

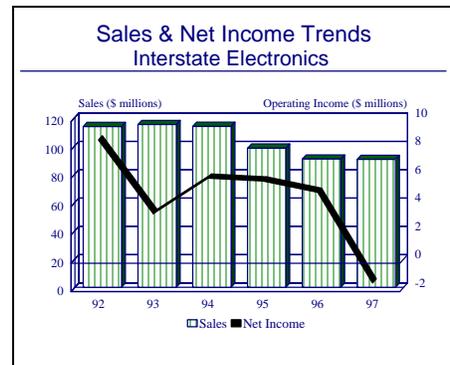
# ARCHIVED REPORT

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## Interstate Electronics Corporation - Archived 12/2000

### Outlook

- L-3 Communications completed its acquisition of Interstate Electronics for \$60 million in July
- Acquisition should be a good fit for L-3
- Interstate report will be combined with L-3 and subsequently dropped next year



### Headquarters

Interstate Electronics Corporation  
602 E. Vermont Rd  
Anaheim, CA 92803  
Telephone: (714) 758-0500  
From the US (800) 854-6979  
Web Site: <http://www.iechome.com>

Interstate Electronics Corporation was established in Anaheim, California, in 1956. The company became a wholly owned subsidiary of Figgie International (renamed Scott Technologies in 1998), a highly diversified Fortune 500 company with technical, industrial, consumer, and service-oriented business areas.

In April 1999, Interstate Electronics was sold to L-3 Communications for \$60 million. Headquartered in New York City, L-3 Communications is a leading merchant supplier of secure communication systems and products, avionics and ocean systems, microwave components and telemetry, instrumentation, space and wireless products (see separate report in this binder).

Interstate supplies test instrumentation for the US Navy's Fleet Ballistic Missile program; flat panel display systems for a wide variety of military applications; satellite communication systems; signal-processing systems for EW and ASW applications; and Navstar GPS receiver and GPS-based tracking systems.

Interstate Electronics employs nearly 500 personnel.

### Structure and Personnel

#### Corporate Officers

Richard Tierney  
President  
Roger Rascon  
Vice President, Finance & Information Systems and  
Controller  
Robert Huffman

Vice President, Engineering  
Steve Jungers  
Vice President, Business Development

John C. Schwartz  
 Vice President, Strategic Weapons Systems &  
 Integrated Technical Services  
 Vern E. Green  
 Vice President, Products Group

Michael Patrick  
 Vice President, Operations  
 Sherry Dowe  
 Director, Human Resources

## Product Area

Interstate Electronics Corporation was part of Figgie International's (now called Scott Technologies) Technical Group, which is primarily responsible for defense and aerospace work. IEC is now a subsidiary of L-3 Communications. Interstate Electronics' product line is broken out as follows:

### Interstate Electronics Corporation

1. GPS
  - 1.1 Military Systems
  - 1.2 Commercial Systems
2. Strategic Weapons Systems
3. Satcom
4. Displays
  - 4.1 Industrial
  - 4.2 Military

The company's primary business continues to be the development of electronic instrumentation that supports testing and tracking of the US Navy's Fleet Ballistic Missiles (FBM) Program to include submarine and shipboard launch control systems. To enhance Trident missile range instrumentation, Interstate introduced the use of five-channel C/A-code Global Positioning System (GPS) digital receivers as tracking aids.

From its FBM work, the company has perfected its fast Fourier transform technology, the digital process that separates and breaks down a signal into distinct elements. Interstate supplies signal intercept, signal processing and signal analysis systems to the US intelligence community. The company also provides electronic warfare signal processing equipment for aircraft, shipboard and submarine applications. Interstate's Frequency Analysis System (FAS) is a passive ASW acoustic processing system in service with the navies of Canada, the Netherlands, Norway and Japan.

Interstate manufactures a wide range of militarized plasma, electroluminescent (EL) flat panel displays and CRTs for all military applications. Its AC plasma displays come in a variety of sizes, with applications that include the UYK-75 and USQ-96(V) flat panel displays for the US military. There are also several electroluminescent EL display products and a full range of color and monochrome CRT displays from the Hartman Systems Division. Interstate has added liquid crystal displays (LCDs) under the brand names WarriorVision and Sentry to its product line.

## Facilities

Company Headquarters, 602 East Vermont Ave, Anaheim, CA 92803. Telephone: (714) 758-0500. Fax: (714) 758-4148. Company administration and marketing activities. Program research and develop-

ment and manufacturing is carried out in adjacent facilities located on East Vermont Avenue in the Anaheim area.

## Corporate Overview

Interstate Electronics enjoys a unique niche as supplier of both instrumentation systems for the US Navy's ballistic missile programs and of GPS instrumentation upgrades for DoD test ranges nationwide and overseas. The company believes in fostering an environment for innovation that allows it to maintain a healthy R&D and manufacturing reputation in the industry. As a subsidiary of Figgie International, Interstate had the financial backing to support its corporate culture to develop and nurture new products and applications. Under L-3, the company still maintains a network of representatives in Europe, the Middle East and the

Pacific Rim, and continues to seek overseas business and joint venture opportunities.

### New Products and Services

**5-inch Projectile GPS.** In May 1999, Interstate Electronics completed shipment of the first GPS receiver designed for use in a rocket-assisted projectile. This new, reduced-sized receiver fits in the tapered front end of a US Navy 5 inch shell and is capable of withstanding over 12.5 kgs of force and severe shock. Enhanced with unique signal acquisition technology, it is able to acquire the military satellite GPS signals

within seconds of clearing the barrel of the Navy's upgraded MK-45 deck mounted gun.

**XM982 ERP GPS.** In May 1998, Raytheon selected Interstate Electronics as its GPS subcontractor for the XM982 Extended Range Projectile Program. This development contract covers the delivery of 393 engineering development model GPS receivers. The IEC receivers, which will be designed to absorb the massive shock from a 155 mm gun, will provide navigation information immediately after the launch of a projectile. Value of the contract was not disclosed.

**Direct Sunlight Display.** In June 1997, Interstate Electronics introduced a 9.5 inch monochrome LCD flat-panel display for applications in which readability in direct sunlight is a requirement. In addition to the high-brightness feature, the new "smart" rugged display incorporates a CPU, RAM, and flash disk. The company has received an order for 4,000 units for use on a US Army program.

### **Plant Expansion/Organization Update**

**Name Change.** In May 1998, Figgie International Inc changed the name of the company to Scott Technologies, Inc. Accordingly, the Class A Common Stock and Class B Common Stock of Figgie International Inc are now the Class A Common Stock and Class B Common Stock of Scott Technologies, Inc. The Class A Common Stock and Class B Common Stock of Scott Technologies, Inc trade under the symbols "SCTTA" and "SCTTB," respectively.

**Commercial Product Lines Cut.** In late 1997, in light of limited market success for Interstate's commercial products and the need for further product development expenditures, Interstate Electronics decided to curtail the following classes of products: GPS-based airport landing systems; manufacture and development of commercial communication modems; and development of GPS products for the commercial avionics market. According to the company, these products contributed less than \$1 million in sales in 1997. In 1997, IEC recorded a \$7.6 million restructuring charge.

### **Mergers/Acquisitions/Divestitures**

**IEC Sold to L-3.** In October 1998, Scott Technologies announced its intent to divest its Interstate Electronics subsidiary in order to focus on Scott's core activities of respiratory systems and other life saving products. A buyer was found in April 1999 when L-3 Communications signed a definitive agreement to acquire Interstate Electronics for \$60 million. The

agreement included certain real estate with a value in excess of \$10 million. The transaction closed in July 1999.

"The IEC acquisition fits our strategic model very well," said Frank C. Lanza, chairman and CEO of L-3 Communications. "Its products are synergistic with our existing operations and have leadership positions in their key markets."

"The Trident telemetry and instrumentation business adds vertically to our current operations in this area," Lanza said. He also noted that the division has been an important member of the Trident team for over forty years and that he expects this relationship to continue well into the future.

"IEC's GPS technology is a horizontal addition to our products group and it makes L-3 a significant player in providing this technology for the next generation of guided weapons," said Lanza. "Military forces are placing a high priority on smart munitions that operate effectively even in adverse weather conditions, and IEC, which has over two decades of experience in GPS navigation and tracking systems, has received R&D contracts to work on the next generation of guidance systems."

Lanza mentioned that IEC's JSTARS program contract, along with its Harpoon Control Station contract, complement L-3 Communications' existing presence in the military display products market. He also said that IEC's General Motors contract for the integration of flat panel displays into both new and upgraded locomotive cabs offers opportunities for L-3 to extend its display business into the commercial market.

### **Teaming/Competition/Joint Ventures**

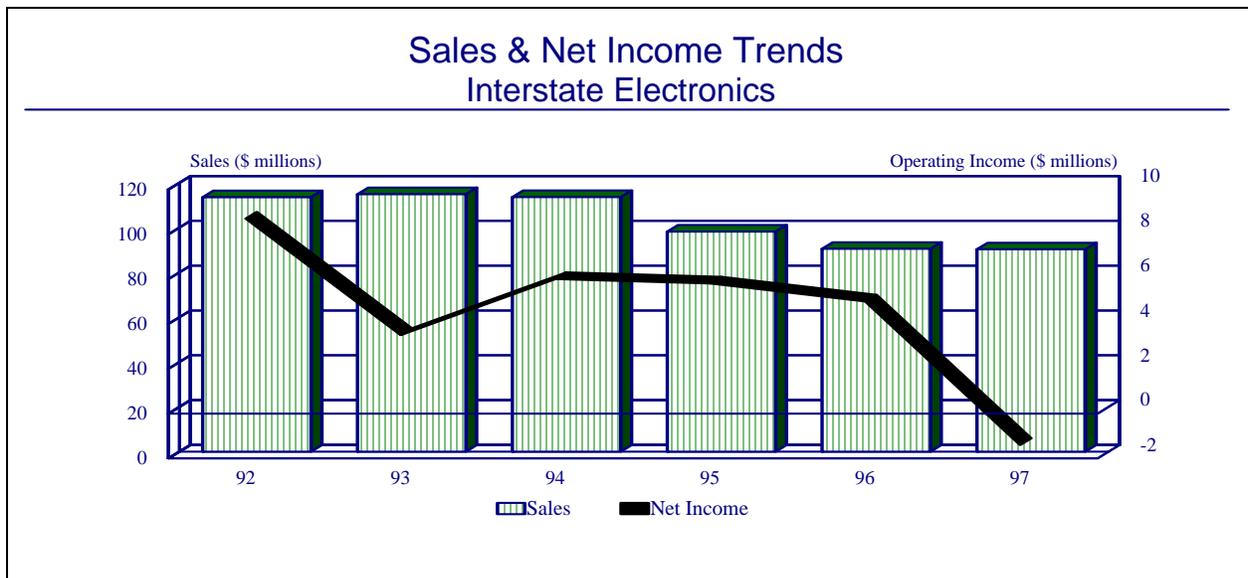
**Nissho Iwai.** In 1987, Interstate signed an agreement with Nissho Iwai Corp, Japan's sixth largest trading firm, to be the company's sales representative in Japan for its GPS products, with emphasis on range instrumentation applications.

**NASA Satellite Ground Station.** Interstate is supplying digital and high-speed parallel signal-processing systems as part of General Electric's Tracking & Data Relay Satellite System (TDRSS) ground relay terminal team. NASA awarded GE an initial \$20.6 million contract for the second TDRSS ground terminal in late 1988 and an additional \$202 million contract in February 1989. Other members include Loral (formerly Ford Aerospace), Eaton Corp, and TRW.

## Financial Results/Corporate Statistics

In 1998, Scott Technologies listed Interstate as a discontinued operation and financial figures were not detailed for it. Interstate's 1997 sales decreased to \$90.3 million from \$90.5 million in 1996. The company posted a loss of \$1.4 million compared to operating income of \$5 million in 1996. The loss was attributed to a restructuring charge of \$7.6 million, taken in 1997 to cover the curtailment of Interstate's commercial product line. The decline in sales for the past few years is due to gradual reduction in required support for strategic weapon systems and a decrease in demand for Global Positioning Systems (GPS). Last available statistics are provided below. Prior to 1994 Figgie did not publish financial results for Interstate.

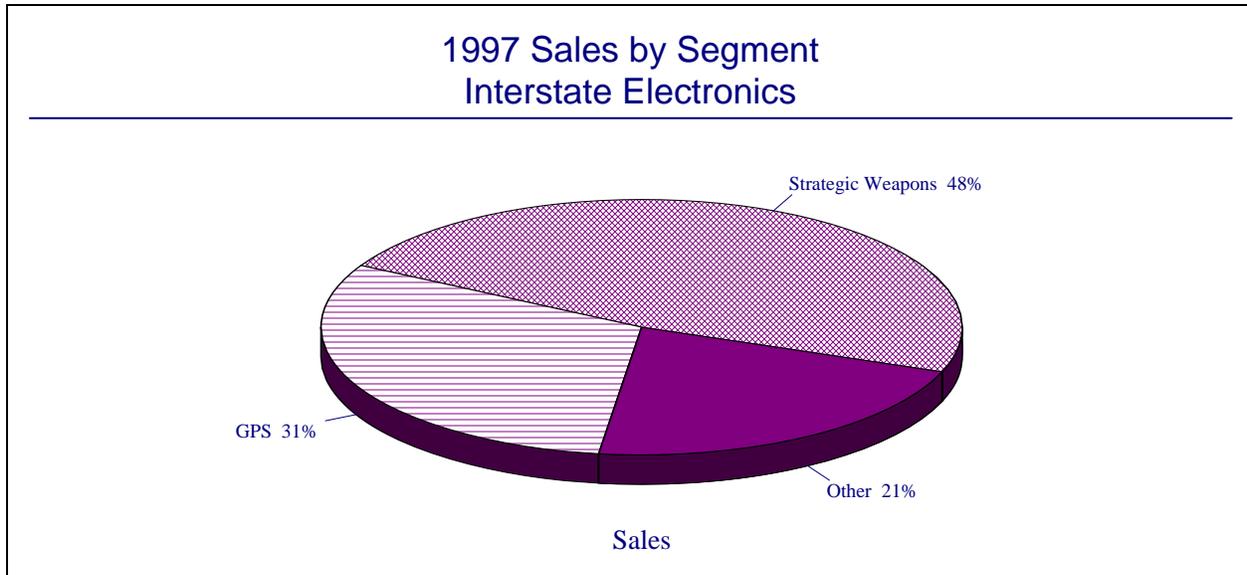
Y/E December 31	1992	1993	1994	1995	1996	1997
(\$ millions)						
Net Sales	113.5	114.9	113.6	98.2	90.5	90.3
Percent Govt	91.1	93.2	90.7	87.6	91.4	87.0
Operating Income	8.7	3.5	6.0	5.8	5.0	-1.4
R&D Expenditures	4.4	12.6	12.7	8.5	9.0	9.4



### Industry Segments

A breakdown of Interstate's sales by major market segment for 1993 to 1997 is given below. Figgie did not report operating income figures by segment.

SALES	1993	1994	1995	1996	1997
(\$ millions)					
Strategic Weapon Systems	61.3	52.9	50.9	45.5	43.0
Global Positioning Systems	33.2	37.9	28.2	26.1	27.9
Other	20.3	22.7	19.1	18.9	19.4
<b>TOTAL</b>	<b>114.8</b>	<b>113.6</b>	<b>98.2</b>	<b>90.5</b>	<b>90.3</b>



### Strategic Outlook

With Interstate's sales in a decline, former parent company Scott Technologies decided now was the time to focus its core operations and divest the electronics units. Thanks to the niche markets that Interstate operates in, especially display technology, the company

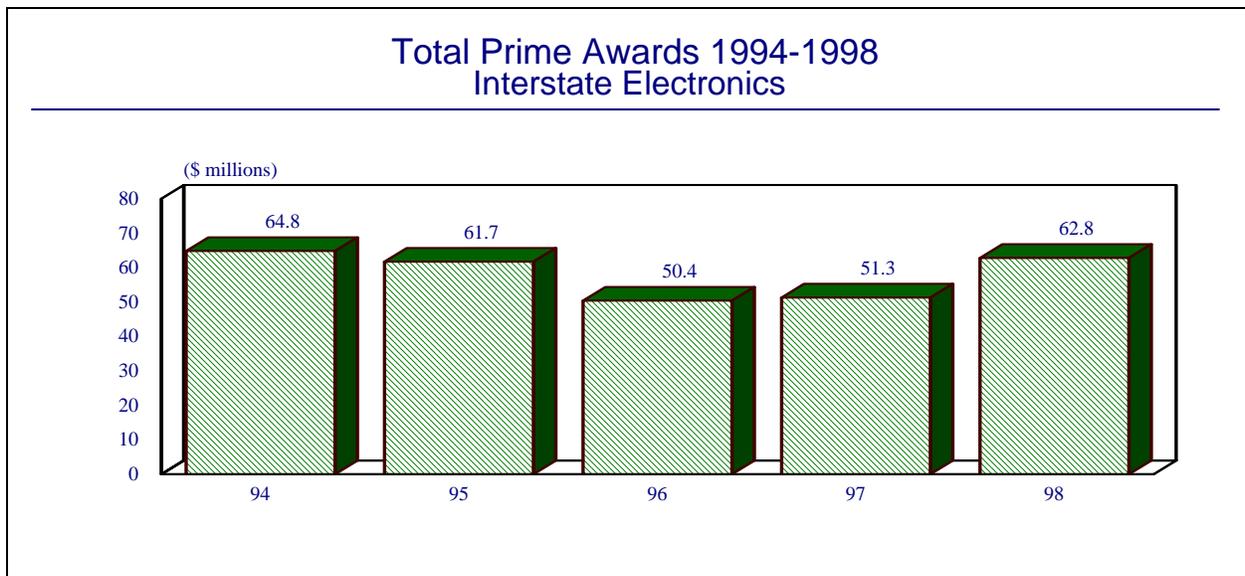
should remain intact and become a good fit for its new parent, L-3 Communications.

With Interstate now sold, this report will be combined with the L-3 report and the individual update on Interstate dropped.

### Prime Award Summary

Interstate's prime awards for 1994 to 1998 are as follows.

(\$ millions)	1994	1995	1996	1997	1998
AIR FORCE	12.1	11.0	9.1	1.6	13.2
DEF LOGISTICS AGENCY	0.2	0.0	0.3	0.3	0.1
DEPT OF TRANSPORTATION	0.0	0.0	0.2	0.0	0.0
NAVY	52.5	50.7	40.8	49.4	49.5
<b>TOTAL</b>	<b>64.8</b>	<b>61.7</b>	<b>50.4</b>	<b>51.3</b>	<b>62.8</b>



## Program Activity

Some important aerospace and government programs currently underway at Interstate are listed below. The briefs are intended to provide a listing of programs that are of major importance to the company. For detailed information or analysis of specific aerospace and defense programs or equipment, please refer to the appropriate FORECAST INTERNATIONAL binder (for example, AIRCRAFT, MILITARY VEHICLES, WARSHIPS, MISSILES, ELECTRONICS, and GAS TURBINES). The following is an outline of the company's business interests:

- Defense Electronics
- Display Systems
- Range Instrumentation
- Missiles

### Missile Programs

#### UGM-133A Trident II

This is a strategic, Submarine-Launched Ballistic Missile (SLBM). The Trident II missile will be deployed by the US Navy onboard its Ohio class submarines, but will not be retrofitted to those boats already outfitted with the older Trident I. The British have also procured the Trident II. Interstate provides various engineering services for this program.

### Electronic Programs

#### NAVSTAR GPS

NAVSTAR is a three-dimensional (3-D) space-based navigation system. Interstate produces GPS-equipped tracking pods for use on fixed-wing aircraft during

flight and weapons tests and training missions. The Sidewinder missile-sized pods contain a GPS receiver and use an L-band datalink to transmit aircraft position and time-to-ground tracking stations. The company is currently working on development of a GPS equipment family for a range applications.

#### JSTARS

JSTARS is an airborne, multimode, advanced synthetic aperture radar system. JSTARS is the acronym for Joint Surveillance Target Attack Radar, sometimes referred to as Joint STARS. Nomenclature established for the airborne radar system is APY-3. The Ground Station Module (GSM) nomenclature is the TSQ-168. Interstate Electronics is developing the system's Improved Graphic Displays.

### Display Products

Interstate Electronics offers a full range of display technologies. The company has designed and produced thousands of high-quality systems for hundreds of military platforms including airborne, surface ship, submarine, manportable, mobile, and land-based. Interstate offers production in four technologies: active matrix liquid crystal display (AMLCD); cathode ray tube (CRT); (electroluminescent) EL; and plasma.

#### WarriorVision

In June 1996, Interstate introduced a new family of thin displays intended for the harsh environment of the battlefield. The family of liquid crystal displays is known as WarriorVision, and is intended to be used in

platforms with limited space for displays. Display sizes range from 10" to 20".

**CommandVision**

The CommandVision series of CRT displays is a ruggedized CRT monitor designed to meet today's requirements for high performance, low life-cycle costs, and high reliability. The monitor is designed to handle a wide range of airborne, shipboard, and ground mobile applications.

**ImpacVision**

This is Interstate Electronics series of industrial flat panel displays. The company offers these production display products in the four viable display technologies: active matrix liquid crystal display (AMLCD); cathode ray tube (CRT); (electroluminescent) EL; and plasma.

**US Contract Awards**

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Below is a listing of major contracts awarded to Interstate from the United States government from 1995 to 1998 (contracts as of press date).

<u>Date</u>	<u>Award (\$ millions)</u>	<u>Contract #</u>	<u>Description</u>
<b>1995</b>			
11/2/95	\$35.3	N00030-96-C-0015	Engineering, logistic and operational support for the Trident I & II test instrumentation program.
<b>1996</b>			
6/24/96	\$6.9	F08626-96-C-0105	Develop a GPS range system with an over-the-horizon and ten-track capability.
11/19/96	\$34.9	N00030-97-C-0013	Engineering, logistics, and field services for Trident I & II flight test instrumentation.
<b>1997</b>			
11/18/97	\$31.4	N00030-98-C-0005	Engineering, logistics and field services for the Trident I & II flight test instrumentation.
<b>1998</b>			
3/5/98	\$12.0	N00030-98-C-0011	Three M240R DRS subsystem spalt kits and three M241R auxiliary & display sets for the Trident II.
7/29/98	\$10.0	F04701-98-C-0033	R&D to produce the next-generation security cards for programs employing GPS technology.
11/17/98	\$29.5	N0030-99-C-0012	Program management, systems engineering support, logistics, and field services.

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