CT-95/02

THE COMPETITION TRIBUNAL

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REGISTRAR - REGISTRAIRE OTTAWA, ONT. #26			

IN THE MATTER OF an Application by the Director of Investigation and Research under sections 79 and 105 of the *Competition Act*, R.S.C. 1985, c. C-34 as amended;

AND IN THE MATTER OF an abuse of dominant position in the supply of shared electronic network services for consumer-initiated shared electronic financial services.

BETWEEN:

THE DIRECTOR OF INVESTIGATION AND RESEARCH

Applicant

- and-

BANK OF MONTREAL, THE BANK OF NOVA SCOTIA,
CANADA TRUSTCO MORTGAGE COMPANY,
CANADIAN IMPERIAL BANK OF COMMERCE, LA
CONFEDERATION DES CAISSES POPULAIRES ET
D'ECONOMIE DESJARDINS DU QUEBEC, CREDIT
UNION CENTRAL OF CANADA, NATIONAL BANK OF
CANADA, ROYAL BANK OF CANADA, THE TORONTODOMINION BANK and INTERAC INC.

Respondents

-and-

TELPAY, A Division of CTI-Comtel Inc.
RETAIL COUNCIL OF CANADA
CANADIAN LIFE AND HEALTH INSURANCE ASSOCIATION
MIDLAND WALWYN CAPITAL INC.
RICHARDSON GREENSHIELDS OF CANADA LIMITED,
MACKENZIE FINANCIAL CORPORATION
and TRIMARK INVESTMENT MANAGEMENT INC.

COMPETITION INTERNAL TRIBUNAL DE LA CONCURRENCE

AFFIDAVIT OF LIAM J. CARMODY

Exhibit No.

No. de la pièce.

Filed on Déposée le

Registrar Greffier

Doc #: 25421.1

AFFIDAVIT OF LIAM J. CARMODY

I, LIAM JOSEPH CARMODY, of Ridgewood, New Jersey, U.S.A., **MAKE**OATH AND STATE AS FOLLOWS:

I. INTRODUCTION

- 1. I have been retained by the Director of Investigation and Research to provide expert industry evidence in respect to the Application filed by the Director with respect to Interac.
- 2. I am president of Carmody & Bloom Inc., a management consulting firm based in Ridgewood, N.J. specializing in electronic payments and consumer banking. A copy of my resume is attached as Exhibit "A" to this affidavit.
- 3. I have been involved in electronic payments and consumer banking for 27 years and have been a consultant for 16 of those years. As a consultant, I have assisted brokerage and other investment firms in the development and operation of several financial products and services including those that incorporate payment services.
- 4. I have assisted several Canadian banks in the retail banking and payments areas.
- I have assisted banks and bank consortiums in the U.S. in designing, organizing and implementing shared electronic networks including NYCE in New York and New England, Cash Station in Chicago and NEAR in Louisiana. For two years, I served as interim President of the NYCE network. I have also worked with national EFT networks including PLUS, Cirrus and Interlink.

- I have been active in the industry as a founder of the Electronic Funds Transfer Association and as an author of numerous published articles. I am a frequent speaker at industry conferences. I am frequently quoted in both the general press Wall Street Journal, CBS radio, CNBC, New York Times, USA Today, Business Week, Time Magazine, etc. as well as the industry press.
- 7. I have been asked by the Director to express my expert views on the functioning of brokerage firm debit cards in the United States and its implications for the Draft Consent Order ("DCO").
- 8. My affidavit is organized into the following three sections:
 - (a) Industry Environment;
 - (b) Brokerage/Transaction Products and Flows; and
 - (c) Processing Services Pricing.

II. INDUSTRY ENVIRONMENT

U.S. Non-Bank Experience With Off-Line Debit Cards

- 9. In the U.S. banks have made off-line debit card services available to non-banks since the late 1970s in conjunction with checking services. The use of these services is relatively widespread primarily in the brokerage industry. The brokerage/bank arrangement appears to operate smoothly and at relatively low costs to the brokerage firms.
- 10. Asset management accounts were first introduced in 1977 by Merrill Lynch the then largest brokerage firm in the U.S. The account integrated brokerage services

(trading account, margin account and money market account) with banking services (checking and debit cards) into a single customer brokerage relationship. The banking services were provided by Banc One of Columbus, Ohio.

- 11. The accounts proved popular with consumers. Merrill Lynch added over half a million new brokerage accounts within five years after introduction. Today over forty brokerage firms offer asset management accounts to approximately two million consumer investors.
- The appeal to consumers of the asset management account centers on two features, sweeps and transaction access. The sweep feature automatically transfers interest and dividends from securities and the proceeds of the sale of securities into an interest bearing money market fund. Prior to this, the brokerage firm would either mail a check to the customer or deposit the funds in a non-interest bearing cash account. Transaction access allows brokerage customers flexible and convenient access (by check or debit card) not only to the funds in the money market fund but also to marginable securities.
- 13. Brokerage firms arranged with banks to issue Visa or MasterCard debit cards to the brokerage firm's customer. In practice, these cards function identically to Visa or MasterCard debit cards issued by banks to their own customers.
- 14. Off-line debit cards are acceptable at Visa or MasterCard merchants and ABMs worldwide. Transactions clear through the Visa and MasterCard settlement system like credit card transactions but when they are received by the brokerage firm they are debited to the customers' money market accounts. Brokerage firms use Visa and MasterCard debit cards for the simple reason that when the asset management accounts were introduced in the late 1970s and early 1980s, regional and national EFT networks

were in their infancy. Moreover, regional EFT coverage would be inadequate for brokerage firms with national customer bases. The Cirrus and Plus networks did not provide broad ABM coverage until the late 1980s. Regional and national POS did not emerge until early 1990s. By then Visa and MasterCard were firmly established as the debit card products of the brokerage firms. Typically the brokerage Visa and MasterCard debit cards are cobranded with Plus and Cirrus. Ironically, Visa and MasterCard debit cards are becoming increasingly popular with U.S. banks as replacements for their ABM cards.

Despite the availability of transactional services, the great majority of brokerage customers view their asset management accounts as investment accounts with flexible access rather than as demand accounts for the payment of routine bills and charges. This is also how these accounts are positioned by the brokerage firms themselves.

Who Uses Off-Line Debit Cards

- 16. The popularity of check and debit card access to asset management accounts prompted expansion of its availability to other brokerage services, such as money market funds and mutual funds. Other non-bank organizations have not attempted to provide such transaction access services primarily because of a lack of need.
- 17. Money market funds trade in highly liquid bank instruments. There are more than 1,000 money market funds in the U.S. In addition to check access, most (about 90%) offer off-line debit card access through Visa or MasterCard.
- 18. There are more than 5,300 mutual funds in the U.S. Debit card access is not provided on these accounts except in rare instances. This is a result of the nature of mutual funds. Mutual funds are considered long term investments in stocks and bonds.

Typically interest and dividends are reinvested. Consequently, while check access is available, debit card access is not considered consistent with the investment philosophy of mutual funds.

- 19. While U.S. retailers are active in issuing proprietary credit cards and increasingly cobranded bank credit cards, the issuance of debit cards has generated almost no interest to date. Proprietary and cobranded credit cards are perceived by retailers to produce greater revenues (interest on outstandings) and have wider consumer appeal within customer retention and frequent shopper programs.
- 20. Similarly U.S. insurance companies have not pursued debit card services because their consumer payments do not lend themselves to transaction-intensive access.

Brokers Control the Customer Relationship

- 21. In asset management accounts as well as money market and mutual funds that provide transaction access, the brokerage firms control virtually the entire customer relationship. Banks provide one primary function and one secondary function. The primary function is access to the transaction clearing and settlement infrastructure. The secondary function is data processing.
- 22. From the consumer's perspective, bank presence in brokerage/transactional products is almost invisible. Account opening takes place directly and exclusively with the brokerage firm. The account opening forms and materials reference the brokerage firm prominently (see Exhibits B, C and D). Debit cards show the brokerage firm name exclusively (see Exhibit E). The brokerage firm produces the monthly customer statements and provides all customer service. The overwhelming majority of brokerage customers are likely unaware of the involvement of a bank in their brokerage relationship.

- 23. From the perspective of the card associations, however, the presence of banks is both highly visible and essential to the services provided by brokerage firms. When brokerage customers use their Visa or MasterCard debit cards at ABMs or merchants the transaction clears back to the brokerage firm's bank using the bank's bank identification number ("BIN"). Visa and MasterCard rules require principal members to be regulated depository institutions. Members receive a BIN and the BIN must appear on all cards issued by the bank. All transactions made by cards within the bank's BIN are cleared to that bank for settlement. By accepting membership in Visa and MasterCard, the bank agrees to guarantee payment for all transactions properly accepted by merchants and acquirers and authorized by the bank. This guarantee of payment is essential to the success of worldwide card acceptance. In the U.S., this gatekeeper role is widely accepted by banks and non-banks alike. Banks are strictly regulated by several government agencies and their financial adequacy and data processing integrity are closely monitored by these agencies. It is for these reasons that banks as a group are considered the most reliable organizations to ensure guaranteed payment.
- In brokerage accounts with debit card access, the brokerage firm provides instructions to the bank as to account limits and other criteria that the bank uses to authorize transactions. From the perspective of Visa and MasterCard and their members, the member bank whose BIN was used guarantees the transaction and is unconditionally liable. Since transaction authorization goes hand in hand with transaction liability, banks have contractual recourse against the brokerage firm if, for example, the transaction is approved but the funds are not available.

Data Processing is the Secondary Function Provided by Banks

- 25. Debit card processing does not necessarily take place in bank check processing systems, and in many instances does not take place in the banks at all. There are two components to debit card processing authorization and posting. Sometimes these functions take place simultaneously and sometimes a day or two apart depending on where the transaction originates.
- There are two main methods of authorizing brokerage customer transactions. In the first, the brokerage firm provides a data file to the bank (or third party processor) containing the account names and PANs and the amount of money available to be used by each cardholder. (The available dollar amount is always determined by the brokerage firm.) When the Visa or MasterCard interchange system sends a request for transaction authorization to the bank or third party processor, the request will be approved if the card account is valid and there are sufficient funds to cover the transaction amount. If transaction settlement is next day, the settlement transaction file will be transmitted directly to the brokerage firm for posting. Account posting almost never takes place at the bank/third party. Pursuant to card association rules, the bank/third party maintains transaction logs only until the charge back/representment cycle is completed usually 60 days.
- 27. In the second method of authorization the bank or third party simply switches the transaction directly to the brokerage firm for on-line authorization. In this approach the bank/third party would maintain a brokerage customer file only if it provides a stand-in authorization service in the event the brokerage firm is unable to respond to the authorization request.

In one variation of the second method, the brokerage firm - Merrill Lynch, actually receives authorization requests and settlement files directly from Visa. Merrill Lynch owns a bank and is a member of Visa with its own BIN. The Merrill Lynch bank is a regulated depository bank and is responsible for settlement into Visa.

Features of Brokers' Accounts

- 29. Today's asset management accounts have more "banking" features than their predecessors, including personal computer ("PC") access and bill payment, direct deposit, funds transfer and expense analysis features.
- 30. Trading is now available (and encouraged) through touch-tone phones, screen phones and PCs. (Charles Schwab and Fidelity both offer 10% discounts for on-line trades).
- 31. The bill payment service provides investors the ability to pay bills 24 hours a day, 7 days a week by phone or PC. It is offered directly by the brokerage firms.
- 32. The direct deposit service allows investors to have payroll, pension, Social Security or other recurring payments deposited directly into their asset management money market account.
- With the expense analysis feature, investors can write a code on each check, designating the category of expense (i.e., medical expenses, mortgage).

- 34. Minimum balances for asset management accounts are typically in the U.S. \$10,000 range. Some are lower at U.S. \$2,000 and some are higher at U.S. \$20,000.
- 35. Annual fees for asset management accounts can be as high as U.S. \$150 but are usually U.S. \$100. Some discounters offer streamlined asset management accounts for free.
- 36. Asset management accounts offer detailed, consolidated monthly statements.

Benefits of Brokerage/Bank Arrangements

- 37. Brokerage firms can provide their customers with almost seamless access to bank transaction services at relatively low costs. Almost no individual brokerage firm would have sufficient debit card volume to justify building an in-house on-line authorization and transaction processing system. Bank arrangements give the benefit of bank economies of scale. Competition for this business among banks ensures pricing is competitive. Brokerage firms have a selection of banks and third party processors to provide debit card processing services usually much cheaper than if the firms processed the transaction in-house.
- 38. For banks, the brokerage volume leverages their investment in fixed cost processing services to generate incremental fee revenues. Moreover the banks' role as settlement agents and guarantors of payment maintains the overall integrity of the system. Consumers benefit by the convenience and flexibility these accounts provide in managing their financial lives.

The Same Approach Can Work on Interac

- 39. An approach similar to that used for brokerage-provided Visa and MasterCard debit cards in the United States could work equally well in Canada for an Interac bank-issued debit card. Non-banks could arrange with an Interac member bank to provide network access. The arrangement would be contractual and would likely stipulate the non-bank's agreement to abide by Interac's operating rules.
- 40. Non-banks could take advantage of the benefits outlined above. From the perspective of the non-bank's customer, the card is issued by the non-bank even though the BIN is that of the bank. From the perspective of the payment and settlement system, the card is issued and payment is guaranteed by the Interac member bank.

III. BROKERAGE/TRANSACTION PRODUCTS AND FLOWS

Asset Management Accounts

- 41. Asset management accounts typically offer a combination of investment services centered on a money market fund with check and debit card access. Since the ability to invest, save, borrow and spend is consolidated into one account, investors in theory have greater flexibility and control over their finances.
- 42. The typical asset management product integrates a brokerage firm account, a money market fund and a margin account into one account relationship and account number.
- 43. The brokerage firm account allows investors to buy, sell and hold bonds, stocks, mutual funds and tax advantaged investments.

- The money market fund automatically sweeps proceeds from interest, dividends or the sale of securities into the money market fund. This feature also provides check and debit card access. The amount available to the customer for debit card purchases, checks, and pre-authorized debits is the funds available from money market account balances, and the marginal loan value of eligible securities in the brokerage firm account.
- All asset management accounts that I am aware of use either a Visa or MasterCard debit card, that is, a card which accesses an account, rather than a credit facility. The card allows investors to make purchases at any Visa/MasterCard location or to obtain cash advances from participating banks. Investors can also obtain cash at ABMs participating in the international networks (Cirrus/Plus). Daily limits are typically U.S. \$5,000 for purchases and U.S. \$500 for ABM withdrawals.
- Visa/MasterCard (off-line debit cards) differ from ABM debit cards (on-line debit cards) in several ways. Off-line debit cards allow cardholders to make purchases at any Visa/MasterCard location. On-line debit cards can be used to make purchases only at merchant locations that have on-line connections (through a sponsoring bank to regional or national ABM networks). Interac is an on-line debit card.
- As with credit cards, transactions are authorized real-time (virtually instantaneously) for purchases made with an off-line debit card. However, the purchase amount is typically not debited against the cardholder's available funds for 2-3 days. The authorization message and the settlement message do not occur simultaneously. They are also called two-message transactions. However, ABM transactions are authorized and posted simultaneously (single message transactions).

- 48. With on-line debit cards, both purchases and ABM withdrawals use a single message format (authorization and posting occur simultaneously) and cardholder funds are debited for the purchase or withdrawal amount immediately.
- In a Credit Services or Margin Account, investors can borrow against the value of eligible securities without liquidating securities. Brokerage firms extend credit up to 50% of the value of stocks, mutual funds and most bonds. Investors can borrow up to 95% of the value of government bonds. Margin loan rates are relatively low, compared to unsecured bank loan rates.
- Banc One in Columbus, Ohio is the dominant provider of check and card access for the brokerage firm industry in the U.S. Banc One started the business in 1977 when it made "significant" alterations to its DDA (demand deposit account) system to accommodate Merrill Lynch's CMA accounts. Today Banc One controls about 75% of the market. It processes for the top 20 brokerage firms including Merrill Lynch, Paine Webber, Dean Witter, Prudential, Alliance Capital and A.G. Edwards. New customers include Jack White, Miller Johnson and U.S. Clearing. (Banc One is currently responding to 10 new brokerage firm RFPs.)
- Other banks that provide this service include Pittsburgh National (for Smith Barney), Mellon Bank, United Missouri Bank and State Street (probably exiting the business). First Union Bank of Charlotte, North Carolina is trying to enter the business.
- The basic banking services include access to the Federal Reserve Bank and the Automated Clearing House (ACH) for check presentment and clearing and to the bankcard associations (MasterCard and Visa) for debit card authorization and settlement. The Federal Reserve and the card associations require that all transactions be settled to members and that members be banks. Banks ensure the integrity of the overall

infrastructure. However, these requirements do not prevent non-banks from offering bank type services. Non-banks can arrange with banks to issue cards. This approach works well for both banks and non-banks since banks have the processing operations and economies of scale to drive processing costs down.

- 53. The account opening process for asset management accounts is handled by the brokerage firm. Account opening forms are created, distributed, received and processed by the brokerage firm. Customers complete the application (see Exhibits B, C and D) providing name, address, social security number, income and employment information (if applicable) and select from among the various services including debit card access.
- 54. Customers agree to be bound by the terms and conditions set forth by both the bank and the brokerage firm that relate to the products and services used. The major terms and conditions include:
 - (a) Customers understand that the account agreement is governed by the appropriate state and federal laws that regulate the bank and brokerage firm.
 - (b) Customers authorize the bank and brokerage firm to obtain consumer/credit reports.
 - (c) Customers agree that the bank or brokerage firm may terminate the service at any time and that all checks/cards will be returned at such time.
 - (d) Customers understand conditions under which access to funds may be withheld (outstanding checks or card purchases).

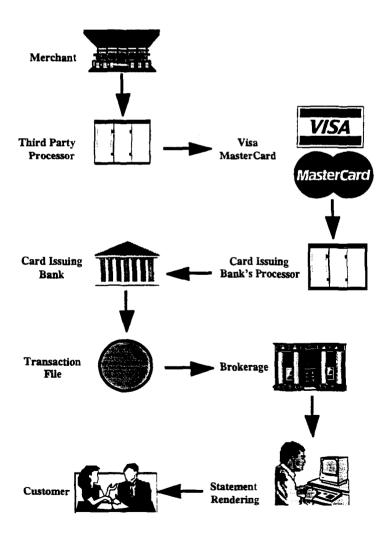
- (e) Customers agree to pay all applicable fees to the brokerage firm.
- 55. The brokerage asset management account number is usually not imbedded in the debit card number which is provided by the bank.

Off-line Debit Cards

- Off-line debit cards are used to make ABM transactions or purchases at any Visa/MasterCard merchant. Banks or third party processors process debit card transactions on behalf of the brokerage firm. ABM transactions made by off-line debit cards are authorized and posted simultaneously. In most purchases made with off-line debit cards, authorization and settlement do not occur simultaneously.
- In order to clarify this, when a Visa debit card purchase is made in a dual message format the acquirer processes the authorization of the transaction at the time of the transaction (e.g., through the Visa BASE I system) and does the clearing and settlement later through another system (e.g., Visa BASE II system) with a second message. At this time a hold is placed for the amount of the transaction. This hold reduces authorization availability (affects future transactions). Incoming posted items match against this pending authorization. However, the authorization holds drop after a number of days if no match is found.
- With single messages, the acquirer transmits both the authorization of the transaction and its clearing and settlement within one message. Since the single message format contains more information at the time of authorization than the dual message format, the card issuer can post to the cardholder's account as soon as the transaction is approved.

59. If cardholder funds are not available at the time of the actual posting of the transaction, the bank (as the card issuer) is liable for the transaction amount. The bank, however, will have a contractual agreement with the brokerage firm that will relieve it of all such liabilities as long as the transactions were authorized against the balance file (or other parameters) provided by the brokerage firm.

Debit Purchase Transaction Flow



Interac Comparison

- 60. Pursuant to the DCO, non-banks could work with Interac member banks to issue on-line debit cards and process debit card transactions in a fashion similar to the off-line Visa and MasterCard arrangements described above.
- In one approach, the non-bank would receive and process all account applications necessary for the issuance of the debit card. The agreement between the customer and the non-bank would incorporate all of the terms and conditions required by the Interac member bank.
- A debit card is then issued to the non-bank customer consistent with network standards and bearing prominently or even exclusively the name of the non-bank. A PIN is also issued to the customer permitting the customer to use the card at any Interacterminal.
- The non-bank would provide a file of all non-bank cardholders showing the cardholders' names, addresses, account numbers, card PANs, and available balances. The file would be maintained by the Interac member bank as an on-line authorization and transaction-capture file. Contractually, the bank would be prohibited from using this file for any other purpose.
- 64. The bank would also hold the PIN encryption algorithm so the non-bank cardholder transaction would be processed as efficiently as bank cardholder transactions.
- 65. As non-bank cardholders use their cards at Interac terminals, the transaction is routed through the network back to the Interac member bank that holds the non-bank

- file. The bank authorizes the transaction based on the available balance in the cardholders' account and other parameters agreed to with the non-bank. At the end of each day, a batch file is created of all of the cardholders' transactions and transmitted to the non-bank for posting to the cardholders' account (not unlike how many banks process their own transactions). Also, each day the non-bank would transmit a batch file containing refreshed balances, new accounts, address changes, etc. to update the authorization file.
- Network operating rules invariably require that issuers must respond to authorization requests within seconds. Even if the transaction is one which involves a cardholder of a non-bank, this response time must be met. It should be recognized that in an arrangement between a bank and non-bank, no additional switch is required before the transaction is authorized.
- The non-bank would maintain an account at the bank containing sufficient balances to cover at least 100% of the estimated daily cardholder transactions. This account would be debited at least once a day by the bank and refreshed once a day by the non-bank
- This is a relatively straightforward and simple approach. It is my experience that it is operationally efficient for both banks and non-banks. In fact, given the low transaction volume expected to be generated by most non-banks, it is likely that this is the approach that would be used even if the non-bank had direct access to Interac. Moreover, it is a processing service that could be provided by indirect as well as direct connect banks.

IV. PROCESSING SERVICES PRICING

- Bank pricing of brokerage firm processing in the U.S. has dropped substantially since product introduction in 1977. Requests for proposals for these services are typically issued by brokerage firms to banks every two years.
- 70. When asset management accounts were introduced in the 1970s, brokerage firms typically paid U.S. \$1.55 per account per month (on a bundled basis) for bank processing services. This fee has dropped by about 50%, due to increased competition among banks and greater bank operating efficiencies. Additionally, since the system enhancements required for brokerage firm account processing were made (by the major providers) 10 15 years ago, current pricing tends to be based on incremental or volume driven costs.
- Monthly per account fees range from U.S. \$.95 U.S. \$1.15 depending on the account's enhancements and the number and type of services performed. For example, Merrill Lynch pays lower fees to Banc One than other brokerage firms because Merrill issues and processes its own debit cards (through a Merrill Lynch subsidiary bank). As a result, Merrill's monthly per account fees range between U.S. \$.75 U.S. \$.92. Merrill continues to use Banc One for check processing because of the significant costs of investing in an in-house capability.
- 72. Third party transaction-related fees for off-line debit authorization and settlement range from U.S. \$.028 to U.S. \$.155 depending on whether the transactions are authorized at the bank or processor or passed through to the brokerage firm.

- 73. In the cases where the bank or processor maintains a file for the brokerage firm, residency fees range from U.S. \$.0137 per month per account to U.S. \$.1425 per month. Fees for additions or updates to cardholder files range from U.S. \$.01 to U.S. \$.02.
- 74. The fees for card production services vary widely. Standard embossing/encoding services range from U.S. \$.33 to U.S. \$.75. PIN mailers fees (per card) range from U.S. \$.10 to U.S. \$.17.
- 75. According to the 1994 Functional Cost Analysis for Commercial Banks prepared by the Federal Reserve Bank, the average costs for banks' demand deposit accounts are an average of U.S. \$19.46 per account per month. That is substantially higher than the fees charged to brokerage firms.
- The higher costs result from the additional functions required to service and process the bank's own accounts. The additional services include deposit gathering, check presentment and collection, statement rendering with accompanying printing and postage costs, check storage and mailing, and customer service.
- Additionally, far fewer checks and debit transactions occur on brokerage firm accounts than on bank demand deposit accounts, due to the customer perception that the brokerage firm accounts are primarily for investment and not transaction purposes. Most customers will continue to retain a bank checking account for their routine bill payment and cash access transactions.

V. CONCLUSIONS

78. The U.S. experience suggests that the approach to providing debit cards to the customers of non-banks outlined in my affidavit is functionally viable, if not preferable,

to any other approach, including direct connect issuing membership in Interac. In my opinion, it is clearly a competitive alternative for non-banks in terms of costs, timeliness, security, customer service, quality and customer value.

- 79. Non-banks can provide their customers with almost seamless access to bank transaction services at relatively low costs. Few individual non-banks would have sufficient debit card volume to justify building an in-house, on-line authorization and transaction processing system.
- 80. Bank arrangements give the benefit of economies to scale to non-banks. Competition among banks for non-bank business ensures pricing is competitive. Non-banks should have a selection of banks that will be able to provide debit card processing services much cheaper than if the firms processed the transaction in-house.

This affidavit is sworn pursuant to Rule 47 of the Compettion Tribunal Rules.

hiam J. Carmody

SWORN before me at the City of Toronto in the Municipality of Metropolitan Toronto, this27th day of March, 1996

A Commissioner, etc.

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LIAM J. CARMODY

MARCH 1996

EXHIBIT A: EXPERIENCE AND QUALIFICATIONS OF COMMISSIONER FOR TAKING AFFICE LIAM CARMODY

Liam Carmody

Liam Carmody has a broad background in management consulting, banking and financial services.

His 27 years of professional experience includes sixteen years as a nationally known management consultant in the financial services industry. Mr. Carmody is widely regarded as one of the industry's most accomplished strategists.

Prior to Carmody & Bloom, Mr. Carmody's experience includes:

- Management Consulting Banking Practice; Booz Allen and Hamilton; where
 he managed strategic planning, product development and business planning
 assignments for major U.S. and international financial service organizations.
- Vice President Retail Planning, Products and Services, First Fidelity Corporation; where he restructured and expanded the consumer product line and operating branch support systems.
- Assistant to the President, American Express Company; where he was a key member of the President's office responsible for preparation of Board financials, and the coordination of corporate long term planning efforts.
- Director Product Development; American Express Co., Card Division;
 where he managed the introduction of numerous new consumer services,

including the airport Travelers Check Dispensing network, Gold Card ABM interchange, direct debit of cardholder bills, and a new debit card product. He was responsible for electronic payments strategic planning, retail merchant business planning and the management and operation of the Card Division's direct response insurance program.

Mr. Carmody has also held positions in marketing at Colgate Palmolive and the American Feed Company. He received a Bachelor of Arts from St. John's University.

A COMMISSIONER FOR TAKING AFFIDAVITS

APPENDIX B: ACCOUNT OPENING FORMS FOR MERRILL LYNCH



THE MERRILL LYNCH CMA® ACCOUNT APPLICATION AND AGREEMENT FORM

IMPORTANT:

If you wish to open a CMA® account, please complete this form.

- If you wish to open a CMA account and participate in the CMA Master FinancialSM service by opening one or more CMA SubAccountsSM, you must complete this form and one or more blue CMA SubAccount Application and Agreement forms. Your Financial Consultant can provide additional forms, if necessary.
- If you already have a CMA account and wish to add one or more CMA SubAccounts in order to participate in the CMA Master Financial service, DO NOT complete this form. Complete only a blue CMA SubAccount Application and Agreement form for each CMA SubAccount you wish to open.



TYPE OF ACCOUNT

Please check the appropriate box for the type of CMA account you wish to open. Your Financial Consultant can answer any questions you may have.

ACCOUNT Information

Please print the names of all account holders. The term "Primary Account Holder" is used here only to identify the account holder whose Social Security/Taxpayer Identification Number will be used for tax reporting purposes. Please print your address; note, this is the address to which your monthly account statements will be mailed.

You may elect to participate in the CMA® Master Financial™ service by opening any number of CMA SubAccounts™ in addition to this CMA account. For information about the CMA Master Financial service and CMA SubAccounts, please refer to the CMA® booklet, or ask your Financial Consultant.

If you elect at this time to have this account serve as a master CMA account in the CMA Master Financial service, please be sure also to complete a CMA SubAccount Application and Agreement form for each CMA SubAccount.

For UGMA/UTMA accounts, the Account Information section (Primary Account Holder) should be completed as follows: "John Doe Cust for Mary Doe UGMA (or UTMA)".

TAX REPORTING INFORMATION

Please check either the Social Security number or Taxpayer Identification Number box and provide that number for the Primary Account Holder.* If you are NOT a U.S. citizen, a U.S. resident for tax purposes or other U.S. person, you must execute a Certificate of Foreign Status and Reduced Rate, Form W-8/1001. If Social Security number or Taxpayer Identification Number applied for, use Form W-9. Your Financial Consultant can provide you with the appropriate forms, if necessary.

*For UGMA/UTMA accounts, the child's Social Security number must be used

FOR JOINT ACCOUNTS ONLY

Joint ownership of property is an important part of your estate planning and entails important legal and tax consequences. Please consult your attorney if you have any questions about your joint account ownership choice.

NOTE: Nonresident aliens who elect to maintain a joint account agree in the CMA Account Agreement that the account will be governed by New York law.

INVESTOR Creditline** Service

The Investor CreditLine[™] service allows suitable investors to borrow against the value of the eligible securities in their accounts. Check the box only if you DO NOT wish to establish your account with this service. Please note: If multiple accounts are opened in the same name, only one account may be established with the investor CreditLine service. Also, certain account ownerships such as UGMA/UTMA accounts, accounts for certain trusts, and CMA Accounts for Estates are not eligible for participation in this service.

CMA VISA³ Program Selection

Please choose only one Visa® option, Classic or Gold, for your account. Certain accounts (e.g., UGMA/UTMA accounts, accounts for testamentary trusts, accounts for those trusts that do not authorize trustees to act independently, and CMA Accounts for Estates) are not eligible to receive Visa cards. For more information about the CMA Visa options, please refer to the CMA booklet or speak with your Financial Consultant. Please be sure to complete the Visa information section on the reverse side of the Application and Agreement form. If you elect the CMA Visa Gold Program, please also complete the Visa Gold Application on the reverse side of the Application and Agreement form.

PRIMARY MONEY ACCOUNT SELECTION

Select one of the CMA Money Accounts as your Primary Money Account. Your free credit balances will be automatically invested or deposited into the Money Account you indicate as number 1.

You may change your Primary Money Account selection at any time simply by notifying your Financial Consultant. For more information about these Money Accounts, including making manual investments, please refer to the CMA booklet or speak with your Financial Consultant.

CMA ACCOUNT AGREEMENT

Please read the CMA Account Agreement carefully and be sure that each account holder signs and dates the form. Be sure to include titles, such as Trustee, Custodian or Executor, with your signature where appropriate (e.g., John Doe, Trustee). Be sure also to complete the reverse side of the Application and Agreement form so that your check and, if applicable, Visa information can be processed properly.

Please return only the Client Account Services copy and Financial Consultant copy to your Financial Consultant. Keep the rest of this form for your records.

TYPE OF Account	Indicate the type of CMA account you ☐ Single ☐ Joint ☐ UGMA/U		the appropriate box: Bestate Other
	Will this account serve at this time as ☐ Yes ☐ No	the master CMA account is	n the CMA Master Financial service?
ACCOUNT INFORMATION	***************************************		
	(Primary Account Holder Name)	(Secondary Accou	unt Holder Name, if Joint Account)
	Mailing Address: Street Address	City, State	Žip Code
AX REPORTING NFORMATION	Check One: Social Security Number T	axpayer Identification Num	ber:
	☐ Check here if you are subject to ball so, you must also cross out the por		
OR JOINT		-	ate by checking the appropriate box bel
CCOUNTS	☐ JTWROS: Joint Account with Righ	•	m
	☐ TIC: Joint Account without Right of ATBE: As Tenants by Entirety (for	• *	
	COMMPROP: Community Property		
	Other Tenancy Designation (Speci	•	y in states where apparease;
NVESTOR Creditline.	Your CMA account will be establishe the box below.	d with the Investor Credit	Line service (if eligible) unless you che
SERVICE	Check here if you DO NOT want t	he Investor CreditLine ser	vice.
CMA VISA Program	Visa Account (Complete the Visa Inst	ructions on the reverse sid	e.):
SELECTION	☐ CMA Classic Visa Card☐ CMA Visa Gold Program (Please also	o complete the CMA Visa Go	old Program Application on the reverse si
PRIMARY MONEY ACCOUNT	Indicate your choice for your Primary the remaining Money Accounts as ch automatically redeemed or withdraw	oices 2, 3, 4, etc., if you wis	
SELECTION	CMA Money Fund		CMA Treasury Fund
	CMA Tax-Exempt Fund		☐ Insured Savings ⁵⁴ Account
	CMA Government Securities Fund	1	Other:
	CMA Municipal Money Fund (circ AZ, CA, CT, MA, MI, NJ, NY, NC, O	le one):	Indicate name of Money Account
CMA		·	("CMA" Service") and I consent and agree to all of the
ACCOUNT AGREEMENT	terms and conditions of the attached Cash Manag I acknowledge that I have read the Agreement and I further acknowledge and agree that the Agreeme transactions in my CMA account and all transfers	ement Account Agreement (the "Agr i will retain my copy for my records. ent will govern all aspects of the CMA between it and any CMA SubAccoun int, any CMA checks and/or Visa car	eement"), which is incorporated herein by reference. A Service provided by or through you, including all tts that I consent to be linked to it, as well as, if applic d(s) issued for my account, the investor CreditLine
TAX CERTIFICATION	correct taxpayer identification number and (2) the that I am subject to backup withholding as a resul subject to backup withholding. I understand that I	at I am not subject to backup withho It of a failure to report all interest and i must cross out item (2) above if I he or dividends on my tax return, unle	y: (1) that the taxpayer identification number above idding either because I have not been notified by the I d dividends, or the IRS has notified me that I am no lave been notified by the IRS that I am subject to backs after being so notified, I have received another not
•	1. THAT IN ACCORDANCE WITH PARAGRA CONTROVERSIES WHICH MAY ARISE WITH	i YOU; THE INVESTOR CREDITLINE SE TIES MAY BE LOANED TO YOU (
Sign 2	Signature (Primary Account Holder)	Date	Title (For Special Accounts, e.g., Trustee/Executor)
Here -	v	-	
4	Signature (Secondary Account Holder, if Joint Account	nt) Date	Title (For Special Accounts, e.g., Co-trustee/Co-execu
		·	

Client Account Services Copy Detach and Return to Merrill Lynch

CMA CHECK AND VISA INFORMATION FORM

ADDRESS Instructions	1. Please provide your name(s) and address exactly as you would like them to appear on your CMA checks. Please confine the information requested to the spaces provided. Five lines may be printed on your checks. They can be used for your name, address, telephone number, social security number, etc. If you do not want ALL account holders' names printed on the checks, please provide us with a letter of authorization signed by ALL account holders. (Please print or type.)		
	*Primary Name (First Name, Middle Initial, Last Name)		
	"Additional Name, if Applicable (First Name, Middle Initial, Last Name	») 1	
	Street Address or Telephone Number or Social Security Number		
	Co. at 444		
	Street Address		
	City, State	Zip Code	
	*Cards and checks issued to persons acting in a representative or fid **Example: The name of a secondary party to a joint account.	luciary capacity (for example, a trustee) will indicate such capacity.	
	 If you would like your CMA checks and/or Visa canddress printed on the reverse, please complete Send my acrds checks both to: 		
	Name		
	Street Address		
	City, State	Zip Code	
CHECK Selection	Please select the check style you wish by checking Personal Wallet-style check (01) - no charge Deskbound check (02)* Large Executive-style check (03)* Secretary-style check with end stubs (07)* There is a nominal imprinting fee for these checks. Please ask your	· · · · · · · · · · · · · · · · · · ·	
VISA	Please indicate how many Visa Cards you want:		
INSTRUCTIONS	In primary name $0 \ 0 \ 1 \ 2$ In secondary name $0 \ 0 \ 1 \ 2$		
	2. If you want one additional Visa card issued in yo person sign here: **T **T **T **T **T **T **T *	ur name for use by another person, please have that	
	Signature	Dete	
	Print Name		
APPLICATION FOR THE CMA VISA GOLD PROGRAM	for the CMA Visa Gold Program. Each Visa Gold	ants on the account in order to process your application Card will be issued subject to a routine credit check. ts or liens may not be approved for the CMA Visa Gold	
	If Single Account, Print	If Joint Account, Print	
	Name of Primary Account Holder	Name of Secondary Account Holder	
	Social Security Number	Social Security Number	
	Annual Income	Annual Income	
	Name of Employer	Name of Employer	
	Years with Present Employer	Years with Present Employer	
	Residence: Own Rent (check one)	Residence: Own Rent (check one)	
	Years at Current Address	Years at Current Address	
	The above information must be provided for all parties to a joint acco	unt. Use additional forms, if necessary. Code #10039 - 0195	

Retain for Your CMA* ACCOUNT	T APPLICATION AND AGREEMENT FORM CMA* Account Nu	mber: Office Use
TYPE OF Account	Indicate the type of CMA account you wish to open by checking the appropriate box: Single Joint UGMA/UTMA Trust Estate Other	<u></u> .
	Will this account serve at this time as the master CMA account in the CMA Master Financial s \square Yes \square No	ervice?
ACCOUNT INFORMATION	(Primary Account Holder Name) (Secondary Account Holder Name, if Joint Account)	
	Mailing Address: Street Address City, State	Zip Code
TAX REPORTING & INFORMATION	Check One: Social Security Number Taxpayer Identification Number: Check here if you are subject to backup withholding due to notification by the IRS. If so, you must also cross out the portion of the Tax Certification below as instructed.	
FOR JOINT ACCOUNTS ONLY	If this is a joint account, your account will be titled as you indicate by checking the appropria JTWROS: Joint Account with Right of Survivorship TIC: Joint Account without Right of Survivorship, also known as Tenants in Common ATBE: As Tenants by Entirety (for married persons, only in states where applicable) COMMPROP: Community Property (for married persons, only in states where applicable) Other Tenancy Designation (Specify):	
INVESTOR Creditlines* Service	Your CMA account will be established with the investor CreditLine service (if eligible) unlet the box below. Check here if you DO NOT want the investor CreditLine service.	ss you check
CMA VISA Program Selection	Visa Account: ☐ CMA Classic Visa Card. ☐ CMA Visa Gold Program	
PRIMARY MONEY ACCOUNT SELECTION	Indicate your choice for your Primary Money Account as number 1 below. You may also desi the remaining Money Accounts as choices 2, 3, 4, etc., if you wish Money Account balances to automatically redeemed or withdrawn in that order. CMA Money Fund CMA Tax-Exempt Fund Insured Savings ^{5M} Accounts	o be
	CMA Government Securities Fund CMA Municipal Money Fund (circle one): AZ, CA, CT, MA, MI, NJ, NY, NC, OH, PA	Account
CMA ACCOUNT AGREEMENT	By signing below, i hereby apply for the Cash Management Account" financial service ("CMA" Service") and I consent and agreems and conditions of the attached Cash Management Account Agreement (the "Agreement"), which is incorporated hereit I acknowledge that I have read the Agreement and will retain my copy for my records. I further acknowledge and agree that the Agreement will govern all aspects of the CMA Service provided by or through you, I transactions in my CMA account and all transfers between it and any CMA SubAccounts that I consent to be linked to it, as we the CMA Money Funds, the insured Savings Account, any CMA checks and/or Visa card(a) issued for my account, the investor service, and any optional CMA services to which I may subscribe now or in the future.	n by reference. including all rell as, if applicable,
TAX CERTIFICATION	I certily, as the "Primary Account Holder" signing below and under penalties of perjury: (1) that the taxpayer identification number and (2) that I am not subject to backup withholding either because I have not been in that I am subject to backup withholding, I understand that I must cross out item (2) above if I have been notified by the IRS that I am s withholding, I understand that I must cross out item (2) above if I have been notified by the IRS that I am s withholding because of underreporting of interest or dividends on my tax return, unless after being so notified, I have receive from the IRS that I am no longer subject to backup withholding. BY SIGNING BELOW, I ACKNOWLEDGE: 1. THAT IN ACCORDANCE WITH PARAGRAPH 10 OF THE AGREEMENT I AM AGREEING IN ADVANCE TO ALCONTROVERSIES WHICH MAY ARISE WITH YOU; 2. IF MY ACCOUNT IS ESTABLISHED WITH THE INVESTOR CREDITLINE SERVICE, THAT PURSUANT TO PAR THE AGREEMENT CERTAIN OF MY SECURITIES MAY BE LOANED TO YOU OR LOANED OUT TO OTHERS; All 3. RECEIPT OF A COPY OF THE ATTACHED AGREEMENT FORM, CONSISTING OF 34 NUMBERED PARAGRAITHIS DATE.	otified by the RS that I am no longer subject to backup red another notice RBITRATE ANY LAGRAPH 24 OF ND
Sign 4	Signature (Primary Account Holder) Date Title (For Special Accounts, e.g., Trust	ee/Executor)
Here	Signature (Secondary Account Holder, if Joint Account) Date Title (For Special Accounts, e.g., Co-tr	ustee/Co-executor)

INTRODUCTION

This Agreement contains the terms governing the Cash Management Account financial service Cash Management Account: inancial service
("CMA" Service"). I will read this Agreement and keep
it for my records because I know that by signing the
CMA Application and Agreement form or the CMA
subAccount" Application and Agreement form (the
"Application and Agreement form(s)") I am agreeing to

DEFINITIONS
In this Agreement, "I," "me," "my" or "accountholder" means each person who signs the CMA Application and Agreement form or the CMA SubAccount Application and Agreement form. "You," "your" or "MLPF&S" means Merrill Lynch, Pierce, Fenner & Smith Incorporated. "MLB&T" means Merrill Lynch Bank & Trust Co. "BANK ONE," COLUMBUS, N.A. "MLN" means Merrill Lynch National Financial." CHASE" means the Chase Manhattan Bank, N.A. MLB&T, MLNF, CHASE and RANK ONE, or referred to collectively as "Banks." The BANK ONE are referred to collectively as "Banks." The "Issuer" means MLB&T or MLNF, whichever issues the Visa Cards from time to time.

"Card/Check Account" means the account(s) established for me by the Banks. "Checks" means checks issued to me by BANK ONE for use with my Card/Check Account. "Card" or "Cards" means one or more Classic Visa' cards issued to me for use with my Card/Check Account. Unless the context requires otherwise, "Card" or "Cards" also means one or more CMA Visa Gold Program cards issued to me for use with my Card/Check Account if I subscribe to and am approved for the CMA Visa Gold Program. The name of the issuer will appear on the Card. The Card(s) issued to me if I subscribe to the CMA Card. The Card(s) issued to the IT is subscribe to the CM/ Visa Gold Program will also be referred to as the "Visa Gold Program Card(s)." "Money Funds" means the CMA money market funds. "Money Accounts" means the Money Funds and any FDIC-insured money market deposit accounts opened for me through the insured Savings[™] Account program.

For purposes of this Agreement, "securities and other property" means, but is not limited to, money, securities, financial instruments and commodities of every kind and nature and related contracts and options. every and and nature and reated contracts and options. This definition includes securities or other property currently or hereafter held, carried or maintained by you or by any of your affiliates, in your possession and control, or in the possession and control of any such affiliate, for any purpose, in and for any of my accounts now or hereafter opened, including any account in which I may have an interest.

DESCRIPTION OF THE CMA* SERVICE

1. The CMA Service consists of: (1) an MLPF&S securities account (referred to as the "Securities Account"), which is either a cash account, or with the investor CreditLine" service, a margin account.
(2) a choice of Money Accounts, (3) if applicable, a Card/Check Account provided by the Banks and (4) if applicable, optional CMA services as described in the Cash Management Account Program Description ement Account Program Description.

DESCRIPTION OF THE CMA MASTER FINANCIAL SERVICE

2. The CMA Master Financial Service consists of: (1) a master account (Master CMA Account) established with the full CMA Service as described above and (2) one or more related CMA SubAccounts established by or with the consent of a Master CMA Accountholder. Each CMA SubAccount is entitled to partial CMA service consisting of: (1) a Securities Account, which is either a cash account, (2) a choice of Money Accounts and (3) optional CMA services to the extent eligible. A CMA SubAccount is not eligible for a Card/Check Account.

SubAccount is not eligible for a Card/Check Account.

CMA SUBACGOUNT— AUTHORIZATIONS

3. By signing the CMA SubAccount Application and Agreement form, each CMA SubAccountholder designates the Master CMA Accountholder as his or her agent for the purpose of receiving monthly CMA account statements and any notices or other communications and authorizes MLPF&S to mail them to the address designated by the Master CMA Accountholder from time to time. If applicable, each CMA SubAccountholder also authorizes MLPF&S (subject to account eligibility requirements) to accept telephonic instructions from the Master CMA Accountholder for the transfer of funds through the CMA Funds Transfer Service to such CMA SubAccount from the Master CMA Account and/or from such CMA SubAccount to the Master CMA Account, as selected in the CMA SubAccount application and Agreement form. In the event any erroneous transfers are made, the Master CMA Accountholder and the CMA SubAccountholder authorize MLPF&S to initiate appropriate corrections. The foregoing authorizations shall remarks by Miless and Master and the CMA SubAccount for the Master CMA Accountholder and the CMA SubAccountholder such the Master CMA Accountholder such the Master CMA appropriate corrections. The foregoing authorizations shall remain in full force and effect until written notice of revocation is delivered to MLPF&S, after which the CMA SubAccount shall remain subject to the terms of this Agreement to the extent it receives the CMA Service in accordance with the policies of MLPF&S.

AGREEMENT REGARDING CASH, MONEY ACCOUNT BALANCES AND OTHER ASSETS AND FEES

4. Available free credit balances in my Securities Account will automatically be invested or deposited at least once a week into the Money Account that I have designated as my Primary Money Account. I understand that you may reasonably withhold access to my Money Account balances until you are satisfied that checks credited to my Securities Account have been collected. You may satisfy amounts that I owe in connection with my CMA Service account (such as debit balances in the Securities Account, amounts owing in my Card/Check able free credit balances in my Securities

Account, or investments or deposits made for me that are later reversed), from the assets in my Money Accounts (including lunds obtained by redeeming Money Funds shares) or from my Securities Account (including, if applicable, by making loans to me). Certain fees, including an annual fee, which are subject to change, will be charged to my account for the financial services provided to me.

REPRESENTATIONS, ADDITIONAL TERMS AND AMENDMENTS

5. I have received a copy of the Money Funds' prospectuses, the Insured Savings Account Fact Sheet and the Cash Management Account Frogram Description. These documents shall be referred to in this Agreement as the "Documents." The Documents contain additional terms governing the CMA Service. agree that these Documents are incorporated into this Agreement as though they were fully set out in this Agreement. Subject to applicable law, you and the Banks also have the right to amend the Documents by so requires, the term "Agreement" shall include the Documents, the term "Agreement" shall include the Documents, as amended from time to time.

agree that you and the Banks shall have the right to amend this Agreement, by modifying or rescinding any of its existing provisions or by adding any new provision. at any time by sending notice of the amendment to me. Any such amendment shall be effective as of a date to be established by you and the Banks, subject to applicable law.

I understand there may be additional documentation required by applicable law or the policies and procedures of MLPF&S or the Banks. I agree to promptly comply with any such requests for additional documents.

HEADINGS ARE DESCRIPTIVE

6. The heading of each provision of this Agreement is for descriptive purposes only and shall not be deemed to modify or qualify any of the rights or obligations set forth in each such provision.

JOINT ACCOUNTS AND JOINT AND SEVERAL LIABILITY

AND SEVERAL LIABILITY
7. If more than one person signs this Agreement, each person shall be an accountholder and their obligations under this Agreement shall be joint and several. The legal ownership of the account shall be in such form as the accountholders shall designate in the Application and Agreement form and as reflected in the account title. In the event no designation is made, MLPF&S is authorized to deal with the accountholders as tenants in common (without right of survivorship).

Notwither undirect the Actives of law provisions of

in common (without right of survivorship).

Notwithstanding the choice of law provisions of Paragraph 11, which shall govern the contractual obligations of the parties under this Agreement, the legal ownership of the account shall be governed by and interpreted under the internal laws of the state of permanent residence of accountholders who are U.S. citizens. Non-resident aliens agree that the form of Joint ownership designated for the account shall be governed (notwithstanding the laws of any other Jurisdiction to the contrary) by the internal laws of the State of New York and. for purposes of determining all matters with regard to the account, agree to submit to the jurisdiction of the courts of New York and the Federal Courts in the of the courts of New York and the Federal Courts in the Southern District of New York and consent to service of process by certified mail to the account's address of

record.

All accountholders agree that each accountholder has authority to transact any business on behalf of the account as fully and completely as if each accountholder were the sole owner of the account. Subject to MLPF&S policies, MLPF&S may accept orders and instructions, written or oral, with respect to the account from each accountholder, without notice to any other accountholder, for the receipt, transfer and withdrawal of funds by check, wire transfer or otherwise and for the purchase, sale, exchange, transfer or other disposition of securities and other property (including margin transactions and short sales if the accountholders have selected the investor Credittine service). All accountholders further agree that all securities and other, property that MLPF&S may be holding for any of them, either in this account or otherwise, shall be subject to a lien for the discharge of the obligations of subject to a lien for the discharge of the obligations of this account to MLPF&S, such lien to be in addition to any rights and remedies MLPF&S may otherwise have.

any rights and remetures militroo may outerwise have. In the event of the death of an accountholder, divorce of married accountholders, assignment of an accountholder's interest or other event that causes a change in ownership of the account, all accountholders or the surviving accountholder(s) as the case may be shall immediately give MLPF&S written notice thereof, and MLPF&S may, in such event, take such action, including requiring such documents or imposing such restrictions on the account, as MLPF&S may deem necessary in the circumstances. The estate of a necessary in the circumstances. The estate of a deceased accountholder and a departing accountholder by assignment or divorce shall remain liable, jointly and severally, with the remaining or surviving accountholder(s), for any obligations of the account arising before MLPF&S receives such notice, or incurred in liquidation of the account or the adjustment of the interests of the accountholders.

In the event of any such change in ownership of the account, MLPF&S is authorized to divide or retitle the account in accordance with the form of legal ownership of the account as reflected on the records of MLPF&S, or by written instructions of the remaining or surviving accountholder(s), or by obtaining a court order, as MLPF&S may reasonably determine is appropriate in the

Client Copy Retain For Your Records Do Not Return to Merrill Lynch

circumstances. Unless agreed otherwise among the account holders in a writing provided to MLPF&S, joint accounts designated "with right of survivorship" (e.g., JTWROS) shall vest the interest of a deceased accountholder in the surviving accountholder(s) and accounts designated "without right of survivorship" (e.g., TIC) shall entitle the estate of a deceased accountholder and the surviving accountholder(s) to equal shares of the account. All accountholders agree to indemnify MLPF&S against any liability, loss or expense incurred from acting in accordance with this Agreement in the event of a change in ownership of the account.

All statements, notices or other communications sent or given to one accountholder by MLPF&S shall be considered notice to all accountholders. In the event MLPF&S receives inconsistent instructions from two or more accountholders, reasonably believes instructions received from one accountholder are not mutually agreeable to all accountholders, or receives a court order with respect to the account, MLPF&S may, but is not obligated to, restrict activity in the account, require that all instructions be in writing signed by all accountholders, suspend or terminate the CMA Service and/or file an interpleader action in an appropriate court at the expense of the accountholders.

TERMINATION OF THE CMA SERVICE

8. The Banks, you or I may terminate my subscription to the CMA Service, including the use of my Checks or Cards, if applicable, at any time. I shall remain responsible for authorized charges which arise before or after termination.

If my subscription is terminated, you may redeem all my Money Fund shares and, unless I advise you otherwise, withdraw all my Money Account deposit balances. Also, I shall promptly return all unused Checks and any Cards to you or the Banks. My failure to do so may result in a delay in your complying with my instructions regarding the disposition of my assets with you.

CREDIT INFORMATION

9. I authorize you, each of your affiliates, and the Banks. to request a consumer report about me from one or more consumer reporting agencies for the purposes of considering my subscription to the CMA Service. reviewing or collecting any account opened for me, or for any other legitimate business purpose. Upon my request, you will inform me of the name and address of each consumer reporting agency from which you obtained a consumer report, if any, in connection with my subscription or accounts. I also authorize you, each of your affiliates, and the Banks to share any information you may have or obtain about me for any legitimate business purpose.

AGREEMENT TO ARBITRATE CONTROVERSIES WITH MLPF&S

- 10. Arbitration is final and binding on the parties.
 - The parties are waiving their right to seek remedies in court, including the right to jury trial.
 - Pre-arbitration discovery is generally more limited than and different from court proceedings.
 - · The arbitrators' award is not required to include factual findings or legal reasoning and any party's right to appeal or to seek modification of rulings by the arbitrators is strictly limited.
 - The panel of arbitrators will typically include a rity of arbitrators who were or are affiliated with the securities industry.

I agree that all controversies which may arise between us, including but not limited to those involving any transaction or the construction, performance, or breach of this or any other agreement between us, whether entered into prior, on or subsequent to the date hereof, emicrea into prior, on or subsequent to the date hereof, shall be determined by arbitration. Any arbitration under this Agreement shall be conducted only before the New York Stock Exchange, Inc., the American Stock Exchange, Inc., or an arbitration facility previded by any other exchange, the National Association of any ouner excample, the Ivational Association of Securities Dealers, Inc., or the Municipal Securities Rulemaking Board, and in accordance with its arbitration rules then in force. I may elect in the first instance whether arbitration shall be conducted before the New York Stock Exchange, Inc., the American Stock the New York Stock Exchange, Inc., the American Stock Exchange, Inc., other exchanges, the National Association of Securities Dealers, Inc., or the Municipal Securities Rulemaking Board, but if I fail to make such election, by registered letter or telegram addressed to you at the office where I maintain my account, before the expiration of five days after receipt of a written request from you to make such election, then you may make auch election. Judgment upon the award of the whitesten week he are the second security as the second security of the second rbitrators may be entered in any court, state federal, having jurisdiction. No person shall bring a putative or certified class action to arbitration, nor s putative or certified class action to arbitration, nor seek to enforce any pre-dispute arbitration agreement against any person who has initiated in court a putative class action; or who is a member of a putative class who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) The class certification is denied; (ii) The class is decertified; or (iii) The customer is excluded from the class by the court. Such forbersone to enforce an agreement to court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this Agreement to the extent stated here

CARMODY

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A COMMISSIONER FOR TAKING AFFIDANTS

APPENDIX C: ACCOUNT OPENING FORMS FOR DEAN WITTER

Dean Witter

Active Assets Account Application

Interest and gross proceeds casels of securities for any value of the Account Registration Right of survivorship Tenants by the entirety Community property Tenants in common Equal ownership is assumed unless other percentages are shown here: Account Ac	◆ Account Holder Name	→ Joint Holder Name BRANCH USE ONLY →			
Community property Tenants in common Equal ownership is assumed unless other percentages are shown here: Account	☐ Individual ☐ Custodian (UGMA/UTMA) ☐ Trust (complete Section 7) Joint Account Registration ☐ Right of survivorship	Dean Witter is required by law to withhold 31% of dividends, interest and gross proceeds of sales of securities for any account which has not filed a W-9 Form. Please enter your			
Other* (identity)	Community property Tenants in common Equal ownership is assumed unless other percentages are shown here: Account Joint Joint holder % tenant % tenant	Holder Number Joint Holder Number Check if either of the following applies: The IRS has notified me that I am subject to			
3. Active Assets Account Services Please check below any Active Assets Account services you would like. Detailed information about the account, its services and annual fee may be found in the Dean Witter Client Agreement and the Active Assets Trust prospectus. Please read them carefully. Year-End Summary of account activity (all owners receive) Preprinted deposit slips Direct deposit of social security or payroll (additional form required) Monthly mailling of interest and dividend checks for all income excluding return of capital/principal Money Trust Gov't Trust Tax-free Trust Business Active Asset Accounts only: Cal. Tax-free Trust FDIC Insured Account A I confirm that I am at least 18 years of age and of full legal age in my state of residence. B. As required by IRS regulations, I certify under penalties of perjury that I have provided you with my correct Social Security or Tax ID number. C. I acknowledge I have received the Dean Witter Client Agreement and agree to abide by its terms as currently in effect or as they may be amended from time to time. D. I confirm that I have received the Active Assets Trust prospectus. E. (check one) Yes, I am requesting margin privileges. The following applies only to clients who request and are approved for margin privileges: I authorize Dean Witter to lend to itself or to others, either separately or in common, any holding in my account at the rates and ten	Other* (identify)	☐ I have nonresident alien or foreign entity status.			
Please check below any Active Assets Account services you would like. Detailed information about the account, its services and annual fee may be found in the Dean Witter Client Agreement and the Active Assets Trust prospectus. Please read them carefully. Year-End Summary of account activity (all owners receive) Direct deposit of social security or payroll (additional form required) Monthly mailing of interest and dividend checks fee All income All income excluding return of capital/principal Money Trust Gov't Trust Tax-free Trust Business Active Asset Accounts only: Fiscal Year-End Summary					
Detailed information about the account, its services and annual fee may be found in the Dean Witter Client Agreement and the Active Assets Trust prospectus. Please read them carefully. Personal Identification Number for VISA card ATM cash withdrawals Preprinted deposit slips	Please check below any Active Assets Account service	Checkwriting privileges			
Preprinted deposit slips Direct deposit of social security or payroll (additional form required) (additional form required) (additional form required) Monthly mailing of interest and dividend checks for All income All income excluding return of capital/principal Money Trust Gov't Trust Tax-free Trust Business Active Asset Accounts only: Fiscal Year-End Summary Month Day	Detailed information about the account, its services ar annual fee may be found in the Dean Witter Client Agr and the Active Assets Trust prospectus. Please read the	d eement Personal Identification Number for VISA card ATM cash withdrawals checkwriting/VISA card application on the reverse side			
Daily sweep of all available cash into (check one): All income All income excluding return of capital/principal Money Trust Gov't Trust Tax-free Trust Business Active Asset Accounts only: Cal. Tax-free Trust FDIC Insured Account Fiscal Year-End Summary	Year-End Summary of account activity	☐ Direct deposit of social security or payroll			
Cal. Tax-free Trust					
4. Signatures All clients must sign below. By signing: A. I confirm that I am at least 18 years of age and of full legal age in my state of residence. B. As required by IRS regulations, I certify under penalties of perjury that I have provided you with my correct Social Security or Tax ID number. C. I acknowledge I have received the Dean Witter Client Agreement and agree to abide by its terms as currently in effect or as they may be amended from time to time. D. I confirm that I have received the Active Assets Trust prospectus. E. (check one) Yes, I am requesting margin privileges. The following applies only to clients who request and are approved for margin privileges: I authorize Dean Witter to lend to itself or to others, either separately or in common, any holding in my account that Dean Witter may be carrying for me on margin. I understand that I may borrow against my account at the rates and ten	☐ Money Trust ☐ Gov't Trust ☐ Tax-free Trus	t Business Active Asset Accounts only:			
4. Signatures All clients must sign below. By signing: A. I confirm that I am at least 18 years of age and of full legal age in my state of residence. B. As required by IRS regulations, I certify under penalties of perjury that I have provided you with my correct Social Security or Tax ID number. C. I acknowledge I have received the Dean Witter Client Agreement and agree to abide by its terms as currently in effect or as they may be amended from time to time. D. I confirm that I have received the Active Assets Trust prospectus. E. (check one) Yes, I am requesting margin privileges. No, I do not wish margin privileges. The following applies only to clients who request and are approved for margin privileges: I authorize Dean Witter to lend to itself or to others, either separately or in common, any holding in my account that Dean Witter may be carrying for me on margin. I understand that I may borrow against my account at the rates and ten	☐ Cal. Tax-free Trust ☐ FDIC Insured Account	☐ Fiscal Year-End Summary			
 A. I confirm that I am at least 18 years of age and of full legal age in my state of residence. B. As required by IRS regulations, I certify under penalties of perjury that I have provided you with my correct Social Security or Tax ID number. C. I acknowledge I have received the Dean Witter Client Agreement and agree to abide by its terms as currently in effect or as they may be amended from time to time. D. I confirm that I have received the Active Assets Trust prospectus. E. (check one) Yes, I am requesting margin privileges. The following applies only to clients who request and are approved for margin privileges: I authorize Dean Witter to lend to itself or to others, either separately or in common, any holding in my account that Dean Witter may be carrying for me on margin. I understand that I may borrow against my account at the rates and ten 		Month Day			
explained in the Dean Witter Client Agreement. I UNDERSTAND THAT THIS ACCOUNT IS GOVERNED BY THE PRE-DISPUTE ARBITRATION CLAUSE APPEARING ON PAGE 7 OF THE AGREEMENT.	 A. I confirm that I am at least 18 years of age and of full legal age in my state of residence. B. As required by IRS regulations, I certify under penalties of perjury that I have provided you with my correct Social Security or Tax ID number. C. I acknowledge I have received the Dean Witter Client Agreement and agree to abide by its terms as currently in effect or as they may be amended from time to time. D. I confirm that I have received the Active Assets Trust prospectus. E. (check one) Yes, I am requesting margin privileges. No, I do not wish margin privileges. I authorize Dean Witter to lend to itself or to others, either separately or in common, any holding in my account that Dean Witter may be carrying for me on margin. I understand that I may borrow against my account at the rates and terms explained in the Dean Witter Client Agreement. I UNDERSTAND THAT THIS ACCOUNT IS GOVERNED BY THE 				

Trust and Business

Accounts

Only

Trust Acc Only

Dean Witter Client Agreement

Effective May, 1993

This agreement contains important terms and conditions governing Dean Witter accounts including all securities accounts, Active Assets® Accounts and margin loan accounts. Please read it carefully and keep it for future reference. Any questions you have regarding this document or your account should be discussed with your Dean Witter Account Executive.

This agreement is authorized for distribution to Active Assets Account clients only when preceded or accompanied by an Active Assets Trust prospectus.

The Dean Witter Client Agreement presents the terms and conditions governing accounts established at Dean Witter. Your signature on the Dean Witter Account Application or the Active Assets® Account Application confirms that you agree to abide by the terms and conditions outlined in this Agreement. Section I applies to all accounts; Section II to Active Assets Accounts only; Section III to all accounts requesting margin privileges, including Active Assets Accounts.

I. General Information for All Dean Witter Clients

Account Opening Information

Account Registration

The account registration selected determines who will have an interest in the Account. Clients should consult with their own legal advisors to determine the type of account registration that best meets their needs.

Individual Accounts may be opened in the name of an individual who has attained the legal age of majority. Only this individual has authority to give account instructions.

Custodian Accounts are established under the Uniform Gift to Minors Act ("UGMA") or the Uniform Transfers to Minors Act ("UTMA"). The custodian exercises fiduciary control over assets owned by a minor. Assets contributed to an UGMA/UTMA are irrevocable gifts and cannot be withdrawn for benefit of the custodian.

Joint Accounts may be held in one of four forms:

Joint Tenants with Right of Survivorship. If one owner of the account dies, the account passes in its entirety to the surviving owner(s) and is not counted as part of the probate estate of the decedent. Only individuals are eligible for this ownership.

renants by the Entirety. Similar to (a) above, but available only to a lawfully married couple residing in a state which permits this form of ownership (AR, DE, DC, FL, HI, MD, MA, MI, MO, PA, TN, VT, WY). Generally it prevents creditors of only one spouse from seizing account assets.

Community Property. Similar to (a) above, but available only to a married couple residing in a community property state (AZ, CA, ID, LA, NV, NM, TX, WA). Note: Depending on individual circumstances, use of this designation alone may not conclusively establish ownership of assets in the account as community property.

Tenants in Common without Rights of Survivorship. If one owner of the account dies, that person's percentage share of the assets passes to his or her estate as of the date of death. Any legal entity may be a tenant in common.

Joint and Individual Liability. For all forms of joint nership, each owner of the account has full and independent authority:

- a. to buy, sell and trade assets in the account;
- b. to receive confirmations, statements and other communications;
- to deposit and withdraw money, securities and other property; and
- d. generally to act as if each were the sole account owner, all without notice to other owners. Dean Witter may treat notice to one owner as notice to all owners.

Each account owner is jointly and severally liable for the account.

Subject to its policies, Dean Witter may follow the instructions of any one account owner and, if inconsistent instructions are received or Dean Witter reasonably believes instructions from one account owner may not be mutually agreeable to all, may do any of the following: (a) choose which instructions to follow and which to disregard; (b) suspend all activity in the the account until written instructions signed by all owners are received; (c) close the account and deliver all securities and other property, net of debits or liabilities, to the address of record; and/or (d) take other appropriate legal action.

Trust Accounts. Clients must have executed an independent written trust agreement prior to the trustees completing Dean Witter's "Trustee Certification of Investment Powers."

Other Registrations. The required documentation is available through your Account Executive for all other registrations including:

1. Corporations

4. Investment clubs

2. Partnerships

5. Institutions

3. Charitable organizations

6. Guardianships

Client Affiliations

Industry regulations require clients to notify Dean Witter if they hold a key position in a publicly traded firm or are affiliated with a financial services firm.

Clients who are a director, 10% or greater shareholder, or policy-making executive of a publicly traded firm must notify us of their position and identify the firm. Clients must do the same if they are affiliated with or work for a bank, an insurance company, a trust company or a securities firm.

Substitute W-9

Federal income tax regulations require Dean Witter to obtain a Social Security or Tax ID number for every account. Use this guide to select the appropriate number.

Account Type	Social Security #	Tax ID#
Individual	The individual	
Joint (2 or more)	The actual owner or if combined funds, the first individual.	
Custodian (UGMA/ UTMA) or Guardian	The minor or the beneficiary/ward	
Trust, estate or pension plan		The legal entity
Corporate		The corporation
Partnership		The partnership
Sole Proprietorship	The owner	

The Dean Witter Securities Account

Dean Witter clients may open a standard securities account or an Active Assets Account (See Section II) to purchase, sell or hold securities on either a cash or margin basis. Securities accounts are subject to federal and state iaw and the rules and customs of the NYSE, the NASD, other industry self-regulatory organizations and exchanges.

Account Servicing Charge

Dean Witter applies an annual \$50 maintenance fee, assessed in January, to all accounts except: (a) Active Assets Accounts, Dean Witter custodial and managed accounts (e.g., IRAs, VIPs, RPMs and ICS); (b) accounts open for less than one year; (c) accounts which during the previous calendar year either generated \$100 or more in transaction revenue and/or margin interest or belong to a "household" (same address) of accounts which jointly generated \$150 or more in transaction revenue, account fees, and/or margin interest; (d) accounts holding \$25,000 or more in InterCapital mutual funds at year-end; and (e) accounts holding only non-deliverable or book-entry securities. Dean Witter reserves the right to alter its fees, with advance notice to clients, and, for certain groups or categories of customers, to modify the features of and fees charged for accounts.

Margin Privileges

Clients contemplating margin trading should be certain they understand the operation of a margin account under various market conditions. Margin trading is not for everyone, and the increased leverage of margin privileges may heighten

'n risks and rewards. Clients wishing to apply for margin privileges should read Section III, Margin Privileges, carefully and discuss any questions with their Account Executive.

Options Trading

able upon request.

Options trading is available for eligible clients. While relatively conservative methods of trading options are common, options trading can be highly speculative. Some strategies expose the options investor to the risk of losing far more than their original investment, and unexpected events or unusual market volatility can make it extremely difficult and costly for an investor to close out open options positions. Dean Witter cannot be responsible for conditions beyond its control including extreme market volatility or trading volume, governmental restrictions, or exchange and marketplace rulings including trading halts. Clients considerng options trading should be convinced that they possess 3 requisite investment experience; have the financial resources to bear any potential losses their trading strategies could expose them to; and have concluded options trading is suitable within the overall context of their investment objectives. Applications for options trading are avail-

Communications: Suspected Errors

Until Dean Witter receives a written notice of a different address, all communications — including margin and

maintenance calls — sent to the address of record are presumed to have been given to the client personally whether or not actually received.

Clients suspecting an error on their monthly statement or a trade confirmation should promptly contact the manager of the branch servicing that account. Dean Witter may presume the statement correct unless it receives written notification about the suspected error within 10 days. It is the client's responsibility to seek immediate clarification about entries that the client does not clearly understand.

Termination or Restriction of Accounts

A client may terminate an account at any time but will remain responsible for any charges to the account. Dean Witter likewise may terminate an account at any time or place limitations on available services, including the nature, volume and timing of transactions.

Clients who decline to continue Active Assets status will automatically have their assets transferred to a standard Dean Witter securities account unless other instructions are received. Because the Active Assets money funds and Insured Account are integral components of the Active Assets program, all such funds will also be liquidated and transferred (at no charge) to the standard Dean Witter securities account in the form of free credit balances. Clients may then choose to invest these funds in Dean Witter money market funds under the terms described in the prospectuses for those funds.

Governing Law

No provision of this Agreement may be amended or waived unless agreed to in writing and signed by an authorized officer of Dean Witter. If any provision of this Agreement becomes inconsistent with any applicable current or future law, that provision will be deemed amended to conform with the law, but all other provisions will remain in effect. This Agreement and its enforcement will be governed by the law of the State of New York without regard to conflict of laws provisions.

This Agreement shall cover individually and collectively all accounts, joint, single or in a fiduciary capacity, which are held by Dean Witter for the client. This Agreement shall be binding upon the present Dean Witter organization and any successor organizations and their respective assigns; it shall be binding upon the current account owner(s) and the heirs, executors, administrators, trustees, receivers, successors and assigns of the account.

SIPC Protection

Securities held in Dean Witter accounts receive up to \$2,500,000 in protection: \$500,000 through the Securities Investor Protection Corporation ("SIPC") and \$2 million through Aetna. Active Assets Accounts receive up to \$25 million in protection: \$500,000, SIPC; \$9.5 million, Aetna and \$15 million through private third-party insurers. Coverage of uninvested cash is limited to \$100,000. Money market fund shares are not covered.

II. The Active Assets Account

The Active Assets Account program of Dean Witter Reynolds Inc. offers integrated financial services linking together a securities account, a no-load money market trust or a federally insured bank account, checkwriting privileges and a VISA debit card.

The annual program fee is \$80 for Active Assets Accounts and \$100 for Business Active Assets Accounts. Dean Witter reserves the right to change annual program fees and services at any time.

The Components of the Active Assets Program The Securities Account

The securities account is a conventional margin or cash brokerage account which may be used to purchase and sell securities on margin or on a fully-paid basis. The General Information about securities accounts provided in Section I of this Agreement also applies to Active Assets Accounts; clients should make sure they read and understand that information. Active Asset clients who are eligible and approved for margin privileges should also be sure to carefully read Section III of this Agreement which outlines the terms and conditions governing the use of margin privileges.

Money Market Funds

A money market fund or insured bank account is an integral part of every Active Assets Account. On each business day, an account's free credit balances, as of the previous close of business, are automatically invested in the money market vehicle chosen by the account holder. "Free credit balances" means any cash that could be withdrawn from the ies account without creating a negative balance or giving rise to interest charges; it does not include any credit balance generated from the short sale of securities.

Active Assets Account holders may select any one of the following money market vehicles:

- a. The Active Assets Money Market Trust
- b. The Active Assets Government Trust
- c. The Active Assets Tax-Free Trust
- d. The Active Assets California Tax-Free Trust
- e. The Active Assets Insured Account which is an FDIC insured bank account maintained at a bank affiliated with Dean Witter. Account holders selecting this option will be sent a separate document containing the terms governing the Active Assets Insured Account. FDIC insurance is provided for up to \$100,000. (Note: Not available to residents of Connecticut.)

Each Active Assets Trust is a diversified open-end management investment company seeking high current income, preservation of capital and liquidity from investments in short term securities. Trust shares are neither insured nor protected by the FDIC, SIPC or any other governmental or private agency. An investment in Trust shares is a security purchase and is not the same as a bank deposit.

The price of Trust shares is the per share net asset value next determined after a purchase or redemption order is entered. While each Trust seeks to maintain a \$1.00 net asset value, there is no guarantee that this objective will be met. More complete information about Trust shares may be found in the accompanying Trust prospectus given to all Active Assets Account holders.

In view of the Active Assets program annual account fee, investors seeking solely to invest cash in a money market, government or tax-free fund, and not wishing to use the automatic investment and other special features of the Active Assets Account, should consider alternative means of purchasing money funds.

Checkwriting Privileges

Free checkwriting privileges are available through the Active Assets Account from Bank One, Columbus, N.A. under Bank One's rules and applicable state and federal laws. Business Active Assets Accounts may write 50 checks a month free and thereafter pay \$.15 per check. Active Assets checks may be used for any purpose including transferring funds between brokerage accounts, but federal regulations prohibit their use for the direct purchase of securities. All accounts are subject to nominal fees for such items as reorders of checks, orders of special style checks, stop payment requests, copies of cancelled checks and dishonored checks. Investors should be aware that the checking feature is intended to provide clients with easy access to the assets in their accounts; the Active Assets Account is not a bank account.

VISA® Debit Cards

A VISA* debit card is available at no additional cost from Bank One and may be used to purchase merchandise, services or to receive cash advances. Dean Witter will debit an account directly to pay VISA transactions upon notice from Bank One. All VISA transactions will be reflected on the Active Assets Account monthly statement; no separate monthly VISA bill will be sent. Dean Witter and/or Bank One may when necessary answer or make inquiries about a card holder's credit history. Use of the VISA card is governed by VISA and Bank One regulations as well as applicable state and federal law.

The VISA card may also be used to access Active Assets Account funds through Automatic Teller Machines ("ATMs") at any VISA network machine worldwide.

Amounts up to \$1000 per day may normally be withdrawn; however, local bank regulations may limit this amount. Dean Witter will impose a \$1.00 fee for each ATM withdrawal. Local bank fees may also apply. Clients expecting to make ATM withdrawals will need Personal Identification Numbers ("PINs"). Information on PINs is available by calling 1-800-869-DEAN.

VISA charges incurred in a foreign currency will be converted by VISA International into a U.S. Dollar amount. The currency conversion rate used is either a wholesale market rate or a government mandated rate in effect one day prior to the processing date, increased by one percent (1%) in each case. The conversion rate on the processing date may vary from that when the transaction occurred.

Questions on VISA transactions. If a client believes a statement is wrong, or if more information about a VISA transaction is required, clients should telephone 800-869-DEAN or write to Dean Witter, P.O. Box 87, Bowling Green Station, New York, NY 10274 no later than 60 days after the FIRST statement on which the questioned transaction appeared.

Complaints will be investigated and, in case of error, corrected promptly. If the investigation takes more than 20 business days, the account will be recredited for the amount in question so that the funds are available to the client during the time it takes to complete the investigation.

Clients subscribing to the Active Assets service may be liable for the unauthorized use of their VISA card in an amount up to \$50. The owner of a VISA card will not be liable for any unauthorized use which occurs after Bank One has been notified orally or in writing of a loss, theft or possible unauthorized use. If shares of a Trust are redeemed for the unauthorized use of the VISA card, such shares shall be reinstated as if never redeemed and Dean Witter will indemnify the Trust against any losses caused thereby.

If a VISA card is lost or stolen, the Active Assets client should report the loss immediately by placing a collect call to Bank One at (614) 248-4242 any time, day or night, seven days a week.

When an Active Assets Account is closed, all VISA cards and unused checks must be promptly returned to Dean Witter. Failure to do so could delay the disposition of the account's assets.

The Authorized Limit

The Authorized Limit in the Active Assets Account is the total amount available for investments, checkwriting and VISA transactions. It is calculated as the sum of:

- a. free credit balances in the account; plus
- b. the value of any Active Assets Trust shares or Insured Account balance; plus
- c. the available margin loan value; minus
- d. any debit amounts owed Dean Witter.

The Authorized Limit is accessed in the above order; its value may fluctuate on a daily basis and is dependent upon such factors as the collection of checks deposited, the market value of securities, the status of securities transactions, and the time required to transmit and confirm data between financial institutions. The Authorized Limit is immediately reduced at the time Bank One is notified of the use of the VISA card, not at the time applicable sales or cash advance drafts are paid. Dean Witter may withhold access to the proceeds of checks deposited until collected and until federal funds become available. If a VISA transaction or a check is rejected because of an insufficient Authorized Limit, Dean Witter will not be liable for any consequences of the rejection.

Debits to the Account will be satisfied in the following order of priority:

- a. securities transactions, including margin maintenance calls and other account fees;
- b. VISA debit card transactions; and
- c. Bank One checking transactions.

If any debit in the account remains after Dean Witter has requested payment, then Dean Witter is authorized to sell, liquidate, transfer or otherwise apply any asset of the account holder held by Dean Witter to satisfy the liability without requiring further notice or demand before such action is taken. Liability for such obligations shall survive termination of the account.

Other Account Features

The Active Assets Account program offers other special features at no additional charge, including

- Direct deposit of social security, payroll or other recurring income.
- Automatic bill payment for items requiring regular, periodic payments such as mortgages or insurance premiums.
- Monthly mailing of interest and dividends generated by securities held in your account.
- Coding of checks to allow for easier monthly and year-end recordkeeping.

Dean Witter may add, modify or delete special features from time to time. More information about any of these features is available from your Dean Witter Account Executive.

III. Margin Privileges

This section only applies to those clients eligible and approved for margin privileges. Margin clients should read it with particular care. "You" refers to the owners of the account and "we" refers to Dean Witter.

Margin Privileges

Margin trading is not for everyone. You should examine your investment objectives, financial resources and risk tolerance to determine whether margin trading is appropriate for you. Margin privileges involve the extension of credit by Dean Witter to you, secured by the collateral in your account and the amount borrowed will appear as a debit balance on which you will be charged interest at varying rates as described on this page. The increased leverage which margin provides may heighten both risks and rewards.

Pledge of Securities

Dean Witter may borrow money to lend to margin customers, including you, and may pledge customers' securities and other assets as collateral for such loans. You give Dean Witter permission, without notice to you, to pledge and hypothecate your securities and other property, separately or together with assets of other margin customers, as collateral for any outstanding loans you may have from us at that time.

Adequate Margins & Repayment

In the interest of maintaining a sound financial condition a securities broker-dealer should be able to act appropriately and promptly with respect to each extension of credit it has made. Economic and market conditions change, often rapidly, and the values of individual securities can be volatile. In light of such conditions, we retain absolute discretion in determining when additional collateral will be required from you.

You agree at all times to maintain such margins for your account with Dean Witter as required by law or custom, or as we may deem necessary or advisable. You also promise to discharge your obligations to Dean Witter upon demand; this obligation survives termination of your account with Dean Witter. Any oral agreement to the contrary will be unenforceable. No Dean Witter account executive, branch office manager or branch employee has any "thority to waive or modify Dean Witter's margin calls or stpone sell-outs or buy-ins.

Liquidations & Covering Positions

If for any reason, in our sole discretion, we deem it necessary or advisable, you authorize us:

- a. to require additional collateral or equity from you;
- b. to sell or transfer any or all of your securities and other property, from any of your accounts;
- c. to buy in (or "cover") any securities and other property of which your accounts may be short; and

d. to cancel any outstanding orders or close out any commitments made on your behalf.

Circumstances prompting Dean Witter to take such action could include, but are not limited to:

- a. extreme market volatility or trading volume
- b. your failure to promptly supply additional collateral upon request;
- c. filing of an attachment, levy or petition of bankruptcy against you, your accounts, or assets in your accounts; or
- d. your incapacity or death.

Notwithstanding Dean Witter's general policy of giving notice of a margin deficiency, and despite any specific incidents or prior course of conduct between us, you understand we may and authorize Dean Witter to liquidate securities and other property to satisfy margin maintenance requirements without notice to you and without any prior request for additional margin from you.

We may perform such sales or transactions according to our judgement and discretion — with or without prior notice or advertisement — on the exchange or other market where such business is usually transacted; or at public auction or private sale (including transactions with Dean Witter for its own account); and you waive any right of redeeming the proceeds of such transactions without our consent.

Short Account — Marking to Market

Short securities will be "marked to the market" periodically. If a security which you sold short (or "short against the box") appreciates in market value over the selling price, your margin account will be debited, and if the security depreciates in value your margin account will receive a credit.

Rate of Interest Charged; Credit Terms

Securities and Exchange Commission Rule 10b-16 requires a broker who extends credit to a customer in connection with a securities transaction or otherwise to furnish specified information detailing the terms and conditions under which interest will be charged.

The interest rate charged by Dean Witter on amounts you owe will range from .75% to 2.50% above Dean Witter's "Base Rate" depending on the total size of your debit balance, as follows:

Debit Balance	e	Percentage added to Base Rate
\$0 - \$2	24,999	+2.50%
\$25,000 - \$4	19,999	+2.00%
\$50,000 - \$9	9,999	+1.25%
\$100,000+		+0.75%

Dean Witter sets its Base Rate in light of market conditions. The Base Rate reflects the broker call rate, the prime rate, the federal funds rate, and other commercially recognized interest rates. The interest rate a client is charged will increase or decrease without notice as the Base Rate increases or decreases. If Dean Witter increases the rate charged you for any other reason, you will be given at least 30 days advance written notice.

We reserve the right to charge your account a rate higher than stated above in light of factors such as high concentrations of a security, low-priced or speculative securities, or illiquid assets.

Interest Computation

Dean Witter computes interest on debit balances as:

average	applicable	# of days with net debit balance
outstanding	x interest	x
debit balance	rate	360

Each time the Base Rate changes, the interest charge is computed and added to your debit balance and a new interest computation begins. If the interest rate has not changed during a calendar month, the interest charge is computed as of the last day of the month and added to the debit balance. Your monthly statement will reflect the average outstanding debit balance (if any), the applicable interest rate or rates with the period each rate was in effect, and the resulting dollar charge. Days on which the net bal-

e is zero, or a credit, will be disregarded entirely for purposes of the interest computation.

Clients may find it advisable to give consideration to paying their interest charges on a periodic basis, thereby reducing the likelihood of margin calls due to increasing debits.

Arbitration

Arbitration Disclosures: Industry regulations require that the following disclosures appear in conjunction with the arbitration agreement which immediately follows:

- a. Arbitration is final and binding on the parties.
- b. The parties are waiving their right to seek remedies in court, including the right to jury trial.
- c. Pre-arbitration discovery is generally more limited than and different from court proceedings.
- d. The arbitrators' award is not required to include factual findings or legal reasoning and any party's right to appeal or to seek modification of rulings by the arbitrators is strictly limited.
- e. The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry.

f. No person shall bring a putative or certified class action to arbitration, nor seek to enforce any pre-dispute arbitration agreement against any person who has initiated in court a putative class action; who is a member of a putative class who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) the class certification is denied: (ii) the class is decertified; or (iii) the customer is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this agreement except to the extent stated herein.

Arbitration of Controversies

You agree that all controversies between you or your principals or agents and Dean Witter or its agents (including affiliated corporations) arising out of or concerning any of your accounts, orders or transactions, or the construction, performance, or breach of this or any other agreement between us, whether entered into before or after the date an account is opened, shall be determined by arbitration only before the New York Stock Exchange, Inc.; the National Association of Securities Dealers, Inc.; or the Municipal Securities Rulemaking Board, as you may elect. If you make no written election addressed to us by registered mail within five days after receiving a written demand for arbitration from us, then you authorize us to elect one of the above listed forums for you.

Unless rules of the arbitral forum dictate otherwise, any arbitration proceeding between us shall be held at a location at which the selected forum regularly conducts such proceedings nearest to the Dean Witter office carrying your accounts at the time the claim arose; this venue shall apply even if you have related disputes with other parties which cannot be resolved in the same locale. Except for simplified proceedings (small claims), any arbitration proceeding between us shall be heard and decided by a panel of not fewer than three arbitrators.

The law of the State of New York will apply in all respects, including but not limited to determination of applicable statutes of limitation and available remedies. The award of the arbitrator or a majority of them shall be final, and judgement on the award may be entered in any state or federal court having jurisdiction.

If you have any questions about margin privileges, make sure to discuss them with your Dean Witter Account Executive.





APPENDIX D: ACCOUNT OPENING FORMS FOR SMITH BARNEY

SMITH E	BARNEY
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Client Agreement

Account Nur			. 0	
Branch	Account	!'	10	1+0
1 1	1 1 1 1	1	1	1 1 1

Before you sign this Agreement, please "Important New Account Information". Note: Signatures are MANDATORY in e	. After you have complete	d and signe	d this Agree			
Account Title					,	
Account Owner's Name			Account Own Name	er's		
Street Address		Apt.	City		State	ZIP Code
In consideration of Smith Barney Inc. accepting in the sections numbered 1 through 11. If this in the sections numbered 15 through 17. If this numbered 12 through 14. Note: Texas residuals in the sections numbered 15 through 14. Note: Texas residuals in the sections numbered 15 through 14. Note: Texas residuals in the section of the s	is a <i>margin account</i> , 1 (we) f is a <i>joint account</i> , we further ac	urther acknow knowledge tha	ledge that I (w It we have read	e) have read, understand and , understand and agree to the to	agree to the terms erms of this Agreem	of this Agreement contained nent contained in the sections
A. Cash Accounts. I (We) acknowledge that I (we) have re If this is a joint account, all parties must sign.		ement which	contains a _l	ore-dispute arbitration cla	ause at section (6.
Account Owner's Signature		Date	Joint Accoun	t Owner's Signature		Date
B. Margin Accounts. By signing this Agreement, I (we) ackn received a copy of this Agreement while this is a joint account, all parties must sign.	ch contains a pre-dispute a	urities may l orbitration cl	pe loaned to ause at sect	you or loaned out to othe ion 6.	ers. I (We) ackno	owledge that I (we) have
Account Owner's Signature		Date	Joint Accoun	t Owner's Signature		Date
'I have not been notified by the Internation; b) the IRS has notified me that I am no must cross out (b) above if you are currefor those exempt from backup withhold. The Social Security Number or Tax Identification Number on Smith Barney's records is:	o longer subject to backup v ently subject to backup withi	withholding (holding beca	The Social Soldentification	or (c) I am exempt from ba	ackup withholdin ends on your tax	g (see below). <i>Note: You</i>
Note for joint accounts: The Social Security Numbe	r of this account is the number of the	ne client whose	L		er the number of any	other account owner.
Account Owner's Signature		Date	Joint Accoun	t Owner's Signature		Date
	or withholding of your name, ac ne, address and securities position own securities that are being h	ons disclosed t	o any compan	ies, upon their request, in		
E. Money Market Fund Agreement. Available cash in your account will automatica nlease check the "NO" box below. If you wish nte to Wisconsin residents: You must indicate to Wisconsin residents. You must balance I NO, I do not want cash balance I YES, I would like the cash balance.	to change your choice of mone ate below specifically whether of es in my account to be automati	ry market fund, or not you wist ically swept in	<i>please contac</i> o to have a mo to a money ma	ct your Financial Consultant. ney market sweep for your ac arket fund.		ic money market fund sweep
F. Tenancy in Common. DO NOT Compl undersigned, the interests in the account as of shall be as follows: Note: Texas residents Name of Participant	the close of business on the da with joint accounts must als	ite of the death co execute a	of the decede Texas Joint	nt, or on the following busines	ss day if the date of ement (form 388	death is not a business day (2).
Name of Participant				Signature of Participant		
Name of Participant				Signature of		
Name of Participant				Signature of Participant		
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In consideration of your opening one or more accounts for me ("we", "us" and "our" are each substituted for "1", "me" and "my", respectively, in the case of multiple account holders, corporations and other entities), and your agreeing to act as broker/dealer for me for the extension of credit and in the purchase or sale of securities, commodities, options and other property, it is agreed in respect to any and all accounts, whether upon margin or otherwise, which I now have or may at any future time have with Smith Barney Inc. or your successors (hereinafter referred to as "you" or "your" or "SB"), that:

- 1. All transactions entered into under this Agreement shall be subject to any applicable constitution, rules, regulations, customs and usages of the exchange or market and its clearinghouse, if any, where such transactions are executed by SB or its agents and to all applicable laws, rules and regulations of governmental authorities and self-regulatory agencies. Such reference to the "constitution, rules, regulations, customs and usages of the exchange" shall in no way be construed to create a cause of action arising from any violation of such constitution, rules, regulations, customs and usages. If any provision is enacted that would be inconsistent with any of the provisions of this Agreement, the provision so affected shall be deemed modified or superseded by the enactment, but the remaining provisions of this Agreement shall remain in effect. Except as herein provided, no provision of this Agreement may be waived, altered, modified or amended unless the same is in writing and signed by an authorized official of SB.
- 2. I agree that all property of mine, whether owned individually, jointly, or in the name of another, which at any time may be in your possession or control for any purpose, including safekeeping, shall be subject to a continuing security interest, lien and right of set-off for the discharge of all of my indebtedness and other obligations to SB, and will be held by SB as security for the payment of any of my indebtedness or obligations to SB. In enforcing your security interest, you shall have the discretion to determine which property is to be sold and the order in which it is to be sold and shall have all the rights and remedies available to a secured party under the New York Uniform Commercial Code. Without your prior written consent, I will not cause or allow any of the collateral held in my account(s), whether now owned or hereafter acquired, to be or become subject to any liens, security interests, mortgages or encumbrances of any nature other than your security interest.

Without limiting the generality of the foregoing, I hereby authorize SB to automatically liquidate any money market funds available in my account(s) from time to time to cover any of my indebtedness or obligations to SB including non-trade related debts. You are further authorized to liquidate any other property held in my account(s) to satisfy any such indebtedness or obligations whenever in your discretion you consider it necessary for your pro'.

"Prop...," as used anywhere in this Agreement shall include, but not be limited to, securities of all kinds, money, certificates of deposit, bankers' acceptances, commercial paper, options, commodities, and contracts for the future delivery of commodities or relating to commodities or securities, and the distributions, proceeds, products and accessions of any of the above.

3. In case of the sale of any security, commodity, or other property at my direction and the inability of SB to deliver the same to the purchaser by reason of my failure to supply them to SB, I authorize SB to borrow any security, commodity, or other property necessary to make delivery thereof, and I hereby agree to be responsible for any loss which SB may sustain thereby and any premiums, interest or other costs which SB may be required to pay as a result of such borrowing, and for any loss or cost which SB may sustain by reason of its inability to borrow the security, commodity, or other property sold.

You may charge my account(s) with such usual and customary charges as you may determine to cover your services and facilities, including, but not limited to, custody and transaction fees. I will promptly pay SB any deficiency that might arise in my account(s). I understand and agree that a finance charge may be charged on any debit balance in any cash account I have with SB in accordance with the SB policy described in the accompanying literature regarding new accounts. You may transfer excess funds between any of my accounts 's (including commodity accounts) for any reason not in conflict with the Commodity E_{λ} are Act or any other applicable law. If any transactions are effected on an exchange in which a foreign currency is used, any profit or loss as a result of a fluctuation in the exchange rate will be charged or credited to my account(s).

4. Communications may be sent to the mailing address on file with you, or at such other address as I may hereafter give in writing, and all communications so sent, whether by mail, telegraph, messenger or otherwise, shall be deemed given to me personally, whether actually received or not. Transactions entered into for my account(s) shall be confirmed in writing to me where required by applicable law or regulation. In addition, SB shall provide me with periodic statements reflecting activity in such account(s). I agree that transactions reflected on such confirmations and statements shall be conclusively deemed accurate as stated unless I notify SB in writing within three (3) days and ten (10) days of receipt, respectively, that the information contained in such confirmation or statement is inaccurate. Such notice must be sent by me to SB by telegram or letter directed to the attention of the Branch Office Manager of the office servicing the account. Failure to so notify SB shall also preclude me from asserting at any later date that such transaction was unauthorized.

I authorize you at your discretion to obtain reports and to provide information to others

concerning my credit standing and my business conduct. You may ask credit reporting agencies for consumer reports of my credit history. Upon my request you will inform me whether you have obtained any such consumer reports and if you have, you will inform me of the name and address of the consumer reporting agency that furnished the reports to you.

5. I hereby represent that I am of the age of majority. Unless I advise you to the contrary, in writing, and provide you with a letter of approval from my employer, where required, I represent that I am not an employee of any exchange, or of any corporation of which any exchange owns a majority of the capital stock, or of a member of any exchange, or of a member firm or member corporation registered on any exchange, or of any corporation, lirm or individual engaged in the business of dealing, either as a broker or as principal, in securities, bills of exchange, acceptances or other forms of commercial paper. I further represent that no one except those signing this agreement has an interest in my account.

If my account has been introduced to you and is carried by you only as a clearing broker, I agree that you are not responsible for the conduct of the introducing broker and your only responsibilities to me relate to the execution, clearing and bookkeeping of transactions in my accounts.

6. Arbitration

- · Arbitration is final and binding on the parties.
- The parties are waiving their right to seek remedies in court, including the right to jury trial.
- Pre-arbitration discovery is generally more limited than and different from court proceedings.
- The arbitrators' award is not required to include factual findings or legal reasoning, and any party's right to appeal or to seek modification of rulings by the arbitrators is strictly limited.
- The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry.

lagree that all claims or controversies, whether such claims or controversies arose prior, on or subsequent to the date hereof, between me and SB and/or any of its present or former officers, directors, or employees concerning or arising from (i) any account maintained by me with SB individually or jointly with others in any capacity; (ii) any transaction involving SB or any predecessor firms by merger, acquisition or other business combination and me, whether or not such transaction occurred in such account or accounts; or (iii) the construction, performance or breach of this or any other agreement between us, any duty arising from the business of SB or otherwise, shall be determined by arbitration before, and only before, any self-regulatory organization or exchange of which SB is a member. I may elect which of these arbitration forums shall hear the matter by sending a registered letter or telegram addressed to Smith Barney Inc. at 388 Greenwich Street, New York. N.Y. 10013-2396, Attn: Law Department. If I fail to make such election before the expiration of five (5) days after receipt of a written request from SB to make such election, SB shall have the right to choose the forum.

No person shall bring a putative or certified class action to arbitration, nor seek to enforce any pre-dispute arbitration agreement against any person who has initiated in court a putative class action; or who is a member of a putative class who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) the class certification is denied; (ii) the class is decertified; or (iii) the customer is excluded from the class by the court.

Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this agreement except to the extent stated herein.

The foregoing agreement to arbitrate does not entitle me to obtain arbitration of claims that would be barred by the relevant statutes of limitations if such claims were brought in a court of competent jurisdiction. If, at the time that a demand for arbitration is made or an election or notice of intention to arbitrate is served, the claims sought to be arbitrated would have been barred by the relevant statute of limitations or other time bar, any party to this Agreement may assert the limitations as a bar to the arbitration by applying to any court of competent jurisdiction, and I expressly agree that any issues relating to the application of a statute of limitations or other time bar, are referable to such court. The failure to assert such bar by application to a court, however, shall not preclude its assertion before the arbitrators.

7. The provisions of this Agreement shall be continuous, shall cover individually and collectively all accounts which I may open or reopen with SB, and shall inure to the benefit of SB's present organization, and any successor organization or assigns. Should any term or provision of this Agreement be deemed or held to be invalid or unenforceable, the remaining terms and provisions shall continue in full force and effect. This Agreement, all the terms herein, and all controversies described in Paragraph 6 shall be governed and construed in accordance with the laws of the State of New York, including, but not limited

to, the law of New York regarding the permissible rates of interest that may be charged and the law of New York regarding damages recoverable in arbitration, without giving effect to principles of conflicts of law. This choice of law clause shall not govern the choice of statutes of limitations applicable to claims and controversies described in Paragraph 6, and the statute of limitations applicable to any such claim or controversy shall be that which would be applied by the federal district court for the district in which I reside.

- 8. I understand that you may in your sole discretion prohibit or restrict trading of securities or substitution of securities in any of my accounts. You have the right to terminate any of my accounts (including multiple owner accounts) at any time by notice to me. The provisions of this agreement shall survive the termination of any account.
- 9. Your failure to insist at any time upon strict compliance with any term of this Agreement, or any delay or failure on your part to exercise any power or right given to you in this Agreement, or a continued course of such conduct on your part shall at no time operate as a waiver of such power or right, nor shall any single or partial exercise preclude any other further exercise. All rights and remedies given to you in this Agreement are cumulative and not exclusive of any other rights or remedies which you otherwise have.
- 10. I understand that SB shall not be liable for loss caused directly or indirectly by government restrictions, exchange or market rulings, suspension of trading, war, strikes or other conditions, commonly known as "acts of God," beyond SB's control.
- 11. From time to time you may at your discretion, make loans to me for a purpose other than purchasing, carrying or trading in securities ("Express Credit Loans"). Express Credit Loans will be made in a nonsecurities credit account ("Express Credit Account"). The minimum and maximum amount of any particular loan may be established by you in your discretion regardless of the amount of collateral delivered to you and you may change such minimum and maximum amounts from time to time.

I agree not to use the proceeds of any Express Credit Loan to purchase, carry or trade in securities. I also agree not to use Express Credit Loan proceeds directly or indirectly to repay other debt that I incur for the purpose of purchasing, carrying or trading in securities.

Joint Account Agreement Paragraphs 12 through 14 apply only to Joint Accounts

12. If this is a joint account, in consideration of you and your successors carrying a joint account on margin or otherwise for the undersigned, each of us agrees to be jointly and severally liable for said account and to pay on demand any debit balance or losses at any time due in this account. Any of us has full power and authority to make purchases and sales, including short sales, to withdraw monies and securities from, or to do anything else with repret to our account, either individually or in our joint names, and you and your

rence to our account, either individually or in our joint names, and you and your successors are authorized and directed to act upon instructions received from any of us and to accept payment and securities from any of us for the credit of this account. Any and all notices, communications, or any demands for margin sent to any of us shall be binding upon all, and may be given by mail or other means of communication.

- 13. Each of us agrees to hold SB harmless from and indemnify SB against any losses, causes of action, damages and expenses arising from or as the result of SB following the instructions of either or any of us. SB, in its sole discretion, may at any time suspend all activity in the joint account pending instructions from a court of competent jurisdiction or require that instructions pertaining to the joint account or the property therein be in writing signed by both or all of us. SB shall be entitled to recover from the account or from any of us prior to distribution of the funds or property therein such costs as it may incur, including reasonable attorney's fees, as the result of any dispute between or among us relating to or arising from the account.
- 14. Each of us agrees that, in the event of the death of either or any of us, the survivor or survivors shall immediately give you written notice thereof, and you may, before or after receiving such notice, take such actions, require such papers, inheritance or estate tax waivers, retain such portion of the account and restrict transactions in the account as you may deem advisable to protect you against any tax, liability, penalty or loss under any sent or future laws or otherwise. The estate of either or any of us who shall have died shall

isent of ruture laws of otherwise. The estate of either or any of us who shall have died shall liable and each survivor shall continue liable, jointly and severally, to you for any net debit balance or loss in said account in any way resulting from the completion of transactions initiated prior to the receipt by you of the written notice of the death of the decedent, or incurred in the liquidation of the account or the adjustment of the interests of the respective parties.

If this account is a joint tenancy account with rights of survivorship, and not a tenancy in common, in the event of the death of either or any of us, the entire interest in the joint tenancy account shall be vested in the survivor or survivors on the same terms and conditions as previously held, without in any manner releasing the decedent's estate from the liability provided for herein.

If this account is a tenancy in common, in the event of the death of either or any of us, the interests in the account shall be determined as specified on the signature section of this Agreement and shall be held upon the same terms and conditions as previously held, without in any manner releasing the decedent's estate from the liability provided for herein.

SB will assume that our account is a joint account with right of survivorship unless we elect a tenancy in common by completing section F on page 1 of this Agreement.

Margin Agreement

Paragraphs 15 through 17 apply only to Margin Accounts

15. You are hereby authorized, without notice to me, and without regard as to whether or not you have in your possession or under your control at the time thereof other property of the same kind and amount, to pledge, repledge, hypothecate or rehypothecate my property or any part thereof, either separately or together with other property of other clients, either for the amount due you from me or for a greater sum.

16. I agree to pay ON DEMAND any balance owing with respect to any of my accounts, including interest and commissions and any costs of collection (including attorneys' fees, if incurred by you). I understand that you may demand full payment of the balance due in my account plus any interest charges accrued thereon, at your sole option, at any time without cause and whether or not such demand is made for your protection. I understand that all loans made are not for any specific term or duration but are due and payable at your discretion upon a demand for payment made to me. I agree that all payments received for my account(s) including interest, dividends, premiums, principal or other payments may be applied by you to any balances due in my account(s). If I maintain both a cash and a margin account with you, you are authorized in your discretion to utilize the equity in either type of account in satisfaction of any maintenance margin requirement without the actual transference of funds or securities between such accounts.

Whenever you deem it necessary or appropriate for your protection, you are authorized, in your sole discretion, to sell, assign, transfer and deliver all or any part of my property which may be in your possession or control in any manner you deem appropriate, make any necessary purchases to cover short sales and/or any open commodity contract positions and/or to cancel any outstanding orders in order to close out the account. Without limiting the generality of the foregoing, such sale, purchase or cancellation may be made, in your sole discretion, on the exchange or other market where such business is then usually transacted, at public auction or at private sale without advertising the same. All of the above may be done without demand for margin or notice of purchase, sale or cancellation to me. No demand for margin, or notice given to me of intent to purchase or sell property or to cancel orders in my account, shall impose on you any obligation to make such demand or provide such notice to me. Any such notice or demand is hereby expressly waived, and no specific demand or notice shall invalidate this waiver. After deducting all costs and expenses of the purchase and/or sale and deliveries, including, but not limited to, commissions and transfer and stamp taxes, you shall apply the residue of the proceeds to the payment of any and all of my liabilities to you, and I shall remain liable for any deficiency. Upon any such sale, you may purchase the whole or any part thereof free from any right of redemption. In the event of my death or incompetency, the authority given by this Paragraph shall continue effective and shall be binding upon my personal representatives and heirs.

17. I will at all times maintain such margin for my account maintained by SB, as SB may require from time to time, and any debit balances arising in such account shall be charged interest in accordance with the SB policy described in the accompanying literature regarding new accounts provided by you under Rule 10b-16 of the Securities Exchange Act of 1934, as amended from time to time. I am aware that interest charges, if not paid, will be added to the debit balance in my account for the next interest period. I am aware and agree that you may impose, for my account(s), margin requirements more stringent than those required by law or exchange regulations. I further understand and agree that such margin requirements may be changed and modified by you from time to time without prior notice to me. I further agree that any waiver by you or failure to promptly enforce, as to my account or that of others, such margin requirements shall not in any way prevent you from subsequently enforcing said margin requirements with regard to my account.

After you have reviewed this Agreement and the information in the accompanying literature regarding new accounts, please sign the appropriate sections on page 1 of this Agreement. Return the completed Agreement in the enclosed postage-paid envelope and retain the accompanying literature regarding new accounts for your records.

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Instructions for the completion of the Tax Certification section

(Section references are to the Internal Revenue Code.)

Purpose of Form. - A person who is required to file an information return with IRS must obtain your correct laxpayer identification number (TIN) to report income paid to you, real estate transactions, mortgage interest you paid, the acquisition or abandonment of secured property, or contributions you made to an individual retirement arrangement (IRA). Use Form W-9 to turnish your correct TIN to the requester (the person asking you to turnish your TIN), and, when applicable, (1) to certify that the TIN you are turnishing is correct (or that you are waiting to a number to be issued). (2) to certify that you are not subject to backup withholding, and (3) to claim exemption tom backup withholding if you are an exempt payee. Furnishing your correct TIN and making the appropriate certifications will prevent certain payments from being subject to backup withholding.

Note: If a requester gives you a form other than a W-9 to request your TIN, you must use the requester's form.

How To Oblain a TIN. - If you do not have a TIN, apply for one immediately. To apply, get Form SS-5, Application for a Social Security Number Card (for individuals) from your local office of the Social Security Administration, or Form SS-4, Application for Employer Identification Number (for businesses and other entities), from your local Internal Revenue Service office.

To complete Form W-9 if you do not have a TIN, write "Applied For" in the space for the TIN in Part I, sign and date the form, and give it to the requester. Generally, you will then have 60 days to obtain a TIN and furnish it to the requester. If the requester does not receive your TIN within 60 days, backup withholding, if applicable, will begin and continue until you furnish your TIN to the requester. For reportable interest or dividend payments, the payer must exercise one of the following options concerning backup withholding during this 60-day period. Under option (1), a payer must backup withhold on any withdrawals you make from your account later 7 business days after the requester receives this form back from you. Under option (2), the payer must backup withhold on any reportable interest or dividend payments made to your account, regardless of whether you make any withdrawals. The backup withholding under option (2) must begin no later than 7 business days after the requester receives this form back. Under option (2) the payer is required to refund the amounts withheld if your certified TIN is received within the 60-day period and you were not subject to backup withholding during that period.

Noie: Writing "Applied For" on the form means that you have already applied for a TIN or that you intend to apply for one in the near future.

As soon as you receive your TIN, complete another Form W-9, include your TIN, sign and date the form, and give it to the requester.

What is Backup Withholding? - Persons making certain payments to you after 1992 are required to withhold and to pay to IRS 31% of such payments under certain conditions. This is called "backup withholding". Payments that could be subject to backup withholding include interest, dividends, broker and barter exchange transactions, renls, royalties, nonemployee compensation, and certain payments from fishing boat operators, but do not include real estate transactions.

It you give the requester your correct TIN, make the appropriate certifications, and report all your taxable interest and dividends on your tax return, your payments will not be subject to backup withholding. Payments you receive will be subject to backup withholding it:

- (1) You do not furnish your TIN to the requester, or
- IRS notifies the requester that you furnished an incorrect TIN, or
- (3) You are notified by IRS that you are subject to backup withholding because you failed to report all your interest and dividends on your tax return (for interest and dividend accounts only), or
- (4) You fail to certify to the requester that you are not subject to backup withholding under (3) above (for interest and dividend accounts opened after 1983 only), or
- (5) You fail to certify your TIN. This applies only to interest, dividend, broker, or barter exchange accounts opened after 1983, or broker accounts considered inactive in 1983.
- Fo ayments, you are subject to backup withholding only if (1) or (2) above applies.

Cer. ___, yees and payments are exempt from backup withholding and information reporting. See Payees and Payments Exempt From Backup Withholding, and Exempt Payees and Payments under Specific Instructions, below, if you are an exempt payee.

Payees and Payments Exempt From Backup Withholding. - The following is a list of payees exempt from backup withholding and for which no information reporting is required. For interest and dividends, all listed payees are exempt except item (9). For broker transactions, payees listed in (1) through (13), and a person registered under the Investment Advisers Act of 1940 who regularly acts as a broker are exempt. Payments subject to reporting under sections 6041 and 6041A are generally exempt from backup withholding only if made to payees described in items (1) through (7), except that a corporation that provides medical and health care services or bills and collects payments for such services is not exempt from backup withholding or information reporting. Only payees described in items (2) through (6) are exempt from backup withholding for barter exchange transactions, patronage dividends, and payments by certain fishing boat operators.

- (1) A corporation.
- (2) An organization exempt from tax under section 501(a), or an individual retirement plan (IRA), or a custodial account under 403(b)(7).
- (3) The United States or any of its agencies or instrumentalities.
- (4) A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities.
- (5) A foreign government or any of its political subdivisions, agencies or instrumentalities.
- (6) An international organization or any of its instrumentalities.
- A foreign central bank of issue.
- (8) A dealer in securities or commodities required to register in the U.S. or a possession of the U.S.
- A futures commission merchant registered with the Commodity Futures Trading Commission. Treat estate investment trust.
- (11) An entity registered at all times during the tax year under the Investment Company Act of 1940.
- (12) A common trust fund operated by a bank under section 584(a).
- (13) A financial institution.
- (14) A middleman known in the investment community as a nominee or listed in the most recent publication of the American Society of Corporate Secretaries, Inc. Nominee List.
- (15) A trust exempt from tax under section 664 or described in section 4947.

Payments of dividends and patronage dividends generally not subject to backup withholding also include the following:

- Payments to nonresident aliens subject to withholding under section 1441.
- Payments to partnerships not engaged in a trade or business in the U.S. and that have at least one nonresident partner.
- Payments of patronage dividends not paid in money.

Payments made by certain foreign organizations.

Payments of interest generally not subject to backup withholding include the following:

- Payments of interest on obligations issued by individuals. Note: You may be subject to backup withholding
 if this interest is \$600 or more and is paid in the course of the payer's trade or business and you have
 not provided your correct TIN to the payer.
- Payments of tax-exempt interest (including exempt-interest dividends under section 852).
- Payments described in section 6049(b)(5) to nonresident aliens.
- Payments on tax-free covenant bonds under section 1451.
- Payments made by certain foreign organizations.
- Mortgage interest paid by you.

Payments that are not subject to information reporting are also not subject to backup withholding. For details, see sections 6041, 6041A(a), 6042, 6044, 6045, 6049, 6050A, and 6050N, and the regulations under such sections.

Penalties

Failure To Furnish TIN. - If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil Penalty for False Information With Respect To Withholding. - If you make a false statement with no reasonable basis that results in no imposition of backup withholding, you are subject to a penalty of \$500.

Criminal Penalty for Falsilying Information. - Willfully falsilying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. - If the requester discloses or uses TINs in violation of Federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name. - If you are an individual, provide the name shown on your social security card. However, if you have changed your last name, for instance, due to marriage, without informing the Social Security Administration of the name change, please enter your first name and both the last name shown on your social security card and your new last name. If you are a sole proprietor, you must furnish your individual name and either your SSN or EIN. You may also enter your business name or "doing business as" name on the business name line. Enter your name(s) as shown on your social security card and/or as it was used to apply for your EIN on Form SS-4.

Signing the Certification

- (1) Interest, Dividend, and Barter Exchange Accounts Opened Before 1984 and Broker Accounts That Were Considered Active During 1983. - You are not required to sign the certification; however, you may do so. You are required to provide your correct TIN.
- (2) Interest, Dividend, Broker and Barter Exchange Accounts Opened After 1983, and Broker Accounts That Were Considered Inactive During 1983. - You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item (2) in the certification before signing the form.
- (3) Real Estate Transactions. You must sign the certification. You may cross out item (2) of the certification.
- (4) Other Payments. You are required to furnish your correct TIN, but you are not required to sign the certification unless you have been notified of an incorrect TIN. Other payments include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services, payments to a nonemployee for services (including attorney and accounting fees), and payments to certain fishing boat crew members.
- (5) Mortgage Interest Paid by You, Acquisition or Abandonment of Secured Property, or IRA Contributions. - You are required to furnish your correct TIN, but you are not required to sign the certification.
- (6) Exempt Payees and Payments. If you are exempt from backup withholding, you should complete this form to avoid possible erroneous backup withholding. Enter your correct TiN in Part I, write "EXEMPT" in the block in Part II, sign and date the form. If you are a nonresident alien or foreign entity not subject to backup withholding, give the requester a completed Form W-8, Certificate of Foreign Status.
- (7) TIN "Applied For." Follow the instructions under How To Obtain a TIN, above, sign and date this form.

Signature. - For a joint account, only the person whose TIN is shown in Part I should sign the form.

Privacy Act Notice. - Section 6109 requires you to furnish your correct taxpayer identification number (TIN) to persons who must file information returns with IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, or contributions you made to an individual retirement arrangement (IRA). IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 31% if taxable interest, dividend, and certain other payments to a payee who does not furnish a TIN to a payer. Certain penalties may also apply.

What Name and Number to give the Requester.

For this type of account	Give name and SSN of:		
Individual	The Individual		
Two or more Individuals	The actual owner of the account or the first individual on the account!		
Custodian account of a minor	The minor ²		
Revocable savings trust (grantor is also trustee)	The grantor-trustee'		
So-called trust account that is not a legal or valid trust under state law	The actual owner		
Sole proprietorship	The owner ¹		
For this type of account	Give name and EIN of:		
Sole proprietorship	The owner ³		
A valid trust, estate, or pension trust	Legal entity ^s		
Corporate	The corporation		
Association, club, religious, charitable, educational,			
or other tax-exempt organization	The organization		
Partnership	The partnership		
A broker or registered nominee	The broker or nominee		

'List first and circle the names of the person whose number you furnish.

*Circle the minor's name and furnish the minor's social security number,

Show your individual name. You may also enter your business name. You may use your SSN or EIN.

*List first and circle the name of the legal trust, estate, or pension trust. Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.

Note: If no name is circled when there is more than one name, the number will be considered to be that of the first name listed.



Throughout this Agreement, "you" and "your" refer to the Financial Management Account or FMA Plus** account (collectively "FMA") holder(s) who are obligated on the FMA® account. "We", "us" and "our" refer to Smith Barney Inc. ("Smith Barney").

- 1. **DESCRIPTION OF THE ACCOUNT.** The FMA account links a conventional Smith Barney securities margin account to the money market mutual fund (the "Designated Fund") you have designated to us. It also provides, as options, a checkwriting privilege, a Money Card ("Money Card") issued by Commercial Credit Plan, Inc. (the "Money Card Issuer"), access via computer to certain online services ("Online Services") and/or the Automatic Funds Transfer ("AFT") service. To obtain any of the optional FMA services, you must utilize the appropriate forms provided by us. The provisions of this Agreement regarding the checkwriting, Money Card, Online Services and AFT services are only applicable to those FMA accounts that opt for such services. To participate in the FMA program, an investor generally must place in a Smith Barney securities margin account (the "Securities Account") cash, marketable securities or a combination of the two having a market value of no less than \$10,000.
- 2. MONEY MARKET FUNDS. Although each of the money market funds (the "Funds") from which you may select the Designated Fund provides an investor with a means of earning a return on cash, neither the FMA account nor interests in the Funds are bank accounts and neither are protected by the Federal Deposit Insurance Corporation. As is standard in the securities industry, an investment in the Funds is neither insured nor guaranteed by the United States government.

INVESTMENT IN SHARES OF THE FUNDS IS ONLY ONE OF THE SERVICES PROVIDED AS PART OF THE SMITH BARNEY FMA ACCOUNT. INVESTORS ARE ADVISED TO READ THE PROSPECTUSES OF THE FUNDS IN CONJUNCTION WITH THIS SMITH BARNEY FMA ACCOUNT AGREEMENT, THE CLIENT AGREEMENT WITH SMITH BARNEY AND THE ACCOMPANYING LITERATURE, AND THE MONEY CARD APPLICATION FORM AND AGREEMENTS WITH THE MONEY CARD ISSUER AND THE ONLINE SERVICES AGREEMENT.

If you do not wish to use the FMA program's other services, you may wish to consider investing in the Funds or in other suitable investments offered to the public by us, without participating in the FMA Program.

- 3. THE SECURITIES ACCOUNT. The Securities Account is a conventional Smith Barney margin rount which can be used to purchase and sell securities. Certain FMA applicants may be litted to open an FMA account with a securities cash account. Provisions in this Agreement regarding margin lending and margin loan value do not apply to those FMA accounts which have a securities cash account only.
- 4. MONEY CARDS. You may request a Money Card, which upon acceptance will be issued to you by the Money Card Issuer. You can use this debit card to withdraw funds from your FMA at Automated Teller Machines ("ATMs") of participating ATM networks, to withdraw funds from your FMA at participating financial institutions and to purchase goods and services ("Purchases") at any retail establishment which accepts the Money Card (collectively "Money Card Transactions"). When you make a Purchase using the Money Card, you will be requesting the Issuer to withdraw funds from your FMA in the amount of the Purchase and directing or ordering the Issuer to pay these funds to the retail establishment. You authorize us to deduct the amount of the cash withdrawals, the amount of all such Purchases and any FMA fees from your FMA account. These Money Card Transactions will be reflected on your FMA monthly statement.

We will charge a fee for each cash withdrawal made via a Money Card. The charge is \$1.00 per ATM withdrawal and \$2.50 per withdrawal from a participating financial institution. Participants in the FMA PLUS Program will receive the first 100 ATM withdrawals in a calendar year at no charge. We may change this fee at any time on notice to you.

You may authorize additional Money Card holders for the same FMA. If you have requested an additional Money Card, you understand that you are authorizing withdrawals to be made from your 'A account via ATM from a participating network, from a participating financial institution or for .chases by the person to whom the additional Money Card is issued. You agree to accept all liability with respect to the Money Card Transactions effected by you or any additional Money Card holders. Please note that any additional Money Cards will have the same account number as your primary card.

Smith Barney reserves the right to cancel your Money Card at any time for any reason upon notice to you. If the Money Card is cancelled any pending debits will be processed and will be deducted immediately from the FMA account. In order to cancel an additional card or the primary card you must call the FMA Client Service Center at (800) 634-9855. In addition you need to return the cancelled cards cut in half to Smith Barney, FMA Client Service Center, P.O. Box 247, New York, NY 10008. You remain liable for any expenses incurred before we receive the returned Money Card.

The combined net worth of available cash in the Securities Account, Designated Fund shares, certain other money market fund shares (which may include Fund shares) and available margin loan

Financial Management Accountsm Agreement

value minus uncleared funds and Money Card pending debit transactions shall be referred to herein as the "Total Cash Available" in your FMA. The loan value of eligible securities for the purposes of margin is subject to regulatory requirements and our credit policies then in effect. Since your Total Cash Available is dependent upon our credit policies and securities prices as well as changes in the balance in the FMA account including securities settlements, cash withdrawals and Purchases with your Money Card and other activity including checkwriting, it may fluctuate from day to day.

Your Total Cash Available is reduced at the time the Issuer is notified of the use of the Money Card, not at the time we receive demand for payment for Purchases or at the time cash withdrawals are deducted from your FMA account. In the case of Purchases the amount of each Purchase is immediately reserved in your FMA, payment for all Purchases during a month is deducted once per month from your FMA account. Funds in your FMA being reserved for authorized but unposted Purchases may not be used to pay checks, other debits or withdrawals.

If your Total Cash Available at any time falls below zero dollars, Smith Barney may suspend Money Card privileges, terminate the Money Card issued to you and any additional Money Cards. If this occurs you agree that you will immediately pay all amounts owed to us including Purchases which will be immediately charged to your account.

- 5. ONLINE SERVICES. You may access your FMA account online through an online service provider (the "Online Provider"). You have the ability through various personal finance software approved by Smith Barney to download FMA information into your computer software ("Online Account Access") or to issue payments based on your instructions and processed by the Online Provider ("Online Bill Payment"). If approved for the service, an Online Services Agreement will be sent to you. Your use of the service following activation will constitute the acceptance of the terms of such agreement.
- 6. CHECKWRITING PRIVILEGE. You may access your FMA account with a checkwriting privilege through our processing bank (the "Processing Bank"). Your FMA monthly account statements will list each check paid on your behalf. There is no minimum dollar amount for checks written. Upon entering the FMA Program, you will receive at no cost a supply of personalized checks. Additional checks will be supplied to you upon payment of a fee.

Any FMA account holder may request that payment be stopped on any checks written on the FMA account (whether or not written by that account holder) by calling us at the telephone number set forth in the Special Considerations section below, and providing any oral or written information requested. However, we are unable to guarantee that payment on any check will, in fact, be stopped.

We may impose fees for services in connection with the checkwriting privilege, e.g. for stop payment orders or for copies of canceled checks. Copies of canceled checks may be specifically requested, in which case a per copy fee will be charged. The first 10 copies provided each calendar year will be free of charge.

 AFT SERVICE. You may access, or add funds to, your FMA account by utilizing our AFT service. This service utilizes the Automated Clearing House system to effect electronic fund transfers. The first ten AFT transactions per month in your FMA account are free to you. We will charge a fee for any AFT transactions over ten per month. We may change this fee arrangement at any time, on notice to you. If you utilize the AFT service, you authorize us, and our processing financial institution (the "Processing Bank") to initiate transfers of money from the account(s) ("Your Bank Account") which you designate on a form provided by us to your FMA account, and/or from your FMA account to Your Bank Account. You authorize us, the Processing Bank and your financial institution(s) ("Your Bank") to comply with any instructions regarding funds transfers between your FMA account and Your Bank Account, provided that such instructions are given to your Smith Barney Financial Consultant, or are given with your Telephone Authorization Code. Such instructions need not be given by both of you. If for any reason funds are added to or deducted from your FMA account or Your Bank Account in error, you authorize us, the Processing Bank and Your Bank to make any debits or credits to your FMA account or Your Bank Account to correct the error. This authority shall remain in full force and effect until we have received written notification from you of its termination. in such time and in such manner as to afford us, the Processing Bank and Your Bank a reasonable opportunity to act on such notification. We shall have no liability for costs or damages resulting from inaccuracy of information which you provide to us, or from your failure to update any information which you provided to us.

You must deliver a completed AFT enrollment form, signed by all FMA account holders and all owners of Your Bank Account, to us at least 15 days in advance of your first AFT transaction. On the form, you must select a 4-digit (numbers only) Telephone Authorization Code. You will need to know this Telephone Authorization Code in order to arrange transfers through the FMA Client Service Center. The Telephone Authorization Code will not be necessary in order to arrange transfers through your Smith Barney Financial Consultant.

Your Bank must be a domestic financial institution capable of processing ACH transactions. At least one of the names on the FMA account must be identical to, and in the same capacity as, a name on each of Your Bank Accounts. Notwithstanding the foregoing, for custodian for minor FMA or bank

accounts, the capacities may be different as long as at least one of the custodian or individual account holder names on the FMA account is identical to a custodian or individual account holder name on each of Your Bank Accounts. A similar exception applies in the case of a grantor revocable living trust FMA or bank account, where the grantor(s), the beneficiary(s) and at least one of the trustee(s) are the same and the provisions of the trust empower the grantor(s) to freely amend and revoke the trust. In the case of such an FMA or bank account, the capacities may be different as long as at least one of the beneficiary or individual account holder names on the FMA account is identical to a beneficiary or individual account holder name on each of Your Bank Accounts. If the FMA account or any of Your Bank Accounts is any other type of trust account or an estate account, they must have only identical owners, in identical capacities.

You can establish, change or cancel recurring transfers to your FMA account in the same dollar amount for any day through the 28th of the month by completing the appropriate sections of the enrollment form. After we have received a signed enrollment form and activated the AFT service for you, you may originate, change or cancel individual transfers to or from your FMA account up to 30 days in advance by calling the FMA Client Service Center at (800) 634-9855 or your Financial Consultant.

The "Transfer Date" is the date the Automatic Funds Transfer is processed by us and posted to your FMA account. Transfers will normally be processed on all days that are business days for both the New York Stock Exchange and the New York Federal Reserve Bank. Transfers requested after 3:00 p.m. Eastern Time on any business day, or requested for a day other than a business day, will generally be processed on the next business day.

Funds sent from your FMA account to Your Bank Account will be charged to your FMA account on the Transfer Date, and will generally be available in Your Bank Account on the next business day. Funds sent from Your Bank Account to your FMA account will generally be charged to Your Bank Account on the first business day after the Transfer Date, but will be posted to your FMA account on the Transfer Date. The posting and funds availability policies of Your Bank may vary. For transfer of funds into your FMA account, we will assign a hold time that must pass before funds are available for withdrawal. However, funds are available in an FMA account on the Transfer Date for investment in securities or to reduce FMA account borrowing levels.

We will notify you as soon as possible, by telephone or in writing, if an AFT transaction cannot be processed by us or has been rejected by Your Bank. We reserve the right to refuse to honor your request for an AFT transfer for any reason.

Any change in ownership of your FMA account, the cancellation of your FMA account, or a transaction returned because Your Bank has closed or frozen Your Bank Account will result in the ""ation of your AFT privileges, including the cancellation of any recurring transfer instructions have on record for your FMA account or individual transfers already requested, but not yet processed. If your AFT privileges are canceled for any reason, you will remain liable for any outstanding transfers, whether arising before or after such cancellation.

8. FEES. We will deduct from your FMA account an annual fee for processing and administration. We may change the amount of this fee from time to time. We will notify FMA holders before any increase in the fee becomes effective. The annual fee is currently \$50 for the FMA and \$125 for the FMA PLUS.

You will pay standard fees for securities transactions, interest on any margin loan, and other fees and charges as may be associated with account services and transactions incurred in the use of your Securities Account. In addition, you will pay for certain FMA transactions, including but not limited to the checkwriting privilege (e.g., check printing, copies of canceled checks, checks returned because of insufficient collected funds or stop payments), Money Card Transactions (e.g. pertransaction cash withdrawal fees), AFT transactions (e.g., per-transaction fees and transfers rejected for insufficient collected funds) and fees for Online Services (e.g., fees for Online Account Access and Online Bill Payment). All of these fees will be deducted from your FMA account, as described in the "Payments" section below.

9. PAYMENTS. You authorize us to debit your account immediately whenever a check, electronic or paper draft or Money Card Transaction is presented for payment on your behalf, when an AFT transaction is effected, or when an FMA fee is due.

Payments for checks, drafts, Money Card Transactions, AFT transactions, Online Bill Payments, margin interest, and FMA fees will be deducted from the Total Cash Available in your FMA account in the following order: first, from available cash in your securities account; second, from the proceeds of redeeming Designated Fund shares; third, from the proceeds of redeeming certain other money market fund shares; and fourth, from margin loans within the value of your securities margin account.

We will debit your FMA account only up to an amount equal to the account's Total Cash Available. If there is insufficient Total Cash Available in your FMA account to cover checks, drafts or payment for AFT transactions or Online Bill Payments when they become due as described above, we will not pay such charges or permit such transactions. We have no obligation to make partial payment on any charges.

- 10. DIRECT DEPOSIT/DIRECT PAYMENT. You may arrange to have certain payments credited or debited directly to or from your FMA account. These payments are credited or debited through arrangements with our Processing Bank and are generally treated in a manner similar to the way we process any deposits as credits or FMA checks as debits to the account.
- 11. MONTHLY STATEMENTS. We will prepare and send monthly FMA account statements that set out, among other things, transactions in the Securities Account, margin interest charges, if any, dividends received on Designated Fund shares and on securities held in the Securities Account, checks, drafts, Money Card Transactions, Online Bill Payments, and AFT transactions.
- 12. SPECIAL ACCOUNTS. For certain FMA account holders, we may, at our discretion and from time to time: waive or modify certain services of, or conditions for participating in, the FMA program; provide more or fewer services; waive some or all fees; or charge different fees than those charged to other account holders, whether or not such account holders receive different services.
- 13. SPECIAL CONSIDERATIONS. If you have questions about your Financial Management Account, including questions related to the Securities Account, Designated Fund shares, checks, drafts, stop payments, Online Services, Money Card Transactions, or AFT transactions (including establishing and stopping transfers) you may call the FMA Client Service Center at (800) 634-9855.

Any one FMA account holder may give us instructions regarding the FMA account services (checkwriting privilege, Online Services, Money Card Transactions or AFT transactions), and all FMA account holders authorize us to comply with any such instructions, except that you may indicate on the appropriate forms provided by us that two signatures are required to clear checks. If we receive inconsistent instructions from any FMA account holders relating to the checkwriting privilege, Online Services, Money Card Transactions or AFT transactions (including instructions regarding cancellation of service or stopping of payment), we may, at our option, honor any one of the instructions, or decline to honor any inconsistent instructions without written directions from all FMA account holders and (in the case of AFT transactions) all owners of Your Bank Account. You shall protect each PIN or Telephone Authorization Code, checks, Online Services Code and Money Cards issued in connection with an FMA account from access by anyone not authorized to use them.

- 14. LIABILITY. You agree that neither we, any Processing Bank, nor the Money Card Issuer will be liable for any loss you incur in connection with the checkwriting privilege, AFT transactions or Money Card Transactions unless we are negligent in fulfilling this Agreement. In no event will we, any Processing Bank, nor the Money Card Issuer be liable for consequential, special or indirect damages or losses where permitted by law. Liability regarding Online Services is further limited in your Online Services Agreement.
- 15. TERMINATION OF THE FMA ACCOUNT. You may terminate your FMA account at any time upon written notice to us. We may terminate your FMA account at any time, for any reason. Any termination of your FMA account will result in the cancellation of all Money Cards issued in connection with your FMA account and in the cancellation of the checkwriting privilege, Online Services and AFT service and any direct deposit and direct payment processing. If your FMA account is terminated, you will remain responsible for the payment of charges to your Securities Account, as well as for all Money Card Transactions and fees, online Services transactions and fees, any checks you write and any outstanding AFT transfers, in each case whether arising before or after the termination of your FMA account. If your FMA account is terminated or the Money Card, Online Services, and/or checkwriting privilege is canceled, you must immediately cease using the cards, Online Services, and checks and you must promptly destroy by cutting in half all unused checks and Money Card(s) and return the destroyed Money Cards to us.
- 16. CHANGING THIS AGREEMENT. We may modify this Agreement (including the fee arrangements set forth herein) at any time without notice. Any changes in the terms of an FMA account reflected in any modification of this Agreement that are adverse to your interests shall be binding on such FMA account, and shall take effect, upon notice of such changes to you. Any such notice shall be given by U.S. mail, addressed to your current address as reflected in our records. All other changes shall be binding on such FMA account, and shall take effect when specified by U.S.
- 17. LAWS GOVERNING THIS AGREEMENT. This Agreement shall in all respects be governed by, and construed in accordance with the laws of the State of New York (disregarding any conflicts of law rule which might result in the application of the laws of any other jurisdiction), and all matters pertaining to the construction, validity and performance of this Agreement shall be determined in accordance with such laws. The terms and conditions of this Agreement apply to you, your heirs, executors, administrators, successors and assigns. It will benefit our successors and assigns. If any part of this Agreement cannot be enforced, the remaining portion will continue to be in effect.

FMA® and FMA PLUSsm Upgrade Application

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SMITH BARNEY

A Member of Travelers Group

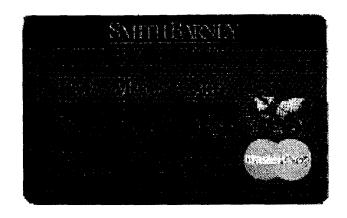
Account Number Branch Account Co-Owner Account Owner/ Name(s) Your Name FMA: Yes, I would like to open an FMA account to immediately benefit from daily "sweep" of idle cash into a competitive money market fund, access to the FMA Client Service Center, the optional Dividend Reinvestment Service and the features selected below. An annual fee applies. FMA PLUS: Make my account an FMA PLUS – all the benefits of an FMA, plus up to 100 free ATM withdrawals per year with my Money Card, a complimentary IRA linked to my account, free monthly Online Account Access, premier statement reporting services and more. An annual fee applies. Unrestricted checking provides you with convenient access to your money Checking without any per-check charges. Print only the account name on my checks. Print the account name and address on my checks. Do not print the address. Please select your printing preference (check one) Joint accounts: Please tell us how many signatures are Two signatures are required. One signature is required. required to authorize checks The FMA Money Card is a Gold MasterCard®. This debit card gives you easy access **Money Card** to cash at over 240,000 ATM machines and purchases at over 12 million locations. How would you like your name to appear? Home Phone Number Mother's Maiden Name Yes, send me a Money Card. How should the Co-Owner's name appear? Yes, send a Money Card to the Account Co-Owner. Please note: a margin borrowing agreement is required to obtain the Money Card. Ask your Financial Consultant for form 3026 if you need to add margin borrowing privileges. Cash withdrawal fees may apply. See the FMA Agreement for additional information. Online Services With your personal computer and Quicken® or Microsoft® Money software, you will have the ability to download cash and money fund balances, checks paid, cash withdrawals and Money Card charges directly into your personal finance software, in addition to Online Bill Payment services.

(h): Online Account Access Online Bill Payment Please enroll my FMA in (Choose one or both): I use the following software (Check one): Quicken 5.0 Microsoft Money for Windows® 95 For Security Purposes please complete: | Mother's Maiden Name (Owner's) (Not required if provided in Money Card section above) Bill Payment fees apply. Online Account Access fees may apply. See the Online Services Agreement for details. Transfer money by phone between your FMA and bank account. **Automatic Funds Transfers** Send money where you need it, when you need it there. Attach a voided check or a letter from your bank confirming the account number, title, account type (checking or savings) and the bank routing number. Your bank account must have the name of at least one FMA account owner in the title. Speak to your Financial Consultant for Trust and Estate account ownership requirements. Bank Account Name Number Staple a voided check here Select your Telephone VOID (numbers only) **Authorization Code:** Complete this section only if your bank Signature of non-FMA owner Account Title account title includes someone who is not a co-owner of your FMA. I authorize Smith Barney Inc. ("SB") to initiate transfers and any adjustments for entries made in error to or from my account indicated above, in accordance with the terms stipulated in the FMA Agreement, which I have read and agree to. This authorization is to remain in full force and effect until SB has received notification from me of its termination. By signing below, Vwe ("I") authorize Smith Barney Inc. ("SB") to establish checking privileges, Online Services, and the Automatic Funds Transfer service, and to have the Money Card(s) issued as indicated above, and I affirm that I have the authority to open this account. I understand that this account is governed by the terms and conditions of this Application, the FMA Agreement, the SB Client Agreement, the Online Services Agreement, my agreement with the Money Card issuer, and/or other agreements I may have with SB or other providers of services related to the FMA account. I have read all those documents and agree to their terms. If I choose to use Online Services, by signing this application, I agree that my Online Services Agreement will contain certain provisions limiting my rights and remedies including, where permitted by law, a limitation on consequential, special and indirect damages and on losses arising from the negligence of Smith Barney or its agents. All account owners must sign. Owner's Signature For Office Use Only: Checking Co-Owner's Signature(s) Date

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APPENDIX E: SPECIMEN BROKERAGE ISSUED CHECK AND DEBIT CARD

Appendix E: Specimen Brokerage Issued Check and Debit Card



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