



## **Apex Investment Partners (A): April 1995**

As the three venture capitalists from Apex Investment Partners headed to the Seattle-Tacoma Airport, their mood was pensive. Rick Bolander, George Middlemas and Oliver Nicklin—along with several analysts from an affiliated firm—had just spent nearly 12 hours with officials from AccessLine Technologies, an emerging telecommunications firm based in Bellevue, Washington. The company appeared to have extraordinary potential for rapid growth. If Apex was to be the lead venture investor, it would need to move quickly. But before the transaction could be completed, however, two major obstacles needed to be surmounted.

AccessLine had pioneered the development of the first commercial system to deliver a broad array of personal communication services. It was the developer of the “One Person, One Number” concept, which allows individuals to manage all of their telecommunications (personal and business calls, faxes, voice messaging, and paging) through a single phone number. A caller need not know the location or phone number of a subscriber’s communication device, but simply dial the AccessLine number.

Apex was not only excited about AccessLine’s technology, but also about its business approach. The intense competition among traditional telephone companies and new entrants had led carriers to offer new services to differentiate themselves. The AccessLine System provided such a differentiating service, with relatively modest capital and operating expenditures. The firm had signed agreements with several key players in the telecommunications industry which allowed it to generate increasing fees as the use of these services increased. The company also was poised for rapid international growth through its relationships with European and Canadian carriers. Unlike most early-stage deals in which Apex considered investing, AccessLine had relatively limited risk: cash flow was projected to turn positive in the third quarter of 1995. Another source of strength was AccessLine’s management team, which combined extensive technical expertise with business experience in many facets of the telecommunications industry, and had met or exceeded financial projections during the last seven quarters.

AccessLine had raised \$15 million in a private placement with non-venture investors in July 1994, but there were no earlier venture investors. Much of this meeting between AccessLine and Apex, as well as an earlier session, had been spent building mutual understanding and establishing a relationship of trust between the corporate managers and the venture capitalists. But at the same time, it was clear that there were two contentious issues that needed to be resolved before any deal could proceed. In each case, the position of the two parties seemed far apart.

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*Professor Josh Lerner prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. Josh Lerner has undertaken advisory work for Apex Investment Partners.*

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First, AccessLine's valuation posed a complex challenge. While AccessLine was an extremely promising firm, there was a considerable degree of uncertainty about its prospects. Apex would need to invest at a valuation that was low enough to ensure a sufficient return if the firm proved successful, in order to compensate the fund for the risk it was assuming. But AccessLine's management team felt strongly that the investment had to be priced at a premium to the valuation in the previous financing round.

Second, Dan Kranzler, AccessLine's President and CEO, had proposed a set of terms and conditions that were very similar to those in the company's Series A financing. Apex typically invested in deals with much more stringent terms and conditions. Determining what protections were needed for Apex in this case, and persuading AccessLine that these terms were needed, was proving to be a complex challenge.

## Apex Investment Partners

Apex Investment Partners was founded in 1987 by James A. Johnson and the First Analysis Corporation. Prior to forming Apex, Johnson had been chief financial officer of Beatrice Foods. He had also, in conjunction with a Beatrice colleague, been a partner in Knightsbridge Associates, a small buy-out fund. While with Knightsbridge, Johnson and his partners did a buyout of the haircut chain, Supercuts, in a transaction valued at \$21 million. (When the firm went public in 1991, the company's equity was priced at \$48 million.)<sup>1</sup> Another successful buyout was Tasty Frozen Products, which was sold to H.J. Heinz for several times the purchase price in 1991.

First Analysis Corporation, who served as a general partner of Apex, was founded in 1982 by Oliver Nicklin. Nicklin had previously been chief operating partner at the investment banking firm William Blair & Co. Originally a "research boutique" (an organization concentrating on equity research in a particular industry), First Analysis had diversified into corporate finance and mergers and acquisition activity. All of its work focused on environmental and industrial productivity technologies. Beginning in 1985, First Analysis had begun raising a series of targeted venture funds focusing on productivity-enhancing and environmental technologies. The six funds that they had raised in the ensuing decade had total committed capital of \$210 million.<sup>2</sup>

In December 1991, George Middlemas joined Apex. Middlemas had been in the venture industry since 1979, first at Citicorp Venture Capital and then at Inco Venture Management. Among the companies that Middlemas had been responsible for were America Online (and its predecessor, Control Video Corp.), Plant Genetics (which merged with Calgene), and Security Dynamics Technologies Inc. Middlemas had left Inco after the venture organization returned to its original objective of managing venture investments for its corporate parent, the Toronto-based nickel producer Inco, Ltd. (In the interim, it had raised and invested capital from external investors.)<sup>3</sup> Rick Bolander, a recent graduate of Harvard Business School who had spent seven years as an operating manager at AT&T, had joined Apex in 1994. Biographies of the principals of Apex are summarized in **Exhibit 1**.

In its eight-year life, Apex had raised three funds.<sup>4</sup> Its first fund, Apex Investment Fund I, closed in 1987; Apex Investment Fund II, in 1990. Together, the two funds had committed capital of

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<sup>1</sup>Supercuts Initial Public Offering Prospectus, October 30, 1991.

<sup>2</sup>"Environmental Venture Fund/Environmental Private Equity Fund," *Venture Capital Journal*, 35 (January 1995) 45.

<sup>3</sup>"Inco's Peabody Succeeds Feiner as President," *Venture Capital Journal*, 32 (March 1992) 29.

<sup>4</sup>This information is drawn from "Portfolio Profiles: Chicago—Apex Investment Partners," *Venture Capital Journal*, 33 (November 1993) 43-44, and "Apex Gets Ameritech as Lead Investor," *Venture Capital Journal*, 35 (April 1995) 18. This should not be construed as an offering document for the sale of securities or otherwise.

about \$70 million. As of April 1995, Apex was in the process of raising its third fund, which had a \$75 million target. The Ameritech Pension Trust had committed \$10 million for this next fund. Several of the key investments of Apex's first two funds (out of a total of about 40) are summarized in **Exhibit 2**. These were concentrated in four broad areas:

- telecommunications, information technology and software.
- environmental- and industrial productivity-related technologies.
- consumer products and specialty retail.
- health-care and related technologies.

In making its investments, Apex had sought to balance early-stage investments with those already generating positive operating cash flows. As of the end of 1994, fully 35% of Apex's portfolio was classified as start-up or first-stage. About one-sixth of its investments were in buy-outs or industry consolidations. Whatever the stage of the investment, Apex generally sought a leading role. In nearly two-third of its portfolio at the end of 1994, Apex was the lead investor; in three-quarters of the investments, an Apex representative had joined on the board. As of early 1995, Apex Investment Fund II had yielded a cash return of 26% to the limited partners.<sup>5</sup>

## AccessLine Technologies

AccessLine Technologies (originally known as AccessPlus Communications) was established in early 1989 in Bellevue, Washington.<sup>6</sup> Its basic technology had been invented by Robert Fuller. Fuller had begun working on the "One Person, One Number" concept in 1983, after he had sold his first company, US Communications (a manufacturer of cellular equipment for telephone companies), to E.F. Johnson Co. Fuller had initiated in 1984 a patent application that ultimately led to two important awards governing telecommunications network technologies. Patent number 4,893,335, "Remote Access Telephone Control System," issued in 1990; number 5,375,161, "Telephone Control System with Branch Routing," was awarded in 1994.

Fuller recruited Daniel Kranzler in 1986 to commercialize his technological ideas. (Biographies of AccessLine principals are presented in **Exhibit 3**.) After a brief stint as a school psychologist after graduating college in the mid-1970s, Kranzler had spent his working life in the mobile communications industry. His first position in the industry was selling paging equipment for the Harris Corporation. After a brief hiatus as a sailboat salesman in California, Kranzler moved to the Seattle area. He worked out an arrangement with an existing paging company, which allowed him to begin his own paging firm using the same frequency. Within a year, his firm, Beepers Northwest, was one of the fastest growing in the U.S. industry. Kranzler's firm caught the eye of Craig McCaw, who acquired Beepers Northwest in 1983. Kranzler became the eighteenth employee at McCaw Cellular Communications, and helped grow McCaw's cellular and paging businesses. (McCaw emerged as the nation's largest cellular firm before being acquired by AT&T.)

Kranzler met Fuller while working at McCaw. Fuller had been impressed with Kranzler's entrepreneurial zeal and tenacity. The two men's partnership had evolved over time. An initial focus of their efforts was US Metrolink. This company enabled Seattle-area customers to pay lower rates for in-state calls than charged by the local telephone provider, US West, by arbitraging discrepancies

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<sup>5</sup>"Apex Gets Ameritech as Lead Investor," *op. cit.*

<sup>6</sup>This history of AccessLine is based in large part on Tim Healy, "Entrepreneur Knows When to Hold Ideals, When to Fold Them," *Seattle Times*, January 29, 1990, D4; Jerry Michalski, "AccessLine, the Communications Coordinator," *Release 1.0*, 93 (January, 1993): 13; and "AccessLine Revisited: Friend of the Intelligent Network," *Release 1.0*, 94 (October 1994): 10.

in the local rates. After a fiercely-fought, multi-year battle with US West before State of Washington's Utilities and Transportation Commission, Kranzler and Fuller shifted their emphasis to the "One Person, One Number" technology. As president of AccessLine, Kranzler played several roles. In addition to designing the firm's marketing strategy, he was instrumental in reshaping this technology to enhance market acceptance. Robert Fuller served as chairman of the new firm.

AccessLine's vision was to integrate cellular phone, paging, voice messaging, and traditional telephone service. A subscriber was assigned a single telephone number. (See **Exhibit 4** for a detailed product description.) Calls to a subscriber could be routed to him (e.g., to his car or office phone), to his fax machine, or else to his voice mailbox. If a subscriber was in transit at the time of an urgent call, the system was able to page him. The subscriber could then dial into the system, and be connected with the caller. Users could program the system in a myriad of ways: for instance, a subscriber could screen or block all but selected business calls to his home after a certain hour.

Thus, AccessLine strategy was distinct from the numerous manufacturers of personal communications systems who were contemporaneously attracting financing. (An analysis of AccessLine's competitors is reproduced in **Exhibit 5**.) While a variety of competitors were focusing on developing special units that were usable inside and outside the office, AccessLine sought to achieve similar goals using the customer's existing telephone network. Kranzler argued (as it turned out, correctly) that consumers would be reluctant to invest \$700 or more for a Newton or other personal communicator. He believed that they would be much more willing to pay a few dollars a month to get most of these communicators' features from AccessLine.

The firm sought to commercialize its technology through the aggressive use of strategic alliances. While telephone companies had originally intended to develop the software for single-number systems in-house, they soon discovered it was far more cost-effective to license the technology. In 1989, AccessLine undertook its initial strategic relationship with McCaw Cellular Communications. McCaw not only launched AccessLine's product, but also provided a considerable fraction of the firm's initial financing. In the ensuing three years, AccessLine undertook licenses with many carriers, including Ameritech, Bell Atlantic, Southern New England Telephone and Bell Canada. The telephone companies then marketed the service to its customers under their own brand names. (For instance, Bell Atlantic marketed the service as ContactLine; Southern New England as Linx AccessLine.) In exchange for a higher fee, a phone company could be granted an exclusive franchise in a particular market. In addition, AccessLine undertook strategic alliances with equipment manufacturers such as Stratus Computer (manufacturer of the fault-tolerant mainframes used in many telephone networks) and Motorola.

AccessLine turned to professional equity investors for the first time in June 1994. Under the leadership of AccessLine's Chief Financial Officer, Bill Stuart, and Bill Brady from Morgan Stanley & Co., it undertook a \$15.5 million private placement from five investors. As part of the transaction, Jay Hoag, at the time managing director of Chancellor Capital Management, was elected to the board.<sup>7</sup> **Exhibit 6** reproduces the term sheet of the transaction. In the ensuing year, the pace of strategic alliances had continued apace, including a major arrangement with IBM, which agreed to use AccessLine's technology in its forthcoming personal communicator device. AccessLine's historical finances and projected growth are summarized in **Exhibit 7**.<sup>8</sup>

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<sup>7</sup>"AccessLine Technologies Completes \$15.5 Million In Private Placement," *PR Newswire*, July 25, 1994. Hoag left Chancellor shortly after this transaction to begin his own firm, but retained his board seat. No other director was added to the board to represent the Series A investors.

<sup>8</sup>AccessLine's sales were projected to continue to grow steadily, reaching about \$208 million by 1999. 1994 sales were \$14.2 million, and 1995 sales were projected as \$32.5 million ("NTT to Deploy 'One Number Service' in Japan: NTT to Form a New Company with an American Corporation by End of September," *Nikkei Sangyo Shimbun*, September 6, 1995, p. 1). While after-tax net income was projected to be very modest in 1995 and 1996,

## The Proposed Transaction

Reflecting this rapid growth, AccessLine sought additional financing in early 1995. The firm sought to raise approximately \$16 million, which it intended to use for acquisitions and developing strategic partnerships. Bolander had learned about AccessLine during his job search as he was completing his MBA in early 1994. While he had not accepted the business development position that the firm offered him, he had stayed in touch with the management team. As AccessLine began looking for another financing round, he arranged a meeting between Apex and AccessLine officials.

The two teams had met for an informal dinner in late February. After pursuing a variety of due diligence investigations, Apex had decided to visit Seattle in early April. After an evening at the scenic Salish Lodge in Snoqualmie (the site where the “Twin Peaks” series was filmed) informally conversing over dinner and watching the NCAA basketball finals, the two teams had spent the day reviewing the company, its technology, and its prospects. At the day’s end, the Apex team was excited by AccessLine’s prospects. The investment also fit in well with their current objectives. Most of Apex’s technology investments to date had been early-stage ones. Apex Investment Fund II, however, was approaching middle age, and its third fund was still being raised. Consequently, the prospect of an investment in an imminently positive-cash-flow firm that had the prospect of going public relatively quickly was attractive.

Nonetheless, Apex’s management had two sets of concerns with the deal as proposed. The first related to the proposed valuation of the deal. AccessLine’s management felt strongly that the Series B investment had to be priced at a premium to the valuation in the prior financing round. As AccessLine’s chief financial officer, Bill Stuart, noted:

We will not enter into a transaction which is unfair to our existing shareholders, especially those who invested last June. That’s not the way we operate and, in any event, the Series A Preferred shareholders will need to approve the financing. If we give better terms on this deal, we will need to renegotiate our last financing with those Series A shareholders. From their standpoint, the question would be why provide better terms than those of the last financing—AccessLine has met and, in fact, exceeded their expectations. There is more value in the company—not less.

But Apex needed to ensure that if the company was successful that the fund would receive a very attractive return. AccessLine had received, they believed, a relatively high valuation in its initial external financing round. Investing at too high a valuation in this round would limit the fund’s upside. In considering its potential return, Apex also examined two comparable firms that were publicly traded (summarized in **Exhibit 8**).

Even if Apex was willing to invest at a high valuation, it would need to persuade one or more syndication partners to do likewise. Apex Investment Fund II’s partnership agreement prohibited the venture capitalists from investing more than a few million dollars in any one deal. Apex intended to serve as lead investor<sup>9</sup> for this transaction, contributing a total of \$2 million of its own capital and arranging for much of the additional financing. If Apex was to persuade others to invest, the investment could not be priced at too high a level.

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by 1999 it was projected to represent 22% of sales. New capital expenditures (*i.e.*, distinct from expenditures to replace depreciation) were expected to be about \$1.5 million in 1995 (a year in which sales growth was \$18.3 million). New capital expenditures were likely to be proportional to the dollar growth in sales in subsequent years. Net working capital would remain approximately constant.

<sup>9</sup>As lead investor, Apex anticipated that it would represent the Series B shareholders on AccessLine’s board.

At the same time, Apex realized that AccessLine was talking to a number of other venture capitalists, including Accel Partners and at least one other group. Accel, based in San Francisco and Princeton, was a formidable competitor, with \$350 million under management and a specialization in telecommunications investments. (Its previous investments had included Network Equipment Technologies and Vitalink Communications.) If Apex sought to drive too hard a bargain, AccessLine might turn to these other investors for capital.

Secondly, Apex had concerns with the particulars of AccessLine's proposed term sheet (presented in **Exhibit 9**). Apex felt that the agreement should more directly provide incentives for the management team to pursue a mutually satisfactory outcome (*i.e.*, an initial public offering at an attractive valuation). This might be accomplished through a variety of mechanisms. Among the approaches that might accomplish this goal would be provisions that required punitive interest or dividend payments if the firm did not go public. This gave the venture capitalists the right to fire management if the firm did not go public by a certain date, and allowed the venture capitalists to force the firm to repurchase their shares (a put option).

In addition, Apex management felt that there was a greater need for measures that would protect the Series B investors from steps that were detrimental to their interests, such as the sale of shares to public or private investors at too low a valuation. The proposed AccessLine term sheet had provided some protections. For instance, the investors did not need to convert their preferred shares into common stock if an IPO was completed at a price under \$10.50 per share. Their failure to convert the shares would essentially block the firm from going public. Nonetheless, Apex management believed that stronger measures would be helpful. These might include making the existing protections stronger (e.g., by raising the price at which the investors would be required to automatically convert their shares into common stock), as well as giving rights of first refusal on future financing.

The Apex team realized that these steps would likely meet with resistance from AccessLine. In particular, Kranzler interpreted suggestions along these lines as indications that Apex was viewing the investment in purely financial terms, and was seeking to earn a quick profit by "flipping" the shares after an IPO. If Apex was not interested in quick profits, he asked, why should it demand a set of terms that would punish management for not going public?

In two weeks, the two sides planned to meet again. This session, set for the Union League Club in Philadelphia, would involve Stuart from AccessLine, Middlemas and Bolander from Apex, and Brady from Morgan Stanley. The outstanding issues, the Apex team realized, would need to be resolved quickly if the deal was to come to fruition.

**Exhibit 1** Profiles of Key Personnel**Apex Management**

**James A. Johnson** Prior to founding Apex, Jim Johnson was one of three founding partners of Knightsbridge Partners, a private investment firm. Knightsbridge sponsored investments in small- to medium-size companies with excellent growth prospects. After the partnership was disbanded, Mr. Johnson retained ongoing responsibility for two companies from which the investors have now successfully exited. Previously, Mr. Johnson was associated with Beatrice Foods, serving in a number of positions including CFO of the parent corporation and senior vice president of the \$6 billion revenue U.S. Foods operating subsidiary. During this period, he was active in numerous acquisitions and divestitures including Esmark, Tropicana, Culligan, Air Stream Trailers, Coca-Cola Bottling of Los Angeles, and Dannon Yogurt. Mr. Johnson holds an MBA from Northwestern University and is a CPA. He is director of Acstar, American Waste Services, Industrial Services Technologies, Pure Fill Corporation, and Select Comfort, and currently serves as the president of the Juvenile Protection Association. Mr. Johnson concentrates on consumer-related opportunities and later stage deals.

**George M. Middlemas** George Middlemas joined Apex in 1991 and has been involved in the venture capital industry since 1979. Prior to joining Apex, he was senior vice president and principal with Inco Venture Capital Management and prior to that was vice president and member of the investment commitment committee of Citicorp Venture Capital. Mr. Middlemas was a founding investor in Arnold Palmer Golf, Security Dynamics, America Online, Autotote, Conductron, and ALC (Lexitel). In addition, he was instrumental in the early financings of GRID Systems, Chomerics, Omni Cable TV, and Plant Genetics (Calgene). He is currently a director of PureCycle, American Communication Services, Steinbrecher, Data Critical, Security Dynamics, Tut Systems, and Arnold Palmer Golf. Mr. Middlemas holds bachelors of arts degrees in history and political science from the Pennsylvania State University, a masters of arts degree in political science from the University of Pittsburgh, an MBA from Harvard University, and is a CPA. He also serves on the Library Development Board of the Pennsylvania State University. Mr. Middlemas concentrates on telecommunications, software, and information technology.

**Frederick W. W. Bolander** Rick Bolander joined Apex in 1994 after participating in a start-up venture to fund telecommunications projects, including a shared private telecommunications network in Tanzania, Africa in the summer during his MBA enrollment. Mr. Bolander was with AT&T for seven years where he served in various operating management roles including product development, project management, operations, engineering, sales, and marketing. He holds an MBA from Harvard University. After receiving his bachelors and masters of science degrees in electrical engineering from the University of Michigan, Mr. Bolander developed course material and lectured at the University on computer architecture. He is currently a director at Concord Communications. Mr. Bolander concentrates on telecommunications, software, and information technology.

**First Analysis Corporation**

**F. Oliver Nicklin, Jr.** Oliver Nicklin founded First Analysis Corporation and is its president. He is an acknowledged expert in the broad environmental waste services field, having 25 years of experience in this area, as well as over 27 years of private investment experience. Prior to founding FAC, he served 12 years as an analyst, director of research, and chief operating partner at William Blair & Company, an investment banking, brokerage firm located in Chicago. His other experience includes strategic planning and European project evaluations for Amoco Corp. and Exxon Corp. A major emphasis throughout his career has been finding, evaluating, and nurturing emerging growth situations. He is a chartered financial analyst and received a bachelor's degree in chemical

engineering from the University of Texas and an MBA from Harvard University. Currently, Mr. Nicklin is on the Board of Acstar, American Waste, and GNI Corp.

**Bret R. Maxwell** Bret Maxwell is a managing director of First Analysis Corporation responsible for coordinating private equity activities. Mr. Maxwell has more than 12 years of experience in the environmental and telecommunications private equity markets with the solid waste management field among his primary areas of expertise. His prior experience includes consulting for Arthur Andersen & Co. on manufacturing control systems and engineering work for General Electric Co. on automated inspection systems, robots, and sensing devices for jet engines. He is a chartered financial analyst and received a bachelor's degree in industrial engineering and an MBA, both from Northwestern University. Mr. Maxwell participates or has participated on the Boards of American Waste, American Communication Services, Continental Waste, Dialogic Corporation/GammaLink, National Recovery Systems, Salopek Golf Cars, and The Zond Group.

### **Other Investment Professionals**

**Nancy L. Corrie—Chief Financial Officer** Nancy Corrie joined Apex in 1991 after serving as an accountant with Arthur Andersen & Co. for six years. She is a CPA and graduated with highest honors from DePaul University. Ms. Corrie is responsible for the financial administration of Apex as well as limited partner reporting and communications.

Source: Corporate documents.



**Exhibit 2** Selected Apex Investments in April 1995**Telecommunications, Information Technology, and Software****American Communication Services, Inc. (ACSI) – Oakbrook, IL (NASDAQ:ACNS)**

ACSI is a competitive access provider (CAP) and a developer and operator of fiber optic networks. CAP networks are used by high volume telecommunication users and long distance providers to bypass the Local Exchange Carriers. The company has five networks in operation, five networks under construction, and 10 more being planned. By the year 2000, it is estimated that CAP industry revenues will exceed \$2.5 billion, and ACSI expects to achieve several percentage points of the available market. ACSI was founded by Apex, Global Capital, and The Productivity Fund, along with the management team. Publicly held, ACSI recently completed a private placement of \$20 million to finance the completion of networks under construction. *Apex holds a board seat and the current valuation is 1.6x cost.*

**Applied Digital Access, Inc. (ADA) – San Diego, CA (NASDAQ:ADAX)**

ADA is a leading provider of network test and performance monitoring systems for high speed telecommunications circuits. Its customers are primarily the Regional Bell Operating Companies. The company is also developing a product that could be installed on customer premises, thereby greatly enlarging the market for their products. To our knowledge, ADA is the only company with technology capable of processing test data from DS3 circuits without inducing degradation in the circuit itself. ADA went public in March 1994. Apex participated in a recapitalization financing of ADA in early 1992 and was responsible for introducing Ameritech Development Corporation to the company. *Current valuation is 7.3x cost.*

**Data Critical Corporation – Seattle, WA/Oklahoma City, OK**

Data Critical has developed a patented technology for using the paging network (or any other wireless bandwidths) for sending large data files to remote locations. Applications for the technology include medical information, law enforcement, broadcast fax, and financial information. The company has already signed agreements with several companies for the development of services and has finished one extensive trial leading to a commercial roll-out in 1995. Apex led a bridge round in 1994 and a \$3 million round in early 1995. *Apex holds a board seat and carries the investment at cost.*

**Dialogic Corporation/GammaLink – Parsippany, NJ (NASDAQ:DLGC)**

Dialogic is a leading developer, manufacturer, and distributor of call-processing system products. The company went public in April 1994. First Analysis Corporation was a founder of GammaLink in 1986 and Apex originally invested in GammaLink in 1990. GammaLink and Dialogic agreed to merge via a pooling of interests in September 1993. GammaLink is a leading manufacturer of PC-fax communication products. Since the IPO and merger, the company has been performing above expectations. *Holdings in Dialogic were liquidated at 5.75x cost.*

**Security Dynamics Technologies, Inc. (SDI) – Cambridge, MA (NASDAQ:SDTI)**

SDI develops and supplies a family of products used for computer and network security. The company's basic technology ("SecurID") is based on over 14 patents in the United States and overseas, and their products are used by many "Fortune 1000" companies, as well as government agencies. Profitable since the fourth quarter of 1989, SDI has been growing at over 50% per annum and enjoys 70%+ gross margins. SDI was founded in 1986 by a group including George Middlemas and the original management team. Apex invested in SDI in 1992 as part of a recapitalization and the company went public in December 1994. *Apex holds a board seat and the current valuation is 7.5x cost.*

**Steinbrecher Corp. – Burlington, MA**

Steinbrecher is the leading designer and supplier of wideband digital radio systems, which are primarily used in wireless communication networks. The company's technology enables wireless networks to process signals digitally with higher fidelity at lower signal strengths. The company's

patented technology is less expensive than current analog solutions and more versatile. The company is currently supplying data transceivers to McCaw, Airtouch, and other cellular network operators. They are also developing a new product ("mini-cell") targeted for the worldwide cellular voice industry in late 1995/early 1996. The technology can easily be adapted to PCS or other voice and data uses. Apex and McCaw Corporation led an \$8.6 million venture financing in February 1993, a \$20 million private placement in December 1993, and a \$15 million private placement in October 1994. *Apex holds a board seat and Steinbrecher is currently valued at 2x cost.*

#### **Tut Systems, Inc. – Pleasant Hill, CA**

Tut designs and distributes transceiver products that improve the transmission characteristics of copper wire. The core technology employs a patented balun circuit to enhance the signal-to-noise ratio by over 100 times better than other existing balun technologies. Tut's unique solution offers a cost advantage over the competition's solution. Tut will leverage their core technology to develop additional products. Apex led a \$5 million venture financing in April 1995 which allowed the company to expand its marketing efforts. *Apex holds a board seat and carries the investment at cost.*

### **Environmental/Industrial Productivity**

#### **PureCycle Corporation – Commerce City, CO (NASDAQ:PCYC)**

PureCycle is a water resource and development company that owns the rights to market and develop ground and surface water in the state of Colorado. In addition, the company has a proprietary technology for the treatment of waste water. The company's main asset is a large amount of water (three million acre feet) that is located within seven miles of Denver. This water, when developed, represents an asset worth at least \$200 million and annual revenues to the company exceeding \$12 million. The company is in the midst of developing the assets for use by several communities in the Denver area. Apex structured and led two financings of PureCycle that have financed operations during development. *Apex holds a board seat and the company is valued at cost.*

#### **Zemex Corporation – Toronto, Ontario, Canada (NYSE:ZMX)**

Zemex is involved in the extraction and processing of industrial minerals as well as the production of powdered metals. Assuming only the growth in Zemex's existing business, due to programs already in place or announced, net income would increase from \$1.8 million in 1993 to \$6.8 million in 1996. Zemex represented an opportunistic and relatively low risk means of participating in an upsurge in cyclical issues and came to our attention through our deal flow via FAC. *Current valuation is 1.6x cost.*

#### **The Zond Group, Inc. – Tehachapi, CA**

Zond develops, constructs, operates, and manages wind power generating facilities and sells related technology. The company has developed wind power projects comprising of approximately 260 megawatts of generating capacity and currently operates over 2,400 wind turbines. Zond is completing tests of its new wind turbine, the Z-40. *Apex holds a board seat and the current valuation is at cost, plus Zond pays a current dividend.*

### **Consumer Products /Specialty Retail/Other Investments**

#### **Arnold Palmer Golf Management Co. (Pacific Golf, Inc.) – Orlando, FL**

Pacific Golf was founded to acquire Arnold Palmer Golf Management (APGM) and to acquire, lease, upgrade, and manage golf course facilities. Apex led this investment and holds a major position. Since the investment was made in September 1993, the company has added four additional facilities and has more than tripled in size and is cash flow positive. *Apex holds two board seats and APGM is currently valued at 2.5x cost, based on a multiple of cash flow comparable to other companies in this area.*

#### **Continental Waste Industries, Inc. – Clark, NJ (NASDAQ:CONT)**

Continental Waste is a solid waste collection and disposal company. The company has acquired several solid waste landfills and collection companies in six Midwestern states. Continental Waste

has outperformed expectations consistently. Management has completed several strategic acquisitions. As of fourth quarter 1994, the company reported an increase in revenues of 130% from the previous year and fully diluted earnings per share was \$0.17, up from \$0.05 in 1993. *Apex was a founder of Continental Waste in 1990, holds a board seat, and currently values the company at 3.2x cost.*

**Expressly Portraits, Inc. – Foster City, CA**

Expressly Portraits operates more than 150 photographic portrait studios in high traffic shopping malls throughout the United States. The company is based on the concept of providing finished portraits for the consumer in one hour. The customer, frequently a family, has their appointed sitting and returns for their finished portraits one hour later. The concept is popular with the malls since the family, often including both spouses, normally spends the hour in the mall. Expressly Portraits has increased its number of stores by over 130 and sales by over \$45 million since Apex's investment in 1990. The company has also attracted two very significant corporate partners, one of whom invested \$10 million. *Expressly is currently valued at 1.8x cost.*

**Mothers Work, Inc. – Philadelphia, PA (NASDAQ:MWRK)**

Mothers Work is a specialty retailer in the upscale maternity market and currently operates over 160 stores nationwide under the names Mothers Work, Mimi's Maternity, and Maternity Works. Apex was among the initial venture investors in this company. Since our investment, Mothers Work has had a successful public offering, increased the number of stores 350%, and increased revenues by more than 400%. In addition, the company designs and manufactures 70% of their goods and utilizes a sophisticated internally developed MIS system. Mothers Work acquired Page Boy, a direct competitor, and recently announced the acquisition of A Pea in the Pod, its next largest competitor in this niche. *Apex held a board seat and the company is currently valued at 2.6x cost.*

**Select Comfort Corporation – Minneapolis, MN**

Select Comfort manufactures and distributes a line of adjustable air support mattresses for home use through both direct marketing and its own retail stores. The company has undertaken a retail roll-out and has over 30 stores as of December 1994, an increase of 27 stores from the time of our initial investment in March 1993. The company recently began a new sales promotion effort utilizing "road shows" aimed at potential customers. The use of multiple distribution channels has allowed the company to more than quadruple its sales since Apex's investment, with another 100% increase projected for 1995. *Apex held a board seat and the company is currently valued at 2.75x cost.*

**Preferred Solutions, Inc. – New York, NY**

Preferred Solutions provide prescription benefit management services which lower drug costs for companies and managed care entities. Drug costs are reduced via a combination of enforcing generic substitutions, dispensing optimum prescription size, eliminating duplications, and negotiating and enforcing discounts with pharmacies and manufacturers. Despite its relatively early stage, Preferred Solutions has already achieved a reputation for being far ahead of the competition in its analytical features. *The company was sold for cash in January 1995 for 2x investment.*

**Richwood Pharmaceuticals, Inc. – Florence, KY**

Richwood has developed a drug distribution network focused on specific drug categories not normally addressed by the large integrated pharmaceutical companies. Richwood's efforts are currently focused on pain management and neurological disorders. The company has found an exciting prospect in one drug in a portfolio it recently acquired from another company. As currently evaluated, the drug has promise as a treatment for attention deficit disorders, currently a \$150 million market. The company has several clinical trials underway to assess efficacy and the early results are quite promising. *Apex holds a board seat and Richwood is currently valued at 1.75x cost.*

Source: Corporate documents.

**Exhibit 3** AccessLine Management Profiles**Daniel Kranzler**  
**President and Chief Executive Officer**

See description in case study.

**Robert M. Fuller**  
**Founder and Chairman of the Board of Directors**

Bob Fuller has been a member of the mobile electronics and telephone communications industries since 1971. He began his career as principal engineer of Harris Corporation, R.F. Communications in Rochester, New York. In 1976, Fuller co-founded U.S. Communications which produced mobile phone products for the mobile and cellular industries. As president and CEO, Fuller grew the firm to sales of \$2.5 million. U.S. Communications merged with E.F. Johnson/Western Union in 1981 and Fuller subsequently became corporate vice president for E.F. Johnson, continuing to head the U.S. Communications division until 1983. Fuller is the owner of patents and patents pending for the technology he invented on which the AccessLine System® is based.

**Frederick A. Epler**  
**Senior Vice President, Engineering**

Fred Epler is one of the founding members of AccessLine Technologies and in addition to being senior vice president of engineering, he is also a member of the board of directors. Epler has been associated with Robert Fuller and his companies since 1977 and played a major role in the development of the AccessLine System technology. His expertise includes specialties in electrical/mechanical engineering, electronics design, and telecommunications interface. At U.S. Communications, Epler was the director of engineering, supervising the engineering and technical staffs in the design and development of cellular telephones.

**William J. Stuart**  
**Senior Vice President and Chief Financial Officer**

Bill Stuart has had 15 years of broad financial management experience in both large and small corporate environments. He has a strong record of success with high growth companies, and expertise in the areas of joint ventures, mergers and acquisitions, financing, planning, and international operations. Prior to joining AccessLine Technologies, Stuart was vice president of AT&T Paradyne, where he had responsibilities as an area controller for several business units and as an international controller overseeing financial operations of the company's international subsidiaries and distributors. Prior to its acquisition by AT&T, Stuart was treasurer for Paradyne Corporation. At Prime Computer, Inc., prior to joining AT&T Paradyne, Stuart held various financial management positions during which time the company grew from \$60 million to \$640 million in annual revenues. Stuart joined AccessLine Technologies in May of 1992.

**Mark A. Louison**  
**Senior Vice President and Chief Operating Officer**

Mark Louison has a wide variety of experience in sales, marketing, and general management in the wireless telecommunications industry with particular expertise in management of start-up operations and distribution channel development. Prior to joining AccessLine Technologies, Louison was vice president and general manager for the New York metropolitan area of NYNEX Mobile Communications Company. Louison was promoted to the management team as a result of the partnership in New York between Bell Atlantic and NYNEX. Louison joined AccessLine Technologies as senior vice president of operations in December of 1992.

**Brian T. McManus**  
**Senior Vice President and General Counsel**

Prior to joining AccessLine Technologies in 1994 as senior vice president and general counsel, Brian McManus was a partner in the Seattle law firm of Mundt, MacGregor, Happel, Falconer, Zulauf &

Hall, and was AccessLine's chief legal counsel. He has also been corporate secretary since January 1993. McManus has concentrated his legal practice in the areas of partnership and corporate formation and finance, software licensing and other forms of intellectual property protection.

**Edwin A. Hopper****Member of the Board**

Ed Hopper was one of the pioneers in developing cable television franchises and distributing cable service to homes around the country. His first involvement was with National Communication Service Corp. Hopper then joined McCaw as the lead executive for cellular telephone when McCaw was beginning to apply for FCC licenses prior to the introduction of cellular service in the United States. Hopper led the cellular team at McCaw in developing and securing cellular licenses. As McCaw spread its operations throughout the United States and went public, Hopper became vice chairman and was responsible for financial structuring, as well as acquisitions and organization of partnerships and operations. In 1988, Hopper retired and now lives in Portland, Oregon.

**Jay C. Hoag****Member of the Board**

Jay Hoag is a founder and managing director of Technology Crossover Ventures, a fund investing in late-stage private and young public information-technology firms. From 1982 to 1995, Hoag was with Chancellor Capital Management, Inc. (formerly Citicorp Investment Management, Inc.). At Chancellor, he led the management of the technology portfolio. Hoag first was an analyst for the electronics and computer software and services industry, joined the Alternative Asset Group in 1985 and was appointed managing director in 1990.

**James R. Carreker****Member of the Board**

Jim Carreker has been president and CEO of Aspect Telecommunications since its inception in 1985 where he guides the overall strategy of the company. From 1982 through 1985, Carreker served in various management positions at Dataquest, Inc., a leading provider of high technology market research. From 1976 through 1982, Carreker headed product development at a division of Datapoint Corporation, a computer and communications manufacturer. During the latter part of this period, Carreker was vice president and general manager of Datapoint's Communications Management Products Division. Prior to joining Datapoint, he worked for AT&T Bell Laboratories and EDS.

**John C. Bolger****Member of the Board**

John Bolger recently retired from Cisco Systems, Inc. where he had been vice president and chief financial officer since 1989. Prior to that, he served as vice president of finance and administration for KLA Instruments, Inc., a semiconductor equipment manufacturer, from March 1988 to February 1989. He was also vice president of finance at Monolithic Memories, Inc. from 1983 until its acquisition by Advanced Micro Devices, Inc. in 1987.

Source: Corporate documents

**Exhibit 4** AccessLine Product Description

By linking state-of-the-art computer compatibility with a telephone network, the AccessLine System® combines the full power of today's computer technology with a telephone number and has introduced the AccessLine Smart Number.® Having a Smart Number on your phone is analogous to putting a personal computer on your desktop. Once you have an *intelligent* platform which is easily accessed, you can choose applications to meet your needs as they arise. Some users may use their computers for just word processing, spreadsheets, or graphics, while others may use many of the applications together to give them more power to be effective and productive. In the same way, an AccessLine Smart Number user can make his or her communications more effective and productive by *choosing* one or more of the AccessLine applications. Below is a list of some of the functions:

**Personal AccessLine®**

This feature is often referred to as the Phone Number Assigned to People, Not Places.® It's a personal phone number—a number associated with a person, not a particular phone. It has the ability to look for a subscriber at his or her current location, and move from location to location based on a subscriber's schedule. Call routing to the cellular phone is now fully automatic—a first in a single number technology.

**Screened AccessLine®**

While the AccessLine service can increase the accessibility of key people on the move, the ability to be inaccessible during certain times is of equal importance. A busy professional wants important calls to reach him or her on the first attempt but does not want to be disturbed by unimportant calls that could be handled at another time or by others. Screened AccessLine allows a subscriber to have this kind of call management. Based on criteria such as time of day, location, and availability status, each subscriber may screen and control her calls in her own way. Therefore, the AccessLine System lets the subscriber choose the amount of and kind of screening desired. Following is a list of the kinds of screening available to an AccessLine subscriber:

**Informed Forwarding**—"You've reached the AccessLine for Bob Jones who is currently on his cellular phone. If you wish to speak to him now, touch 1 and we will connect you. Otherwise, please hold the line and speak with his office."

**Urgent Screened Forwarding**—"You've reached the AccessLine for Bob Jones who is currently on his cellular phone. If it is important that you speak to him now, touch 1 and we will connect you. Otherwise, hold the line and speak with his office."

**Emergency Screen**—"You've reached the AccessLine for Dr. Jones who is currently away from his office. If this is an emergency, requiring that you speak to him now, touch 1 and we will page him. If you'd like to speak to his office, touch 2. Otherwise, hold the line and leave a detailed message."

**VIP Access Only**—"You've reached the AccessLine for Benjamin Morgan, who is currently with a client. If it is important that you speak with him now, touch in his privacy code and we will connect you. Otherwise, hold the line and leave a detailed message."

**Voice Screen**—"You've reached the AccessLine for Marianne Quinlan. Please state your name and the purpose of your call and we will attempt to connect the call to your party."

A subscriber can choose from many screening options and levels of control.

**AccessLine Connection®**

AccessLine Connection lets a subscriber pick up a call on **any** phone. Her pager becomes the "ringer" for her phone. When a caller dials a subscriber's number and hears the ringing, the subscriber *feels* the ring on her silent vibrating pager. The subscriber then goes to **any** phone and dials her

AccessLine number to connect with the caller who is holding on the line. This virtually puts an end to telephone tag, pager tag, and (the newest game) voice mail tag. In addition, this product solves the problems of portable users: limited battery life, poor reception areas, and poor cellular telephone etiquette (i.e., taking calls in inappropriate public places such as a theater or restaurant).

**AccessLine Messaging®**

Incorporated into the AccessLine service is a messaging service. The difference between AccessLine Messaging and other voice messaging systems is that AccessLine always takes care of callers. The system always gives callers the option of speaking to a live person thereby eliminating “voice mail jail.” In addition, voice mail messages are accessible directly through a subscriber’s AccessLine which gives subscribers additional functions such as the ability to instantly call back a caller who left a message without having to dial the number. This has tremendous value in terms of convenience and safety for subscribers in their cars who can’t take their eyes from the road to look up a number.

**Rebound<sup>SM</sup>**

This feature lets a subscriber return or rebound back into his AccessLine System after completing an outbound call (automatically or by using touchtones). This enables the subscriber to answer a series of voice mail messages within a single call or to use AccessLine as a call card.

**Fax Reflection<sup>SM</sup>**

The AccessLine Smart Number also integrates fax. The intelligence in the system automatically detects when a fax machine is calling and routes the call to the fax machine of the subscriber’s choice.

**AccessLine Traveler<sup>SM</sup>**

More and more, telephone users are finding the need to be mobile, not only in town, but anywhere in the United States and the world. AccessLine Traveler allows subscribers the ability to travel to any city throughout the world and still receive important calls. AccessLine Traveler informs callers that the subscriber is out of town and screens the calls (as designated by the subscriber) and then forwards the call to the subscriber at any location. A subscriber can pick up calls at her remote field office, hotel, or on any cellular network and the caller does not need to know any roaming codes or procedures. The AccessLine knows how to find you and does it all transparently to the caller. In order to utilize the Personal AccessLine, a subscriber need only to provide a basic schedule of where he or she is most likely to be located during a given week. As an example, a subscriber may usually be at his office between 8:00 a.m. and 6:00 p.m., commuting between 7:30 and 8:00 a.m. and 6:00 and 6:30 p.m., at home between 6:30 and 10:00 p.m. and available only for family calls after 10:00 p.m.

In summary, AccessLine gives telephone subscribers the ability to coordinate and simplify their accessibility for important calls while also controlling communications so that they receive only the calls they want. Using the AccessLine is as simple to use as it is sophisticated.

Source: Corporate documents.

**Exhibit 5** AccessLine Competitive Analysis

There will be significant competition in the industry. This area may account for over one billion dollars of revenue per year in the next few years. With that potential revenue base, competition will be in two forms. First, there will be "point-solutions" which deliver one or several pieces of the AccessLine suite of services. Second, there will be companies who will introduce a similar suite of services to AccessLine's. In general, it is important to note that while there are a number of systems announced, AccessLine is the *only* commercially deployed system in the market.

**Constant Touch – Glenayre**

Glenayre's one number solution is a software package on Glenayre's Modular Voice Processing Family (MVP) platform. The MVP was an enhancement to the existing paging services offered by Glenayre. Glenayre has been marketing the service since 1994 although there are no announced customers to date. The company has an excellent reputation in the industry and a very strong sales force. The system has a complex and cumbersome user interface compared to AccessLine's. (The interface is one of the more important criteria for market acceptance.) AllTel in the United States has looked at the Glenayre system but is now in discussion with AccessLine. In Europe, there is a test system in BelgiCom. AccessLine is in discussion with BelgiCom, apparently indicating some dissatisfaction on their part with the Glenayre system.

**Ericsson**

Ericsson is apparently planning to put some functionality in their switch and has deployed a trial system with the Norwegian telecommunications firm. AccessLine has licensed the Swedish firm Telia, which had attempted unsuccessfully to obtain personal number functionality from Ericsson. In mid-1994, Telia determined that, despite their close relationship, Ericsson could not be relied upon to deliver the solution anytime soon. Also, AccessLine is in discussions with the Norwegian firm, indicating disappointment with the product being delivered by Ericsson.

**McCaw**

Recently introduced Universal Number in the U.S. as a direct competitor to earlier AccessLine customers. The interface is cumbersome and inflexible. No take rate statistics are available. However, McCaw's marketing of the service will probably benefit AccessLine. McCaw is an aggressive marketer and will help drive demand by licensees for a competitive solution from AccessLine and force AccessLine licensees to market the AccessLine solution more aggressively. Recent information indicates that the company is trying to purchase another product, "Magic Number," to replace its current one. It is unclear as to why.

**Northern Telecom**

In early 1995, Northern Telecom announced a marketing agreement with BellSouth to use their ProLink software as the foundation for Personal Number Service. No timeframe for commercial availability was announced. Northern Telecom plans to develop its own wireless mobility services for availability beginning in late 1995. AccessLine is currently discussing with Northern Telecom the steps necessary to port its application. Also, AccessLine has licensed the technology to two of Northern's sister companies – Bell Canada and Bell Mobility.

**OneVoice PCS – InterVoice**

InterVoice, a Dallas-based call automation company announced OneVoice PCS in February 1994, an enhanced product on the InterVoice OneVoice Network Solutions Platform. According to their literature, subscribers are able to consolidate their office, home, cellular, fax and pager numbers into a single personal number. The company has also indicated that their products can provide voice recognition and verification capabilities on their integrated services platform. AccessLine is aware of no installation of the OneVoice PCS platform in the U.S., other than one trial in Los Angeles.

**Precision Systems Inc. (PSI)**

PSI is a developer and manufacturer of voice and call processing systems for use with local and long distance companies and has been in business since 1981. The company is based in Clearwater, Florida. In 1994, Single Number Service (SNS) was acquired by PSI. The SNS is said to allow callers to locate a



subscriber at any of several locations by dialing a single phone number. According to the company, when a caller dials the SNS number, the SNS application will dial different numbers to “find” the subscriber based upon the time of day and a predetermined schedule or pattern. The company indicates that features such as voice dialing, simultaneous phone ringing, and scheduling are offered. The company president has contacted AccessLine’s president and proposed the use by PSI of the AccessLine software on their platform. AccessLine has not responded at this time. There are no known sites where SNS is installed.

### **Prairie Systems**

Prairie Systems is a five-year old, privately-held company headquartered in Omaha, Nebraska. They have been successful to date in selling the wireless fax and 800-number paging components in the ARDIS Personal Messaging Service (ARDIS is the largest wireless Motorola packet radio network in the United States). The company announced “The Next Generation One-Number Solution” in January 1995. The Information Services Platform (ISP) is advertised to support messaging, broadcasting, network switching and interactive application solutions and services such as personal number, messaging, credit card access and enhanced fax services. Prairie Systems has announced its intention to license their system and have test installations in the United Kingdom and Hong Kong.

### **Priority Call Management**

The PCM platform is understood to be basically an automatic call director (ACD) that provides the caller with several options, touch 1 for ---, touch 2 for ---, etc. The system offers only one of the dozens of applications available on the AccessLine system.

### **ProLink**

ProLink is a proprietary development out of Bell South Corporation who thought it could sell this call-processing functionality to other carriers. The ProLink service is less feature-rich and less user- friendly compared to the AccessLine service offerings (i.e., the system “hunts” from place to place until it finds the subscriber, or the caller hangs up). Bell South has attempted to sell their software system to a number of carriers in the past few years (AccessLine has been up against them on several occasions and has won in every instance). No other carrier in the United States or internationally has endorsed this platform to date.

### **TPS**

TPS is an U.S.- and U.K.-based firm with 45 employees. It offers in both countries a wide array of enhanced communications services, including voice-activated dialing, voice and fax mail, and one-number features. It also provides intelligent agent services, allowing callers to sort through large amounts of e-mail, news stories, and other information.

### **Wildfire**

The Wildfire Assistant, developed by start-up Wildfire Communications Inc., can place phone calls on your behalf, announce incoming calls and, knowing your routine, automatically forward calls to your phone or pager. Wildfire offers a voice recognition “personal assistant” system that can help in making calls and checking messages. This system uses standard “off-the-shelf” industry voice recognition algorithms to execute its functions, and is very progressive and effective in the use of “conversational” voice recognition. (You can receive a demonstration of the system by dialing 1-800-945-3347.) While the system has immediate high-tech appeal, there are few, if any, “live” systems out in the field. The applicability of the service from mobile phones or phones with any background noise is unknown. According to the company, the Wildfire server includes an internal switch for routing calls, processes spoken commands to initiate or redirect calls by accessing a directory of names and telephone numbers users have established. The product is scheduled to begin shipment in mid-1995. It is extremely expensive—\$1,200 to \$2,000 per user subject to system size. This expense is largely due to the reliance on voice recognition throughout all conversations through the platform.

Source: Corporate documents.

**Exhibit 6** Access Series A Term Sheet: June 4, 1994

Securities:	2,500,000 shares of Series A Preferred Stock and, for each share so purchased, warrants to purchase an additional 0.15 shares of Series A Preferred Stock at an exercise price of \$7.00 per share ("Units"). <sup>a</sup>
Investors:	The Units will be offered only to "accredited investors" as defined in Regulation D under the Securities Act.
Aggregate Proceeds:	\$17,500,000
Price:	\$7.00 per Unit (the "Sale Price").
Placement Agent:	Morgan Stanley & Co. Incorporated (the "Placement Agent") to act on a "best efforts" basis. The Company will pay in cash a placement fee equal to 5% of the aggregate offering proceeds.

The capitalization of the Company giving effect to the Financing will be as follows:

Name or Entity	Class of Stock	Number of Shares	Total Percentage Ownership
Existing Investors <sup>b</sup>	Common (Class A and B)	7,931,060	61%
New Investors	Series A Preferred	2,500,000	19%
	Warrants to Purchase Series A Preferred	375,000	3%
Reserved for Management and Employees <sup>c</sup>	Common (Class A and B)	<u>2,143,846</u>	<u>17%</u>
Total		<u>12,949,906</u>	<u>100%</u>

<sup>a</sup>While the term sheet was prepared assuming the sale of 2.5 million shares, 2.22 million shares were actually sold.

<sup>b</sup>Includes 157,677 shares issued as part of the Fuller Research & Development Company merger, 389,820 shares issued pursuant to restricted stock grants and 1,087,962 shares subject to options granted to Daniel R. Kranzler.

<sup>c</sup>Excludes 643,600 shares reserved for future grant.

**Rights and Preferences of Series A Preferred**      The Series A Preferred shall be entitled to:

(1) An 8% non-cumulative *dividend preference*; any such dividend to be paid when and if declared by the Board of Directors out of funds legally available for such purpose.

(2) A *liquidation preference* equal to the Sale Price per share plus declared and unpaid dividends. Thereafter, all remaining assets shall be distributed among the holders of Common Stock ("Common"). A change in control of the Company by way of merger, sale of assets or other reorganization shall constitute a liquidation event.

(3) The right of *conversion* of the Series A Preferred into Class A Common Stock at the option of the holder, at the initial ratio of one-

for-one ("Conversion Ratio") at any time; *provided* however, the Series A Preferred shall automatically convert upon (i) an initial public offering ("IPO") with gross proceeds of at least \$10,000,000 and a per share price of at least \$10.50 until June 30, 1996, or (ii) the written consent of holders of at least two-thirds of the Series A Preferred.

(4) *Antidilution* adjustment, on a weighted-average basis using a broad-based formula, for any new issues at a purchase price less than the Series A conversion price, except for issues of employee shares or on recapitalizations, but including shares reserved for issuance to employees but not yet subject to any option or other acquisition right. Proportional adjustment of the Series A conversion price in the event of a stock split, combination, reclassification and the like.

(5) The right to *vote* on an as-converted basis with Class A Common Stock as a single class on all matters (except to the extent that voting as a separate class or series is required by law): *provided*, however, that a vote of the holders of at least two-thirds of the Series A Preferred, voting as a separate class, shall be required for (a) any material adverse change in the rights, preferences or privileges of the Series A Preferred; (b) any creation of a new class of shares having rights or preferences senior to or on a parity with the Series A Preferred; (c) declaration or payment of any cash dividends on the Common Stock; (d) any redemption, purchase or other acquisition of the Company's capital stock or any payments with respect to stock appreciation rights or similar rights; (e) a recapitalization or reorganization into a limited liability company or other noncorporate form; (f) entering into any business other than the telecommunications business; (g) any increase in compensation of any officer, director or any other employee holding 5% or more of the Company's capital stock unless approved by a disinterested majority of the Board; or (h) entering into certain specified related-party transactions.

(6) The right to *elect* one director to the Board.

#### **Term of Warrants**

The warrant shall expire on June 3, 1999 or earlier upon the occurrence of a change in control of the Company.

#### **Information and Inspection Rights**

The holders of Series A Preferred or Class A Common Stock issued upon conversion of Series A Preferred ("Conversion Stock") shall be entitled to receive quarterly and annual financial statements prepared in accordance with GAAP. The annual statements shall be certified by a nationally known accounting firm.

Each holder of 100,000 shares or more of Series A Preferred Stock and/or Conversion Stock shall be entitled to monthly financial statements prepared in accordance with GAAP, to inspect the Company's books and records and to discuss the Company's affairs with its officers.

The foregoing information and inspection rights shall be terminated upon an IPO.

### Registration Rights

At any time following the earlier of (i) June 3, 1997 or (ii) one year after an IPO, the holders of a majority of the Series A Preferred and the Conversion Stock shall be entitled to demand registration of at least 50% (or such lesser amount if the anticipated aggregate offering price would exceed \$10 million) of the Class A Common Stock issued or issuable upon conversion of the Series A Preferred under the Securities Act of 1933 (the "1933 Act") for a public offering on a firm commitment underwritten basis (the "Demand Rights"). The Demand Rights may only be exercised once during any 12-month period, and the Company shall not be obligated to effect more than two registrations under the Demand Rights. The Demand Rights may not be exercised during the 180 days following the effective date (or subsequent to the filing date at any time prior to the effective date) of a registration statement filed by the Company under the 1933 Act.

The holders of Series A Preferred and Conversion Stock shall be entitled to "piggyback" registration rights (the "Piggyback Rights") on registrations by the Company (or any other holders), subject to pro rata "cutback" (including to zero on an IPO) to accommodate shares to be sold for the account of the Company.

If available for use by the Company, at any time following the second anniversary of the IPO the holders of Series A Preferred and Conversion Stock shall be entitled to unlimited S-3 registrations (the "S-3 Rights"); provided the aggregate offering price of each such offering is at least \$1,000,000.

The Company shall pay for the expense (exclusive of underwriting discounts or commissions or special counsel of a selling stockholder) of all registrations under the Demand Rights and Piggyback Rights. The selling stockholders shall pay for the expenses of all registrations under the S-3 Rights.

Registration rights may be transferred to related entities, constituent partners and a transferee who acquires at least 100,000 registrable securities (or such lesser number as constitutes all such securities held by the transferor) upon written notice to the Company.

Registration rights shall terminate with regard to any holders who can sell all of their shares under Rule 144 (exclusive of Rule 144 (k)) in a three month period.

All holders of registration rights will agree to a 120-day lock-up period after an IPO, conditional upon all officers and directors similarly agreeing.

Other standard provisions with respect to registration rights shall apply, including limits on subsequent registration rights, cross indemnification, the Company's ability to delay the filing of demand

registration for a period of at least 120 days, the period of time in which the registration statements shall be kept effective, underwriting arrangements and the like.

### **Redemption Rights**

Each holder of Series A Preferred Stock shall have the right to require the Company to repurchase their share of Series A Preferred Stock (but *not* any Conversion Stock) at \$7.00 per share plus any declared and unpaid dividends on each anniversary of the first closing date (June 3), beginning June 3, 2,000, provided that no holder may require the Company to repurchase more than one-third of its share of Series A Preferred Stock on any anniversary date. If a holder exercises such right, the Company may elect to repurchase all of such holder's shares.

### **Rights to Maintain**

Each holder of at least 100,000 shares of Series A Preferred Stock and/or Conversion Stock shall have a right to maintain its percentage ownership interest in the Company in the event the Company issues stock at a price less than \$7.00 per share, subject to exceptions for stock issued pursuant to mergers and acquisitions, technology licensing arrangements, strategic alliances, employee stock options, stock issued on an IPO and other standard exceptions.

### **Right of Co-Sale**

Each purchaser of Units shall have a right of co-sale in the event that either Daniel Kranzler or Robert Fuller shall propose to sell his stock to third parties, subject to certain exceptions for transfers to family members and other shareholders, transfers to the Company pursuant to its right of first refusal, and sales of up to 26-2/3% of Mr. Kranzler's shares and up to 33-1/3% of Mr. Fuller's shares.

### **Option to Buy Common Stock**

Each purchaser of Units shall have an option to purchase 0.583 shares (rounded to the nearest share) of Class A Common Stock from the current shareholders for each Unit purchased. The option shall be exercised and the shares of Common Stock purchased, if at all, on or before July 31, 1994. The purchase price shall be \$5.00 per share, payable in cash at closing.

### **Voting Agreement**

Each holder of Series A Preferred Stock shall agree to vote all of its shares in favor of a designee of Chancellor Venture Capital Fund II as the director which such holders are entitled to elect.

### **Board of Directors**

It shall be a condition to closing that Jay Hoag of Chancellor Capital Management shall be appointed to the Board. In addition, the stockholders subject to the existing Shareholders' Agreement shall amend that agreement to provide that they will vote for two directors independent of the company.

### **Closing**

The first closing for the Financing shall occur on or about June 3, 1994 at the offices of Wilson, Sonsini, Goodrich & Rosati; a second closing may occur by July 1, 1994.

### **Purchase Agreement**

The Financing shall be evidenced by a Unit Purchase Agreement and other related agreements satisfactory to counsel to the Investors.

Source: Corporate documents.

**Exhibit 7** Historical Financial Performance and Projected Growth of AccessLine Technologies, Inc.

## Consolidated Statements of Operations, Year Ended December 31, 1993

	<b>1993</b>
Revenue	
Systems revenue	\$7,551,090
Licensing and maintenance	<u>808,699</u>
Total revenue	\$8,359,789
Cost of systems	<u>2,815,292</u>
Gross margin	\$5,544,497
Operating expenses	
Sales, general and administrative	4,985,320
Engineering, research and development	<u>1,421,099</u>
Total operating expenses	<u>\$6,406,419</u>
Operating loss	(861,922)
Other income, net	<u>12,348</u>
Net loss	<u>\$(849,574)</u>
Net loss per share	<u>\$(0.10)</u>
Weighted average common share outstanding	<u>8,751,598</u>

## Consolidated Balance Sheet, December 31, 1993

<b>Assets</b>	<b>1993</b>
Current assets	
Cash and cash equivalent	\$ 50,337
Accounts receivable	685,962
Inventory	823,181
Prepaid expenses and deposits	<u>240,482</u>
Total current assets	1,799,962
Property and equipment, net	638,503
Other assets, net	<u>396,793</u>
Total	<u>\$2,835,258</u>

<b>Liabilities and Stockholders' Equity</b>	<b>1993</b>
Current liabilities	
Accounts payable	\$1,946,739
Accrued wages, benefits, taxes	413,597
Other accrued liabilities	256,854
Deferred revenue	<u>1,628,506</u>
Total current liabilities	\$4,245,696
Note payable	1,888,139
Other liabilities	73,226
Total stockholders' equity (deficiency in assets)	<u>(3,371,803)</u>
Total	<u>\$2,835,258</u>

	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
U.S. Personal number market:					
Cellular	244,350	839,700	2,208,150	3,861,000	5,798,250
PCS	0	59,200	296,000	621,600	1,184,000
Paging	182,650	576,933	1,667,000	2,648,333	4,232,667
Personal number market	427,000	1,475,833	4,171,150	7,130,933	11,214,917
Combined penetration (%)	0.75%	2.13%	5.13%	7.63%	10.61%
AccessLine U.S.subscribers:					
Subscribers	29,890	118,067	417,115	1,069,640	2,242,983
Penetration of cellular, paging & PCS	0.05%	0.17%	0.51%	1.14%	2.12%
Penetration of personal number market	7.00%	8.00%	10.00%	15.00%	20.00%
Non U.S. subscribers:					
Canada	12,000	18,000	40,000	75,000	150,000
Europe	20,000	30,000	100,000	600,000	1,300,000
Japan	0	40,000	150,000	350,000	800,000
Asia	0	25,000	100,000	275,000	600,000
Total non U.S. subscribers	32,000	113,000	390,000	1,300,000	2,850,000
Total AccessLine subscribers	61,890	231,067	807,115	2,369,640	5,092,983

Source: Corporate documents.

**Exhibit 8** Comparable Public Companies**3Com**

One of the data networking industry's largest and fastest-growing firms, 3Com provides a scalable architecture to allow business and homes to gain access to critical information through high-speed networks.

<b>Recent Performance (\$m)</b>	<b>1994</b>	<b>1993</b>	<b>1992</b>
FY Revenues	827.0	617.2	408.4
FY Net Income	19.5	68.2	5.2
Market Capitalization at Calendar Year End	3,320	1,419	662
Beta	1.39		

**Boston Technologies**

A global leader in the delivery of network based enhanced services for telephone companies, cellular service providers, and other telecommunications firms.

<b>Recent Performance (\$m)</b>	<b>1994</b>	<b>1993</b>	<b>1992</b>
FY Revenues	70.3	49.5	36.4
FY Net Income	6.7	3.1	-2.4
Market Capitalization at Calendar Year End	364	199	180
Beta	2.03		

Both firms had virtually all-equity capital structures in April 1995. The 10-year Treasury bond in April 1995 had a yield of 7.1%.

Source: Compiled from corporate securities filings and public databases.



**Exhibit 9** Series B Term Sheet Proposed by AccessLine Management

<b>Securities:</b>		<b>2,000,000 shares of Series B Preferred Stock ("Shares").</b>
Investors:	The Shares will be offered only to "accredited investors" as defined in Regulation D under the Securities Act.	
Aggregate Proceeds:	\$16,000,000	
Price:	\$8.00 per Share (the "Sale Price").	
Placement Agent:	Morgan Stanley & Co. Incorporated (the "Placement Agent") on a "best efforts" basis. The Company will pay in cash a placement fee equal to 5% of the aggregate offering proceeds.	

The capitalization of the Company giving effect to the Financing will be as follows:

<b>Name or Entity</b>	<b>Class of Stock</b>	<b>Number of Shares</b>	<b>Total Percentage Ownership</b>
Existing Investors <sup>a</sup>	Common (Class A and B)	8,086,099	53%
	Series A Preferred	2,220,726	15%
	Warrants to Purchase Series A Preferred	333,110	2%
	Series B Preferred	2,000,000	13%
New Investors			
Reserved for Directors, Management & Employees	Common (Class A and B)	<u>2,582,047</u>	<u>17%</u>
Total		<u>15,221,982</u>	<u>100%</u>

<sup>a</sup>Includes 1,087,962 shares subject to options granted to Daniel R. Kranzler.

**Rights and Preferences of Series B Preferred**

The Series B Preferred shall be entitled to:

(1) An 8% non-cumulative *dividend preference* in pari passu with the Series A Preferred Stock (the Series A and Series B Preferred Stock are collectively referred to herein as the "Preferred"); any such dividend to be paid when and if declared by the Board of Directors out of funds legally available for such purpose.

(2) A *liquidation preference* equal to the Sale Price per share plus declared and unpaid dividends payable in pari passu with the Series A Preferred. Thereafter, all remaining assets shall be distributed among the holders of Common Stock ("Common"). A change in control of the Company by way of merger, sale of assets or other reorganization shall constitute a liquidation event.

(3) The right of *conversion* of the Series B Preferred into Class A Common Stock, at the option of the holder, at the initial ratio of one-for-one ("Conversion Ratio") at any time; *provided*, however, the Series B Preferred shall automatically convert upon (i) an initial public offering ("IPO") with gross proceeds of at least \$10,000,000 and a per share price of at least \$10.50 until June 30, 1996 or at least \$12.00 after

June 30, 1996, or (ii) the written consent of holders of at least two-thirds of the Preferred.

(4) *Antidilution* adjustment, on a weighted-average basis using a broad-based formula, for any new issues at a purchase price less than the Series B conversion price, except for issues of employee shares or on recapitalizations. Proportional adjustment of the Series B conversion price in the event of a stock split, combination, reclassification and the like.

(5) The right to *vote* on an as-converted basis with Class A Common Stock and Series A Preferred Stock as a single class on all matters (except to the extent that voting as a separate class or series is required by law); *provided*, however, that a vote of the holders of at least two-thirds of the Preferred, voting as a separate class, shall be required for (a) any material adverse change in the rights, preferences or privileges of the Series B Preferred; (b) any creation of a new class of shares having rights or preferences senior to or on a parity with the Series B Preferred; (c) declaration or payment of any cash dividends on the Common Stock; (d) any redemption, purchase or other acquisition of the Company's capital stock or any payments with respect to stock appreciation rights or similar rights; (e) a recapitalization or reorganization into a limited liability company or other noncorporate form; (f) entering into any business other than the telecommunications business; (g) any increase in compensation of any officer, director or any other employee holding 5% of more of the Company's capital stock unless approved by a disinterested majority of the Board; or (h) entering into certain specified related-party transactions.

## Information and Inspection Rights

The holder of Series B Preferred or Class A Common Stock issued upon conversion of Series B Preferred ("Conversion Stock") shall be entitled to receive quarterly and annual financial statements prepared in accordance with GAAP. The annual statements shall be certified by a nationally known accounting firm.

Each holder of 100,000 shares or more of Series B Preferred Stock and/or Conversion Stock shall be entitled to monthly financial statements prepared in accordance with GAAP, to inspect the Company's books and records and to discuss the Company's affairs with its officers.

The foregoing information and inspection rights shall terminate upon an IPO.

## Registration Rights

At any time following the earlier of (i) June 3, 1997 or (ii) one year after an IPO, the holders of a majority of the Preferred and the Conversion Stock shall be entitled to demand registration of at least 50% (or such lesser amount if the anticipated aggregate offering price would exceed \$10 million) of the Class A Common Stock issued or issuable upon conversion of the Preferred under the Securities Act of 1933 (the "1933" Act") for a public offering on a firm commitment underwritten basis (the "Demand Rights"). The Demand Rights may only be exercised once during any 12-month period, and the Company shall not be obligated to effect more than two registrations under the Demand Rights. The Demand Rights may not be exercised during the 180 days following the effective date (or subsequent to the filing date at any time prior to the effective date) of a registration statement filed by the Company under the 1933 Act.

The holders of Series B Preferred and Conversion Stock shall be

entitled to “piggyback” registration rights (the “Piggyback Rights”) on registrations by the Company (or any other holders), subject to pro rata “cutback” (including to zero on an IPO) to accommodate shares to be sold for the account of the Company.

If available for use by the Company, at any time following the second anniversary of the IPO the holders of Series B Preferred and Conversion Stock shall be entitled to unlimited S-3 registration (the “S-3 Rights”); provided the aggregate offering price of each such offering is at least \$1,000,000.

The Company shall pay for the expenses (exclusive of underwriting discounts or commissions or special counsel of a selling stockholder) of all registrations under the Demand Rights and Piggyback Rights. The selling stockholders shall pay for the expenses of all registrations under the S-3 Rights.

Registration rights may be transferred to related entities, constituent partners and a transferee who acquires at least 100,000 registrable securities (or such lesser number as constitutes all such securities held by the transferor) upon written notice to the Company.

Registration rights shall terminate with regard to any holders who can sell all of their shares under Rule 144 (exclusive of Rule 144(k)) in a three month-period.

All holders of registration rights will agree to a 120-day lock-up period after an IPO, conditional upon all officers and directors similarly agreeing.

Other standard provisions with respect to registration rights shall apply, including limits on subsequent registration rights, cross indemnification, the Company’s ability to delay the filing of demand registration for a period of at least 120 days, the period of time in which the registration statement shall be kept effective, underwriting arrangements and the like.

### **Redemption Rights**

Each holder of Series B Preferred Stock shall have the right to require the Company to repurchase their shares of Series B Preferred Stock (but *not* any Conversion Stock) at \$8.00 per share plus any declared and unpaid dividends on each anniversary of the closing date, beginning with the fifth anniversary, provided that no holder may require the Company to repurchase more than one-third of its share of Series B Preferred Stock on any anniversary date. If a holder exercises such right, the Company may elect to repurchase all of such holder’s shares.

### **Right to Maintain**

Each holder of at least 100,000 shares of Series B Preferred Stock and/or Conversion Stock shall have a right to maintain its percentage ownership interest in the Company in the event the Company issues stock at a price less than \$8.00 per share, subject to exceptions for stock issued pursuant to mergers and acquisitions, technology licensing arrangements, strategic alliances, employee stock options, stock issued in an IPO and other standard exceptions.

### **Closing**

The closing for the Financing shall occur on or about \_\_\_\_\_ at the offices of Wilson, Sonsini, Goodrich & Rosati.

### **Purchase Agreement**

The Financing shall be evidenced by a Purchase Agreement and other related agreements reasonably satisfactory to counsel to the Investors.

Source: Corporate documents.