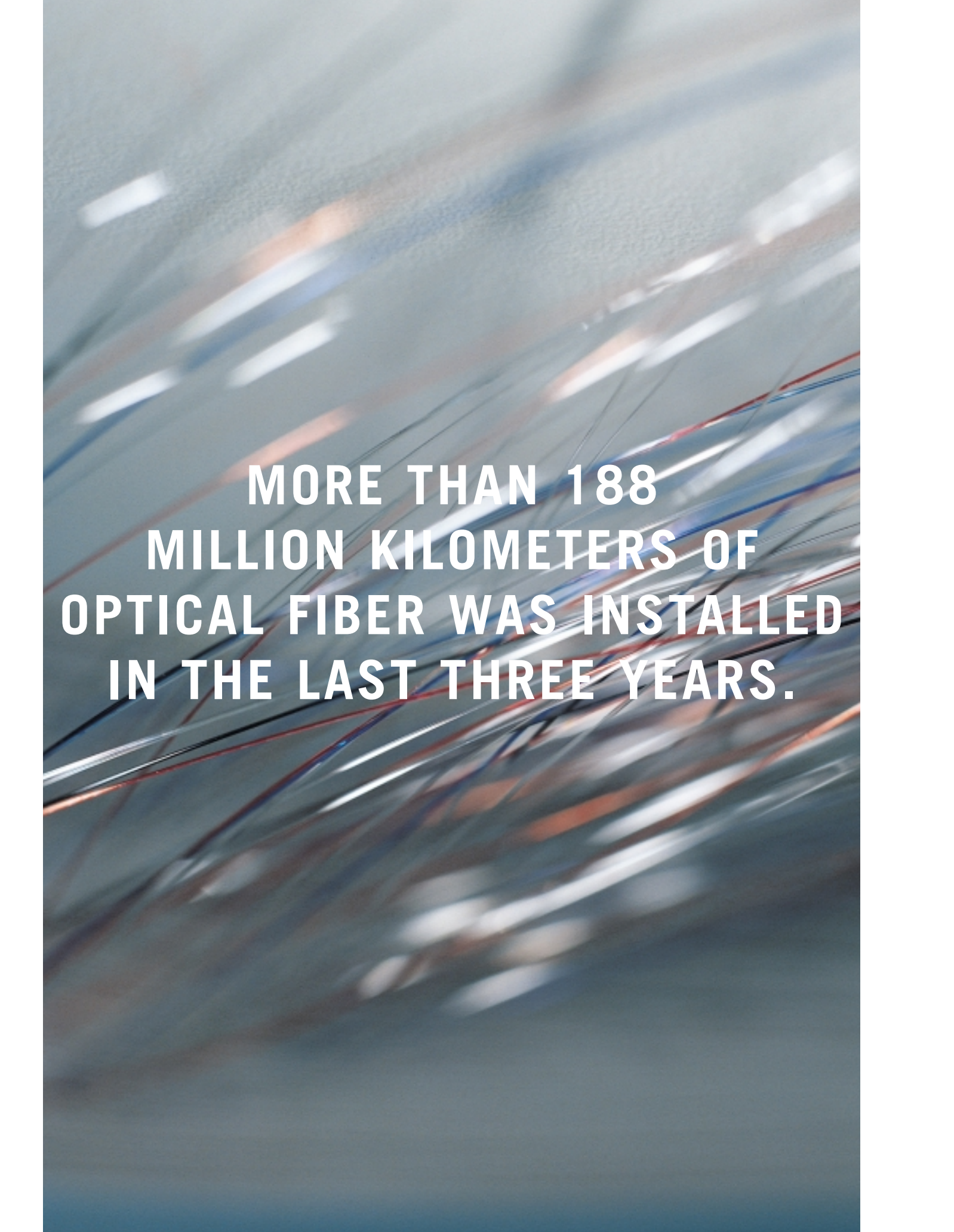


**THE KEEPERS
OF COMMUNICATIONS.
ACTERNA.**



**MORE THAN 188
MILLION KILOMETERS OF
OPTICAL FIBER WAS INSTALLED
IN THE LAST THREE YEARS.**

**NEARLY ONE HUNDRED
MILLION CABLE MODEMS WILL
BE INSTALLED BY 2004.**






**DSL LINES
WILL DOUBLE IN 2001 TO
24 MILLION AND REACH 43
MILLION BY 2004.**

A close-up photograph of a computer monitor. The screen displays a video of a man wearing a light blue shirt, a dark tie, and a wide-brimmed straw hat. He is outdoors, and a mouse cursor is visible on the screen. The text is overlaid in the center of the screen.

**APPROXIMATELY 600
MILLION PEOPLE WILL BE
CONNECTED TO THE INTERNET
BY 2003, FUELING CONTINUED
DATA/IP GROWTH.**



**WORLDWIDE WIRELESS
SUBSCRIBERS ARE EXPECTED
TO DOUBLE TO NEARLY
1.2 BILLION IN 2004.**

**THE EXPLOSION IN
WORLDWIDE COMMUNICATIONS
SERVICES IS ACCELERATING
DEMAND FOR OUR NETWORK
TEST AND MANAGEMENT
SOLUTIONS.**

A C T E R N A is the world's largest manufacturer of test and management solutions for optical transport, access, and cable networks, and the second largest communications test company overall. We are focused entirely on providing integrated instruments, systems, software, and services that help customers develop, install, manufacture, and maintain their communications networks.

**AT ACTERNA,
WE ARE UNIQUELY
POSITIONED TO ADDRESS
THESE OPPORTUNITIES.**

DEAR SHAREHOLDER:

Fiscal 2001 was truly a stellar year for Acterna. Here are some highlights:

- We reported record results for the year, as pro forma sales increased 27 percent and pro forma profit from operations grew 42 percent.
- Pro forma sales from optical transport test and management products rose 93 percent to \$420 million.
- We completed the merger with Wavetek Wandel Goltermann, combining the world's number two and number three providers of communications test and management products.
- We acquired Cheetah Technologies, the leading provider of test systems for the cable TV industry.
- We changed our name to Acterna to reflect the new mission of our company, the nature of the industry we address, and our commitment to our customers.
- We listed Acterna stock on the Nasdaq National Market (Nasdaq: ACTR).

THE KEEPERS OF COMMUNICATIONS

As we look at Acterna today, we are the world's largest provider of test and management solutions for optical transport, access, and cable networks and the second largest communications test company overall. We surpassed the \$1 billion revenue mark for the first time,

recording \$1.27 billion in pro forma sales in fiscal 2001. We are solidly positioned in the heart of the industry that is critical to the smooth flow of communications around the world. Our tagline – *The Keepers of Communications* – reflects the critical role communications test and management plays in helping our customers get to market faster with new products and services, improve quality of service, and reduce operational costs. More than ever before, the success of our customers depends on getting the best performance possible out of their network infrastructure and their employees. We help them do that every day.

STRATEGY FOR GROWTH
AND PROFITABILITY

Our strategy is built on three points: diversification, strong investment in new products, and attention to operating performance.

First, while we are focused on communications test and management, Acterna is uniquely diversified in terms of the markets we address, the regions of the world in which we sell, and the customers that use our products. For example, we offer instruments, systems, software, and services across all five network areas – optical transport, access, cable, data/IP, and wireless. We believe this gives us an important competitive

SALES				SALES BY AREA		
	(\$ IN MILLIONS)	(AMOUNTS ARE PRO FORMA)	1999		2000	2001
					Optical Transport \$420 Access \$186 Cable \$152 Data, Wireless, and Other \$394 Other Acterna Corp. \$114 Total \$1,266	

advantage as those network areas continue to converge. Our solutions also address all phases of the network life cycle from product R&D to service deployment to monitoring and maintenance, which is key as communications services move from the lab to the end user more quickly than ever before. Geographically, we have a local presence in every region in the world, with 41 percent of our revenue coming from outside North America. Our customers, which are split between network operators, equipment manufacturers, and end-users, include blue-chip companies such as AT&T, SBC, Verizon, Deutsche Telekom, China Telecom, Cisco, Siemens, and Tycom.

Second, we continue to make investments in new products one of our highest priorities. On a pro forma basis, we invested \$160 million in R&D last year, of which \$145 million was directed to developing communications test and management products. These investments resulted in a full new product pipeline and a record number of new product introductions, including several industry firsts in the optical transport area. For instance, we introduced the ONT-50 Optical Network Tester, which is the first portable analyzer to combine both optical and digital testing in a single instrument. The ONT-50 significantly reduces the time it takes technicians to test optical networks, thus saving

customers time and money. We also introduced the Acterna TestPad™ 2510, the lightest, most compact field instrument for testing 10-gigabit fiber optic networks.

Third, we continue to set high standards for executing our business plans. With the successful integration of our companies behind us, we have turned our attention to leveraging our operating synergies and taking full advantage of our greater purchasing power as a billion dollar company. As part of that effort, we began the implementation of an Enterprise Resource Planning system that will replace multiple legacy systems that we inherited from our merger. When it is substantially installed in fiscal 2003, this system will integrate financial, supply chain management, and customer relationship management systems across the entire company. We are confident that this investment will provide a material pay-off in our ability to manage the business and to better serve our customers globally. In addition, we are consolidating our manufacturing operations and have taken steps to streamline other parts of our organization.

Many companies claim to have a worldwide presence, but as a result of our merger we truly do. We sell direct in more than 30 countries and operate world-class research and development centers in both Europe and

[8]

<p>SALES BY GEOGRAPHY</p>	<table border="0"> <tr> <td>North America</td> <td>\$747</td> <td rowspan="4"></td> </tr> <tr> <td>Latin America</td> <td>\$76</td> </tr> <tr> <td>Europe</td> <td>\$325</td> </tr> <tr> <td>Asia and Rest of World</td> <td>\$118</td> </tr> <tr> <td colspan="2">Total</td> <td>\$1,266</td> </tr> </table>	North America	\$747		Latin America	\$76	Europe	\$325	Asia and Rest of World	\$118	Total		\$1,266	<p>PRO FORMA PROFIT FROM OPERATIONS</p> <p>Defined as earnings before interest, taxes, amortization, special charges, and integration expense.</p>	<table border="1"> <thead> <tr> <th>Quarter</th> <th>FY 2000 (\$M)</th> <th>FY 2001 (\$M)</th> </tr> </thead> <tbody> <tr> <td>1Q</td> <td>\$20</td> <td>\$36</td> </tr> <tr> <td>2Q</td> <td>\$42</td> <td>\$49</td> </tr> <tr> <td>3Q</td> <td>\$41</td> <td>\$53</td> </tr> <tr> <td>4Q</td> <td>\$32</td> <td>\$54</td> </tr> </tbody> </table>	Quarter	FY 2000 (\$M)	FY 2001 (\$M)	1Q	\$20	\$36	2Q	\$42	\$49	3Q	\$41	\$53	4Q	\$32	\$54
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North America – we believe this strengthens our competitive advantage. Just as important, we have a strong global team of energetic, committed, and experienced Acterna employees dedicated to meeting the exacting needs of our customers every day. It is to the full credit of these employees that our merged companies have come together so quickly and so seamlessly.

OTHER ACTERNA BUSINESSES

In addition to Acterna's communications test business, there are two additional businesses, AIRSHOW and da Vinci Systems, which comprise approximately 10 percent of our sales. Both businesses are clear leaders in their respective markets: AIRSHOW supplies in-flight information and entertainment systems for passengers of commercial and private aircraft. Although this market has felt the effects of the slowing economy, AIRSHOW has continued to win important new business. AIRSHOW now provides Delta Shuttle passengers with flight statistics and connecting gate information. Our da Vinci color enhancement system was recently awarded an Emmy for outstanding achievement in engineering development.

OUTLOOK

We have much to be proud about this past year. We are particularly pleased with our strong sales and profit

growth, the successful integration of the merged companies, and a full new product pipeline – all of which we accomplished against a backdrop of industry and market uncertainty. As we enter our fiscal 2002, however, we find ourselves in the midst of a significant slowdown in the global communications industry. This industry slowdown, perhaps the worst in years, comes after a number of years of record-level growth.

While we are in a difficult market environment, our experience and leadership in the industry and our diversity across markets, geography, and customers will enable us to weather these challenges and to take full advantage of market upturns as they occur. The global communications test and management market, now valued in excess of \$10 billion, remains an integral part of the successful deployment and management of optical, access, cable, data and wireless networks. We believe Acterna is uniquely positioned to take advantage of the long-term growth potential of this market.

Sincerely yours,



Ned C. Lautenbach
Chairman and CEO



John R. Peeler
President



July 24, 2001



THE KEEPERS OF COMMUNICATIONS.

NETWORK DIVERSIFICATION TODAY'S INTERCONNECTED WORLD DEPENDS ON INFORMATION THAT FLOWS OVER MULTIPLE, CONVERGED NETWORKS. ACTERNA PROVIDES PRODUCTS AND SERVICES THAT ADDRESS FIVE KEY NETWORK MARKETS: OPTICAL TRANSPORT, ACCESS, CABLE, DATA/IP, AND WIRELESS.

BROAD PRODUCT PORTFOLIO THE LIFE CYCLE OF A NETWORK TECHNOLOGY STRETCHES FROM ITS DEVELOPMENT IN THE LAB TO THE MANUFACTURING FLOOR TO DEPLOYMENT IN THE FIELD. ACTERNA COVERS THIS ENTIRE LIFE CYCLE WITH MORE THAN 100 DIFFERENT INSTRUMENTS AND SYSTEMS PRODUCT LINES, AS WELL AS SOFTWARE AND SERVICES, MAKING IT ONE OF THE MOST COMPREHENSIVE SUPPLIERS IN ITS INDUSTRY.

GLOBAL PRESENCE WITH NEARLY 1,500 SALES AND SERVICES PERSONNEL AROUND THE WORLD AND A PRESENCE IN 80 COUNTRIES, ACTERNA IS ABLE TO SERVE ITS CUSTOMERS LOCALLY AND ALSO ADDRESS THE NEEDS OF LARGE, MULTINATIONAL CUSTOMERS.

WORLD CLASS R&D ACTERNA HAS A LONG HISTORY OF BEING FIRST TO OFFER NEW TEST SOLUTIONS, SUCH AS THE FIRST PORTABLE BATTERY-OPERATED SONET TESTER AND THE FIRST ALL-IN-ONE OPTICAL AND DIGITAL TEST UNIT. IN FISCAL 2001, ACTERNA INVESTED MORE THAN \$145 MILLION TO DEVELOP NEW COMMUNICATIONS TEST PRODUCTS.

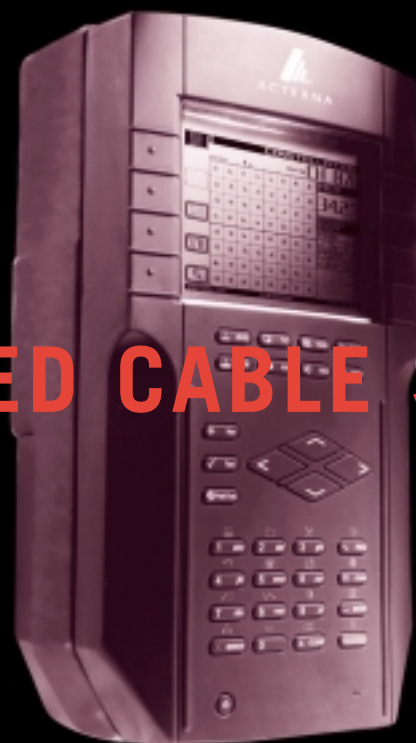
STRATEGIC ALLIANCES ACTERNA HAS FORMED MORE THAN 350 STRATEGIC ALLIANCES WITH LEADING COMMUNICATIONS INDUSTRY MANUFACTURERS, SERVICE PROVIDERS, SOFTWARE COMPANIES, SYSTEMS INTEGRATORS, DISTRIBUTORS, AND VALUE-ADDED RESELLERS. THESE INCLUDE ALCATEL, CAP GEMINI ERNST & YOUNG, CISCO, METASOLV, SIEMENS, AND TELLABS.

CUSTOMER SATISFACTION MORE FIELD TECHNICIANS IN THE COMMUNICATIONS INDUSTRY USE ACTERNA'S PORTABLE TEST INSTRUMENTS THAN ANY OTHER PROVIDER – MORE THAN 250,000 ACTERNA UNITS ARE DEPLOYED WORLDWIDE. ACTERNA SELLS TO VIRTUALLY EVERY NETWORK OPERATOR AND MANY COMMUNICATIONS EQUIPMENT MANUFACTURERS AS WELL AS TO FORTUNE 500 COMPANIES.



ACCELERATED FIBER OPTICS

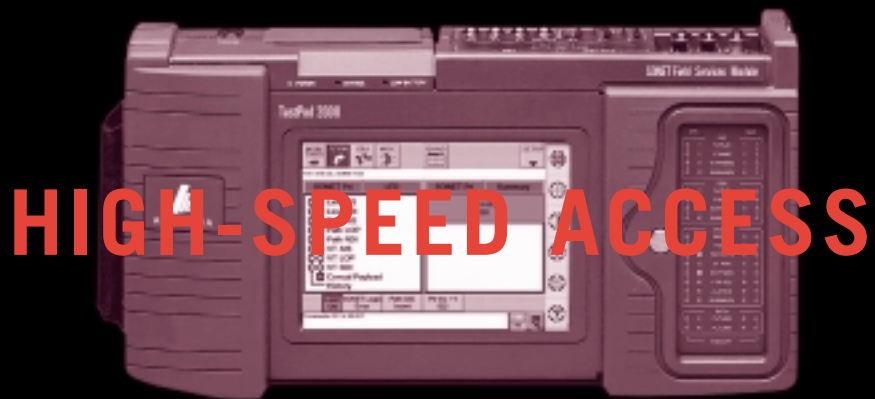
FIBER OPTICS Optical networks are the backbone that connects more businesses and homes than ever before. With \$420 million in optical transport revenue on a pro forma basis in fiscal 2001, Acterna is the world's largest provider of instruments used to deploy and troubleshoot these high-speed fiber networks. In February 2001, the company marked an industry first with the deployment of the 5,000th handheld optical tester, the Acterna TestPad 2310.



EXPANDED CABLE SERVICE

[12]

C A B L E The cable industry is in the midst of a major initiative to deliver new services to their subscribers. Acterna is the world's largest provider of test and management products to the cable industry with 100,000 test instruments and 200 cable test systems deployed worldwide. Acterna's instruments enable cable operators to prepare their networks for advanced digital services such as internet access via cable modems, digital TV, and telephony. Cable operators also use Acterna systems to monitor their networks to insure top quality service.



ACCESS Multimedia, high-speed Internet, and other broadband applications are driving demand for high-speed local access from the office and home. To supply these services, network operators must contend with converging technologies, increased competition, and demand for high quality. Acterna's access network test and management solutions help these providers install, troubleshoot, and monitor DSL, broadband, and other access services that connect business and residential customers to their networks.



DATA/IP MANAGEMENT

D A T A / I P Data/IP traffic has overtaken voice traffic, and analysts predict continued strong growth for data services. Keeping data networks operating at peak efficiency while avoiding bottlenecks and downtime has been a complex task. Acterna's Cyclone family of analyzers streamline data traffic analysis from a multi-step approach to a one-step solution. Cyclone can now test IP traffic and services running over frame relay, ATM, packet over SONET, and MPLS networks.



WIRELESS COVERAGE

WIRELESS Is my mobile phone working? With worldwide subscribers expected to reach 1.2 billion by 2004, Acterna is addressing opportunities in the wireless market including the testing of handsets and devices, RF testing, and network testing. The company is the leading provider of equipment for testing mobile handsets to identify needed repairs.

A vintage computer monitor is centered in the image. The screen displays a map of the United States with state boundaries, overlaid on a data table with multiple columns and rows. The text "SERVICES AND SOLUTIONS" is superimposed in large, bold, orange letters across the middle of the monitor.

SERVICES AND SOLUTIONS

GLOBAL SERVICES AND SOLUTIONS Intense competition in the global communications industry requires companies to maximize network investments while keeping pace with changing technology. Acterna provides a range of consulting services – product support, service deployment, training, process improvement, and program management – tailored to meet customer needs. To decrease service providers' time to revenue while assuring service levels as technologies evolve, the company also provides custom software and centralized test systems for automated, end-to-end network management.

ANNUAL MEETING

The Annual Meeting of Shareholders will be held at 2 p.m. on Wednesday, September 12, 2001, at Debevoise & Plimpton, 919 Third Avenue, New York, NY. Formal notice of the meeting, proxy statement, and proxy will be mailed to shareholders prior to the meeting.

COMMON STOCK

Acterna Corporation common stock is listed on the Nasdaq National Market under the ticker symbol ACTR.

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FORM 10K AND ADDITIONAL INFORMATION

Additional information, copies of this report, and the Form 10-K filed with the U.S. Securities and Exchange Commission may be obtained without charge by writing to Investor Relations at the Company's corporate office.

FINANCIAL HIGHLIGHTS

	FISCAL 2000	FISCAL 2001	CHANGE
Sales	\$ 996	\$ 1,266	27%
Pro forma Profit from Operations*	\$ 135	\$ 192	42%
Cash Earnings**	\$ 53	\$ 63	19%
Cash EPS	\$ 0.27	\$ 0.31	15%

*Defined as earnings before interest, taxes, amortization, special charges, and integration expense.

**Cash earnings defined as net income (loss) plus amortization and special charges.

(\$ IN MILLIONS, EXCEPT PER SHARE DATA)

(AMOUNTS ARE PRO FORMA)



ACTERNA™
The Keepers of Communications