ADVISORY REPORT

OFFICE OF THE INSPECTOR GENERAL

BILLINGS FOR CENTREX AUTOVON TERMINATIONS

Report Number 92-054

February 25, 1992

Department of Defense

The following acronyms are used in this report:

AFB.....Air Force Base
AT&T.....American Telephone and Telegraph Company
AUTOVON.....Automatic Voice Network
CENTREX.....Central Office Exchange Service
CSA.....Communications Service Authorization
DCA.....Defense Communications Agency
DCTN.....Defense Commercial Telecommunications Network
DISA.....Defense Information Systems Agency
DLA.....Defense Logistics Agency
USOC.....Universal Service Order Code

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MEMORANDUM FOR COMPTROLLER OF THE DEPARTMENT OF DEFENSE
DEPUTY ASSISTANT SECRETARY OF DEFENSE (COMMAND, CONTROL AND COMMUNICATIONS)
DIRECTOR, DEFENSE INFORMATION SYSTEMS AGENCY

SUBJECT: Advisory Report on Billings for CENTREX AUTOVON Terminations (Report No. 92-054)

This final advisory report summarizes the results of our audit of billings rendered by the Bell Operating Companies and AT&T and the resultant payments made by DoD telecommunications users for Automatic Voice Network terminations at Central Office Exchange Service installations and for special assembly charges. The audit was performed in segments from November 1990 through April 1991. Separate reports were issued on the conditions disclosed at the DoD Components identified in Appendix D.

The individual Component reports included recommendations to recover overpayments made to vendors, reduce communications budgets, and establish specific invoice verification controls. Implementation of the recommendations at the Component level will rectify the systemic weaknesses disclosed by the audit. Therefore, this advisory report contains no recommendations for corrective actions.

A draft of this report was issued on November 23, 1991. Because the report did not contain recommendations, comments were not required, and none were received.

If you have any questions regarding this advisory report or any of the Component reports, please contact Mr. John A. Gannon, Program Director, on (703) 693-0163 (DSN 223-0163). The cooperation and courtesies extended to the audit staff are appreciated. Copies of this advisory report will be sent to the activities listed in Appendix J.

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AUDIT REPORT NO. 92-054 February 25, 1992
(Project No. 9IC-0025)

ADVISORY REPORT ON THE BILLINGS FOR CENTREX AUTOVON TERMINATIONS

EXECUTIVE SUMMARY

Introduction. In January 1984, the divestiture of the American Telephone & Telegraph Company (AT&T) and its 22 Bell Operating Company subsidiaries occurred. Under the court-ordered Plan of Reorganization, the Bell Operating Companies became the provider of local service, while AT&T became the long-distance carrier and vendor for customer-premise service equipment.

DoD installations that do not own or lease an on-premise switch rely on the Bell Operating Companies to provide them with dial tone service, commonly referred to as Central Office Exchange Service (CENTREX). Bell Operating Companies charge DoD CENTREX installations monthly for Automatic Voice Network (AUTOVON) or Defense Commercial Telecommunications Network (DCTN) termination service for incoming or outgoing calls over the common-user Defense Switched Network. Special assemblies enhance the ordinary capabilities of existing equipment for DoD customers, and AT&T assesses monthly charges for this service.

The audit was performed in segments from January 1989 through April 1991. Separate reports, identified in Appendix D, were issued to the DoD Components.

Objectives. The objective of the audit was to determine whether the Bell Operating Companies and AT&T have properly billed DoD telecommunications users for CENTREX AUTOVON termination service and for special assembly charges in accordance with existing tariffs and agreements. We also evaluated the adequacy of applicable internal controls.

Results. The audit showed that communications managers at DoD CENTREX installations did not verify monthly telecommunications invoices before certifying them for payment and did not perform inventories of circuits and special assemblies. As a result, undetected overcharges in excess of $3.5 million, as of FY 1991, occurred relating to AUTOVON and DCTN termination service from Bell Operating Companies and AT&T and to special assemblies from AT&T. If DoD contracting officers are successful in negotiating credits for the overcharges identified in this report, reductions totaling over $6.8 million could be made to the DoD communications budget during execution of the FY 1991-FY 1995

Future Years Defense Program. Although this audit was limited to only two billing elements at the 22 DoD CENTREX installations, we believe that the weaknesses in bill-paying verification and certification procedures have potential applicability to other charges for telecommunication services and equipment throughout the Department. This report summarizes the results of the audit and advises management of the overall potential.

Internal Controls. In each of the Component reports, we identified internal control deficiencies as defined by Public Law 97-255, OMB Circular A-123, and DoD Directive 5010.38. Controls were not established to ensure compliance with inventory and bill-paying procedures. Further, the report on the Defense Telecommunications Service-Washington identified a material internal control weakness relating to bill-paying verification procedures.

Potential Benefits of Audit. In the five Component reports issued, we recommended that credits, with an aggregate total of $2,854,950, be recovered from telephone company vendors. The Components concurred in the monetary benefits, subject to negotiations between Defense contracting officers and the telephone company vendors.

Summary of Recommendations. We recommended the recovery of overpayments, reduction of the communications budget, maintenance of accurate service contracts and inventories, institution of procedural controls, and issuance of telecommunications guidance.

Summary of Management Comments and Audit Response. The Components agreed to pursue credits for overpayments from vendors, reduce communications budgets, maintain proper contractual documentation, establish internal control programs, implement provisions for disciplinary action, and where applicable, report a material internal control weakness. Management comments on each of the Component reports were responsive to the recommendations. Management comments on a draft of this advisory report were not required, and none were received.

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This report was prepared by the Readiness and Operational Support Directorate, Office of the Assistant Inspector General for Auditing, DoD. Copies of the report can be obtained from the Information Officer, Audit Planning and Technical Support Directorate (703) 693-0340.

BILLINGS FOR CENTREX AUTOVON TERMINATIONS

PART I - INTRODUCTION

Background

The Automatic Voice Network (AUTOVON) and the Defense Commercial Telecommunications Network (DCTN) are the long-distance voice (telecommunications) networks for the Department of Defense. Appendix A defines the communications terms intrinsic to this audit report. The two networks function as general purpose (common-user) backbone networks, and DoD subscribers pay user fees to the Defense Information Systems Agency (DISA) (formerly the Defense Communications Agency [DCA]) for the maintenance and operation of the networks. DISA is responsible for the design, acquisition, and management of both networks. However, camp, post, station, and base communications needs, such as AUTOVON and DCTN terminations and special assemblies, at DoD activities and installations are acquired and managed through a base communications office at DoD installations. Obtaining access to the AUTOVON and DCTN is a function of base communications.

Before deregulation and divestiture of the American Telephone and Telegraph Company (AT&T) and the Bell Operating Companies on January 1, 1984, AT&T primarily provided, maintained, and billed for local and long-distance telephone service and associated customer-premise equipment (leased equipment). With the advent of divestiture, AT&T and its 22 Bell Operating Company subsidiaries were divested of assets and services by Federal court decree in the Plan of Reorganization. Among other things, the Plan of Reorganization separated local service from long-distance service and established distinct telecommunications markets. AT&T became the provider of long-distance service, and the 22 Bell Operating Companies were allowed to provide local exchange services through their automated telecommunications system known as the Central Office Exchange Service (CENTREX). In addition, AT&T maintained ownership of and the right to charge for leased equipment and special assemblies. Appendix B contains additional information on the billing effects of divestiture within the DoD and on users of CENTREX.

After divestiture in 1984, DoD CENTREX installations received two monthly telecommunications bills, an AT&T bill and a local Bell Operating Company bill. Among the more significant billing items on the AT&T invoices were the charges for AUTOVON and DCTN terminations and special assemblies. An AUTOVON and a DCTN termination is a software function of CENTREX that provides a DoD CENTREX customer with connectivity from the local installation to the AUTOVON and DCTN network, respectively. However, AT&T should

not have charged for AUTOVON or DCTN termination service because that service was provided by the Bell Operating Companies, not AT&T. For the purposes of this report, we have termed such erroneous charges as overcharges. The local Bell Operating Companies file tariffs with state public utility commissions and are granted the exclusive right to provide DoD customers with AUTOVON and DCTN termination services. Bell Operating Company tariffs are filed as private line terminations and affect both the AUTOVON and the DCTN systems.

A special assembly is custom-made equipment leased from AT&T for the specific needs of a DoD customer. A special assembly can be added to existing equipment or circuits or can function as a separate equipment item. In all cases, special assemblies enhance the ordinary capabilities of existing equipment and have features that are essential to DoD customers.

Objective

The objective of the audit was to determine whether the Bell Operating Companies properly billed DoD telecommunications users for CENTREX AUTOVON termination service and for special assembly charges in accordance with existing tariffs and agreements. We also evaluated the adequacy of applicable internal controls.

Scope

The audit concentrated on AT&T and Bell Operating Company charges for AUTOVON and DCTN termination service and special assembly items at DoD CENTREX installations for the period January 1, 1984, through May 31, 1989.

AT&T provided us the official accounting records for the period January 1, 1984, through August 31, 1988. From these records, we determined that 22 installations were billed for charges associated with AUTOVON or DCTN termination service or special assemblies. We verified the charges with the records at the 22 installations included in the audit and found that 21 installations were being erroneously billed for either AUTOVON or DCTN termination service or special assemblies. We provided installation commanders with our results immediately upon completion of the verification work at each site. Further, to provide timely audit results, we sent memorandums to these commanders summarizing our findings, and we provided the same summaries to the applicable major commands and to the DCA. Details relating to our audit methodology are discussed in Appendix C.

This economy and efficiency audit was made from January 1989 through April 1991. The audit was made in accordance with

auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD, and accordingly, included such tests of internal controls as were considered necessary. A list of audited activities is provided in Appendix I.

Internal Controls

The Federal Managers' Financial Integrity Act of 1982 and the Office of Management and Budget Circular A-123 require each Federal agency to establish a program to identify significant internal control weaknesses. Further, the Army, Navy, Air Force, and Defense Logistics Agency issued additional guidance, which contains policies and procedures for implementing internal control programs.

For those installations included in our audit, we reviewed certification procedures relating to monthly communications bills for the period January 1, 1984, through May 31, 1989. An internal control objective for certification procedures should be designed to ensure that charges for services provided by communication vendors are accurate. The internal control weaknesses that existed at most of the DoD CENTREX locations resulted in ineffective certifications of monthly communications bills by DoD communications managers. Further, improperly certified invoices at the Defense Telecommunications Service-Washington constituted a material internal control weakness. The overcharges we identified could have been avoided if the Component communications managers had implemented procedures for maintaining official inventories of services and equipment and for subsequent reconciliation of monthly vendor bills.

Prior Audit Reports Issued

We issued reports that detailed specific issues related to the DoD Components we audited (see Appendix D). Inspector General Audit Report No. 90-005, "Requirements Validation For Telecommunications Services," dated October 16, 1989, stated that installation circuit inventories were often missing or inaccurate. The report recommended that DoD Components establish and accurately maintain at the user, communications command, or communications management levels, perpetual inventories of telecommunications circuits leased and owned by the Defense Communications Systems Organization. The Assistant Secretary of Defense (Command, Control, Communications and Intelligence) concurred with this recommendation and is implementing a DoD directive to accomplish the inventory objective. The results of the audit discussed in this advisory report reinforce the need to perform and maintain accurate inventories of telecommunications assets at the installation level.

PART II - RESULTS OF AUDIT

OVERCHARGES FOR AUTOVON AND DCTN TERMINATIONS AND SPECIAL ASSEMBLES

AT&T and five Bell Operating Companies incorrectly charged DoD Components at 21 CENTREX installations for AUTOVON and DCTN termination service and for special assemblies. The AT&T overcharges resulted from incorrect billings for AUTOVON and DCTN termination service and special assemblies. The Bell Operating Company overcharges occurred because of incorrect billings for the number of circuits associated with AUTOVON and DCTN termination service and from unauthorized tariff charges for AUTOVON and DCTN termination service. The overcharges were incurred continuously for more than 6 years because inventories of circuits and leased special assemblies were not performed, and because DoD communications managers did not verify telephone bills before certifying them for payment. As a result, DoD Components overpaid AT&T and the five Bell Operating Companies more than $3.5 million. Further, unnecessary AUTOVON and DCTN termination charges and special assembly charges could cost DoD Components about $3.6 million during FY 1991, and about $6.8 million during the execution of the FY 1991 through FY 1995 Five-Year Defense Program.

AUTOVON and DCTN Termination Service Overcharges

AT&T billings. At 15 of the 22 Defense CENTREX installations audited, AT&T overcharged for AUTOVON and DCTN termination service from March 1984 to May 1989. Overcharges occurred due to the erroneous transfer of billing codes from the Regional Bell Operating Companies to AT&T at the time of divestiture (described in detail in Appendix B). Although AUTOVON and DCTN termination service was provided by the local Bell Operating Companies, AT&T erroneously billed installations for periods up to 62 months. Further, although base communications managers were certifying monthly bills, they did not detect that AT&T was erroneously billing their installations for AUTOVON and DCTN terminations.

In 1986 and 1987, the AT&T billing discrepancies related to AUTOVON and DCTN termination service were identified at some installations. Partial credits were issued to various DoD CENTREX installations based on policies and procedures established by AT&T (see Appendix B). Amounts of AT&T overcharges and credits are shown in Appendix E.

Bell Operating Company billings. At 9 of the 22 CENTREX installations, various Bell Operating Companies overcharged for AUTOVON and DCTN termination service from July 1982 [1/] through May 1989. The overcharges occurred due to pricing disparities between AUTOVON and DCTN termination service; incorrect billings for the number of circuits associated with AUTOVON and DCTN termination service; and incorrect and unauthorized tariff charges for AUTOVON termination service. In addition, three Naval installations had not been billed for AUTOVON and DCTN termination service from 1984 to 1989. In each instance, the local Bell Operating Company agreed to charge the installations prospectively, from 1989 forward, for AUTOVON and DCTN termination service. Finally, at the Defense Telecommunications Service-Washington (DTS-W), Bell Operating Company undercharges also occurred, creating a potential liability of $571,000. The Bell Operating Company overcharges of $1,243,238 are shown in Appendix F.

AT&T Special Assembly Overcharges

AT&T overcharged 19 installations for special assemblies that could not be identified or located by communications managers. Accordingly, we expanded the scope of the audit to include those specific overcharges beginning with the date of initial overcharging, July 26, 1982. Many of the special assemblies were installed by AT&T several years before divestiture, were removed by AT&T as assemblies became obsolete, and were replaced with state-of-the-art equipment available to all AT&T customers. AT&T did not maintain records documenting the removal of special assemblies; yet, AT&T continued to bill these installations for special assemblies that could not be located. Details on AT&T special assembly overcharges of $963,820 are in Appendix G.

Systemic Bill-paying Verification Procedures

Inventory procedures. Inadequate inventory and payment certification procedures existed at all of the installations audited. Erroneous charges by AT&T and the Bell Operating Companies went undetected, in some instances for more than 7 years, primarily because communications managers did not properly certify invoices before payment. As a result of improper certification procedures, the Government's monetary interests were left unprotected at all levels of the base communications management structure. Communications managers did

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[1/] We found Bell of Pennsylvania Telephone Company overcharges that occurred from July 1982 through July 1984 at the Aviation Supply Office, the Ships Parts Control Center, and the Defense Personnel Support Center.

not identify erroneous monthly charges and continually certified incorrect invoices for payment. Guidelines covering inventory management and payment certification had been issued within the Army, Navy, and Air Force but, for the most part, had been ignored.

The overcharges occurred because inventory procedures were either lax or nonexistent. For example, an inventory of special assemblies was performed only at the Western Division-Naval Facilities Engineering Command. We found the absence of special assembly inventories in the Navy to be a serious condition, in light of the guidance issued by the Chief of Naval Operations and in the Navy Telephone Manual.

Inventory management in the Army and Air Force fared no better. At one Army installation, AT&T billed for 231 special assembly units at a total monthly cost of $2,785. Yet, an inventory of special assembly items was not made. A descriptive guide detailing inventory procedures contained in the 7th Signal Command Pamphlet 105-1 was not used as a source of reference at the Army installations we audited. In addition, three of the four Air Force installations we audited had not complied with the annual inventory provision of Air Force Regulation 700-8. Had Air Force communications managers accounted for and classified installation circuits, they could have assessed the accuracy of the number of AUTOVON and DCTN termination charges by the local Bell Operating Company and avoided the incurrence of overcharges.

The Assistant Secretary of Defense (Command, Control, Communications and Intelligence) has issued a DoD directive that requires the Military Departments and Defense agencies to conduct a 100-percent physical inventory of all leased base and long-haul telecommunications services at least every 2 years. We made inventory management recommendations in each of the five reports that parallel the intent of the inventory provision contained in the DoD directive.

Once inventory baselines are established, the basis for perpetual inventory maintenance will be accomplished. By updating changes (additions and deletions) in a timely manner, the base communications manager establishes an inclusive and current list of the telecommunications services provided by the vendors. Moreover, a current inventory becomes a vital source of reference for the base communications manager during the payment certification process of monthly bills. However, the installations included in our audit did not properly certify the accuracy of monthly Bell Operating Company and AT&T charges. At the DTS-W, over $4.9 million in payments were certified without confirmation that the charges were appropriate.

Maintaining Communications Service Authorizations (CSAs). Inaccurate and nonexistent CSAs were also a cause for faulty certification procedures. Along with the Basic Agreement, the CSA comprises the required communications contract between an installation and a telephone company vendor. However, only 2 of the 22 installations audited maintained a current CSA that accurately itemized the monthly services. Further, the Air Force was the only Military Department that had a definitive policy on centralization and subsequent approval of CSAs. The Navy had no requirement to provide CSAs to a centralized office, and the Army had not specified an action office responsible for the issuance of CSAs. We viewed this absence of policy as an indication that management oversight concerning bill-paying verification procedures needed to be emphasized.

A compendium of our audit results at the Component level is presented in Appendix H. We continue to believe that lack of management oversight remains a crucial, if not primary ingredient that will prevent the occurrence of erroneous payments and the continued use of inadequate verification procedures.

Summary of Recommendations and Management Comments

Recovering overpayments. In each of the five reports, we recommended that overpayments be recovered from vendors for AUTOVON and DCTN termination service and special assemblies by obtaining credits totaling $2,854,950. This total is subject to negotiations between Defense contracting officers and the telephone company vendors. Each of the five Components concurred.

Reducing communications budget requirements. Each of the five reports contained recommendations to reduce FY 1991 communications requirements and communications budgets for the FY 1991 through FY 1995 Five-Year Defense Program, subject to the negotiations between Defense contracting officers and telephone company vendors. The FY 1991 reductions total $3,593,171, and the FY 1991 through FY 1995 reductions total $6,818,830. Each of the five Components concurred in the recommendation to reduce communications budget requirements.

Maintaining proper CSAs. In four of the five reports, we recommended that accurate and current CSAs and other supporting documentation be maintained to complete proper certification of monthly invoices. The Navy report did not contain a recommendation to maintain CSAs since the Navy Telephone Manual has a provision covering CSAs. Each of the four Components concurred in the recommendation to maintain accurate CSAs.

Establishing internal control programs. Each of the five reports contained a recommendation for oversight of bill-paying procedures. We recommended that a program be established to annually test the accuracy of base communications bill-paying procedures by reconciling inventories to CSAs and certified bills. Each Component concurred in the recommendation to provide oversight and to implement a specific internal control program for bill-paying verification procedures.

Implementing provisions for disciplinary action. The five reports contained a recommendation for disciplinary action against communications managers who fail to certify bills properly and use inadequate bill-paying verification procedures. Each Component concurred in the recommendation.

Other recommendations. We recommended that management at the DTS-W report the lack of an internal management control program for bill-paying verification procedures as a material internal control weakness, and management concurred. We recommended that the Defense Logistics Agency (DLA) publish the Telecommunications Management Manual in final form; DLA concurred.

Conclusion

The telecommunications overcharges experienced by the communications managers at CENTREX installations can be attributed, in part, to the confusion resulting from divestiture and deregulation of AT&T in January 1984. Communications managers were unclear on the role that telephone company vendors assumed immediately after divestiture, which may explain why communications managers initially certified erroneous bills. However, as the roles of AT&T and the Bell Operating Companies became better defined, communications managers should have familiarized themselves with the types of service and authorized charges of each vendor. Yet, for more than 5 years after divestiture, AT&T and the Bell Operating Companies continued to submit invoices with erroneous charges for AUTOVON and DCTN terminations and special assemblies, and communications managers at CENTREX installations continued to certify the bills without detecting the errors.

Our audit focused on only two billing elements, (terminations and special assemblies) at only 22 DoD installations. Yet, we believe that improper bill-paying procedures relating to base commercial communications may be a problem throughout the DoD community and not be limited to just CENTREX installations. With the publication of DoD Directive 4640.13, "Management of Base Long-haul Telecommunications, Equipment, and Services," December 5, 1991, it is evident that the OSD shares our

concern. There are instructions in the Directive that parallel our recommendation to the Components regarding the verification of the monthly telecommunications bills against CSAs and inventories. Properly executed, this process will greatly reduce the risk of improperly certifying payment for telecommunications services and equipment. The concern and timely interest of OSD in this matter and the elevation of these issues to senior management DoD-wide is commendable. Vigilance and periodic monitoring of the base communications bill-paying process by the OSD is necessary in order to eliminate the likelihood of future improper telecommunications payments.

Part III - ADDITIONAL INFORMATION

APPENDIX A - Glossary

APPENDIX B - Billing Effects of Divestiture

APPENDIX C - Audit Methodology

APPENDIX D - Audit Reports Issued on Billings for CENTREX AUTOVON Terminations

APPENDIX E - AT&T AUTOVON and DCTN Termination Overcharges and Credits

APPENDIX F - Summary of Bell Operating Company Overcharges

APPENDIX G - AT&T Special Assembly Overcharges

APPENDIX H - Compendium of Audit Results

APPENDIX I - Audited Activities

APPENDIX J - Report Distribution

APPENDIX A: GLOSSARY

AUTOVON	The Automatic Voice Network is part of the Defense Communications System's long-distance telecommunication service.
AUTOVON Access Lines	Provides DoD subscribers access to the AUTOVON network via line connections from the Central Office Exchange System to the AUTOVON switch.
Backbone Costs	Costs associated with AUTOVON and DCTN, incurred for the lease of switches and interconnecting circuits, operation and maintenance of switching centers, and administrative expenses.
Base Communications	The local area telecommunications needs of DoD installations.
Bell Operating Companies	The 22 independent Bell telephone companies that provide local telecommunications needs to a defined geographic area.
Central Office Exchange Service (CENTREX)	A highly automated telecommunications center where the Bell Operating Companies terminate customer lines and house the equipment that interconnects these lines. The CENTREX provides DoD installations with access to long-distance networks (such as AUTOVON and DCTN) from local bases.
Communications Service Authorizations (CSA)	Telecommunications service contracts placed by DoD installations against Basic Agreements established with various vendors.
Defense Commercial Telecommunications Network (DCTN)	A part of the Defense Communications System's long-distance telecommunications service that was designed to alleviate AUTOVON traffic burdens.

APPENDIX A: GLOSSARY (Continued)

Plan of Reorganization	The Federal court document that outlines the divestiture agreement between AT&T and the Bell Operating Companies.
Precedent-AUTOVON Termination	A prioritized AUTOVON call that can preempt all other AUTOVON calls.
Private Branch Exchange	Customer-owned or leased switching equipment that is located on DoD installations.
Private Line Terminations (AUTOVON or DCTN terminations)	A physical switching mechanism that allows DoD CENTREX subscribers to connect local area telecommunications with the AUTOVON or DCTN. Termination charges are controlled by state public utility commissions as a result of tariffs filed by the Bell Operating Companies.
Regional Bell Operating Companies	Seven Bell holding companies that are parent corporations to the 22 local Bell Operating Companies (for example, the Pacific Bell Telephone Company is controlled by Pacific Telesis).
Routine-AUTOVON Terminations	An AUTOVON call that has no preemptive capability.
Special Assembly	Equipment that is added to either existing equipment or existing voice (telecommunications) lines. Special assemblies enhance the ordinary capabilities of equipment or lines and are designed for the specific needs of a DoD user.
Tariff	A schedule of authorized charges or rates of the Bell Operating Companies approved by a state public utility commission.
Universal Service Order Code	An alpha-numeric designation that classifies or identifies telecommunications services appearing on the monthly Bell Operating Company bill.

APPENDIX B: BILLING EFFECTS OF DIVESTITURE

Overview. Most DoD installations either own or lease an on-premise switch, a Private Branch Exchange, which provides the user with dial tone service, control of telephone routing, and options for telephone features. Some installations neither own nor lease a switch and subsequently rely on a local exchange carrier (usually a Bell Operating Company) for their switch services. The Bell Operating Companies provide switch services and other features to users through a Central Office. A Central Office is a highly automated telecommunications center where the Bell Operating Companies terminate customer lines and house the equipment that connects those lines. Users who are serviced by a Central Office refer to its service as Central Office Exchange Service, or CENTREX. As part of the divestiture agreement, the Bell Operating Companies retained their Central Office operations and the right to provide all services associated with CENTREX.

The divestiture redistribution and assignment of telecommunications services between AT&T and the Bell Operating Companies occurred in early 1984. The actual assignment of services was accomplished through a transfer of billing codes from the Regional Bell Operating Companies to AT&T. The Plan of Reorganization allowed AT&T the ability to provide special assemblies and customer-premise (leased) equipment, while the Bell Operating Companies were allowed to provide AUTOVON termination service.

Special assemblies and AUTOVON and DCTN terminations. Most special assemblies were installed before divestiture and are billed at unit prices established at the time of installation. Before divestiture, special assemblies were owned by the local Bell Operating Company, which was corporately synonymous with AT&T. After divestiture in 1984, AT&T assumed ownership of and the right to bill customers for special assemblies. Although the detailed inventory records identifying the location of each special assembly and, therefore, the basis for the charges, were transferred by the Regional Bell Operating Companies to AT&T, AT&T cannot locate the inventory records. Accordingly, both AT&T management and Bell Operating Company management consider the records to be lost. All DoD installations and activities that subscribe to AUTOVON and DCTN service pay a backbone fee to the DISA (formerly the DCA) for the service. However, the CENTREX users must pay an additional charge to the servicing Bell Operating Company, because CENTREX provides the additional termination service of routing incoming and outgoing AUTOVON and DCTN calls from the Central Office to the DoD installation.

AUTOVON and DCTN calls terminate through a CENTREX software mechanism. The monthly charge for AUTOVON and DCTN termination

service is controlled in most states through Bell Operating Company tariffs filed at the appropriate state public utility commissions and is directly proportional to the number of AUTOVON or DCTN access lines located at an installation. Tariffs for AUTOVON termination service are filed as a private line termination and are usually distinguished in price as a Routine-AUTOVON or a Precedent-AUTOVON termination. A Routine-AUTOVON call has no preemptive capability, while a Precedent-AUTOVON call is prioritized and can preempt all other AUTOVON calls. Tariffs that specifically identify DCTN terminations have not been filed by Bell Operating Companies. However, Routine-AUTOVON terminations and DCTN terminations are functionally identical.

Divestiture Billing Codes Transfer. Telecommunications services are classified by an alpha-numeric billing code known as a Universal Service Order code (USOC). The USOC associated with special assembly charges is E99ZPYZZ++. In compliance with the Federal court-ordered divestiture decree, all USOCs with this exact 10-character designation were transferred from the Bell Operating Companies to AT&T. The transfer of the special assembly USOCs was handled by the Regional Bell Operating Companies, the holding companies for the Bell Operating Companies. However, due to an apparent programming oversight, all other USOCs beginning with the first 3-character designation E99, were inadvertently transferred by the Regional Bell Operating Companies to AT&T. Prominent among this transfer were the numerous E99 billing codes associated with AUTOVON termination service. Accordingly, through this erroneous USOC transfer, the Bell Operating Companies allowed AT&T to bill for AUTOVON termination service, although they provided the service. The Bell Operating Company USOCs beginning with E99 and associated with AUTOVON termination charges that were erroneously transferred were: BFBK1, BFBK9, BFDKB, BFDKC, BFDKG, BFDKQ, BFDKR, BFDKU, and BFDKW.

Discovery of AT&T Billing Errors. In 1986 and 1987, the AT&T billing discrepancy relating to AUTOVON terminations was identified. The errors were detected by various Bell Operating Company marketing representatives who discovered that their respective companies were not billing DoD CENTREX installations for the AUTOVON termination service. Bell marketing representatives notified the various regional AT&T Federal Business Centers (billing offices) of the errors. In concert with the Bell Operating Companies, AT&T agreed that DoD installations that were assessed AUTOVON and DCTN termination charges after April 15, 1985, would be eligible for a credit equal to the amount overcharged by AT&T. (No effort was made to compensate installations for charges assessed for unidentifiable

special assemblies.) The period immediately before April 15, 1985, and extending back to January 1, 1984, was viewed as a "wash" by AT&T and the Bell Operating Companies; that is, AT&T absolved itself from issuing credits for erroneous AUTOVON termination charges from January 1, 1984, through April 15, 1985. This internally devised policy was done with the concurrence of all 22 local Bell Operating Companies. In turn, the Bell Operating Companies agreed that they would not seek remuneration for AUTOVON termination service provided to DoD installations from January 1, 1984, to April 15, 1985. They did, however, retroactively bill DoD installations from the time the errors were detected in either 1986 or 1987, back to April 15, 1985.

The April 15, 1985, benchmark is regarded by AT&T and the Bell Operating Companies as the end of the "true-up" period, as provided by the Plan of Reorganization. Generally, the Federal court allowed the divested parties a grace period of 1 year as a "discovery of record errors and of mistaken assignments."[1/] AT&T interpreted the Plan of Reorganization as allowing AT&T to retain revenue accrued from the erroneous AUTOVON termination charges from January 1, 1984, through April 15, 1985, and that AT&T could not be held liable for erroneous billing actions during that period. We considered AT&T's interpretation and subsequently discussed the matter with lawyers of the Antitrust Division, Department of Justice. The Antitrust Division handled the Government's interest during the court-ordered deregulation of AT&T. The Antitrust Division's legal staff did not agree with AT&T's interpretation, mainly asserting that the "true-up" period did not relieve AT&T of incurred liability. The Department of Justice took the position that all AT&T overcharges assessed against DoD CENTREX installations from January 1, 1984, forward must be credited to the affected installations.

Finally, in a breach of its policy (refusing to provide credits for overcharges incurred before April 15, 1985), AT&T provided a credit to a U.S. Naval installation for overcharges relating to AUTOVON termination service incurred in late 1984. It appeared to the auditors that a precedent was created that would justify future credit requests for overcharges incurred by all DoD installations from January 1, 1984, through April 15, 1985.

[1/] Plan of Reorganization, Civil Action No. 82-0192, United States District Court for the District of Columbia.

APPENDIX C: AUDIT METHODOLOGY

Our audit approach in determining the accuracy of charges for AUTOVON and DCTN termination service and special assembly items is discussed below.

CENTREX universe. We identified the CENTREX universe from network schematics in the AT&T Routing Guide, dated December 15, 1987. The guide showed that 44 DoD installations were serviced by CENTREX. To determine if these installations had been erroneously charged for AUTOVON termination service or for special assemblies, we requested AT&T to provide official company accounting records for the period January 1, 1984, through August 31, 1988. The records indicated that 22 installations were being billed for charges associated with AUTOVON termination service and special assemblies. However, after a site visit by our office, we determined that one naval installation was not erroneously charged for AUTOVON termination service or special assemblies.

Evaluation of charges. All instances of potential AT&T overcharges were verified to billing information available at the 22 DoD installations included in our audit. We examined available AT&T invoices, Bell Operating Company invoices, CSAs, work orders, and Basic Agreements to determine the validity and appropriateness of charges. We reviewed internal controls over communications bill-paying procedures at each installation, as well as specific, internal control policies relating to payment of vendor invoices. We inventoried special assembly items at all installations. To reconcile the number of AUTOVON and DCTN terminations listed on monthly invoices, we visited the local Bell Operating Company Central Office that serviced each of the installations. Additionally, we visited state public utility commission offices to verify that termination charges billed agreed with the amounts allowed (tariffs) to be charged for such services. We also met with Bell Operating Company officials to discuss issues relevant to the audit. We met with DCA (now DISA) officials periodically throughout the audit to obtain official DoD telecommunications guidance. Through the cooperation of these officials, we were provided with DCA certified circuit inventory data that were valuable to our audit. We provided installation commanders with our results immediately upon completion of the field work at each site. Further, to provide timely audit results, we sent memorandums to the commanders of the installations audited. We also provided the same summaries to the appropriate higher Service commands and to DCA. We discussed the details of our results and recommendations with senior officials of the Office of the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) and

with the Director, Defense Communications System Organization, DCA. In our correspondence and meetings, we explained the basis for our conclusions and stressed the need to take corrective action to: eliminate erroneous charges, initiate collection action against AT&T and the Bell Operating Companies for prior overpayments, conduct baseline inventories of telecommunications assets, and improve internal controls over bill-paying procedures.

APPENDIX D: AUDIT REPORTS ISSUED ON BILLINGS FOR CENTREX AUTOVON TERMINATIONS

Title	Report No.	Date
Billings for CENTREX AUTOVON Terminations in the Department of the Army	91-011	November 9, 1990
Billings for CENTREX AUTOVON Terminations in the Department of the Air Force	91-023	December 28, 1990
Billings for CENTREX AUTOVON Terminations in the Defense Logistics Agency	91-028	December 31, 1990
Billings for CENTREX AUTOVON Terminations in the Department of the Navy	91-043	February 6, 1991
Billings for CENTREX AUTOVON Terminations at the Defense Telecommunications Service-Washington	91-072	April 26, 1991

APPENDIX E: AT&T AUTOVON AND DCTN TERMINATION OVERCHARGES AND CREDITS

Installation	Overcharges	Outstanding Credits	Overcharges
Army			
Defense Telecommunications Service-Washington	$ 223,523	$121,166	$102,357
Navy			
Aviation Supply Office	150,972	114,155	36,817
Ships Parts Control Center	248,222	227,436	20,786
Public Works Center-Norfolk	84,307	51,786	32,521
Naval Amphibious Base-Little Creek	15,629		15,629
Norfolk Naval Shipyard	18,995		18,995
Naval Station - New York	34,911		34,911
Western Division Naval Facilities Engineering Command	21,953		21,953
Naval Postgraduate School	21,325		21,325
Marine Corps Air Station-El Toro	3,761		3,761
Air Force			
McClellan AFB*	213,827	53,931	159,896
Los Angeles AFB	81,998		81,998
Onizuka AFB	22,981		22,981
Air Force Academy	17,966		17,966
Defense Logistics Agency			
Defense Personnel Support Center	184,010	128,014	55,996
Totals	$1,344,380	$696,488	$647,892

*Air Force Base

APPENDIX F: SUMMARY OF BELL OPERATING COMPANY OVERCHARGES

Installation	Vendor	Outstanding Overcharges
Army		
Defense Telecommunications Service - Washington	C&P of DC [1]	$ 772,881
Defense Telecommunications Service - Washington	C&P of MD [2]	116,604
Navy		
Aviation Supply Office	Bell of PA [3]	33,264
Ships Parts Control Center	Bell of PA	96,281
Naval Amphibious Base-Little Creek	C&P of VA [4]	17,869
Norfolk Naval Shipyard	C&P of VA	31,035
Air Force		
McClellan Air Force Base	Pacific Bell	4,193
Los Angeles Air Force Base	Pacific Bell	81,186
Onizuka Air Force Base	Pacific Bell	16,247
Defense Logistics Agency		
Defense Personnel Support Center	Bell of PA	73,678
Total		$1,243,238

[1] Chesapeake and Potomac Telephone Company of the District of Columbia.
[2] Chesapeake and Potomac Telephone Company of Maryland.
[3] Bell Telephone Company of Pennsylvania.
[4] Chesapeake and Potomac Telephone Company of Virginia.

APPENDIX G: AT&T SPECIAL ASSEMBLY OVERCHARGES

Installation	Period of Overcharge	Outstanding Overcharges
Army		
Tank-Automotive Command	Sept. 1984 to Feb. 1989	$160,699
Defense Metropolitan Area Telecommunications Service - St. Louis	Oct. 1984 to Jan. 1989	7,806
Fort Carson	May 1984 to Jan. 1989	11,325
Defense Telecommunications Service - Washington	Apr. 1985 to Apr. 1989	395,036
Navy		
Aviation Supply Office	Aug. 1984 to Aug. 1988	79,664
Naval Station - New York	Dec. 1984 to Dec. 1988	888
Ships Parts Control Center	July 1984 to Dec. 1988	100,482
Public Works Center - Norfolk	Apr. 1985 to Dec. 1988	16,099
Naval Amphibious Base-Little Creek	Apr. 1985 to Aug. 1988	7,049
Norfolk Naval Shipyard	Apr. 1985 to Feb. 1988	22,047
Naval Postgraduate School	Mar. 1984 to May 1989	7,153
Marine Corps Air Station - El Toro	Apr. 1984 to Dec. 1986	209
Puget Sound Naval Shipyard	May 1984 to May 1989	55,778
Air Force		
McClellan Air Force Base	Apr. 1984 to May 1989	68,670
United States Air Force Academy	Apr. 1984 to May 1989	2,717
Los Angeles Air Force Base	Apr. 1984 to May 1989	2,199
Defense Logistics Agency		
Defense Personnel Support Center	July 1984 to Dec. 1988	15,206
Defense Contract Administration Management Area - Grand Rapids	Aug. 1985 to May 1987	3,476
Defense Contract Administration Management Area - Detroit	Aug. 1985 to June 1987	7,317
Total		$963,820

APPENDIX H: COMPENDIUM OF AUDIT RESULTS

Finding	Army	Navy	Air Force	DLA	DTS-W	Total
Overcharges by AT&T:	$180,000	$ 892,000	$410,000	$210,000	$ 619,000	$2,311,000
- Special Assemblies	Y	Y	Y	Y	Y	
- AUTOVON/DCTN Terminations	N	Y	Y	Y	Y	
Inventories Performed	N	N	N	N	N	
Proper Certifications Made	N	N	N	N	N	
Bell Operating Company Overcharges	N	178,000	102,000	74,000	890,000	1,244,000
Material Internal Control Weakness	N	N	N	N	Y	
						$3,555,000
Recommendations						
Request Credits from Vendors	Y	Y	Y	Y	Y	
Issues Proper CSA's	Y	N	Y	Y	Y	
Establish Procedures for Disciplinary Action	Y	Y	Y	Y	Y	
Issue Telecommunications Guidance	Y	N	Y	Y	Y	
Annual Oversight Program to Reconcile Inventories with the Certified Bills	Y	Y	Y	Y	Y	
Budget Reductions (subject to negotiations with vendors)						
FY 1991	$221,000	$ 767,000	$527,000	$160,000	$1,918,000	$3,593,000
FY 1991-1995	$403,000	$1,172,000	$828,000	$178,000	$4,237,000	$6,818,000

NOTE: Y = Yes
N = No
Computations are rounded to the nearest thousand.

APPENDIX I: AUDITED ACTIVITIES

We visited 22 Defense Central Office Exchange Service bases from January through December 1989.

Installation	Audit Conducted
Army	
Tank-Automotive Command	March 1989
Fort Carson	February-March 1989
Defense Metropolitan Area Telecommunications Service - St. Louis	February 1989
Defense Telecommunications Service - Washington	April-December 1989
Navy	
Aviation Supply Office	January 1989
Ships Parts Control Center	January 1989
Public Works Center - Norfolk	January 1989
Naval Amphibious Base - Little Creek	January 1989
Norfolk Naval Shipyard	January 1989
Naval Station and Naval Base - Charleston	March 1989
Naval Station - New York	February 1989
Western Division Naval Facilities Engineering Command	June 1989
Puget Sound Naval Shipyard	April 1989
Naval Postgraduate School	June 1989
Marine Corps Air Station- El Toro	June 1989
Air Force	
McClellan Air Force Base	June 1989
Los Angeles Air Force Base	June 1989
Onizuka Air Force Base	June 1989
U.S. Air Force Academy	February 1989
Defense Logistics Agency	
Defense Personnel Support Center	January 1989
Defense Contract Administration Services Management Area - Detroit	May 1989
Defense Contract Administration Services Management Area - Grand Rapids	May 1989

APPENDIX J: REPORT DISTRIBUTION

Department of Defense
Comptroller of the Department of Defense
Deputy Assistant Secretary of Defense (Command, Control and Communications)
Director, Washington Headquarters Services

Department of the Army
Assistant Secretary of the Army (Financial Management)
Auditor General, U.S. Army Audit Agency

Department of the Navy
Assistant Secretary of the Navy (Financial Management)
Auditor General, Naval Audit Service

Department of the Air Force
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Air Force Audit Agency

Defense Agencies
Director, Defense Advanced Research Projects Agency
Director, Defense Information Systems Agency
Director, Defense Intelligence Agency
Director, Defense Logistics Agency
Director, Defense Mapping Agency
Director, National Security Agency/Chief Central Security Service
Director, Defense Nuclear Agency
Director, Defense Telecommunications Service-Washington

Non-DoD Activities

Office of Management and Budget
U.S. General Accounting Office
NSIAD Technical Information Center

Congressional Committees:

Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Subcommittee on Communications, Committee on Commerce, Science, and Transportation
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Subcommittee on Telecommunications and Finance, Committee on Energy and Commerce
House Committee on Government Operations
House Subcommittee on Legislation and National Security, Committee on Government Operations

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