress	2165	(Classified Information)
596600	Ampex Corp. Redwood City, Calif.	In Progress	2166 (a)	Control Computer in Information Retrieval System
7L0001-TR	Goodyear Aerospace Akron, Ohio	In Progress	2167 (a)	Shipboard Simulator
WA-R411596-GA	Allis-Chalmers Milwaukee, Wisc.	In Progress	4056 (a)	Research in fuel cell development for Air Force

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596610	Ampex Corp. Redwood City, Calif.	In Progress	4059 (a)	Control Computer in Information Retrieval System
1401	Withheld by Request	In Progress	4061 (a)	Computer & Digital Acquisition System for Electronic Color Separations.
596920	Ampex Corp. Redwood City, Calif.	In Progress	----	Information Retrieval System for a learning resource center

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