

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

AMENDMENT NO. 1

TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CELLULAR TECHNICAL SERVICES COMPANY, INC.
(Exact name of registrant as specified in its charter)

Delaware 4812 11-2962080
(State or other jurisdiction of (Primary Standard (I.R.S. Employer
incorporation or organization) Industrial Identification No.)
Classification Code Number)

2401 Fourth Avenue, Seattle, Washington 98121
(206) 443-6400
(Address, including zip code, and
telephone number, including area code,
of registrant's principal executive
offices)

Stephen Katz, Chairman of the Board and Chief Executive Officer
Cellular Technical Services Company, Inc.
2401 Fourth Avenue, Seattle, Washington 98121
(206) 443-6400
(Name, address, including zip code, and telephone number, including
area code, of agent for service)

Copy of communications to:
Edward R. Mandell, Esq.
Parker Chapin Flattau & Klimpl, LLP
1211 Avenue of the Americas
New York, New York 10036-8701
Tel: (212) 704-6000
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Approximate date of proposed sale to the public: From time to time after
the effective date of this Registration Statement as determined by market
conditions.

If any of the securities being registered on this form are to be offered
on a delayed or continuous basis pursuant to Rule 415 under the Securities Act
of 1933, as amended (the "Securities Act"), check the following box. [X]

If this Form is filed to register additional securities for an offering
pursuant to Rule 462(b) under the Securities Act, please check the following box
and list the Securities Act registration statement number of the earlier
effective registration statement for the same offering. []

If this Form is a post-effective amendment filed pursuant to Rule 462(c)
under the Securities Act, check the following box and list the Securities Act
registration statement number of the earlier effective registration statement
for the same offering. []

If delivery of the prospectus is expected to be made pursuant to Rule 434,
please check the following box. []

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share (1)	Proposed Maximum Aggregate Offering Price (1)	Amount of Registration Fee (2)
Shares of Common Stock, par value \$.001 per share.....	400,000 Shares	\$10.5625	\$4,225,000	\$1,280.30 (3)

- (1) Estimated solely for purposes of calculating the registration fee.
- (2) Estimated solely for the purpose of calculating the registration fee, pursuant to Rule 457(c).
- (3) A registration fee in the amount of \$2,068.18 was paid upon filing of the Registration Statement.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such State.

SUBJECT TO COMPLETION -- DATED APRIL 9, 1997

PROSPECTUS

400,000 Shares
 CELLULAR TECHNICAL SERVICES COMPANY, INC.
 Common Stock

This Prospectus relates to an aggregate of 400,000 shares of common stock (the "Common Stock") of Cellular Technical Services Company, Inc., a Delaware corporation (the "Company"), which may be offered and sold from time to time by the Selling Shareholders named herein. The Company will not receive any of the proceeds from the sale of the shares of Common Stock being sold by the Selling Shareholders. See "Selling Shareholders."

The shares of Common Stock may be offered for sale by the Selling Stockholders from time to time in the over-the-counter market, in privately negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. The shares of Common Stock may be sold directly by the Selling Stockholders or through underwriters, brokers or dealers. In connection with any such sales, the Selling Stockholders and brokers or dealers participating in such sales may be deemed "underwriters" within the meaning of the Securities Act or 1933, as amended ("Securities Act"), and any discounts, commissions, concessions and any profits realized by them on the sale of the Shares may be deemed to be underwriting compensation under the Securities Act. At such time as Rule 144 ("Rule 144") promulgated under the Securities Act becomes available for the sale of such shares, such shares may be sold under Rule 144 instead of under this Prospectus, subject to compliance with the volume and manner of sale limitations, as well as the other requirements, of Rule 144. See "Plan of Distribution".

The Common Stock is included in The Nasdaq Stock Market's National Market (the "Nasdaq National Market") under the symbol "CTSC." On April 14, 1997, the last reported sales price for the Common Stock on the Nasdaq National Market was \$11.00 per share.

SEE "RISK FACTORS" BEGINNING ON PAGE 5 FOR A
DISCUSSION OF CERTAIN MATERIAL FACTORS THAT
SHOULD BE CONSIDERED IN CONNECTION WITH AN
INVESTMENT IN THE COMMON STOCK OFFERED HEREBY.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE
SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES
COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR
ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY
OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO
THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is _____, 1997

AVAILABLE INFORMATION

The Company is subject to the informational requirements of the Exchange Act and, in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy statements and other information filed by the Company can be inspected and copied at the public reference facilities maintained by the Commission at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, and at the Commission's Regional Offices located at 7 World Trade Center, 13th Floor, New York, New York 10048 and Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661-2511. Copies of such material can also be obtained at prescribed rates from the Public Reference Section of the Commission, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. The Commission maintains a Web site (<http://www.sec.gov>) that contains reports, proxy and information statements and other information electronically filed through the Commission's Electronic Data Gathering, Analysis and Retrieval system ("EDGAR"). The Common Stock is currently quoted on The Nasdaq Stock Market and such reports and other information can also be inspected at the offices of Nasdaq Operations, 1735 K Street, N.W., Washington, D.C. 20006.

The Company has filed with the Commission, Washington, D.C. 20549, a Registration Statement (No. 333- 20505) and an amendment thereto under the Securities Act with respect to the shares of Common Stock (the "Registration Statement"). As permitted by the rules of the Commission, this Prospectus does not contain all of the information set forth in the Registration Statement and the exhibits thereto. For further information with respect to the Company and the shares of Common Stock offered hereby, reference is made to the Registration Statement and the exhibits filed therewith. Statements contained in this Prospectus, and in any document incorporated herein by reference, as to the contents of any contract or any other document referred to are not necessarily complete and, in each instance, reference is made to the copy of such contract or other document filed as an exhibit to the Registration Statement or such document, each such statement being qualified in all respects by such reference. A copy of the Registration Statement may be inspected without charge at the Commission's principal office, Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, and copies of all or any part of the Registration Statement may be obtained from such office upon the payment of the fees prescribed by the Commission. The Registration Statement has been filed through EDGAR and is also publicly available through the Commission's Web site (<http://www.sec.gov>).

INFORMATION INCORPORATED BY REFERENCE

The following documents heretofore filed by the Company with the Commission are incorporated herein by reference: (1) the Company's Annual Report on Form 10-K for the year ended December 31, 1996; (2) the Company's Current Reports on Form 8-K filed on January 27, 1997, February 5, 1997 and March 6, 1997; and (3) the description of the Company's Common Stock contained in the Company's Registration Statement on Form 8-A and any amendment or report filed by the Company for the purpose of updating such description. Each document filed pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act by the Company subsequent to the date of this Prospectus but prior to the termination of this offering shall be deemed to be incorporated by reference in this Prospectus and to be a part hereof from the date of the filing of such

documents. Any statement contained in this Prospectus or in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Prospectus.

THE COMPANY WILL PROVIDE, WITHOUT CHARGE, TO EACH PERSON, INCLUDING ANY BENEFICIAL OWNER, TO WHOM A COPY OF THIS PROSPECTUS IS DELIVERED, UPON THE WRITTEN OR ORAL REQUEST OF ANY SUCH PERSON, A COPY OF ANY DOCUMENT INCORPORATED BY REFERENCE IN THIS PROSPECTUS (OTHER THAN EXHIBITS UNLESS SUCH EXHIBITS ARE EXPRESSLY INCORPORATED BY REFERENCE IN SUCH DOCUMENTS). REQUESTS SHOULD BE DIRECTED TO CELLULAR TECHNICAL SERVICES COMPANY, INC., 2401 FOURTH AVENUE, SEATTLE, WASHINGTON 98121, ATTENTION: MICHAEL E. MCCONNELL, VICE PRESIDENT AND CHIEF FINANCIAL OFFICER.

2

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 authentications" 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(R) Platform, PreTect(TM) fraud prevention application, and No Clone Zone(sm) 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 ("CTIA") 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 designated 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.

"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(R) Platform provides the underlying technology for post-call application products and services for credit management and prepaid billing ("Hotwatch Products").

The Company's current activities are primarily focused on

3

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. During 1996, the Company entered into agreement 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.

During the last eleven years, wireless communications service has been one of the fastest growing segments of the telecommunications industry. The CTIA 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 Company was incorporated in Delaware in August 1988 under the name NCS Ventures Corp. ("Ventures") as a majority-owned subsidiary of Nationwide Cellular Service, Inc. ("Nationwide"), a publicly-traded company. In September 1988, Ventures formed, as equal partners with NYNEX Mobile Billing Services, Inc. ("NYNEX"), a partnership, Cellular Technical Services Company (the "Partnership"). In May 1991, Ventures changed its name to Cellular Technical Services Company, Inc. In August 1991, the Company exercised an option to purchase the interest in the Partnership owned by NYNEX and consummated the initial public offering of its securities. In 1995, concurrent with the merger of Nationwide into MCI Communications Corp., Nationwide distributed to its stockholders all of its shares of the Company's Common Stock.

4

The Company's principal offices are located at 2401 Fourth Avenue, Seattle, Washington, 98121 and its telephone number is (206) 443-6400.

5

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

A number of statements contained in this Prospectus 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 unproven 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 this Prospectus and the Company's other filings with the Commission.

RISK FACTORS

An investment in the shares of Common Stock offered hereby involves a high degree of risk. Prospective investors should carefully consider the following risk factors, in addition to the other information set forth in this Prospectus, in connection with an investment in the shares of Common Stock offered hereby.

Dependence on Cellular Market; Rapid Industry Change and Technological Obsolescence. The Company's future success will depend on the continued and expanded use of its existing products and services, and its ability to develop new products and services or adapt existing products and services to keep pace with changes in the wireless communications industry. The Company historically has provided its products and services exclusively to cellular carriers. In addition, the Company's user/device authentication products currently are designed to provide security exclusively for analog cellular telephones. The Company believes that over 95% of domestic cellular telephone service currently is provided in the analog mode, but that the industry is undertaking a shift to digital mode in the major markets due to certain advantages of the digital mode, including expanded capacity, greater privacy and enhanced security. Technological changes or developments in the cellular industry, such as encryption technology for enhanced privacy, "Authentication" ("A-Key") technology for enhanced security against cloning fraud, improved switching technologies, or further industry consolidation, could reduce or eliminate demand for the Company's user/device authentication products. A rapid shift away from the use of analog cellular telephones in favor of digital cellular telephones utilizing A-Key or to other wireless services, such as PCS, could affect demand for the Company's user/device authentication products and could require the Company to develop modified or alternative user/device authentication products addressing the particular needs of providers of such new services. The Company's user/device authentication products apply to digital phones operating in the analog mode and to TDMA phones operating in the digital mode. In addition, the Company believes that its user/device authentication products could apply to other types of digital phones if market demand requires it. To date, the Company has emphasized its product development efforts in other areas where greater market potential is seen. The number of subscribers using analog cellular systems worldwide continues to increase, and as a result, the Company sees a continued increase in demand for its user/device authentication products for fraud protection. The Company is pursuing the development of other applications for the Blackbird Platform. However, there can be no assurance that the Company will be successful in modifying or developing its existing or future products in a timely manner, or at all. If the Company is unable, due to resource, technological or other constraints, to adequately anticipate or respond to changing market, customer or technological requirements, the Company's business, financial condition and results of operations will be materially adversely affected. Further, there can be no assurance that products or services developed by others will not render the Company's products and services non-competitive or obsolete.

Limited Product Line; Uncertainty of Widespread Market Acceptance. The Company's revenues have been and can be expected to continue to be derived from a limited number of products and services. The Company recently expanded its product line with the introduction of the Blackbird Products. Although the Company believes that the Blackbird Products present significant growth

opportunities for its business, there can be no assurance that the Company will derive significant revenues from the commercialization of such technology or any other products. By virtue of the signing of certain contracts in 1996, the Company commenced the commercial installation of the Blackbird Products in a number of major cellular markets. Such installations are subject to the Blackbird Products' compliance with contractual requirements, including acceptance testing to ensure that the Blackbird Products are properly installed and performing in accordance with contractual specifications. Given the early stage of commercial use, however, there can be no assurance that any given installation of Blackbird Products will satisfy contractual requirements. Additionally, achieving widespread market acceptance and penetration of the Blackbird Products and the Company's other products and services will, in some cases, require additional enhancements and improvements to those products and services and increased

7

marketing efforts to effectively compete and increase customer awareness of the Company's products and services. There can be no assurance, however, that such additional enhancements and improvements or increased marketing and sales efforts will result in a more successful commercialization and increased market penetration of the Company's products and services.

Technological Factors; Uncertainty of Product Development; Unproven Technology. The Company's products are currently being utilized by a limited number of customers and there can be no assurance that they will prove to be sufficiently reliable in widespread commercial use. It is common for hardware and software as complex and sophisticated as that incorporated in the Company's products to experience errors or "bugs" both during development and subsequent to commercial introduction. In particular, the Company has identified certain software and hardware errors in its Blackbird Products and to date corrected some, but not all, of such errors. There can be no assurance that any errors in the Company's existing or future products will be identified, and if identified, corrected. Any such errors could delay commercial introduction of new products and require modifications in products that have already been installed. Remedying such errors has been and may continue to be costly and time consuming. Delays in remedying any such errors could materially adversely affect the Company's competitive position with respect to existing or new technologies and products offered by its competitors. In particular, delays in remedying existing or future errors in the Company's Blackbird Products could materially adversely affect the Company's ability to achieve significant market penetration prior to the possible widespread use of A-Key. In addition, software and hardware warranties are generally included as part of the Company's obligations under its agreements with its customers. To date, the costs to the Company of meeting the Company's warranty obligations relating to its Hotwatch Products have not been substantial. Warranty obligations related to the Blackbird Products have been and are expected to continue to be greater than those encountered with Hotwatch Products due to the expanded customer base for Blackbird Products. However, to the extent that the software and hardware maintenance fees from its products are not adequate to cover the costs of making any necessary modifications or meeting the Company's warranty obligations, the Company could be required to make significant additional expenditures, which could have a material adverse effect on the Company. The Company is continually seeking to enhance and improve its existing products and services and to develop new products and services, including other application products utilizing the Blackbird and Hotwatch Platforms. Accordingly, the Company remains subject to all of the risks inherent in new product development, including unanticipated technical or other development problems which could result in material delays in product commercialization or significantly increased costs. There can be no assurance that the Company will be able to successfully enhance or improve existing products or develop new products.

Risk of New Hardware Manufacturing Activities. For the most part, the Company's engineering resources historically have been devoted to software design and development. As a result, only a limited number of such resources were initially used in the design and prototype production of the Company's proprietary hardware. In recent quarters the Company has added significantly to its hardware design and development process. In addition, the Company continues to utilize a number of subcontractors for hardware design, engineering, manufacturing and integration of certain proprietary printed circuit boards, radio equipment and other subassemblies which are components of the Company's Blackbird Products. The Company's future success will continue to depend on enhancing and expanding its manufacturing activities with respect to the design

and engineering of hardware, improving its inventory control systems, maintaining effective quality control, procuring component parts and maintaining subcontractor relationships. Failure to achieve any of these factors could have a material adverse effect on the Company's business, financial condition and results of operations.

Ability to Manage Growth. The Company has expanded its operations rapidly, which has created significant demands on the Company's administrative, operational, development and financial personnel and other resources. Additional expansion by the Company may further strain the Company's management, financial and

8

other resources. There can be no assurance that the Company's systems, procedures, controls and existing space will be adequate to support expansion of the Company's operations. The Company's future operating results will depend, among other things, on its ability to manage changing business conditions and to continue to improve its operational and financial control and reporting systems. If the Company's management is unable to manage growth effectively, its business, financial condition and results of operations could be materially adversely affected. The Company's ability to manage growth depends in part upon the Company's ability to attract, train and retain a sufficient number of qualified personnel or independent contractors commensurate with the expanding needs of the Company. An increase in the turnover rate among the Company's employees would increase the Company's recruiting and training costs, and if the Company were unable to recruit and retain a sufficient number of employees or independent contractors, it could be forced to limit its growth or possibly curtail its operations. There can be no assurance that the Company will be successful in attracting, training and retaining the required number of qualified employees or independent contractors to support the Company's business in the future.

Dependence on Key Personnel. The Company's future success depends in large part on the continued services of its key management, sales, engineering, research and development and operational personnel and on its ability to continue to attract, motivate and retain highly qualified employees and independent contractors in those areas. Competition for such personnel is intense and there can be no assurance that the Company will be successful in attracting, motivating and retaining key personnel. The inability to hire and retain qualified personnel or the loss of the services of key personnel could have a material adverse effect upon the Company's business, financial condition and results of operations. The Company has entered into employment agreements with, among others, its President and Chief Operating Officer (which expires in February 1999), Chief Financial Officer (which expires in December 1997), Vice President, Engineering (which expires in July 1998) and General Counsel (which expires in August, 1997). There can be no assurance that any of these contracts will be renewed. The Company does not maintain any key-man life insurance policies on any of its employees.

Limited Customer Base; Reliance on Significant Customers. The Company's potential customer base is relatively limited due to the significant concentration of ownership and/or operational control of wireless communication markets. Currently, the Company markets its services and products only to cellular carriers, of which there are 27 in the United States and approximately 150 in international markets. There can be no assurance that any customers, current or future, will maintain business relationships with the Company. See "-- International Operations." Revenues attributable to a relatively small number of customers historically have represented and are likely for the foreseeable future to continue to represent a significant percentage, in any given period, of the Company's total revenues. 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% (such three customers being AirTouch, BANM and AT&T Wireless Services, Inc., respectively), three customers with sales of 59%, 15% and 12% and three customers with sales of 54%, 22% and 11% in the years ended December 31, 1996, 1995 and 1994, respectively. 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 assurance that such customers will continue to maintain business relationships with the Company. The Company has recently signed contracts with new customers which, if successfully implemented and performed, would generate significant revenue. However, the loss of one or more

major customers could have a material adverse effect on the Company's business, financial condition and results of operations.

9

Competition. The market for the Company's products and services is highly competitive and subject to rapid change. A number of companies currently offer one or more similar products and services offered by the Company. In addition, many wireless communications carriers are providing or can provide, in-house, certain of the Hotwatch Products that the Company offers. Trends in the wireless communications industry, including greater consolidation and technological or other developments that make it simpler or more cost-effective for wireless communications carriers to provide certain services themselves, could affect demand for the Company's products and services and could make it more difficult for the Company to offer a cost-effective alternative to a wireless communications carrier's own capabilities. Current and potential competitors have established or may in the future establish collaborative relationships among themselves or with third parties, including third parties with whom the Company has a relationship, to increase the visibility and utility of their products and services. Accordingly, it is possible that new competitors or alliances may emerge and rapidly acquire significant market share. In addition, the Company anticipates continued growth in the wireless communications industry and, consequently, the entrance of new competitors in the future. An increase in competition could result in price reductions and loss of market share and could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company believes that the principal competitive factors facing the Company in the wireless communications industry include the ability to identify and respond to customer needs, the quality and breadth of products and services, technical expertise and price. To remain competitive, the Company will need to continue to invest in research and development, sales and marketing, customer service, manufacturing activities and administrative systems. There can be no assurance that the Company will have sufficient resources to make such investments or that the Company will be able to make the technological advances necessary to remain competitive. Many of the Company's current and potential competitors have significantly greater financial, marketing, technical and other competitive resources, as well as greater name recognition, than the Company. As a result, the Company's competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements or may be able to devote greater resources to the promotion and sale of their products and services. There can be no assurance that the Company will be able to compete successfully with its existing competitors or with new competitors. The Company's principal competitors in the service metering field include IBM, I-NET, Inc., GTE Telecommunications Services, Inc. ("GTE-TSI"), Boston Communications Group, EDS Personal Communications Corporation, Cincinnati Bell Information Systems, Inc., Lightbridge, Inc., Subscriber Computing, Inc., CSC Intellicom, Systems/Link Corporation, Brite Voice Systems, Inc. and Orga Card Systems Inc. The Company's principal competitors in the user/device authentication field include Corsair Communications, Inc. ("Corsair"), Coral Systems, Inc. ("Coral") (in connection with a joint venture with Applied Signal Technology), Authentix Network, Inc., GTE-TSI and Signal Science Incorporated ("Signal Science"). The Company believes that Corsair has agreements pursuant to which Corsair has installed or will install its RF-based fingerprinting fraud protection product in a number of major markets. The Company has no knowledge of any such agreements or installations by others, although others may be testing or developing such products. 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) which could render the Company's products obsolete or less marketable.

History of Net Losses; Accumulated Deficit. Although the Company had net income of \$63,000 for the year ended December 31, 1995 and net income of \$1,550,000 for the year ended December 31, 1994, the Company sustained a net loss in each of the preceding years, had a net loss of \$7,350,000 for the year ended December 31, 1996, and, at December 31, 1996, had an accumulated deficit of \$10,976,000. In addition, in the event that the Company is not successful in generating sufficient

future product revenues, the carrying value of capitalized software development costs, inventories and other assets could be significantly impaired. There can be no assurance that the Company's operations will be profitable in the future. The introduction of the Blackbird Platform contributed to interim losses of the Company as a result of certain contractual performance criteria, pursuant to which only a portion of the system's revenues and the majority of the system's costs are recorded during the early stages of deployment. Accordingly, revenues and direct margins recorded by the Company can be expected to be lowest in earlier periods of deployment and inconsistent from quarter to quarter, especially during the initial market deployment 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.

International Operations. The Company is marketing its products and services in international markets. In pursuing such opportunities, the Company is and will remain subject to all the risks inherent in international transactions, such as changes in export, import, tariff and other trade regulations, currency exchange rates, foreign tax laws, and other legal, economic, and political conditions. There can be no assurance that changes in any of the foregoing will not have a material adverse effect on the Company's business, financial condition and results of operations. Further, the laws of certain foreign countries do not protect the Company's intellectual property to the same extent as the laws of the United States. See " -- Proprietary Rights". In certain international markets, the Company will need to modify its products or develop new or additional products to adapt to the different wireless technologies or network standards utilized by the carriers in such markets. There can be no assurance that the Company's marketing efforts and technological enhancements will result in successful commercialization or market acceptance or penetration in such international markets. If the Company is unable to adequately anticipate and respond to marketing or technological requirements in the international marketplace, the Company's business, financial condition and results of operation could be materially adversely affected.

Fluctuations in Quarterly Performance. The Company has experienced fluctuations in its quarterly operating results and anticipates that such fluctuations will continue and could intensify. The Company's quarterly operating results may vary significantly depending on a number of factors, including the timing of the introduction or acceptance of new products and services offered by the Company, changes in the mix of products and services provided by the Company, long sales cycles, changes in regulations affecting the wireless industry, changes in the Company's operating expenses, uneven revenue streams, and general economic conditions. Revenue recognition for the Company's products is based upon various performance criteria and varies from customer to customer and product to product. Hardware and software delivery and customer acceptance in accordance with contractual definitions are generally the significant factors used in determining revenue recognition. There can be no assurance that the Company's levels of profitability will not vary significantly among quarterly periods or that in future quarterly periods the Company's results of operations will not be below prior results or the expectations of public market analysts and investors. In such event, the price of the Company's Common Stock could be materially adversely affected.

Dependence on Third-Party Vendors. The Company has been and will continue to be dependent on third-party vendors for computer equipment, network services, component parts, manufacturing, systems integration and certain software all of which are incorporated in its products and services. While available from multiple sources, the Company currently obtains or licenses certain equipment and software from a limited number of sources. Although the Company believes that there are currently available substitute sources for all such equipment and software, the Company could be required to redesign affected products to accommodate substitutes therefor. In an attempt to ensure satisfactory sources of supply, the Company currently maintains supply and software license arrangements with various suppliers. There can be no assurance, however, that the Company will be able to procure necessary equipment and software on a satisfactory and timely basis. For

example, from time to time the electronic computer component parts industry has experienced parts allocation restrictions. Any failure or delay in obtaining necessary equipment, component parts or software, or if necessary, establishing alternative procurement arrangements, could cause delays in product commercialization and could require product redesign or modification. There can be no assurance that the Company could complete any necessary modifications in a timely manner or that modified or redesigned products would maintain current functionality or performance features or could be successfully commercialized. Any inability or delay in establishing necessary procurement arrangements or successfully modifying products could have a material adverse effect on the Company's business, financial condition and results of operations.

Possible Need for Additional Financing. In the event of unanticipated technical or other problems, or if the funds currently available to the Company prove to be insufficient to fund operations, the Company may be required to seek additional financing sooner than currently anticipated or may be required to curtail its activities. There can be no assurance that additional financing will be available on acceptable terms, or at all. In November 1996, the Company obtained a \$5.0 million line of credit from The Chase Manhattan Bank. The line of credit is secured by all the personal property of the Company, bears interest at the prime rate plus .75%, and expires September 30, 1997. All outstanding balances under the line must be repaid for a consecutive 30-day period before such expiration date. 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 the date of this prospectus.

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 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. There can be no assurance, however, 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.

Litigation or regulatory proceedings, which could result in substantial cost and uncertainty to the Company, may also be necessary to enforce patent or other proprietary rights of the Company or to determine the scope and validity of a third party's proprietary rights. 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. The Company's failure

to successfully enforce its proprietary rights or defend against infringement claims brought

12

by third parties could have a material adverse effect upon the Company. In addition, there can be no assurance that the Company will have the resources necessary to successfully defend an infringement claim brought by a third party.

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 internal nondisclosure agreements with its employees and consultants, and license agreements with customers, 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.

Risk of System Failure or Inadequacy. The Company operates and maintains internal computers and telecommunication equipment for, among other things, monitoring and supporting its products and services, and operating its Real-Time Roaming Fraud Prevention Service. The Company's operations are dependent upon its ability to maintain such equipment and systems in effective working order and to protect them against damage from fire, natural disaster, power loss, telecommunications failure or similar events. Although the Company provides back-up for substantially all of its systems, these measures will not eliminate the risk to the Company's operations from a system failure. In addition to its own systems, the Company relies on certain equipment, systems and services from third parties that are also subject to risks, including risks of system failure. There can be no assurance that the Company's property and business interruption insurance will be adequate to compensate the Company for any losses that may occur in the event of a system failure. Any damage, failure or delay that causes interruptions in the Company's operations could have a material adverse effect on the Company's business, financial condition and results of operations. See " -- Dependence on Third Party Vendors."

Government Regulation and Legal Uncertainties. While, for the most part, the Company's operations are not directly regulated, the wireless carriers that constitute the Company's customers are heavily regulated at both the federal and state levels. Such regulation may inhibit the growth of the wireless telecommunications industry, limit the number of potential customers for the Company's services and impede the Company's ability to offer competitive services to the wireless communications market or otherwise have a material adverse effect on the Company's business, financial condition and results of operations. At the same time, recently enacted federal legislation deregulating the telecommunications industry may cause changes in the industry, including entrance of new competitors or industry consolidation, which could in turn subject the Company to increased pricing pressures, decrease the demand for the Company's services, increase the Company's cost of doing business or otherwise have a material adverse effect on the Company's business, financial condition and results of operations. Additionally, media reports and certain interest groups have suggested that certain RF emissions from portable cellular telephones might be linked to various health concerns, including cancer, and may cause interference with hearing aids, pacemakers and other medical devices. Concerns over RF emissions may have the effect of discouraging the use of cellular and other wireless communications services, such as PCS, which could have an adverse effect upon the Company's business. In addition, the Personal Communications Industry Association announced in July 1995 that it was undertaking an industry-wide study to gather information on possible PCS interference with medical devices for all PCS protocols. There can be no assurance that such reports and the findings of such study will not have a material adverse effect on the Company's business, financial condition and results of operations or that such findings will not lead to government regulation that will have a material adverse effect on the Company's business, financial condition and results of operations.

No Dividends. To date, the Company has not paid any dividends on the Common Stock and does not expect to declare or pay any dividends on such Common Stock in the foreseeable future.

Outstanding Options. As of April 1, 1997 there were outstanding stock options to purchase an aggregate of 2,379,520 shares of Common Stock at a weighted average exercise price of approximately \$8.01 per share. To the extent that these outstanding stock options are exercised, dilution to the Company's stockholders may occur if the market price or book value of the Common Stock of the Company at the time of exercise is greater than the exercise price of the options. Moreover, the terms upon which the Company will be able to obtain additional equity capital may be adversely affected since the holders of such outstanding securities can be expected to exercise them at a time when the Company would, in all likelihood, be able to obtain any needed capital on terms more favorable to the Company than those provided in the outstanding options.

Shares Eligible for Future Sale. As of the date of this Prospectus, the Company has outstanding 22,643,068 shares of Common Stock (including 7,200 shares issued for option exercises, from January 1, 1997, to the date of this Prospectus), of which the 400,000 shares to be resold in this offering and the 4,600,000 shares sold in the Company's initial public offering in August 1991 and all other shares will be freely tradeable without restriction or further registration under the Securities Act, except for those shares held by "affiliates" (as defined in the Securities Act) of the Company. There are no restricted shares currently outstanding. Affiliates are able to sell shares pursuant to Rule 144 ("Rule 144") under the Securities Act, subject to compliance with certain requirements set forth in Rule 144. In addition, 5,400,000 shares of Common Stock are authorized under the Company's 1991 Qualified Stock Option Plan, as amended, 1991 Non-Qualified Stock Option Plan, as amended, 1993 Non-Employee Director Stock Option Plan and 1996 Stock Option Plan. Of these shares, 2,274,520 shares are issuable upon the exercise of outstanding stock options granted by the Company, of which options to purchase 799,136 shares are currently exercisable. Registration Statements on Form S-8 have been filed with the Commission registering all of the shares of Common Stock that may be issued under these plans as well as the 105,000 shares of Common Stock subject to options (all of which are currently exercisable) granted to Robert Dahut, the Company's former President, which were not granted under any stock option plan of the Company. No new options will be granted under either the Company's 1991 Non-Qualified Stock Option Plan, or under the Company's 1991 Qualified Stock Option Plan. Sales of substantial amounts of shares of Common Stock in the public market, or the availability of such shares for future sale, could adversely affect the market price of the Common Stock and could impair the Company's future ability to raise additional capital through an offering of its equity securities.

Possible Volatility of Stock Price. The market price of the Common Stock could be subject to significant fluctuations in response to variations in financial results or announcements of material events by the Company or its competitors. Regulatory changes or changes in the general condition of the economy or the financial markets could also adversely affect the market price of the Common Stock.

Anti-Takeover Provisions. The Certificate of Incorporation and By-laws of the Company contain various provisions which may have the effect of discouraging, delaying or preventing future changes of control or takeover attempts, which the Company's stockholders may deem to be in their best interests, and perpetuating the Company's existing management. Among other things, such provisions: (i) provide the Board of Directors with broad discretion to issue serial preferred stock; (ii) provide for three-year terms for the directors of the Company and the election of such directors on a staggered basis; (iii) prohibit repurchases by the Company from a stockholder owning 5% or more or the Company's voting securities (other than those stockholders meeting such description as of May 30, 1991) who have held their securities for less than two years, unless approved by

a majority of the disinterested stockholders; and (iv) require the approval of two-thirds of all shares eligible to vote for any proposed amendment to the Certificate of Incorporation or By-laws that seeks to modify or remove the foregoing provisions. In addition, in certain circumstances, Delaware law requires the approval of two-thirds of all shares eligible to vote for certain business combinations involving a stockholder owning 15% or more of the Company's voting securities (other than stockholders currently meeting such description), excluding the voting power held by such stockholder. The existence of all of the above provisions may have the effect of discouraging, delaying or preventing a future change of control or takeover attempt of the Company, which could have an adverse effect on the market price of the Common Stock.

DESCRIPTION OF SECURITIES

The following summary description of the Company's capital stock is qualified in its entirety by reference to the Company's Certificate of Incorporation.

COMMON STOCK

The Company is authorized to issue up to 30,000,000 shares of Common Stock, par value \$.001 per share. As of April 2, 1997, the Company had approximately 200 shareholders of record and the Company believes its Common Stock is beneficially owned by in excess of 5,000 holders.

Holder of Common Stock are entitled to one vote for each share held of record on each matter submitted to a vote of shareholders. There is no cumulative voting for election of directors. Subject to the prior rights of any series of preferred stock which may from time to time be outstanding, if any, holders of Common Stock are entitled to receive ratably dividends when, as, and if declared by the Board of Directors out of funds legally available therefore and, upon the liquidation, dissolution or winding up of the Company, are entitled to share ratably in all assets remaining after payment of liabilities and payment of accrued dividends and liquidation preferences on the preferred stock, if any. Holders of Common Stock have no preemptive rights and have no rights to convert their Common Stock into any other securities. The outstanding Common Stock is, and the Common Stock to be outstanding upon completion of this Offering will be, duly authorized and validly issued, fully paid and nonassessable.

PREFERRED STOCK

The Company is authorized to issue up to 5,000,000 shares of preferred stock, par value \$.01 per share. The preferred stock may be issued in one or more series, the terms of which may be determined at the time of issuance by the Board of Directors, without further action by shareholders, and may include voting rights (including the right to vote as a series on particular matters), preferences as to dividends and liquidation, conversion and redemption rights and sinking fund provisions.

No shares of preferred stock will be outstanding as of the closing of this offering, and the Company has no present plans for the issuance thereof. The issuance of any such preferred stock could adversely affect the rights of the holders of Common Stock and therefore, reduce the value of the Common Stock. The ability of the Board of Directors to issue preferred stock could discourage, delay or prevent a takeover of the Company. See "Risk Factors -- Anti-Takeover Provisions."

ANTI-TAKEOVER PROVISIONS

The Certificate of Incorporation and By-laws of the Company contain various provisions which may have the effect of discouraging, delaying or preventing future changes of control or takeover attempts, which the Company's

stockholders may deem to be in their best interests, and perpetuating the Company's existing management. Among other things, such provisions: (i) provide the Board of Directors with broad discretion to issue serial preferred stock; (ii) provide for three-year terms for the directors of the Company and the election of such directors on a staggered basis; (iii) prohibit repurchases by the Company from a stockholder owning 5% or more or the Company's voting securities (other than those stockholders meeting such description as of May 30, 1991) who have held their securities for less than two years, unless approved by a majority of the disinterested stockholders; and (iv) require the approval of two-thirds of all shares eligible to vote for any proposed amendment to the Certificate of Incorporation or By-laws that seeks to modify or remove the foregoing

16

provisions. In addition, in certain circumstances, Delaware law requires the approval of two-thirds of all shares eligible to vote for certain business combinations involving a stockholder owning 15% or more of the Company's voting securities (other than stockholders currently meeting such description), excluding the voting power held by such stockholder. The existence of all of the above provisions may have the effect of discouraging, delaying or preventing a future change of control or takeover attempt of the Company, which could have an adverse effect on the market price of the Common Stock.

ELECTION OF DIRECTORS

The Certificate of Incorporation and By-laws of the Company set the number of directors at a minimum of three and a maximum of fifteen and provide for three-year terms of office on a staggered basis.

REMOVAL OF DIRECTORS

The Certificate of Incorporation of the Company permits stockholders to remove a director with or without cause by an affirmative vote of two-thirds of the total votes eligible to be cast at a duly constituted meeting called expressly for that purpose.

APPROVAL OF REPURCHASES

The Certificate of Incorporation of the Company prohibits repurchases by the Company from a shareholder owning more than 5% of the Company's voting securities (a "Significant Shareholder") (other than those shareholders meeting such description as of May 30, 1991) who has owned such securities of the Company for less than two years, unless approved by an affirmative vote of at least a majority of the total votes entitled to vote generally in the election of directors other than the voting power held by the Significant Shareholders.

AMENDMENT OF CERTIFICATE OF INCORPORATION AND BY-LAWS

The Certificate of Incorporation provides that in addition to the general requirements to amend a certificate of incorporation, an affirmative vote of the holders of at least two-thirds of the total votes eligible to be cast is required to amend the anti-takeover provisions described above.

The Certificate of Incorporation of the Company provides that either the Board of Directors or the stockholders may alter, amend or repeal the By-laws of the Company. The Board of Directors may take such action by an affirmative vote of at least a majority of the directors at a meeting expressly called for that purpose. Such action by stockholders requires an affirmative vote of at least two-thirds of the total votes eligible to be cast at a meeting called expressly for that purpose.

TRANSFER AGENT

Continental Stock Transfer & Trust Company, New York, New York as Transfer Agent for the Common Stock.

17

SELLING SHAREHOLDERS

The following table sets forth information, as of March 31, 1997, with respect to (i) each Selling Shareholder's beneficial ownership of the Company's Common Stock prior to the offering of any shares of Common Stock hereunder by such Selling Stockholders, (ii) the number of shares of Common Stock which may be offered for sale hereunder and (iii) the number of shares of Common Stock to be beneficially owned by each Selling Shareholders after the offering (assuming the sale of all shares of Common Stock being offered hereunder). The Company will not receive any of the proceeds from the sale of such securities. There are no material relationships between any of such Selling Shareholders and the Company or any of its predecessors, nor have any such material relationships existed within the past three years.

Name of Selling Stockholders -----	Shares of Common Stock Beneficially Owned Prior to Offering -----	Shares of Common Stock to be Offered Hereunder -----	Shares of Common Stock Beneficially Owned After Offering -----
Harvey Sandler	1,061,116	120,000	941,116
Phyllis Sandler	124,000(1)	60,000	64,000
Fusion Partners, L.P.	89,000	65,000	24,000
Fusion Offshore Fund Ltd.	2,300	1,300	1,000
Ricky Sandler	3,700	3,700	0
Andrew Sandler	10,000	10,000	0
Martin Tash	160,000(2)	120,000	40,000(2)
Jeffrey M. Levine	22,000(3)	10,000	12,000
David Ross	11,200(4)	10,000	1,200(4)

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- (1) Includes 1,000 shares of Common Stock in an IRA Account,
 - (2) Additional shares of Common Stock in which Martin Tash may be deemed to have an interest include (i) Martin and Arlene S. Tash, Joint Account - 90,500 shares; (ii) Arlene S. Tash - 6,622 shares; and (iii) Arlene S. Tash, IRA - 10,778 shares. Arlene S. Tash is the wife of Martin Tash.
 - (3) Includes 5,156 shares of Common Stock in an IRA Account.
 - (4) Includes 1,200 shares of Common Stock in an IRA Account. Does not include 18,002 shares of Common Stock held by Amy Ross (the wife of David Ross).

PLAN OF DISTRIBUTION

The shares of Common Stock may be offered for sale by the Selling Shareholders from time to time in the over-the-counter market, in privately negotiated transactions or otherwise at market prices prevailing at the time of sale, at prices relating to such prevailing market prices or at negotiated prices. The shares of Common Stock may be sold by one or more of the following methods: (a) ordinary brokerage transactions and transactions in which the broker solicits purchasers; (b) purchases by a broker or dealer as principal, and the resale by such broker or dealer for its account pursuant to this Prospectus, including resale to another broker or dealer; (c) a block trade in which the broker or dealer so engaged will attempt to sell the shares of Common Stock as agent but may position and resell a portion of the block as principal in order to facilitate the transaction; or (d) negotiated transactions between one or more Selling Shareholders and purchasers without a broker or dealer. In

connection with any sales, a Selling Shareholder and broker or dealer participating in such sales may be deemed "underwriters" within the meaning of the Securities Act.

Brokers or dealers selling under this Prospectus may receive discounts, commissions or concessions from a Selling Shareholder and/or purchasers of the Shares for whom such broker or dealers may act as agents, or to whom they may sell as principal, or both (which compensation as to a particular broker or dealer may be in excess of customary commissions). Any such discounts, commissions and concessions and any profits realized on the sale of Shares may be deemed to be underwriting compensation under the Securities Act. Certain of the Selling Shareholders may, under certain circumstances, be entitled to indemnification against liabilities under the Securities Act pursuant to agreements between them and the Company.

At such time as Rule 144 becomes available for the sale of such shares of Common Stock, such shares may be sold under Rule 144 instead of under this Prospectus, subject to compliance with the volume limitations, as well as the other requirements of Rule 144.

The Selling Shareholders have been advised by the Company that (i) they are subject to the prospectus delivery requirements under the Securities Act with respect to any sale of shares pursuant to this Prospectus; (ii) that, to the extent deemed "distributing" Common Stock, neither they nor any brokers or dealers acting for them nor any "affiliated purchasers" may bid for or purchase any Common Stock of the Company or attempt to induce any person to purchase any Common Stock in violation of Rule 10b-6 promulgated under the Exchange Act or (iii) they may not engage in any stabilization activity in connection with the Common Stock.

LEGAL MATTERS

The validity of the Common Stock offered hereby has been passed upon for the Company by Parker Chapin Flattau & Klimpl, LLP, New York, New York.

EXPERTS

The financial statements of the Company appearing in the Company's Annual Report (Form 10-K) for the year ended December 31, 1996, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon incorporated by reference therein and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

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No person has been authorized in connection with the offering made hereby to give any information or to make any representation not contained in this Prospectus or a supplement to this Prospectus, and, if given or made, such information or representation must not be relied upon as having been authorized by the Company, the Selling Shareholders or any other person. Neither this Prospectus nor any supplement to this Prospectus constitutes an offer to sell or a solicitation of an offer to buy, any securities other than the securities to which it relates or an offer to sell or the solicitation of an offer to buy such securities in any jurisdiction where, or to any person to whom it

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CELLULAR TECHNICAL
SERVICES COMPANY, INC.

400,000 Shares of
Common Stock

is unlawful to make such an offer or solicitation. Neither the delivery of this Prospectus nor any supplement to this Prospectus nor any sale made hereunder or thereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since the date hereof or thereof or that the information contained herein is correct as of any time subsequent to the dates as of which such information is furnished.

 PROSPECTUS

 TABLE OF CONTENTS
 Page

Available Information..... 2
 Information Incorporated by
 Reference..... 2
 The Company..... 3
 Special Note Regarding
 Forward-Looking Statements..... 4
 Risk Factors..... 5
 Description of Securities.....14
 Selling Shareholders.....16
 Plan of Distribution.....17
 Legal Matters.....17
 Experts.....17

, 1997

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PART II
 INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

All of the expenses listed below are estimated except for the SEC registration fee. The itemized statement below includes all expenses in connection with the distribution of the securities being registered, other than underwriting discounts and commissions:

Securities and Exchange Commission registration fee ...	\$ 2,068.18
Blue Sky fees and expenses	2,500.00
Printing and engraving expenses	2,500.00
Accounting fees and expenses	5,000.00
Legal fees and expenses	25,000.00
Miscellaneous expenses	931.82

TOTAL	\$ 38,000.00
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ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The Company is incorporated under the laws of the State of Delaware. Section 145 of the General Corporation Law of the State of Delaware ("Section 145") provides that a Delaware corporation may indemnify any persons who are, or are threatened to be made, parties to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as

a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his conduct was unlawful. A Delaware corporation may indemnify any persons who are, or are threatened to be made, a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person was a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests except that no indemnification is permitted without judicial approval if the director, officer, employee or agent is adjudged to be liable to the corporation. Where a director, officer, employee or agent is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses which he has actually and reasonably incurred.

The Company's certificate of incorporation provides for the indemnification of directors and officers of the Company to the fullest extent permitted by Section 145.

II-1

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Exhibits:

- 4.1 -- Specimen Certificate for Common Stock of Registrant(1)
- 4.2 -- Stock Purchase Agreement dated as of November 8, 1996, among the Company and the investors specified therein (2)

- 5.1 -- Opinion of Parker Chapin Flattau & Klimpl, LLP(3)
- 23.1 -- Consent of Ernst & Young LLP(4)

- 23.2 -- Consent of Parker Chapin Flattau & Klimpl, LLP (included in opinion filed as Exhibit 5.1)

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- (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 Quarterly Report on Form 10-Q filed on November 14, 1996, for the quarter ended September 30, 1996 (File No. 0-19437).
 - (3) Filed previously.
 - (4) Filed herewith..

ITEM 17. UNDERTAKINGS.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "Act") may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such

indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers of sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and

(iii) To include any material information with respect to the plan of distribution previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

II-2

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and

(3) to remove from the Registration Statement by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

II-3

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Amendment to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on the 8th day of April 1997.

CELLULAR TECHNICAL SERVICES COMPANY, INC.

By: /s/ Stephen Katz

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

Pursuant to the requirements of the Securities Act of 1933, this Amendment to the Registration Statement has been signed below by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Stephen Katz ----- Stephen Katz	Chairman of the Board of Directors and Chief Executive Officer	April 8, 1997
/s/ William C. Zollner ----- William C. Zollner	Director, President and Chief Operating Officer	April 8, 1997
* ----- Michael E. McConnell	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer) Director	April 8, 1997
* ----- Jay Goldberg	Director	April 8, 1997
* ----- Lawrence Schoenberg	Director	April 8, 1997

II-4

*By: /s/ Stephen Katz

Stephen Katz
Attorney-in-fact

II-5

EXHIBIT INDEX

4.1 -- Specimen Certificate for Common Stock of Registrant (1)
4.2 -- Stock Purchase Agreement dated as of November 8, 1996, among
the Company and the investors specified therein (2)
5.1 -- Opinion of Parker Chapin Flattau & Klimpl, LLP (3)
23.1 -- Consent of Ernst & Young LLP (4)
23.2 -- Consent of Parker Chapin Flattau & Klimpl, LLP (included in
opinion filed as Exhibit 5.1)

(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 Quarterly Report on Form 10-Q filed on November 14, 1996, for the quarter ended September 30, 1996 (File No. 0-19437).
- (3) Filed previously.
- (4) Filed herewith.

Consent of Independent Auditors

We consent to the reference to our firm under the caption "Experts" in Amendment No. 1 to the Registration Statement (Form S-3) and related Prospectus of Cellular Technical Services Company, Inc. for the registration of 400,000 shares of its common stock and to the incorporation by reference therein of our report dated March 5, 1997, with respect to the financial statements and schedules of Cellular Technical Services Company, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 1996, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

Seattle, Washington
April 7, 1997