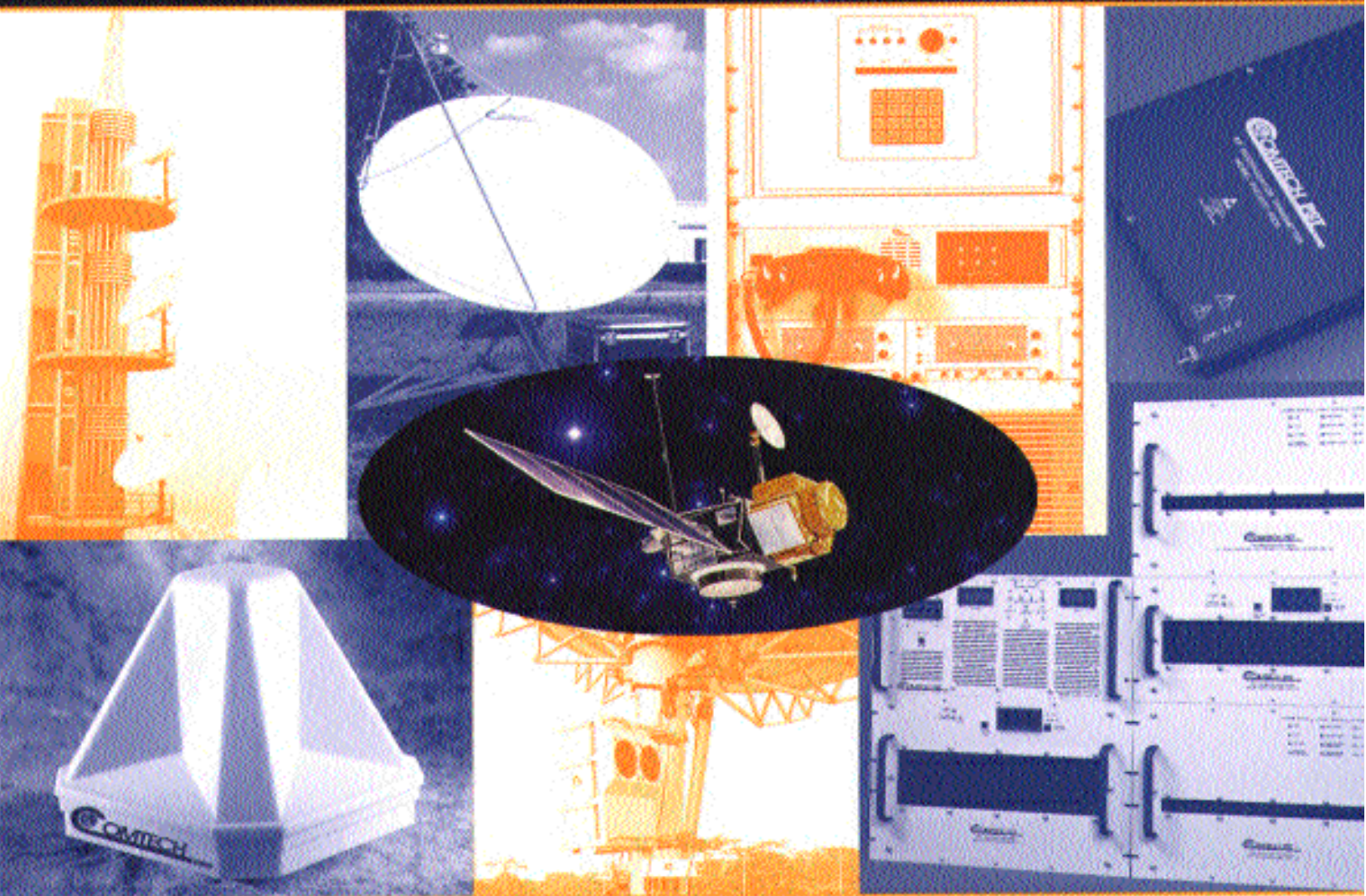


1 9 9 9 A N N U A L R E P O R T



C O M T E C H T E L E C O M M U N I C A T I O N S C O R P .

## About the Company



Comtech Telecommunications Corp. ("Comtech") is a global player in the domestic and international telecommunications and RF microwave amplifier industries. Comtech specializes in the design and manufacture of technologically advanced products and networks that are used for transmission of voice, data and video in communications networks using satellite, over-the-horizon microwave, terrestrial line-of-sight or other wireless communications systems.

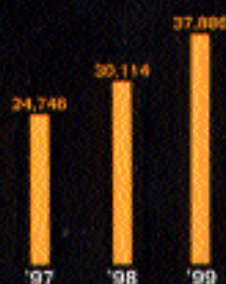
The Company operates primarily in three interrelated business segments: *Telecommunications Transmissions*, *RF Microwave Amplifiers*, and *Mobile Data Communications Services*. Each business segment is composed of subsidiaries that rely on local technological and managerial talent supported by centralized corporate assets. All three business segments pursue opportunities from the increasing demand for enhanced voice, data and video communications to the increasing need for telecommunications infrastructure and network and messaging services.

Today, Comtech offers upwards of 200 unique products that are designed, manufactured and marketed to customers such as telecommunications and network providers; telephone companies; oil and gas companies; broadcast networks; cable television operators; utilities; local, state and federal governments; transportation companies; and system integrators.

## 1999 Financial Highlights

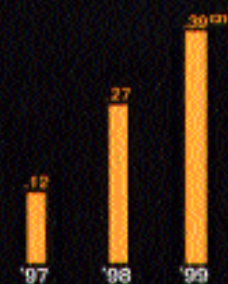
### Sales

(\$ in thousands)



### Earnings Per Share<sup>(1)</sup>

(Diluted and in \$)



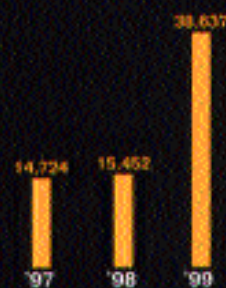
### Income

(\$ in thousands)



### Backlog

(\$ in thousands)



	Ended July 31,				
	1999	1998	1997	1996	1995
Net Sales	\$37,886,000	\$30,114,000	\$24,746,000	\$20,916,000	\$16,455,000
Operating Income (Loss)	2,827,000	1,452,000	638,000	341,000	(1,335,000)
EPS—Diluted <sup>(1)</sup>	1.15 <sup>(2)</sup>	.27	.12	.02	(.39)
Working Capital	10,192,000	8,917,000	7,930,000	7,797,000	7,681,000
Stockholders' Equity	18,357,000	12,093,000	10,878,000	10,301,000	10,081,000
Book Value Per Share	4.18	3.08	2.79	2.65	2.59
Backlog	38,637,000	15,452,000	14,724,000	9,700,000	10,242,000
Return on Assets	17.6%	5.6%	2.7%	.4%	(8.9%)
Return on Equity	28.7%	9.1%	4.5%	.7%	(14.9%)
Total Debt/Equity	8.3%	18.6%	17.6%	24.4%	28.5%

(1) Reflects a three-for-two stock split effective July 30, 1999.

(2) Reflects a non-recurring benefit resulting from a reduction in the Company's valuation allowance against deferred tax assets and a loss from discontinued operations. On a pro-forma basis, diluted EPS on income before discontinued operations, assuming a normal effective tax rate of approximately 35%, would be \$0.39 per share and net income would be \$1,775,000.

These Financial Highlights should be read in conjunction with the Notes to Consolidated Financial Statements and Management's Discussion and Analysis of Financial Condition and Results of Operations.

# Dear Shareholders:

*F*iscal year 1999 was not simply a good year for Comtech Telecommunications Corp., it was a landmark year! One in which the strategies that we have been pursuing over the past several years began to produce significant, decision-affirming results. For example:

- We posted historically outstanding financial results, with fiscal 1999 net sales 26% higher than those for fiscal 1998, net earnings up by 377%, income from continuing operations up 112% and bookings rising by 150%, respectively.
- We won important competitions, including a U.S. Army contract that was made possible by our newly acquired capabilities in satellite-based mobile data communications services with the potential to generate sales of up to \$418 million over the next eight years.
- We launched the most impressive array of new internally-developed products in the history of Comtech, including satellite transceivers, amplifiers for instrumentation applications, and new modems and modem options including the Turbo Codec, which in recent trials demonstrated the ability to deliver significant bandwidth and energy savings.
- And our product line and markets were broadened through an important acquisition that took us into mobile data communications services.

Investors apparently took note of our progress, and last year we saw a near tripling of the price of Comtech stock, with our three-for-two stock split taken into account.

Over the past five years, as planned, we have transformed Comtech from a company that was primarily engaged in the delivery of systems to one that now derives approximately 80% of its revenues from products. This in turn has had a direct and positive impact on our bottom line, because in our industry products customarily yield higher margins than systems. This transition also reduced our exposure to risk by substantially reducing the portion of our revenues that comes from systems installations outside the U.S.

Our most promising area for future internal growth is currently in mobile data communications services, which is a telecommunications services segment which we entered in October 1998 with the acquisition of the company that became our Comtech Mobile Datacom Corp.



subsidiary. Our mobile data communications services technology makes possible secure, global satellite real-time two-way asset tracking, messaging and data communications between mobile platforms (aircraft, sea, rail or motor vehicles,

for example) and fixed sites. This technology performed successfully in intercontinental satellite tests in September 1999, increasing our enthusiasm about its likely commercial applications in industries ranging from land and aviation messaging and transportation to remote sensor data reporting. Much of the basic research and development needed to make packet data technology useable has already been financed by the Army and the owners from whom we bought our foothold in the business.

Another fiscal 1999 acquisition, however, did not work out for us. That new subsidiary, Comtech Wireless Inc., a provider of low-cost wireless telephone systems for remote areas and small population centers, as it turned out, did not meet our plan and would have required resources and time better put elsewhere. Against this background, we discontinued that subsidiary's activities and are exploring a sale of its assets.

We remain committed to making acquisitions that are a good strategic fit with our core businesses (we have no interest in moving away from the telecommunications in which our capabilities give us a leadership position) and can provide us with worthwhile

#### Highlights of Fiscal Year 1999

- *Historically outstanding sales, operating income, net income, and backlog.*
- *Higher earnings per share.*
- *Increase in cash and working capital, decrease in long-term debt.*
- *Introduction of new digital modem options, including the Turbo Codec.*
- *Introduction of first single unit 100 watt C-band transceiver.*
- *2,500th satellite frequency converter shipped.*
- *August 1998: Comtech Systems Inc. receives \$42.5 million contract for digital communication terminals.*
- *October 1998: Comtech enters satellite mobile data communications services business with acquisition of Mobile Datacom Corp.*
- *June 1999: Comtech Mobile Datacom Corp. receives mobile data communications services contract from U.S. Army with potential \$418 million value over eight years.*
- *July 1999: Comtech shares split three for two, increasing number of shares outstanding to 4.5 million.*

growth opportunities while also being accretive to earnings.

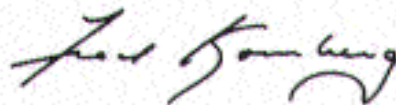
This year we established a goal to combine internal product development with acquisitions to increase our sales above the \$100 million mark by fiscal year 2002. This will require sales gains of 35% annually over the next three years. Our current expectation calls for about half of this growth to come from our existing core business, with core-related telecommunications acquisitions providing the rest.

As Comtech becomes bigger and reaches into new core-related market niches, however, we will keep firmly in mind the critical importance of maintaining and enhancing that enterprising spirit that infuses and energizes our team. With the parent corporation managing financial resources and providing overall strategic direction, our operating units participate fully in setting annual and long range goals. They vigorously and creatively pursue those goals and, at the end of the day, are held accountable and

are rewarded accordingly. Unquestionably, our entrepreneurial environment has helped Comtech earn its reputation for responsiveness to customer needs, agility in responding to changes in the marketplace and speed in bringing new products on line. We are determined to keep it that way.

We are enormously grateful to our employees, our customers, our suppliers and our shareholders for the many forms of support that have made the progress of the past year possible and positioned us for progress in the years ahead.

Management's commitment is to seize many rich opportunities that are now, or become, available to us, and we plan to deliver on that commitment.

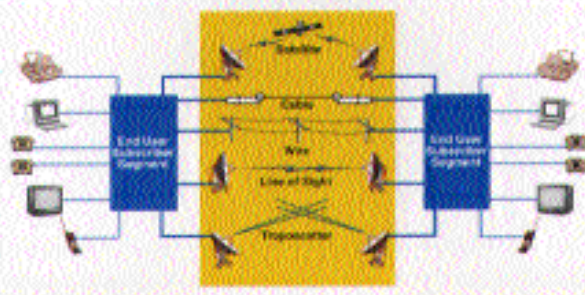


Fred Kornberg  
*Chairman of the Board*

October 12, 1999

## Comtech Today

Comtech is made up of three business segments. These segments are distinct and decentralized, but are mutually supportive and complementary.



### Telecommunications Transmissions

- Satellite
- Over-the-Horizon Microwave
- Wireless

### RF Microwave Amplifiers

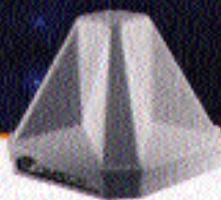
- Communications
- Defense
- Instrumentation

### Mobile Data Communications Services

- Land Transportation Location and Messaging
- Remote Sensor Data Reporting
- Aeronautical Location and Messaging



## Mobile Data Communications Services



### Comtech Mobile Datacom Corp. (CMDC)

[www.comtechmobile.com](http://www.comtechmobile.com)

CMDC is a full-service supplier of mobile data communications services for the commercial and government land transportation, remote sensing, utility and aviation markets. In addition to the satellite- and internet-based services, CMDC also develops and supplies mobile transceivers and radio frequency, data processing, and switching equipment for use by partners and licensees to establish local satellite earth station gateways and PC-based network operating centers.

The Company's core technology provides global two-way messaging and GPS-based asset tracking. User access to message and position information is achieved either by satellite (for the mobile user) or Internet (for the "wired" user). Key elements of CMDC's system include real-time messaging, mobile-to-mobile messaging, advanced multi-level security features, the ability to operate over a broad range of geostationary (GEO) and low earth orbit (LEO) satellite systems, and ease of transfer from system to system. The network open architecture facilitates the development of applications as well as interconnection with wireless terrestrial networks and the Internet.

### Products/Markets

- Mobile transceiver terminals, and packet data switching
- In-vehicle tracking with map display on laptop PC
- Global satellite tracking using embedded GPS—land transportation and aviation
- Asset protection—thrift, hijacking
- Remote sensor monitoring—SCADA, utility, fuel flow
- Environmental monitoring
- Secure, real-time one- and two-way messaging

The photograph above shows CMDC's Transceiver Model 2010 which contains all the electronics necessary for satellite mobile data communications using a variety of GEO and LEO satellites. With a Palm Pilot or laptop PC as a user interface, free-form messages can be sent between an asset operator and user headquarters. The operator simply mounts the compact unit appropriately in the vehicle, ship, aircraft or fixed asset, and connects to a power source or operates from an available rechargeable battery.

The System Overview diagram to the left depicts various industrial, recreational and governmental system asset tracking, sensor and messaging applications. The mobile data communications transmission using satellite, wireless, or internet can be from and to a multitude of sources and locations and can be to and from many gateway satellite earth stations and customer control centers.

## RF Microwave Amplifiers



### Comtech PST Corp. (CPST)

[www.comtechpst.com](http://www.comtechpst.com)

CPST designs and manufactures solid-state, high power, broadband amplifiers for use in a broad spectrum of applications including cellular and wireless base stations, high power test systems, defense systems, electromagnetic compatibility and susceptibility (EMC) instrumentation and satellite communications.

#### Products/Markets

- Solid-State High Power Amplifiers—10 KW CW
- Wireless Communications Amplifiers
- Communications Amplifiers—Satellite, Over-the-Horizon Microwave, Video, Radio
- Instrumentation Amplifiers—EMC, Wireless, Cellular, PCN/PCS, Calibration
- Broadband Solid-State Replacement of TWT Amplifiers
- Defense Amplifiers—Radar, Jamming, Simulation, Communication

Pictured above is Comtech PST's Model BHED2758-1000 solid-state amplifier subsystem. Comtech PST delivered 14 amplifier systems to a foreign customer for incorporation into frequency-agile defense communications jamming systems installed in the Pacific Rim Theatre. The amplifier subsystem performs selectively from 20 to 110 MHz and 100 to 500 MHz with 1000 watts of RF output power.

Also shown is Comtech PST's Model PHC1037-4000 solid-state amplifier subsystem. The extremely small sized and low weight amplifier is the prime component of Identification Friend-or-Foe (IFF) systems used aboard aircraft, ships and land vehicles, such as tanks and personnel carriers, and is the smallest amplifier ever developed at its frequency and output power level of 4000 watts.



### Comtech Antenna Systems, Inc. (CASI)

[www.comtechsystems.com](http://www.comtechsystems.com)

CASI is a leading design innovator, manufacturer and supplier of a variety of fiberglass and aluminum parabolic antenna systems for applications in satellite and over-the-horizon microwave communications. CASI designs antenna systems for specific types of communications applications and also offers a standardized catalog line of antenna products to independent distributors, prime contractors and end users. End users include: TV and radio broadcasters; cable companies; teleports; university and corporate private satellite networks; oil and gas producers; and government entities.

#### Products/Markets

- Satellite and Over-the-Horizon Microwave Antenna Systems—0.9 to 9.0 Meter
- Quick Deployable and Fly-Away Antenna Systems—1.2, 1.8 and 2.4 Meter
- Inclined Orbit Tracking Antenna Systems—3.8, 5.0 and 7.3 Meter
- Offsat™ and Multi-Beam Antennas
- Trailerized Antenna Systems—Low Over-the-Road Profile

The antenna photograph shown above is CASI's new and improved satellite 2.4-meter fly-away antenna system. The 2.4-meter antenna system is designed for use by television news gathering services and sports broadcast networks for transmission and reception of voice, data and video, over a variety of satellites worldwide. The fly-away antenna system is ideal for quick response to breaking news events because it comes packaged in commercial airline checkable transit cases and can be deployed in less than one hour of arrival on location.





### Comtech Communications Corp. (CCC)

[www.comtechcorp.com](http://www.comtechcorp.com)

CCC designs and manufactures a broad range of high-performance, high-quality products, available in discrete frequency bands from 3 to 18 GHz, for a multitude of satellite communications applications for the domestic and international marketplace. These products include Satellite Transceivers, Frequency Up and Down Converters, Modems (containing Turbo Codec) and Solid-State Power Amplifiers. CCC holds a patent on its Daisy-Chain® 1:N Redundancy Switching System for its frequency converter subsystems and offers complete redundancy systems for all its products. All CCC products meet the performance standards published for Intelsat, Eutelsat, Insat, Asiasat and other worldwide and regional satellite networks. All CCC products carry the European Union CE certification.

#### Products/Markets

- Satellite Transceivers—C-, X- and Ku-Bands—up to 100 watts
- Frequency Up and Down Converters—C-, X- and Ku-Bands
- Satellite Modems for VSAT, DAMA and SCPC/MCPC Networks—up to 2048 kbps
- Solid-State Power Amplifiers—C-, X- and Ku-Bands—up to 700 watts
- Daisy-Chain® 1:N Redundancy Self-Contained Switching Systems
- 1:1 and 1:2 Redundant Transceiver Protection Switching Systems
- Satellite Modems for IBS/IDR International Gateway Earth Stations
- First Commercial Production of Turbo Codec for Improved Data Transmission Performance and Lower Operating Costs

The photo above shows CCC's 100-watt Model CSAT-5060 C-Band Satellite Transceiver installed at the pedestal of an antenna located at Singapore Telecom's Bukit Timah satellite earth station in Singapore. The earth station uses 100-watt transceivers in both single and redundancy configurations using the CCC Model CSWT-5000 1:1 Redundant Transceiver Protection Switching System on both 5-meter and 7-meter antennas.



### Comtech Systems, Inc. (CSI)

[www.comtechsystems.com](http://www.comtechsystems.com)

CSI provides high-quality, reliable telecommunication solutions with products and systems utilizing a variety of communications technologies including digital over-the-horizon microwave, digital satellite, line-of-sight microwave for national and international commercial and defense communications applications. CSI's customers include foreign and domestic prime contractors, international oil and gas producers, and international post, telegraph and telecommunication (PTT) organizations.

#### Products/Markets

- Over-the-Horizon Microwave Products and Systems
- Satellite Earth Station Products and Systems
- Microwave Radio Products and Systems—up to 38 GHz
- Digital Adaptive and Fade Resistant Modems—up to 8192 kbps
- Computer Controlled Radio Performance Monitoring and Power Control Systems
- Path Profile Propagation Analysis
- Air Defense Communication System Integration
- Communication Systems for Offshore Locations
- Communication Network Integration

CSI's Digital Over-the-Horizon Quadruple Diversity Microwave Radio shown above operates in discrete frequency bands from 0.7 to 7.6 GHz. The radio incorporates CSI's world renowned and patented adaptive fade resistant digital modem capable of processing up to 4TT or 4EI signals (8192 kbps). This radio, when combined with CSI's klystron or solid-state high power amplifiers and antennas, provides systems capable of up to 2000 watts cw output power for communications transmission of over-the-horizon microwave voice, data and video over distances up to 300 miles.

CSI's Over-the-Horizon Microwave Radio systems have a proven track record worldwide in such applications as offshore oil and gas production data transmission, in-country communication infrastructure modernization and air traffic control and defense communications.

## Corporate Information

### COMTECH TELECOMMUNICATIONS CORP.

105 Baylis Road  
Melville, New York 11747  
Phone: (631) 777-8900  
Fax: (631) 777-8877  
Web Site: [www.comtechtel.com](http://www.comtechtel.com)

### BOARD OF DIRECTORS

Fred Kornberg<sup>(1)(4)</sup>  
*Chairman, Chief Executive Officer and  
President of the Corporation*

Dr. George Bugliarello<sup>(2)(3)(4)</sup>  
*Chancellor, Polytechnic University*

Richard L. Goldberg<sup>(1)(4)</sup>  
*Partner, Proskauer Rose LLP*

Gerard R. Nocita<sup>(1)(2)(3)</sup>  
*Private Investor*

Dr. John B. Payne<sup>(4)</sup>  
*President and CEO of Nucorn, Inc.*

Sol S. Weiner<sup>(2)(3)</sup>  
*President, Weiner Investments Inc.*

*(1) Executive Committee*

*(2) Audit Committee*

*(3) Executive Compensation Committee*

*(4) Nominating Committee*

### CORPORATE OFFICERS & SUBSIDIARY PRINCIPALS

Fred Kornberg  
*President and Chief Executive Officer*

Gail Segui  
*Secretary and Treasurer*

J. Preston Windus, Jr.  
*Sr. Vice President and Chief Financial Officer,  
President of Comtech PST Corp. (CPST)*

Richard L. Burt  
*Sr. Vice President,  
President of Comtech Systems, Inc. (CSI)*

Robert L. McCollum  
*Vice President,  
President of Comtech Communications Corp. (CCC)*

Joel Alper  
*President of Comtech Mobile Datacom Corp. (CMDX)*

Thomas C. Christy  
*President of Comtech Antenna Systems, Inc. (CASI)*

### REGISTRAR & TRANSFER AGENT

American Stock Transfer and Trust Co.  
40 Wall Street  
New York, New York 10005

### MARKET FOR REGISTRANT'S COMMON STOCK

Comtech Telecommunications Corp.  
Common Stock is traded on the Nasdaq  
National Market®. The symbol is CMTL.

### INDEPENDENT AUDITORS

KPMG LLP  
1305 Walt Whitman Road  
Melville, New York 11747

### LEGAL COUNSEL

Proskauer Rose LLP  
1585 Broadway  
New York, New York 10036

### ANNUAL MEETING

Tuesday, December 14, 1999 @ 10.00 a.m.  
Melville Marriott Hotel  
1350 Old Walt Whitman Road  
Melville, New York 11747

### FINANCIAL INFORMATION

For financial information  
visit us on the internet at  
<http://www.comtechtel.com>

### 10-K REPORT

A copy of the Form 10-K Annual Report  
filed with the Securities and Exchange  
Commission and Exhibits for the year  
ended July 31, 1999, are available to  
shareholders for a processing fee of  
\$25. Requests in writing for this report  
should be sent to:

Investor Relations  
Comtech Telecommunications Corp.  
105 Baylis Road  
Melville, New York 11747



### FAST 50

The plaque pictured to the left was presented to Comtech Telecommunications Corp. for its inclusion in the "1999 Long Island Technology Fast Fifty," a program that recognizes those 50 public and private companies, headquartered on Long Island, New York, which have had the most significant growth on the basis of revenues over a four-year period.

## Operating Units

### Telecommunications Transmissions

#### **COMTECH ANTENNA SYSTEMS, INC. (CASI)**

3100 Communications Road  
St. Cloud, Florida 34769  
Tel: (407) 892-6111  
Fax: (407) 892-0994  
Web: [www.comtechsystems.com](http://www.comtechsystems.com)

#### **COMTECH COMMUNICATIONS CORP. (CCC)**

4666 South Ash Avenue  
Tempe, Arizona 85282  
Tel: (480) 831-7501  
Fax: (480) 831-7563  
Web: [www.comtechcom.com](http://www.comtechcom.com)

#### **COMTECH SYSTEMS, INC. (CSI)**

3100 Communications Road,  
St. Cloud, Florida 34769  
Tel: (407) 892-6111  
Fax: (407) 957-3402  
Web: [www.comtechsystems.com](http://www.comtechsystems.com)

#### **COMTECH SYSTEMS INTERNATIONAL, INC. (CSII)**

3100 Communications Road  
St. Cloud, Florida 34769  
Tel: (407) 892-6111  
Fax: (407) 957-3402  
Web: [www.comtechsystems.com](http://www.comtechsystems.com)

### RF Microwave Amplifiers

#### **COMTECH PST CORP. (CPST)**

105 Baylis Road  
Melville, New York 11747  
Tel: (631) 777-8900  
Fax: (631) 777-8877  
Web: [www.comtechpst.com](http://www.comtechpst.com)

### Mobile Data Communications Services

#### **COMTECH MOBILE DATACOM CORP. (CMDC)**

19540 Amaranth Drive  
Germantown, Maryland 20875  
Tel: (301) 428-2101  
Fax: (301) 428-1004  
Web: [www.comtechmobile.com](http://www.comtechmobile.com)



105 Baylis Road  
Melville, New York 11747  
USA  
TEL: (631) 777-8900 • FAX: (631) 777-8877

