

ADVANCED MEMORY SYSTEMS
ANNUAL REPORT 1971





**ADVANCED MEMORY SYSTEMS, INC.
ANNUAL REPORT FOR THE YEAR
ENDED SEPTEMBER 30, 1971**

Directors:

Robert H. F. Lloyd
*President
Advanced Memory Systems, Inc.*

Paul Bancroft, III
*Vice President
Bessemer Securities Corporation
New York, New York*

David A. Bossen
*President
Measurex Corporation
Santa Clara, California*

Dr. Sidney Fernbach
*Head of the Computation Department
Lawrence Livermore Laboratory
Livermore, California*

Sol Kershner
*Vice President
Advanced Memory Systems, Inc.*

Officers:

Robert H. F. Lloyd
President

L. Brent Dickson
Vice President, Manufacturing

Charles Fa
Vice President, Technology

Sol Kershner
*Vice President, Finance and Administration
Secretary and Treasurer*

Fred A. Ordemann
Vice President, Product Development

Millard H. Phelps
*Vice President, Marketing
OEM Products*

Gordon W. Ringo
Director — End User Marketing

Transfer Agents:

Crocker National Bank
San Francisco, California

Chase Manhattan Bank
(National Association)
New York, N.Y.

Registrars:

Bank of America
National Trust & Savings Association
San Francisco, California

Chase Manhattan Bank
(National Association)
New York, N.Y.

Counsel:

Cooley, Crowley, Gaither, Godward, Castro
& Huddleson
San Francisco, California

Auditor:

Arthur Young & Company
San Jose, California

TO OUR SHAREHOLDERS

The soaring sixties turned into the stumbling seventies for many firms in the computer industry who counted on an ever-expanding universe of single product or single market acceptance. Some of the largest main-frame companies and many peripheral suppliers experienced disappointing endings to their lofty aspirations. In essence, they were not adaptable to unforeseen market changes. The blight on the boom impacted many broadly based manufacturers of semiconductors, too, as ferrite core prices dropped to counter inroads of MOS/LSI devices. Nevertheless, through a year of layoffs and shutdowns, AMS continued to hire, expand and increase product sales.

The reasons behind AMS' strength in a generally sagging marketplace are manyfold: highly innovative engineers, dedicated support personnel, uniformly high product quality, aggressive marketing methods and products aimed at a wide range of markets . . . all leading to acceptance of semiconductors as the preferred memory technology both now and in the years to come.

AMS pledged itself to a single application in the semiconductor spectrum—semiconductor memories. By concentrating all our efforts in this single avenue, AMS has achieved a recognized position in this industry. Whenever publications such as FORTUNE or BUSINESS WEEK report overviews of the industry, AMS is invariably mentioned along with some of the most reputable giants.

A vital decision that has enabled AMS to continue to grow has been the consistent application of field proven and reliable processing techniques in the manufacture of its semiconductor elements. While some other companies struggled to master other processing techniques—mostly with only marginal success—AMS concentrated on design innovations utilizing proven processes. The results? A reputation for on-time delivery and superior and reliable performance.

This background has enabled AMS to secure a prominent position in the add-on main memory market. Through a major contract with ITTEL Corporation to market AMS monolithic main memory add-on systems for IBM System/360 computers, we began shipment in June, 1971 and installed over 50 of these systems by the beginning of December. Equipment performance and user acceptance in the field has been excellent.

AMS has enjoyed the distinction of building both the world's largest semiconductor memory systems and the world's fastest semiconductor memory compo-

nents. More importantly, AMS memory devices are accumulating performance records at an unprecedented rate each month in scores of installations.

The basic element to all these installations is an AMS 1024 bit memory device. More than one year has passed since its introduction and it is still the fastest MOS memory device on the market with a remarkable record for reliability. In AMS add-on memory systems thirty-two devices are mounted on circuit cards which are then combined in "decks" known as Basic Storage Modules. By adding more and more decks, the user can obtain memories with millions of bits of instantly accessible memory. The 1024 design has been licensed to Texas Instruments and Motorola (the two largest semiconductor manufacturers in the world). We believe these alternate-source agreements assure industry standardization of our design and further enhance our reputation in the industry.

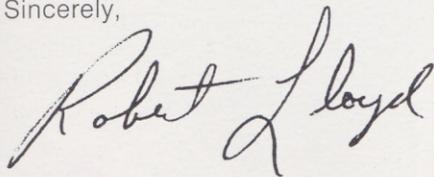
To help maintain our continuing sales growth, we are pleased to announce the appointment of Mr. Millard H. Phelps, Jr., as Vice President, Marketing, OEM Products. Mr. Phelps has over ten years experience in the product marketing area, most recently as Vice President of Marketing for Fabri-Tek and as Vice President of Marketing for Nortec.

In November, 1971, AMS issued \$2,500,000 of 8% convertible subordinated debentures, due October 1, 1991. The proceeds from this public offering are not reflected in the financial statements presented in this report.

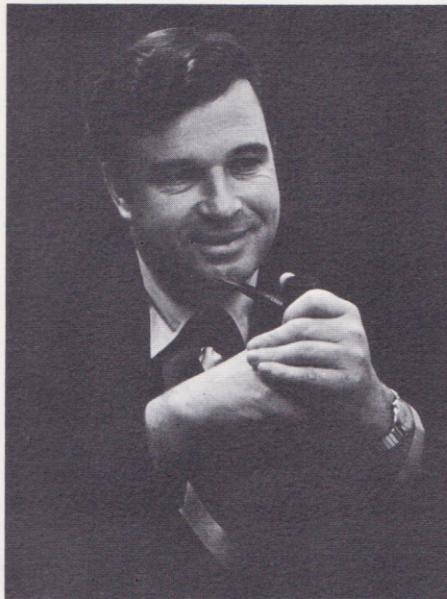
AMS is now planning the development, manufacture and marketing of add-on main memory systems for IBM's newest generation of computers—the System/370. We will be in a position to deliver these systems early in the life cycle of this advanced computer series.

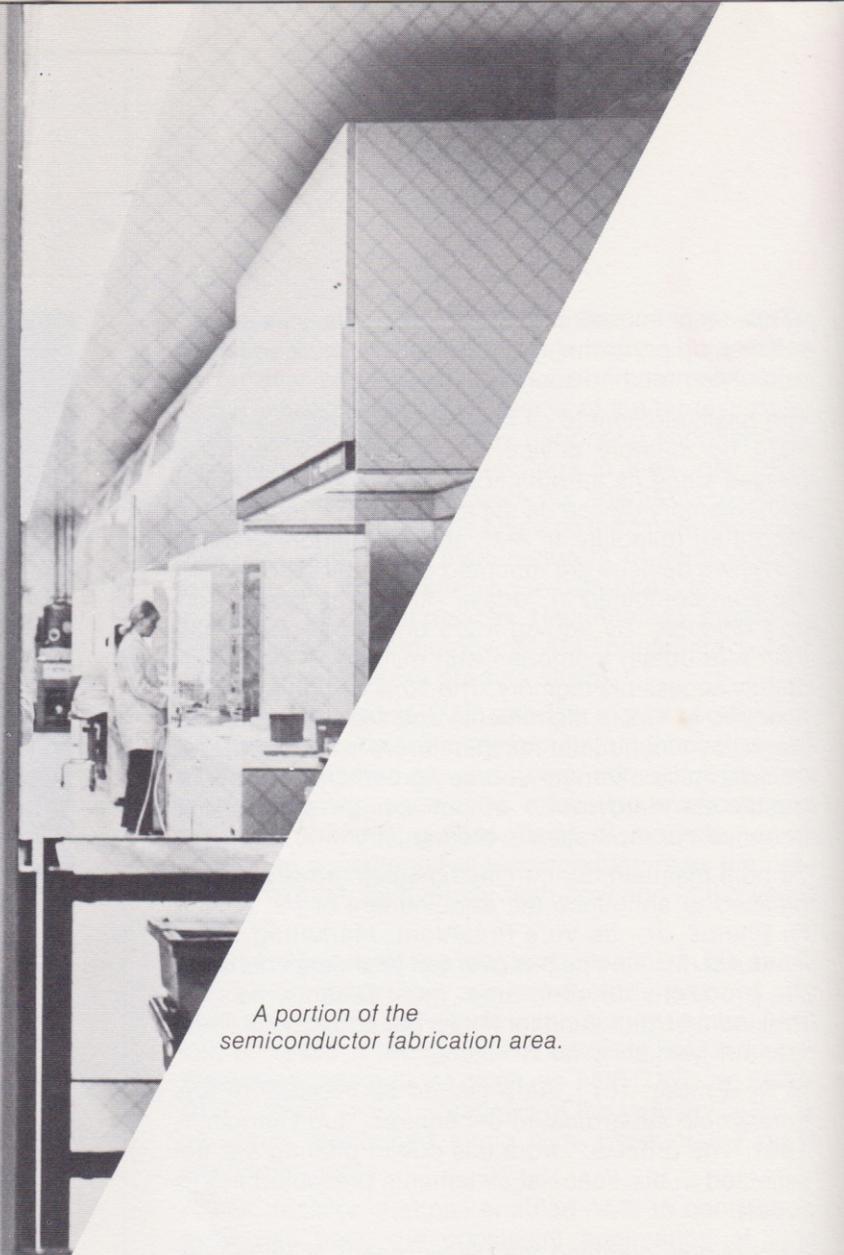
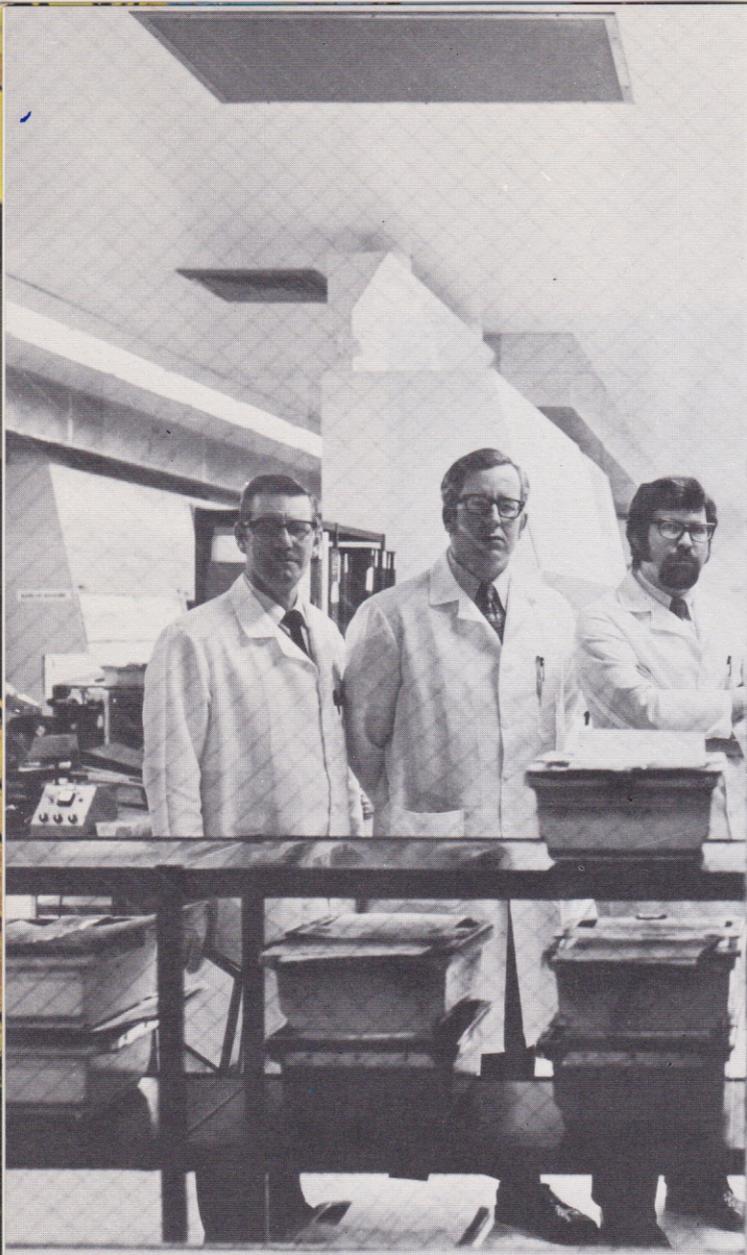
We have achieved notable progress during 1971 by dedicating ourselves to the production and delivery of advanced memory systems. This singleness of purpose will be carried forward into 1972 with the same high degree of commitment, creativity and confidence.

Sincerely,

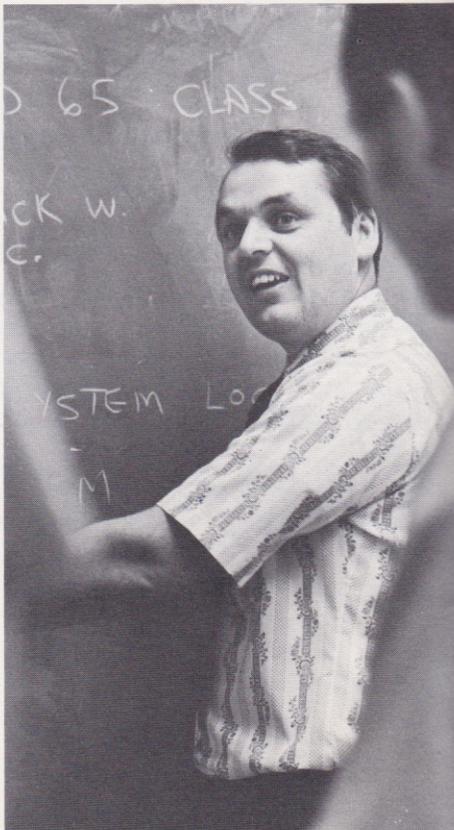
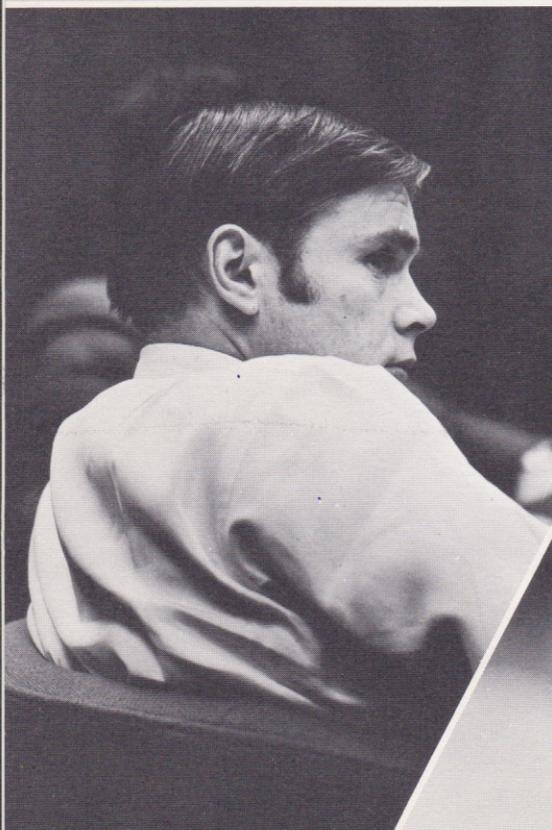


Robert H. F. Lloyd, President
December 23, 1971





*A portion of the
semiconductor fabrication area.*



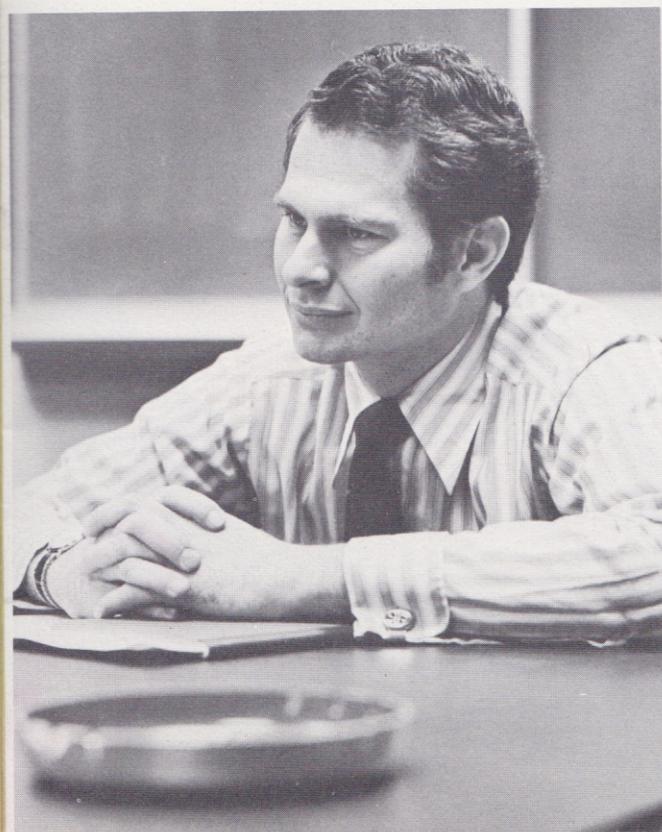
Since its organization three years ago, AMS has designed, manufactured and delivered a wide variety of semiconductor memory components, subsystems and systems for use with computers. Sales have been made to over 130 manufacturers and end-users. In the past year, however, a significant change has taken place in the customer mix of the company.

In June of this year, AMS began deliveries of add-on main memory systems, products designed to extend the usable size of memories for (and therefore the life of) IBM System/360, Models 30, 40 and 50 computers. This business represents our most significant step into the "end-user" market. The vehicle for this entry is a marketing agreement with ITEL Corporation of San Francisco, California—one of the largest computer leasing companies in the world.

At the time of writing this report, the developments of a comparable product to extend the memory and life of IBM System/360, Model 65 computers (a large computer in the System/360 line) is nearing completion. This product will also be marketed primarily through ITEL Corporation. Initial shipments are scheduled for early in January, 1972.

AMS add-on main memory systems supplement or, to a limited extent, replace the ferrite core memory supplied by computer manufacturers and other ferrite core makers. Integrated circuit chips—each containing over a thousand memory locations—are mounted in metal and ceramic packages which are typically 1.2 inches long by 0.4 inches wide. To produce memory systems, these packages are mounted on printed circuit boards or "cards" which, in turn, are assembled in a cabinet which houses the cards and the required power supplies. This completed system connects directly to the appropriate IBM computer via a cable which plugs into an IBM receptacle. AMS memory systems, then, are truly "plug compatible"—free of any need for software changes by the user.

The AMS systems are modular in design. Memory cards and support electronics are assembled into units of operational memory called Basic Storage Modules. These "BSMs" have capacities ranging from 32 thousand bytes of memory for Model 30 computers to 256 thousand bytes of memory for Model 65 computers. (8 data bits per byte.) By adding additional BSMs, these systems can therefore be built with capacities of from 32 thousand to 2 million bytes of memory, depending upon the computer model. In addition, once installed, they can be expanded in size. This means the user can obtain the memory size upgrade he requires for his computer at any particular time.





Typical IBM System/360 computer installation utilizing AMS' Monolithic Main Memory add-on.

A design technique similar to that used by IBM in the new IBM System/370 computer line has been incorporated by AMS in the design of add-on main memory systems for 360 computers. "Error Checking and Correction" is a technique which detects an error caused by a memory device malfunction *before* that error can have any effect on the data. The error is corrected; the computer continues to operate; the malfunctioning memory device is identified and service personnel can then replace the card containing that device during routine preventive maintenance.

The add-on main memory system, which is sold or leased at a cost below that charged by IBM for competing equipment is being used by such firms as The Mennen Company, Hyster, Beckman Instruments, Hughes Aircraft, Time, Inc., Getty Oil, Stanford Research Institute, and American Savings and Loan.

AMS is in the enviable position of being the only current supplier of semiconductor add-on systems. Installation of these systems further expands our experience in the production of semiconductor memory products and systems. Of additional significance is the tangible demonstration of the industry's acceptance of semiconductor memory. At this time, AMS products are accumulating device performance histories at the rate of 25 million device hours per month.

Each day that passes supports AMS' contention that semiconductor memories are the most reliable and economical adjuncts to computer equipment. Each hour of our products' successful operation enhances the reputation of AMS in the industry. As the result of our entry into the end-user market, the AMS user base is expanded and the opportunities for developing new business are multiplied.

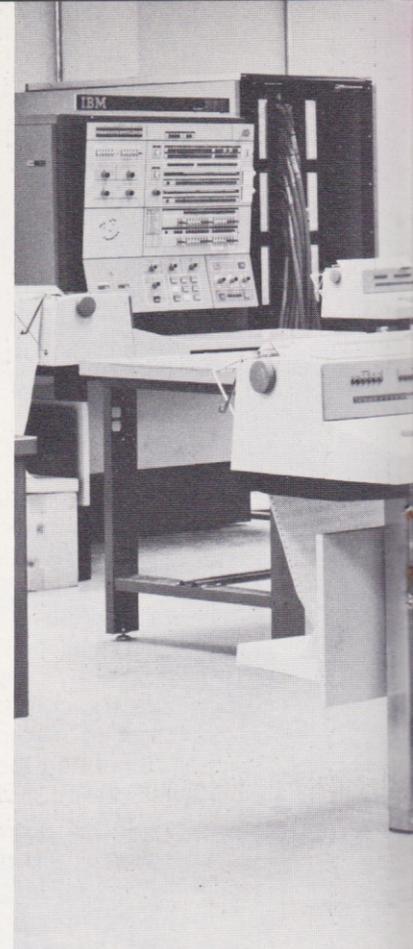
AMS has been organized and staffed as a vertically integrated operation with design and manufacturing capabilities ranging from the integrated circuit device to complete end user systems. We believe this approach will provide distinct competitive advantages. First, significant cost and performance advantages can be achieved through design trade-offs if the memory elements and systems are designed simultaneously. Second, semiconductor devices represent a significant portion of the total manufacturing cost of our systems. To maximize profitability in the long run, we feel that we must have the capability to manufacture our own integrated circuits. Third, we are in a position to actively market to customers who will buy only at the device level as well as to customers who require full memory systems.

In anticipation of the demand by large and medium sized computer designs for speeds greatly in excess of those previously available, AMS developed its line of high-speed bi-polar components designed for application in specialized functions where speed is paramount. Speed in this case refers to access time — the time required to find a particular item of data in a computer's memory, and to transfer it to another part of the computer system where it can be acted upon. Access times are incredibly short; they are measured in microseconds (millionths of a second) and nanoseconds (billionths of a second).

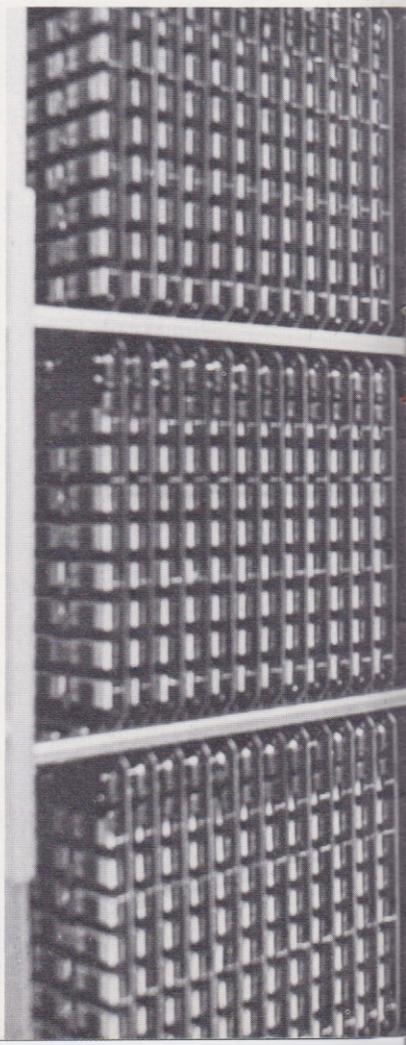
AMS has produced and sold components, circuit cards incorporating these components, subsystems and systems having access time as fast as 5 nanoseconds for components and 10 nanoseconds for systems. Potential applications for such high-speed memory includes specialized functions — such as special purpose control, buffer, scratch-pad and register stack memories — and general applications such as main memory in the next generation of very large computers now being designed, for computer-controlled test equipment, in digital communications systems and for data switching. Our fastest bi-polar products are several times faster than those announced by any other semiconductor memory manufacturer.

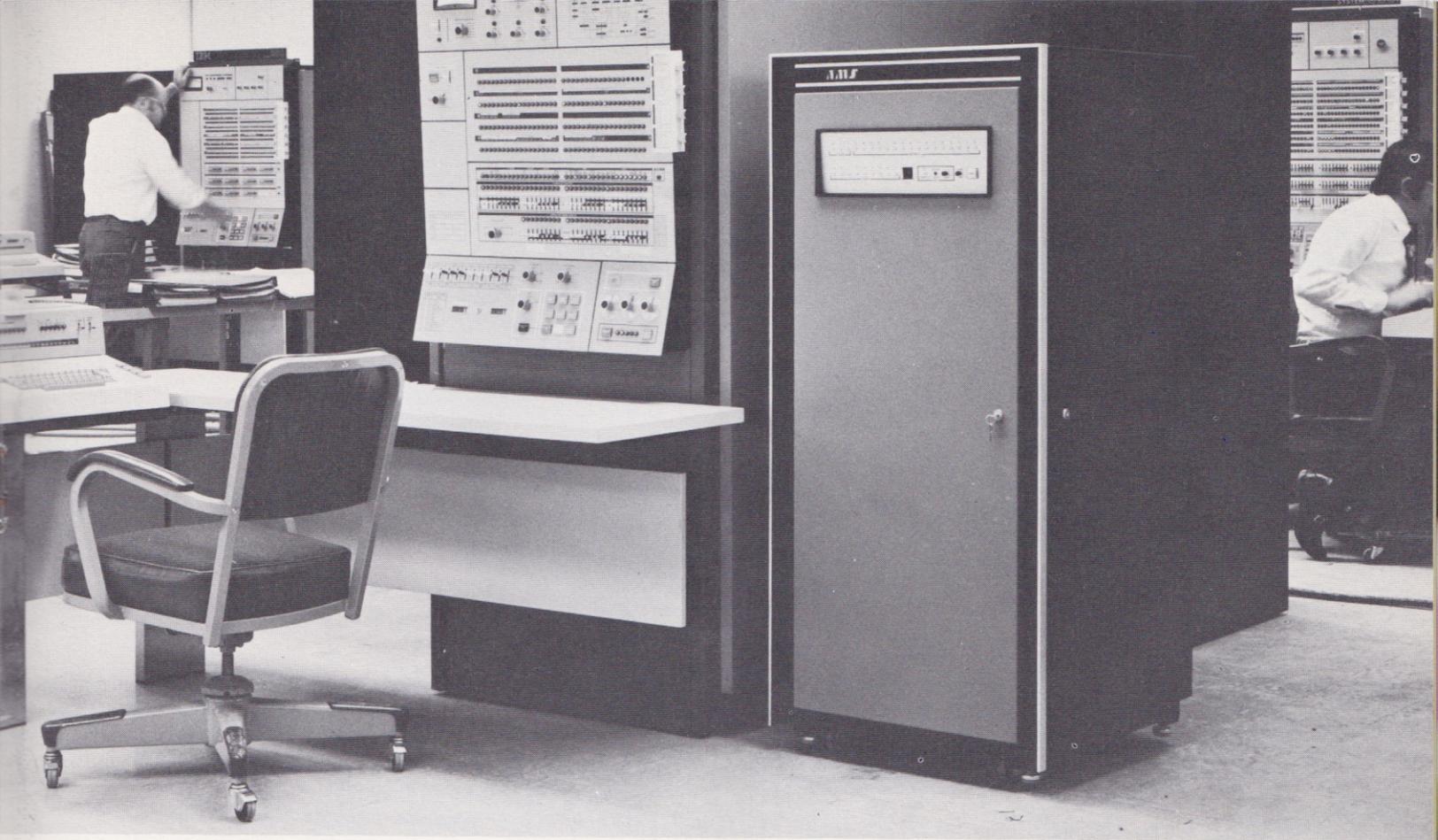
The AMS-designed and manufactured Model 6002 semiconductor memory component is the industry's fastest MOS (Metal-Oxide-Silicon) memory device. AMS has entered into agreements with Motorola, Inc., and Texas Instruments — both major manufacturers in the semiconductor industry — to enable them to become alternate sources of this device. We believe these agreements reflect the confidence of these large semiconductor manufacturers in AMS designs and technological skills and represent evidence that the industry may accept this AMS design as standard.

As indicated, AMS manufactures for, and markets to, both the end user and OEM. To serve both these markets, AMS has developed two sales forces. Twelve manufacturer's representative organizations with 35 offices in 21 states, and 2 distributors with 7 offices in 6 states serve OEMs. The sales activities of these representatives and distributors are supplemented by the Company's personnel at the AMS main office, and through sales offices in Boston, Philadelphia and Los Angeles.



Inserting a storage card into a BSM (Main Storage Module). Each of the 72 cards contains 32,768 words of storage capability. (The BSM shown adds 262,144 words of storage to an IBM System/360 Model 30.)

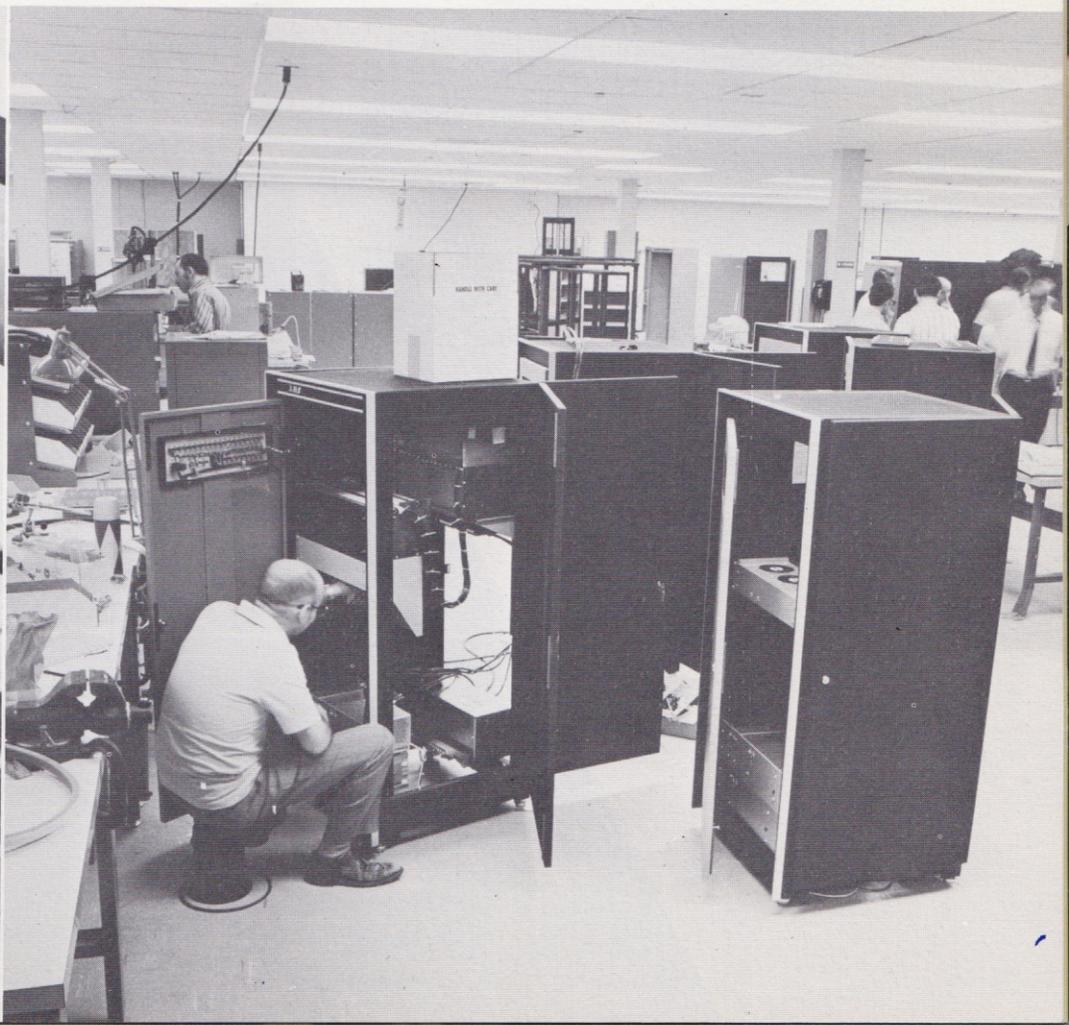
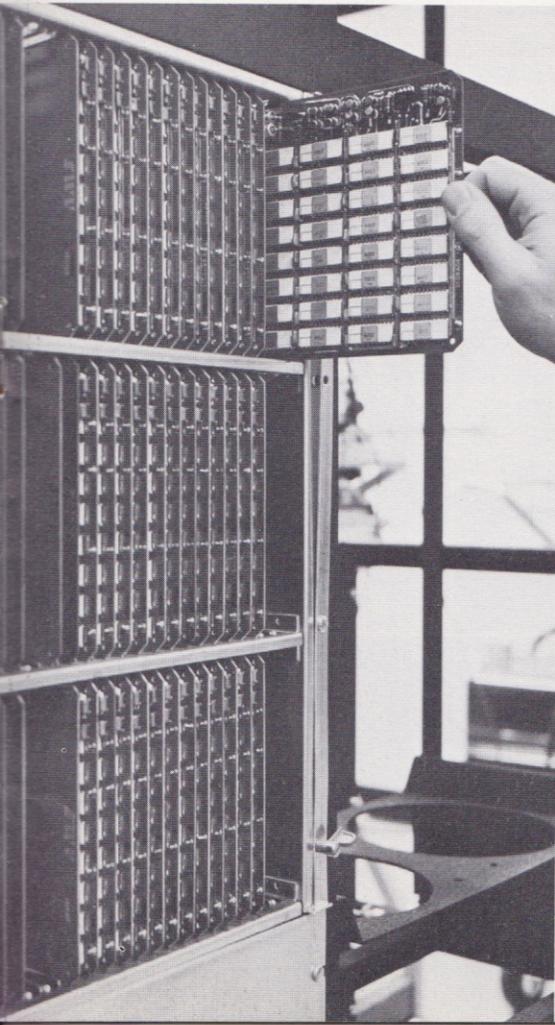


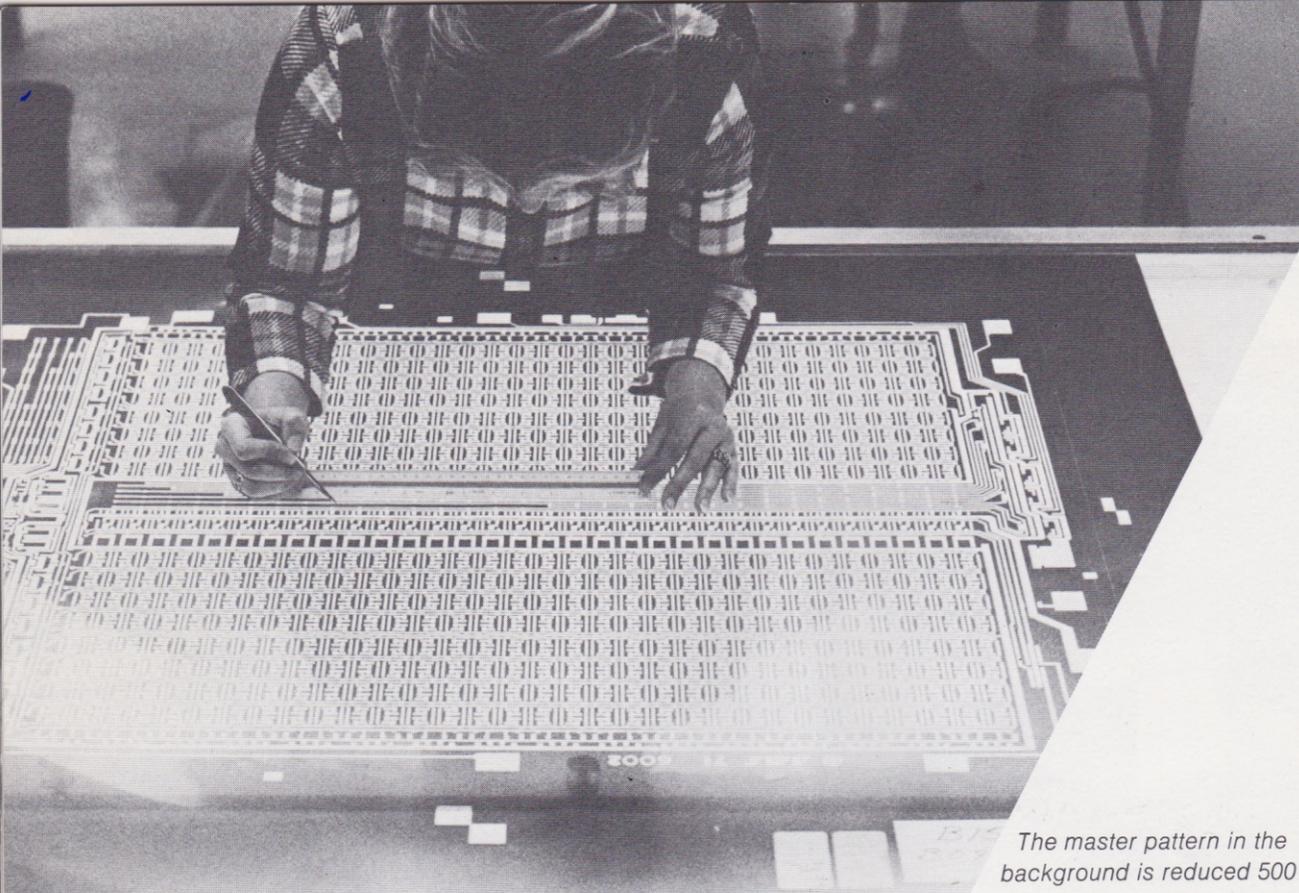


Basic Storage Module).
 bits of memory storage
 2,144 positions (or bytes)
 del 65). (Below)

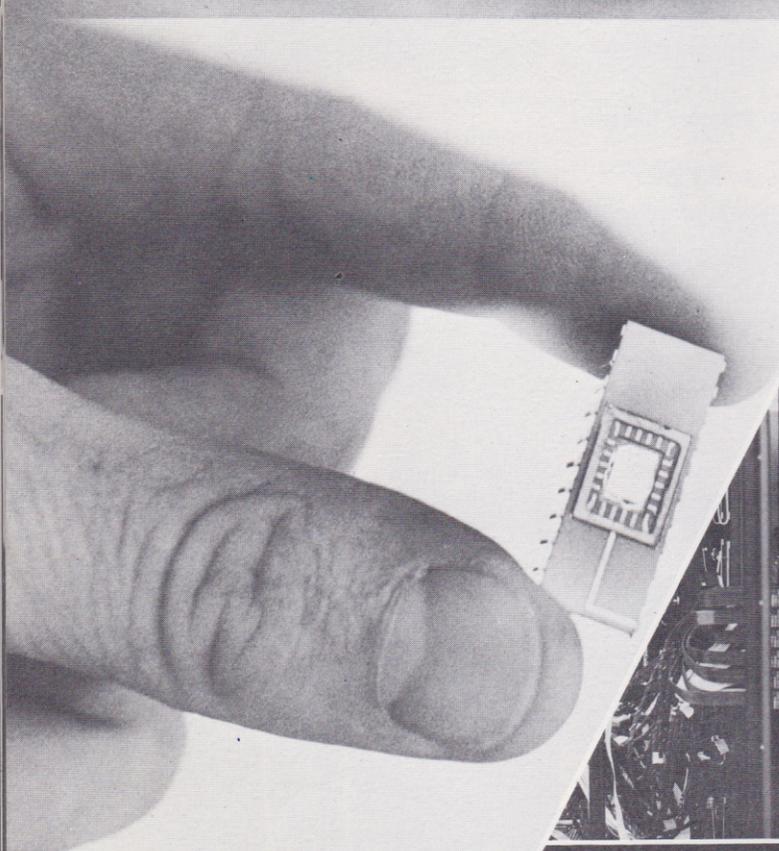
IBM System/360 computers used for final performance
 evaluation of AMS' Add-On Memory Systems.

A portion of the systems assembly area.

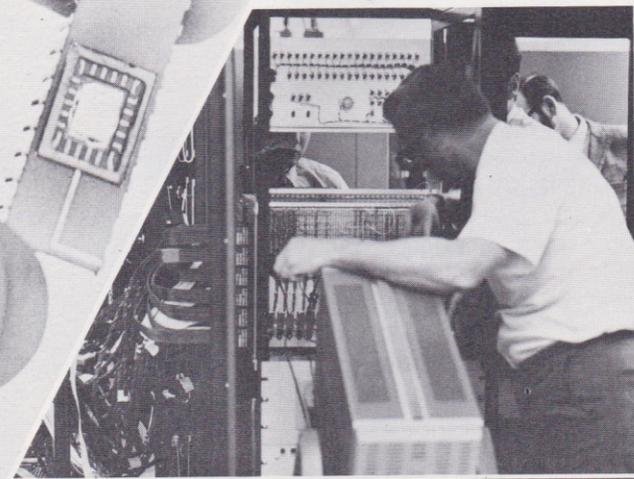




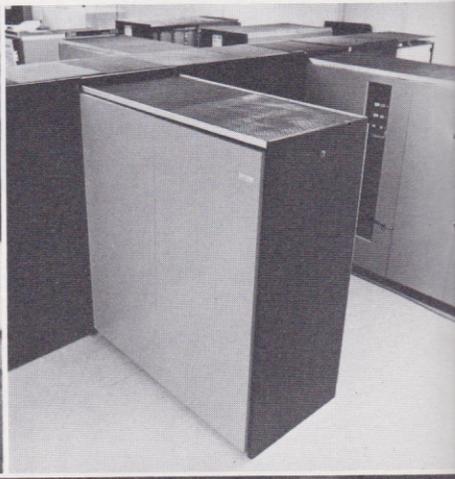
The master pattern in the background is reduced 500 times to create the semiconductor device shown in the foreground.



Systems checkout during assembly operation.



The AMS add-on memory for IBM System/360 Model 65 computer which contains up to 8 Basic Storage Modules with 2,097,152 positions (or bytes) of storage.



Exterior view of the new facility for systems assembly and research and development.

End user products are marketed primarily by ITEL Corporation whose force of over 20 direct salesmen is augmented by our own end-user marketing staff.

Foreign sales of products other than add-on memories are handled by an overseas representative with offices in London, Munich, Geneva, Stockholm and Tokyo, with assistance from company personnel.

During the past year AMS has more than doubled plant size, and has obtained options for additional facilities which will be almost totally allocated to manufacturing and research/development.

AMS is currently planning the development, manufacture and marketing of add-on main memory systems for the recently introduced IBM System/370—the newest generation of IBM computers. We will therefore be in a position to manufacture and deliver such systems at the very beginning of the product life cycle of the 370—rather than toward the end of the product life cycle as was the case with the 360.

We have developed an MOS memory component with more than 2,000 bit-per-chip capacity. We are experimenting with new, lower-cost packaging methods for MOS devices to generate even more attractive pricing structures. AMS plans to emphasize OEM sales activities which will capitalize on end-user systems acceptance while continuing to develop a broader customer base for all products through a growing network of factory representatives and distributors.

AMS' confidence in the intrinsic values of semiconductor memory is being confirmed by growing industry acceptance of our product line. As of the publication of this report, AMS has delivered semiconductor memory products that have a performance history of more than 80 million device hours.

AMS memory systems have found widespread acceptance and application in a remarkably short period of time. We are confident we will continue to grow with expanding markets while exploring new and innovative techniques for design, development, sales and service.

BALANCE SHEET

September 30, 1971 and 1970

Assets	1971	1970
Current assets:		
Cash	\$ 120,998	\$ 94,766
Time certificates of deposit and marketable securities, at cost plus accrued interest (which approximates market)	1,227,501	749,653
Trade accounts receivable, less allowance for doubtful accounts of \$1,532 in 1971 and \$2,000 in 1970 (Note 1)	746,019	143,519
Inventories, at lower of average cost or market:		
Raw materials and supplies	248,628	76,085
Work in process	624,811	172,308
	<u>873,439</u>	<u>248,393</u>
Prepaid expenses	47,208	22,176
Total current assets	<u>3,015,165</u>	<u>1,258,507</u>
Machinery, equipment and leasehold improvements, at cost (Notes 5 and 10):		
Demonstration equipment	—	95,216
Machinery, equipment and furniture	67,458	19,333
Leasehold improvements	132,382	113,928
	<u>199,840</u>	<u>228,477</u>
Less accumulated depreciation and amortization	37,769	27,472
Net machinery, equipment and leasehold improvements	<u>162,071</u>	<u>201,005</u>
Other assets:		
Deposits—lease and other (Note 7)	255,216	331,094
Deferred financing costs, less amortization of \$11,288 in 1971 and \$7,304 in 1970	39,447	20,586
Organization expense, at cost less amortization	1,800	2,700
Unrecovered preoperating costs, less amortization of \$383,632 in 1971 and \$191,800 in 1970 (Note 2)	191,871	383,703
	<u>\$3,665,570</u>	<u>\$2,197,595</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 521,577	\$ 172,319
Accrued liabilities	101,461	31,095
Installment note payable—due within one year	—	1,200
Total current liabilities	<u>623,038</u>	<u>204,614</u>
Installment note payable—due after one year	—	3,100
6½% convertible notes payable (Note 4)	500,000	500,000
Commitments and contingencies (Notes 7 and 8)		
Stockholders' equity (Notes 3, 4, 9 and 11):		
Preferred stock, \$10 par value; 300,000 shares authorized, 30,000 shares of convertible Series A issued and outstanding (liquidation preference \$100 per share, an aggregate of \$3,000,000)	300,000	—
Common stock, \$.10 par value, 3,900,000 shares authorized (929,655 shares are reserved for issuance), 867,095 shares issued	86,710	86,710
Capital in excess of par value	5,821,103	3,315,807
Accumulated deficit	<u>(3,660,981)</u>	<u>(1,908,336)</u>
	<u>2,546,832</u>	<u>1,494,181</u>
Less cost of 33,000 shares in treasury	4,300	4,300
Total stockholders' equity	<u>2,542,532</u>	<u>1,489,881</u>
	<u>\$3,665,570</u>	<u>\$2,197,595</u>

See accompanying notes.

STATEMENT OF OPERATIONS

Years ended September 30, 1971 and 1970

	1971	1970
Revenues:		
Net sales (Note 1)	\$ 2,217,211	\$ 465,967
Interest	74,275	169,763
	<u>2,291,486</u>	<u>635,730</u>
Costs and expenses:		
Cost of goods sold	1,601,769	912,176
Research and development (Note 2)	1,079,499	623,846
Selling	461,722	325,918
General and administrative	454,000	453,587
Interest and amortization of deferred financing costs	39,395	36,739
Amortization of preoperating costs (Note 2)	191,832	191,800
Suspension of end-user SSU program (Note 5)	215,914	—
	<u>4,044,131</u>	<u>2,544,066</u>
Net loss (Note 2)	<u>\$(1,752,645)</u>	<u>\$(1,908,336)</u>
Net loss per weighted average shares of common stock outstanding (Note 6)	<u>\$ (2.10)</u>	<u>\$ (2.33)</u>

See accompanying notes.

STATEMENT OF STOCKHOLDERS' EQUITY

Years ended September 30, 1971 and 1970

	Series A Convertible Preferred Stock	Common Stock	Capital in Excess of Par Value	Accumulated Deficit	Treasury Stock	Total Stockholders' Equity
Balances October 1, 1969	\$ —	\$ 84,476	\$3,315,807	\$ —	\$(4,300)	\$ 3,395,983
Exercise of employee stock options (22,340 shares) (Note 9)	—	2,234	—	—	—	2,234
Net loss	—	—	—	(1,908,336)	—	(1,908,336)
Balances September 30, 1970	—	86,710	3,315,807	(1,908,336)	(4,300)	1,489,881
Preferred stock issued for cash (30,000 shares) (Note 3)	300,000	—	2,505,296	—	—	2,805,296
Net loss	—	—	—	(1,752,645)	—	(1,752,645)
Balances September 30, 1971 (Notes 3, 4 and 9)	<u>\$ 300,000</u>	<u>\$ 86,710</u>	<u>\$5,821,103</u>	<u>\$(3,660,981)</u>	<u>\$(4,300)</u>	<u>\$ 2,542,532</u>

See accompanying notes.

STATEMENT OF CHANGES IN FINANCIAL POSITION

Years ended September 30, 1971 and 1970

	1971	1970
Source of working capital:		
Issuance of preferred stock	\$ 2,805,296	\$ —
Exercise of employee stock options	—	2,234
Decrease in long-term note receivable	—	6,225
	<u>2,805,296</u>	<u>8,459</u>
Disposition of working capital:		
Net loss from operations	1,752,645	1,908,336
Less charges not requiring the disbursement of funds:		
Depreciation	(87,903)	(24,585)
Amortization of preoperating costs	(191,832)	(191,800)
Other amortization	(4,884)	(4,884)
Suspension of end-user SSU program	(215,914)	—
	<u>1,252,112</u>	<u>1,687,067</u>
Additions to machinery, equipment and leasehold improvements	264,883	160,498
Increase (decrease) in deposits	(75,878)	262,469
Increase in deferred financing costs	22,845	—
Decrease in long-term debt	3,100	1,200
	<u>1,467,062</u>	<u>2,111,234</u>
Increase (decrease) in working capital	<u>\$ 1,338,234</u>	<u>\$(2,102,775)</u>
Changes in composition of working capital are as follows:		
Increases (decreases) in current assets:		
Cash	\$ 26,232	\$ (10,528)
Time certificates of deposit and marketable securities	477,848	(2,433,140)
Accounts receivable	602,500	143,519
Inventories	625,046	171,411
Prepaid expenses	25,032	16,827
Total increase (decrease)	<u>1,756,658</u>	<u>(2,111,911)</u>
Increases (decreases) in current liabilities:		
Accounts payable	349,258	(7,766)
Accrued liabilities	70,366	(1,370)
Installment note payable	(1,200)	—
Total increase (decrease)	<u>418,424</u>	<u>(9,136)</u>
Increase (decrease) in working capital	<u>\$ 1,338,234</u>	<u>\$(2,102,775)</u>

See accompanying notes.

NOTES TO FINANCIAL STATEMENTS

September 30, 1971 and 1970

1. Sales under 1970 ITEL agreement

Approximately \$1,224,000 (55%) of sales for the year ended September 30, 1971 (and approximately 91% of sales for the three months then ended) were made to ITEL Corporation (ITEL) under an agreement between the Company and ITEL. Under the agreement, which provides for the manufacture and sale or lease of add-on semiconductor main memory for IBM System/360, Models 30, 40 and 50 computers, price reductions are applicable, both retroactively and prospectively, to all sales to ITEL if certain sales volumes of specified models are achieved during the term of the agreement. Since there is no assurance that the sales volume required to achieve these price reductions will be attained and because, in man-

agement's opinion, there is a better matching of revenues and expenses by recording sales at the higher prices in light of the higher production costs at the beginning of the contract, sales to ITEL have been recorded at the higher, initial prices under the agreement (billings are at provisional rates which are less than the maximum prices). At such time in the future if it becomes evident that the lower prices will be required, the Company will record sales and related costs in amounts that will result in a gross profit percentage estimated for the entire contract. In the event that the maximum sales price is reduced, management believes the gross profit percentage will not be less than that resulting from the Company's current accounting under the contract.

2. Preoperating costs

The Company was in the development stage from October 25, 1968 (date of incorporation) to September 30, 1969. During that period all preoperating costs (including research and development) were deferred. As of September 30, 1969 the Company had developed products which were being offered for sale and concluded that it was no longer in the development stage. Commencing October 1, 1969 the Company began amortizing its preoperating costs over three years.

For income tax purposes the Company has consistently deducted preoperating and research and development costs in the year incurred and at September 30, 1971 has net operating loss carryforwards of approximately \$3,860,000 of which \$583,000 expires in fiscal 1974, \$1,717,000 expires in fiscal 1975, and \$1,560,000 expires in fiscal 1976.

3. Preferred stock

In February 1971, the shareholders approved an amendment to the Company's Certificate of Incorporation to authorize 300,000 shares of preferred stock with a par value of \$10 per share.

In May 1971 the Company issued 30,000 shares of convertible Preferred Stock, Series A. Each share of preferred stock is convertible into twenty shares of common stock (600,000 shares in the aggregate). The conversion rate and price are subject to adjustment under anti-dilution provisions. The shares of preferred stock are subject to automatic conversion into common stock should net proceeds to the Company from public offering(s) of all securities issued by it and/or from private placement(s) of its common stock aggregate \$4,000,000 or more during the period May 16, 1971 through May 15, 1973. The Company may, at any time, call for redemption of preferred shares at \$100 per share at which time the holders may elect to convert the shares so called into common stock.

The Series A preferred shares have preference in liquidation of \$100 per share and also have voting and dividend rights equal to the common shares (on an "as if fully converted" basis). The Company has reserved 600,000 shares of its common stock for conversion of the preferred shares.

The Company may not, without prior approval of the preferred shareholders issue preferred shares on a parity with or senior to the outstanding preferred shares (unless such shares are included in a public offering pursuant to a registration statement filed on Form S-1). In the event of a merger or consolidation in which the Company is not the surviving corporation, or in the event of sale of all or a substantial portion of the Company's assets, the preferred shareholders may redeem their shares for \$100 per share.

4. 6½% convertible notes payable

In December 1968 the Company issued 6½% convertible notes in the principal amount of \$500,000 due December 10, 1975 with interest payable semi-annually in June and December. The notes are subject to prepayment by the Company at any time on or after December 10, 1970 by payment of principal and interest to the date of call. Each note (principal amount—\$25,000) is convertible at any time prior to maturity into 4,687½ shares of common stock. The Company has reserved 93,750 shares of its common stock for issuance upon conversion of the notes. Holders of \$375,000 of the notes have agreed to convert their notes subject to certain events and conditions within a certain period of time following conversion of all of the preferred stock (see Note 3). Provisions of the note agreements restrict payment of dividends and repurchase of outstanding shares of stock.

5. Suspension of end-user SSU program

In July 1971, the Company decided to suspend indefinitely its end-user SSU program and to write off the cost of demonstration equipment related thereto.

6. Earnings (loss) per share of common stock

The computation of loss per share of common stock is based upon the weighted average number of shares outstanding during each period. No effect has been given to conversion of the

preferred stock or exercise of options upon common stock (described in Notes 3 and 9), both of which are common stock equivalents, or to conversion of notes (described in Note 4), since they have an antidilutive effect on the per share amounts. The outstanding preferred stock and \$375,000 of the notes are required to be converted into common stock under certain circumstances (see Notes 3 and 4). Giving effect to the assumed conversion of these securities as of the date they were issued, including elimination of interest expense on the notes, the loss per share would be \$1.53 and \$2.11 for the years ended September 30, 1971 and 1970 respectively.

7. Commitments

The Company has leased office and manufacturing space for the ten years ending December 31, 1978, with an option to renew for an additional five years. Lease rentals on these facilities are approximately \$54,000 annually through December 31, 1978, (\$28,000 annually thereafter through 1983). In May 1971 the Company leased additional manufacturing space for fifteen months, for a total rental of \$74,525.

Through October 29, 1971, the Company had commitments to lease production and test equipment and office furniture having a cost of approximately \$1,600,000. At September 30, 1971 equipment costing approximately \$1,200,000 had been leased at an approximate annual rental of \$285,000. Lease terms vary from two to six years and approximate the useful lives of the equipment. Lease deposits at September 30, 1971 approximated \$242,000, of which \$228,000 is refundable in increments based upon the Company's achieving certain backlog, profitability and balance sheet ratios.

The Company has entered into five year employment agreements with seven officers and one employee (four of whom are also principal stockholders) providing for minimum annual salaries aggregating approximately \$196,000.

8. Contingencies

The Company has been notified of claims that it may be infringing patents issued to others. These claims have been referred to counsel, and are in various stages of evaluation and negotiation. Three companies have made claims aggregating approximately \$500,000 payable over the next five years. If it appears necessary or desirable, the Company will seek to be licensed by the present and any future claimants. It is management's opinion that the amount, if any, the Company may be required to pay in the future, is not material to current operating results or financial position.

9. Stock option plan

On December 3, 1968 the Board of Directors adopted a qualified stock option plan under which, as amended, options for a total of 212,000 shares of common stock may be granted to key employees.

The option price must be at least 100% of the fair market value on the date of the grant. Options may run for a maximum term of five years from the date of grant. Options may not be exercised to the extent of more than 40% of the shares covered thereby in each of the first two years.

Additional information with respect to options is as follows:

	Options Outstanding			Aggregate Value
	Unissued Options	Number of Shares	Price Per Share	
Balance October 1, 1969		140,045	\$.10-\$11.00	\$233,751
Options granted	(29,500)	29,500	10.75- 34.88	388,413
Options exercised	—	(22,340)	.10	(2,234)
Options cancelled	2,530	(2,530)	.10- 9.75	(9,903)
Balance September 30, 1970		144,675	.10- 34.88	610,027
Options granted	(15,100)	15,100	10.75- 34.875	381,088
Options cancelled	6,950	(6,950)	.10- 26.375	(42,330)
Balance September 30, 1971	8,080	152,825		\$948,785
Options exercisable at September 30, 1971		83,980	\$.10-\$32.50	\$259,297

(cont.)

Notes to Financial Statements (continued from preceding page).

The Company has reserved 160,905 shares of common stock for the options granted but not exercised and for the shares available for grant.

The proceeds upon exercise of the options are credited to the common stock account in the amount of the par value and the excess is credited to the capital in excess of par value account. No charge has been made to income in accounting for the options.

In June 1971 the Board of Directors adopted a second qualified stock option plan under which options for a total of 75,000 shares of common stock may be granted to key employees. The option price must be at least 100% of fair market value on the date of the grant. Options may run for a maximum term of five years from the date of the grant. No options have been granted under this plan.

10. Depreciation and amortization

Depreciation of \$87,903 and \$24,585 charged to operations during fiscal 1971 and 1970 respectively was computed using the straight-line method over the following useful lives:

Description	Rate or Useful Lives
Machinery, equipment, and furniture	5 years
Leasehold improvements	5-10 years

11. Subsequent event

In November 1971, the Company issued \$2,500,000 of 8% convertible subordinated debentures due October 1, 1991 and concurrently repurchased 1,600 shares of Series A convertible preferred stock at \$100 per share for a total of \$160,000. The debentures are convertible on or after January 1, 1972, unless previously redeemed, into common stock at a conversion price of \$10 per share, subject to adjustment under certain conditions.

Report of Certified Public Accountants

The Board of Directors and Stockholders
Advanced Memory Systems, Inc.

We have examined the accompanying balance sheet of Advanced Memory Systems, Inc. at September 30, 1971, and the related statements of operations, stockholders' equity and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have previously made a similar examination of the financial statements for the prior year.

In our opinion, the statements mentioned above present fairly the financial position of Advanced Memory Systems, Inc. at September 30, 1971 and 1970 and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis during the period.

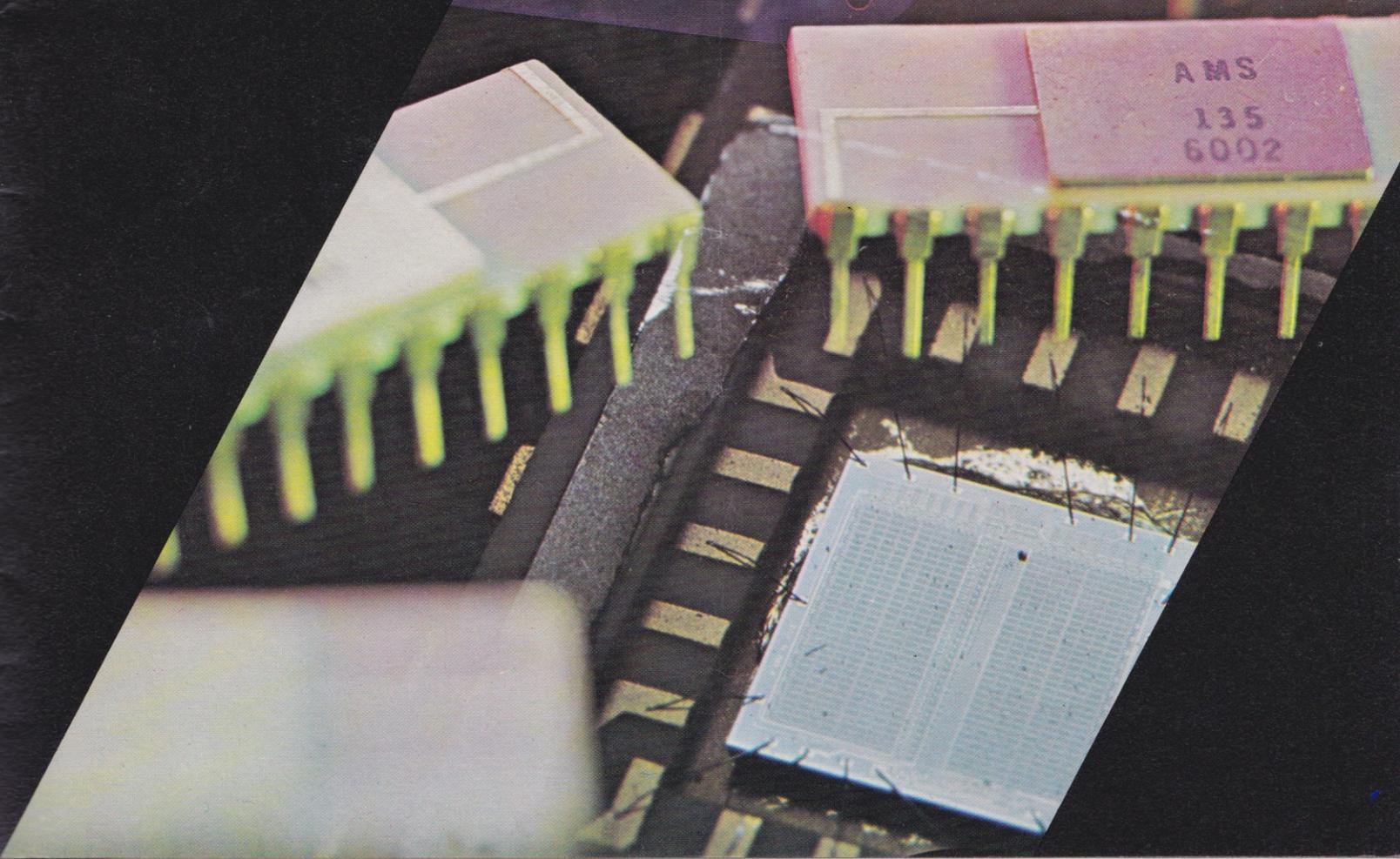
In our report dated November 7, 1970 relating to the financial statements at September 30, 1970 and for the year then ended (the preceding year) mentioned above, our opinion was qualified with respect to the recovery of the carrying value of the Company's pre-operating costs, demonstration equipment and inventory. Subsequently the Company obtained additional equity capital and the qualification of our opinion as to this matter is therefore removed.

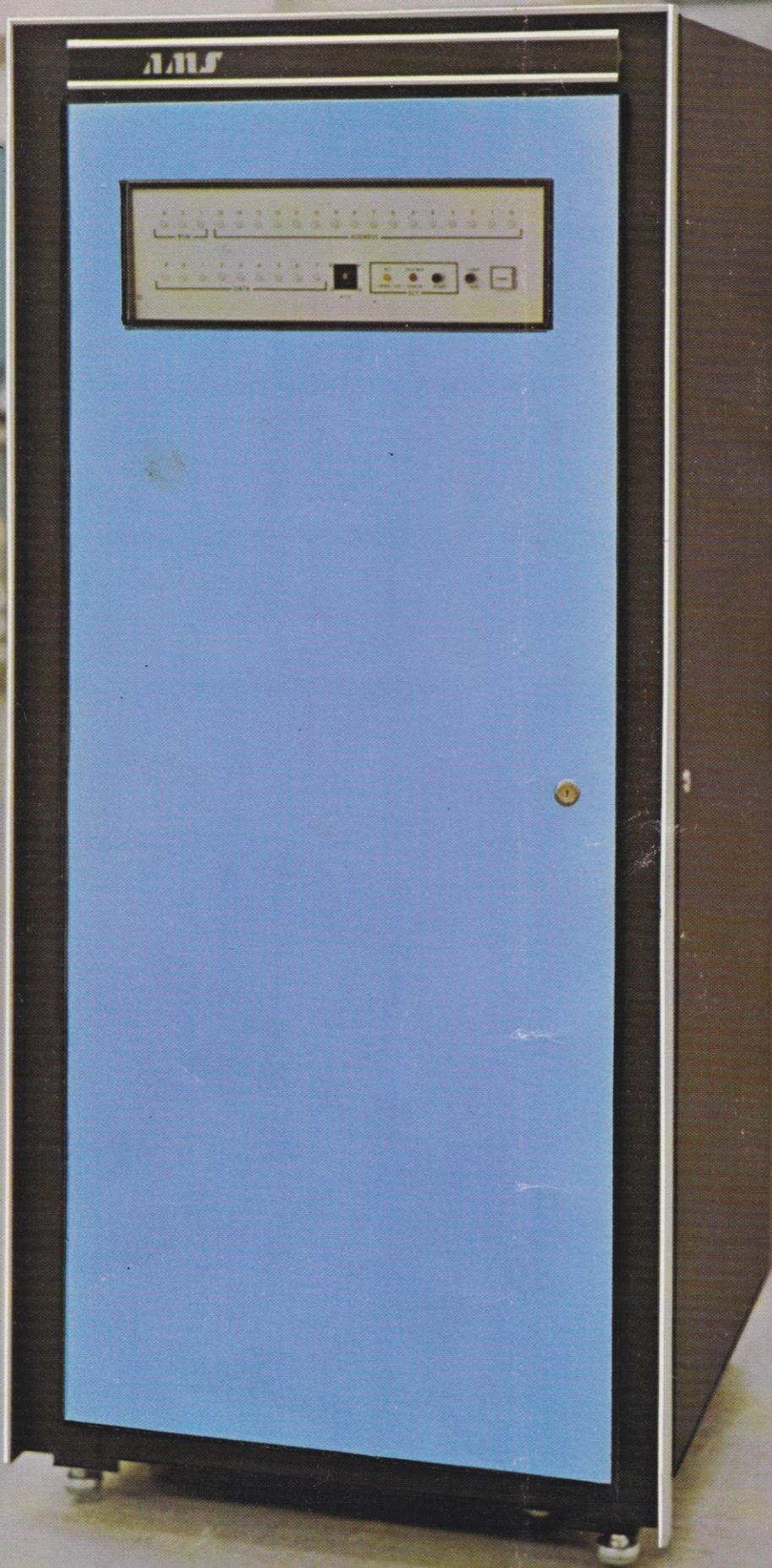
ARTHUR YOUNG & COMPANY

San Jose, California
October 29, 1971, except for Note 11 as
to which the date is November 5, 1971

Back cover: AMS Monolithic Main Memory add-on system for IBM/360 computer, Models 22, 30, 40 and 50.

Right: Photo montage showing progression (bottom to top) from an enlargement of the semiconductor element to the packaged semiconductor device to the assembled storage card used in the BSM (Basic Storage Module).





AMSTM ANNUAL REPORT 1977

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Sunnyvale, California 94086

Litho in USA