

SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

Annual Report Pursuant to Section 13 or 15 (d)
of the Securities Exchange Act of 1934

For the fiscal year ended
December 31, 1996

Commission File No. 0-19437

CELLULAR TECHNICAL SERVICES COMPANY, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware

11-2962080

(State of Other Jurisdiction of
Incorporation or Organization)

(I.R.S. Employer Identification No.)

2401 Fourth Avenue, Seattle, Washington 98121

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (206) 443-6400

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act:

Common Stock, \$.001 par value

(Title of Class)

Indicate by check mark whether the Registrant (1) has filed all reports
required to be filed by Section 13 or 15(d) of the Securities Exchange Act of
1934 during the preceding 12 months (or for such shorter period that the
Registrant was required to file such reports), and (2) has been subject to
the filing requirements for the past 90 days. Yes X No
-- ---

Indicate by check mark if disclosure of delinquent filers pursuant to
Item 405 of Regulation S-K is not contained herein, and will not be
contained, to the best of Registrant's knowledge, in definitive proxy or
information statements incorporated by reference in Part III of this Form
10-K or any amendment to this Form 10-K. [X]

As of March 21, 1997, there were 22,640,868 shares of Common Stock, \$.001
par value outstanding. As of March 21, 1997, the aggregate market value of
the Company's Common Stock, \$.001 par value, held by non-affiliates was
approximately \$227 million. The aggregate market value of the Company's stock
was calculated using the average of the high (\$10.88) and low (\$9.69) sale
price for its Common Stock on March 21, 1997 on NASDAQ as reported by the
National Quotation Bureau

Documents incorporated by reference in Part III: The Company's definitive
proxy statement to be filed in connection with the 1997 Annual Meeting of
Stockholders.

Exhibit Index--see page 27

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ITEM 1. BUSINESS

THE COMPANY

The Company's mission is to be the premier provider of real-time information processing and information management solutions for the global wireless communications industry. Over the past nine years, the Company has used its extensive experience with real-time technology to create advanced solutions for this industry. Today, the Company develops both software and hardware for sale as part of its integrated systems solutions in the areas of "user/device authentication" and "service metering."

"User/device authentication" primarily involves various forms of "pre-call" verification to ensure that the use of a wireless communications device (e.g., a cellular telephone) is legitimate before the device is allowed to connect to a wireless communications network. In this area, the Company is a leading provider of radio frequency ("RF") based solutions for the prevention of "cloning fraud," with its Blackbird-Registered Trademark-Platform, PreTect-TM- fraud prevention application, and No Clone ZoneSM roaming fraud prevention service ("Blackbird Products"). "Cloning fraud" is the term used by the cellular industry to describe the illegal activity of using a cellular telephone that has had its electronic serial number and telephone number altered to match those of a legitimate subscriber's telephone. The Cellular Telecommunications Industry Association has estimated that in 1996 cloning fraud has resulted in more than \$1 billion in costs and lost revenues to the United States cellular industry. The Company believes that in 1997 cloning fraud will result in an increased amount of such costs and lost revenues. The Company's Blackbird Platform provides the underlying technology for the Company's application products for user/device authentication. The Company's PreTect application product, the first application product on the Blackbird Platform, is designed to proactively prevent cloning fraud in real-time. The Company's No Clone Zone service is designed to effectively prevent roaming-based cloning fraud in real-time between markets using the Blackbird Platform and PreTect application product. See "The Blackbird Platform" below.

"Service metering" primarily involves the collection of various forms of "post-call" information (within minutes after the end of the call) to ensure that a wireless communications carrier's subscriber has proper account status to make additional calls. The Company's Hotwatch-Registered Trademark-Platform provides the underlying technology for post-call application products and services for credit management and prepaid billing ("Hotwatch Products"). See "The Hotwatch Platform" below.

The Company's current activities are primarily focused on the further development, marketing, and deployment of the Blackbird Platform, the PreTect fraud prevention application product, the No Clone Zone roaming fraud prevention service, and other products and services that may be developed on the Blackbird Platform (the "Blackbird Products"). During 1996, the Company entered into agreements with AirTouch Cellular ("AirTouch"), Bell Atlantic NYNEX Mobile ("BANM"), Ameritech Mobile Communications, Inc. ("Ameritech"), and GTE Mobilnet of California Limited Partnership ("GTE-California") establishing terms for the provision of the Blackbird Products for use in over 2,000 cell sites throughout the United States.

The Company's products and services currently are used exclusively for analog cellular networks. The Company believes that, as of the end of 1996, there were approximately 30,000 domestic cell sites of analog cellular networks in which the Company's products and services currently can be used. Additionally, the Company believes that the number of international cell sites of analog cellular networks to which its products are either currently adaptable or could be adaptable may be equal to or greater than the number of domestic cell sites. The Company also believes that its products and services may be adaptable for use in other wireless communications networks.

THE WIRELESS COMMUNICATIONS INDUSTRY

During the last eleven years, wireless communications service has been one of the fastest growing segments of the telecommunications industry. The Cellular Telecommunications Industry Association has estimated that the number of cellular subscribers in the United States increased from approximately 340,000 subscribers in December 1985 to approximately 44 million subscribers in December 1996. The Company believes the worldwide wireless communications market may have exceeded 100 million subscribers by the end of 1996. The Company expects significant growth in wireless communications to continue in the United States as a result of the increased demand for cellular service and the emergence of personal communications service ("PCS") as a new form of wireless communications service. The Company also expects that significant growth will also occur in international markets. The Company believes that the number of cellular and PCS subscribers may grow to 80 million in the United States and more than 300 million worldwide by the end of 2001. The Company also believes that the demand for its products and services may increase as the Company adapts its products and creates new products to service an expanded wireless communications industry.

The FCC regulates the wireless communications industry in the United States and is responsible for granting the licenses required to operate wireless communications systems. The FCC has divided the United States into a number of service (license) areas or markets. Wireless communications services, each of which utilizes a different portion of the radio spectrum, are expected to be dominated by cellular services and PCS and, to a lesser extent, enhanced specialized mobile radio ("ESMR"). The introduction of PCS and digital ESMR has added new service providers in many cellular markets creating increased competition, additional service features, and a greater number of choices for wireless communications subscribers.

Currently, cellular service dominates wireless communication services. At year end 1996, there were approximately 44 million cellular subscribers in the United States. The Company believes that approximately 95% of service currently is provided in an analog mode but that the industry is undertaking a shift to digital mode in the major markets due to certain systems advantages in the digital mode, including expanded capacity, greater privacy, and enhanced security (such as, for example, use of cryptographic authentication). Cellular subscribers are serviced by two carriers in each market (commonly referred to as "A Band" and "B Band" carriers). The markets are defined as Metropolitan Service Areas ("MSAs"), of which there are 306, and Rural Service Areas ("RSAs"), of which there are 428. As a result of the current duopoly structure, there are 612 MSAs and 856 RSAs. Service is available on a nationwide basis and the major providers, through adherence to industry standards, offer interoperability to markets that they do not own. The 10 largest cellular carriers own or operate 180 of the largest 200 MSAs.

PCS systems are digital wireless communications networks, operating on a higher frequency band than cellular, which compete directly with existing cellular telephone, paging, and specialized mobile radio services. The Company believes that PCS providers are the first direct wireless competitors to cellular providers and the first to offer mass market all-digital wireless communications networks. In addition, PCS providers may be the first to offer mass market wireless local loop applications in competition with wired local communications services. The FCC has auctioned PCS licenses to the public. Service resulting from these licenses will provide the primary competition to cellular service. The service areas for PCS differ from those of cellular. The PCS licenses are based on Major Trading Areas ('MTAs'), of which there are 51, and Basic Trading Areas ('BTAs'), of which there are 493. BTAs are a subset of MTAs and are wholly contained within the MTA boundaries. As with cellular, ownership of the PCS licenses is concentrated. Sprint Telecommunications Venture, AT&T Wireless and PCS PrimeCo (ultimately owned by AirTouch Communications, Inc., Bell Atlantic Corporation, NYNEX Corporation, and US West, Inc.) account for the majority of coverage of the PCS licenses.

ESMR service is dominated by one carrier, Nextel Corporation, which the Company believes will be focusing its attention on commercial, rather than consumer, uses of wireless solutions.

OPERATION OF WIRELESS COMMUNICATIONS NETWORKS

The service areas of a wireless communications network, whether cellular or PCS, are divided into multiple cells. Because cellular networks operate at lower frequencies, their cells generally cover a wider area than PCS cells. In both cellular and PCS networks, each cell contains a base station comprised of transmitting, receiving, and signaling equipment located at a cell site which is connected by microwave or landline telephone lines to a Mobile Switching Center ("MSC") that controls the operation of the cellular communications network for the entire service area. The MSC controls the transfer of calls from cell to cell as a subscriber's telephone travels, coordinates calls to and from telephones, allocates calls among the cells within the network and connects calls to the local landline telephone network or to a long distance telephone carrier. Wireless communications carriers establish interconnection agreements with local exchange carriers and interexchange (long distance) carriers, thereby integrating their network with the existing landline communications network.

A major component of any wireless communications network is the switching equipment, commonly known as a "Switch," located in the carrier's MSC. The Switch, which is owned and/or operated by the carrier, manages the provision of service, the interconnection of subscribers' telephones with the public telephone network, and the hand-off from cell site to cell site within a network. The Switch maintains a database of the carrier's subscriber information, such as phone and electronic serial numbers, and call option features. The Switch tracks the progress of calls made to or from such subscribers and records call detail for billing purposes.

While analog and digital cellular networks and PCS digital networks utilize similar conceptual technologies and hardware, they operate on different frequencies and use different technical and network standards. Analog cellular phones are functionally compatible with cellular networks in the United States, Canada, and a number of other international markets. Cellular carriers typically agree to provide service to subscribers from other cellular markets, commonly known as "roamers," who are temporarily located in or traveling through their service areas. Agreements among cellular carriers provide that the carrier in the home market of the subscriber pays the serving carrier (roaming market) at rates prescribed by the serving carrier. As a result, analog cellular phones generally can be used wherever a subscriber is located, as long as a cellular network is operational in the area.

PCS networks are expected to operate under one of three principal digital signal transmission technologies: Global System for Mobile ("GSM"), Code Division Multiple Access ("CDMA") or Time Division Multiple Access ("TDMA"). In the United States, digital cellular and PCS networks are expected to operate under primarily the TDMA or CDMA standards, with the CDMA standard expected to be the more widely adopted. Outside of the United States, GSM is the most prevalent digital wireless technology, with approximately 120 systems operating in 92 countries serving over 13 million subscribers. The TDMA and CDMA-based PCS standards are higher frequency versions of the digital cellular standard currently in limited use by cellular carriers in the United States. PCS networks are expected to offer greater capacity, call quality, and hand-off advantages than analog or digital cellular networks. PCS networks are expected initially to offer the same features and services offered by digital cellular networks.

GSM and TDMA are both variations of "time division multiplexing" standards that are not currently compatible with each other or with CDMA. Thus, a subscriber of a wireless network that utilizes GSM, TDMA, or CDMA technology currently will be unable to use a GSM, TDMA, or CDMA phone when traveling in an area not served by the same digital technology, unless the subscriber carries a dual-mode phone that permits the subscriber to default to the analog cellular network in that area (GSM phones, however, currently do not default to analog). Such dual-mode phones are commercially available today and are currently required for digital phones to effectively roam, as the PCS digital networks do not currently have roaming capabilities on a nationwide basis. Therefore, the digital phones currently need access to analog cellular networks for use while roaming. The Company believes that carriers will maintain an underlying analog cellular network as they expand their operations to include digital networks, thereby allowing a continued use of analog cellular networks. See also "Cloning Fraud in Digital Networks" below.

CLONING FRAUD IN DIGITAL NETWORKS

The Company's Blackbird Products currently are used exclusively for analog cellular networks, although the Company believes that its Blackbird Products may be adaptable for use in digital networks such as digital cellular and PCS digital networks. The technology used in these digital networks currently enable wireless carriers to incorporate various forms of user/device authentication to combat cloning fraud, including cryptographic authentication. One form of cryptographic authentication, commonly known as "A-Key authentication," uses a complex security feature that contains a secret code and special number based on a cryptographic mathematical process shared only by the digital phone and the digital network. When a person places or receives a call, the digital network asks the digital phone to "prove" its identity through a question-and-answer process, which occurs without delaying the time it takes to connect a legitimate call. A-Key authentication is expected to be the most widely adopted cryptographic authentication by wireless carriers in the United States. The Company believes that such cryptographic authentication could be effective in reducing cloning fraud, provided that it is widely deployed and not compromised. However, because such authentication technology is in the early stages of commercial use, it is not currently known whether or to what extent it will provide effective, long-term protection against cloning fraud in digital networks.

Digital phones will continue to be susceptible to cloning fraud when they roam on an analog network. In the roaming environment, a subscriber of a GSM, TDMA, or CDMA-based digital network currently will be unable to use a GSM, TDMA, or CDMA phone when traveling in an area not served by the same digital technology, unless the subscriber carries a dual-mode phone that permits the subscriber to default to the analog cellular network in that area (GSM phones, however, currently do not default to analog). A-Key authentication is capable of combating cloning fraud in digital phones while roaming in an analog mode; however, for such authentication technology to be implemented, it currently must comply with the IS-41 "rev. C" network service standard. The Company believes that full deployment of A-Key authentication compliant with the IS-41 "rev. C" standard could take a number of years to complete, with implementation just underway by some carriers. The Company believes that extensive efforts and cooperation among the large market carriers, small market carriers, wireless industry associations, and wireless technology providers is required to implement a fully-functional A-Key authentication system. Given such factors, the Company believes that subscribers of digital wireless networks will continue to be susceptible to cloning fraud while roaming in the analog mode.

BUSINESS STRATEGY

DEPLOYMENT OF BLACKBIRD PRODUCTS

The Company's immediate strategy is to achieve significant market penetration and deployment of the Blackbird Products. To accomplish this, the Company has expanded and will continue to expand its domestic and international sales and marketing efforts. After it achieves widespread deployment of the Blackbird Products, the Company believes that it will be able to leverage its relationships with carriers and its position at the carriers' cell sites, as well as its underlying platform technology, to offer additional products and services. The Company plans to expand its research and development efforts to enhance its existing products and services and to develop new value-added products for the Blackbird Platform. These new products may include fraud prevention products which can be sold in connection with PreTect or non-fraud prevention products sold on a stand-alone basis.

LEVERAGE CORE COMPETENCIES

Through the development and deployment of the Blackbird and Hotwatch Platforms, the Company has developed several core competencies. The Company believes that these core competencies may facilitate its development of products and services which complement its existing technology and add value to its current and potential customer base.

- - Real-time distributed computing. The Company believes that it has developed unique expertise in the area of distributed real-time computing. This capability allows the Company to acquire data and perform information processing in the highly distributed environment encountered in wireless infrastructures. The Company's Blackbird Platform uses messaging methods running on TCP/IP (Transaction Control Protocol/Internet Protocol) Networks to allow communications and data exchange between distributed information processing elements with real-time response rates. For example, the Company's expertise in this area allowed the creation of the No Clone Zone service which processes RF "fingerprinting" information at call set-up time in a nationwide network.
- - Ability to interface with carriers' cell sites and switches. The Company's proprietary software and hardware products collect and utilize information resident at the carrier's cell site and/or switch. This expertise may facilitate the development of future products and services in both an analog and digital environment.
- - Real-time database expertise. The Company has developed the ability to optimize database performance which enables systems to reach transaction decisions in very short time frames. For example, PreTect can determine whether or not to connect a call within a few seconds of call origination.
- - Real-time rating expertise. The Company has developed the ability to combine streams of telephone billing information, such as toll charges, discounts, promotions, and surcharges to mimic a carrier's billing system on a real-time basis, within minutes after the end of the call, rather than in a batch process for monthly customer billing. This currently allows the Company to determine account authorization for future telephone calls. The Company believes this expertise may be applicable to other systems that involve real-time charges.
- - Ability to interface with billing systems. The Company has developed the ability to interface with the systems infrastructures of major billing service companies in the wireless communications industry. As these companies expand their customer base beyond telephone carriers the Company believes it can apply its knowledge to provide its value-added service metering technologies to this expanded customer base.

SYSTEM DESIGN AND ARCHITECTURE

The Company's products incorporate software designs that use the UNIX operating system, which provides customers with significant flexibility in their choice of computer equipment and is widely used in the telecommunications industry. In addition, the Company uses database and advanced messaging technology which allows for flexibility in platform and database portability, particularly as the underlying computer infrastructure continues to evolve. The Company's products also incorporate industry standard hardware, using the UNIX operating system, for the central system and application processing functions for both the Blackbird and Hotwatch Platforms. While the Cell Site Systems deployed with the Blackbird Platform contain industry standard computer components, the Company designs and contracts manufacturing for certain proprietary printed circuit boards and other subassemblies. The standard components and custom manufactured subassemblies are then integrated by the Company and its subcontractors for delivery to the Company's customers.

THE BLACKBIRD PLATFORM

The Blackbird Platform provides real-time data collection, distribution, storage, and reporting of key information regarding pre-call activity. The Blackbird Platform was designed to deliver centralized control and efficiencies of operation based on industry standards, open systems, and real-time distributed messaging. This platform approach makes it possible for the Company to deliver a range of applications in a unique, modular fashion. Enhancement of the Blackbird Platform product line is expected to continue during 1997 and beyond. Additionally, the Company is actively researching other applications using the pre-call data that is collected by the Blackbird Platform for potential future release.

PRETECT APPLICATION

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The PreTect application product employs patented RF "fingerprinting" technology to proactively prevent cloning fraud in real-time. PreTect accomplishes this by building RF fingerprints of legitimate subscribers' cellular phones using the pre-call data collected by the Blackbird Platform. An RF fingerprint is the cellular phone's unique electromagnetic signal waveform characteristics contained in each phone, with no two RF fingerprints being the same. PreTect compares RF fingerprints of incoming call requests to its database of RF fingerprints for validated legitimate subscriber phones and also examines usage characteristics to assist in verifying authenticity. It then directs automatic call "tear-down" or interdiction of a fraudulent call before connection is completed. With PreTect, the Company offers its customers with use of a graphical user interface ("GUI") that is unique to RF user/device authentication systems. The GUI makes PreTect easy to learn and use, automates most operations, and enables fraud department personnel and customer service representatives to become productive in using Blackbird Products in a more effective and efficient manner.

PreTect enables proactive pre-call fraud prevention rather than post-call fraud detection. The Company believes that such pre-call fraud prevention is a major technological breakthrough for the wireless communications industry. The Blackbird Products were tested in four major domestic markets and one international market in 1995. In 1996, the Company recorded its first commercial sales from the Blackbird Products in over a dozen major markets under agreements with AirTouch and BANM. Currently, the Blackbird Products are operational and/or being deployed in over thirty markets through the Company's agreements with AirTouch, BANM, GTE, and Ameritech, including Los Angeles, San Francisco, San Diego, New York, Northern New Jersey, Detroit, Chicago, Boston, Atlanta, Milwaukee, Philadelphia, Baltimore, and Washington D.C.

THE NO CLONE ZONE SERVICE

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The Company has developed what it believes is the world's first real-time RF-based roaming fraud prevention service, known as the No Clone Zone service, which provides seamless, RF-based roaming fraud prevention. The No Clone Zone service proactively and transparently prevents roaming cloning fraud in markets which utilize the Blackbird Platform and PreTect. The service delivers the same high performance interdictions of fraudulent calls in roaming markets as PreTect does in the home market. The service leverages the underlying power of existing Blackbird Platform deployments, and the Blackbird Platform's real-time distributed messaging performance, to quickly and seamlessly link participating carrier systems nationwide, into a private, high-speed network. The service also leverages the PreTect GUI, delivering real-time, system-wide data visibility with PreTect's superior usability, reporting, and query capabilities. This service is currently deployed in numerous domestic major markets and is expected to be deployed in the majority, if not all, of the domestic markets where the Company's Blackbird Platform and PreTect application are deployed.

THE HOTWATCH PLATFORM

The Hotwatch Platform provides technological solutions primarily in the "service metering" area, which involves various forms of "post-call" verification to ensure that a wireless communications subscriber has proper account status to make additional calls. The Company's application products in this area are Accountlink-TM-

("Accountlink"), which provides prepaid real-time credit limit monitoring, and Accountvue-TM- ("Accountvue"), which provides a solution for real-time usage metering. These real-time "post-call" products support call data acquisition and rating features for the purpose of "service metering." Real-time "rating" means the ability to calculate, on a real-time basis, local and long distance toll charges and cellular air time charges for each call made on a cellular telephone system. The Company's real-time rating supports multiple long distance rating and multiple airtime price plans. The Company believes that real-time data acquisition and rating on a call by call basis will enable carriers and resellers to improve cash flow, more effectively manage their credit, collection, and billing functions, and increase their subscriber base by allowing them to provide service to certain subscribers who might otherwise be deemed unacceptable credit risks.

MAJOR CUSTOMER AGREEMENTS

AIRTOUCH CELLULAR AGREEMENTS

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In March 1996, the Company signed an agreement with AirTouch under which the parties agreed that the Company will be the exclusive provider of cellular fraud prevention systems using RF technology to AirTouch and its affiliates. AirTouch's cellular licenses include both A Band and B Band markets. The Company and AirTouch have installed and continue to install the Company's Blackbird Products under this agreement in AirTouch's Atlanta (A Band), Los Angeles (B Band), San Diego (B Band) and Michigan (A Band) markets. In addition, AirTouch's Bay Area Cellular Telephone Company affiliate has installed the Blackbird Products under this agreement in its San Francisco, and San Jose A Band markets. The five year agreement, which provides terms for the purchase of the Company's products in at least 1,000 cell sites, schedules minimum deployment in a majority of those cell sites during 1996 and 1997, subject to the Blackbird Products' compliance with contractual requirements. Concurrently, agreements were signed for the Company's support, maintenance, and No Clone Zone services. Approximately \$8.8 million of revenues were recognized in 1996 from the AirTouch agreements.

BANM AGREEMENTS

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In October 1996, the Company signed an agreement with BANM to provide Blackbird Products for use in BANM's cellular markets. Under the terms of an interim agreement signed in March 1996, the Company began deployment of Blackbird Products in BANM's New York, Northern New Jersey and Philadelphia B Band markets. Deployments of Blackbird Products in these markets are continuing under the definitive agreement, as well as deployments in BANM's Washington, D.C., Baltimore, and Boston B Band markets. Concurrently, agreements were signed for support, maintenance, and No Clone Zone services. System and service revenues recognized from the BANM agreements in 1996 totaled approximately \$8.0 million.

AMERITECH AGREEMENTS

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In October 1996, the Company signed an agreement with Ameritech to provide its Blackbird Products for use in Ameritech's A Band and B Band cellular markets. Deployment in Ameritech's Illinois, Michigan, Ohio, and Wisconsin (B Band) and Missouri (A Band) markets began in late 1996. Concurrently, agreements were signed for the Company's support, maintenance, and No Clone Zone services were also signed. There were no revenues recognized in 1996 for the deployment of the Company's Blackbird Products in Ameritech's markets; however, recognition of revenues has commenced in the Company's first quarter of 1997.

GTE MOBILNET AGREEMENTS

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In September 1996, the Company signed an agreement with GTE-California to provide its Blackbird Products for use in GTE-California's B Band markets in California. Concurrently, agreements were signed for the Company's support, maintenance and No Clone Zone services. Deployment of the Company's Blackbird Products began in late 1996 in GTE-California's San Francisco and San Jose markets. There were no revenues

recognized in 1996 for the deployment of the Company's Blackbird Products in GTE-California's markets; however, recognition of revenues has commenced in the Company's first quarter of 1997.

In January 1997, the Company and GTE Mobilnet of Virginia ("GTE-Virginia") signed a letter of intent under which the Company will provide its Blackbird Products for use in GTE-Virginia's B Band cellular markets throughout Virginia. While agreements for deployment of the Company's products and services are in negotiation, the Company and GTE-Virginia are in the planning stages of system deployment.

AWS AGREEMENTS

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In August 1994, the Company entered into two agreements with AT&T Wireless Services, Inc. ("AWS") (the "Axys Agreements") for the design and support of the AWS real-time information management system Axys Version 3.0 ("Axys 3.0"). The Axys Agreements consist of a software license ("SWL") and a technical services agreement ("TSA"), both of which expire in December 1998. The SWL provided AWS with a nonexclusive worldwide perpetual license for the Company's Hotwatch real-time post-call data collection platform, and the rating, credit monitoring and credit card billing application functions of that platform. Under the terms of the TSA, the Company receives hourly compensation for the development, deployment and servicing of the Axys 3.0 products. The two parties also signed an agreement, expiring in July 1999, for the license and marketing of derivatives of Axys 3.0 products (the "MA") granting the Company marketing and other rights for certain software applications derived from Axys 3.0. The MA and the SWL provide for additional potential revenue for the Company based upon sales of Axys 3.0 and related software products made by either the Company or AWS to third parties as well as to additional future AWS markets.

Revenues from the SWL and TSA began in the third quarter of 1994 with the "cumulative minimum expected" commitments for revenue being reached during the first half of 1996. Depending upon the deployment of the Axys products, additional revenues through 1999 are possible. Following the AWS acquisition of McCaw Cellular Communications, Inc. in 1995, AWS changed the scope of its development and deployment of Axys products, including the reduction of its reliance on outside vendors and contractors. As a result, the Company is not currently providing services under the TSA. The Company believes there could be additional potential revenue from the sale of Axys 3.0 products by the Company and/or AWS under the SWL and/or MA to future domestic and international markets including acquired affiliates of AWS or other third parties who implement the Axys system. The Company believes that such revenues, if realized, would most likely occur in the latter half of the contract terms. Total expected future revenues, if any, under the SWL, TSA, and MA agreements cannot be determined at this time.

In November 1994, the Company signed a contract with AWS to license its Accountlink and Accountvue application products under the Hotwatch Platform and to provide support services for those products during the interim period while Axys 3.0 is being fully developed and deployed. As a result of a change in its business strategy, AWS ceased using the products under this agreement in June 1996.

Revenues from the AWS Axys and Hotwatch products agreements in 1996 totaled approximately \$2.1 million.

OTHER HOTWATCH PRODUCTS AGREEMENTS

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Revenues in 1996 were also recognized from Hotwatch agreements with various customers. These agreements were with LIN Broadcasting Company ("LIN") and American Cellular Communications ("ACC"), subsidiaries of AWS and BellSouth Cellular ("LIN/ACC"), Ameritech, and 360DEG. Communications Company ("360DEG.CC") (formerly Sprint Cellular Company).

REVENUE GENERATION

OVERVIEW

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Revenues are derived from: system sales, which primarily include the license of software and the sale of hardware products; and service fees, which primarily include maintenance, software subscription services, roaming fraud prevention services, and system monitoring services. Prior to 1996 the Company's revenues had been derived primarily from initial license fees, fixed or variable monthly software license fees and, to a lesser extent, non-recurring computer equipment sales for its Hotwatch Platform and related products. Revenues from Hotwatch have declined considerably in 1996 versus 1995 and are not currently expected to grow in future periods above 1996 levels.

Revenue recognition for the Company's systems is based upon various performance criteria and varies from customer to customer and product to product. Physical hardware and software delivery, definitions of system delivery, and customer acceptance are generally the significant factors used in determining revenue recognition. Maintenance and service revenues are recognized ratably over the period of coverage and/or as services are performed.

During the three years ended December 31, 1996, six customers or their affiliates accounted for substantially all of the Company's revenues. Such customers are AirTouch, BANM, AWS, 360DEG.CC, LIN/ ACC, and Shared Technologies (the Company's largest customer for its former rental products). The LIN/ ACC and AWS agreements are with entities that share common ownership in some of the markets in which the Company's products have been deployed. Each of these customers accounted for 10% or more of the Company's revenues during one or more of the three years ended December 31, 1996. The high percentage of revenues derived from a limited number of customers is principally attributable to the Company's relatively small number of customers during these periods and the fact that certain of these customers made significant non-recurring purchases of computer equipment. The Company's targeted customer base is limited due to the concentrated nature of ownership and/or operational control of the most populated wireless communications markets in the United States and limited to a lesser extent in the international markets. The Company expects that certain of its cellular carrier customers operating in multiple cellular markets will continue to account for a relatively high percentage of the Company's total revenues.

RECURRING HARDWARE AND SOFTWARE SUPPORT SERVICES

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Hardware maintenance, software maintenance, software subscription services (for software upgrades and new releases), the No Clone Zone service, and system monitoring are the primary recurring services provided by the Company to its customers. Support personnel diagnose and resolve problems, dispatch third party hardware vendors, forward enhancement requests to the Company's research and development staff, and coordinate with customers on software upgrades and new releases. Software troubleshooting, maintenance, and upgrades are conducted either via the Company's public data network or via modem over a standard telephone line. An on-line customer management system tracks problems and resolutions. Support is available 24 hours per day, seven days per week. Engineering research and development personnel assist in software support activities to the extent required.

INSTALLATION

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Currently, the Company arranges to receive certain third-party vendor system equipment at its facilities where it integrates its proprietary software with such equipment and performs preliminary testing prior to shipment to the customer. Typically, the Company, its third-party vendors, and/or the customer jointly perform installation services, with each bearing responsibility for different aspects of installation. The installation process, which commences upon execution of a customer's order, generally is completed within 30 to 90 days depending upon

the deployment schedule agreed upon between the Company and the customer. The costs of installation may be separately charged or included with system pricing.

TRAINING AND DOCUMENTATION.

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The Company's personnel provide system training on-site or at the Company's facilities in Seattle. The training programs consist primarily of presentation materials, hands-on exercises, and group demonstrations. All of these training costs are factored into system pricing. Refresher training subsequent to completion of the initial training is provided at negotiated fees. User manuals relating to the Company's products and other materials and documentation produced by the Company are provided to training participants and supervisory personnel. Third party computer equipment documentation typically is provided by the computer equipment vendor.

CUSTOM PROGRAMMING

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The Company offers custom software development work upon customer request. Customers are charged hourly rates for such services or may contract with the Company for fixed fees where appropriate.

PROFESSIONAL SERVICES

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The Company provides system project planning, configuration, implementation, and other professional services in connection with sales of its products. Customers are charged hourly rates for such services or may contract with the Company for fixed fees where appropriate.

MARKETING

To date, the Company has primarily focused its marketing efforts on cellular carriers operating domestically in the 50 most heavily populated MSAs. To a lesser extent, but increasingly so in 1996, the Company has also focused its efforts in developing international interest in its products. The Company will continue to expand these efforts in 1997 and beyond to further penetrate significant wireless communications markets, both domestic and international. The Company's sales force markets its products directly to cellular carriers through proposals and presentations. International plans contemplate sales through agents, distributors, and/or the Company's direct sales force. The Company also participates at targeted trade shows, conferences and industry events and selectively advertises and uses direct marketing. The Company also meets with its current and prospective customers to gather product feedback that assists the Company in determining product direction. Achieving wide-spread market acceptance and penetration of the Company's products will require, in addition to enhancing and improving such products, increased marketing efforts and the expenditure of significant funds to increase customer awareness of the Company and to inform potential customers of the benefits of the Company's products. At March 12, 1997, the Company employed 23 sales, sales support, and marketing personnel.

PROPRIETARY RIGHTS

The Company's success will depend in part on its ability to protect its technology, processes, trade secrets and other proprietary rights from unauthorized disclosure and use and to operate without infringing the proprietary rights of third parties. The Company's strategy is to protect its technology and other proprietary rights through patents, copyrights, trademarks, nondisclosure agreements, license agreements, and other forms of protection. The Company has been active in pursuing patent protection for technology and processes involving its Hotwatch Products and Blackbird Products that it believes to be proprietary and that offer a potential competitive advantage for the Company's products and services. To date, the Company has been granted patents on certain features of the Hotwatch Products and has patents pending in the United States and in selected foreign countries for certain features of the Hotwatch Products and Blackbird Products. In addition, the Company has also licensed patents from third parties in an effort to maintain flexibility in the development and use of its

technology, including exclusive and non-exclusive rights to use patents in connection with the Blackbird Products.

Despite these efforts, there can be no assurance that any pending or future patent application of the Company or its licensors will result in issuance of a patent, that the scope of protection of any patent of the Company or its licensors will be held valid if subsequently challenged, or that third parties will not claim rights in or ownership of the products and other proprietary rights held by the Company or its licensors. In addition, the laws of certain foreign countries do not protect the Company's intellectual property rights to the same extent as the laws of the United States.

Although the Company believes that its technology has been independently developed and that its products do not infringe patents known to be valid or violate other proprietary rights of third parties, it is possible that such infringement of existing or future patents or violation of proprietary rights may occur. There can be no assurance that third parties will not assert infringement claims in the future with respect to the Company's current or future products or that any such claims will not result in litigation or regulatory proceedings or require the Company to modify its products or enter into licensing arrangements, regardless of the merits of such claims. No assurance can be given that any necessary licenses can be obtained in a timely manner, upon commercially reasonable terms, or at all, and no assurance can be given that third parties will not assert infringement claims with respect to any current licensing arrangements.

In addition to the foregoing methods of protection, the Company employs various physical security measures to protect its software source codes, technology and other proprietary rights. However, such measures may not afford complete protection and there can be no assurance that others will not independently develop similar source codes, technology or other proprietary rights or obtain access to the Company's software codes, technology, or other proprietary rights. Furthermore, although the Company has and expects to continue to have agreements with its employees and third parties which contain restrictions on disclosure, use and transfer of proprietary information, there can be no assurance that such arrangements will adequately protect the Company's proprietary rights or that the Company's proprietary rights will not become known to third parties in such a manner that the Company has no practical recourse.

RESEARCH AND DEVELOPMENT

For the years ended December 31, 1996, 1995, and 1994, the Company incurred gross research and development expenditures of \$7.0 million, \$5.8 million, and \$4.1 million, respectively, prior to capitalization of software development costs during each period in the amounts of \$1.3 million, \$1.7 million, and \$1.7 million, respectively. The Company's research and development efforts are focused on new hardware and software products, enhancing and improving existing hardware and software products, including developing new software applications and additional computer equipment interfaces, principally associated with the Hotwatch and Blackbird platforms. These enhancements and/or new products may, when and if developed, enable the Company to expand the use of its existing products and perform a broad variety of services and functions not presently being offered by the Company. Costs included in the Company's gross research and development expenditures include costs for research, design, development, tests, preparation of training and user documentation, and fixing and refining new and existing features (i.e., software maintenance) for inclusion in its product line. At March 12, 1997, the Company employed 72 full-time research and development and product management personnel and had contracted with various independent contractors engaged in research and development activities. The Company anticipates that development expenditures will continue to increase in 1997 and beyond in response to increased market demand for new and enhanced products as technology in the telecommunications industry moves forward at a rapid pace.

COMPETITION

The market for the Company's products and services is characterized by intense competition among numerous nationally recognized companies. The Company believes, based upon its discussions with major cellular carriers, as well as upon its general knowledge of the industry, that it: (i) has developed innovative software technology which enables it to be one of the few vendors to have successfully commercially deployed billing and data processing software products in large markets incorporating real-time rating, analysis and networking technology; (ii) is one of only two vendors that have successfully commercially deployed real-time RF-based fingerprinting products that are capable of stopping cloning fraud aimed at cellular carriers; and (iii) is the first vendor to develop a real-time RF-based roaming fraud prevention service. However, there can be no assurance that other companies do not have or are not currently developing functionally equivalent or superior products, or that functionally equivalent or superior products will not become available in the near future.

The Company is aware of competitors which have indicated that they have developed, marketed and installed commercially available products with respect to post-call real-time software technology. These companies include, among others, IBM, I-NET, Inc., GTE Telecommunications, Services, Inc., Boston Communications Group, EDS Personal Communications Corporation, Cincinnati Bell Information Systems, Inc., Lightbridge, Inc., Coral Systems, Inc., Subscriber Computing, Inc., CSC Intellicom, and Systems/Link Corporation as well as cellular carriers' proprietary systems operating in some of the most populated cellular markets.

The Company is aware of various competitors, such as Corsair Communications, Inc., Signal Sciences (a subsidiary of Allen Telecom Inc.), Synacom Technology, Inc., Authentix Network, Inc., Brite Voice Systems, T-Netix, Inc., and GTE Telecommunications Services, Inc., which currently or are expected to compete directly with the Company in the user/device authentication area. One competitor, Corsair Communications, Inc., competes directly with the Company's RF-based fingerprinting fraud protection products. The Company believes that Corsair Communications, Inc. has agreements pursuant to which Corsair Communications, Inc. has installed or will install its RF-based fingerprinting fraud protection product in approximately thirty major markets.

The Company believes that the principal competitive factors affecting a prospective customer's choice of software systems are the number and nature of functions available on the system, price, performance, ease of use, reliability, technical support, customer service, the availability of real-time information and the financial stability of the vendor. The ability of the Company to compete successfully will depend in large measure on its ability to maintain a technically competent research and development staff and to adapt to technological changes and advances in the industry, including ensuring continuing compatibility with evolving generations of computer equipment. In addition, there are numerous companies, including wireless communications carriers, hardware and software development companies and others, which have or may develop the expertise which would encourage them to attempt to develop and market products (such as A-Key based authentication) which could render the Company's products obsolete or less marketable.

SUPPLIERS

The Company has been and will continue to be dependent on third-party vendors for the computer equipment, electronic components, manufacturing services, and certain software that is incorporated in its products. While these are generally available from multiple sources, the Company currently obtains or licenses certain equipment, electronic components, manufacturing services, and software from a limited number of suppliers. The Company's software programs were specifically designed to adhere to the UNIX operating systems standard which can operate on standard computer equipment sold by numerous manufacturers and vendors. The Company currently purchases hardware from Hewlett-Packard ("HP"), its primary system hardware supplier, under a Channel Partner Program ("CPP"). As an HP Value Added Reseller ("VAR") within the CPP program, the Company qualifies for a number of services under HP's marketing, support and financial programs. The Company has attained HP's "Best in Class" designation for 1997. The Company also maintains relationships

with other hardware vendors. The Company currently purchases hardware components from its vendors at discounts from list prices. These hardware components then become a cost component as the Company's systems are generally priced as bundled turnkey products (system, components, installation and training). The Company also currently maintains various software license arrangements with several suppliers. All of these licenses allow the Company's customers to use the software in perpetuity, with the result that the loss of a particular source would not affect any product already in use.

With the introduction of the Blackbird Products, the Company has manufactured to its proprietary specifications a Cell Site System which operates in connection with the system hardware described above. While the parts and components of this system are industry standard and generally available from many suppliers, the Company designs and contracts manufacturing for certain proprietary printed circuit boards and other subassemblies. These standard components and custom manufactured subassemblies are then integrated by the Company and its subcontractors for delivery to the Company's customers.

EMPLOYEES

As of March 12, 1997, the Company had 182 full-time employees. Of such employees, 25 are in corporate, administrative, and information systems positions, 23 are in sales, marketing, and related support functions, 62 are in customer support, field operations, and manufacturing functions, and 72 are engaged in product management and research and development. From time to time, the Company contracts with consultants and other independent contractors on its development projects. None of the Company's employees are covered by a collective bargaining agreement. The Company believes that its relations with its employees are good.

ITEM 2. PROPERTIES

The Company has committed to leasing approximately 47,000 square feet of general office space at 2401 Fourth Avenue, Seattle, Washington for its corporate offices and approximately 1,200 square feet of space at 2001 Sixth Avenue, Seattle, Washington, which it uses for computer operations. Both of these spaces are under five year non-cancelable operating lease arrangements that expire in September and May 2000, respectively, with a current aggregate annual base rent of \$.7 million. Both leases contain five year renewal options and provide for the pass-through to the Company of increases in operating and other costs. Although the space is adequate for its current activities, the Company believes that additional space, if needed, will be readily available.

ITEM 3. LEGAL PROCEEDINGS

In 1996, an action was brought against the Company by Reon International Corp. and Reon Corp. in the Superior Court of King County, Washington, in which the plaintiffs allege breach of contract, misappropriation of trade secrets, and breach of other obligations by the Company. The action was filed in late July 1996 and, since that time, a significant number of the plaintiffs' initial claims have been dismissed. The plaintiffs have amended their complaint three times, most recently in January 1997, and now allege that certain transactions between the parties constitute a joint venture partnership. The plaintiffs seek dissolution of the alleged joint venture partnership, damages in excess of \$10 million, and other relief. The Company has formally denied all of the plaintiffs' claims and is vigorously defending this action. It is the opinion of the Company's management that this action is without merit and will be resolved without a material adverse effect on the Company's liquidity, operating results, or financial position. There are no other pending legal proceedings to which the Company is a party or to which any of its property is subject.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

There were no matters submitted to a vote of security holders of the Company, through solicitation of proxies or otherwise, during the fourth quarter of the fiscal year covered by this Report.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

The following table sets forth, for each quarter during fiscal 1995 and 1996 and for the period from January 1, 1997 through March 21, 1997, the reported high and low sales prices of the Company's Common Stock on the Nasdaq National Market (Symbol: "CTSC").

	SALES PRICE	
	HIGH	LOW
1995		

First Quarter.....	9.25	6.50
Second Quarter.....	15.38	7.75
Third Quarter.....	15.50	9.63
Fourth Quarter.....	12.25	7.50
1996		

First Quarter.....	15.25	10.56
Second Quarter.....	20.13	13.50
Third Quarter.....	21.25	11.25
Fourth Quarter.....	22.13	15.88
1997		

First Quarter through March 21, 1997.....	19.31	9.12

As of March 10, 1997 the number of holders of record of the Company's Common Stock was 205, and the number of beneficial shareholders was estimated to be in excess of 5,000.

There were no dividends paid or other distributions made by the Company with respect to its Common Stock during 1996 or 1995.

Prices of the Company's common stock have been retroactively adjusted to give effect to the two-for-one stock splits in 1994 and 1996.

ITEM 6. SELECTED FINANCIAL DATA

YEAR ENDED DECEMBER 31,
(IN 000'S, EXCEPT PER SHARE AMOUNTS)STATEMENT OF OPERATIONS DATA¹:

	1996	1995	1994	1993	1992
Revenues.....	\$ 20,902	\$ 12,109	\$ 9,732	\$ 5,091	\$ 4,772
Gross Research & Development Expenditures ²	7,010	5,819	4,088	2,019	2,183
Net Income (Loss).....	(7,350)	63	1,550	(1,206)	(1,542)
Net Income (Loss) Per Share ³	(0.33)	0.00	0.08	(0.07)	(0.10)
Weighted Average Shares Outstanding ³	21,999	22,026	20,297	17,364	15,687
Cash Dividends Declared.....	0	0	0	0	0

DECEMBER 31,
(IN 000'S)

BALANCE SHEET DATA:

	1996	1995	1994	1993	1992
Working Capital.....	\$ 11,409	\$ 11,094	\$ 9,783	\$ 6,578	\$ 7,182
Cash.....	4,854	9,448	9,042	5,158	6,645
Capitalized Software Development Costs.....	3,599	3,347	2,606	1,431	1,238
Total Assets.....	32,352	18,371	15,477	9,863	10,056
Long Term Obligations.....	0	0	0	0	0
Total Stockholders' Equity.....	18,185	16,734	13,727	9,053	9,457

¹ Certain reclassifications have been made to the prior year financial statements to conform to current period's presentations.

² Gross research and development expenditures presented in this Statement of Operations Data are higher than research and development costs and expenses disclosed in the Statements of Operations due to the inclusion of capitalized software development costs and contract design and development services costs which are disclosed elsewhere in the financial statements. See Management's Discussion and Analysis of Financial Condition and Results of Operations.

³ Per common share amounts and weighted average shares outstanding have been retroactively adjusted to give effect to the two for one stock splits in 1994 and 1996. See Note j of Notes to Financial Statements.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis provides information which management believes is relevant to an assessment and understanding of the Company's results of operations and financial condition. The discussion should be read in conjunction with the financial statements and notes thereto.

OVERVIEW

Prior to the current year, the Company's revenues had been primarily derived from the Company's Hotwatch-Registered Trademark- Platform and related application products and services ("Hotwatch Products") and, to a lesser extent, phone rental products which are no longer being marketed by the Company. To address the wireless communications industry's increasing need for a product to more effectively combat cloning fraud, a major industry problem, the Company has developed the Blackbird-Registered Trademark- Platform and related application products and services ("Blackbird Products"). The Blackbird Platform has been engineered with an open architecture design to allow the Company and others to develop application products which could run on or exchange information with it.

In 1995, the Company began conducting trials for the purpose of testing and evaluating the Blackbird Products. Since that time, the Company has signed agreements with AirTouch Cellular ("AirTouch"), Bell Atlantic NYNEX Mobile ("BANM"), GTE Mobilnet of California Limited Partnership ("GTE-California"), and Ameritech Mobile Communications, Inc. ("Ameritech") to deploy and support the Blackbird Products.

During the current year, the Company recorded its first substantial revenues from two of the contracts noted above. Revenue recognition for the Company's systems is based upon performance criteria which vary from customer to customer and product to product. Physical hardware and software delivery, definitions of system delivery, and customer acceptance are generally the significant factors used in determining revenue recognition. As a result of such performance criteria, only a portion of the systems revenues and the majority of the system costs are recorded during the early stages of a system deployment. Accordingly, revenues and direct margins recorded by the Company can be expected to be lower in earlier periods of deployment and inconsistent from quarter to quarter, especially during the initial market deployments under new contracts. The resulting deferral of revenue will be recorded in subsequent periods as the performance criteria specified in the applicable contract is met.

In addition, the Company has incurred substantial operating expenses during the early deployments, primarily in the areas of sales and marketing, installation and customer support, and in research and development. Moreover, the Company expects that its costs and expenses will continue to increase in the future, due to a continual need to expend substantial monies on research and development, enhanced sales and marketing activities, and expansion of customer support capabilities needed to service its anticipated product deployments in both domestic and international markets.

The Company's revenue and customer base is currently concentrated among a few large domestic cellular carriers due to the significant concentration of ownership and/or control of cellular licenses. As the Company expands its domestic and international marketing efforts, and as the wireless communications industry expands beyond cellular telephony to include other wireless communication services, the Company believes that it will be able to diversify its revenue and customer base. To date, the Company's sales have been generated by the Company's in-house sales force. The Company currently uses and expects to continue using agents and/or distributors in conjunction with its in-house sales efforts for sales in the international marketplace. While the Company has not yet signed international sales agreements, it is in the process of exploring and identifying limitations that may be placed upon it by foreign operations and the expected resulting impact upon the Company's results of operations and liquidity. Its success in exploiting these expanded markets and in achieving and maintaining profitability on both domestic and international operations, will depend on, among other things, (i) its ability to make its existing and future technology commercially acceptable, (ii) recognize and successfully adapt to the rapid changes in the wireless communications industry (including the anticipated growth of digital

services), (iii) enhance and expand its manufacturing activities concurrent with its growth, (iv) comply with foreign regulatory requirements without negatively impacting the Company's results of operations or liquidity, (v) manage intellectual property protection in foreign countries, (vi) manage foreign currency exchange rate fluctuations that may be attributed to international sales contracts, and (vii) engage additional sales agents and/or distributors, all of which could delay revenues and/or increase the cost of doing business.

1996 compared to 1995

Total revenues increased 73% to \$20.9 million in 1996 from \$12.1 million in 1995 and the Company incurred a net loss of \$7.4 million, or \$0.33 per share in 1996 compared to net income of \$.1 million, or \$.00 per share in 1995. While the increase in revenues is directly attributable to the Company's initial deployment of its Blackbird Products, the decline in operating results was primarily the result of: (i) development of an expanded operating structure, which impacted most functions within the Company, that is designed to support a higher volume of sales, (ii) unrecognized revenues attributable to systems shipped in 1996 where some, but not all revenues associated with those shipments were recorded, (iii) unrecognized revenues attributable to systems shipped in 1996 with no revenues recorded but where substantial sales, customer support, installation and research and development operating expenses were incurred, and (iv) lower initial average sales prices from the Company's initial contracts for the Blackbird Products.

Systems revenues are generated from licensing and sales of the Company's proprietary software and hardware products, from the sale of third party equipment sold in support of the proprietary systems, and to a lesser extent, fees earned associated with the installation and deployment of such systems. Systems revenues increased 108% to \$19.8 million in 1996 from \$9.5 million in 1995.

Revenues from Blackbird systems amounted to \$16.7 million for 1996 and were derived exclusively from sales under the agreements with BANM and AirTouch. There were no corresponding revenues during 1995. Revenues from Hotwatch systems decreased 64% to \$3.1 million in 1996 from \$8.6 million in 1995. These revenues principally originate from agreements with three customers--the AWS Axys and Hotwatch Products agreements (collectively, the "AWS Agreements") between the Company and AT&T Wireless Services, Inc. ("AWS"), a license agreement ("LIN/ACC Agreement") between the Company and collectively LIN Broadcasting Company ("LIN") and American Cellular Communications ("ACC"), subsidiaries of AWS and BellSouth Cellular, respectively, and a license agreement with 360DEG. Communications Company ("360DEG. CC"). The decrease in revenues from Hotwatch systems is primarily due to lower non-recurring revenues from the AWS and 360DEG.CC agreements. Revenues in 1997 related to the AWS and other agreements are not expected to increase and could possibly decrease over those recorded in 1996, primarily because revenue from the AWS agreements reached its cumulative minimum expected revenue levels in 1996.

Service revenues are derived primarily from maintenance, system monitoring and related professional services provided in support of the Company's currently deployed product base. Service revenues decreased 58% to \$1.1 million in 1996 from \$2.6 million in 1995 and were primarily derived from Hotwatch systems. This decrease is primarily due to \$1.2 million of non-recurring Hotwatch programming services associated with the AWS Axys agreement and initial Blackbird Product evaluation revenues recorded during the 1995 period. Service revenues from Blackbird Products were minimal in 1996, however the Company anticipates that total service revenues during 1997 and beyond will increase above the amounts recorded during 1996 as a result of the deployment of the Company's Blackbird systems.

Costs of systems and services increased 255% to \$16.7 million in 1996 from \$4.7 million in 1995. Costs of systems and services are primarily comprised of the costs of: (i) equipment (which primarily includes proprietary and third party hardware, and to a lesser extent, manufacturing overhead, and related expenses), (ii) amortization of capitalized software development, (iii) system installation, and (iv) customer support. Costs of equipment increased 945% to \$11.5 million in 1996 from \$1.1 million in 1995 and relates primarily to initial deployments of the Company's Blackbird Products. Cost of software amortization, system installation, product royalties and

customer support increased 38% to \$5.1 million in 1996 from \$3.7 million in 1995 and is attributable primarily to increased personnel and related overhead costs associated with installing and supporting products in the Company's expanded customer base.

Costs of systems and services, as a percent of total revenues, were 79% and 39% for the 1996 and 1995 periods, respectively. The increase in 1996 is attributable to: (i) the higher hardware component costs of system sales for Blackbird Products as compared to Hotwatch Products, (ii) lower initial average sales prices from systems deployed to the Company's first Blackbird Products customers, and (iii) unrecognized revenues attributable to systems where some, but not all, revenues were recorded in 1996 and which will be recognized in future periods in accordance with the Company's revenue recognition practices discussed in the overview section above.

Sales and marketing expenses increased 62% to \$3.4 million in 1996 from \$2.1 million in 1995. This increase is primarily attributable to personnel and related costs incurred in connection with the Company's increased efforts to generate demand for its products and the costs incurred during both pre- and post-sales Blackbird contract activities. To a lesser extent, variable sales incentive compensation contributed to the 1996 increased expenses.

General and administrative expenses increased 43% to \$3.0 million in 1996 from \$2.1 million in 1995 principally due to increased personnel related costs associated with the continued expansion of the Company's business.

Research and development expenditures include the costs for research, design, development, testing, preparation of training and user documentation, and fixing and refining features for the software and hardware components included in the Company's current and future product lines. Research and development costs increased 56% to \$5.5 million in 1996 from \$3.5 million in 1995. Software development costs of \$1.3 million and \$1.7 million were capitalized during 1996 and 1995, respectively, and related primarily to the development of the Blackbird Products. In addition, costs of \$.2 million and \$.6 million, related to design and development services under the AWS and other Hotwatch customers agreements were expensed in 1996 and 1995, respectively, as costs of services. Capitalized development costs declined in 1996 primarily due to an increase in non-capitalizable research, design, and maintenance activities associated with the Blackbird Products. Including capitalized software development costs, and contract design and development costs recorded as costs of services, gross research and development expenditures increased 23% to \$7.0 million in 1996 from \$5.7 million in 1995, primarily due to expanded investment in the Blackbird Products.

Interest income decreased 40% to \$.3 million in 1996 from \$.5 million. The decrease was attributable to lower average cash balances invested at lower average interest rates during 1996 as compared to 1995.

1995 compared to 1994

Total revenues increased 25% to \$12.1 million in 1995 from \$9.7 million in 1994 and the Company had a net income of \$.1 million, or \$0.00 per share, compared to a net income of \$1.5 million, or \$0.08 per share in 1994. While the increase in revenues is attributable to an increase in system and service revenues over 1994 from the AWS and 360DEG.CC Agreements, the decline in operating results was primarily attributable to: (i) inconsistent contract revenue streams from the Hotwatch Products and (ii) increased efforts and expenditures in both sales and marketing and research and development of the Blackbird Products.

Systems revenues increased 27% to \$9.5 million in 1995 from \$7.5 million in 1994. There were no Blackbird system revenues in either 1995 or 1994. Revenues from Hotwatch systems increased 37% to \$8.6 million in 1995 from \$6.3 million in 1994. Revenues during both periods were primarily derived from sales under the AWS, LIN/ACC and 360DEG.CC Agreements in accordance with contract roll-out provisions.

Costs of systems and services increased 27% to \$4.7 million in 1995 from \$3.7 million in 1994. Costs of systems and services were primarily comprised of the costs of: (i) third party equipment, (ii) amortization of capitalized software development, (iii) system installation, and (iv) customer support. Costs of equipment

increased 22% to \$1.1 million in 1995 from \$.9 million in 1994 and is attributable to contract fulfillment with its Hotwatch customers. Cost of software amortization, system installation, and customer support increased 37% to \$3.7 million in 1995 from \$2.7 million in 1994 and is attributable primarily to increased personnel and related overhead costs associated with installing and supporting the Company's expanded Hotwatch customer base and to a lesser extent pre-sales and support related costs associated with trial and testing agreements of the Company's new Blackbird Products.

Sales and marketing expenses increased 163% to \$2.1 million in 1995 from \$.8 million in 1994 as a result of increased personnel and related costs incurred in connection with the Company's expansion efforts to generate demand for the Company's products and, to a lesser extent, sales incentive compensation attributable to certain contracts.

General and administrative expenses decreased 9% to \$2.1 million in 1995 from \$2.3 million in 1994. This decrease is primarily the result of 1994 expenditures associated with hiring and relocation of the Company's President, 1994 management incentive bonuses that were non-recurring during 1995, and reduced management fees paid to Nationwide Cellular Service, Inc. ("Nationwide") under the four-year management services agreement between the Company and Nationwide that expired in August 1995.

Research and development costs increased 106% to \$3.5 million in 1995 from \$1.7 million in 1994. Software development costs of \$1.7 million and \$1.7 million were capitalized during 1995 and 1994, respectively, and relate primarily to the development of the Company's Blackbird product in both years and to development of the Accountlink product in 1994. In addition, costs of \$.6 million related primarily to design and development services under the AWS Axys and Metered Billing Agreements were recorded in both periods as costs of services. Including the \$1.7 million of capitalized software development costs and the \$.6 million of contract design and development services costs, the Company incurred gross research and development expenditures of \$5.8 million in 1995 which represents a 45% increase over the \$4.0 million expended in 1994. This increase is primarily the result of additional expenditures for personnel related costs, outside consulting services and prototype hardware expenditures for development of the Company's Blackbird products.

Interest income increased 67% to \$.5 million in 1995 from \$.3 million in 1994. The increase was attributable to higher average cash balances in 1995.

LIQUIDITY AND CAPITAL RESOURCES

The Company's capital requirements have consisted primarily of funding software development, property and equipment requirements, working capital and the Company's operating losses. The Company has historically funded these requirements through issuance of Common Stock (including proceeds from the exercise of warrants and options) and from operating profits in certain periods. On December 31, 1996 the Company's cash balance was \$4.9 million as compared to \$9.4 million on December 31, 1995. The Company's working capital increased to \$11.4 million at December 31, 1996 from \$11.1 million at December 31, 1995.

Cash used by operating activities amounted to \$10.3 million in 1996, as compared to cash provided by operating activities of \$.8 million in 1995 and \$3.2 million in 1994. Depreciation and amortization, which provides cash for operating activities, amounted to \$1.9 million, \$1.6 million, and \$1.0 million in 1996, 1995, and 1994, respectively. These increases are attributable to the increased investment activities for software development and property and equipment as discussed below. The increased utilization of cash during these periods resulted primarily from the increased loss for 1996 as compared to 1995, a reduced profit for 1995 as compared to 1994, and to a lesser extent, the net changes in the balances of the major working capital components which include; (i) accounts receivable, which increased in 1996 as a result of the initial Blackbird System revenues that were recorded during the last several months of the year, (ii) inventories, which the Company continues to increase to meet anticipated sales demand for Blackbird Products during 1997 (additional inventory at December 31, 1996 of approximately \$4.6 million was on order to meet anticipated shipment schedules during the first half of 1997),

(iii) accounts payable, which increase reflects the increased level of inventory purchases and operating expenses associated with the expansion of the Company's operations, and (iv) deferred revenue and customer deposits, which increases reflect billings and/or cash received in advance of revenues recognized. During the early stages of deploying the Blackbird contracts discussed above, the Company has experienced uneven cash flow and operating results. These factors originate from the deferred revenue recognition and payment terms contained in these contracts.

Cash utilized by investing activities totaled \$3.1 million, \$3.3 million and \$2.5 million in 1996, 1995, and 1994, respectively. The Company's capital requirements during such periods were (i) software development, particularly with respect to the Blackbird Products and (ii) property and equipment, primarily for furniture, leaseholds, and equipment associated with expanding the Company's business. These expenditure levels are expected to continue in 1997 at or above the current levels. At December 31, 1996, the Company had no significant commitments for capital expenditures. The Company, as part of its growth strategy, would consider the cost/benefit of purchasing software and/or hardware technology in the event that an attractive opportunity arises.

Cash provided by financing activities totaled \$8.8 million, \$2.9 million, and \$3.1 million during 1996, 1995, and 1994, respectively.

In November 1996, the Company sold 400,000 shares of common stock to investors in a private placement with proceeds to the Company approximating \$6.4 million net of estimated expenses. The Company has filed a registration statement for the resale of such shares. Also, in November 1996, the Company obtained a \$5.0 million line of credit from a major bank. The line, which is secured by all personal property of the Company, bears interest at the prime rate plus .75% and expires September 30, 1997. The proceeds from the stock sale and the line of credit will be used to fund the Company's growth and provide additional working capital. No funds have been drawn on the line of credit as of this date.

Cash provided by financing activities has also been generated from the exercise of stock options by Nationwide (see below), the Company's directors, officers and employees and additionally, during 1994, from the exercise of Common Stock Warrants issued in connection with the Company's Initial Public Offering in 1991. Proceeds from these combined activities totaled \$2.4 million, \$2.9 million, and \$3.1 million during 1996, 1995 and 1994, respectively.

Prior to September 14, 1995, Nationwide owned 6,680,000 shares of the Company's Common Stock and was the holder of an option to purchase an additional 1,280,000 shares. On September 14, 1995, in connection with its merger with MCI Communications Corporation, Nationwide exercised its option and distributed the combined total of 7,960,000 shares to its stockholders. As a result of the exercise of the option, the Company received \$1.6 million and issued 1,280,000 shares of Common Stock. The majority of the cash provided by financing activities in 1994 resulted from the exercise in March 1994 of 287,437 Class A Warrants from which the Company received \$2.1 million, net of expenses, in exchange for 1,149,748 shares of Common Stock. All of the Company's warrants had been exercised or had expired by the end of 1994.

The Company expects to continue to incur substantial expenses in support of research and development activities, growth of its sales and marketing organization, support for new products and the anticipated expanded customer base, enhancing the hardware design and manufacturing processes and administrative activities. The Company believes that cash flow anticipated from its operating activities, existing cash balances, proceeds from the stock sale (as described above) and cash available under the line of credit (also discussed above), are sufficient to fund its operations for at least the next 12 months.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

A number of statements contained in this report are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties that could cause actual results to differ materially from those expressed or implied in the applicable statements. These risks and uncertainties include but are not limited to: the Company's dependence on the cellular communications market; its vulnerability to rapid industry change and technological obsolescence; the limited nature of its product life, and the uncertainty of market acceptance of its products; the unproved status of its products in widespread commercial use, including the risks that its current and future products may contain errors that would be difficult and costly to detect and correct and that technological difficulties may in general hinder or prevent commercialization of its present and future products; potential manufacturing difficulties; potential difficulties in managing growth; dependence on key personnel; the Company's limited customer base and reliance on a relatively small number of customers; the possible impact of competitive products and pricing; the uncertain level of actual purchases of its products by current domestic and prospective domestic and international customers under existing and future agreements, as the case may be; uncertainties in the Company's ability to implement these agreements sufficiently to permit it to recognize revenue under its accounting policies (including its ability to meet product performance criteria contained in such contracts); the results of financing efforts; uncertainties with respect to the Company's business strategy; general economic conditions; and other risks described in the Company's Securities and Exchange Commission filings.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements and supplementary data required by this item are included in Part IV as indexed at Item 14(a)(1) and (a)(2).

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

IDENTIFICATION OF DIRECTORS AND EXECUTIVE OFFICERS

The name, age, position with the Company and other information with respect to each of its directors and executive officers is as set forth below.

NAME	AGE	POSITION WITH COMPANY	YEAR FIRST ELECTED	TERM OF OFFICE
Stephen Katz	53	Chairman of the Board of Directors and Chief Executive Officer	1988	1997
William C. Zollner	50	President, Chief Operating Officer and Director	1997	1998
Jay Goldberg ^{1,2}	56	Director	1991	1999
Lawrence Schoenberg ^{1,2}	64	Director	1996	1999
Michael E. McConnell	46	Vice President and Chief Financial Officer	--	--
Kyle R. Sugamele	34	Vice President, General Counsel and Corporate Secretary	--	--
Stephen F. Elston	39	Vice President, Engineering	--	--
Douglas F. Anderson	43	Vice President, Sales and Marketing	--	--

BUSINESS EXPERIENCE

Stephen Katz, Chairman of the Board of Directors, was Acting Chief Executive Officer and Acting President from November 1992 until February 1994, at which time he became Chief Executive Officer. Mr. Katz has been Chairman of the Board and a director of the Company since its inception and a member of the Management Committee of the predecessor partnership during the entire period of its existence. From September 1984 until September 1995, Mr. Katz was Chairman of the Board, Chief Executive Officer and until September 1993, President of Nationwide Cellular Service, Inc., which was the Company's majority stockholder until May 1992 and its largest stockholder, owning 34% of its outstanding shares, until September 1995. At that time such shares were distributed to Nationwide's stockholders, immediately prior to Nationwide's merger with MCI Communications Corp. ("MCI"). In May 1996, Mr. Katz was appointed Vice-Chairman of the Board and Chief Executive Officer of Coin Bill Validator, Inc. whose business is currency and coin authentication.

William C. Zollner was named President and Chief Operating Officer and a Director of the Company in February 1997. From August 1996 to January 1997, Mr. Zollner provided management consulting to software and systems companies. From July 1991 to July 1996, Mr. Zollner served as Chief Operating Officer of Serena Software International, a

¹ Member of the Compensation and Stock Option Committee

² Member of the Audit Committee

company specializing in systems and application change management and productivity products. Previously, Mr. Zollner served eight years with Sterling Software, Inc., a company specializing in software applications serving several markets. While with Sterling, he served as Senior Vice President of its Systems Software Marketing Division, and President of its International Division.

Jay Goldberg has served as Director of the Company since August 1991. He is currently Chairman and CEO of Opcenter, LLC, as well as Lexstra International, a UK-based firm. Mr. Goldberg was Chairman of the Board since November 1990 and President and Chief Executive Officer from August 1990 until January 1994, of Image Business Systems, Inc., a software company previously engaged in work flow and image processing, inactive since August 1994. In June of 1989, Mr. Goldberg formed Zeitech, Inc., a computer software firm for which he served as Chairman of the Board until the company was sold to Career Horizons in January 1996. From May 1986 until February 1990, Mr. Goldberg was Chief Executive Officer of Money Management Systems, Inc., a company also engaged in the computer software business which was sold to SunGuard Data Systems, Inc. in 1989.

Lawrence Schoenberg joined the Company as a Director in September 1996. Mr. Schoenberg founded AGS Computers, Inc. in 1967 and served as CEO until 1991. The company was sold to NYNEX in 1988. The micro-computer segment subsequently became a part of Merisel, Inc. Mr. Schoenberg also serves as Director to Government Technology Services, Inc. (since December 1991), Merisel, Inc. (since November 1989), SunGuard Data Services, Inc. (since October 1991), and Penn America Group, Inc. (since January 1994). Former directorships include Systems Center, Inc., which was sold to Sterling Software, Inc., SoftSwitch, Inc., which was sold to Lotus/IBM Corp., Forecross Corporation (from 1993 to June 1996), and Image Business Systems, Inc. (from January 1992 to August 1994).

Michael E. McConnell has been Vice President and Chief Financial Officer of the Company since January 1992. Prior to joining the Company, from April 1991 to December 1991, Mr. McConnell engaged in personal investments. From 1986 to March 1991, Mr. McConnell was the Chief Financial Officer of Delphi Information Systems, Inc., a public company engaged in the development of software systems for the insurance field. Mr. McConnell is a certified public accountant.

Kyle R. Sugamele joined the Company in July 1995 as Vice President and General Counsel, and was named Corporate Secretary in June 1996. Prior to joining the Company, Mr. Sugamele was associated with the law firm of Mundt, MacGregor, Happel, Falconer, Zulauf & Hall in Seattle. His practice has involved a wide range of commercial, corporate, banking, and general business matters, with particular emphasis in the protection and licensing of intellectual property and trade secrets, commercial finance, and business transactions.

Stephen F. Elston joined the Company in July 1996 as Vice President of Engineering. From January 1993 until joining the Company, he held several positions with MathSoft, Inc., a software development company. From July 1995 to June 1996, as Senior Director of Product Development in their Data Analysis Products Division, he managed development and releases for two software product lines. From January 1995 to July 1995, he was Acting Director of Product Development. He was also Acting Product Manager from January 1995 to September 1995, and Director of Research from January 1993 to December 1995, in MathSoft's StatSci Division. From June 1990 to January 1993, Mr. Elston was a Research Geophysicist with Mobil Research and Development Company.

Douglas F. Anderson has been with the Company since July 1, 1994 and was named Vice President, Sales and Marketing on August 1, 1994. From 1991 to July 1994, Mr. Anderson had been Director of North American Operations of Saros Corporation, a company engaged in the business of developing systems software. For five years prior thereto Mr. Anderson had been Director of North American Sales for Lotus Development Corporation.

The Company's Board of Directors is divided into three classes. The Board is composed of one Class I director, Mr. Zollner, two Class II directors, Messrs. Goldberg, and Schoenberg, and one Class III director, Mr. Katz. The terms of the Class I, Class II and Class III directors expire on the dates of the 1998, 1999 and 1997 annual meetings, respectively. At each annual meeting, successors to the class of directors whose term expires at that

annual meeting are elected for a three-year term. Officers are elected annually at the discretion of the Board of Directors and serve at the discretion of the Board.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to the Company's definitive proxy statement relating to its 1997 Annual Meeting of Stockholders under the caption "Executive Compensation."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by this item is incorporated by reference to the Company's definitive proxy statement relating to its 1997 Annual Meeting of Stockholders under the caption "Security Ownership."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this item is incorporated by reference to the Company's definitive proxy statement relating to its 1997 Annual Meeting of Stockholders under the caption "Executive Compensation--Certain Transactions."

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

(a) 1. Financial Statements:

The following financial statements of Cellular Technical Services Company, Inc. are included as required to be filed by Item 8.

	PAGE NO. -----
Report of Ernst & Young LLP, Independent Auditors	30
Balance Sheets at December 31, 1996 and 1995.....	31
Statements of Operations for the years 32 ended December 31, 1996, 1995 and 1994.....	32
Statements of Stockholders' Equity for the years ended December 31, 1996, 1995 and 1994.....	33
Statements of Cash Flows for the years 1996, 1995 and 1994 ended December 31,.....	34
Notes to Financial Statements.....	35

2. Financial Statement Schedules:

Schedule II--Valuation and Qualifying Accounts.....	46
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All other schedules have been omitted because they are inapplicable, not required, or the information is included in the financial statements or notes thereto.

3. Exhibits:

3.1 Restated Certificate of Incorporation of the Registrant, as amended (1)	
3.2 By-Laws of the Registrant (1)	
3.3 Amendment I to By-Laws of the Registrant, dated October 28, 1993 (3)	
4.1 Specimen Certificate for Common Stock of Registrant (1)	
4.2 Stock Purchase Agreement dated as of November 11, 1996 among the Registrant and the investors specified therein (9)	
7.1 1991 Qualified Stock Option Plan (as amended as of November 30, 1993) (+)(2)	
7.2 1991 Non-Qualified Stock Option Plan (as amended as of November 30, 1993) (+)(2)	
7.3 1993 Non-Employee Director Stock Option Plan (+)(3)	
7.4 1996 Stock Option Plan (+)(8)	
10.1 Employment Agreement between the Registrant and William C. Zollner dated February 19, 1997 (+)(11)	

- 10.2 Employment Agreement between the Registrant and Robert P. Dahut dated January 31, 1994(+)(3)
- 10.2A Letter Agreement between the Registrant and Robert P. Dahut dated January 21, 1997(+)(10)
- 10.3 Employment Agreement between the Registrant and Michael E. McConnell dated January 1, 1993(+)(3)
- 10.4 Employment Agreement between the Registrant and Kyle R. Sugamele dated June 29, 1995(+)(7)
- 10.5 Employment Agreement between the Registrant and Stephen F. Elston dated July 17, 1996(+)(12)
- 10.6 Agreement of Lease dated May 23, 1994 between the Registrant and Martin Selig Properties(5)
- 10.6A Amendment to Lease dated April 7, 1995 between the Registrant and Martin Selig Properties(7)
- 10.7 Technical Services Agreement dated December 1, 1993, between Registrant and McCaw Cellular Communications, Inc.(a)(4)
- 10.8 Source Code License Agreement (CTS Software) dated December 1, 1993, between Registrant and McCaw Cellular Communications, Inc.(a)(4)
- 10.9 Source Code License Agreement (McCaw Software) dated July 15, 1994, between Registrant and McCaw Cellular Communications, Inc.(a)(4)
- 10.10 Master Purchase and License Agreement between the Registrant and AirTouch Cellular dated March 6, 1996(d)(7)
- 10.11 Master Purchase and License Agreement between the Registrant and Bell Atlantic NYNEX Mobile dated August 27, 1996 (e)(9)
- 10.12 Master Purchase and License Agreement between the Registrant and GTE Mobilnet of California Limited Partnership dated September 30, 1996(e)(9)
- 10.13 Master Purchase and License Agreement between the Registrant and Ameritech Mobile Communications, Inc. dated October 14, 1996(e)(9)
- 10.14 Patent License Agreement between Registrant and The Boeing Company dated April 29, 1994(c)(5)
- 10.15 Patent Sublicense Agreement between Registrant and Motron Electronics dated May 24, 1995(b)(6)
- 10.16 Patent License Agreement between Registrant and AirTouch Cellular, dated December 22, 1995(d)(7)
- 11.1 Computation of Earnings Per Share(12)
- 23.1 Consent of Ernst & Young LLP, independent auditors(12)
- 27 Financial Data Schedule (12)

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a Confidential treatment granted pursuant to order of the Secretary of the Securities and Exchange Commission dated December 1, 1994 (File No. 0-19437).

- b Confidential treatment granted pursuant to order of the Secretary of the Securities and Exchange Commission dated January 25, 1996 (File No. 0-19437).
 - c Confidential treatment granted pursuant to order of the Secretary of the Securities and Exchange Commission dated July 26, 1996 (File No. 0-19437).
 - d Confidential treatment granted pursuant to order of the Secretary of the Securities and Exchange Commission dated November 8, 1996 (File No. 0-19437).
 - e Confidential treatment granted pursuant to order of the Secretary of the Securities and Exchange Commission dated February 28, 1997 (File No. 0-19437).
- (+) Management contract or compensation plan or arrangement required to be noted as provided in Item 14(a)(3).
- (1) Incorporated by reference to Registration Statement on Form S-1 declared effective on August 6, 1991 (File No. 33-41176).
 - (2) Incorporated by reference to Registration Statement on Form S-8 filed on March 7, 1994 (File No. 33-76128).
 - (3) Incorporated by reference to Annual Report on Form 10-K filed on March 30, 1994 for the year ended December 31, 1993 (File No. 0-19437).
 - (4) Incorporated by reference to Quarterly Report on Form 10-Q filed on August 12, 1994 for the quarter ended June 30, 1994 (File No. 0-19437).
 - (5) Incorporated by reference to Annual Report on Form 10-K filed on March 28, 1995 for the year ended December 31, 1994 (File No. 0-19437).
 - (6) Incorporated by reference to Quarterly Report on Form 10-Q filed on August 8, 1995 for the quarter ended June 30, 1995 (File No. 0-19437).
 - (7) Incorporated by reference to Annual Report on Form 10-K filed on March 27, 1996 for the year ended December 31, 1995 (File No. 0-19437).
 - (8) Incorporated by reference to Registration Statement on Form S-8 filed on July 12, 1996 (File No. 333-08049).
 - (9) Incorporated by reference to Quarterly Report on Form 10-Q filed on November 14, 1996 for the quarter ended September 30, 1996 (File No. 0-19437).
 - (10) Incorporated by reference to Current Report on Form 8-K filed on February 5, 1997 (File No. 0-19437).
 - (11) Incorporated by reference to Current Report on Form 8-K filed on March 6, 1997 (File No. 0-19437).
 - (12) Filed herewith.
- (b) Reports on Form 8-K

The Registrant did not file any Current Reports on Form 8-K during the quarter ended December 31, 1996.

REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

The Board of Directors and Stockholders
Cellular Technical Services Company, Inc.

We have audited the accompanying balance sheets of Cellular Technical Services Company, Inc. as of December 31, 1996 and 1995, and the related statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 1996. Our audits also included the financial statement schedule listed in the Index at Item 14(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cellular Technical Services Company, Inc. at December 31, 1996 and 1995, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 1996, in conformity with generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

ERNST & YOUNG LLP

Seattle, Washington
March 5, 1997

CELLULAR TECHNICAL SERVICES COMPANY, INC.

BALANCE SHEETS

(IN 000'S, EXCEPT PER SHARE AMOUNTS)

	DECEMBER 31,	
	1996	1995
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents.....	\$ 4,854	\$ 9,448
Accounts receivable, net of allowances of \$101 in 1996 and \$70 in 1995.....	11,616	508
Inventories, net.....	8,275	1,947
Prepaid expenses and deposits.....	831	828
Total Current Assets.....	25,576	12,731
PROPERTY AND EQUIPMENT, net.....	3,177	2,293
SOFTWARE DEVELOPMENT COSTS, net.....	3,599	3,347
TOTAL ASSETS.....	\$ 32,352	\$ 18,371
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable.....	\$ 6,365	\$ 1,154
Payroll-related liabilities.....	735	223
Taxes (other than payroll and income).....	660	198
Customers' deposits.....	4,626	20
Deferred revenue.....	1,781	42
Total Current Liabilities.....	14,167	1,637
STOCKHOLDERS' EQUITY		
Preferred Stock, \$.01 par value per share, 5,000 shares authorized, none issued and outstanding		
Common Stock, \$.001 par value per share, 30,000 shares authorized, 22,636 shares issued and outstanding in 1996 and 21,603 in 1995.....	23	22
Additional paid-in capital.....	29,138	20,338
Accumulated deficit.....	(10,976)	(3,626)
Total Stockholders' Equity.....	18,185	16,734
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY.....	\$ 32,352	\$ 18,371

The accompanying footnotes are an integral part of these financial statements.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

STATEMENTS OF OPERATIONS

(IN 000'S, EXCEPT PER SHARE AMOUNTS)

	YEAR ENDED DECEMBER 31,		
	1996	1995	1994
REVENUES			
Systems.....	\$ 19,799	\$ 9,532	\$ 7,485
Services.....	1,103	2,577	2,247
Total Revenues.....	20,902	12,109	9,732
COSTS AND EXPENSES			
Cost of Systems and Services.....	16,617	4,722	3,666
Sales and marketing.....	3,401	2,142	789
General and administrative.....	2,966	2,116	2,269
Research and development.....	5,523	3,540	1,728
Total Costs and Expenses.....	28,507	12,520	8,452
INCOME (LOSS) FROM OPERATIONS.....	(7,605)	(411)	1,280
INTEREST INCOME.....	255	476	280
INCOME (LOSS) BEFORE INCOME TAXES.....	(7,350)	65	1,560
PROVISION FOR INCOME TAXES.....		2	10
NET INCOME (LOSS).....	\$ (7,350)	\$ 63	\$ 1,550
NET INCOME (LOSS) PER SHARE.....	\$ (0.33)	\$ 0.00	\$ 0.08
WEIGHTED-AVERAGE SHARES OUTSTANDING.....	21,999	22,026	20,297

The accompanying footnotes are an integral part of these financial statements.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

STATEMENTS OF STOCKHOLDERS' EQUITY

(IN 000'S)

	COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TOTAL
	SHARES	AMOUNT			
Balance, January 1, 1994.....	17,829	\$ 18	\$ 14,274	\$ (5,239)	\$ 9,053
Exercise of Common Stock Warrants.....	1,629	2	2,765		2,767
Exercise of stock options.....	283		357		357
Net income.....				1,550	1,550
Balance, December 31, 1994.....	19,741	20	17,396	(3,689)	13,727
Exercise of stock options.....	1,862	2	2,942		2,944
Net income.....				63	63
Balance, December 31, 1995.....	21,603	22	20,338	(3,626)	16,734
Exercise of stock options.....	633	1	2,360		2,361
Sale of Common Stock.....	400		6,440		6,440
Net income.....				(7,350)	(7,350)
Balance, December 31, 1996.....	22,636	\$ 23	\$ 29,138	\$ (10,976)	\$ 18,185

The accompanying footnotes are an integral part of these financial statements.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

STATEMENTS OF CASH FLOWS

(IN 000'S)

	YEAR ENDED DECEMBER 31,		
	1996	1995	1994
OPERATING ACTIVITIES			
Net income (loss).....	\$ (7,350)	\$ 63	\$ 1,550
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization of property and equipment.....	817	609	432
Amortization of software development costs.....	1,123	985	550
Changes in operating assets and liabilities:			
(Increase) decrease in accounts receivable.....	(11,108)	1,239	(316)
(Increase) decrease in inventories.....	(6,328)	(1,492)	114
(Increase) in prepaid expenses and deposits.....	(3)	(537)	(59)
Increase in accounts payable.....	5,211	261	371
Increase (decrease) in payroll-related liabilities.....	512	(283)	380
Increase (decrease) in taxes (other than payroll and income).....	462	67	(30)
Increase (decrease) in customers' deposits.....	4,606	(8)	49
Increase (decrease) in deferred revenue.....	1,739	(151)	171
NET CASH (USED IN) PROVIDED BY OPERATING ACTIVITIES.....	(10,319)	753	3,212
INVESTING ACTIVITIES			
Purchase of property and equipment.....	(1,701)	(1,565)	(727)
Capitalization of software development costs.....	(1,375)	(1,726)	(1,725)
NET CASH USED IN INVESTING ACTIVITIES.....	(3,076)	(3,291)	(2,452)
FINANCING ACTIVITIES			
Proceeds from sale of Common Stock.....	6,440		
Proceeds from exercise of stock options.....	2,361	2,944	357
Proceeds from exercise of Common Stock Warrants.....			2,767
NET CASH PROVIDED BY FINANCING ACTIVITIES.....	8,801	2,944	3,124
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS.....	(4,594)	406	3,884
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR.....	9,448	9,042	5,158
CASH AND CASH EQUIVALENTS AT END OF YEAR.....	\$ 4,854	\$ 9,448	\$ 9,042

The accompanying footnotes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

NOTE A--SIGNIFICANT ACCOUNTING POLICIES:

Nature of Operations and Organization--Cellular Technical Services Company, Inc. (the "Company") is primarily engaged in the design, development, marketing, installation and support of integrated data processing systems for the wireless communications industry. Although the Company's current customer base is comprised of domestic U.S. cellular service providers, management believes that demand for the Company's products extends worldwide. The Company was incorporated in Delaware on August 19, 1988. Prior to September 14, 1995, the Company's single largest stockholder had been Nationwide Cellular Service, Inc. ("Nationwide").

Cash and Cash Equivalents--The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Diversification of Credit Risk--The Company is subject to concentrations of credit risk primarily from cash investments and accounts receivable. Credit risk from cash investments is managed by diversification of cash investments among institutions and by the purchase of investment-grade commercial paper securities. The estimated fair values of the securities approximate cost. Credit risk associated with trade receivables is subject to ongoing credit evaluations. The Company does not typically require collateral for receivables. Reserves for potential losses, if any, are maintained where appropriate.

Inventories--Inventories, which primarily consist of raw materials, work in process, and finished components (including data processing and telecommunication equipment), are stated at the lower of cost or market value, with cost determined on a first-in, first-out basis. Inventories are integrated for delivery to customers by either the Company or its third-party integrators. The Company's inventory is monitored for obsolescence and considers factors such as turnover, technical obsolescence, right of return status to suppliers and pricing. Reserves for slow-moving and obsolete inventory, if any, are maintained where appropriate.

Property and Equipment--Property and equipment, including leasehold improvements, are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization commences at the time assets are placed in service and is computed using the straight-line method over the estimated useful lives of the assets of two to five years or terms of the associated operating leases. The Company capitalizes expenditures that significantly increase the life of the related assets, while maintenance and repairs are charged to operations. Gain or loss is reflected in results of operations upon the retirement or sale of assets.

Software Development Costs--Software development costs, consisting primarily of internally developed software, have been capitalized in accordance with Financial Accounting Standards Board Statement No. 86, "Accounting for the Costs of Computer Software to be Sold, Leased or Otherwise Marketed." Capitalization of software development costs begins upon the establishment of technological feasibility. The ongoing assessment of the recoverability of these costs considers external factors including, but not limited to, anticipated future net product revenues, estimated economic life and changes in software and hardware technology. Amortization of capitalized software development costs is the greater of the amount computed using (a) the ratio that current gross revenues for a product bear to the total of current and anticipated future gross revenues for that product or (b) the straight-line method over the remaining estimated economic life of the product. Capitalization ceases and amortization begins when products are available for general release.

Revenue Recognition--System revenues, consisting primarily of bundled hardware and software products, are recognized in accordance with AICPA Statement of Position No. 91-1, "Software Revenue Recognition." Revenue is recognized when all of the following conditions are met: persuasive evidence of an arrangement exists, delivery has occurred (contract performance criteria has been completed), the amount is fixed and determinable, and collectability is probable. Non-revenue generating obligations after delivery are not material.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

NOTES TO FINANCIAL STATEMENTS

Service revenues, consisting primarily of hardware and software maintenance and related support services, are recognized ratably over the period that maintenance coverage is provided, whether bundled with the system sale or contracted for separately. Prepaid or allocated maintenance and services are recorded as deferred revenues. Amounts billed and received on sales contracts before revenue is recognized, are recorded as customer deposits.

Income Taxes--The Company follows the deferred method of accounting for income taxes whereby deferred tax assets and liabilities are determined based on differences between financial reporting basis and tax basis of assets and liabilities and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. The Company provides a valuation allowance for deferred tax assets that cannot be currently recognized due to the cumulative losses incurred by the Company.

Net Income (Loss) Per Share--The computation of net income (loss) per share is based upon the weighted-average number of common shares outstanding during the period plus (in periods in which they have a dilutive effect) the weighted-average effect of common shares contingently issuable upon the exercise of stock options and warrants (using the treasury stock method). Fully diluted earnings per common and common equivalent share are not presented because dilution is less than 3%.

Stock-Based Compensation--The Company adopted Financial Accounting Standards Board Statement No. 123, "Accounting for Stock-Based Compensation" during the year ended December 31, 1996. As provided for by Statement 123, the Company has chosen to measure stock-based compensation cost under the intrinsic-value method prescribed under Accounting Principles Board Opinion No. 25 and has adopted the disclosure only provisions of Statement 123. Refer to footnote J for further discussion.

Risks and Uncertainties--Management of the Company believes that the risks and uncertainties discussed below, whether viewed individually or combined, will not result in a significant unfavorable impact to the Company. However, there can be no assurance that any unfavorable outcome of the risks and uncertainties discussed below will not have a material adverse effect on the Company's financial position, results of operations or liquidity.

Competition in selling the Company's products continues to grow as cellular software vendors, cellular carriers and other technology-oriented companies have developed or are developing products that do or will compete against the Company's products. In connection with developing the Company's software products, significant amounts of software development costs have been capitalized. Additionally, the Company has purchased inventories that are intended to support future product sales. In the event the Company is not able, due to resource, technological or other constraints, to adequately anticipate or respond to changing market, customer or technological requirements, the carrying value of capitalized software, inventories, and other assets could be significantly impaired.

The nature of the Company's business is such that a single customer will account for more than 10% of the Company's product and service revenues during a given fiscal year. Sales to customers aggregating 10% or more, either individually or combined as affiliates due to common ownership, were concentrated as follows: three customers with sales of 42%, 38%, and 10% in 1996, three customers with sales of 59%, 15%, and 12% in 1995, and three customers with sales of 54%, 22%, and 11% in 1994. The aggregate sales to these customers (none accounted for more than 10% in all three years) represented 90%, 86%, and 87% of the Company's total system and service revenues in 1996, 1995 and 1994, respectively. There can be no assurances that such customers will continue to maintain business relationships with the Company. Accordingly, the loss of one or more major customers could have a material adverse effect on the Company.

Should the Company's 1996 contract signings and expanded sales efforts lead to significant additional sales of its Blackbird Products, the Company may need to obtain additional financing to fund this growth. Factors

CELLULAR TECHNICAL SERVICES COMPANY, INC.

NOTES TO FINANCIAL STATEMENTS

impacting the need will be timing of contract signings, negotiated payment terms, manufacturing and inventory lead times and others. Management believes that debt or equity financing could be obtained from currently identified or new sources.

The Company has been and will continue to be dependent on third-party vendors for the computer equipment, electronic components, manufacturing services, and certain software that is incorporated in its products. While these are generally available from multiple sources, the Company currently obtains or licenses certain equipment, electronic components, manufacturing services, and software from a limited number of sources of supply.

From time to time, the Company could be subject to involvement with legal actions and claims arising in connection with its business. In an action brought against the Company by a former assembler of Company product (and its affiliate), the plaintiffs allege breach of contract, misappropriation of trade secrets, and breach of other obligations by the Company. The action was filed in late July 1996 and, since that time, a significant number of the plaintiffs' initial claims have been dismissed. The plaintiffs have amended their complaint three times, most recently in January 1997, and now allege that certain transactions between the parties constitute a joint venture partnership. The plaintiffs seek dissolution of the alleged joint venture partnership, damages in excess of \$10 million, and other relief. The Company has formally denied all of the plaintiffs' claims and is vigorously defending this action. It is the opinion of the Company's management that this action is without merit and will be resolved without a material adverse effect on the Company's liquidity, operating results, or financial position.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Reclassifications--Certain reclassifications have been made to the prior year financial statements to conform to the current period's presentation.

NOTE B--INVENTORY:

Inventory consists of the following (in 000's):

	DECEMBER 31,	
	1996	1995
Raw materials.....	\$ 2,723	\$ 705
Work in process and finished components.....	6,014	1,460
	8,737	2,165
Less inventory reserves.....	(462)	(218)
	\$ 8,275	\$ 1,947

Finished goods inventories of \$2.7 million and \$.3 million at December 31, 1996 and 1995, respectively, were located at customer sites. Upon achieving performance criteria specified in customer agreements, such inventories are charged to costs of systems and removed from the inventory balance.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

NOTES TO FINANCIAL STATEMENTS

NOTE C--PROPERTY AND EQUIPMENT:

Property and equipment consist of the following (in 000's):

	DECEMBER 31,	
	1996	1995
Computer equipment and software.....	\$ 3,983	\$ 2,917
Furniture, fixtures and office equipment.....	1,764	1,221
Leasehold improvements.....	235	223
	5,982	4,361
Less accumulated depreciation and amortization.....	(2,805)	(2,068)
	\$ 3,177	\$ 2,293

NOTE D--SOFTWARE DEVELOPMENT COSTS:

Software development costs consist of the following (in 000's):

	DECEMBER 31,	
	1996	1995
Capitalized software.....	\$ 7,659	\$ 6,284
Less accumulated amortization.....	(4,060)	(2,937)
	\$ 3,599	\$ 3,347

NOTE E--LINE OF CREDIT:

In November 1996, the Company obtained a \$5.0 million line of credit from a major bank secured by all property of the Company. Under the terms of the agreement, the Company may borrow against this line of credit through the execution of promissory notes at the rate of prime plus 0.75%. The line of credit expires on September 30, 1997 and all outstanding balances under the line must be repaid for a consecutive 30-day period before the aforementioned expiration date. As of December 31, 1996, there were no borrowings against the credit agreement.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

NOTES TO FINANCIAL STATEMENTS

NOTE F--COMMITMENTS AND CONTINGENCIES:

Leases--The Company leases office space under separate non-cancelable operating leases that expire in 2000 and contain renewal options for additional five-year terms. The Company also leases equipment and telecommunication lines and services under non-cancelable operating leases with initial terms ranging from three to five years expiring through 1999. In addition, the Company leases office space, equipment and telecommunication lines and services under various rental agreements with initial terms ranging from one to twelve months. Amounts charged to operations under all lease and rental agreements totaled \$1.0 million, \$.8 million and \$.5 million in 1996, 1995 and 1994, respectively. Future minimum annual lease payments at December 31, 1996, under those agreements with initial terms greater than one year are as follows (in 000's):

1997	\$	686
1998		706
1999		714
2000		519

Total	\$	2,625

Employment Agreements--The Company has employment agreements with four officers and two senior employees with varying expiration dates extending through 1998.

NOTE G--RELATED-PARTY TRANSACTION:

During 1991, the Company entered into a management advisory service agreement with Nationwide at \$25,000 per month for a four-year period expiring in 1995. Amounts charged to general and administrative expenses under this agreement totaled \$178,000 and \$300,000 during 1995 and 1994, respectively.

NOTE H--EMPLOYEE RETIREMENT SAVINGS PLAN:

The Company has adopted an Employee Retirement Savings Plan covering substantially all employees who have been employed for at least six months and meet certain age and eligibility requirements. Each eligible employee may contribute up to 15% of his or her compensation per year, subject to a maximum limit imposed by federal tax law, into various funds. Under current plan provisions, matching contributions are made by the Company equal to two-thirds of the employee's contribution, subject to a maximum of 6% of compensation contribution by the employee. Company contributions charged to costs and expenses totaled \$136,000, \$97,000 and \$57,000 during 1996, 1995 and 1994, respectively.

NOTE I--INCOME TAXES:

At December 31, 1996, the Company had available for federal income tax purposes net operating loss carryforwards of approximately \$41.3 million and research and development tax credits of approximately \$.7 million which begin to expire in 2003. The federal income tax net operating loss carryforwards exceed the retained deficit, primarily due to the differences between financial reporting and tax treatment of software development costs and deductibility of certain amounts on exercise of stock options. A portion of the net operating loss carryforward (approximately \$27.2 million) is attributed to the stock option deduction, the tax effect of which will be credited to additional paid-in capital when realized. The net operating loss carryforwards of the Company have been and will continue to be subject to limitations imposed by Section 382 of the Internal Revenue Code because there has been an ownership change of greater than 50% in the Company.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

NOTES TO FINANCIAL STATEMENTS

NOTE I--INCOME TAXES (continued):

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax liabilities and assets are as follows (in 000's):

	DECEMBER 31,		
	1996	1995	1994
Deferred tax assets:			
Net operating loss carryforwards.....	\$ 14,049	\$ 9,363	\$ 2,822
Research and development tax credits.....	653	688	450
Reserves and allowances on financial statements in excess of tax returns.....	351	98	139
Total deferred tax assets.....	15,053	10,149	3,411
Deferred tax liabilities:			
Depreciation on tax returns in excess of financial statements.....	107	54	38
Capitalized software development costs.....	1,434	1,107	826
Total deferred tax liabilities.....	1,541	1,161	864
Net deferred tax assets.....	13,512	8,988	2,547
Valuation allowance.....	(13,512)	(8,988)	(2,547)
Net.....	\$ --	\$ --	\$ --

The net change in the valuation allowance for deferred tax assets was an increase of approximately \$4.5 million attributable to the net operating losses incurred by the Company during 1996. While management believes that the total deferred income tax asset will be fully realized by future operating results, the operating loss recognized in 1996, losses in recent years, and a desire to be conservative make it appropriate to record a valuation reserve. Accordingly, the Company has provided a valuation allowance of 100% of the net deferred income tax asset related to the operating loss carryforward and temporary differences.

The reconciliation of income tax computed at the U.S. federal statutory tax rate to income tax expense is as follows (in 000's):

	YEAR ENDED DECEMBER 31,		
	1996	1995	1994
Income tax provision (benefit) at statutory rate of 34%.....	\$ (2,499)	\$ 22	\$ 530
Losses producing no current tax benefit.....	2,499		
Utilization of net operating loss carryforward.....		(22)	(530)
Alternative minimum tax--current.....		2	10
Provision for income taxes.....	\$ 0	\$ 2	\$ 10

NOTES TO FINANCIAL STATEMENTS

NOTE J--STOCKHOLDERS' EQUITY:

Stock Split--On June 14, 1996 and January 10, 1994, the Company declared a two-for-one split of its Common Stock, \$.001 par value per share, effected by a 100% stock dividend whereby each holder of Common Stock received one additional share of Common Stock for each share held. The additional shares were distributed on June 27, 1996 and February 15, 1994, respectively. All outstanding common shares and per share amounts in the accompanying financial statements have been retroactively adjusted to give effect to the two-for-one stock splits.

Class A Warrant Redemption--On January 28, 1994, the Company exercised its right to redeem, at a price of \$.25 per Warrant, all 287,500 Class A Warrants issued in 1992. Each Class A Warrant had entitled the registered holder to purchase, at a price of \$.00 per Warrant, four shares of Common Stock for a period of three years ending May 12, 1995. As of March 18, 1994 (the termination date of the Warrant exercise period), substantially all of the outstanding Class A Warrants had been exercised in exchange for 1,149,748 shares of Common Stock. Proceeds to the Company, net of expenses of \$.2 million associated with the issuance of the Common Stock, amounted to \$2.1 million.

Underwriter's Warrants--In connection with the initial public offering of its securities in 1991, the Company sold to its underwriter, at a nominal price, Underwriter's Warrants to purchase 100,000 units at an exercise price of \$5.75 per unit. Each unit consisted of four shares of Common Stock and one underlying Warrant to purchase for \$5.00 four additional shares of Common Stock. As of December 31, 1994, the Company had issued 800,000 shares of Common Stock associated with the exercise of all Underwriter's Warrants and Warrants underlying the Underwriter's Warrants. Proceeds to the Company amounted to \$.6 million in 1994.

Nationwide Cellular Service, Inc.--Prior to September 14, 1995, Nationwide owned 6,680,000 shares of the Company's Common Stock and was the holder of an option to purchase an additional 1,280,000 shares. On September 14, 1995, in conjunction with the merger between Nationwide and MCI Communications Corporation, Nationwide exercised its option and distributed the combined total of 7,960,000 shares to its stockholders. As a result of the exercise of the option, the Company received \$1.6 million and issued 1,280,000 shares of Common Stock.

Private Placement--On November 8, 1996, the Company sold 400,000 shares of Common Stock to investors in a private placement. Proceeds to the Company net of estimated expenses of \$.1 million amounted to approximately \$6.4 million.

Stock Options--In 1991, the Company adopted a Qualified Stock Option Plan and a Non-Qualified Stock Option Plan. Pursuant to the 1991 Qualified Plan, as amended, the Company was authorized to grant options to purchase up to 2,800,000 shares of Common Stock to its officers and key employees, at a price not less than the fair market value per share of Common Stock on the date of grant and have a term of ten years. Pursuant to the 1991 Non-Qualified Plan, as amended, the Company was authorized to grant options to purchase up to 1,200,000 shares of Common Stock to its directors, officers, key employees and others who rendered services to the Company at such price as fixed by the Compensation and Stock Option Committee. Options granted under both the 1991 Qualified Plan and 1991 Non-Qualified Plan generally vest to the respective option holders at the rate of 20% per year commencing on the first anniversary date of the grant. Both the aforementioned plans were rendered inactive for future grants upon adoption of the 1996 Stock Option Plan as discussed below. In December 1993, the Company adopted the 1993 Non-Employee Director Stock Option Plan which allows the Company to grant options to purchase up to 300,000 shares of Common Stock. Pursuant to the 1993 Non-Employee Director Plan, each non-employee director is to be granted options to purchase 20,000 shares of Common Stock upon initial appointment as a director of the Company and an additional 12,000 options, in recurring annual increments, at a price equal to the fair market value per share of Common Stock on the date of

NOTES TO FINANCIAL STATEMENTS

NOTE J--STOCKHOLDERS' EQUITY (continued):

grant. Options under the Non-Employee Director Plan vest to the respective option holder after one year and have a term of ten years.

The Company has also granted options to purchase 920,000 shares of Common Stock at fair market value to certain directors and officers of the Company at exercise prices ranging from \$1.25 to \$6.13 per share. These options are in addition to those granted under the 1991 Qualified and Non-Qualified Plans, the 1993 Non-Employee Director Plan, and the options previously granted to and subsequently exercised by Nationwide (as discussed above). The options have terms ranging from five to ten years and vest to the respective option holder over periods ranging from two to five years. In June 1996, the Company adopted a 1996 Stock Option Plan covering both incentive stock options and non-qualified stock options. Pursuant to action taken by the Company's Board and approved by a majority of the Company's Shareholders, no new options will be granted under either the Company's 1991 Qualified Stock Option Plan or under the 1991 Non-Qualified Stock Option Plan. The 1996 Stock Option Plan authorizes the grant of options to purchase a maximum of 1,100,000 shares of the Company's Common Stock to employees (including officers and directors who are employees) of and consultants to the Company. Options granted under the plan may either be incentive stock options ("ISOs"), within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), or non-qualified stock options which do not qualify as ISOs ("NQSOS"). The exercise price, term and vesting provision of each option grant is fixed by the Compensation and Stock Option Committee with the provision that the exercise price of an ISO may not be less than the fair market value of the Company's Common Stock on the date of grant and the term of an ISO may not exceed ten years.

Financial Accounting Standards Board Statement No. 123--The Company has chosen to measure stock-based compensation cost under the intrinsic-value method of Accounting Principles Board Opinion No. 25, (APB 25) and related interpretations because, as discussed below, the alternative fair value accounting provided for under Statement 123 requires use of option valuation models that were not developed for use in valuing employee stock options. Under APB 25, if the exercise price of the Company's employee stock options equals the market price of the underlying stock on the date of grant, no compensation expense is recognized.

Pro forma information regarding net income and earnings per share is required by Statement 123, and has been determined as if the Company had accounted for its employee stock options under the fair value method of that Statement. In that regard, the fair value for options granted during 1996 and 1995 was estimated at the date of grant using a Black-Scholes option pricing model with the following weighted-average assumptions for 1996 and 1995, respectively: risk-free interest rates of 6.1% and 5.5%; dividend yields of 0.0% and 0.0%; volatility factors of the expected market price of the Company's common stock of .55% and .56%; and a weighted-average expected life of the options of 5.1 and 5.0 years.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

NOTES TO FINANCIAL STATEMENTS

NOTE J--STOCKHOLDERS' EQUITY (continued):

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. The Company's pro forma information follows (in 000's, except per share amounts):

	1996	1995
	-----	-----
Net earnings (loss)--as reported.....	\$ (7,350)	\$ 63
Net earnings (loss)--pro forma.....	\$ (8,042)	\$ (106)
Earnings (loss) per share--as reported.....	\$ (0.33)	\$ 0.00
Earnings (loss) per share--pro forma.....	\$ (0.37)	\$ 0.00

The pro forma effect on net income for 1996 and 1995 is not representative of the pro forma effect on net income in future years because it does not take into consideration pro forma compensation expense related to grants made prior to 1995.

The following table summarizes information concerning outstanding and exercisable stock options as of December 31, 1996 (in 000's except per share amounts):

RANGE OF EXERCISE PRICES	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
	NUMBER OUTSTANDING	WEIGHTED- AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED- AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE	WEIGHTED- AVERAGE EXERCISE PRICE
\$ 1.00 - \$ 6.00	542	6.06	2.70	270	2.31
\$ 6.13 - \$ 6.13	814	4.58	6.13	294	6.13
\$ 7.13 - \$ 10.94	702	8.32	8.53	213	8.06
\$12.00 - \$ 19.94	265	9.26	16.06	12	12.38
	-----			-----	
\$ 1.00 - \$ 19.94	2,323	6.59	7.19	789	5.43
	-----			-----	

CELLULAR TECHNICAL SERVICES COMPANY, INC.

NOTES TO FINANCIAL STATEMENTS

NOTE J--STOCKHOLDERS' EQUITY (continued):

Information with respect to the Company's stock options is as follows (in 000's except per share amounts):

	SHARES UNDER OPTION	OPTION PRICES	WEIGHTED- AVERAGE EXERCISE PRICE
	-----	-----	-----
Balance, January 1, 1994.....	4,182	\$ 1.00 - \$ 6.13	*
Granted.....	724	6.00 - 7.25	*
Exercised.....	(284)	1.00 - 5.41	*
Canceled.....	(92)	1.67 - 5.41	*

Balance, December 31, 1994.....	4,530	1.00 - 7.25	*
Granted.....	463	7.13 - 12.38	*
Exercised.....	(1,862)	1.00 - 7.25	*
Canceled.....	(117)	1.00 - 8.25	*

Balance, December 31, 1995.....	3,014	1.00 - 12.38	5.73
Granted.....	241	12.00 - 19.94	16.88
Exercised.....	(633)	1.00 - 10.94	3.73
Canceled.....	(299)	1.67 - 17.88	7.55

Balance, December 31, 1996.....	2,323	1.00 - 19.94	7.19

Exercisable at December 31, 1996.....	789	1.00 - 19.94	5.43

Available for grant at December 31, 1996.....	1,105		

Common Stock reserved for future issuance.....	3,428		

Weighted-average fair value of options granted during the year ended December 31, 1996.....	\$ 9.17		

*--not applicable

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

BY: /s/ STEPHEN KATZ

Stephen Katz, Chairman of the Board
of Directors and Chief Executive Officer
March 26, 1997

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

/s/ Stephen Katz

Stephen Katz, Chairman of the
Board of Directors and
Chief Executive Officer
(Principal Executive Officer)
March 26, 1997

/s/ William C. Zollner

William C. Zollner, Director,
President and Chief Operating
Officer
March 26, 1997

/s/ Michael E. McConnell

Michael E. McConnell
Vice President and
Chief Financial Officer
(Principal Financial and
Accounting Officer)
March 26, 1997

/s/ Jay Goldberg

Jay Goldberg, Director
March 26, 1997

/s/ Lawrence Schoenberg

Lawrence Schoenberg, Director
March 26, 1997

CELLULAR TECHNICAL SERVICES COMPANY, INC.
SCHEDULE II--VALUATION AND QUALIFYING ACCOUNTS
(in 000's)

	BALANCE AT BEGINNING OF PERIOD	ADDITIONS	DEDUCTIONS	BALANCE AT END OF PERIOD
	-----	-----	-----	-----
INVENTORY RESERVES				
Year ended December 31, 1994.....	\$ 55	\$ 136	\$ 102	\$ 89
	-----	-----	-----	-----
Year ended December 31, 1995.....	\$ 89	\$ 180	\$ 51	\$ 218
	-----	-----	-----	-----
Year ended December 31, 1996.....	\$ 218	\$ 390	\$ 146	\$ 462
	-----	-----	-----	-----
SALES AND RECEIVABLE ALLOWANCES				
Year ended December 31, 1994.....	\$ 45	\$ 152	\$ 19	\$ 178
	-----	-----	-----	-----
Year ended December 31, 1995.....	\$ 178	\$ (59)	\$ 49	\$ 70
	-----	-----	-----	-----
Year ended December 31, 1996.....	\$ 70	\$ 116	\$ 85	\$ 101
	-----	-----	-----	-----

EMPLOYMENT AGREEMENT

This Agreement is entered into as of July 17, 1996, between CELLULAR TECHNICAL SERVICES COMPANY, INC., a Delaware corporation ("CTS"), and STEPHEN ELSTON (the "Executive"). In consideration of the mutual promises, covenants and obligations contained herein, the parties agree as follows:

1. Employment and Term. Company hereby employs Executive as the Vice President--Engineering of Company on the terms and conditions set forth in this Agreement, and Executive hereby accepts and agrees to such employment with Company, for an original term beginning on the date of this Agreement and ending on the second (2nd) anniversary of this Agreement, subject to continuation set forth below. The Chief Executive Officer of Company and Executive shall meet and discuss in good faith the terms of a new or extended contract of Executive's employment with Company at least three (3) months prior to the end of the original term and each extended term thereafter. Unless otherwise extended, replaced, or terminated as set forth herein, this Agreement shall, after the original term, continue thereafter on a month-to-month basis terminable by either party upon written notice of termination to the other party in accordance with Subsection 9.1, below, at least thirty (30) days before the termination date.

2. Duties. Executive is employed to perform the duties of Vice President -Engineering of Company and shall have such authority and perform such duties consistent with such position as may be assigned to Executive by the President, Chief Executive Officer, and/or the Board of Directors of Company from time to time. Executive shall perform such duties faithfully, diligently, to the best of his ability, and in a manner consistent with the best interests of Company. Executive shall devote his full time, skills, and efforts to the performance of such duties and to the furtherance of the best interests of Company. All of the foregoing duties and responsibilities will be subject to the terms of this Agreement, the supervision of the President, Chief Executive Officer, and the Board of Directors of Company, and the then-current plans, practices, policies, and procedures established by Company and generally applicable to comparable executives of Company.

3. Compensation, Benefits, Vacation, and Expenses. In consideration for Executive's services under this Agreement, Executive shall receive the following compensation and benefits during the term of this Agreement:

3.1 Base Salary. Executive shall receive an initial annual base salary of \$105,000.00, which shall be paid in accordance with Company's usual payroll policies for comparable executives of Company. Company shall consider increases to such base salary at least annually. Such base salary shall not be subject to reduction except for Cause (as defined in Section 6, below). Any change in such base salary: (i) shall not serve to cancel this Agreement or otherwise limit or reduce any other right or obligation to Executive under this Agreement; and (ii) shall merely serve to amend this Subsection with respect to such change in base salary, and all of the other terms of this Agreement shall continue in full force and effect.

3.2 Incentive Compensation and Bonuses. Executive shall receive annual incentive compensation and bonuses in accordance with the terms of the Executive Incentive Compensation Plan attached hereto as Exhibit A, subject to Company's then-current plans, practices, policies, and procedures with respect to incentive compensation established by the Board of Directors of Company (or a committee thereof) and generally applicable to comparable executives of Company.

3.3 Stock Options. Company will grant to Executive options to purchase shares of voting common stock of Company pursuant to the terms of that certain Officer Stock Option Agreement dated as of July 17, 1996 between Executive and Company attached hereto as Exhibit B. Such options shall be in such amounts, exercisable at such per-share exercise price, and vested under such vesting schedule as set forth in such Officer Stock Option Agreement. Such Officer Stock Option Agreement shall be subject to all of the terms and conditions of Company's 1996 Stock Option Plan.

3.4 Benefits. Executive and his family shall be entitled to participate in and shall receive all benefits under all welfare benefit plans, practices, policies, and programs generally provided by Company (including without limitation all health, medical, dental, prescription, disability, salary continuance, life insurance, 401(k) retirement savings, and other benefit plans and programs) to comparable executives of Company.

3.5 Annual Vacation. Executive shall be entitled to a minimum of three (3) weeks paid annual vacation, which shall be in addition to Company holidays and sick leave. Such vacation may be scheduled in Executive's reasonable discretion, subject to reasonable oversight by the President, Chief Executive Officer, and/or the Board of Directors of Company. Annual vacation increases, accruals, and the like will be provided pursuant to the vacation and leave policies, practices, and procedures established by Company and generally applicable to comparable executives of Company.

3.6 Expenses. Executive shall be entitled to reimbursement for reasonable business expenses incurred by Executive for the benefit of Company. Executive shall present from time to time itemized accounts or receipts for such expenses in accordance with the plans, practices, policies, and procedures established by Company and generally applicable to comparable executives of Company.

4. Proprietary Rights. Upon the execution of this Agreement, Executive and Company shall enter into that certain Agreement Regarding Confidential Information and Property Rights attached hereto as Exhibit C, and Executive shall fully comply with the provisions of such agreement.

5. Restrictive Covenants.

5.1 Nonsolicitation. During the term of Executive's employment with Company and for a period of twelve (12) months after the termination thereof, however caused, Executive shall not directly or indirectly do any of the following without Company's prior written approval: (i) communicate with or solicit any person or entity which was a customer of Company or which Company was actively soliciting to be a customer during the twelve (12) month period preceding termination of Executive's employment with Company (each being a "Customer") for the purpose of marketing services or products in competition with any services or products of Company, whether or not communication is initiated by the Customer, Executive, or any other party; (ii) in any manner interfere with Company's business relationship with any Customer or potential customer or otherwise urge any Customer or potential customer to discontinue business or not to do business with Company; or (iii) hire, offer to hire, solicit, or endeavor to entice away any employee, agent, or consultant of Company or any of its affiliates, or otherwise urge any such person to discontinue his or her relationship with Company, whether or not communication is initiated by such person, Executive, or any other party.

5.2 Noncompetition. During the term of Executive's employment with Company and for a period of twelve (12) months after the termination thereof, however caused (except by Executive with Good Reason or by either party following a Change of Control, in which case the

terms of this Subsection shall not apply), Executive shall not directly or indirectly do any of the following without Company's prior written approval: (i) engage as owner, employee, consultant, or otherwise, within the United States, in any facet of the business activities of Company or any of its affiliates, except as required in the ordinary course of Executive's employment with Company, or (ii) otherwise compete, within the United States, with the business activities of Company or any of its affiliates; provided, that Executive shall have the right to make passive investments in any entity so long as Executive does not participate in the business of such entity in violation of this Subsection.

5.3 Nondisparagement. During the term of Executive's employment with Company and for a period of twelve (12) months after the termination thereof, however caused, Executive shall not make any disparaging remarks about Company or its products or services to any person or entity, provided that the terms of this Subsection will not limit Executive's right to give non-malicious and truthful testimony in the event that Executive is required to testify pursuant to a court order or applicable law.

5.4 Injunctive Relief. Executive agrees that if he violates the provisions of this Section 5 or otherwise threatens to do so, Company, in addition to any other rights and remedies available under this Agreement or otherwise, shall be entitled to obtain an injunction issued (without the necessity of a bond) by any court of competent jurisdiction restricting Executive from committing or continuing any such violation.

6. Termination of Employment.

6.1 Definitions. For purposes of this Agreement, the following terms shall have the following definitions: 6.1.1 "Cause" shall mean and be deemed to exist if any of the following events occur: (i) a material breach by Executive of his obligations under this Agreement (other than as a result of incapacity due to Disability or death) caused by (a) Executive's willful misconduct committed in bad faith without reasonable belief that the conduct causing such breach is in the best interests of Company, or (b) Executive's gross negligence; (ii) actual fraud or embezzlement on the part of Executive; or (iii) the conviction of Executive of, or a plea of guilty or no contest by Executive to, a felony involving moral turpitude.

6.1.2 "Disability" shall mean the definition of the term "Disability" in Company's disability benefit plan covering executives of Company as in effect from time to time, or, if no such disability benefit plan exists, then such term shall mean the inability, by reason of any medically-determined physical or mental impairment, of Executive to satisfactorily perform his duties hereunder for a period of more than ninety (90) consecutive days or an aggregate of more than ninety (90) days in any rolling twelve-month period.

6.1.3 "Good Reason" shall mean and be deemed to exist if any of the following events occur without the written approval of Executive: (i) Company reduces, in any material respect, Executive's position, title, or responsibilities contemplated by this Agreement without Cause or assigns Executive duties which are inconsistent, in any material respect, with such position, title, or responsibilities without Cause; (ii) Company fails to pay any amount when due to Executive hereunder or materially breaches any other obligation hereunder which is not remedied within thirty (30) days after receipt of written notice from Executive specifying such breach; or (iii) any failure by Company or any of its successors or assigns to comply with and satisfy Subsection 9.2, below.

6.1.4 "Change of Control" shall mean and be deemed to exist if any of the following events occur:

(i) the occurrence of a change of "control" of Company (as such quoted term is defined in Rule 12b-2 promulgated under the Securities Exchange Act of 1934, as amended from time to time (the "Act")) or any change in the "ownership or effective control" or in the "ownership of a substantial portion of the assets" of Company (as such quoted phrases are used in Section 280G(b)(2) of the Internal Revenue Code of 1986, as amended from time to time (the "Code")); or

(ii) any "person" (as such quoted term is used in Sections 3(a)(9), 13(d), and/or 14(d)(2) of the Act), except for an employee benefit plan (or trust) sponsored or maintained by Company or any entity controlled by Company, becomes the "beneficial owner" (as such quoted term is used in Rule 13d-3 promulgated under the Act), directly or indirectly, of 30% or more of either: (A) Company's then-outstanding shares of voting common stock ("Outstanding Company Common Stock"); or (B) the combined voting power of the then-outstanding voting securities of Company entitled to vote generally in the election of directors ("Outstanding Company Voting Securities"); or

(iii) the following persons cease for any reason to constitute a majority of the Board of Directors of Company: (A) individuals who, as of the date hereof, constitute the Board of Directors; and (B) individuals who become members of the Board of Directors after the date hereof whose election, or nomination for election by Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Board of Directors, but excluding, for this purpose, any director designated by a person who has entered into an agreement with Company to effect a transaction described in this Subsection 6.1.4 or whose initial election or appointment to the Board of Directors occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 promulgated under the Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a person other than the directors then comprising the incumbent Board of Directors; or

(iv) the approval by Company's shareholders of any merger, consolidation, or other business combination involving Company, other than a merger, consolidation, or other business combination which would result in all or substantially all of the beneficial owners, respectively, of the Outstanding Company Common Stock and Outstanding Company Voting Securities outstanding immediately prior thereto being the beneficial owners of at least 60% of, respectively, the shares of voting common stock and the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger, consolidation, or other business combination; or

(v) the approval by Company's shareholders of any sale, exchange, or other disposition (in one transaction or a series of related transactions) of all or substantially all of the assets of Company; or

(vi) the approval by the shareholders of Company of any plan or proposal for liquidation or dissolution of Company.

Notwithstanding anything to the contrary, if a Change of Control occurs and if Executive's employment with Company is terminated prior to the date on which the Change of Control occurs, then a "Change of Control" shall be deemed to have occurred on the date immediately prior to the date of such termination, so long as Executive can reasonably demonstrate that such termination (A) was at the request of a third party who had taken steps reasonably calculated to effect the Change of Control, or (B) otherwise arose in connection with or anticipation of the Change of Control.

6.2 Termination Upon Death Of Executive. In the event of the death of Executive during the term of this Agreement, Executive's employment shall automatically terminate without further obligation to Executive's estate under this Agreement, except that Executive's estate shall be entitled to receive all monies and other rights to which Executive otherwise would have been entitled hereunder through the end of the calendar month after the month in which death occurred, plus all accrued and unpaid monies owing through such date under this Agreement, all of which shall be paid to Executive's estate or beneficiary, as applicable, in a lump sum in cash within thirty (30) days after the month in which death occurred.

6.3 Termination Upon Disability of Executive. If Company determines in good faith that the Disability of Executive has occurred during the term hereof, Company may provide to Executive written notice in accordance with Subsection 9.1, below, of its intention to terminate Executive's employment. In such event, Executive's employment with Company shall terminate effective at the end of six (6) months after Executive's receipt of such notice, provided that within the six (6) month period after such receipt the Executive shall not have returned to full-time performance of Executive's duties hereunder. Until the termination of employment at the expiration of the six (6) month period, Executive shall receive his regular compensation and benefits as specified in Section 3, above. If Executive's employment is so terminated, Company shall have no further obligation to Executive under this Agreement, except that Executive shall be entitled to receive upon the effective date of such termination all such monies and rights to which Executive is entitled hereunder through the effective date of such termination, plus all accrued and unpaid monies owing hereunder through such date, all of which shall be paid to Executive in cash within thirty (30) days after such date.

6.4 Termination For Cause, Etc. Company may terminate Executive's employment with Company for Cause by providing Executive with prior written notice of termination in accordance with Subsection 9.1, below. If Company terminates Executive's employment for Cause in accordance with this Subsection or terminates Executive's employment in the manner specified in Section 1, above, or if Executive terminates his employment other than as provided under Subsection 6.5, below, Company shall have no further obligation to Executive under this Agreement, except that Executive shall be entitled to receive upon the effective date of such termination only such monies and rights to which Executive is entitled hereunder through the effective date of such termination, plus all accrued and unpaid monies owing hereunder through such date, all of which shall be paid to Executive in cash within thirty (30) days after such date.

6.5 Termination For Good Reason, Related to Change of Control, Etc. Executive may terminate his employment with Company for Good Reason or at any time on or after a Change of Control by providing Company with prior written notice of termination in accordance with Subsection 9.1, below. In the event that (i) Executive terminates his employment for Good Reason, (ii) Executive terminates his employment on or after a Change of Control of Company (by providing to Company the written notice described above within sixty (60) days after such Change of Control), (iii) Company terminates this Agreement on or after a Change of Control of Company or the date that any party announces (or is required to announce) any prospective Change in Control transaction involving Company, or (iv) Company terminates Executive's employment in any manner other than as expressly permitted under Subsections 6.2, 6.3, or 6.4, above, then: (A) Company shall make a lump sum payment equal to a multiple of one (1) times the highest annual compensation (as reportable on Executive's IRS W-2 form) received by Executive from Company during any of the most recent two (2) years ending on or prior to the date on which the termination occurs; (B) all stock options granted to Executive shall become fully vested and immediately exercisable at Executive's election; (C) all welfare benefit plans, practices, policies, and programs applicable to Executive hereunder and in existence during the ninety

(90) day period prior to the effective date of termination, or if more favorable to Executive those in effect generally at any time thereafter with respect to other comparable executives of Company, shall continue as to Executive for an additional one (1) year after the effective date of termination, provided, however, that if Executive becomes re-employed with another employer and is eligible to receive medical and other welfare benefits under another employer provided plan, the medical and other welfare benefits described herein shall not apply to the extent duplicative to those provided under such other plan during such applicable period of eligibility; and (D) Executive shall be entitled to receive upon the effective date of such termination all such monies and rights to which Executive is entitled hereunder through the effective date of such termination, plus all accrued and unpaid monies owing hereunder through such date. The payments described in clauses (A) and (D) above shall be paid to Executive in cash within sixty (60) days after the effective date of termination.

6.6 Effect Of Termination. Upon the termination of Executive's employment with Company, this Agreement shall terminate and the obligations of the parties hereunder shall cease, except the terms of Sections 4 through 9 hereof shall survive the termination of this Agreement for any reason.

7. Change of Control.

7.1 Acceleration Of Vesting Of Options. Upon the occurrence of a Change of Control of Company, all stock options granted to Executive shall become fully vested and immediately exercisable at Executive's election, regardless of whether Executive exercises any other rights afforded Executive under this Agreement.

7.2 Transition Period. Notwithstanding the terms of Subsection 6.5, above, if a Change of Control occurs and Company advises Executive in writing no later than twenty (20) days after the occurrence of the Change of Control that it desires Executive to continue his employment with Company for a transition period, which shall not exceed six (6) months from the occurrence of the Change of Control except as the parties otherwise agree in writing (the "Transition Period"), then: (i) during the Transition Period, Executive will continue his employment with Company and will continue to receive all compensation including salary and other benefits as he was receiving prior to the Change of Control; (ii) Executive's services will be performed substantially at Company's offices in Seattle, Washington; (iii) Executive shall have the right to terminate his employment under Subsection 6.5, above, on or within thirty (30) days after expiration of the Transition Period by providing notice to Company, in which event the obligations of Company shall be as provided in Subsection 6.5, above.

7.3 Compensation Reduction. Notwithstanding any other provision of this Agreement to the contrary, if any payments or benefits made by Company to Executive hereunder or otherwise would be subject to the excise tax or taxes imposed by Section 4999 of the Code (collectively, the "Change of Control Amount"), such Change of Control Amount shall be reduced so that Executive shall be entitled to receive a Change of Control Amount with a "present value" (as determined for purposes of Section 280G of the Code) of not more in the aggregate than 2.99 times the Executive's applicable "base amount" under Section 280G of the Code (collectively, the "Limited Amount"); provided, however, that if the entire Change of Control Amount, when reduced by such excise tax or taxes, is greater than the Limited Amount, then no reduction shall be made under this Subsection. Unless the parties otherwise agree to in writing, any reduction under this Subsection shall be conclusively determined by the independent certified public accounting firm regularly employed by Company during the ninety (90) day period prior to the effective date of the event triggering the payment of the Change of

Control Amount to Executive, and the determination of such independent certified public accounting firm shall be final and binding on all parties.

8. Indemnification. Company shall indemnify and hold harmless Executive and his family, heirs, estate, and legal representatives from and against any and all claims, damages, losses, liabilities, and expenses (including without limitation all reasonable attorneys' fees) arising out of or in connection with Executive's performance of his duties and responsibilities hereunder in his capacity as an officer or employee of Company or any of its affiliates to the maximum extent permitted by law. Executive shall notify Company of any indemnifiable claim coming to his attention which may result in any indemnification obligation on Company's part hereunder. Company shall have the right to conduct the defense against any such claim brought by a third party with counsel of its selection. The obligations of Company under this Section shall continue following the termination of this Agreement and/or the termination of Executive's employment with Company. After a Change of Control of Company, Company shall pay promptly as incurred all reasonable attorneys' fees and related expenses which Executive may incur as a result of any dispute or contest (regardless of the outcome thereof) by Company, Executive, or others with respect to the validity or enforceability of, or the rights and/or obligations under, any provision of this Agreement.

9. Miscellaneous.

9.1 Notices.

9.1.1 All notices hereunder by either party shall be given by personal delivery, by sending such notice by U.S. certified mail, postage prepaid, or by a reputable courier service, fees prepaid, to the other party at its address set forth on the signature page below. Any notice given in accordance with this Subsection shall be effective as of the date of receipt or attempted delivery (if receipt is refused), as the case may be. Each party may change its address for notice purposes upon written notification thereof to the other party in accordance with this Subsection.

9.1.2 All notices of termination described in Sections 1, 6.3, 6.4, and 6.5 shall be provided in writing in accordance with Subsection 9.1.1 and shall: (i) indicate the specific termination provision in this Agreement relied upon; (ii) to the extent applicable, provide in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated; and (iii) indicate the applicable effective date of termination. The failure by either party to set forth in the notice of termination any fact or circumstance which contributes to a showing of justification for termination shall not waive any right of such party hereunder or preclude such party from subsequently asserting such fact or circumstance in enforcing such party's rights hereunder.

9.2 Assignment; Binding Effect. This Agreement is personal to Executive and, therefore neither this Agreement nor any of Executive's rights, powers, duties or obligations hereunder may be assigned by Executive without Company's prior written approval. This Agreement shall be binding upon and inure to the benefit of Executive and his heirs, estate, and legal representatives and Company and its successors and assigns. Company shall require its successors and assigns to assume expressly and agree to perform under this Agreement in the same manner and to the same extent that Company would be required to perform if no such succession or assignment had taken place. For purposes of this Agreement, successors and assigns of Company shall include without limitation all persons acquiring, directly or indirectly, all or substantially all of the voting securities or assets of Company, whether by merger, consolidation, stock or asset purchase, or otherwise, and such successors shall thereafter be deemed "Company" for the purposes hereof.

9.3 Taxes. Company may withhold from any amounts payable under this Agreement such federal, state, or local taxes as shall be required to be withheld pursuant to any applicable law or regulation.

9.4 Headings. The headings in this Agreement are included for the convenience of reference and will be given no effect in the construction of this Agreement.

9.5 Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement. In the event that any provision of this Agreement is deemed invalid or unenforceable by any court of competent jurisdiction, such provision shall be deemed to be modified to the extent necessary for the provision to be legally enforceable to the fullest extent permitted by applicable law. Any court of competent jurisdiction may enforce or modify any provision of this Agreement in order that the provision will be enforced by the court to the fullest extent permitted by applicable law.

9.6 Waiver. Any waivers hereunder must be in writing. No consent or waiver, express or implied, by any party to or of any breach or default by the other in the performance by the other of its obligations hereunder shall be deemed or construed to be a consent or waiver to or of any other breach or default in the performance by such other party of the same or any other obligations of such party hereunder.

9.7 Governing Law. This Agreement and the obligations of the parties hereunder shall be interpreted, construed, and enforced in accordance with the laws of the state of Washington applicable to contracts made and to be performed in the state of Washington, without regard to conflict of laws principles.

9.8 Entire Agreement; Amendments; Conflicts. This Agreement and the attached Exhibits (which are incorporated herein by this reference): (i) contain the entire agreement and understanding between the parties with respect to the subject matter hereof; and (ii) supersede all prior agreements, negotiations, representations, and proposals, written and oral, relating to the subject matter hereof. This Agreement may be modified, supplemented, and/or amended only by a writing signed by both Executive and an authorized representative of Company. In the event of any conflict between this Agreement and any other agreement between Executive and Company, the terms of this Agreement shall control.

EXECUTED as of the date set forth above.

EXECUTIVE:

CTS:

CELLULAR TECHNICAL SERVICES
COMPANY, INC.

By /s/ Stephen Katz

/s/ Stephen Elston

Stephen Katz

Signature

Print Name

Stephen Elston

Chief Executive Officer

Print Name

Title

Executive's Address for Notices:
8212 Sixth Avenue N.W.
Seattle, Washington 98117
Attention: Mr. Stephen Elston

CTS's Address for Notices:
2401 Fourth Avenue, Suite 808
Seattle, Washington 98121
Attention: Legal Department

Attachments:

- Exhibit A-Executive Incentive Compensation Plan
- Exhibit B-1996 Stock Option Agreement
- ExhibitC-Agreement Regarding Confidential Information and Property Rights

EXHIBIT A
TO
EMPLOYMENT AGREEMENT

EXECUTIVE INCENTIVE COMPENSATION PLAN

This Exhibit pertains to and is made a part of that certain letter of Employment Agreement ("Employment Agreement") dated as of July 17, 1996, between CELLULAR TECHNICAL SERVICES COMPANY, INC. ("CTS") and STEPHEN ELSTON ("Executive").

1. Bonus Criteria.

1.1 For the calendar year ended December 31, 1997, Executive will be entitled to a bonus of at least 25% of his base salary if CTS meets its budgetary goals for such year, as approved by the Board of Directors of CTS (or the Compensation and Stock Option Committee thereof).

1.2 Executive's bonus for each subsequent calendar year will be based on corporate performance and other criteria specifically identified for the Executive by the Chief Executive Officer and/or the Board of Directors of CTS (or the Compensation and Stock Option Committee thereof).

2. Additional Stock Option Grants. In addition to the stock options described in Section 3.3 of the Employment Agreement, the Board of Directors of CTS (or the Compensation and Stock Option Committee thereof) may grant additional stock options to Executive in such amounts, at such exercise price, under such vesting schedule, and pursuant to such additional terms as it may determine in its sole discretion.

EXHIBIT B
TO
EMPLOYMENT AGREEMENT

OFFICER INCENTIVE STOCK OPTION CONTRACT
(1996 STOCK OPTION PLAN)

THIS INCENTIVE STOCK OPTION CONTRACT entered into as of July 17, 1996 between CELLULAR TECHNICAL SERVICES COMPANY, INC., a Delaware corporation (the "Company"), and Stephen Elston (the "Optionee"). The Company and Optionee hereby agree as follows:

1. The Company, in accordance with the allotment made by the Compensation and Stock Option Committee of the Board of Directors of Company (the "Committee") and subject to the terms and conditions of the 1996 Stock Option Plan of the Company (the "Plan"), hereby grants to the Optionee an option to purchase an aggregate of 20,000 shares of the common stock, \$.001 par value per share, of the Company ("Common Stock") at an exercise price of \$15.00 per share, being at least equal to the fair market value of such shares of Common Stock on the date hereof (except as otherwise required by the Plan). This option is intended to constitute an incentive stock option within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), although the Company makes no representation or warranty as to such qualification.

2. The term of this option shall be ten (10) years, also note limits on ISO term under Section 6 of the Plan, from the date hereof, subject to earlier termination as provided in the Plan. However, this option shall not be exercisable until the completion of one full year of Optionee's employment with the Company after the date hereof, on which date this option shall become exercisable as to 20 % of the total number of shares of Common Stock subject hereto, and after which date this option shall become exercisable as to an additional 20 % of such shares on each of the next four (4) successive anniversaries of such date. The right to purchase shares of Common Stock under this option shall be cumulative, so that if the full number of shares purchasable in a period shall not be purchased, the balance may be purchased at any time or from time to time thereafter, but not after the expiration of the option. In addition, this option shall become immediately exercisable in full upon a "Change of Control" (as defined below) of the Company during the term of this option or as otherwise provided in any employment agreement between the Optionee and the Company. Notwithstanding any of the foregoing: (a) Optionee may not exercise this option beyond the date that Optionee's employment relationship with the Company terminates, except as otherwise provided in the Plan or in any employment agreement between the Optionee and the Company, and (b) in no event may a fraction of a share of Common Stock be purchased under this option. For purposes of this Contract, a "Change of Control" shall mean and be deemed to exist if any of the following events occur:

(i) the occurrence of a change of "control" of Company (as such quoted term is defined in Rule 12b-2 promulgated under the Securities Exchange Act of 1934, as amended from time to time (the "Act")) or any change in the "ownership or effective control" or in the "ownership of a substantial portion of the assets" of Company (as such quoted phrases are used in Section 280G(b)(2) of the Internal Revenue Code of 1986, as amended from time to time (the "Code")); or

(ii) any "person" (as such quoted term is used in Sections 3(a)(9), 13(d), and/or 14(d)(2) of the Act) other than the Company, any entity controlled by the Company, or any employee benefit plan (or trust) sponsored or maintained by the Company, becomes the "beneficial

owner" (as such quoted term is used in Rule 13d-3 promulgated under the Act), directly or indirectly, of 25% or more of either: (A) Company's then-outstanding shares of voting common stock ("Outstanding Company Common Stock"), or (B) the combined voting power of the then-outstanding voting securities of Company entitled to vote generally in the election of directors ("Outstanding Company Voting Securities"); or

(iii) the following persons (collectively, the "Incumbent Board") cease for any reason to constitute a majority of the Board of Directors of Company: (A) individuals who, as of the date hereof, constitute the Board of Directors, and (B) individuals who become members of the Board of Directors after the date hereof whose election, or nomination for election by Company's shareholders, was approved by a vote of at least a majority of the directors then comprising the Board of Directors, but excluding, for this purpose, any director designated by a person who has entered into an agreement with Company to effect a transaction described in this definition of Change of Control or whose initial election or appointment to the Board of Directors occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 promulgated under the Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a person other than the directors then comprising the incumbent Board of Directors; or

(iv) the approval by Company's shareholders of any merger, consolidation, or other business combination involving Company, other than a merger, consolidation, or other business combination with respect to which, immediately following such business combination: (A) all or substantially all of the beneficial owners, respectively, of the Outstanding Company Common Stock and Outstanding Company Voting Securities outstanding immediately prior thereto, are the beneficial owners of at least 60% of, respectively, the shares of voting common stock of the surviving entity, and the combined voting power of the voting securities of the surviving entity entitled to vote generally in the election of directors, outstanding immediately after such business combination in substantially the same proportion as their ownership in the Company immediately prior to such business combination, (B) no "person" (as such quoted term is used in Sections 3(a)(9), 13(d), and/or 14(d)(2) of the Act) other than the Company, any entity controlled by the Company, or any employee benefit plan (or trust) sponsored or maintained by the Company or the surviving entity, is the "beneficial owner" (as such quoted term is used in Rule 13d-3 promulgated under the Act), directly or indirectly, of 25% or more of either the then-outstanding shares of voting common stock of the surviving entity or the combined voting power of the then-outstanding voting securities of the surviving entity entitled to vote generally in the election of directors, and (C) at least a majority of the members of the board of directors of the surviving entity were members of the Incumbent Board at the time of the execution of the initial agreement providing for such business combination; or

(v) the approval by Company's shareholders of any sale, exchange, or other disposition (in one transaction or a series of related transactions) of all or substantially all of the assets of Company, other than to a corporation with respect to which, immediately following such disposition: (A) all or substantially all of the beneficial owners, respectively, of the Outstanding Company Common Stock and Outstanding Company Voting Securities outstanding immediately prior thereto, are the beneficial owners of at least 60% of, respectively, the shares of voting common stock of such corporation, and the combined voting power of the voting securities of such corporation entitled to vote generally in the election of directors, outstanding immediately after such disposition in substantially the same proportion as their ownership in the Company immediately prior to such disposition, (B) no "person" (as such quoted term is

used in Sections 3(a)(9), 13(d), and/or 14(d)(2) of the Act) other than the Company, any entity controlled by the Company, or any employee benefit plan (or trust) sponsored or maintained by the Company or such corporation, is the "beneficial owner" (as such quoted term is used in Rule 13d-3 promulgated under the Act), directly or indirectly, of 25% or more of either the then-outstanding shares of voting common stock of such corporation or the combined voting power of the then-outstanding voting securities of such corporation entitled to vote generally in the election of directors, and (C) at least a majority of the members of the board of directors of such corporation were members of the Incumbent Board at the time of the execution of the initial agreement providing for such disposition; or

(vi) the approval by the shareholders of Company of any plan or proposal for liquidation or dissolution of Company.

Notwithstanding anything to the contrary, if a Change of Control occurs and if the Optionee's employment relationship with the Company is terminated prior to the date on which the Change of Control occurs, then a "Change of Control" shall be deemed to have occurred on the date immediately prior to the date of such termination, so long as Optionee can reasonably demonstrate that such termination: (A) was at the request of a third party who had taken steps reasonably calculated to effect the Change of Control, or (B) otherwise arose in connection with or anticipation of the Change of Control.

3. This option shall be exercised by giving written notice to the Company, at its address identified on the signature page below, stating that the Optionee is exercising the option hereunder, specifying the number of shares being purchased, and accompanied by payment in full of the aggregate purchase price therefor: (a) in cash or by certified check, (b) with previously acquired shares of Common Stock which have been held by the Optionee for at least six months, or (c) a combination of the foregoing.

4. The Company may withhold cash and/or shares of Common Stock to be issued to the Optionee in the amount which the Company determines is necessary to satisfy its obligation to withhold taxes or other amounts incurred by reason of the grant or exercise of this option or the disposition of the underlying shares of Common Stock. Alternatively, the Company may require the Optionee to pay the Company such amount in cash promptly upon demand.

5. In the event of any disposition of the shares of Common Stock acquired pursuant to the exercise of this option within two years from the date of hereof or one year from the date of transfer of such shares to the Optionee, the Optionee shall notify the Company thereof in writing within 30 days after such disposition. In addition, the Optionee shall provide the Company on demand with such information as the Company shall reasonably request in connection with determining the amount and character of the Optionee's income, the Company's deduction and its obligation to withhold taxes or other amounts incurred by reason of such disqualifying disposition, including the amount thereof. The Optionee shall pay the Company in cash on demand the amount, if any, which the Company determines is necessary to satisfy such withholding obligation.

6. Notwithstanding the foregoing, this option shall not be exercisable by the Optionee unless (a) a Registration Statement under the Securities Act of 1933, as amended (the "Securities Act") with respect to the shares of Common Stock to be received upon the exercise of this option shall be effective and current at the time of exercise, or (b) there is an exemption from registration under the Securities Act for the issuance of the shares of Common Stock upon such exercise. The Optionee hereby represents and warrants to the Company that, unless such a Registration Statement is effective and current at the time of exercise of this option, the shares of Common Stock to be issued upon the exercise of this option will be acquired by the Optionee for his own account, for investment only, and

not with a view to the resale or distribution thereof. In any event, the Optionee shall notify the Company of any proposed resale of the shares of Common Stock issued to him upon exercise of this option. Any subsequent resale or distribution of shares of Common Stock by the Optionee shall be made only pursuant to (i) a Registration Statement under the Securities Act which is effective and current with respect to the sale of shares of Common Stock being sold, or (ii) a specific exemption from the registration requirements of the Securities Act, but in claiming such exemption, the Optionee shall, prior to any offer of sale or sale of such shares of Common Stock, provide the Company (unless waived by the Company) with a favorable written opinion of counsel, in form and substance satisfactory to the Company, as to the applicability of such exemption to the proposed sale or distribution. Such representations and warranties shall also be deemed to be made by the Optionee upon each exercise of this option. Nothing herein shall be construed as requiring the Company to register the shares subject to this option under the Securities Act.

7. Notwithstanding anything herein to the contrary, if at any time the Committee shall determine, in its discretion, that the listing or qualification of the shares of Common Stock subject to this option on any securities exchange or under any applicable law, or the consent or approval of any governmental regulatory body, is necessary or desirable as a condition to, or in connection with, the granting of an option or the issue of shares of Common Stock hereunder, this option may not be exercised in whole or in part unless such listing, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee.

8. The Company may affix appropriate legends upon the certificates for shares of Common Stock issued upon exercise of this option and may issue such "stop transfer" instructions to its transfer agent in respect of such shares as it determines, in its discretion, to be necessary or appropriate to: (a) prevent a violation of, or to perfect an exemption from, the registration requirements of the Securities Act; (b) implement the provisions of the Plan or this Contract or any other agreement between the Company and the Optionee with respect to such shares of Common Stock; or (c) permit the Company to determine the occurrence of a "disqualifying disposition," as described in Section 421(b) of the Code, of the shares of Common Stock transferred upon the exercise of this option.

9. Nothing in the Plan or herein shall confer upon the Optionee any right to continue in the employ of the Company, any Parent or any of its Subsidiaries, or interfere in any way with any right of the Company, any Parent or its Subsidiaries to terminate such employment at any time for any reason whatsoever without liability to the Company, any Parent or any of its Subsidiaries.

10. This option is not transferable by the Optionee otherwise than by will or the laws of descent and distribution and may be exercised, during the lifetime of the Optionee, only by the Optionee or the Optionee's legal representatives.

11. All notices hereunder by either party shall be given by personal delivery, by sending such notice by U.S. certified mail, postage prepaid, or by a reputable courier service, fees prepaid, to the other party at its address identified on the signature page below. Any notice given in accordance with this section shall be effective as of the date of receipt or attempted delivery (if receipt is refused), as the case may be. Each party may change its address for notice purposes upon written notification thereof to the other party in accordance with this section.

12. The Company and the Optionee agree that: (a) they will both be subject to and bound by all of the terms and conditions of the Plan, a copy of which is attached hereto and made a part hereof; (b) any undefined capitalized term used herein shall have the meaning ascribed to it in the Plan;

(c) in the event of a conflict between the terms of this Contract and the terms of the Plan, the terms of the Plan shall govern; (d) the Company may amend the Plan and the options granted to the Optionee under the Plan, subject to the limitations contained in the Plan; and (e) Optionee shall comply with all applicable laws relating to the Plan and the grant and exercise of this option and the disposition of the shares of Common Stock acquired upon exercise of the option, including without limitation, federal and state securities and "blue sky" laws.

13. This Contract shall be: (a) governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to the conflicts of law rules thereof; and (b) binding upon and inure to the benefit of any successor or assign of the Company and to any heir, distributee, executor, administrator or legal representative entitled to the Optionee's rights hereunder. The invalidity, illegality or unenforceability of any provision herein shall not affect the validity, legality or enforceability of any other provision.

EXECUTED as of the date first set forth above.

OPTIONEE:

/s/ Stephen Elston

Signature

Stephen Elston

Print Name

585665620

Social Security Number

Optionee's Address for Notices:

8212 6th Ave. NW
Seattle, WA 98117

Attachments:

1996 Stock Option Plan

CTS:

CELLULAR TECHNICAL SERVICES
COMPANY, INC.

By /s/ Michael E. McConnell

Michael E. McConnell

Print Name

Vice President and Chief Financial Officer

Title

CTS's Address for Notices:

2401 Fourth Avenue, Suite 808
Seattle, Washington 98121
Attention: Chief Financial Officer

EXHIBIT C
TO
EMPLOYMENT AGREEMENT

Employee Agreement Regarding
Intellectual Property and Proprietary Information

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IN CONSIDERATION of my employment or my continued employment at will by Cellular Technical Services Company, Inc. and/or any of its partners, subsidiaries, or affiliated companies (hereinafter collectively referred to as the "Company"), and in further consideration of the Company's award to me, while employed by the Company, of an inventor's honorarium for the specific assignment to the Company of each original U.S. Patent Application:

- A. I hereby assign and agree to assign to the Company, all my right, title and interest in and to all inventions, discoveries, improvements, ideas, computer or other apparatus programs and related documentation, and other works of authorship (hereinafter each and collectively designated "Intellectual Property"), whether or not capable of registration under applicable patent or copyright laws or susceptible to other forms of protection, which during the period of my employment by the Company I may make or create, solely or jointly with others, in whole or in part, either:
1. in the course of such employment, or
 2. relating to the business or research or development of the Company, or
 3. with the use of the time, material, equipment, supplies, or facilities of the Company, or its private proprietary, confidential or trade secret information.

This Agreement does not apply to an invention for which no equipment, supplies, facilities, or private, proprietary, confidential or trade secret information of the Company was used and which was developed entirely on my own time, unless (a) the invention related (i) directly to the business of the Company, or (ii) to the Company's actual or demonstrably anticipated research or development, or (b) the invention results from any work performed by me for the Company.

- B. I further agree, without charge to the Company:
1. to disclose promptly to the Company all such Intellectual Property,
 2. to promptly, at the request of the Company, execute a specific assignment to the Company of all right, title and interest to such Intellectual Property, including without limitation priority rights arising from patent applications, and
 3. to do anything else reasonably necessary to enable the Company to secure patents, copyrights or other forms of protection for such Intellectual Property in the United States and in other countries.

C. I acknowledge and agree that in performing my responsibilities as an employee of the Company, I will have access to information regarding equipment, devices, software, designs,

research know-how, processes, technical data and other technology, customs, marketing and production plans and strategies, payroll and other financial information and administrative information, and other information (collectively the "Information"), pertaining to the Company's business or its actual or anticipated research or development (collectively the "Business"), which the Company considers confidential and proprietary. Therefore, in order to protect the legitimate business interests of the Company in such Information, I agree as follows:

1. During the term of my employment with the Company and for a period of five (5) years following the termination thereof, I will hold in strictest confidence all Information of the Company of which I become aware in the course of my employment, regardless of the form of such Information, e.g., oral, written, electronic, or otherwise. During this period, I will treat all such Information as secret and confidential, but in any event with no less care than that which a reasonable person or business would utilize with respect to trade secrets or highly confidential information. In particular, I will:

- a. restrict disclosure of the Information solely to those employees of the Company with a "need to know" and not disclose the Information to any other person or entity without prior written authorization of the Company;
- b. insure the proper safekeeping of the Information and timely and complete disposition or destruction of materials; and
- c. not use the Information for my own benefit or the benefit of others, or engage in conduct which is competitive with the Business.

For purposes of this Agreement, a "need to know" means that the employee requires access to the Information in order to perform his or her responsibilities as an employee of the Company.

2. Notwithstanding the above, I will have no obligation to preserve the confidentiality or honor the restriction on use in Paragraph 1, above, as to any Information which becomes part of the public domain by other than an unauthorized disclosure or through my fault. I agree that I will have the burden of proving the existence of the exception to confidentiality described in this Paragraph 2.

3. All information shall be deemed and remain the property of the Company.

4. If I am required to disclose the Information by a legal or regulatory action, then I will immediately notify the Company in such time as to permit the Company to intervene or contest such disclosure.

5. I agree to indemnify the Company and hold it harmless from any and all claims, judgments, damages, losses, costs, and expenses, including attorney's fees, resulting from any publication, disclosure, or use by me in violation of this Agreement.

D. I further agree that the various provisions of this Agreement:

1. shall be interpreted in accordance with Washington law,
2. shall be binding upon my heirs, executors, administrators, successors and assigns,
3. shall be deemed separable from each other, and the invalidity of one provision shall not affect the validity of any other provision,
4. shall not be deemed to provide or imply the duration or other terms and conditions of my employment, and
5. shall not be modified, supplemented, or altered except by a writing signed by both parties to this Agreement.

E. In the event of a breach or threatened breach of this Agreement, the parties shall be entitled to injunctive relief and all other remedies provided by law. In the event of a dispute regarding this Agreement, the prevailing party shall be entitled to recover all attorney's fees and related expenses incurred, including those incurred on appeal.

F. The masculine, feminine, singular and plural of any word or words used in this Agreement shall be deemed to include and refer to the gender and number appropriate in the context.

G. I hereby acknowledge having on this day received a copy of this Agreement.

EMPLOYEE:

Stephen F. Elston, Ph.D., Vice President of Engineering

Employee name and title

/s/ Stephen Elston 7/1/96

Employee signature and date

COMPANY:

Cellular Technical Services Company, Inc.
2401 Fourth Avenue, Suite 808
Seattle, WA 98121

By /s/ Lynne Sederholm

Its Human Resources Manager

Date 7/1/96

Exhibit 11.1 Computation of Earnings Per Share

CELLULAR TECHNICAL SERVICES COMPANY, INC.

COMPUTATION OF EARNINGS PER SHARE
(unaudited)

(in 000's, except per share amounts)

	YEAR ENDED DECEMBER 31,		
	1996	1995	1994
Primary earnings per share:			
Net income (loss) for calculation of primary earnings per share	\$ (7,350)	\$ 63	\$ 1,550
Weighted average number of shares outstanding	21,999	20,398	19,091
Dilutive effect of outstanding warrants and stock options--based upon the Treasury Stock Method using average market price(1)	0	1,628	1,206
Weighted average number of shares, as adjusted, for calculation of primary earnings per share	21,999	22,026	20,297
Primary earnings (loss) per share(2)	\$ (0.33)	\$.00	\$.08

(1) Common Stock equivalent shares have not been considered in the calculation for the year ended December 31, 1996 because the effect would be antidilutive.

(2) Fully diluted earnings share computations are not included since they would not materially change results presented on a primary earnings per share basis.

Exhibit 23.1 Consent of Ernst & Young LLP, Independent Auditors

We consent to the incorporation by reference in the Registration Statements (Form S-8) pertaining to the 1991 Qualified Stock Option Plan, 1991 Nonqualified Stock Option Plan, 1993 Non-Employee Director Stock Option Plan, 1996 Stock Option Plan, and Non-Qualified Stock Option Agreement Between the Registrant and Robert P. Dahut of Cellular Technical Services Company, Inc. of our report dated March 5, 1997, with respect to the financial statements and schedule of Cellular Technical Services Company, Inc. in the Annual Report (Form 10-K) for the year ended December 31, 1996.

SEATTLE, WASHINGTON

March 24, 1997

This schedule contains financial information extracted from the accompanying financial statements and is qualified in its entirety by reference to such financial statements.

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YEAR		
DEC-31-1996		
DEC-31-1996		4,854
	0	
	11,717	
	101	
	8,275	
	25,576	5,982
	2,805	
	32,352	
14,167		0
0		0
	0	23
	18,162	
32,352		19,799
	20,902	13,960
	28,507	
	0	
	0	
	0	
	(7,350)	0
(7,350)		0
	0	
	0	0
	(7,350)	
	(0.33)	
	(0.33)	