Harmon Industries, Inc. 1996 Annual Report

Signal and Train Control Systems for Railroads Worldwide

diam.s

1.00

pendinanan (h

194

armon is a leading supplier of sophisticated signal and train control products and systems. It serves three railroad markets: domestic freight, domestic rail transit, and international, which includes both freight and rail transit.

Harmon's design focus is microprocessor based and aimed toward systems and products that improve the operating efficiency and safety performance of its customers. Products include railroad signal and train control equipment, train inspection systems, rail/highway grade crossing hardware and related components.

Harmon emphasizes engineering innovation and rapid response to customer needs. Many of its products provide sophisticated and timely solutions to signal and control problems that impact the railroad industry.

Harmon is headquartered in Blue Springs, Missouri, a suburb of Kansas City. It operates from numerous facilities in the U.S., Canada, England, Switzerland, and Australia.

Harmon common stock trades on The Nasdaq Stock Market under the symbol: HRMN. Its current annual dividend is 15 cents per share. ■

#### **Table of Contents**

Financial Highlights	1
Report to Shareholders	2
Harmon Markets	4
Corporate Progress	14
Selected Financial Data	16
Financial Review	18
Consolidated Financial Statements	24
Notes to Consolidated	
Financial Statements	29
Investor Information	38
Management, Directors	
and Corporate Data	39
Locations	39

#### **Financial Highlights**

(in thousands except per share data, where applicable)

## **Operating Data**

Year ended December 31,	1996	1995	Percent Change
Net sales	\$175,440	\$ 136,780	+ 28.3 %
Pre-tax income	15,105	11,180	+ 35.1
Income taxes	5,775	4,294	+ 34.5
Net earnings	9,330	6,886	+ 35.5
Earnings per share	1.36	1.01	+ 34.7
Dividends per share	.15	.15	-0-

#### **Performance Data**

Year ended December 31,	1996	1995	Percent Change
Return on sales (pre-tax)	8.6%	8.2%	+ 4.9 %
Return on year-end equity	<b>16.1</b> %	14.0%	+ 15.0
Return on capital employed $^1$	25.9%	21.7%	+ 19.4

## Year-end Data

December 31,	1996	1995	Percent Change
Working capital	\$ 33,629	\$ 35,014	- 4.6 %
Interest-bearing long-term debt	3,412	12,090	- 71.8
Approximate number of shareholders <sup>2</sup>	637	675	- 5.6
Number of employees	1,200	1,075	+ 11.6
Outstanding shares (000s)	6,829	6,806	+ 0.3

<sup>1</sup> Return on capital employed is a measurement that encourages management to operate as efficiently as possible. It promotes reduced asset values relative to sales, and measures how effective it is (for example) to borrow money to purchase capital goods to reduce manufacturing costs. The formula is: the sum of pre-tax earnings plus interest expense divided by the sum of average total assets minus non-interest bearing liabilities.

<sup>2</sup> Includes only registered shareholders. Since many shareholders hold their shares in "street name," the number of individual shareholders is larger than the number shown.

N 1996, WE CELEBRATED OUR 50TH ANniversary by delivering the best year ever for Harmon. Incoming orders increased 35% to \$187.5 million. Shipments rose 28% to \$175.4 million. Earnings before taxes were \$15.1 million, and net earnings increased 35% to a record \$9.3 million, or \$1.36 per share. Our order backlog grew to \$59 million from \$49 million at 1995 year-end. This performance was especially noteworthy because it was achieved in a year when the rail supply industry as a whole was experiencing weak sales and earnings.

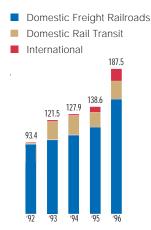
Our record breaking performance in 1996 was due largely to a combination of leadingedge technology, a partnership-service concept that we introduced four years ago, a marketing strategy that commits us to grow simultaneously in three markets: domestic freight, rail transit, and international, and superb performances by our dedicated and talented employees who enabled us to reach our 1996 objectives.

#### **Growth Strategy**

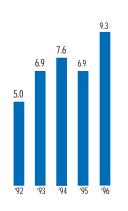
As Harmon continuously develops smarter, smaller and less expensive products, it needs to grow its markets correspondingly. Consequently, we are working on a growth strategy that dictates that we maintain our strong position with our domestic freight railroad customers in our traditional product areas while adding new products and services. It also requires us to enhance our established position in the North American rail transit market, and seek meaningful expansion within international markets with basically similar products and technology that we provide to our domestic markets. This latter focus is particularly important as the international markets are roughly eight times as large as our domestic markets.

DOMESTIC FREIGHT. We received record orders of \$151 million in 1996. These were 34% above 1995's intake and 94% ahead of our 1992 level. Part of that five-year growth is the result of our having increased the number of our service offerings over the past several years to include asset management and on-time deliveries. Among our order gains for 1996 was our first turnkey signal system installation. It entailed the design, manufacture and in-

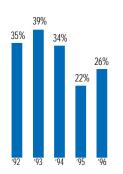
#### Orders Booked \$- Millions



Net Earnings \$- Millions







stallation of microprocessor interlockings, track circuits, hot box detectors and rail/highway crossing systems for 150 miles of track at Stampede Pass in Washington. We completed the job in just six months. The speed of our performance was appreciated by the customer and confirmed Harmon as a major force in timesensitive turnkey installations.

In 1996 we saw a continuing change from product business to systems business, which, because of the size of systems, intensifies the need for close, partnership relations. We intend to expand our services gradually by expanding the partnership concept to include repair shops, installation services, spare parts pools, proactive maintenance and other services.

RAIL TRANSIT. We booked orders aggregating \$22.5 million in 1996, a 19% increase from 1995 and a ninefold gain over the past five years. This year's orders included a \$17.6 million contract to design and build a train control system for New Jersey Transit's new light rail line. This was the largest single contract ever awarded to Harmon. Other highlights included our completion of the CTA Green Line rehabilitation project in Chicago in which we acted as its main transit signal and systems supplier, an invitation from the New York City Transit Authority to participate with other signal suppliers in its planning process for future train control systems, and the Florida Department of Transportation's agreement to award a consortium, of which Harmon is a member, a franchise to build a 200 mph passenger train system to link Miami to Orlando and Tampa.

■ INTERNATIONAL. We booked orders amounting to \$14.3 million in 1996, more than twice what we received in 1995 and 14 times what we got in 1992. The gain last year was sparked by our acquisition of Vaughan Harmon Systems Ltd., which produced orders in excess of \$10 million. Vaughan Harmon is an industry leader in Europe for software and systems, which gives us a strong entry into the European market. Moreover, we expect our technology and products will be a major factor in growing Vaughan Harmon's business. The market in the UK is presently very strong as, after 2½ years of little capital spending, Railtrack is now planning a major upgrade of its track systems, which presents a strong opportunity for us.

#### **Strategy Validation**

Our growth over the past five years is strong evidence that our strategy is working, and we were very pleased with our performance in 1996.

#### **Strategic Goals**

Within our strategic plan, we have identified six areas where we need to be better than our competition: customer service, quality/reliability, fast cycle times, cost effectiveness, technology and systems integration.

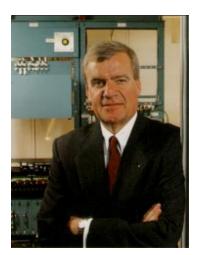
In order to further improve our *customer service*, we merged our three domestic operating subsidiaries into the parent company. We took this step to improve operations internally by assigning total responsibility along functional lines rather than through corporate subsidiaries. We also acquired two contract engineering companies in Florida, and they will enhance our industry position as a signal and engineering design company.

To improve our *quality/reliability* we focussed close attention on various manufacturing and other processes. We now have two of our facilities TICKIT certified, and all but two ISO-9000 certified.

To improve on our *cycle times*, we reinforced our project management resources. This was instrumental in our getting the CTA rehab contract in Chicago and the 150 mile signal system turnkey installation contract at Stampede Pass last year, as both were extremely time sensitive. This focus has enabled us also to reduce our system delivery time from 90 to 60 days.

We are approaching *cost effectiveness* as it relates to the total cost incurred by customers. This includes the cost of the product, its installation cost, its subsequent maintenance cost, and the time involved to complete a project. As a result of this focus, we find that our on-time complete delivery service for signal installations has reduced installation costs by 30-40%, resulting in material savings for the customer.

To maintain our *technology* leadership, we spend an average of four percent of each sales dollar on research and development, which is yielding exciting technology. Last October, we demonstrated our ITCS high speed train

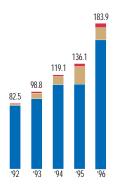


Björn E. Olsson President and Chief Executive Officer

#### Gross Sales \$- Millions

Domestic Freight Railroads
 Domestic Rail Transit

International



control system in Michigan. Amtrak ran a passenger train at speeds up to 101 mph over a distance of 20 miles. Amtrak's goal is to reduce the trip time between Detroit and Chicago from 5¾ hours to 3½ hours or less, a major advance in enroute speed, which has already triggered some international interest. Our system provides a cost effective means of improving safety and reducing travel times because it can be integrated into other control systems currently in place. In addition, our advanced technology and patented method of applying cab signalling on board AC traction locomotives generated substantial business for us in 1996.

The trend towards *increased systems integration* is continuing. In this respect, Harmon is building up capabilities not only to integrate its products into a system, but also to provide an interface for other existing systems. This will enable us to supply our products to the replacement market, regardless whether Harmon or another company made the original system.

## **Growth Outlook**

We strongly believe that we will be able to maintain our growth through the remainder of the 20th Century. Most of the growth should come through additional services for the freight railroads in North America and from increased business both in the transit and international markets.

The near-term perspective is more difficult to predict because of the ongoing merger activities among the North American railroads. We are presently experiencing a slowdown in our business as some railroads are deferring certain capital expenditures, pending the outcome of ongoing negotiations.

But as we saw in 1996, once the mergers are completed, there is much work to be done to consolidate track systems, which should give us many sales opportunities. On balance, 1997 is expected to be another strong year for Harmon.

au tar

Björn E. Olsson *President and Chief Executive Officer* Blue Springs, Missouri, March 21, 1997

ARMON SUPPLIES signal and train control systems, products and services to three rail markets: domestic freight, domestic rail transit, and international, which is comprised of both freight and rail transit customers. Our strategy is to develop lasting relationships with customers by providing safe, efficient and technologically advanced products and services that enable them to enhance their productivity.

An analysis of each market and the validity of our business strategies for each of our three major markets follow.

#### **Domestic Freight and Service**

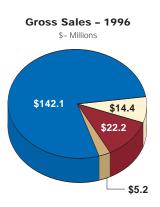
Domestic freight carriers purchase several hundred million dollars in signal and train control systems and products annually. We derive the majority of our revenues from this market. Our market share is roughly 30 percent. Our sales volume increased in each of the last five years, concrete evidence of how well our business strategy is working.

#### Growth Potential

We have both a technological lead in products and systems, and a complete service operation. Our near-term growth potential lies principally in increasing the amount of services we provide. Over the longer term, we see an increase in the size of this market.

One of the railroads' ongoing requirements is to reduce costs and increase the utility of their rolling stock and infrastructure. These needs play to our strengths.

Our product focus, in addition to providing safety, has always been to develop products that provided direct cost savings or enhanced our customers'



- Domestic Freight
- Domestic Service
- Domestic Rail Transit
- International

During the past five years Harmon increased its business substantially by entering the service business as well as the new project market for domestic rail transit and the international market. efficiency, or both. Our advanced signal and control systems, for example, enable railroads to achieve substantial cost savings quickly because Harmon systems provide a rapid payback. Thus the opportunity to reduce operating costs has become a strong incentive for the railroads to make cost-saving equipment and system purchases, regardless of market conditions.

#### • Effect of Railroad Mergers

Railroad mergers are a fact of life. While merger negotiations are in progress, an uncertainty sometimes surrounds the involved railroads' intentions regarding their near-term capital goods purchases. In general, the more ambitious and expansive projects are put on hold until the merger negotiations run their course.

Once the merger is completed, our sales often increase for a period while the new railroad seeks to modernize and consolidate its operations with more cost effective equipment.

Mergers also tend to foster the sale of marginal operations to short line railroads. This often means that these "feeder" railroads will also require some revamping of their signals and controls. Further, short line railroads often lack the staff to assemble the components and install them, a situation that is tailor-made for our service organization.

Thus it can be fairly said that anticipated sales often shrink while merger talks are in progress and then for a time grow to above average levels once the merger is either completed or abandoned.

Domestic freight rail is indispensable. It is the only transportation system capable of carrying massive loads. This market is Harmon's largest source of revenue, providing 77% of its shipments in 1996.





#### Competitive Position

We occupy a dominant position in the signal and train control sector of the domestic freight market.

## Technology

Our product development continues to capitalize on advances in technology. Communications-based signalling, a subject of intense interest in both the freight and rail transit markets, is a major focus of our R&D efforts. This concept uses radio data communications to convey operating instructions between computers on the ground and computers on trains, rather than relying on human operators to correctly interpret trackside signal lights. Combined with a means such as Global Positioning Satellites (GPS) to let the on-board computer know its exact location on the track, these innovations can greatly improve the efficiency of train operations while simultaneously enhancing their safety.

Our Incremental Train Control System (ITCS), which is being installed on a portion of Amtrak's high-speed rail line between Detroit and Chicago, is a form of communications-based signalling. It enables trains to operate safely at higher speeds than previously, making them more competitive with air travel in many instances. A short segment of the system was demonstrated successfully last October. It is now being expanded to complete a 71 mile corridor, which will be operational in late 1997.

We also have a strong lead in on-board cab signal systems. Our Ultra Cab II, combined with a unique patented antenna, is the only such product that can operate successfully in the face of intense electrical interference generated by new, high-power AC traction locomotives. Amtrak's High Speed Test Run



Harmon's Incremental Train Control System (ITCS) successfully passed its initial test phase last October on a 20mile track section of Amtrak's line in southwestern Michigan. This is the first step toward Amtrak's realization of rail service between Detroit and Chicago at speeds in excess of 100 mph. In keeping with its philosophy of designing cost effective products, the Harmon ITCS was made to operate with existing signals and controls, thus

making it highly affordable.

For many years, our Electro Code products have been in wide use by domestic railroads. These products carry information through the rails between trackside block signals and eliminate the need for wayside pole line. Thousands of miles of pole line have been replaced with Electro Code, with a resulting major increase in operating reliability and safety.

Our Vital Harmon Logic Controller (VHLC) is the product of choice of most freight railroads for control of signals and switches at interlockings. Its outstanding performance record and cost effectiveness have led to installations of nearly 900 units, more than any other competitor's product worldwide.

#### Service Advantage

Service has evolved into a major line of business for us, adding \$22 million to our revenues in 1996, up 57 percent from that of the previous year. Our service arm warehouses commonlyused signal components (regardless of which supplier manufactured them); manages customers' off-premise signal and control inventories; and performs assembly of component parts. These functions give us the ability to manage even complex projects from beginning to end, which provides us with a powerful competitive advantage.

Adding project management to our expanding list of services proved timely. Last year we completed a \$13 million contract to modernize a freight railroad's signal system at Stampede Pass in the Cascade Mountains. Time to completion was a crucial element. Upon completion, it would enable our customer to materially increase its freight traffic, thereby enhancing its revenues.

We furnished and installed all the signal equipment on 150 miles of main line, plus six passing sidings and numerous rail/highway crossings. The project used a broad spectrum of our products: HXP-3 for crossings, Electro Code for track circuits, VHLC controllers for interlockings, plus the signals themselves and

 Harmon's technological lead over its domestic competitors is due largely to its R&D focus, which averages four percent of every sales dollar.



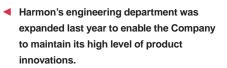
other accessories. To maximize our installation productivity, our service warehouse assembled complete installation kits and shipped them directly to the site. Despite unfavorable weather and other obstacles, we finished the project on schedule—a feat considered impossible by many.

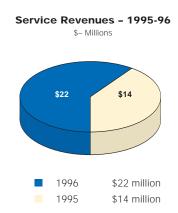
#### 1996 Results

During 1996, our incoming orders from the domestic freight market were \$151 million, an increase of 34 percent over the previous year. Our 1996 shipments to freight railroad customers were \$164 million, up 51 percent from those of 1995. Our year-end backlog for domestic freight was \$25 million.

#### • Summary—Domestic Freight and Service

We have steadily increased our sales to the domestic freight railroad market year after year. We are also helping to enlarge this market by providing contract services in addition to our manufacture of products and systems. Contract services have enormous potential. They come at a time when the domestic freight railroads are heavily focussed on their primary missionmoving freight economically. Consequently, many are downsizing their ancillary roles to reduce operating costs, outsourcing many service and purchasing functions they formerly did for themselves. We believe contract services may well grow in size to rival our product and systems sales. It has certainly given Harmon an additional sales opportunity that most of its principal competitors do not possess. Consequently, we find our business is growing at a time when some of our competitors' volumes are shrinking.





The addition of a project management function to Harmon's service organization and a sizable increase in shipments to existing customers helped service revenues increase 57% in the past year.

#### **Domestic Rail Transit**

The size of the domestic transit market for our products is roughly the same as that of the domestic freight market — in excess of \$300 million annually. We have long served the repair and renovation side of this market, but the new project side is relatively recent for us. We entered it in 1991. That year the St. Louis Metro Link rail transit system accepted our electronic signal solutions, and awarded us a contract to supply its signal and control systems. Their acceptance of our electronic innovations became a defining moment in Harmon history. Shortly thereafter, microprocessor-based systems became widely accepted for domestic rail transit signal products and systems.

#### • Fundamental Differences

There are major differences between freight and rapid transit customers and how business is done in the rail transit market.

- The transit market involves moving people, not freight. Thus, in addition to safety and efficiency, other considerations such as train frequency and comfort are extremely important issues.
- Unlike the freight railroads, which are generally focused on improving or extending existing facilities, the transit market is involved in major new starts as well as upgrades to its current signals and controls.
- In some instances, new "turnkey" construction projects are so large that only huge corporations or consortiums can function as the general contractor. In these situations, Harmon takes on a subcontractor role for its portion of the project. For other projects, Harmon's increasing size and proven track record are enabling it to act as a prime contractor.
- In many cases, the buyer is a municipal authority, not a private company. Since municipal authorities often lack the technical expertise to design a system, they



frequently rely on consultants to draw up the detailed specifications. As a result, consulting firms are the gate keepers to projects. Initially, rail transit consultants often ignored our microprocessor technology, preferring to support older mechanical relay systems. Our initial success in St. Louis, followed by subsequent installations in Chicago, Denver, New York, Philadelphia, and San Diego, established the superiority of our systems. Many rail transit consultants are now among our most enthusiastic supporters. Winning them over was a critically

ning them over was a critically important milestone in our sales strategy.

 In general, sizable fluctuations in orders received in any given year are to be expected simply because the market consists of a relatively small number of immense projects rather than a great volume of smaller

orders, which are typical in the freight markets. In addition, many projects are spread out over several construction phases, which may extend from two to five years, or more. Thus, winning the signal and control portion of a rail transit project often translates into large order backlogs that may take several years to complete. We expect to build such a backlog over the next several years, which will tend to balance out yearto-year fluctuations in shipments.

- For the most part, rail transit projects are funded by federal, state and local governments. The funding is being driven, at least in part, by public pressure to relieve congestion on already crowded highways and to reduce the air pollution that accompanies automobile use. Rail transit has strong support in Washington, which suggests that a reasonable level of federal funding will be in place for at least several years.
- Harmon microprocessor technology is being embraced by rail transit authorities. Last year, orders for Harmon rail transit equipment reached \$22 million.



Rail transit is often seen as the best solution for relieving traffic and attendant air pollution in major cities in the U.S.

#### Market Potential

Domestic rail transit continues to expand. We expect to bid on signal and control system contracts approximating several hundred million dollars for rail transit projects in 1997 – both new and upgrade projects. Sources within the industry indicate that projects of similar magnitude are likely to be put out for bid each year through the year 2000.

#### 1996 Results

At year-end 1996, our rail transit backlog was

\$24 million, 74 percent in new construction and the balance in repair and upgrade work. The new installation backlog consisted principally of a \$17.6 million contract awarded in November, 1996, for us to design and build a microprocessorbased train control system for a 9.5-mile light-rail system that will connect the New Jersey cities of Bayonne and Hoboken. This project includes equipping 43 transit with Ultre Caburgita

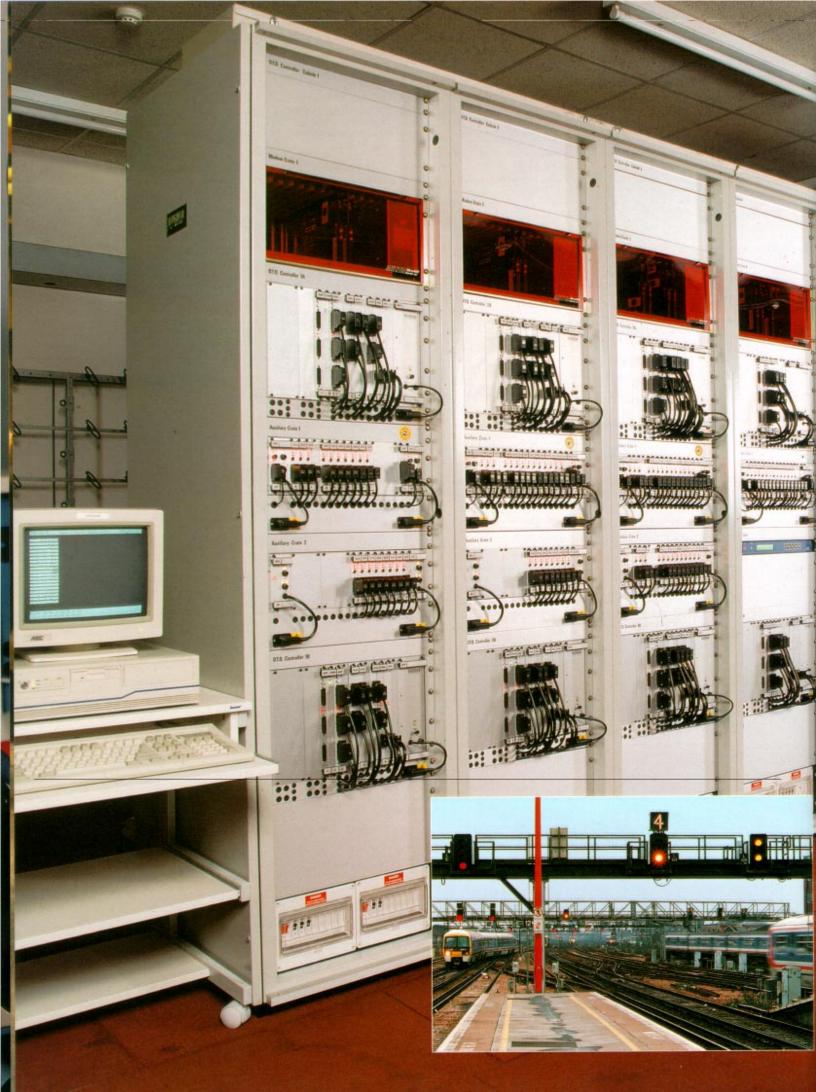
cabs with Ultra Cab units.

Total contracts received in 1996 were \$22 million, up 19 percent over 1995 awards. Shipments for 1996 were off 32 percent at \$14 million, which reflected a drought in rail transit contracts awarded in 1995 and early 1996.

## • Summary – Rail Transit

The outlook is quite positive. Our products and systems are gaining greater acceptance each year, largely because of their exemplary performance on jobs undertaken during the past five years.

We have learned how to do business in this environment. We have been able to join forces with some of the largest railroad builders in the world to assure our participation in the multimillion dollar projects that are now in various stages of planning. In addition, we have increased our service and project management staffs so that we can be the prime contractor on installations such as the \$13 million Green Line project in Chicago. Finally, the amount of planned new projects and repair and upgrades to existing systems is larger than at any time in recent memory.



#### International

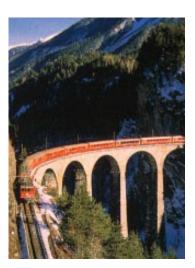
The international market dwarfs the domestic market. It is estimated at \$4-\$5 billion annually, roughly eight times that of the North American freight and rail transit markets, combined.

The international market holds enormous potential for Harmon. In many parts of the world, notably China, India, Southeast Asia, Africa, Latin America, and the former Sovietbloc countries, significant investment in the railway infrastructure is under way or being planned, with the addition of new lines, modernization of existing lines and expansion of passenger services.

Railroads in the UK, South America and the European Continent are presently undergoing a wave of privatization. Declining government subsidies to the former state-run railways are creating greater demand for products that deliver improved efficiency while assuring safe and reliable operations. This new attention to economics opens the door for our products, as cost effectiveness with safety has been a major product development focus of Harmon for 50 years.

Our products and technologies continue to attract growing attention on the international front. We anticipate an opportunity to demonstrate our interlocking controls and crossing warning systems in the UK in 1997. Greater acceptance of our products in Australia is providing Harmon with expanding business opportunities there. In China, our established hot box detector business is expanding, and several railroads have shown interest in testing other Harmon products. In 1996, we were awarded a contract to resignal the first 39 km of a 900 km mining railroad in Brazil, with potential for the remainder to follow over the next several years. Other areas in South America, along with major markets in Europe and Southeast Asia, are fertile markets for Harmon's products.

Vaughan Harmon Systems Ltd., which we acquired last July, is a premier railroad software developer in the UK and a market leader in the manufacture of train describers (shown at left), passenger information and modular railway control systems, which control many passenger and commuter trains in the UK. It produced \$10 million in new orders in the first six months we owned them.



Compared to the domestic railroad market, the international market is roughly eight times larger. An emphasis on products that deliver cost savings as well as safety has increased Harmon's potential for international sales.

#### • 1996 Results

In 1996 we booked orders aggregating \$14.3 million, up 107 percent from \$6.9 million in 1995. Shipments rose 30 percent to \$5.2 million from \$4.0 million in 1995. The considerable growth in 1996 included enhanced sales of our hot box detectors, completion of a major cab signalling system in Australia, and the introduction of software and several hardware products, which we obtained when we acquired UKbased Vaughan Harmon Systems Ltd. last July.

Vaughan Harmon is a premier railroad software developer with a market leading position in the UK specializing in train describer systems, passenger information systems and modular railway control systems. In the first six months after the acquisition, Vaughan Harmon produced \$10 million in new orders.

A key benefit that Vaughan Harmon brings is being a recognized and respected rail systems supplier within the European Community. Thus, in addition to having a strong local presence in the UK, Vaughan Harmon will serve as the platform for Harmon's growth into the broader European signalling market.

#### Summary – International

Long-term, the international market affords us great promise because of its enormous size. Numerous rail projects are either already underway or in planning stages. In addition, the benefits of more cost-effective signal and control systems are now gaining increased attention overseas.

Although our market penetration is growing each year, it remains small relative to the overall market potential. Our growth strategy is threefold: to foster additional partnership relations with multinational railroad supply companies; to gain additional market inroads and rapid acceptance through acquisitions of established, local rail suppliers, and to increase our direct physical presence in overseas market areas. URING THE PAST SEVERAL YEARS, WE have been reshaping Harmon so that it could achieve our expanded growth objectives here and abroad. That effort was intensified last year.

Some of the major issues were: adding staff to service our rail transit and international markets; expanding our research and development efforts; accelerating product development; introducing modular construction so that our products could be readily modified to function equally well for freight rail or rail transit —both at home and overseas; reshaping the corporate structure along functional lines for better customer service; and finally, managing our cash flow so we could accomplish what we set out to do.

In the space of five years, we:

- Entered the new project segment of rail transit, which generated over \$53 million in shipments, and produced a \$24 million backlog at year-end 1996;
- Effectively expanded into the international market, which has since provided shipments of more than \$12 million, including \$5 million last year and a year-end backlog of \$11 million;
- Increased the size of our design and engineering staff by 164 percent. We expanded
  our engineering facilities at two locations
  and purchased two engineering companies
  last year;

#### **Product Development**



Unrelenting development of signal and train control systems has enabled Harmon to widen its position as a top supplier of such systems to freight railroads in North America.

- Created a separate service organization that developed aggregate shipments of more than \$70 million since 1991, and \$22 million in 1996. It has been instrumental in our ability to take a complex project from beginning to end. This capability enabled us to complete the Stampede Pass project last year in record time;
- Established partnership relations with several major builders of rail transit systems, domestic as well as international;
- Increased our bonding power to a point where we can bid on any project that fits our capabilities;
- Obtained ISO 9000 certifications for nearly all our operations, including three last year; and finally,
- Materially streamlined our organizational structure in 1996. The new structure enables us to be more productive and simultaneously more responsive to our customers' needs.

These accomplishments, which often involved substantial expenditures, were made during a five-year period which saw Harmon revenues increase 147 percent from \$71 million to \$175 million and net profits grow from less than \$1 million to more than \$9 million.

We believe our past record is evidence that our overall strategy is working and that it is possible to build for the future internally and expand revenue and earnings at the same time. These accomplishments are the bases for our confidence in the future. ■

Stampede Pass, Washington. Here Harmon modernized a freight railroad's signal system in record time. Without having built up our service staff last year, we could not have undertaken the project.



# Selected Consolidated Financial Data (Unaudited)

(Dollars in thousands, except per share data)

Years ended December 31	1996	1995	1994	1993	1992	
Operations						
Net sales	\$175,440	\$136,780	\$119,703	\$ 99,295	\$ 81,899	
Cost of sales	126,997	96,094	81,023	65,716	54,271	
Research and development expenditures	6,331	5,218	4,561	3,442	3,541	
Gross profit	42,112	35,468	34,119	30,137	24,087	
Selling, general and administrative expenses	25,990	23,200	21,176	18,558	15,646	
Other operating expenses (income)	544	481	44	114	137	
Operating income	15,578	11,787	12,899	11,465	8,304	
Other expenses	473	607	214	388	1,228	
Pre-tax earnings (continuing operations)	15,105	11,180	12,685	11,077	7,076	
Income taxes	5,775	4,294	5,046	4,193	2,498	
Earnings from continuing operations	9,330	6,886	7,639	6,884	4,578	
Gain (loss) from discontinued operations					165	
Use of net operating loss carryforward		_	_	_	273	
Net earnings (loss)	\$ 9,330	\$ 6,886	\$ 7,639	\$ 6,884	\$ 5,016	
	,	,	. ,	,	,	
	00.00/	00 40/	00.00/	07.00/	05 00/	
Effective tax rate – continuing operations	38.2%	38.4%	39.8%	37.9%	35.3%	
Return on sales – continuing operations	5.3%	5.0%	6.4%	6.9%	5.6%	
Return on equity – continuing operations	16.1%	14.0%	17.7%	20.8%	30.1%	
Return on equity – total	16.1%	14.0%	17.7%	20.8%	33.0%	
Weighted average shares	6,844	6,827	6,567	6,212	5,275	
Per Share Data						
Earnings from continuing operations	\$ 1.36	\$ 1.01	\$ 1.16	\$ 1.11	\$.87	
Net earnings (loss)	1.36	1.01	1.16	1.11	.95	
Cash dividends	.15	.15	.15	_	_	
Book value	8.48	7.23	6.40	5.23	2.82	
Price/earnings ratio range	8.8-14.3	13.2-20.3	14.2-20.9	10.5-20.9	3.6-13.4	
0						
Other Data At Year-End						
Working capital	\$ 33,629	\$ 35,014	\$ 21,670	\$20,790	\$10,740	
Total assets	104,677	86,845	68,395	53,000	38,488	
Long-term debt	3,412	12,090	733	439	4,898	
Stockholders' equity	57,939	49,232	43,063	33,086	15,197	
Current ratio	1.85:1	2.60:1	2.03:1	2.28:1	1.72:1	
Quick assets ratio	1.01:1	1.16:1	1.03:1	1.32:1	.87:1	
Liabilities to equity ratio	.81:1	.76:1	.59:1	.60:1	1.53:1	
Capital additions (continuing operations)	6,371	5,532	3,242	3,189	2,154	
Capital additions (total)	6,371	5,532	3,242	3,189	2,154	
Depreciation & amortization (continuing operations)	5,004	3,906	2,621	2,121	1,936	
Depreciation & amortization (total)	5,004	3,906	2,621	2,121	1,936	
Outstanding shares (000s)	6,829	6,806	6,728	6,328	5,383	
Catstanding shares (0003)	0,020	0,000	0,720	0,020	0,000	

1	991	1990	1989	1988	1987	1986	Five-Year Compound Growth	Ten-Year Compound Growth
\$ 7	0,934	\$72,707	\$70,154	\$64,558	\$ 57,068	\$47,223	+ 19.85%	+ 14.02%
	5,536	47,478	46,377	42,044	37,995	30,333		
	4,000	3,414	3,200	3,669	3,318	2,360		
2	1,398	21,815	20,577	18,845	15,755	14,530	+ 14.50%	+ 11.23%
1	3,550	14,427	13,186	11,965	10,671	9,362		
	1,122	762	(263)	(27)	43	145		
	6,726	6,626	7,654	6,907	5,041	5,023	+ 18.29%	+ 11.98%
	2,118	1,504	1,244	1,301	1,519	885		
	4,608	5,122	6,410	5,606	3,522	4,138	+ 26.80%	+ 13.82%
	1,688	2,022	2,506	2,100	1,613	2,039	00 15 0/	10.00.0/
	2,920	3,100	3,904	3,506	1,909 (217)	2,099	+ 26.15%	+ 16.09%
(,	2,492) 395	(12,306)	(2,744)	(1,020)	(217)	_		
Ş	823	\$ (9,206)	\$ 1,160	\$ 2,486	\$ 1,692	\$ 2,099	+ 62.52%	+ 16.09%
Ť		+ (+,+)		+,	+ _,			
3	6.6%	39.5%	39.1%	37.5%	45.8%	49.3%		
	4.1%	4.3%	5.6%	5.4%	3.3%	4.4%		
	9.6%	53.9%	26.5%	25.9%	16.5%	20.0%		
	1.2%	(160.2%)	7.9%	18.3%	14.6%	20.0%		
	5,066	4,723	4,633	4,479	4,472	4,854		
\$	.58	\$.66	\$.84	\$.78	\$.43	\$.43	+ 18.58%	+ 12.20%
	.16	(1.95)	.25	.56	.38	.43	+ 53.42%	+ 12.20%
		.0625	.125	.125	.125	.125		
	1.48	1.20	3.19	3.03	2.59	2.34	+ 41.88%	+ 13.74%
21.9	-45.3	N/A	23.0-35.0	9.5-14.8	13.2-22.4	15.4-27.3		
S	9,660	\$ 7,955	\$ 14,444	\$   7,037	\$11,870	\$ 11,599	+ 28.34%	+ 11.23%
	6,575	41,408	48,082	42,948	37,984	34,045	+ 23.41%	+ 11.89%
	1,915	17,220	17,688	12,139	14,621	13,793		
	7,377	5,747	14,756	13,557	11,604	10,470	+ 51.01%	+ 18.66 %
1	1.71:1	1.49:1	2.08:1	1.45:1	2.17:1	2.36:1		
	.76:1	.66:1	.84:1	.60:1	1.09:1	.96:1		
3	3.96:1	6.21:1	2.26:1	2.17:1	2.27:1	2.25:1		
	1,098	2,187	2,236	1,830	1,504	2,212		
	1,098	4,521	4,589	9,886	3,552	2,212		
	2,022	2,410	2,373	2,541	2,481	2,074		
	2,022	3,511	3,185	2,834	2,531	2,074		
	4,998	4,790	4,628	4,478	4,472	4,472		

## Overview

Harmon's overall business has been on an upward trend for the past several years. It continues to increase its sales with its principal customers, the Class I and Short-Line Railroads, and it now occupies a strong, competitive position within the new construction portion of the rail transit market, principally because of its advanced technology and service. Its international business is also beginning to assume a meaningful role in Harmon's overall sales, increasing 29% to over \$5 million in 1996. Additionally, demand for its purchasing, materials management and pre-assembly services supplied by its asset management services business is growing rapidly as these services fill an increasing need in the railroad industry, which continues to downsize and outsource functions the industry previously did internally.

Harmon's growth has been aided also by acquisitions of businesses and/or product lines that fit its core business. In July, 1996 Harmon acquired UK-based Vaughan Systems Ltd. (since renamed Vaughan Harmon Systems Ltd.). It was a strategic acquisition to increase Harmon's sales in Europe. Vaughan Harmon is a designer of signal and control software and a leading manufacturer of train describers, passenger information and modular railway control systems, which complement Harmon's existing product line. It is a promising acquisition, producing \$3 million in sales in its first six months of ownership, and \$10 million in new orders, which will be shipped in 1997. Harmon also acquired two railroad contract-engineering firms last year, which provided a significant gain in engineering resources. In 1995 Harmon acquired the assets of Atlanta-based Serrmi Services, Inc. It provides signal design engineering and wiring and highway grade crossing services to freight railroads. In 1994 Harmon acquired the Transportation Division of Servo Corporation of America. It makes hot box detector systems and other railroad monitoring devices. It has an established position overseas, especially in Europe.

# **Profile of Current Operations**

The Company's sales are summarized by product category in the table on page 19. The table also breaks out gross sales and percentages of total sales for each of the past three years. Sales of Harmon crossing and control products by its asset management services operation are included in those separate descriptive categories. The value-added services supplied with those products are included in the asset management services category.

**Train Control Systems** include products related to the control of train movement. These include signal control track circuits (Electro Code); interlocking control equipment such as Electro Logic, the Harmon Logic Controller (HLC) and the Vital Harmon Logic Controller (VHLC); carborne equipment (Ultra Cab); computer-based control systems; train describers; and the design, wiring and installation of packages and systems comprised of these products.

**Crossing Systems** include all products related to rail/ highway crossing warning systems. The products include train detection devices (the Company's PMD and HXP, among others); flashing lights and cantilevers; and the design, wiring and installation of packages and systems comprised of these products.

Asset Management Services is a single-source, rapid delivery service of railroad components for railroad customers. It involves warehousing commonly-used parts and equipment that are manufactured by the Company and by other vendors. This service has been expanded in recent years to include asset and materials management as well as kitting of various components, which are delivered as a complete unit, ready for installation.

**Train Inspection Systems** include products that monitor the condition of trains when they pass a train inspection site, and the design, wiring and installation of packages and systems comprised of these products. The hot box detector is the principal product, which is installed beside the track to detect overheating bearings in passing rail cars, a serious condition that could lead to derailments. Other products include a sensor to identify high or wide loads and a device that detects foreign objects being dragged under a rail car.

**Printed Wiring Boards** include production of customer designed printed wiring boards for shipment to other electronics manufacturers.

**Other** sales include communication equipment and products that do not fit readily into the other five categories.

## Sales by Product or Service Function\*

	19	96	Years ended E 199	,	199	1994	
(Dollars in thousands)	Amount	%	Amount	%	Amount	%	
Train Control Systems	\$ 87,080	47.3%	\$ 55,437	40.7%	\$ 45,711	38.4%	
Crossing Systems	48,927	<b>26.6</b> %	42,375	31.1%	35,448	29.8%	
Asset Management Services	22,217	12.1%	14,194	10.4%	20,894	17.5%	
Train Inspection Systems	12,906	<b>7.0</b> %	11,360	8.4%	5,054	4.2%	
Printed Wiring Boards	5,249	2.9%	6,752	5.0%	6,307	5.3%	
Other	7,489	4.1%	5,999	4.4%	5,712	4.8%	
Total	\$183,868	100.0%	\$136,117	100.0%	\$119,126	100.0%	

\* Sales volumes shown above are gross totals and do not include cash discounts or deferred contract revenue. As a result, there are differences between the figures in this table and those presented in the Consolidated Statements of Earnings. The differences do not affect the validity of the discussion and analysis.

# **Results of Operations**

Years Ended December 31, 1996, 1995 and 1994. Net sales increased 28% to a record \$175.4 million for 1996 compared with \$136.8 million for 1995 and \$119.7 million for 1994. Net earnings increased 35.5% to a record \$9.3 million in 1996 (\$1.36 per share) compared with \$6.9 million in 1995 (\$1.01 per share). The increase in earnings from 1995 to 1996 was due chiefly to substantially higher sales in 1996. Return on equity was 16.1% for 1996 compared with 14.0% for 1995. Return on capital employed was 25.9%, up from 21.7% in 1995. Net earnings for 1995 were 9.9% below the previous record net earnings of \$7.6 million (\$1.16 a share) reported for 1994. The decrease in earnings between 1995 from 1994 was due to a higher cost of sales principally occasioned by production issues related to an acquired hot box detector line, operating inefficiencies resulting from customer-induced delays in shipments, a \$657,000 increase in research and development expenditures, and higher interest costs.

#### Sales Analysis

The railroad industry has been moving toward the purchase of entire systems and away from the purchase of individual components. This trend reflects the railroads' desires to fix operational responsibility on one supplier and to place orders with large suppliers, which have broad-based product lines, meaningful research and engineering support, and strong service capabilities. This trend has played to Harmon's strengths, which are evident in a \$31.6 million increase to \$87.1 million in sales of train control systems, a \$6.6 million increase to \$48.9 million in sales of crossing systems, and an \$8.0 million increase to \$22.2 million in sales of services in 1996 compared with 1995. The increase in train control system sales is a result of increased orders from recently-merged railroad companies, greater sales of Harmon's Ultra Cab and the initial sale of Harmon's Incremental Train Control system to Amtrak. The increase in crossing system sales primarily reflects higher levels of business with recently-merged railroad companies. Train inspection sales increased 13.6% in 1996, and generally reflected increased domestic sales. The sales gain in asset management services reflects orders that were put on hold in 1995 and subsequently released in 1996. Sales of printed wiring boards were down 22.3%, which is the result of a general downturn in that industry.

Harmon's strengths in crossing and control systems and asset management services were the principal reasons its 1996 sales reached a record \$175.4 million, which was \$38.7 million greater, or 28.3%, than those of 1995. Net sales of \$136.8 million in 1995 were 14.3% ahead of those of 1994. The sales improvement over 1994 was due to gains in train control, crossing control and train inspection system sales. Approximately half of the gain was the result of a combination of the Serrmi acquisition and a resurgence in railhighway crossing system sales. The remainder reflected gains in shipments on rail transit contracts, carborne equipment, and hot box detectors. Sales of asset management services were down \$6.7 million in 1995 when shipments were delayed because of railroad merger activity.

# Management's Discussion and Analysis of Financial Condition and Results of Operations

# **Operating Summary**

	Percentage of Net Sales			Percentage of Change			
	Years ended December 31,			1996	1995	1994	
	1996	1995	1994	over 1995	over 1994	over 1993	
Net sales	100.0%	100.0%	100.0%	28.3 %	14.3 %	20.6 %	
Cost of sales	72.4%	70.3%	67.7%	32.2 %	18.6 %	23.3 %	
Research and development	3.6%	3.8%	3.8%	21.3 %	14.4 %	32.5 %	
Gross profit	24.0%	25.9%	28.5%	18.7 %	4.0 %	13.2 %	
Selling, general and administrative expenses	14.8%	17.0%	17.7%	12.0 %	9.6 %	14.1 %	
Other operating expenses, net	0.3%	0.4%	0.0%	13.1 %	993.2 %	(61.4)%	
Operating income	8.9%	8.5%	10.8%	32.2 %	(8.6)%	12.5 %	
Other expenses	0.3%	0.4%	0.2%	(22.1)%	183.6 %	(44.8)%	
Earnings before income taxes	8.6%	8.1%	10.6%	35.1 %	(11.9)%	14.5 %	
Income taxes	3.3%	3.1%	4.2%	34.5 %	(14.9)%	20.3 %	
Net earnings	5.3%	5.0%	6.4%	35.5 %	(9.9)%	11.0 %	

The table above illustrates the percentage relationship to net sales for certain items reflected in the Company's Consolidated Statements of Earnings and the percentage increase or decrease in the dollar amounts of such items year-to-year.

Sales of the Company's signal and control systems are influenced by various factors. They include the financial condition of the railroad industry, the railroads' budgets for planned equipment expenditures and the level of activity in authorizing grade crossing warning system improvements. These improvements receive up to 80% federal support, up to an authorized limit of \$160 million. Authorization expires in 1997, and the Congress is presently working on an extension of this funding. Rail transit funding for train control and signal systems is expected to approximate 1996 levels.

The market for the remainder of the Company's products is largely dependent on the financial condition of the railroad industry, the trend of the general economy, and individual railroads' budgets for capital expenditures and repairs and maintenance. At year-end 1996, the railroad industry as a whole was healthy, and it continued to look for ways to improve profits, which includes the purchase of more efficient operating systems, the use of outsourced services, and better utilization of current capital equipment. The industry was also merger minded, which historically has reduced capital spending while mergers were pending and increased spending after they were completed.

# Gross Profit

Gross profit as a percent of sales declined to 24.0% for 1996 compared with 25.9% in 1995 and 28.5% in 1994. The decline in 1996 reflects the effect of the material increase in system sales, including the Stampede Pass project, which included wafer-thin profit margins on roughly \$6 million of pass-through sales, and an increase in asset management revenues, which traditionally provide only modest profit margins. Additionally, the Company absorbed product upgrade costs of approximately \$2.3 million in 1996. These narrow margins and product upgrade costs were modestly offset, relative to 1995, by the absence of start-up costs for the hot box detector line.

The decline in gross profit margins in 1995 from those of 1994 was caused primarily by inefficiencies in manufacturing the acquired hot box detector product line, difficulties encountered by the Company when its shipment stream was interrupted by railroad merger activity, increased R&D expenditures and from low margins obtained on pass-through sales that were part of rail transit contracts.

Traditionally, declining profit margins have negative connotations. Harmon's experience is otherwise. Management's focus is on net earnings, and less so on margins. It takes on additional lower margin business when overall increased profits are likely to occur. Its asset management service business illustrates this business concept. Standing alone, it is a low margin, but profitable business. But when linked to Harmon's total business strategy, it makes a healthy profit contribution because its function adds to the overall sale of Harmon products and systems, and it performs a service few others in the railroad industry can match. Moreover, the Company believes this service business will increase as the railroads continue to outsource their asset management and maintenance projects.

## **Research and Development**

Research and development expenses increased \$1.1 million in 1996, which illustrates Harmon's commitment to incorporating new technology into its products. The principal reason for the increase in 1996 was related to Harmon's intense efforts directed toward the continued development of its Incremental Train Control System.

Although R&D expenditures were up in absolute terms for 1996, as a percent of sales they declined fractionally because of the sharp increase in 1996 sales. Expenditures in 1995 were \$670,000 above those in 1994. In both prior years, R&D as a percentage of sales was 3.8%.

## Selling, General & Administrative Expenses

Selling, general and administrative expenses (SG&A) for 1996 were \$26.0 million, roughly \$2.8 million higher than those of 1995. The 1996 increase principally relates to the 28% sales increase, which generated more sales expense and increased profit-based incentive compensation. While SG&A expenses increased in absolute dollar terms last year, their cost relative to net sales declined for the third consecutive year—to 14.8% of sales from 17.0% in 1995 and 17.7% in 1994. The \$7 million increase in service revenues in 1996 helped reduce SG&A expenses as a percent of sales because the asset management services operation incurs proportionally less SG&A expenses per dollar of revenue than Harmon's other revenue producing units. This illustrates the beneficial effect on profits when otherwise low-margin business is added to an already profitable enterprise. Moreover, the 1996 dollar increase in SG&A expenses was only 12% above that of 1995, or roughly 40% of the increase in sales from 1995 to 1996. In short, for every dollar of increased SG&A expenses in 1996, the Company increased its sales two-and-a-half fold. Thus relative SG&A cost savings at the corporate level were a

major factor in Harmon's \$2.4 million increase in net earnings in 1996. These same expenses increased approximately \$2.0 million to \$23.2 million for 1995 from \$21.2 million for 1994. The downward trend as a percentage of net sales reflects gains in cost controls and the fixed nature of certain costs. The absolute increase in dollars each year basically reflects the result of inflation, commissions incident to higher sales volume, and additions to SG&A expenses incident to acquisitions made in 1996, 1995 and 1994. These expenses were offset somewhat in 1995 by lower profit-based bonuses.

## Amortization Expenses

Amortization expenses increased 7.3% in 1996 and 601% in 1995. The increase in 1996 is attributable to three acquisitions made that year, and in 1995 to the acquisitions of the assets of Serrmi Services, Inc. in the first quarter of 1995, and the hot box detector line of Servo Corporation of America at the end of 1994. Acquisitions in 1994 were of little consequence relative to increases in amortization expenses.

# **Other Operating Expenses**

Changes in other operating expenses were insignificant in 1996, 1995 and 1994.

# Interest Expense

Interest expense was \$724,000 in 1996, \$741,000 in 1995 and \$264,000 in 1994. The decrease in 1996 reflected lower average borrowings in 1996. The increase for 1995 reflected increased borrowings to finance acquisitions and to provide working capital that year.

## Income Taxes

The Company's effective income tax rate for 1996 was 38.3% compared with 38.4% in 1995 and 39.8% for 1994. The tax rate was lower in 1995 than 1994 because more business was done in states with lower tax rates in 1995 than 1994.

# Inflation

Inflation has been moderate during the past three years, averaging 3% to 4% for materials and wages. Competitive pressure has required the Company to maintain or reduce sales prices to sustain market share. Management believes that competitive pricing pressures will remain for the foreseeable future. Its program to combat this is to continue to increase productivity, adopt emerging lower-cost technological advances into its products, expand its available products through internal development and acquire products or companies in the railroad supply industry that will expand Harmon's product or service offerings.

## Liquidity, Cash Flow and Capital Resources

The Company has a very strong balance sheet at 1996 year-end. Total assets were \$104.7 million, up \$17.8 million. Stockholders' equity rose to \$57.9 million (\$8.48 per share) from \$49.2 million (\$7.23 per share). Working capital was \$33.6 million, which produced a current ratio of 1.85:1 compared to 2.6:1 a year earlier. Cash was negligible at both year-ends, and interest-bearing debt was down \$8.7 million at 1996 year-end, which reflects Harmon's aggressive cash management policies. Cash was used to fund the acquisitions of two engineering firms and Vaughan Harmon Systems Ltd. (\$2.1 million), capital expenditures of \$6.4 million, increased receivables of \$14.3 million (largely because of the \$19.5 million increase in sales in the 1996 fourth quarter), and to support increased year-end inventories. The majority of the receivables were collected in January, 1997.

The Company renegotiated its primary bank lines of credit in 1996, which increased its line of credit to \$35 million at reduced interest rates compared with \$18 million a year earlier. At December 31, 1996, approximately \$3 million was borrowed against this line versus \$11.5 million at 1995 year-end. In January, 1997 all outstanding borrowings on the line of credit were paid off. Additionally, the Company completed a private placement of unsecured senior notes, priced to yield 6.87%, which provided an additional \$15 million of cash and long-term debt with a ten year maturity. Thus, by January, 1997 the Company had \$50 million available for use. Capital expenditures for 1997 are budgeted at \$11 million, roughly \$4.6 million higher than the capital expenditures for 1996. Traditionally, the Company spends less on capital expenditures than it actually budgets.

# 1997 Outlook

There is much to be optimistic about for 1997. The Company's core business is solid. It began the new year with a record backlog of \$59.4 million, up \$10.3 million from the year earlier backlog of \$49.1 million. Customer acceptance of our newer products has been excellent. In addition, the pending Union Pacific/Southern Pacific merger may generate additional business.

Despite the favorable climate for increased business for Harmon, there are some uncertainties to consider as well. Among them are whether the economy and our railroad customers will perform as well in 1997 as they did in 1996, and whether government funding for rail transit and grade crossing warning systems will continue as before, and whether our R&D departments will continue their output of innovative and very successful products. Further, 1996 sales included a \$13 million contract of a onetime nature which will not recur in 1997.

Merger activity in the railroad industry remains strong. Mergers typically create short-term problems, particularly with shipment continuity and immediate new business. The proposed eastern railroad merger battle may sharply reduce 1997 capital expenditures of these major customers until that issue is resolved. Long-term, however, mergers often prove beneficial as the surviving entity often consolidates traffic patterns to strengthen its operations, which for Harmon translates into additional orders for crossing and control systems.

Finally, we are operating at near-capacity in several areas of our business. Accordingly, we will spend substantial sums of money over the next several years to expand capacity in order to bid on larger contracts and to produce larger and more complex systems. We are addressing these issues by expanding our manufacturing space at several locations and increasing the size of our research and development center to accommodate many additional engineers. In this latter regard, the Company opened an expanded R&D facility at its plant site in Grain Valley, Missouri, in 1996, and it plans further expansions in 1997 and beyond.

The Company's goal is to achieve an annual order rate of approximately \$300 million by the year 2000. This goal is predicated upon maintaining our current product and systems sales levels and increasing our service business to the domestic freight railroad market. It also assumes we will book a representative share of the mass transit projects that are presently contemplated for release during the next three years, and that our aggressive pursuit of business in the international market will result in material sales gains. It does not depend on acquisitions. It should be recognized that these are goals, not forecasts. Much depends on the future trends of domestic and international economies, which are unknown.

## Other

The Company streamlined its organizational structure during 1996, merging its domestic operating subsidiaries into the parent company effective January 1, 1997. Harmon is now organized along functional lines instead of separate operating subsidiaries. This realignment is designed to improve customer service and streamline overall operations.

There are no pending accounting pronouncements that would have a significant effect on the Company's financial statements.

#### **Fourth Quarter Results**

Sales for Harmon's 1996 fourth quarter were \$56 million, 53.4% greater than its 1995 fourth quarter sales of \$36.5 million. Cost of sales as a percentage of sales was 78.4% in 1996 compared with 70.8% in 1995. The difference between the two years reflects greater shipments of lower margin products in 1996, chiefly asset management services, which carry smaller markups than Harmonmanufactured goods and often include pass-through business—products not germane to Harmon's core business but which are purchased by Harmon to complete a turnkey project. A sizable portion of the 1996 fourth quarter sales included asset management service business from two of its largest customers, and the completion of a \$13 million turnkey project in the Cascade Mountains, of which approximately 50% was pass-through business.

Net earnings for the 1996 fourth quarter were \$2.1 million, or \$0.31 per share, compared with \$1.8 million, or \$0.27 per share, for the 1995 fourth quarter.

# **Quarterly Consolidated Statements of Earnings (Unaudited)**

(Dollars in thousands, except per share data)

1996				1995				
Quarters ended	March 31	June 30	Sept. 30	Dec. 31	March 31	June 30	Sept. 30	Dec. 31
Net sales	\$38,397	\$39,111	\$41,957	\$55,975	\$29,415	\$32,854	\$38,026	\$36,485
Cost of sales	27,224	26,141	29,721	43,911	21,330	21,971	26,954	25,839
<b>R&amp;D</b> expenditures	1,458	1,726	1,492	1,656	1,022	1,236	1,503	1,457
Gross profit	9,715	11,244	10,744	10,408	7,063	9,647	9,569	9,189
Selling, general and administrative expenses	6,164	6,560	6,491	6,774	5,612	5,990	5,464	6,134
Amortization	137	137	154	159	133	133	144	137
Miscellaneous (income) expense-net	(16)	(14)	(14)	2	(25)	(7)	(13)	(21)
Operating income	3,430	4,561	4,113	3,473	1,343	3,531	3,974	2,939
Investment income	169	29	28	25	17	60	4	53
Interest expense	255	234	123	112	147	190	197	207
Pre-tax earnings	3,344	4,356	4,018	3,386	1,213	3,401	3,781	2,785
Income taxes	1,269	1,699	1,530	1,278	507	1,343	1,501	943
Net earnings	\$ 2,075	\$ 2,657	\$ 2,488	\$ 2,108	\$ 706	\$ 2,058	\$ 2,280	\$ 1,842
Earnings per common share	\$ 0.30	\$ 0.39	\$ 0.36	\$ 0.31	\$ 0.10	\$ 0.30	\$ 0.33	\$ 0.27
Weighted average shares (000s)	6,829	6,840	6,844	6,864	6,815	6,824	6,837	6,834

Quarterly per share amounts may not add to annual amounts due to the timing of net earnings and changes in common stock equivalents during each year.

(Dollars in thousands)

At December 31,	1996	1995
Assets		
Current assets:		
Trade receivables, less allowance for doubtful accounts of \$307 in 1996 and \$362 in 1995	\$ 39,656	\$25,317
Costs and estimated earnings in excess of billings on uncompleted contracts (note 2)	1,665	4,053
Inventories:		
Work in process	4,145	4,583
Raw materials and supplies	23,076	21,262
	27,221	25,845
Income tax receivable	-	434
Deferred tax asset (note 4)	1,637	584
Prepaid expenses and other current assets	2,851	608
Total current assets	73,030	56,841
Property, plant and equipment, at cost (note 3):		
Land	356	356
Buildings	9,010	5,802
Machinery and equipment	14,292	12,820
Office furniture and equipment	16,032	14,589
Transportation equipment	1,236	1,036
Leasehold improvements	2,395	2,288
	43,321	36,891
Less accumulated depreciation and amortization	25,389	22,714
Net property, plant and equipment	17,932	14,177
Deferred tax asset (note 4)	738	621
Cost in excess of fair value of net assets acquired, net of		
accumulated amortization of \$2,483 in 1996 and \$1,896 in 1995 (note 11)	7,606	7,674
Deferred compensation asset (note 6)	4,998	5,575
Other assets	373	1,957
	\$104,677	\$86,845

At December 31,	1996	1995
Liabilities and Stockholders' Equity		
Current liabilities:		
Current debt installments (note 3)	\$ 737	\$ 337
Accounts payable	15,119	11,698
Accrued payroll, bonus and employee benefit plan contributions (note 6)	10,892	6,688
Billings in excess of costs and estimated earnings on		
uncompleted contracts (note 2)	5,926	1,279
Other accrued liabilities	6,235	1,825
Current tax liability	492	_
Total current liabilities	39,401	21,827
Deferred compensation liability (note 6)	3,925	3,696
Long-term debt (note 3)	3,412	12,090
Total liabilities	46,738	37,613
Stockholders' equity (notes 3 and 7):		
Common stock of \$.25 par value; authorized 20,000,000 shares,		
issued 6,829,273 shares in 1996 and 6,805,626 shares in 1995	1,707	1,702
Additional paid-in capital	23,194	23,003
Foreign currency translation	203	_
Retained earnings	32,835	24,527
Total stockholders' equity	57,939	49,232
Commitments and contingencies (notes 6 and 10)		

**\$104,677** \$86,845

# **Consolidated Statements of Earnings**

(Dollars in thousands, except per share data)

Years ended December 31,	1996	1995	1994
Net sales	\$175,440	\$136,780	\$119,703
Cost of sales	126,997	96,094	81,023
Research and development expenditures	6,331	5,218	4,561
Gross profit	42,112	35,468	34,119
Selling, general and administrative expenses	25,990	23,200	21,176
Amortization of cost in excess of fair value			
of net assets acquired	587	547	78
Miscellaneous income – net	43	66	34
Operating income	15,578	11,787	12,899
Interest expense	724	741	264
Investment income	251	134	50
Earnings before income taxes	15,105	11,180	12,685
Income tax expense (benefit) (note 4):			
Current	6,945	4,413	5,098
Deferred	(1,170)	(119)	(52)
	5,775	4,294	5,046
Net earnings	\$ 9,330	\$ 6,886	\$ 7,639
Earnings per common share	\$ 1.36	\$ 1.01	\$ 1.16
Weighted average shares outstanding (000s)	6,844	6,827	6,567

(Dollars in thousands)

	Common Stock	Additional Paid-in Capital	Foreign Currency Translation	Retained Earnings	Total Stockholders' Equity
Balance at December 31, 1993	\$1,582	\$19,513	\$ -	\$11,991	\$33,086
Net earnings	-	_	_	7,639	7,639
Cash dividends paid (\$0.15 per share)	_	_	_	(968)	(968)
Common stock issued (notes 7 and 11):					
Servo acquisition	65	2,860	_	_	2,925
Stock options and other	35	346	-	-	381
Balance at December 31, 1994	1,682	22,719	_	18,662	43,063
Net earnings	-	_	_	6,886	6,886
Cash dividends paid (\$0.15 per share)	-	_	_	(1,021)	(1,021)
Common stock issued (note 7):					
Stock options and other	20	284	_	_	304
Balance at December 31, 1995	1,702	23,003	_	24,527	49,232
Net earnings	_	_	_	9,330	9,330
Cash dividends paid (\$0.15 per share)	_	_	_	(1,022)	(1,022)
Common stock issued (notes 7 and 11):					
Acquisition of businesses	4	146	_	_	150
Stock options and other	1	45	_	_	46
Foreign currency translation	_	_	203	_	203
Balance at December 31, 1996	\$1,707	\$23,194	\$ 203	\$32,835	\$57,939

## **Consolidated Statements of Cash Flows**

(Dollars in thousands)

Years ended December 31,	1996	1995	1994
Cash flows from operating activities:			
Net earnings	\$ 9,330	\$ 6,886	\$ 7,639
Adjustments to reconcile net earnings to net cash			
provided by (used in) operating activities:			
Depreciation and amortization	5,004	3,906	2,621
Gain on sale of property, plant and equipment	(5)	(34)	(6)
Deferred tax expense (benefit)	(1,170)	(119)	211
Changes in assets and liabilities, net of acquisition of businesses:			
Trade receivables	(13,740)	(3,860)	(3,046)
Inventories	(1,060)	(7,830)	(1,558)
Estimated costs, earnings and billings on contracts	7,381	(2,873)	(920)
Prepaid expenses and other current assets	(360)	131	(109)
Accounts payable	3,345	3,052	2,588
Accrued payroll and benefits	4,000	(651)	1,506
Other liabilities	5,007	(478)	(1,423)
Other deferred liabilities	371	157	304
Total adjustments	8,773	(8,599)	168
Net cash provided by (used in) operating activities	18,103	(1,713)	7,807
Cash flows from investing activities:			
Capital expenditures	(6,371)	(5,532)	(3,242)
Acquisition of businesses	(2,146)	(1,182)	(6,661)
Proceeds from sale of property, plant and equipment	46	84	30
Deferred compensation, net	(1,339)	(429)	(524)
Other investing activities	1,584	(974)	(37)
Net cash used in investing activities	(8,226)	(8,033)	(10,434)
Cash flows from financing activities:			
Proceeds from issuance of common stock	46	292	300
Cash dividends	(1,022)	(1,021)	(968)
Borrowings under line of credit agreements	46,530	31,152	5,075
Repayments under line of credit agreements	(55,165)	(20,491)	(4,275)
Principal payments of long-term debt	(469)	(436)	(320)
Net cash provided by (used in) financing activities	(10,080)	9,496	(188)
Foreign currency translation	203	_	-
Net decrease in cash and cash equivalents	_	(250)	(2,815)
Cash and cash equivalents at beginning of year	_	250	3,065
Cash and cash equivalents at end of year	\$ -	\$ -	\$ 250
Supplemental disclosures of cash flow information:			
Cash paid during the year for:			
Interest	\$ 690	\$ 661	\$ 265
Income taxes	\$ 6,019	\$ 4,167	\$ 5,939
See accompanying notes to consolidated financial statements.	,		

1. Summary of Significant Accounting Principles *Principles of Consolidation and Basis of Presentation.* The consolidated financial statements of the Company include the accounts of Harmon Industries, Inc., and its wholly-owned subsidiaries, Harmon Electronics, Inc. (HEI), Electro Pneumatic Corporation (EPC), Consolidated Asset Management Company, Inc. (CAMCO), Harmon Railway Systems International (HRSI) and Vaughan Harmon Systems Limited (Vaughan Harmon). Effective January 1, 1997 HEI, EPC and CAMCO were merged with and into Harmon Industries, Inc. such that Harmon Industries was the surviving corporation.

Significant intercompany accounts and transactions have been eliminated in consolidation. Management of the Company has made estimates and assumptions relating to the reporting of assets and liabilities and disclosure of contingent liabilities to prepare these financial statements in conformity with generally accepted accounting principles. Actual results could differ from those estimates.

*Nature of Business.* The Company is a major supplier of signal and train control products to railroads throughout North America and the world. It manufactures an extensive line of railroad signal and communication equipment, traffic control systems, rail/highway grade crossing hardware and related components. The Company also provides a single-source, rapid delivery service for urgently needed railroad components by warehousing commonly-used parts and equipment, which are manufactured both by Harmon and other vendors.

*Inventory Valuation*. Inventories are valued primarily at the lower of cost (first-in, first-out) or market (net realizable value). The components of cost are labor, materials and an allocation of manufacturing overhead.

*Property, Plant and Equipment.* Buildings, machinery and equipment, office furniture and equipment, transportation equipment and leasehold improvements are being depreciated or amortized using the straight-line method over the estimated useful lives of the assets, which range from

two to thirty-three years. Maintenance and repairs are charged to operations as incurred. Renewals and betterments are capitalized as additions to the appropriate asset accounts. Upon sale or retirement of assets, the cost and related accumulated depreciation applicable to such assets are removed from the accounts, and any resulting gain or loss is reflected in operations.

Income Taxes. Income taxes are accounted for in accordance with Statement of Financial Accounting Standards No. 109, Accounting for Income Taxes. Under the asset and liability method of Statement 109, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

*Long-term Contracts.* Profits on long-term contracts are recorded on the basis of the Company's estimates of the percentage of completion of individual contracts. That portion of the total contract price is accrued which is allocable, on the basis of the Company's engineering estimates of the percentage of completion, to contract expenditures incurred. Profits are not recorded during the start-up phase of the contract, which has been determined by the Company to approximate the initial 15% of design and construction. All losses are recognized in the period during which they become evident.

*Cost in Excess of Fair Value of Net Assets Acquired.* Cost in excess of the fair value of net assets acquired is amortized on a straight-line basis generally over five to fifteen years. The Company assesses the recoverability of such cost by determining whether the amortization of the cost in excess of the fair value of net assets acquired over its remaining life can be recovered through undiscounted future operating cash flows.

*Statement of Cash Flows.* For purposes of the statement of cash flows, the Company considers all investments purchased with a maturity of three months or less to be cash equivalents.

*Research and Development.* Costs incurred in the creation and start-up of new products or in changing existing products are charged to expense as incurred.

*Earnings per Common Share*. Earnings per common share are based on the weighted average number of common shares outstanding, including common shares held by the Company's Employee Stock Ownership Plan and Trust. Effect is given to common stock equivalents (stock options), if dilutive.

*Fair Value of Financial Instruments.* Estimates of fair values are subjective in nature and involve uncertainties and matters of significant judgment and therefore cannot be determined with precision. Changes in assumptions could affect the estimates. The fair market value of the Company's financial instruments approximates the carrying value.

Stock Option Plans. Prior to January 1, 1996 the Company accounted for its stock option plan in accordance with the provisions of Accounting Principles Board ("APB") Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations. As such, compensation expense would be recorded on the date of grant only if the current market price of underlying stock exceeded the exercise price. On January 1, 1996, the Company adopted SFAS No. 123, Accounting for Stock-Based Compensation, which permits entities to recognize as expense over the vesting period the fair value of all stock-based awards on the date of grant. Alternatively, SFAS No. 123 also allows entities to continue to apply the provisions of APB Opinion No. 25 and provide pro forma net income and pro forma earnings per share disclosures for employee stock option grants made in 1995 and future years as if the fair-value-based method defined in SFAS No. 123 had been applied. The Company has elected to continue to apply the provisions of APB Opinion No. 25 and provide the pro forma disclosure provisions of SFAS No. 123.

#### 2. Contracts in Progress

Contract costs on uncompleted contracts are as follows:

(Dollars in thousands)	Costs and estimated earnings in excess of billings	Billings in excess of costs and estimated earnings	Total
December 31, 1996:			
Costs and estimated earnings	\$ 7,796	\$73,397	\$81,193
Billings	6,131	79,323	85,454
	\$ 1,665	\$ (5,926)	\$ (4,261)
December 31, 1995:			
Costs and estimated earnings	\$25,234	\$28,541	\$53,775
Billings	21,181	29,820	51,001
	\$ 4,053	\$ (1,279)	\$ 2,774

Balances billed, but not paid by customers under retainage provisions in contracts amounted to \$1,165,000 and \$1,146,000 at December 31, 1996 and 1995, respectively. All receivables on contracts in progress are considered to be collectible within twelve months.

# 3. Indebtedness

(Dollars in thousands)	1996	1995
Revolving credit agreements	\$ 2,826	\$11,461
Bank loan	273	-
Note payable	198	-
Capitalized lease obligations	852	966
Total indebtedness	4,149	12,427
Less current installments	737	337
Long-term debt	\$ 3,412	\$12,090

*Revolving credit agreements.* The Company has an unsecured \$20,000,000 revolving credit agreement which expires August 1999. At December 31, 1996, there were no outstanding borrowings. Outstanding borrowings bear interest at a base rate established by the bank plus a variable component depending on the Company's funded debt to capitalization percentage and fixed charges coverage ratio.

The Company has a reducing revolving credit agreement with original total credit availability of \$15,000,000 reducing by \$536,000 as of the last day of each quarter beginning September 30, 1996. The Company has remaining total credit availability of \$13,928,000 at December 31, 1996 against which there are outstanding borrowings of \$2,826,000. Outstanding borrowings are due on August 15, 2001 and bear interest at a base rate established by the bank plus a variable component depending on the Company's funded debt to capitalization percentage and fixed charges coverage ratio (8.25% at December 31, 1996). Borrowings under this agreement are collateralized by liens against substantially all of the Company's equipment and machinery.

The Company pays commitment fees of 1/10 of 1% annually on the unused portion of the revolving credit agreements.

*Bank loan.* The bank loan is a term note payable in monthly installments including interest through April 2002. The note bears interest at a base rate established by the bank plus 2.1% (7.85% at December 31, 1996). The note is collateralized by liens against real and personal property with a net book value of \$1,537,000 at December 31, 1996.

*Overdraft facility.* The Company has a \$343,000 overdraft facility which expires August 21, 1997. At December 31, 1996 there were no outstanding borrowings. Outstanding borrowings bear interest at a base rate established by the bank plus 1.9%. Borrowings under this agreement are collateralized by liens against real and personal property which amounts to \$1,537,000 at December 31, 1996.

*Note payable.* The Company has a term note payable in full within five business days after January 1, 1997. The note bears interest at 7.25% and is unsecured. The note was paid in full on January 8, 1997.

*Capitalized lease obligations.* The Company entered into various computer hardware and software capital lease agreements totaling \$330,000 and \$295,000 in 1996 and 1995, respectively. Monthly installments are due through October 1998. The average implied interest rate in the lease agreements is 7.0%.

*Covenants.* The various indebtedness agreements contain, among other things, covenants relating to: maintenance of certain levels of consolidated net worth and limitations of total liabilities; maintenance of certain ratios of debt to equity and current assets to current liabilities; and certain limitations on the payment of cash dividends. At December 31, 1996, the Company is in compliance with all covenants under its indebtedness agreements and has retained earnings available for dividends of \$3,643,000.

*Maturities.* At December 31, 1996, long-term debt maturities for 1997 and thereafter are:

Years ended December 31	(Dollars in thousands)
1997	\$ 737
1998	417
1999	51
2000	51
2000 and thereafter	2,893
	\$ 4,149

On January 24, 1997 the Company issued \$15,000,000 of senior unsecured notes. The notes are payable in seven equal annual installments beginning January 24, 2000. The notes bear interest at 6.87% payable semi-annually.

#### 4. Income Taxes

Income tax expense consisted of the following:

(Dollars in thousands)	1996	1995	1994
Current:			
Federal	\$ 5,741	\$ 3,664	\$ 4,193
State	1,204	749	905
Total current	6,945	4,413	5,098
Deferred:			
Federal	(976)	(99)	(14)
State	(194)	(20)	(38)
Total deferred	(1,170)	(119)	(52)
Total income tax expense	\$ 5,775	\$ 4,294	\$ 5,046

Income tax expense for the years ended December 31, 1996, 1995, and 1994, respectively, differed from the amounts computed by applying the U.S. federal income tax rate of 35 percent to pretax income as a result of the following:

(Dollars in thousands)	1996	1995	1994
Computed "expected" tax expense	\$ 5,287	\$ 3,913	\$ 4,440
Increase (reduction) in income taxes resulting from:			
State and local income taxes, net of federal income tax benefit	657	473	564
Other, net	 (169)	(92)	42
	\$ 5,775	\$ 4,294	\$ 5,046

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 1996 and 1995 are presented below:

(Dollars in thousands)	1996	1995
Deferred tax assets:		
Deferred compensation	\$1,531	\$1,442
Compensated absences	353	356
Inventories	490	329
Allowance for doubtful accounts	120	141
Various other reserves	1,043	127
Total gross deferred tax assets	3,537	2,395
Less valuation allowance	369	369
Deferred tax liabilities:	3,168	2,026
Plant and equipment	(793)	(821)
Net deferred tax assets	\$2,375	\$1,205

The valuation allowance for deferred tax assets as of January 1, 1995 was approximately \$369,000. There were no net changes in the total valuation allowance for the years ended December 31, 1996 and 1995. Management believes it is more likely than not that the results of future operations will generate sufficient taxable income to realize the deferred tax assets as reduced by the valuation allowance.

During 1995, the Internal Revenue Service completed examinations of the Company's federal income tax returns for the years ended December 31, 1992, 1993 and 1994. The results of the examinations did not have a material effect on the Company's financial statements.

#### 5. Business Segment Information

The Company and its subsidiaries operate in one reportable segment of railroad electronics and related products.

Two customers accounted for net sales of approximately \$77,302,000 and \$16,126,000 for the year ended December 31, 1996, net sales of approximately \$19,091,000 and \$15,532,000 for the year ended December 31, 1995 and net sales of approximately \$25,735,000 and \$11,015,000 for the year ended December 31, 1994. At December 31, 1996, the Company had significant receivable balances from five customers totaling approximately \$23,734,000. The Company has no other unusual credit risks or concentrations.

#### 6. Commitments

The Company has entered into various lease arrangements covering the use of manufacturing facilities, administrative offices and equipment, all of which are operating leases. Rental expense related to these leases amounted to \$1,661,000, \$1,581,000 and \$1,398,000 for the years ended December 31, 1996, 1995 and 1994, respectively. A summary of non-cancelable long-term operating lease commitments follows (Dollars in thousands):

Years ended December 31,	Equ	ipment	Real property	Total commitments
1997	\$	75	\$1,216	\$1,291
1998		20	1,132	1,152
1999		7	883	890
2000		-	734	734
2001		-	259	259

It is expected that in the normal course of business, leases that expire will be renewed or replaced by leases on other properties; thus, it is anticipated that future minimum lease commitments will not be less than the amounts shown for 1997.

*Employee Benefits.* In 1985, the Company formed an Employee Stock Ownership Plan and Trust (ESOP), which includes all employees. The ESOP held 503,497 shares and 506,904 shares of Company common stock which had been allocated to plan participants at December 31, 1996 and 1995, respectively. Company contributions to the ESOP are normally based on a percentage of pretax earnings. Dividends on common shares held by the ESOP are reflected as a reduction in retained earnings.

ESOP contributions charged to operating expense were \$3,815,000, \$2,785,000 and \$3,045,000 for the years ended December 31, 1996, 1995 and 1994, respectively.

The Company and its subsidiaries have various bonus plans based primarily on Company performance. Accrued and unpaid bonuses at December 31, 1996 and 1995 were \$2,505,000 and \$757,000, respectively.

The Company has a nonqualified, unfunded deferred compensation plan for certain key executives providing for payments upon retirement, death or disability. Under the plan, certain employees receive retirement payments equal to a portion of the three highest continuous years' average compensation. These payments are to be made for the remainder of the employees' life with a minimum payment of ten years' benefits to either the employee or his or her beneficiary. The plan also provides for reduced benefits upon early retirement, disability or termination of employment. The deferred compensation (gain) expense was \$(365,000), \$491,000 and \$522,000 for the years ended December 31, 1996, 1995 and 1994, respectively.

The Company has recorded the assets and liabilities for the deferred compensation at gross amounts in the Consolidated Balance Sheets because such assets and liabilities belong to the Company.

The Company does not provide other post-retirement benefits.

# 7. Stockholders' Equity

A summary of stock options granted, exercised and expired follows:

	Shares	Price Per Share	
Balance at January 1, 1994	307,250	\$5.70	Average Price
Granted	42,000	20.50-22.75	
Exercised	(157,600)	3.88-13.38	
Expired	(2,000)	5.50-7.25	
Balance at December 31, 1994	189,650	10.44	Average Price
Granted	28,000	14.00-17.75	
Exercised	(83,150)	3.88-13.38	
Expired	(10,000)	13.38	
Balance at December 31, 1995	124,500	15.20	Average Price
Granted	101,000	13.50-17.00	
Exercised	(6,000)	5.50-8.25	
Expired	(25,500)	16.50-20.63	
Balance at December 31, 1996	194,000	\$14.69	Average Price

The Company has outstanding stock options for 38,500 shares of common stock at prices ranging from \$5.50 to \$8.25 and outstanding stock options for 155,500 shares of common stock at prices ranging from \$14.00 to \$20.63. The Company has exercisable outstanding stock options for

151,885 shares of common stock at prices ranging from \$5.50 to \$22.75 a share (\$14.21 average per share) as of December 31, 1996. In May 1996 the Company granted stock options for up to 1,000 common shares to each of the Company's nine non-employee directors which expire on May 31, 2003. In May 1995, the Company granted stock options for up to 2,000 common shares to each of the Company's eleven directors which expire on May 31, 1997. In May 1994, the Company granted stock options for up to 2,000 common shares to each of the Company's eleven directors as of that date which expired on May 31, 1996.

The Company issued 17,647 shares of unregistered common stock in connection with the 1996 acquisition of businesses. (See Note 11). The Company issued 260,000 shares of unregistered common stock to Servo Corporation of America in December 1994 (See Note 11).

# 8. Affiliates

The Company has investments of 38% and 20% in unconsolidated affiliates which are accounted for under the equity method. Equity in earnings (losses) of these affiliates was not significant for the years ended December 31, 1996, 1995 and 1994. The Company had sales to these related entities totaling \$841,000, \$1,477,000 and \$272,000 for 1996, 1995 and 1994, respectively. The Company had receivables due from these entities of \$223,000 and \$434,000 as of December 31, 1996 and 1995, respectively.

## 9. Other Financial Information

The Company has classified certain environmental compliance expenses as cost of sales in the accompanying statements of operations. These expenses amounted to \$283,000, \$215,000 and \$164,000 for the years ended December 31, 1996, 1995 and 1994, respectively.

## 10. Litigation

*Environmental matter.* On September 30, 1991, the United States Environmental Protection Agency (EPA) issued a complaint against the Company alleging violations of the Resource Conservation and Recovery Act (RCRA) and RCRA regulations in the disposal of solvents at the Company's Grain Valley, Missouri, plant. The complaint

sought penalties in the amount of \$2,344,000 and proposed certain compliance actions. In January 1994 the administrative hearing on the penalty assessment was heard. The decision from that hearing reduced the penalties to \$586,000.

Based on the Company's cooperation with the Missouri Department of Natural Resources (MDNR), which had the original jurisdiction of the matters complained by the EPA, in voluntarily disclosing the alleged violations and in promptly undertaking all remedial actions specified by the MDNR, the penalties appear to the Company's legal counsel to be excessive. However, because so few cases have been disposed of by settlement, or by administrative or judicial proceedings since the new penalty guidelines were adopted, legal counsel cannot express an opinion as to the ultimate amount, if any, of the Company's liability.

The Company has recorded a total of \$2,232,000 of environmental compliance expenses to date relating to this matter. The Company has recorded a liability for its best estimates of the costs to be incurred relative to the compliance actions in other accrued liabilities. Since the amount of the penalty cannot be reasonably determined at this time, no liability has been accrued in the financial statements.

*Other litigation.* The Company has been named as a defendant in several other lawsuits in the normal course of its business. In the opinion of management, after consulting with legal counsel, the liabilities, if any, resulting from these matters will not have a material effect on the consolidated financial statements of the Company.

## 11. Acquisition of Businesses

On July 1, 1996 the Company acquired the stock of Vaughan Systems Limited for an initial purchase price of \$2,003,000 in cash. In addition to the initial purchase price, the purchase agreement provides for contingent payments. These payments are based on the average after-tax earnings of Vaughan Harmon over the three year period ending June 30, 1999 as well as the utilization of certain tax net operating loss carryforwards. Any additional consideration paid will be recorded as goodwill. The acquisition has been accounted for by the purchase method of accounting and accordingly, the operating results have been included in the Company's consolidated results of operations from the date of acquisition. The excess of the cash paid over the fair value of net assets acquired has been recorded as goodwill of \$156,000.

In 1996 the Company acquired the assets of two contract engineering firms. These acquisitions were made with the issuance of 17,467 shares of unregistered common stock valued at \$8.50 per share, a \$198,000 note payable and \$145,000 in cash. These acquisitions have been accounted for by the purchase method of accounting and accordingly, the operating results have been included in the Company's consolidated results of operations from the dates of acquisition. The excess of the consideration given over the fair value of net assets acquired has been recorded as goodwill of \$363,000.

The pro forma effects of the 1996 acquisitions on the consolidated financial statements are not significant.

On February 24, 1995, the Company acquired certain assets of Serrmi Services, Inc. (Serrmi) for approximately \$1,182,000 in cash. The acquisition has been accounted for by the purchase method of accounting and accordingly, the operating results have been included in the Company's consolidated results of operations from the date of acquisition. The excess of the cash paid over the fair value of net assets acquired has been recorded as goodwill of \$139,000. The pro forma effects of the Serrmi acquisition on the consolidated financial statements are not significant.

On December 20, 1994, the Company acquired the transportation division of Servo Corporation of America. Servo's transportation division manufactures hot box detector systems and various components to help railroads monitor the condition of bearings and wheels on freight and passenger vehicles. The purchase method of accounting for business combinations was used and accordingly, the operating results of this division have been included in the Company's consolidated results of operations from the date of acquisition and were insignificant in 1994. The Servo

acquisition was made with the issuance of 260,000 shares of unregistered common stock valued at \$11.25 per share, as determined by a fair market value analysis conducted by an independent investment and securities firm, and \$6,661,000 in cash. The fair value of assets acquired, including goodwill, was \$10,283,000 and liabilities assumed totaled \$697,000. Goodwill of \$7,967,000 is being amortized over fifteen years on a straight line basis. Assets acquired included inventory, fixed assets and other miscellaneous items.

The pro forma results below (unaudited) for 1994 assume the acquisition occurred at the beginning of that year.

(Dollars in thousands, except per share data)

Net sales	\$131,024
Operating income	13,730
Net earnings	8,152
Earnings per common share	1.19

#### 12. Accounting for Stock-Based Compensation

The Company applies Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations in accounting for its plans. Accordingly, no compensation expense has been recognized for its stock-based compensation plans other than for restricted stock and performance-based awards. Had compensation cost for the Company's other stock option plans been determined based upon the fair value at the grant date for 1996 awards under these plans consistent with the methodology presented in Statement of Financial Accounting Standards No. 123, Accounting for Stock-Based Compensation, the Company's net income and earnings per share in 1996 would have been reduced by approximately \$325,000 (\$88,000 -1995), or \$.05 per share (\$.01 per share - 1995). The fair value of the options granted during 1996 is estimated at values ranging from \$5.88 to \$8.86 on the dates of grant using the Black-Scholes option-pricing model with the following assumptions: dividend rate of .15 per share, volatility ranging between 41% and 70%, risk-free interest rate ranging between 5.25% and 7.01%, assumed forfeiture rate of 0%, and an expected life ranging between 1.9 and 3.75 years.

This annual report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which may include statements concerning projection of revenues, income or loss, capital expenditures, capital structure, or other financial items, statements regarding the plans and objectives of management for future operations, statements of future economic performance, statements of the assumptions underlying or relating to any of the foregoing statements, and other statements which are other than statements of historical fact.

These statements appear in a number of places in this annual report and include statements regarding the intent, belief, or current expectations of the Company's management with respect to (i) the demand and price for the Company's products and services, (ii) the Company's competitive position, (iii) the supply and price of materials used by the Company, (iv) the cost and timing of the completion of new or expanded facilities, or (v) other trends affecting the Company's financial condition or results of operations.

Statements made throughout this report are based on current estimates of future events, and the Company has no obligation to update or correct these estimates.

Readers are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially as a result of these various factors. To the Stockholders of Harmon Industries, Inc.: The management of Harmon Industries, Inc., is responsible for the preparation, presentation, and integrity of the consolidated financial statements and other information included in this annual report. The financial statements have been prepared by the Company in accordance with generally accepted accounting principles and, as such, include amounts based on management's best estimates and judgments.

The financial statements have been audited by KPMG Peat Marwick LLP, independent public accountants. Their audits were made in accordance with generally accepted auditing standards and included such reviews and tests of the Company's internal accounting controls as they considered necessary.

The Company maintains a system of internal accounting controls designed to provide reasonable assurance at reasonable cost that Company assets are protected against loss or unauthorized use and that transactions and events are properly recorded.

The Board of Directors, through its Audit Committee, comprised solely of directors who are not employees of the Company, meets with management and the independent public accountants to assure that each is properly discharging its respective responsibilities. The independent accountants have free access to the Audit Committee, without management present, to discuss the results of their work and their assessment of the adequacy of internal accounting controls and the quality of financial reporting.

Björn E. Olsson President and Chief Executive Officer

Charles M. Soudree

Charles M. Foudree Executive Vice President – Finance, Treasurer and Secretary

February 4, 1997

# The Board of Directors and Stockholders of Harmon Industries, Inc. and Subsidiaries:

We have audited the accompanying consolidated balance sheets of Harmon Industries, Inc. and subsidiaries as of December 31, 1996 and 1995, and the related consolidated statements of earnings, stockholders' equity, and cash flows for each of the years in the three year period ended December 31, 1996. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Harmon Industries, Inc. and subsidiaries at December 31, 1996 and 1995, and the results of their operations and their cash flows for each of the years in the three year period ended December 31, 1996, in conformity with generally accepted accounting principles.

## **KPMG Peat Marwick LLP**

Kansas City, Missouri February 4, 1997

# Form 10-K

Shareholders may receive a copy of the Corporation's 1996 Annual Report to the Securities and Exchange Commission on Form 10-K free of charge by writing: Mr. Charles M. Foudree Executive Vice President–Finance at the Corporation's headquarters.

## **Annual Meeting**

Shareholders are cordially invited to attend the Annual Meeting of Shareholders, which will be held at 2:00 p.m. on Tuesday, May 13, 1997, at the Country Club of Blue Springs, Blue Springs, Missouri.

Management urges all shareholders to vote their proxies and thus participate in the decisions that will be made at this meeting.

## **Registrar & Transfer Agent**

UMB Bank, n.a. P.O. Box 419226 Kansas City, Missouri 64141-6226 816/860-7000

For change of name, address, or to replace lost stock certificates, write or call the Securities Transfer Division.

# **Securities Analyst Contact**

Securities analyst inquiries are welcome. Please direct them to: Mr. Charles M. Foudree Executive Vice President–Finance 816/229–3345

# **Independent Auditors**

KPMG Peat Marwick LLP 1600 Commerce Bank Building Kansas City, Missouri 64106

# **Outside Counsel**

Morrison & Hecker LLP 2600 Grand Avenue Kansas City, Missouri 64108-4606 816/691-2600

## **Corporate Headquarters**

1300 Jefferson Court Blue Springs, Missouri 64015 816/229–3345 Telefax: 816/229–0556

# Common Stock Price Range and Dividend Information

At December 31, 1996, there were 6,829,273 shares outstanding and approximately 637 shareholders of record. Cash dividends were resumed in 1994 at the rate of 15 cents per share per year, paid semi-annually at 7½ cents per share.

The range of high and low prices for the past eight quarters ended December 31, 1996 is shown below. Per share prices have been adjusted for all stock splits and stock dividends, if any.

	Price Range		
Calendar Quarter Ended	1996	1995	
March 31	\$153/4 - \$12	\$19 <sup>1</sup> / <sub>2</sub> - \$13 <sup>1</sup> / <sub>2</sub>	
June 30	$18\frac{3}{4} - 13\frac{3}{4}$	18 – 13½	
September 30	18 - 15½	20 ½ – 13 ¾	
December 31	$19\frac{1}{2} - 15$	18 1/4 - 14	

# Stock Trading

The Company's common stock trades on The Nasdaq Stock Market under the symbol: HRMN. Stock price quotations can be found in major daily newspapers and in *The Wall Street Journal*.

At March 6 , 1997, the following securities firms were making a dual auction market in the Company's common stock:

George K. Baum & Company Piper Jaffray Companies Inc. PaineWebber Inc.

## Harmon on the World Wide Web

Information on Harmon Industries, Inc. is available on the Company's World Wide Web site at: http://www.harmonind.com

# **Board of Directors**

Robert E. Harmon (57) *Chairman of the Board* 

Thomas F. Eagleton (67) Attorney-at-Law Thompson & Coburn St. Louis, Missouri

Bruce M. Flohr (58) Chairman & CEO RailTex, Inc. San Antonio, Texas

Charles M. Foudree (52) Executive Vice President– Finance, Treasurer and Secretary

Rodney L. Gray (44) Chairman & CEO Enron International, Inc. Houston, Texas

Herbert M. Kohn (58) Attorney-at-Law Bryan Cave LLP Kansas City, Missouri

Gary E. Ryker\* (47) Executive Vice President Marketing, Sales and Service

Douglass Wm. List (41) Management Consultant Baltimore, Maryland

Gerald E. Myers (55) Management Consultant Tempe, Arizona

Björn E. Olsson (51) President and Chief Executive Officer Donald V. Rentz (58) Grant Leighton Associates of Texas, Inc. Plano, Texas

Judith C. Whittaker (58) Vice President–Legal Hallmark Cards, Inc. Kansas City, Missouri

\* Denotes Advisory Director() Indicates age of director

#### Management

Björn E. Olsson President and Chief Executive Officer

Charles M. Foudree Executive Vice President– Finance, Treasurer and Secretary

Lloyd T. Kaiser Executive Vice President–Systems

Gary E. Ryker Executive Vice President Marketing, Sales and Service

Ronald G. Breshears Vice President– Human Resources

Richard A. Daniels Vice President-Transit Sales

Robert E. Heggestad Vice President–Technology

J. Randall John Vice President–Services John W. Johnson *Vice President–Domestic Sales* 

Raymond A. Rosewall Vice President–Manufacturing

William J. Scheerer Vice President-Applications Engineering

Stephen L. Schmitz Vice President-Controller

William L. Bush Director-Research & Development

Jeffery J. Utterback Director-Quality Assurance

# **Domestic Locations**

Riverside, California (2) † Jacksonville, Florida Atlanta, Georgia Louisville, Kentucky Blue Springs, Missouri Grain Valley, Missouri (3) † Lee's Summit, Missouri Warrensburg, Missouri (2) † Omaha, Nebraska Hauppauge, New York

† Denotes number of plants and locations

International Locations Harmon Industries Lausanne, Switzerland

Henkes-Harmon Industries, Pty. Ltd. Mooroolbark, Victoria, Australia

Vale-Harmon Enterprises, Ltd. Saint-Laurent, Quebec, Canada

Vaughan Harmon Systems Ltd. Ware, England



Corporate Office 1300 Jefferson Court Blue Springs, MO 64015 හ 816•229•3345 Fax: 816•229•0556