### Electronic Trading Guide for NASDAQ Level 2

**by**

**Online Trading Academy.com**

**July Edition**

**Official Training Guide for Direct Electronic Traders**

<table>
<thead>
<tr>
<th>BID</th>
<th>ASK</th>
<th>TIME &amp; SALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTAB 42 5/16</td>
<td>ISLD 42 3/8</td>
<td>42 7/16</td>
</tr>
<tr>
<td>HMQT 42 5/16</td>
<td>INCA 42 3/8</td>
<td>42 3/8</td>
</tr>
<tr>
<td>PRUS 42 5/16</td>
<td>MLCO 42 7/16</td>
<td>42 7/16</td>
</tr>
<tr>
<td>MASH 42 5/16</td>
<td>PWJC 42 7/16</td>
<td>42 3/8</td>
</tr>
<tr>
<td>ARCA 42 5/16</td>
<td>NITE 42 7/16</td>
<td>42 3/8</td>
</tr>
<tr>
<td>SHWD 42 5/16</td>
<td>SELZ 42 7/16</td>
<td>42 3/8</td>
</tr>
<tr>
<td>MADF 42 5/16</td>
<td>DLJP 42 1/2</td>
<td>42 7/16</td>
</tr>
<tr>
<td>USCT 42 5/16</td>
<td>COWN 42 1/2</td>
<td>42 7/16</td>
</tr>
<tr>
<td>INCA 42 5/16</td>
<td>NFSC 42 1/2</td>
<td>42 5/16</td>
</tr>
<tr>
<td>ISLD 42 5/16</td>
<td>SLKC 42 1/2</td>
<td>42 5/16</td>
</tr>
<tr>
<td>SLKC 42 1/4</td>
<td>PRUS 42 1/2</td>
<td>42 5/16</td>
</tr>
<tr>
<td>FBCO 42 1/4</td>
<td>OLDE 42 1/2</td>
<td>42 5/16</td>
</tr>
<tr>
<td>BRUT 42 1/4</td>
<td>ARCA 42 1/2</td>
<td>42 7/16</td>
</tr>
<tr>
<td>NITE 42 1/4</td>
<td>REDI 42 1/2</td>
<td>42 3/8</td>
</tr>
<tr>
<td>NFSC 42 3/16</td>
<td>BRUT 42 1/2</td>
<td>42 7/16</td>
</tr>
<tr>
<td>ATTN 42 3/16</td>
<td>BTRD 42 1/2</td>
<td>42 7/16</td>
</tr>
<tr>
<td>JPMS 42 3/16</td>
<td>MADF 42 1/2</td>
<td>42 7/16</td>
</tr>
<tr>
<td>OPCO 42 1/8</td>
<td>LEHM 42 9/16</td>
<td>42 3/8</td>
</tr>
<tr>
<td>SBSH 42 1/8</td>
<td>JPMS 42 9/16</td>
<td>42 5/16</td>
</tr>
</tbody>
</table>
DISCLAIMER

This Training Guide is designed to provide some of the information necessary and/or relevant to understand Day Trading utilizing the Small Order Execution System (SOES) on the NASDAQ System. It is not designed to provide all information required to understand Day Trading utilizing SOES.

All trading involves risk and Day Trading involves a higher level of Risk compared to other common forms of Capital Management such as Long Term Investments in Stocks, Bonds or Mutual Funds. Proficiency at Day Trading will generally take a long period of time to develop, as it is dependent upon, among other things, the student’s capacity to understand the high degrees of risk involved, aptitude for proper risk management to preserve capital, and potential to develop all of the necessary skills to create profitable results.

The user of this Training Guide must understand that actions taken in any trading, including Day Trading may result in the loss of all Capital. Further, that in cases that involve the use of extended Buying Power and Margin, an investor may lose all Capital and assume the liability of owing additional funds in an amount that is substantially more than the initial Capital.

The securities markets are directly affected by many factors, including economic and political conditions, broad trends in business and finance, legislation and regulation affecting the national and international business and financial communities, currency values, inflation, market conditions, the availability and cost of short-term or long-term funding and capital, the credit capacity or perceived creditworthiness of the securities industry in the marketplace and the level and volatility of interest rates.

As a result of the varied risks associated with the securities markets, which are beyond the control of the investor and of Online Trading Academy.com, an investor’s capital and income could be adversely affected. An investor’s ability to do business on SOES is highly dependent on communications and information systems. Any failure or interruption of the Systems could cause delays in the execution of the investor’s securities trading activities and an inability to execute transactions, which could have a material adverse effect on the investor. Online Trading Academy.com and the Author do not assume any responsibility for losses an individual or group may incur as a result of attempting to follow any advice and/or recommendations given in this publication. Reading this Training Guide does not guarantee success and every investor or group of investors is solely responsible for any risks taken or losses incurred.

Some information provided in this Training Guide, as with many trading facts and techniques, may be sensitive to the period of time it is used. Some information provided may need updating as time passes due to new market regulations and the nature of changing markets. Please request the most recent version if necessary. Past performance does not guarantee the same results in the future.
Thank you for purchasing the “Electronic Trading Guide for NASDAQ Level 2”, the original training manual used by Online Trading Academy.

In appreciation for your purchase we would like to extend a one month free subscription to the Stockjockey daily e-newsletter.

Just visit our web site and register at www.tradingacademy.com/books.htm and signup.

Online Trading Academy is the leader in providing educational programs for individual investors on trading stocks on the NASDAQ and NYSE markets. Whether you are a casual trader or an active day trader, you will find our web site has many resources to expand your horizon.

Good Luck and Happy Trading!

Congratulations

With the purchase of this “Electronic Trading Guide for NASDAQ Level 2”
YOU are entitled to take $100 off of a one week “Book Camp” class at the Online Trading Academy

This coupon is good for 30 days from the purchase date of the book and may be redeemed by cutting and sending in this card to: 4199 Campus Drive, Suite F, Irvine, CA 92612 or calling us at 888-841-8418

Name: ____________________________ Telephone: ____________________________
Address: ___________________________________________________________________

Date of purchase: ______________ Please have Salesperson call me?

Yes ☐ No ☐

Come Visit our web site!! www.tradingacademy.com
Acknowledgements

Online Trading Academy (OTA) would like to give special thanks Jorge L. Jimenez and Spencer Sheldon for putting together this training guide. Thank you Cyber Corporation for allowing OTA to use images of the CyberTrader software. Also, Online Trading Academy would like to thank the many students, instructors, traders, and staff for creating and developing the curriculum for OTA.

Preface

The Future of Electronic Trading

Over the next few years the evolution of the stock market will change dramatically. We can witness this with the rise of electronic trading. Electronic trading will be an efficient way to trade because of its speed and precision.

Investors now have the ability to execute their own trades without having to rely on a broker. The two main reasons why people trade electronically are speed of execution and access to state-of-the-art execution systems. Speed is critical if you are trying to trade because every second counts. Electronic orders are directly routed to the NASDAQ without delay. Day Traders use electronic trading systems to get the best possible fill. The state-of-the-art execution systems give traders access to SOES (Small Order Execution System), SelectNet, and ECN's.

SOES is a market order that was developed in 1987 after the stock market crash because market makers refused to take orders. Therefore, in 1989 the SEC mandated SOES into existence, which forced the market maker to execute orders. In the early 1990's SOES represented as much as 80% of day traders orders.

Today, with the rise of Electronic Communication Systems (ECN's) the SOES execution system represents about 10-20% of day traders orders. What can ECN's do for traders? An ECN can give traders the ability to act like a virtual market maker. Simply put, allows traders to buy stock at the bid price and sell at the ask price (bypassing the spread). A huge advantage over the investors trading on retail order entry systems. ECN orders represent about 70% of day traders orders.

And SelectNet, a limit order system, allows the order to placed between the bid and ask price (narrowing the spread). SelectNet empowers the trader with the ability to preference market makers. Day Traders use SelectNet to execute trades about 10-20% of the time. In summary, with the combination of speed and state-of-the-art execution systems traders can now have a great advantage at there finger tips.
# Table of Contents

## Introduction to Trading

### I. Trading on the NASDAQ System
- Definition
- Basic Terminology
- Dealer vs. Auction Market
- SOES
- SelectNet
- Electronic Communication Networks (ECN’s)
- NASDAQ Trading Skills

### II. Market Awareness
- Gaining Market Awareness
- What Markets to Watch
- Homework Time – Getting to Know Price Levels
- Checking Headlines
- Different Market Indicators

### III. Charting and Price Movements
- Technical Analysis Defined
- Technical vs. Fundamental Analysis
- Intraday Price Movements on the NASDAQ
- Direct Electronic Trader Chart Basics
- Recommended Charts
- Popular Chart Patterns

### IV. Using NASDAQ Level 2 To Your Advantage
- Advantages of Level 2 over Level 1
- Analyzing Short Term Risk through the Market Maker Window
- Observing Market Maker & ECN positioning
- Buy & Sell Signals on Level 2

### V. Order Placing
- Timing your Entry & Exit to get the Best Possible Price
- When to use what type of Order
- The power of ISLD

### VI. Short Positions
- Definition
- The NASDAQ Short Sale Rule
- Shorting Against the Box
Boxed Accounts

VII. Risk Assessment & Management

VIII. Common Trading Styles
- Developing your Trading Style
- Scalping
- Trend Trading
- Multiple Positions
- Overnight Game

IX. Preparing for Live Trading
- Demo vs. Live: A world of difference
- The Right Way to Trade on Demo
- Practicing Key Strokes
- Going Live: CyberTrader Settings
- Establishing Realistic Short-term Goals
- Beginner Trading Scenarios

X. Important NASD Rules for the Direct Electronic Trader
- 5 minute SOES Rule
- 10 Second SelectNet Rule
- NASDAQ Short Sale Rule
- Out of the Money Bids and Offers

Appendices

Appendix A: Training Course Calendar and Agenda
Appendix B: Common Trading Mistakes
Appendix C: NASDAQ Market Makers
Appendix D: Electronic Communication Networks (ECN’s)
Appendix E: NASDAQ 100 List
Appendix F: Reading & Reference Material
Appendix G: Trader’s Slang Glossary
Appendix H: Financial Terminology
Appendix I: Daily Trading Sheet
Appendix J: Standard & Poor's 500 Index (SPX)
Appendix K: NASDAQ Circuit Breaker Rules
Appendix L: Daily Trade Sheet
Appendix M: Fractions & Decimal Equivalents
Appendix N: Cyber Trader Programs
Appendix O: The Executioner Programs
Introduction to Trading

Whether you want to profitably trade futures contracts, commodities, currencies or NASDAQ stocks, in the end, trading is primarily a game of psychology, survived by only the toughest competitors. Profitable stock trading is an old game, played in an organized arena governed by some Golden Rules. Throughout this course, we will study these rules so as to build a solid foundation that the novice trader can rely upon when the challenge begins. Regardless of your professional background, the desire to excel in trading brings forth a professional challenge that can only be overcome by the toughest and most determined individuals. And to those who succeed, the rewards may be substantial. To the reckless and unprepared, substantial losses lie ahead. One has to want to excel in the stock market, and in this endeavor, if they are willing to work hard enough, the market may gladly hand you the rewards you deserve.

In addition, probably the most common trait shared among successful traders is the passion for trading. A successful trader is one who is fascinated by the market’s behavior.

Trading is a business - And as such, we must treat it like one. To the novice, the words: patience; discipline; hard work; and determination may sound too simple and trite. Many novices believe that there must be some other, more complicated (or easier) way to excel. Unfortunately there isn’t.

The only secrets to successful trading are:

- Patience
- Discipline
- Hard Work
- Determination

There is no single magic formula, system, or complicated mathematical analysis that guarantees successful trading. All that is needed is accurate and timely information to make decisions, and a reliable means to execute your trading plan.

Because trading is a business, we must separate it from what is personal. There is very little room for emotions in trading, only room to make calculated, well-planned decisions. Our emotions have a strong tendency to skew the decision-making process. Success or failure in a business can bring out the best and worst of emotions. In business, especially in this business, emotions must be kept in check, while clear thinking, experience, instinct, and skill are of essential importance. Your experience and skills must also lie upon a good foundation of risk management, a powerful drive to protect your trading capital, an ability to intelligently forecast price action, and a willingness to take appropriate risk.

Trading is a Risky Business - With much higher risks than other commonly used investment techniques, such as long-term investments in stocks, mutual funds or bonds.
If you are risk averse, need to invest for capital growth, or for additional income, or are trading with money you cannot afford to lose, do not trade.

**Trading is the study of mass behavior.** The stock market is a perfect, measurable representation of optimism and fear as a result of collective, human behavior. Regardless of whether a stock’s fundamentals may lead one to believe that its current price may be over or undervalued, a trader must face the reality that a stock’s most recent trade is a reflection of its true value. You must accept the current price as a fact, and not as an aberration or mistake. This explains why most successful traders place heavy emphasis on studying price, price action and volume relationships in order to guide them in their trading. Thus, we establish the first **Golden Rule of Trading**:

Don’t Fight the Market, Go With It...

**Trading is not investing.** An investor buys a stock in hopes that it will increase in value over a relatively long time. As such, he is concerned with company fundamentals that will support an upside price move over a period of time that will be too long for the professional trader. The investor has time to wait and weather-out the roller coaster ride that the price of a stock may experience over a long period. The professional trader, on the other hand, is constantly looking for movements in prices, and, is constantly transferring his capital into stock prices that are already “on the move,” regardless of whether that move is to the upside or downside. A trader is more in touch with short and intermediate-term price swings because of a tight form of risk management, in an effort to achieve a significantly higher return on his capital. At the same time, the trader is minimizing risk based on technical planning, proper order execution, and proper trade management. Keep in mind, that no matter how tight you control your risk in direct electronic trading, it is still riskier than many other types of investing.

**Trading requires continued education.** In order to excel at trading, you need to continue to study and learn. Especially as a novice, it is important for you to get familiar with the market. Because markets are always on the move, one must strive to be current on market activity. One will find that in many cases, stock price movements are remarkably simple. You will recognize patterns that repeat themselves. Moreover, because they do, the experienced trader will quickly act to use them as an opportunity to profit. You will also learn that patterns occasionally fail to follow through. How well the trader reacts to failed patterns is one of the key measures of trading excellence.

With the emergence of the Internet, the information needed to keep abreast of markets, price movements, financial news, and other data that in the past, was reserved for only those who could afford to pay the price of accurate data, is now available to every trader, and at a much lower cost. What an opportunity! Now through study and homework, you can develop a trading plan with data that is virtually as current as that used by professional traders.
The learning process in trading will never end. Certain stock price movements, especially NASDAQ price swings, will never cease to amaze even the most experienced trader. A stock trader is constantly in search of the perfect price swing, much as a surfer is constantly in search of the perfect wave. Developing a solid “feel” for market movement should be among the first goals of the novice trader. This “feel” is gained with patience, discipline, hard work, and determination.

Trading is much like hunting. A trader with a plan is like a hunter with a fully bent crossbow. In order to reap the reward, you must release the trigger and have the courage to assume risk. All the study and training is academic without actual execution of your trading plan. Recognize that your decision making process may be different when you are involved in the trade. Execute your plan and be rewarded for being correct, but be prepared to retreat when you are wrong. You must be a risk taker, but wanting to limit risk too much often leads to mediocre trading results.

Trading is a game of longevity. You are always learning and searching for perfection. In addition, you are always aware that at any time you have an open trade position, you are at some level of risk. A Direct Electronic Trader can only measure their success after the last trade has been closed. One must realize that an active trader is constantly at risk and, in this business, it is only the bottom line that matters. A trader is in constant search for the “perfect trade.” Ultimately, the trader who is best at protecting their capital wins in the business of Direct Electronic Trading.

In addition to the tuition for this class, there is a “tuition” to be paid to the market. This additional cost of learning is the amount of losses taken while a trader is still in the learning phase. The size of a beginner’s “tuition” to the market depends on the individual’s ability to adhere to the trading disciplines of capital preservation. A beginning trader must be mentally prepared for all tests the market presents before it will consider rewarding a trader with a higher than normal source of income, a unique way of life, and a respected profession. The road to successful trading is long, filled with bumps and all sorts of ruts. In short, it takes time to learn how to drive on this “road.” Moreover, for many, it takes more time than originally anticipated.

Trading is a way of life. It is a constant search to find the meaning of “how” and “why” people behave in certain ways and how that mass behavior will move a stock’s price up or down. It is also about a trader being constantly aware of the risks involved in their actions, while striving to constantly improve their trading strategy and skills and controlling their emotions.

Many traders discover themselves in this profession. A trader’s natural instinct displays itself in trading. With patience, discipline, hard work, determination, and a willingness to assume risk, the successful trader discovers that same trading rules that applied centuries ago still apply today, and probably will continue to be true in the future.
The Successful Trader will:

Watch a stock’s price movement.
Diligently study why it moved
in order to develop a trading plan.

When the pattern repeats, the trader will recognize it,
and will cautiously execute the appropriate trading plan.

If the pattern fails, the trader will recognize its failure,
and quickly exit the trade.
The trader will study why the trade failed, and **develop a better plan**.

A successful trader will repeat this process in a never ending search for the “Perfect Trade”. 
This figure indicates the personal attributes that a trader must possess to be an effective, profitable trader. The four darkly shaded items are attributes that can be taught. The three lighter shaded items are attributes each trader brings with them. The last item, "Experience and Instinct" is only gained through the passage of sufficient time while actually trading.
I. Trading on the NASDAQ System

NASDAQ Definition

NASDAQ – National Association of Securities Dealers Automated Quotation System

The NASDAQ System is the largest electronic, screen-based stock market in the world with the capacity to handle share volume more than one billion shares a day. NASDAQ has two tiers: the NASDAQ National Market, with NASDAQ's larger companies whose securities are the most actively traded, and the NASDAQ Small Cap Market, with emerging growth companies. One of the major differences between The NASDAQ Stock Market and other major markets in the U.S. is the structure of competing Market Makers.

Established in 1971, the system uses computer network technology to display pricing and trade activity to a wide population. Price quotes from different dealers (Market Makers) and Electronic Communication Networks (ECN’s) are displayed on two levels available to the small investor:

Level 1:
Best bid and ask quotes

Level 2:
All bid and ask quotes from all Market Makers in the stock and best quotes from ECN’s

Basic Terminology

- **Bid**: Buying price (left column)
- **Ask (Offer)**: Selling price (right column)
- **Inside Bid**: Best current buying price
- **Inside Ask (Offer)**: Best current selling price
- **Spread**: The difference between the inside bid and inside offer
- **Crossed Market**: When the inside bid is greater than the inside ask
- **Dealer**: Same as Market Maker (See below.)
- **Locked Market**: When the inside bid is equal to the inside ask
- **Volume**: Total number of shares traded in during a specific period, usually in a day.
- **Long Position**: Ownership of the stock with the intention to sell later at an increased price.
- **Short Position**: Borrowed (or “owed”) stock, sold at current prices with the intent of buying back later at a lower price.
• **Bull or Bullish** Bias to higher pricing
• **Bear or Bearish** Bias to lower pricing

• **Market Makers** The NASD member firms that use their own capital, research, and/or systems resources to represent a stock and compete with each other to buy and sell the stocks they represent. Over 500 member firms act as NASDAQ Market Makers. Each Market Maker competes for customer orderflow by displaying buy and sell quotations for a guaranteed number of shares. Once an order is received, the Market Maker will immediately purchase or sell shares from its own inventory, or seek the other side of the trade until it is executed. Dealers “make a market,” meaning they are quoting both a buying and selling price at all times.

• **Market Order** Order to buy or sell at the best possible current price with a specified number of shares. Such orders are open until cancelled. Orders are delivered based on availability of shares at the best price (that is “at market”).

• **Limit Order** Order to buy or sell at a specified price or better and share Size.

• **Pending Order** An undelivered order that is good until canceled

• **Tickets** Number of trade activities. (1 buy & 1 sell = 2 tickets). Each ticket incurs an appropriate commission charge based on daily ticket volume and type of execution.

• **Filled (Delivered)** A completed pending order.
• **Partial Fill** An order filled at less than the amount of shares specified.

---

**Dealer versus Auction Market**

The NASDAQ is a dealer market. The New York Stock Exchange (NYSE) and most other stock exchanges are auction markets. Most auction markets rely on a “specialist” to assure the market for each stock is as orderly as possible. In addition, because such auction exchanges are generally comprised of more established companies, the prices tend to be less volatile than those seen in a dealer market, such as NASDAQ.

Since the NASDAQ is home to many new and emerging companies that are in a very erratic stage of their business life, stock prices of these companies have a tendency to be highly volatile. In addition, as traders on the NASDAQ system, we are constantly at the mercy of Market Makers (dealers) who may try to dictate pricing and who could, without much effort, back their prices far away from current trading levels. When they
do this all at the same time, this creates higher than normal (or sometimes higher than reasonable) volatility. This may work to the benefit (or dismay) of the Direct Electronic Trader.

However, with the emergence of Electronic Communication Networks (ECN’s), it is possible for Direct Electronic Traders to submit their own bid and offers to seek better prices than those quoted by Market Makers. Such ECN’s allow traders, and small investors, to trade among each other at more efficient prices. The ECN’s also reduce the risk of potential pricing abuse and apparent manipulation that seems to occur too frequently when trading (buying from or selling to) with the Market Makers. These powerful electronic networks have created a new trading arena within the NASDAQ. This makes the Direct Electronic Trader more competitive and, thus, potentially more profitable.

There are many markets, or ways to buy and sell on the NASDAQ. These are:

- **Small Order Execution System (SOES)**

  The Small Order Execution System (SOES) was implemented by the NASD to enable the public to have their “small” orders directly entered into the NASDAQ system for immediate execution at the best possible Market Maker price. For the “small” investor or trader (as opposed to the large institutional traders) SOES orders are very commonly used.

  Some basic SOES facts for the Direct Electronic Trader:

  - A SOES orders can only be filled by Market Makers (not an ECN);
  - A SOES buy order is executed at the ask (offer, selling) price;
  - A SOES sell order is executed at the bid (buying) price;
  - There are two types of SOES orders: market orders and limit orders
  - SOES market orders are filled at best available price;
  - SOES limit orders are limited to:
    - **Limit Buy** - limited to inside ask price (will auto-cancel if unexecuted)
    - **Limit Sell** - limited to inside bid price (will auto-cancel if unexecuted)
    - **Limit Short** - limited to inside bid (allowed on uptick only)
  
  - SOES orders are executed on a first-come, first-served basis, by price.
  - SOES maximum order sizes (or tiers) are 1,000, 500, or 200 shares, depending on the classification of the stock;
• The most common maximum order size for large-cap stocks is 1,000 shares (the tier size is shown in the Market Maker box for each stock);
• Depending on the velocity of actual price movements and how far back “in the queue” your order is, your SOES order may get filled a number of price levels beyond the current bid or ask. This is referred to as “slippage.” In a moving market, enter your SOES order early;
• SOES market orders have priority over SOES limit orders;
• You may cancel your pending (undelivered) SOES order at anytime.

---

**SelectNet**

In 1990, the SEC approved certain modifications to NASDAQ’s OCT service, renamed SelectNet. Among other things, SelectNet was enhanced to permit easier negotiation of trades, including counteroffers and broadcasts of orders to all Market Makers in a security. To the Direct Electronic Trader, SelectNet is yet another tool to buy or sell stock to Market Makers.

**Some Basic SelectNet facts:**

• SelectNet broadcast orders are filled by Market Makers;
• Market Makers are not obligated to fill SelectNet orders;
• You must specify a price and order size on all SelectNet orders. Market orders are not possible;
• There is no maximum or minimum share size on SelectNet (unlike SOES tiers);
• SelectNet orders are subject to the 10 second SelectNet order cancellation rule (see the following paragraph);
• SelectNet orders are “hidden” from the Level 2 Screen. That is, they are not seen on the regular Level 2 Screen. However, once an order is delivered, it is reported, just like all other trades;
• SelectNet orders are commonly filled on last-in, first-out basis. If you are not filled within 20 seconds in a moving market, cancel and refresh your order to get back to the front of the line.
• SelectNet orders are a good alternative to using ECN’s because of their flexibility in price and lack of size restriction.
Figure 1-1, shows messages in the Account Manager On-Line and Position Manager Alerts box. The messages indicate that the trader is trying to cancel a pending SelectNet order to buy 600 shares of INTC and has seven more seconds before that can happen. The trader’s order may be filled before the remaining seven seconds expire.

The 10 Second SelectNet Order Cancellation Rule. In 1997, the NASD established the 10 Second SelectNet Order Cancellation Rule. This rule requires your SelectNet order to remain outstanding for, at least, 10 seconds, to give Market Makers enough time to make a delivery decision. You may not cancel your SelectNet order before the expiration of that ten second period. See Figure 1-1 above.

There are two kinds of SelectNet Orders:

- **Broadcast SelectNet**
  - Seen by all Market Makers representing the stock
  - Not commonly used by novice traders (better to use an ECN)
  - Multiple fills are possible giving the trader far more shares than desired.

- **Preference SelectNet**
  - Only directed to Market Maker specified by the trader
- Often used in faster moving markets as a good alternative to SOES market
- When bidding, match a Market Maker on the Ask at his price
- When offering, match a Market Maker on the Bid at his price

Figure 1-2: The above Market Maker Box is shown with the SelectNet Execute box open at the top. This execution box is only available in the CyberTrader program. It is used for direct entry of SelectNet orders. In the CyberT program, all SelectNet orders are routed automatically through the CyberSmart execution keys. Other trading platforms display the SelectNet executions differently.

Electronic Communication Networks (ECN’s)

Among the most powerful advancements to the NASDAQ system is the establishment and active participation of Electronic Communication Networks (ECN’s) in the market. ECN’s provide institutions, investors (small and big), and traders a means to electronically transmit their current best buying and selling prices. Very often, these are prices very competitive with Market Maker quotes. Recently, the best prices are often established by ECN quotes and not by Market Makers.

The recent establishment of the ECN’s has added a great milestone, if not a total revolution, to the NASDAQ System. Although the NASDAQ may be a dealer oriented market, the presence of ECN’s, as a means for all investors and traders to trade among each other without the help of Market Makers, has created a NASDAQ that is more of a
competitive market. Prices now more accurately reflect the true sentiment of the investing and trading public. Through the various ECN’s and through the army of new stock traders, fairer stock pricing has been established.

Here are some ECN facts:

- **ECN quotes are not “hidden.”** They can be seen on the Level 2 Screen (unlike SelectNet);

- **However, only the best ECN Bid or Ask are displayed on regular Level 2 Screens;**

- **NASDAQ’s ECN’s are displayed with the following symbols: INCA, ISLD, ARCA, BTRD, REDI, ATTN, STRK, NTRD and BRUT (see Appendix);**

- **ECN’s are not SOESable. You cannot use your SOES order keys to “target” them;**

- **Momentum Securities, Inc. has direct access to the ECN’s Island and B-Trade (ISLD and BTRD). Direct access means that you do not have to go through the SelectNet Preference System (see next paragraph) to access the ECN. This allows for a much faster quotes and executions;**

- **When using the CyberT (v1.3) or CyberTrader (v1.7) trading programs, you may submit direct bids and offers through the ISLD and BTRD systems only;**

- **When using the Executioner trading program, you may submit direct bids and offers through the ARCA, ISLD, INCA or BTRD ECN’s;**

- **When using M-Trader program, you may submit direct bids and offers through the ISLD, INCA or BTRD ECN’s;**

- **When sending orders to all other ECN’s, you must route your order through the SelectNet preference system in order to buy or sell from these ECN’s;**

- **When using direct ECN access (ISLD, INCA or BTRD), you must always specify a price and share size, that is, such orders are limit orders;**

- **“Partial Fills” on the ISLD system are common, especially in heavily traded stocks;**

- **Odd lots are not allowed on INCA and BTRD ECN’s. The share size of your order must be in round 100 share increments.**

You can buy or sell a stock through an ECN especially if the price is better than that available from a Market Maker. The trader will need to go through the
SelectNet-Preference system to accomplish this (unless your order entry firm has direct access to that particular ECN).

NASDAQ Trading Skills

Because there are many ways to buy and sell stocks on the NASDAQ, because you will be executing your own orders, and because of the high level of NASDAQ volatility, there are certain skills that will be crucial in your trading. Some of these are as follows:

- Selection of proper and realistic entry and exit points on your trades
- Anticipating, identifying and taking full advantage of momentum
- Properly timing your order placement
- Correlating general market and sector activity to individual stock price activity
- Selecting the most appropriate trade execution method (SOES, SelectNet or ECN)
- Tracking other trader activity within the stock
- Analyzing Market Maker & ECN movements on the Level 2 Screen.
- Fast and correct trade execution keystrokes

These are some basic trading skills needed to maximize trading potential on the NASDAQ System. Some of these will be easier for some, while others may require more time to acquire these necessary skills. Throughout the training course, and before graduating to live trading, practicing to develop these basic skills is a crucial part of the learning process.

Whenever possible, it is important to save every teenie (a 1/16th of a $1.00) on every one of your order executions. Keep in mind that saving just one single teenie on each trade can add up to many thousands of dollars in a year of trading!
II. Market Awareness
Gaining Market Awareness

Current market sentiment and trends will dictate overall market direction. Because we are concerned with short-term price swings and because markets move very quickly, being aware of these two is of crucial importance to the trader. Knowing what is going on in the “big picture” is a tremendous advantage, particularly to the more experienced trader who takes larger risks. To the novice, at times, it may be difficult to associate intraday price swings with overall sentiment or trend. The two, however, are always associated, and now is a good time to begin observing. Be very aware of your market at all times!

What Markets to watch

In the larger picture, the stock markets normally only fear one word: Inflation. Anything that may cause an increase in inflation (and thus, interest rates) has a significant, negative effect on the stock market as a whole. Keep in touch with interest rate directions, although as Direct Electronic Trader you don’t need to do as much homework on this subject as would, say, a bond trader. Just get familiar with it, after all, it is part of your business. This will only help you increase your potential for “bigger” game. If, for example, there was compelling news that would affect bond prices prior to the open, you would have a very good clue as to the type of trading you would adopt to fit that day’s market conditions.

Since we are trading on the NASDAQ, we will be mainly interested in NASDAQ stocks. Most of the more active, liquid, and volatile stocks on the NASDAQ are technology oriented, and, thus, we must obtain an in-depth knowledge of the Tech Sector of the market. This is your primary market. You need to get to know it. We are at a time in history where technology has become a crucial part of our civilization. As changes in technology are moving at such a rapid rate, so are the prices of publicly traded technology companies. This general volatility makes the Tech Sector fertile territory for good trades.

Although emphasis is given to the tech stocks, other worlds of opportunity are out there in the non-tech fields, such as financials, biotechs, industrials, and others. Do your homework! Find a stock with acceptable volume (at least a few hundred thousand shares a day) and a solid trend that you can follow. Look for good possible upside or downside moves today or in the next few days, not over the next few months.
As you study or trade a stock, be aware of the market sector of which it is a member. A large-cap stock (a stock with a large market capitalization), with little compelling news for the day, will have a tendency to “technically” trend in sympathy with stocks that fall in the same business category – or Sector. For example, the price for Dell Computer (DELL) is affected by the major moves of other stocks traded in other markets, such as Compaq and Gateway 2000. In addition, trading in Intel Corp. (INTC) may effect the trading of smaller stocks that fall within the same semi-conductor chip group, such as AMAT, KLAC, or NVLS.

Certain financial websites will identify into which sector, or group, that the stock you are looking at falls. For instance, if you select the free charting service available at IQC.com, a list of up to fourteen other stock symbols will be displayed. These are the symbols of other competitors, or at least other companies, generally thought to be in the same business sector.

Sometimes, important news on a big stock sets the daily sentiment for the overall market. A compelling price move in Intel (INTC) or Microsoft (MSFT), or other large-cap stock, may affect the rest of the entire technology sector or even the entire stock market. Being aware of large price moves in the large-caps is yet another way to increase the odds in your favor.

**Homework Time: Getting to Know Price Levels**

Although it is very possible to make profitable, short term trend or momentum (scalping) trades of a stock without any real knowledge of the company, the biggest winning trades generally come from positioning for large price moves as a result of breakouts or breakdowns. Traders with large accounts may even take a position on several of the stocks in a particular sector. Doing some homework will help tremendously, especially, in being positioned early with a solid trade plan. It is very logical that big price moves often do not give even the most astute trader enough time to “jump in” on a big play. Being prepared and being in position early is the way for the big moves to pay off in a very big way.

As a trader, you are concerned with price movements. Whether they are logical or not, understanding these swings will only make you a better trader. You must have the ability to recognize patterns of increased activity at certain price levels. If a trader had nearly perfect knowledge about a stock, he would have a tremendous advantage over others, particularly casual investors. This advantage grows as the diligent trader is able
to correlate such price movement knowledge with other fundamental, technical and relational information.

The more one knows about a stock’s fundamental status and technical price action, the better one can understand the stock’s price movements. If you trade a stock frequently, you will start to understand its key trading levels based on an intelligent combination of fundamental and technical knowledge. Gather as much information as you can about the stocks you are considering trading. Read news articles, press releases, analyst opinions, message boards on the Internet or anything else you can get hold of. Learn to interpret the news or rumors correctly to turn the odds in your favor and give you confidence in analyzing the price fluctuations.

**Novices beware - a positive news article or a bearish rumor posted on an internet message board you read last night doesn’t mean the stock will react to it today!**

It may have already reacted in anticipation, it may do it tomorrow, or for some reason, the information was not substantial enough to trigger any new price action. Do your homework. Turn over every stone you need to understand your target stock. Because, when you truly believe you understand what makes the price of each stock move, it will be easy to know when, and in what direction, to trade that stock. Keep in mind, however, that combining technical and fundamental knowledge of any particular stock requires a significant degree of experience in proper interpretation. The key words here are **watch** and **learn**.

Look at your data sources and check the charts for patterns. Remember, however, that a Direct Electronic Trader is more concerned, over the long run, with technical analysis (topic covered in another section), while detailed fundamental analysis (P/ E ratios, income statements, balance sheets, etc.) is generally of greater value to the more intermediate to long-term investor.

### Checking Headlines and Sentiment for the Day

Before starting the trading day, check the headlines for general market sentiment. This may set the tone for the day. Check the pre-market trading of the S&P 500 Futures contract, is it gapped up or down and by how much? Is there any compelling economic or political news that would reverse or aid the recent market trend? Use this type of information as a guide to increase your awareness of general market sentiment before starting your trading day. You must prepare mentally (or in your trading notes) for different scenarios that you may see during the day based on technical knowledge. Sometimes the first few trades of the day will even tell you how strong the bids or offers are on a stock or group of stocks.

Market sentiment may dictate whether a stock will achieve a technical breakout beyond its recent trading range today. It may also give you a hint as to whether most of your
positions should be long or short, to take quick profits, or be a little more patient. As a trader, you must be very “in touch” with the market sentiment, especially the specific market you trade. It is a matter of turning the odds into your favor. This information is crucial regardless of your trading style. Being quick to identify the type of “trading” that is happening before your eyes may tell you many things. Important things like staying off the keyboard, or to continue firing away your orders, loosen or tighten stops, or whether the trading day is suited to your trading style.

In general, look for stocks that are proving themselves to you. Keep asking yourself these types of questions: “How is this stock reacting to the general market? How has this stock been acting over the last few days (week or even longer) to the trend of the general market? What is going on in this sector? Is your stock responding to upside movements in the market and holding strong during the general market pullbacks (or vice versa)? What other stocks affect your stock?” To answer these and other similar questions, it is necessary for the diligent trader to not only read all the direct information, but to “read between the lines” as well.

- **Different Market Indicators**

As a trader, you will need to watch both recent and current general market movement by watching indicators. These indicators may signal you to take a position (or liquidate a position) in one stock or a group of stocks. If the rest of the market is beginning to enter a sell-off mode, you must know about it, in order to react appropriately (e.g. liquidate long position, and consider opening a short position).

Although there are a number of market indicators that a Direct Electronic Trader may watch, by far, the most important would be the S&P 500 Futures contract. Many NASDAQ stocks, especially larger tech stocks, have a tendency to confirm a price move in tandem with current S&P 500 Futures contract price trends. Because it is a broad index, and very actively traded ($16 Billion per day!) on the Chicago Board of Exchange, it is one of the best indicators for market sentiment.

Here is a list of market indicators that are commonly used by Direct Electronic Traders that are trading NASDAQ stocks:

- **S&P 500 Futures Contract (Currently “/SPM 9”: expires June 1999)**
The S&P 500 Futures contract is capitalization weighted, representing the market value of all outstanding common shares of the firms listed (share price x shares outstanding). This means that a change in the price of any one stock influences the index in proportion to the relative market value of that firm's outstanding shares. Companies such as General Electric (GE), Wal-Mart Stores, Coca Cola Co., General Motors (GM), Microsoft (MSFT), Intel (INTC) are just a few of the well-known names included in the S&P 500 Index. (Go to the web site for Smartmoney.com. At “map of the market”, there is a display that shows each member of this index).

A large move in the S&P 500 Futures index (especially to the downside) is most often followed by a move of actual stock prices (especially by the larger-cap stocks) in the similar direction. This tool is especially useful to momentum traders. Some stocks, particularly the widely day-traded stocks such as MSFT, INTC and DELL (among others), are extremely sensitive to S&P 500 Futures price movements, while others may need a more convincing move. Regardless, it is a key indicator of market sentiment.

Because of this, try to get very familiar with S&P 500 Futures index price patterns. Technically analyzing S&P 500 Futures contract chart patterns is very helpful, if not indispensable, to the Direct Electronic Trader.

Of particular importance is the activity during the first hour and a half and last two hours of S&P 500 Futures trading. Critical patterns are most often formed during these times.

NASDAQ 100 Index ($NDX) or the NASDAQ Composite Index ($COMPX)

The NASDAQ 100 Index comprises one hundred of the largest domestic, non-financial common stocks listed on the NASDAQ exchange. It has a 94% correlation to the NASDAQ Composite Index that comprises all NASDAQ stocks.

Often, the trend on the NASDAQ 100 will diverge from the S&P 500 trend. This is usually because the technology sector may occasionally take a different direction from that of the general stock market. On these days, it is best to stay with the trend on the NASDAQ 100 (or NASDAQ Composite), especially if you are trading tech stocks. You must be quick to identify this. In fact, if you are really good, you may be able anticipate this divergence prior to market open. Did you do your homework?
Dow Jones Industrial Average (INDU)

Although it may seem absurd, the best Direct Electronic Traders also keep a close eye on the Dow Jones Industrial Average (DJIA), even if it does not include any NASDAQ stocks. Here is why. The DJIA is the most watched stock market indicator in the world.

The DJIA is comprised of 30 blue chip stocks (the “bluest of the blue”) traded on the New York Stock Exchange (NYSE), each representing a major industry or business sector. Its components (member companies) are updated, from time to time, to maintain accurate business industry representation. (This updating also tends to bias the DJIA to the upside.)

To the Direct Electronic Trader, the DJIA is an indicator to watch, not only as one of the more important gauges of market sentiment, but especially when approaching milestones and psychologically important support and resistance levels, such as 9,000, 10,000 etc. For example, if the market is selling-off and establishing a sharp intraday downward trend, you can expect a technical bounce or stall in the trend of the general market (including NASDAQ) as the DJIA heads near a milestone or other important support level.

Philadelphia Semiconductor Index ($SOX)

The Philadelphia Semiconductor Index is comprised of sixteen stocks of major semiconductor companies. Many stocks on this index trade on the NASDAQ. For example, among the more popularly traded stocks are: INTC; AMAT; XLNX; NVLS; LRCX; and LLTC. This index is commonly used while trading stocks that fall within the semiconductor sector.

30-Year U.S. Treasury Bond (i.e., the long bond, current symbol: /USM 9)

In terms of dollar volume, the size of the stock market is dwarfed by the size of the bond market. Activity in the bond market has a very heavy effect on the stock market. This impact is even carried through on an intra-day basis. On some days,
activity in the bond market is more significant, particularly when important macro-economic or political data or news is released. Watching the bond market for significant moves, particularly towards critical support or resistance levels, is another indicator for Direct Electronic Traders. Otherwise, if the bonds are just moving along at a steady price level, they will not have much impact on the stock market on an intraday basis.

Figure 2-1: The CyberTrader Tool “Index Client” is shown above. This tool allows the trader to maintain awareness of each major index, as well as the strength of the overall market, as indicated by “the Tick” and “the Trin.”

III. Charting and Price Movements
Technical Analysis Defined

Technical analysis is the study of price movements, share volume, and price relationships. As stock prices change, they develop a pattern of behavior at certain levels, that tend to repeat and are, therefore, recognizable. Price fluctuations over a period of time are compiled to form a chart that will visually represent the formation of patterns. At its simplest form, the most basic tool of a technical analyst is a chart. Because a chart allows a stock trader to observe the formation of a recognizable pattern, it is possible, to varying degrees, to anticipate future price behavior. With careful analysis, planning, proper order execution and risk management, it is very possible to benefit from properly interpreting chart patterns.

Prices of securities also have a tendency to correlate with prices of other financial instruments or other stocks. For example, a large downside move in prices of the S&P 500 Futures index have a tendency to affect prices of certain securities that are sensitive to fluctuations in that index. A large price move in an industry leader, such as COMPAQ (CPQ on the NYSE), has a strong tendency to affect price action in Dell Computer (DELL on the NASDAQ), the second largest in the industry. When trading a stock, it is of significant advantage to the Direct Electronic Trader to know, and properly interpret, what affects the price of the stock on a technical basis. This is especially true, in a frequently traded stock, in order to have an advantage over others trading (or investing) in that stock.

While technical analysis does not have to be complex, traders primarily relying on technical analysis for trading guidelines tend to move deeper and deeper into the mathematics of price action. Such advance technical analysis tools include simple and exponential moving averages, convergence and divergence indicators, advance-declines lines, relative strength indicators, oscillators, and other esoteric or proprietary tools. While many of these systems may be valid, this manual seeks to cover only the most popular indicators and basic chart patterns for a number of reasons:

- Basics first;
- Some technical indicators are just too complex (especially for the novice);
- Complex trading systems, while may be valid, are subject to proper interpretation and timing
- Studying popular chart patterns helps beginning traders understand the concept of "mass behavior";
- Most successful traders develop remarkably simple methods. Keep your trading simple and stay close to the old rules. It generally pays-off in the long run.
Technical versus Fundamental Analysis

Fundamental analysis is the study of the company information that begins with market type and extends into studying information critical to it’s effects on the company’s ability to earn money over a period of time for its investors. Such matters include assets, sales, products, management and others factors that affect price over long period. Although knowledge of a company’s fundamental aspects offers a degree of validity for the Direct Electronic Trader, too much focus on fundamentals may affect the trader’s ability to technically analyze price fluctuations. The Direct Electronic Trader is more concerned with short and very short-term price swings. Since a company’s fundamental situation is generally used to determine long-term price direction, there is not much need for detailed fundamental study on a stock in order to successfully trade it on an intraday basis. A Direct Electronic Trader is more concerned with technical price moves and intraday momentum and order imbalance.

Intraday Price Movements on the NASDAQ

Because of its dealer nature and technology stock components, the NASDAQ is a unique market. Prices have a tendency to be more volatile and frequently exaggerated. Because they are, it is a Direct Electronic Trader’s playground. However, presence of more exaggerated price movement may be to the Direct Electronic Trader’s advantage or disadvantage. There is a skill to trading on the NASDAQ in order to get the best price levels, avoid slippage and avoid traps. NASDAQ price moves are quick and do not give much time to those who are late. This is discussed at length in a future chapter.

Chart Basics – Terminology

- **X axis** - Time period shown in the horizontal direction
- **Y axis** - Price level shown in the vertical direction
- **Scale** - Extent of Time & Price data
- **Tick** - A point that represents a specific time (x axis) and price (y axis)
- **Trend** - The dominant upward, downward or lateral direction in price.
- **Intraday Chart** - Price fluctuations within a specific trading day or group of days.
- **Daily Chart** - Price fluctuations by day, over a longer period of time, based on opening price for the day, closing price, and range.
- **Line Chart** - Price & Time data plotted by line
- **Bar Chart** - Price & Time data plotted by bar to represent open, close
• **Candlestick Chart** - Price & Time data plotted by "candlestick" to represent open, close and range in price during a given time period. Green (or white) candles represent strength (upside) in price, red (or black) candles represent weakness downside).

• **Support Level** - A critical price level where a downside movement in price normally stalls. Also, a price level that attracts buy orders.

• **Resistance Level** - A critical price level where an upside movement in price normally stalls. Also, a price level that attracts sell orders.

• **Breakout** - A strong upside move in price away from resistance, in search of new resistance.

• **Breakdown** - A strong downside move in price away from support, in search of new support.

• **Consolidation** - A congestion in trading at a price level, typically to form a solid support or resistance level.

**Chart Types - Bar Charts**

- "High" for the Period
- Closing Price
- "Low" for the Period
Figure 3-1: Bar Data - The above chart shows 90 days of price information on the stock WCOM. Each bar indicates the price levels at the Open and the Close. It also shows the High and the Low for that period.
Figure 3-2: Intraday 3 min Bar chart - 2 Day

INTRA DAY: A look at the Price Activity on a stock from the open until close of the trading day. Each bar represents a 3 minute period of trading activity.

Candlestick Charts
Figure 3-3: Intraday 3 min Candlestick Chart - 2 Day
This is the same data as the previous example, but in Candlestick Form. Intraday price action, each candle is 3 minutes of price activity.
Figure 3-4: Daily 90 Day Candlestick Chart
This is the same data as the previous example with the Daily price action over 90 days. Each candlestick represents one day of trading activity.

Trends

Identifying the trend of the market and of the particular stock you are trading is of prime importance. Before entering a trade you must determine the trends of: the market; the sector; and, the stock. As you come across stocks that you are not familiar with you can determine their trend by checking daily and intraday charts. Intraday charts, of course, are more important to the Direct Electronic Trader. Basically, if the trend is up, your odds of winning trades are on the long side and vice versa. **Do not fight the trend - Go with it!**

Although the phrase “Buy Low, Sell High!” will always hold true, there is another term the trading world loves just as much, **“Buy High, Sell Higher!”** (and vice versa). Observe the following example.
Figure 3-5: Intraday 5 min Intraday Downtrend
This is an extreme example of a clear downtrend in the market. Are you trying to buy the dips here? Perhaps you should just go short. Going long on a day like this is a formula for disaster. Stay with the trend, a day like this in the market is a trader’s dream.
Figure 3-6: Intraday 2min 2 day Chart showing an Intraday Uptrend
Here is an example of a strong stock with a clear up-trend. The chart shows a four-point move without a correction. Quite clearly, anybody short on this stock would have experienced a very slow punishment. This, however, is a good example of an excellent trade clearly identifiable through its trend by the breakout at 60 9/32nds.

Support & Resistance

All stocks have support and resistance levels, some of these levels are more important than others (that is, there are major and minor support levels). Support levels are prices at which the stock has difficulty breaking to the downside, while resistance levels are prices that a stock has difficulty breaking to the upside. The break of a support or resistance level is often followed by a major move. When broken, the price level that was formerly the support area typically becomes a future resistance level, and vice versa. These support and resistance price levels are commonly seen on daily charts and are also very common on the intraday charts use by Direct Electronic Traders.

Please see the following examples:
Figure 3-7: Intraday 2 min Candlestick Chart showing resistance. After climbing out of the 78 1/2 area, MSFT has spent the last two hours not being able to get through the 80 price area.

- **Recommended Charts**

There are many different ways to study price moves. One must take into account the scale and type of chart (bar, candlestick, line) being used. As Direct Electronic Traders, we are concerned with short to intermediate term price swings and with the most recent price activity. The period of greatest interest is typically, therefore, the last three minutes to a maximum of six months. Although there will be times when the trader will need to go further back in time to find support or resistance levels, anywhere from three to six months is generally as far back as needed.

**Chart Settings.** Setting the time interval of your charts (i.e., chart view) is of critical importance. For example, a specific chart pattern may be better recognized on a 5 minute, rather than a 1 minute chart. Or perhaps another pattern may be forming on a 60 minute, 10 day chart. As a general rule, the pattern forming on a long-term chart (i.e. 60 minutes) would be more significant than patterns only seen on short-term charts. This is especially true on the more volatile stocks. Although patterns may also be forming on the daily charts, a Direct Electronic Trader typically has more time to assess risk on these. Regardless, it is always important for a trader know where the stock is currently trading relative to short and intermediate term price ranges (3 minutes to 3 months).
These are the charts recommended for Day Trading:

Market Charts: Your “Stethoscope” to the General Market (see Section III)

A Direct Electronic Trader, as discussed in the previous chapters, needs to be in touch with general market conditions at all times. By far, the best indicator to watch is the movement of the S&P 500 Futures Index contract. Here is a list of recommended basic “stethoscopes” to the market:

- S&P 500 Futures Index (/ SPM 9 – main setting)
- NASDAQ 100 ($NDX) best used when the NASDAQ trend is different from that of the general market.
- Dow Jones Industrial Average ($INDU) for checking milestone numbers.
- 30-yr Treasury Bonds (/ USM 9) checking for large price moves only.

Note: Set default chart to Intraday 5 min, 2 day (or 3 min for more detail/scalping); occasionally set to Daily, or Intraday 60 min, 10-day for different views.

Stock Charts

When “pulling-up” (selecting) a stock, a Direct Electronic Trader not only needs to see current Level 2 information (bids and offers with size and depth), but also needs at least three charts (that is, pictures) of its past price behavior. On all trading platforms, it is possible to pull-up a stock for Level 2 information and link it to charts that will give you historical price moves. These links will immediately bring up charts of the stock’s pertinent trading activity. Recommended settings are as follows:

Short-term Picture

It is important to note what the stock has done over the last few hours or trading days. Perhaps a short-term support, resistance, trend or consolidation can be found here. It is also a good chart to find out if a stock is in the process of a major move (or about to correct):

- Set Default to Intraday 5 min, 3 day (or 3, 2 or 1 min, 3-day for more detail)
- On all trading Platforms, link the chart to all Market Maker/ Level 2 windows
- On CyberChart, selecting the “Scale to Range” option will compress all three days into the chart, while de-selecting this option will show more recent activity.
• On Executioner, selecting “Snap to Window” does the same compression.

**Short to Intermediate-Term Picture**
Support, resistance, congestion and breaks are more established during this time period.
• Set default to Intraday 60 min, 10 day (or 30 min, 7 day)
• On all trading Platforms, link the chart to all Market Maker/Level 2 windows
• On CyberChart, selecting the “Scale to Range” option will compress all ten days into the chart, while de-selecting this option will show more recent activity.
• On Executioner, selecting “Snap to Window” does the same compression.

**Intermediate-Term Picture (3 Months to a Year)**
The formation of patterns in the intermediate-term can best be seen on daily charts. They do, however, require a little more patience. On the Nasdaq, a stock price has a tendency to fluctuate before following through on a pattern formation in this chart. This is a great chart to use, especially, when the stock is breaking a new high or low within the time period. It also more clearly shows more established congestion levels.

• Set Default to daily chart, 90 day (or 30 day)
• On CyberChart, link to all Market Maker windows
• On CyberChart, selecting the “Scale to Range” option will compress all ninety
• On Executioner, selecting “Snap to Window” does the same compression day

**Popular Chart Patterns**
We study basic chart patterns for these simple reasons:

• They are the basics.
• They are simple.
• They are popular (and therefore, have a self-fulfilling element).
• More often than not, they work.

But before continuing, we must accept, as a part of trading, that:

**Basic chart patterns will occasionally fail generally due to the formation of other, more significant patterns that form on charts of different scale or misinterpretation by the trader. The skill of a successful trader is tested on how quickly one recognizes and reacts to the failing pattern.**

**Hint: Exit the trade quickly!**
When chart patterns appear to be forming, it is important to recognize the pattern early and to execute the trade to avoid being late to the “party”. By the time you wait for full formation of the chart pattern, and other conformations, to get in a trade, it may already be time for the price to correct!

Support and Resistance Levels

Support Levels (Floors): This is a price level where a down trending stock will have a tendency to stall, or where the stock will find more buyers. This is a price level where a stock has difficulty breaking to the downside.

Resistance Levels (Ceilings): This is a price level where an up trending stock will have a tendency to stall, or where the stock will find more sellers. This is a price level where a stock has difficulty breaking to the upside.

When a stock breaks through resistance, this level will technically become a future support level. On the other hand, when a stock breaks down through support, this level will technically become a future resistance level. Stock prices have a common tendency to rest, consolidate or “congest” (trade in heavy volume and for a longer period) at support or resistance levels.

Breakout and Breakdown Pattern

Stocks that are in the process of consolidating, or congesting at a price level, are often gathering momentum to make a major move in either direction. The direction of that major move is often determined by examining the previous trend, before congestion. The likelihood to continue the previous trend is higher than the likelihood to reverse. Keep in mind that a move in the opposite direction may be just as explosive. An astute trader would like to see a price action to one direction confirmed, instead of
trying to “guess”. A break through the Resistance (to the upside) or Support (to the downside) is usually explosive (check your chart scales!):

Breakouts and breakdowns also occur in “uncharted” areas – such as a new 52 week high (or low). When a stock is about to enter this territory, be prepared to jump in early for the break. The Nasdaq is notorious for fast moves beyond these points and “late” traders are susceptible to price “slippage” as they chase the trade. Keep the following point in mind:

- Entry points at or near the congestion area are early, not subject to much slippage, have bigger profit potential, but are more risky;
- Entry after the breakout point (or breakdown, for shorting) is less risky, because of the confirmed “break”, but is subject to slippage or lesser profit potential;
- Breakout stocks will search for a new resistance level, especially if the price level is “uncharted” (that is, beyond all-time highs). Stock prices typically head for psychological resistance points at the whole numbers and especially “decade” numbers (i.e., 20, 60, 70, 80…). The same applies to the downside. For example, if the stock is about to hit 90 for the first time, you can expect stronger resistance as the stock price approaches that level. It may be a good time to take profit (or a portion of profits) and wait for a clear break beyond that price before jumping back in.
- When hitting intraday highs or lows, wait for a confirmed break or positive signals within the L2 screen before jumping in. Since it is a Support or Resistance Area, the stock may just as well Bounce off of these levels.

- 3 month highs or lows are especially significant for the Direct Electronic Trader
- When Trading Breakouts and Breakdowns, examine the previous trends – Intraday, 10 day and 3 month. Always check chart scales – Time & Price - what may appear to be a large breakout may only be and 1/8 or ¼ move - how much are you risking? Check the Time Value – the breakout may occur over the next few minutes or the next few days! This will help you determine you time expectation – some stocks may take hours before a breakout occurs – expecting it to happen over the next few minutes will create frustration – be aware of your Chart Scales!
Figure 3-8, a 5 minute, 2 day chart of Healtheon (HLTH) showing an intraday breakout after the stock spent four hours in a trading range between 65 and 72.

**Rounded Top & Rounded Bottom Patterns**

This is formed typically on a trend reversal. It is congestion at a price level with bias to a direction, and a slow reversal to bias of the opposite direction, thus, the formation of a “rounded” congestion.

A Rounded Top pattern is a reversal of an upside trend, and thus bearish. While a Rounded Bottom pattern is bullish.
Double Top and Double Bottom Patterns

A Double Top pattern is bearish. Entry point to the short side is a break down beyond the previous support.

A Double Bottom pattern, on the contrary, is bullish. Entry point to the long side is at the breakout beyond previous resistance.

Figure 3-9: Double Top Pattern
This chart depicts the clear double top formation in the S&P 500 Futures created in early 1999. The first top is on January 8 at 1290 1/2 and the second top on February 1st at exactly the same level.

IV. Using NASDAQ Level 2 to Your Advantage

- Advantages of Level 2 over Level 1
While NASDAQ Level 1 only quotes the inside (best) Bid and Ask, Level 2 reflects all quotes and the number of shares available. All Market Maker quotes and the best ECN quotes are seen. Thus, determining price “depth,” based on Level 2, is of tremendous advantage in getting the best prices and setting realistic stops. While proper interpretation of chart patterns may reveal a good stop-out point, the Market Maker window may reveal that there is not enough support at that price. There is skill in reading a NASDAQ Level 2 screen to turn the odds into your favor. Careful observation will reveal facts that may help the Direct Electronic Trader in proper order execution to get the best prices, as well as in trade planning.

Regardless of your trading style, knowledge of reading the Market Maker window is an essential advantage to get the best prices. If you plan to take quick profits during small momentum moves (scalping), it is even more important.

**Analyzing Short Term Risk through the Market Maker Window**

This is particularly critical for scalping trades (that is, anything with less than a 3/8 or ½ point profit target). When you find a number of Market Makers accumulated at a particular price level, it may represent a temporary support or resistance level. Such levels are areas where you should expect you might be able to get out of the trade if it does not go in your favor immediately as desired in the case of very short term scalping trades. Take note that these levels often only represent a very temporary support or resistance point. See Figure 5-1

You may also be able to immediately tell the volatility level of a particular stock by merely looking at a Level 2 screen. Without pulling up a chart, the Level 2 screen provides clues to volatility including number of price levels; share size; volume; and spread – and thus, a quick assessment of risk.

Keep in mind that each stock trades in its own “neighborhood.” That is, each stock has its own distinct price and trading characteristics. Your Level 2 screen will give you several clues to this. In this regard, it is the front-line of your overall risk management technique. Combined with your technical analysis of a stock’s chart, order execution skill, market feel, and proper risk management, you will have the confidence to make proper decision as to how or when to enter or exit a trade.

Here is your Level 2 screen checklist before executing your entry:
SPREAD – anything more than 1/8 is the first sign of volatility. While this should not necessarily stop you from trading a stock, you must be ready for this larger spread. Do not just look at the inside quotes, look at lower price levels. How far away are the other quotes?

MARKET MAKERS - Which Market Makers appear to be the aggressive buyers or sellers in this stock at the present time? Is a group of Market Makers gathered at a certain price level? Why? Are these same Market Makers also gathered at an area on the opposite side?

ECN Presence - How active is the Island ECN in this stock? How about INCA? Some stocks are extremely sensitive to ECN activity. Some other stocks do not have an active ECN presence - this is common on low volume stocks. This will help you determine the most appropriate execution method (such as, SOES, SelectNet Preference, or ECN.)

ECN Size - Beware of large share size (more than a couple of thousand shares) displayed on INCA. INCA is often used to manipulate temporary direction. A strong indicator of legitimate INCA size is when INCA orders continue to chase a stock to higher (or lower) price levels. You can assume the INCA interest is real when you see INCA bids increasing as the selling price increases (or vice-versa). ISLD size however is much more reliable. A build up in ISLD size on the bid side will generally signal a temporary move to the upside. The opposite is generally true when ISLD size continues to build up on the ask side.

VOLUME – Too much or too little volume is generally not a good sign. Although volume should be gauged according to the stock’s daily average. If a particular stock trades 3 to 5 million shares a day, a day where that stock is traded 10 or 15 million shares would be considered heavy, while less than 1 million would be considered light. The daily average volume can be seen on a daily chart.

PRINTS – check the prints (actual execution prices on the “time and sales” column to see on which side (bid or ask) of the Level 2 screen is trading. Correlate this with Market Makers and/or ECN’s currently present on the inside quotes.

+ Or – Indicator - your first sign of a temporary trend or relative strength. A sign of risk is present when a stock is positive or negative by a large amount (typically more than a few points) – check your charts then.

OPEN PRICE – Check to determine if the stock is trading above or below the opening price. This is another temporary sign of trend.
HIGH and LOW PRICES – Check to see if the stock is trading closer to the high or the low for the day.

Figure 4-1: L2 showing temporary Bid side support
Note that the Bid side is showing accumulation of Market Makers and ECN’s at lesser price levels than on the Ask side. This is typical of down trending stocks hitting support – Support is reflected by the Bid Side activity – if you are going long for a scalp on this stock at the 5/8, you can be confident to exit – at worst!- at the ½ in case the trade goes against your favor. Note that you are likely bucking the trend here.
Figure 4-2: DANGER ZONE
Occasionally, a “Comet” visits the Stock Market. A stock experiencing wild volatility, while entertaining, is a danger zone that should generally be avoided especially by the novice. Bring up your checklist and determine the volatility just by looking at this L2 screen example. In real-time, if you come across this, watch it, get entertained, and move on to real trades.

- Observing Market Maker & ECN positioning

Perhaps the most difficult skill to acquire in NASDAQ Direct Electronic Trading is observing Market Maker and ECN activity because it is electronic. It may take some time for the Novice Trader to develop the “eye” for interpreting Market Maker and ECN positioning. Even the most astute of Direct Electronic Traders is not immune to misinterpreting their movements. The only way to learn this well is by proper observation (particularly right before big moves) and experience. Although some activity is blatantly obvious, such as a Market Maker or ECN desperately buying or selling (chasing) regardless of price, taking notice of subtleties in their activity often lead to good price movements. You will correlate the activity within the box to prints, recent price activity, market and sector conditions and, of course, the trend. Remember, however, that observing the Market Makers and ECN’s is merely one of the many indicators in your trade. Do not forget other important aspects of the trade such as market and sector conditions and the stock’s recent price activity.

Here is a list of tips to guide the new trader when learning the Level 2 screen:

- Look for which Market Maker is the aggressor for the day.

- Correlate with prints.
• Take note if INCA is showing a size of 10 (actually 1,000 shares) and is constantly refreshing after being hit.

• Larger order size on the ISLD is a good indicator. Size on INCA is often misleading.

• On wider spread stocks that are consolidating, take note of INCA or a Market Maker jumping to the inside bid or ask (correlate this with recent price action!)

• Watch GSCO. Why? Because everyone watches him. He may be an aggressor, or he may be playing decoy to create opposite momentum. The GSCO trader knows that many Direct Electronic Traders watch him. He will use this to his full advantage. Use him to give you an advantage in getting the best price for your trade.

• The dealer market is by no means simple. It is filled with elaborate traps for even the most experienced traders. Just imagine what can happen to a novice! Watch every step of your trade.

• The NASDAQ market is prime territory to make a lot of money fast. Keep in mind, however, that the possible reward should exceed risk by a factor of two or three in every trade. If the trader is reckless and unprepared, the NASDAQ it is also prime territory to loose a lot of money even faster.

• When a stock is running to the upside, are the Market Makers simply raising the Ask. Look at the Bid as well. On a runaway stock, a widening spread is a terrifying sight. They must be just as aggressive on the Bid side! Remember that when “push comes to shove”, you may eventually need to sell your stock to them and vice versa for a downside break.

• Keep an eye on the Bid side, regardless of whether you are long or short.

V. Order Placing

ORDER PLACING IS AN ACQUIRED AND CRITICAL SKILL FOR THE DIRECT ELECTRONIC TRADER. FOR THE NOVICE, THIS IS ONE OF THE MORE DIFFICULT SKILLS TO LEARN! WHICH ORDER TO PLACE? THE ANSWER LIES IN MOMENTUM.

Timing your Entry and Exit to get the Best Possible Price

Because NASDAQ price swings are quick and exaggerated, your timing and order execution is critical. Get familiar with the L2 screen and prepare for breakouts,
breakdowns and price stalls early. In addition, we are given the tools to buy at the Bid or sell at the Offer, or in between. The key is to be able to identify momentum—properly observing the Level 2 screen will help you identify this. In fact, the student may be able to identify momentum on the first day of seeing a Level 2 screen but it will take some time to correlate it with decision making and order execution. You will need to get familiar with price levels for the individual stock market (particularly support and resistance, both major and minor), sector and stock trends.

When to Use What Type of Order

SOES

The SOES system on the NASDAQ is powerful. However, the key advice here is be early. SOESing in to a stock that is already running and is following through on its momentum may already too late, because of the number of SOES orders that may already be in the SOES queue. If you feel like you are missing the boat, often times, you are correct. Forget about it, if you chase the momentum move, you are likely to be filled right at the top, just when the stock is ready to correct. If you are going to “SOES-in” to open a position, do it early, or forget about it. You may be able to enter on an ECN (if you really need to), during the next correction. If you do identify that a stock is beginning to take off and the momentum is just building up (Market Makers jumping in to the Inside Bid, or an ISLD size build up at the Bid)… and your buy signals are all correct….Bid higher or SOES-IN! Forget about bidding to buy at bid price or between the spread once a stock begins to run. You will probably not get it and just lose precious time.

On the opposite side, if you have an open position and the stock is beginning to stall (for long positions you may start to see Market Maker resistance at the offer, or ISLD size build-up at the offer) and you are ready to take profits, forget about offering the Ask side through ISLD or SelectNet. You need to execute an Island cross, or SOES-out for the bid price while it is there. Do not waste time or you may lose a quarter or more by wrong timing. You may ultimately be forced to offer your stock at a time when nobody wants to buy it (and vice versa when you are short).

Take note: SOES while it is very fast, is also very susceptible to slippage.

SelectNet Preferencing

SelectNet Preferencing is best used to pick up a stock that is moving and when you assume that the queue over at SOES is clogged with orders. Preference a Market Maker on the Ask if you are buying a stock that has upside momentum. Preference a Market Maker on the bid to sell into downside momentum. You are also free to preference a Market Maker at override price levels (that is, below the Bid or above the Ask) if you
feel that it is urgent enough for you to do so. This is typically done when the momentum is very strong, and you are willing to pay higher or sell lower.

The Power of Direct ECN’s - Island (ISLD)

Different brokerages subscribe to various ECN’s directly. Momentum Securities primarily uses Island, while the Executioner subscribes to ARCA. The following uses Island as the example.

On Island, you have the privilege, through Momentum Securities, to attempt to buy at the bid price and sell at the offer (or in between). Because it is a privilege, there are certain exceptions. ISLD is best used on liquid stocks and while the momentum is still in your favor. If the momentum is beginning to stall and turn the other direction, this is a clear sign that an ISLD order to exit your trade may no longer be the best option. You may opt to revert to an early SOES order or offer preference a Market Maker on the bid (or below) in order to get out. The key here is to be reasonable in your ISLD bids and offers. However, knowing which execution method to use at any moment is almost an art form.

In this case, using the ISLD system is your means to use a stock’s liquidity and momentum to be able to get a better price. Basically, if the momentum is upward, your offer has a very good chance of being taken. While momentum is downward, your order will most likely be ignored (and vice versa for short positions). If you notice that others on the ISLD system are joining you as sellers at a particular price, you have the option of lowering your price by 1/64, 1/32, 1/16 or canceling your ISLD order and reverting to the SOES option.

<table>
<thead>
<tr>
<th>ORDER</th>
<th>Momentum UP</th>
<th>Momentum DOWN</th>
<th>Momentum NONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUY</td>
<td>Bid High</td>
<td>Bid Low</td>
<td>Bid Low</td>
</tr>
<tr>
<td></td>
<td>Bid Preference High</td>
<td>Bid In Between</td>
<td>Bid in between</td>
</tr>
<tr>
<td></td>
<td>SOES Buy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELL</td>
<td>Offer High</td>
<td>Offer Low</td>
<td>Offer High</td>
</tr>
<tr>
<td></td>
<td>Offer In Between</td>
<td>Offer Preference Low</td>
<td>Offer In Between</td>
</tr>
<tr>
<td></td>
<td>SOES Sell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHORT</td>
<td>Short Offer High</td>
<td>SOES Short on ↑</td>
<td>SOES Short on ↑</td>
</tr>
<tr>
<td></td>
<td>Short Offer In Between</td>
<td>Short Offer Low on ↑</td>
<td>Short Offer Low on ↑</td>
</tr>
<tr>
<td></td>
<td>Short Offer 1/16 above on ↓</td>
<td>Short Offer 1/16 above on ↓</td>
<td></td>
</tr>
</tbody>
</table>
VI. Short Positions

Definition

A short position (as opposed to a long position) is established with the expectation of a downside move in price. To open a short, a trader will sell the stock that he does not currently own (that is, borrowed shares) with the intention to return them later when the trader closes the short position by buying back the shares, hopefully at a lower price.

Because of past abuse of the privilege of selling borrowed shares, the SEC and the NASD have established Short Sale Rules to avoid stock manipulation and panic selling, among other reasons.

To be shortable, the broker/dealer that clears trades for the brokerage at which you are trading must actually have the stock you want to short in inventory (that is, that specific stock and in the quantity you require must be held in another person’s account at that broker/dealer.) Generally the NASDAQ top 100 stocks and numerous other actively traded NASDAQ stocks will be shortable. To make sure, please consult with the back office at your brokerage or broker/dealer.

Southwest Securities, Inc. clears trades for Momentum Securities and the Executioner and maintains a Master Short list. Specific approval is required to short any stock not on that list. Such specific approvals may be either just for intraday trades or may be for overnight holds. Cyberbroker, Inc. supports a tool in the CyberTrader program called “Short List” that allows traders to check while in the program to determine the shortable status if any specific stock.

Certain stocks in the NASDAQ may not be shorted. For instance, the stock of companies that have just become public (IPO’s) are not shortable for the first thirty days. Also, certain low priced stocks may not be shorted using margin.

If a trader shorts a stock that is not shortable at your brokerage, the trade is likely to be “broken” and the trader fined. Be certain that a specific stock is shortable at your brokerage if it is not an actively traded stock.
The NASDAQ Short Sale Rule

The NASDAQ Short Sale rule prohibits traders from selling a NASDAQ National Market stock at, or below, the inside best bid, when that price is lower than the previous inside best bid for that stock. The establishment of upticks and downticks determines this. In NASDAQ’s dealer oriented market, the definition of the uptick and downtick is different and more conservative from those used by stock exchanges such as the NYSE.

On the NASDAQ, the short sale rule works as follows:

- A downtick is created when the inside bid changes to a lower price (regardless of whether the previous quote was a Market Maker or ECN).

- An uptick is created when a new inside bid is established at a higher price (at least 1/16 of a point) regardless of whether it is a Market Maker or ECN quote.

- A SelectNet bid is unseen on the NASDAQ Level 2 screen and, therefore, cannot establish an uptick.

- You may not send an order to open a short position at the bid price or below when a downtick has been established.

- You may short at the bid price on an uptick only.

- On a downtick, you may offer (through an ECN or SelectNet) to open a short position if it is at least 1/16 above the inside bid (for most commonly traded stocks).

- Some NASDAQ stocks are unavailable for shorting! Unless a stock is on the Master Short List, please check with the office staff to be certain that a stock is shortable.
Figure 6-1, This figure shows the "Message" box that is part of the "Position Manager Alerts" box in the CyberTrader program. Because the "Uptick Arrow" in the Market Maker box in the background is pointing down, an order to short on the bid side has been rejected.
VII. Risk Assessment and Management

As a Direct Electronic Trader, you will be managing your risk at all times. There is only one completely safe place in this market, out of all positions. Otherwise, you are always at risk to some degree or another. The idea in trading is to manage and minimize risk, while opening up an opportunity to profit. There are many steps to managing risk in NASDAQ Direct Electronic Trading and they are mentioned repeatedly throughout this book.

Here are a few pointers on Risk Management in NASDAQ Day Trading:

- Always check the bid and ask spreads. The spread will fluctuate.

- Look for supporting prices on chart and in the Market Maker window before entering a trade. This is especially true if scalping.

- When entering a trade, the upside intention is pretty obvious, so keep asking yourself this question: “What is the possible downside to this trade?”

- Set a reasonable stop loss. Except for scalping, you must allow your stock some room to “breath”!

- Always adhere to your predetermined stop loss. No exceptions!

- Before entering the trade, determine your risk to reward potential. Are you risking ¼ point to make 1/8 of a point?

- When in doubt…get out. Or, get out of a portion of your position.

- Share size is your best risk management tool. Trade small share size when trading volatile stocks.

- Use margin carefully!

- A One Point Loss is Not a Good thing! All stop losses should be less than one point in Direct Electronic Trading. A one-point loss may be a 5 or 10 point loss (or more) in the making. It would be an extremely rare situation that would justify any trader (particularly a new trader) being purposely out of the money in a trade by more than one point.

- Write down all your trades. Although the computer systems are great for tracking your trades, no trader is immune to computer glitches. Write down your trades and keep your own physical record of your trading activity.
- Writing down your trades is also particularly helpful in analyzing your trading. You can see how well your shorts worked as compared to your long positions. You can learn from both your mistakes and your good trades. It is a good way to keep track of your trading activity in order to learn and improve.

- All traders, except the most experienced, should avoid volatile stocks (see figure). If you feel compelled to trade them, severely limit your share exposure.

- Avoid stocks that are experiencing wild moves or heavy volume. Certain stocks just may be too wild to trade at certain times. Although a 25 point rally may be exciting to watch, jumping in on the long-side of such a running stock is very dangerous if the stock is about to make an 8 point correction. The best rule is to watch wildly oscillating stocks for their entertainment value. If you already own the stock, be certain to sell into momentum. Otherwise, sit back and be entertained. Such stocks are comets that will eventually burn themselves out. Now get back to business, trading stocks with controllable risk.
Some Golden Rules of Risk Management for Novice Direct Electronic Traders:

Capital Preservation is Your Prime Objective

Keep Your Share Size Small

Always Check the Accuracy of Trading Records

Learn the Maximum Amount with Limited Risk Exposure

Be Aware of the Market at All Times

Avoid Adding to a Losing Trade

Avoid Taking Home a Losing Trade

Be Patient!
VIII. Common Trading Styles

There are several ways to make money day trading NASDAQ stocks. The idea is to develop a style that will suit you best. The best Direct Electronic Trader is, however, versatile and has the skill to trade different styles, stock types and market conditions. Additionally, the astute Direct Electronic Trader is quick to identify whether current market conditions are suitable to his or her trading style.

- Developing your Own Trading Style

It takes some time to develop a suitable trading style. In fact, a good trader is always ready to adapt or adjust his trading style to changing market environments, rules, methods and patterns. Your trading style will come to you naturally, but always remain open to other forms of trading that may enhance your current method. Be cautious in adopting a new method. Test it over a reasonable time in different market conditions and on different stock types. Let us examine some common trading methods:

- Scalping

The idea here is to take quick and small profits – typically 1/8’s and 1/4’s. The best Direct Electronic Traders always scalp, even if they have already developed different styles. It is fun and, many times, easy money with low risk. Keep in mind that there is a high level of skill needed to scalp. You have to develop the eye for short-term momentum and the skill to execute orders quickly. Let us examine some aspects of scalping:

- Forget about fundamentals.
- Learn to read the Market Maker box including print activity.
- Learn to identify momentum in the Level 2 screen.
- Learn the order execution methods and how to use them in certain situations
- Your execution speed is of critical importance, most especially on high velocity stocks.
- Do not be afraid to “SOES” or “CyberSmart Market” in to a trade if you believe the momentum is strong enough in that direction.
- Exit when momentum dries up.
- If you are wrong: GET OUT.
- Use the liquidity during the momentum to get hit on bids and offers.
- It is generally better to scalp only in the trending direction.
- Scalping is heavy on commission costs!
On Runaway Stocks, beware of widening spreads.
If you have an open position and your Bid or Offer to exit the trade is not being hit within a few seconds, make a more aggressive effort to close the trade. Bid high, offer low or SOES out early! (Look at the Order Execution Table)

Be picky on your scalps. Look for quality! The best scalping times are at the open and towards the close of the trading day. This is when trends are clearer, follow-through is more likely and liquidity is higher.

- Trend (Swing) Trading

This is the center of NASDAQ Direct Electronic Trading (or any trading). Depending on many factors, a swing trade can be stretched anywhere from a quick profit of a few minutes, all the way up to a 2-week position trade. The heart of such a trade is the main trend being built on the daily chart (or on a 10-day Intraday chart). How do you find a ten or twenty-five point winner? (It is not just buying one stock that happens to rip or gap-up twenty points in one day. That would be just plain luck more than anything else would). It is the skill and patience to let winning trades run and maintaining the position until the intermediate term trend reverses.

Because we are traders, we like to rely upon our technique and proper risk management. Here are some pointers for the novice trend trader:

- Know the market. Dissect it and develop a good feel for its behavior. This will require some experience, much homework, and considerable practice (or demo) trading. Study the charts of the S&P 500 futures contract, the Dow Jones Industrial Average (DJIA) and other indexes. Try to identify support and resistance points, chart patterns, and trading sentiment. Learn to correlate those items with economic and political conditions. It is through this process that a new trader learns to trade.
- Know which sectors are strong. Get to know the stocks that make up each sector. Learn which are also most likely to change direction when market conditions change.
- Know each stock that you are about to trade – study its charts.
- If you are in a winning trade, let it run! Give it some room – especially for stocks that are forming an early breakout or breakdown pattern (one that has not already run up so high, or vice versa). You will never find a 1, 5 or 10 point winner (unless you are lucky) by merely scalping 1/8's and quarters all day long.
- On every trade, have an entry point and a realistic exit point in mind before trading. Are you risking 1 point to make ½ point? Do not trade without a 3:1 or 4:1 favorable ratio.
Like scalping, your order execution method is very important. You want to save every teenie possible.

If you are with the trend, give your stock some room for adjustment, although your stops are generally larger here than in high velocity scalping, never ignore your pre-determined stop loss. As the stock goes in your direction, raise your stop loss.

A stock that is about to run, generally needs good market conditions in order to surge higher. Bad market conditions may prevent a stock from surging. Carefully watch the depth of its pullback during this time. If the pullback is shallow, this stock maybe a prime target to run higher when market sentiment turns positive.

Maintaining a trailing stop loss is a key trading technique.

Like scalping, do not be afraid to SOES in to a stock that has just broken out of (or appears to be breaking out of) a congestion area, a double-bottom, a rounded-bottom, or a new three month or 52 week high. NASDAQ stocks run quickly and will not wait for you to get in.

If you miss a breakout you have been anticipating, do not chase the stock. You may be filled just at the moment it is ready to correct. Those that had open a trade early have the convenience of allowing room for the stock to correct or to pull back. Traders who are late will not have that luxury. If the market retraced, but the stock you are watching held steady, this may be a good time to open a position. Otherwise, forget about any trade you missed. There will be many other good trading opportunities.

Pick your stocks carefully. Check liquidity and prior price levels.

If a stock has given you a large profit and is closing the day on the strong side, determine if the market sentiment matches your position and consider taking the trade home. As an alternative, consider exiting only a potion of your position. The trend may continue into the next day, few days or even more than a week.

The best trend trades are from stocks in which you are already very familiar. You should already know the important price levels and trading behavior.

- **Multiple Positions**

Taking multiple positions is probably the most profitable way to trade. This technique tends to limit risk by spreading your exposure to two or more different stocks. Multiple positions are generally opened to take advantage of a convincing general trend in the market or sector (for instance, Internets, or semi-conductors or financials). Multiple positions are generally taken with bias to only one side of the market: that is either long or short. Using multiple positions in an attempt to capture intraday moves can be very confusing to the Direct Electronic Trader. Often, there is
too much information to track and be worried about. Most of the time, when taking on multiple positions, the trader is basically either bullish or bearish.

The key here is market familiarity and the ability to target the strong stocks for rallies and shorting the weak stocks, for sell-offs. Keep in mind that this technique is best reserved for more experienced traders. If you must trade the trends of the market using multiple positions, use small share size on each position. Just because you are diversifying into different stocks, this does not mean that your risk is lowered. Your share exposure is of essential importance. Keep it small.

**Multiple position trading is best suited for when the market or sector trends are clear.**

Managing multiple positions requires experience — some novices get tense on just watching one stock position. Trying to manage more than one position can become both frightening and confusing. If you decide to pursue this style start with only two or, at most, three positions. Use small share size on each position. Start by opening positions on strong stocks during a market rally. Manage each trade carefully and see the results. Did one of them run and the other stall? Did both positions stall? Did they both run? Learn from your experience and determine the reasons for your results. Did you catch the rally early or too late? Did you take profit too quickly? You will see that timing is the key to this style of trading.

Develop a feel for tracking multiple positions at once. This is how experienced traders can make large amounts of money with less risk. Make sure that you stay in touch with the general market and be quick to identify a stall or reversal. Be quick to identify that your positions are not following through. At that time, there is only one thing to do, exit your positions quickly.

Multiple position trades can last for as little as two minutes and may last the whole day. It is uncommon for a novice trader to take multiple positions on an intraday basis. It is recommended that new traders not even consider taking home multiple positions as it is quite tricky and is best left to experienced traders.

**Scaling In and Out**

Perhaps one of the best, risk management techniques is Scaling-In and Out. Here are some facts and pointers for Scaling-In and Out:

- **Scaling-in** is when you enter a trade with a limited amount of shares and, because the price action is going in your favor, you add more shares to your position. If it does not go in your favor initially, your risk exposure and, thus, the loss, is limited.
- **Scaling-in** is often done on trend trades and is not recommended for scalping (with occasional exception)
- Adding to the share exposure is a great idea if the stock price is experiencing a second stage of a price move in the same direction, typically after a pullback and confirmation that the trend is continuing
- This is the best way to take full advantage of a price movement that is confirmed and, thus, presents a great opportunity of a large profit with limited loss potential. The prior positions are there to protect the new positions
- Beware of adding too large a share exposure, you may have difficulty unloading all those shares
- **Scaling-out** is done for three main reasons:
  - First, you are unsure of whether the trend will continue so you unload some, but not all, of your position, just in case the trend follows through as originally intended, but yet you want to protect some of your profits.
  - Second, having accumulated a large number of shares. You will want to dispose of your shares in portions so as not to scare other traders
  - Third: SOES is limited to 1,000 share blocks. You may want to close out enough of your maximum position while there is momentum in your direction so that you can still take advantage of SOES in case of a trend reversal.

- **Overnight Positions**

Here are some pointers on overnight positions:

- These are risky due to gap openings
- Never take home a loser, especially a loser that is on the opposite end of the intermediate trend
- Take home a winner if you feel that the trend will continue into the next day. If it gaps against you, you have room to give
- Particularly, take note of stocks closing on their high (or low) for the day. The likelihood is for these stocks to continue their trend into the next day. It is usually best to stay with the trend of the general market;
- If there is a large gap, be alert to observe gap filling price movement. This is very common. You may want to unload your position early before the gap filling continues. Often, it is a good idea to exit the position at the gap opening and take profits.
- Check market conditions. If the market sentiment is bad and entering a bearish mood (that is, stocks are closing near intraday lows), you may want to get rid of your long position trades before the market closes. Such a weak market is susceptible to gap downs at tomorrow's opening.
IX. Preparing for Live Trading

- **Demo vs. Live Mode: A world of difference!**

While CyberTrader, or other trading systems, may offer real time “demo” trading, there is a world of difference between that and “live” trading. It must be clear to the beginner that demo modes are for: testing trading styles; practicing execution key strokes; and, getting familiar with the software, regardless of whether it is receiving real-time data or not. This is for a few important reasons:

- Order filling on demo-mode is based on random order execution and does not simulate logic. To get your SOES order delivered on demo may take more or less time than when live and, thus, indicate a filled order at a very different price level.
- It is very easy to “cheat” the demo system by bidding or offering into a stock that would otherwise be impossible to be delivered at that price on live mode.
- A trader’s decision-making skills may be radically different when “real money” is involved.

- **The right way to trade on Demo Mode**

Demo mode is best used to:

- Get familiar with all aspects of the software: indicators, charts, confirmation messages, settings, etc.
- Practice and perfect the use of all execution keys, including those to change share size.
- Observe the Level 2 information (Market Maker window), the movement of Market Makers, ECN’s, and prints.
- Correlate price movements on a stock with market or sector movements.
- Learn exactly what momentum looks like in the Level 2 screen.
- Observe the different types of stocks and different ways of trading based on spreads, volume, velocity and momentum.
- Place realistic orders depending on current activity and velocity of price movement. On a stock who’s price is rapidly changing, allow a realistic degree of slippage in both opening and closing a position.
- Observe chart pattern formation.
- Practice decision making skills and discipline.
- Practice simulated trading with the help of the software. Try to set up only realistic trading scenarios. Keep in mind that you will have a tendency to do in live trading what you practiced while on Demo Mode. Keep Demo as realistic, as possible.
Practicing Execution Methods

Because prices change quickly on the NASDAQ, getting familiar and perfecting the use of the execution method is of prime importance in being able to close a trade when you want. Whether it be the CyberTrader keystrokes or the Point & Click operation of the Executioner, execution of the trade is a paramount skill. If you can save an average of only a 1/16 (a teenie) on two trades a day, by the end of one year you would have accumulated a over $30,000 (based on trades of 1,000 shares). Practice the execution paths regardless of your trading style. You must know them “cold.”

Establishing Realistic Short-Term Goals

Making a lot of money in any business is not easy (unless you already know how), and Direct Electronic Trading on the NASDAQ is certainly not an exception. To expect to make money as a novice trader is unrealistic. Give yourself some time to learn your way around the trading world and test your skills. If you are patient, diligent and determined enough (and you stick to the proven rules as explained in this manual), the market will eventually reward you. However, just like most successful people in any field, you have to pay your dues.

Your initial goal should be to establish a solid trading foundation through constant reinforcement of the proven trading rules. It will be the time to test your discipline, diligence and determination to succeed. The learning process in this business is not easy to cope with. You must organize your thoughts and learn to control your emotions in order to think clearly, and practice sound judgement.

Beginner Trading Scenarios

What to do when:

- **You bought the wrong stock.**
  Don’t sell it just yet. Quickly make an assessment (you might just make money!) to determine if the trade is going for you or against you. First, determine the spread and possible exit points. Check the Position Manager Alerts and see if you are getting red or green signals. Regardless, if it is going up, let it run, offer
into the momentum and take a quick profit. Consider it a gift. If it is not going your way, exit quickly. Do not waste time rationalizing or justifying the trade;

- The computer system goes down.
No system is immune to occasional bog-downs. Whether the source of the problem is with the brokerage, the data source or with the entire NASDAQ itself, avoid trading until it is fixed. If you had an open position, do not panic. You will not only cloud your judgement, but you may also make a fool of yourself. Know what open positions you have and write them on a piece of paper. If you wish to exit that position, write down a specific buy or sell order (stock symbol, market or limit order, buy or sell, price and share size) and hand it to the licensed broker in the office for phone execution through Instinet.

- You are showing a substantial profit and don't know what to do.
Believe it or not, many people have trouble closing-out a profitable trade. It is a greed problem. If you are showing a large profit and you are a beginner, you got lucky. Go ahead, take the profit! To wait, just to see the profit disappear, is a classic beginner’s mistake. Don’t end up saying, “I should have sold when I was up”.

- The trade is not going in your favor.
There is only one thing to do – get out! You can’t win ‘em all. As a reminder, a big and costly loser usually starts-off as a small one. Generally, if you are out more than one point you are in real trouble.

- Somebody told you to short this stock.
Do not act upon it! Observe and see what you can learn;

- You are in a situation where you cannot concentrate.
Do not trade.

- You have more than 3 losers in a row.
Step back, relax and see what you did wrong. Avoid trading to “make back the money.” Trade one at a time. A new trade now should have little relevance to your last trade.

- You have 60 tickets in the middle of the day.
You are over trading. Practice your decision-making skills with quality decisions, not how many trades you can fire-off. Slowly build yourself into the world of Direct Electronic Trading and avoid firing away your guns, you might shoot yourself.

- You bid one point out-of-the-money on SelectNet and were filled by a Market Maker. You are instantly up $1,000! Don’t celebrate just yet. You abused the SelectNet system. Odds are, there is an angry Market Maker out there who will call you (or your brokerage) and “bust” (cancel) the trade. If you closed out the long position, a cancellation of the buy side will re-open a short position. You may lose money as result of this. The NASD may even fine you. Be cunning, but do not try to cheat the system, it is not worth it.

- Your closed positions are showing a large profit.
Step back, relax and enjoy the moment. Your next challenge is soon to arrive! Protect that profit and avoid taking any more high risks for the rest of the day.

X. Important NASD Rules for the Direct Electronic Trader

- 5 minute SOES Rule

SOES orders are limited to a maximum of 1,000 shares (for stocks with a SOES Tier 10 limit) in one direction during each 5 minute period.

Scenarios:
- After you had bought 1,000 shares (or the maximum order size for that stock through the SOES system, a Trader is not allowed to purchase any more shares of that same stock through SOES for the next 5 minutes. However, you may purchase more through an ECN system or SelectNet. This applies also for selling or shorting;

- If you had bought the maximum order size through the SOES system, you can only buy again within the next 5 minutes through SOES if you first closeout a portion or all of the original position opened through SOES.

- 10 Second SelectNet Rule

- You may not cancel a SelectNet order for a minimum of 10 seconds
• This applies to broadcast, preference and to all Market Makers and ECN’s

![Table of trades and orders]

**Figure 10-1: SelectNet 10 Second Rule**
This figure shows 7 seconds of the original 10 that the trader must wait before SelectNet cancellation.

- **NASDAQ Short Sale Rule**

The NASDAQ Short Sale rule prohibits traders from selling a NASDAQ National Market stock at, or below, the inside best bid when that price is lower than the previous inside best bid in that stock. That is, when the Uptick Arrow is heading down.

Because of the NASDAQ’s dealer oriented market, the definition of the Uptick and Downtick is different from those on exchanges, such as the NYSE. The following pertains to the NASDAQ Short Sale Rule:

- A downtick is created when the Inside Bid changes to a lower price (regardless of whether the previous quote was a Market Maker or ECN)
- A new uptick is created when a new Inside Bid is established at a higher price (regardless of whether it a Market Maker or ECN quote);
- You may not send an order to open a short position at the bid price when a downtick has been established. You may short at the bid price only on an uptick;
- On a downtick you may offer on the Ask (through ECN or SelectNet) to open a short position if the offered price is at least 1/16 above the inside bid (for most commonly traded stocks);
Out of the Money Bids and Offers on SelectNet/ISLD

In most cases, when bidding or offering on SelectNet, avoid getting more than \( \frac{3}{4} \) point away from the current Bid or Ask. Stay within reasonable range of the market. Bids or offers that are unreasonably “out of the money” will be voided.

On the ISLD system, you have a little more room to maintain an out-of-the-money bid or offer, but avoid using it more than a one point away from the market.

All trades must be reasonable and within reasonable range of the market suited to actual conditions. Any trade deemed unreasonable (erroneous) maybe voided.
Appendices

Appendix A: Training Course Calendar and Agenda
Appendix B: Common Trading Mistakes
Appendix C: NASDAQ Market Makers
Appendix D: Electronic Communication Networks (ECN’s)
Appendix E: NASDAQ 100 List
Appendix F: Reading & Reference Material
Appendix G: Trader's Slang Glossary
Appendix H: Financial Terminology
Appendix I: Daily Trading Sheet
Appendix J: Standard & Poor’s 500 Index (SPX)
Appendix K: NASDAQ Circuit Breaker Rules
Appendix L: Daily Trade Sheet
Appendix M: Fractions & Decimal Equivalents
Appendix N: Cyber Trader Programs
Appendix O: Executioner Programs
Appendix A: Training Calendar and Agenda

One Week Online Trading "Boot Camp"

The objective of this one-week course is to familiarize individuals with the powerful new tools available to the online trader. If you are a beginning trader or you would like to trade part-time, this is the course for you! It includes in-depth instruction on how to decipher Level 2 NASDAQ screens, protect your capital, develop your own special trading style and maximize your profit. Topics covered in this busy 1-week schedule include:

- Trading psychology and terminology
- Using the computer as a trading tool
- Using CyBerTrader or Executioner trading software, real time quotes and other software
- Chart analysis
- Market analysis from a day trading perspective
- Order execution, ECN’s, SOES
- NASDAQ Level 2, market makers, shorting
- Trading styles
- Common trading mistakes and how to avoid them
- And extensive drills to perfect executions

Online Trading Academy
4199 Campus Drive, Ste. G
Irvine, CA. 92612
(888) 841-8418

www.tradingacademy.com

Trading knowledge... Your most valuable form of capital.
# 1 Week Training Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30 to 7:00</td>
<td>Class Begin</td>
<td>Demo Trading Market Watch</td>
<td>Demo Trading Market Watch</td>
<td>Demo Trading Market Watch</td>
<td>Demo Trading Market Watch</td>
</tr>
<tr>
<td>7:00 to 7:30</td>
<td>Class Intro to trading</td>
<td>Smart Key Executions</td>
<td>Charting The Art of Mass Psychology CD-Rom</td>
<td>CyberCorp CD-Rom Demonstration</td>
<td>Demo vs. Live Trading</td>
</tr>
<tr>
<td>7:30 to 8:00</td>
<td>10 survival tips for traders by Mitch C.</td>
<td>Student Demo Trading</td>
<td>Level II Screen Reading with Eyal G.</td>
<td>Risk Control Minimize Losers Maximize winners With Eyal trading live</td>
<td>Test your knowledge</td>
</tr>
<tr>
<td>8:00 to 8:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Test Review Open Q &amp; A Period</td>
</tr>
<tr>
<td>8:30 to 9:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00 to 9:30</td>
<td>NASAQ Terminology</td>
<td>Pints Price &amp; Size ECN Size MM Movements</td>
<td>In depth charting with Chris</td>
<td>Discipline - Your Lifeline To Success With Mitch C.</td>
<td>Trading Styles - Scalping vs. Position Trading vs. Swing</td>
</tr>
<tr>
<td>9:30 to 10:00</td>
<td>Intro to ECN's</td>
<td>Market Maker Box Explained CD-Rom</td>
<td></td>
<td>Know your Market Maker Box with David Janti</td>
<td>Transition from Training to Trading by John O'Donnell</td>
</tr>
<tr>
<td>10:00 to 10:30</td>
<td>Benefits of level II screens with Eyal G.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30 to 11:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00 to 11:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30 to 12:00</td>
<td>Intro to CyberT - General</td>
<td>Island Executions - Live with instructor</td>
<td>Test your knowledge</td>
<td>Test your knowledge</td>
<td>Week Wrap-up</td>
</tr>
<tr>
<td>12:00 to 12:30</td>
<td>Intro to CyberT - MM Box</td>
<td>Island - Class will be trading TESTA live</td>
<td>Discussion</td>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>12:30 to 1:00</td>
<td>Intro to CyberT - Charts</td>
<td>NASDAQ Level II Shorting - Live on line</td>
<td>Demo Trading Knowing Your Support And Resistance</td>
<td>Graduation!</td>
<td></td>
</tr>
<tr>
<td>1:00 to 1:30</td>
<td>Q&amp;A with Guest Trader</td>
<td>Q&amp;A with Guest Trader</td>
<td>Remote connection with Vince</td>
<td>Account Review - Set-up</td>
<td>Lunch at Steelhead</td>
</tr>
</tbody>
</table>

---

**Break**

**Break**

---

**Guests**

**Assistant**

**Eyal G**

**Student Trading**

---

75
Appendix B: Common Trading Mistakes

• **Buying/Selling the wrong stock!**
  Make sure the correct Market Maker Window is highlighted.

• **Buying/Selling the wrong amount of stock!**
  Always check your share size

• **Selling to cover a short position.**
  BUY to cover a short!

• **Buying to cover a long position.**
  SELL to cover a long!

• **Chasing!**
  Too much excitement over a price move. When a stock price goes up, eventually it will correct (to a certain degree). Are you buying when the stock is ready to do a correction?

• **Failing to identify the trend.** If the stock price is going up and you keep taking short positions and losing, how about taking a long position? Snap out of it.

• **Failing to assess risk.**
  Are you risking a point to make a quarter profit? It is your money – check those spreads, volume, and charts. Be aware of SHARE EXPOSURE at all times. Do not take big risks if you or your account cannot take the heat. Always be prepared for the worse possible scenario.

• **Lack of Planning.**
  Have you identified your entry and exit points? Did you open a trade, but you do not have a definite explanation for it? If you are not 100% convinced about your trade before you open it or have the slightest doubt, do not open it.

• **Failing to check order and execution confirmation.** Were you filled for 800 shares when your order was for a thousand? Do you have pending open orders? Check your confirms!

• **Watching a winner turn into a loser.** Adjust your Stop Loss Trail

• **Lack of Discipline.** Stick to your original plan, and only change if the facts change. If you have set a stop loss – stick to it – no justification! Also, if you are not in danger, why exit your trade?

• **Influence.** Did you short this stock because someone told you to? Take control of your own trading.
• **Averaging Down.** Did you buy more of a stock that is going down? **BUY** a stock that is going up! **SELL** (short) a stock that is going down!

• **Over Trading.** Don’t trade if you don’t need to. The Stock Market is always alive and kicking with opportunities to make money – always!

• **Lack of concentration.** Avoid trading when your mind is distracted with other matters.

• **Not being aware of NASDAQ violations.** The trader is entirely responsible for his or her actions. Be aware if you have violated NASDAQ rules. Violation of ANY NASDAQ or SEC rules is highly NOT RECOMMENDED and may result in substantial fines and/or permanent suspension from trading! Please be aware of the:

  - 5 minute SOES rule
  - NASDAQ Short Sale Rule
  - Non-Shortable Stocks
  - Limitations of Bids or Offers on SelectNet – stay within market prices!
### Market Makers

(Not a complete list of market makers; to be used as an example only)

<table>
<thead>
<tr>
<th>Market Maker Symbols</th>
<th>Company Names</th>
<th>Market Maker Symbols</th>
<th>Company Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSA</td>
<td>ALEX BROWN &amp; SONS INC.</td>
<td>MSWE</td>
<td>MIDWEST STOCK EXCHANGE</td>
</tr>
<tr>
<td>AGSI</td>
<td>AEGIS CAPITAL CORP.</td>
<td>NAWE</td>
<td>NASH WEISS &amp; CO.</td>
</tr>
<tr>
<td>BEST</td>
<td>BEAR STEARNS &amp; CO. INC.</td>
<td>NEED</td>
<td>NEDDHAM &amp; CO.</td>
</tr>
<tr>
<td>BTSC</td>
<td>BT SECURITIES</td>
<td>NMRA</td>
<td>NOMURA SECURITIES INTL. INC.</td>
</tr>
<tr>
<td>CANT</td>
<td>CANTOR FITZGERALD &amp; CO.</td>
<td>OLDE</td>
<td>OLDE DISCOUNT CORP.</td>
</tr>
<tr>
<td>CHGO</td>
<td>CHICAGO CORP.</td>
<td>OPCO</td>
<td>OPPENHEIMER &amp; CO.</td>
</tr>
<tr>
<td>CJDB</td>
<td>CJ LAWRENCE DEUTSCHE BANK</td>
<td>PERT</td>
<td>PERSHING TRADING CO.</td>
</tr>
<tr>
<td>COST</td>
<td>COASTAL SECURITIES</td>
<td>PIPR</td>
<td>PIPER JAFFRAY</td>
</tr>
<tr>
<td>COWN</td>
<td>COWEN &amp; CO.</td>
<td>PRUS</td>
<td>PRUDENTIAL SECURITIES INC.</td>
</tr>
<tr>
<td>DAIN</td>
<td>DAIN BOSWORTH INC.</td>
<td>PUNK</td>
<td>PUNK SIEGEL &amp; KNOELL, INC.</td>
</tr>
<tr>
<td>DEAN</td>
<td>DEAN WITTER</td>
<td>PWJC</td>
<td>PAINE WEBBER INC.</td>
</tr>
<tr>
<td>DLJP</td>
<td>DONALDSON LUFKIN &amp; JENRETTE</td>
<td>RAGN</td>
<td>RAGAN MCKENZIE INC.</td>
</tr>
<tr>
<td>DOMS</td>
<td>DOMESTIC SECURITIES</td>
<td>RPSC</td>
<td>RAUSCHER PIERCE REFSNES INC.</td>
</tr>
<tr>
<td>EXPO</td>
<td>EXPOTENTIAL CAPITAL MARKETS</td>
<td>RBSF</td>
<td>ROBERTSON STEPHENS &amp; CO. LP</td>
</tr>
<tr>
<td>FACT</td>
<td>FIRST ALBANY CORP.</td>
<td>SALB</td>
<td>SALOMON BROTHERS</td>
</tr>
<tr>
<td>FAHN</td>
<td>FAHNESTOCK &amp; CO.</td>
<td>SBNY</td>
<td>SANDS BROTHERS &amp; CO. LTD</td>
</tr>
<tr>
<td>FBCO</td>
<td>FIRST BOSTON CORP.</td>
<td>SBSH</td>
<td>SMITH BARNEY SHEARSON INC.</td>
</tr>
<tr>
<td>FPKI</td>
<td>FOX-PITT, KELTON INC.</td>
<td>SELTZ</td>
<td>FURMAN SELTZ INC.</td>
</tr>
<tr>
<td>GRUN</td>
<td>GRUNTAL &amp; CO. INC.</td>
<td>SHWD</td>
<td>SHERWOOD SECURITIES CORP.</td>
</tr>
<tr>
<td>GSCO</td>
<td>GOLDMAN SACHS &amp; CO.</td>
<td>SNDV</td>
<td>SOUNDVIEW FINANCIAL GROUP INC.</td>
</tr>
<tr>
<td>GVRC</td>
<td>GVR CO.</td>
<td>SWST</td>
<td>SOUTHWEST SECURITIES INC.</td>
</tr>
<tr>
<td>HMQT</td>
<td>HAMBRECHT &amp; QUIST INC.</td>
<td>TSCO</td>
<td>TROSTER SINGER CORP.</td>
</tr>
<tr>
<td>HRZG</td>
<td>HERZOG, HEINE, GEDULD INC.</td>
<td>TUCK</td>
<td>TUCKER ANTHONY INC.</td>
</tr>
<tr>
<td>JEFF</td>
<td>JEFFERIES CO. INC.</td>
<td>TVAN</td>
<td>TEEVAN &amp; CO. INC.</td>
</tr>
<tr>
<td>JPMS</td>
<td>J.P. MORGAN</td>
<td>UBSS</td>
<td>UBS SECURITIES</td>
</tr>
<tr>
<td>KEMP</td>
<td>KEMPER SECURITIES INC.</td>
<td>VOLP</td>
<td>VOLPE WEITY &amp; CO.</td>
</tr>
<tr>
<td>LEHM</td>
<td>LEHMAN BROTHERS</td>
<td>WARB</td>
<td>S.G. WARBURG &amp; CO. INC.</td>
</tr>
<tr>
<td>MADF</td>
<td>BERNARD MADOFF</td>
<td>WBLR</td>
<td>WILLIAM BLAIR &amp; CO.</td>
</tr>
<tr>
<td>MASH</td>
<td>MASH &amp; SCHWEITZER, INC.</td>
<td>WEAT</td>
<td>WHEAT FIRST SECURITIES INC.</td>
</tr>
<tr>
<td>MHMY</td>
<td>M.H. MEYERSON &amp; CO. INC.</td>
<td>WEDB</td>
<td>WEDBRUSH MORGAN SECURITIES</td>
</tr>
<tr>
<td>MLCO</td>
<td>MERRIL LYNCH</td>
<td>WERT</td>
<td>WERTHEIM SCHRODER &amp; CO. INC.</td>
</tr>
<tr>
<td>MONT</td>
<td>MONTGOMERY SECURITIES</td>
<td>WSEI</td>
<td>WALL STREET EQUITIES INC.</td>
</tr>
<tr>
<td>MSCO</td>
<td>MORGAN STANLEY &amp; CO. INC.</td>
<td>WSLS</td>
<td>WESSEL, ARNOLD &amp; HENDERSON</td>
</tr>
</tbody>
</table>
Appendix D: Electronic Communication Networks

- INCA - Instinet
- ISLD - Datek / Island System
- ARCA - Archipelago
- BTRD - Bloomberg
- REDI -
- ATTN - Attain
- BRUT - Brass Trading
- NTRD - Next Trade
- STRK - Strike
- Optimark (to be introduced)
## Appendix E: NASDAQ 100 List

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Symbol</th>
<th>% Of Index</th>
<th>Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3Com Corporation</td>
<td>COMS</td>
<td>0.98</td>
<td></td>
</tr>
<tr>
<td>Adaptec, Inc.</td>
<td>ADPT</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>ADC Telecommunications, Inc.</td>
<td>ADCT</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>Adobe Systems Incorporated</td>
<td>ADBE</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>ADTRAN, Inc.</td>
<td>ADTN</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Allied Waste Industries, Inc.</td>
<td>AWIN</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Altera Corporation</td>
<td>ALTR</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>American Power Conversion Corporation</td>
<td>APCC</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>Amgen Inc.</td>
<td>AMGN</td>
<td>1.63</td>
<td></td>
</tr>
<tr>
<td>Andrew Corporation</td>
<td>ANDW</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Apollo Group, Inc.</td>
<td>APOL</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Apple Computer, Inc.</td>
<td>AAPL</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Applied Materials, Inc.</td>
<td>AMAT</td>
<td>1.26</td>
<td></td>
</tr>
<tr>
<td>Ascend Communications, Inc.</td>
<td>ASND</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>Atmel Corporation</td>
<td>ATML</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Autodesk, Inc.</td>
<td>ADSK</td>
<td>0.19</td>
<td></td>
</tr>
<tr>
<td>Bed Bath &amp; Beyond Inc.</td>
<td>BBBY</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>Biogen, Inc.</td>
<td>BGEN</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>Biomet, Inc.</td>
<td>BMET</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>BMC Software, Inc.</td>
<td>BMCS</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>Cambridge Technology Partners, Inc.</td>
<td>CATP</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Centocor, Inc.</td>
<td>CNTO</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>Chancellor Media Corporation</td>
<td>AMFM</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Chiron Corporation</td>
<td>CHIR</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>Cintas Corporation</td>
<td>CTAS</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>Cisco Systems, Inc.</td>
<td>CSCO</td>
<td>8.1</td>
<td></td>
</tr>
<tr>
<td>Citrix Systems, Inc.</td>
<td>CTXS</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Comcast Corporation</td>
<td>CMCSK</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td>Compuware Corporation</td>
<td>CPWR</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>Concord EFS, Inc.</td>
<td>CEFT</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Corporate Express, Inc.</td>
<td>CEXP</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>Costco Companies Inc.</td>
<td>COST</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>Cracker Barrel Old Country Store, Inc.</td>
<td>CBRL</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Dell Computer Corporation</td>
<td>DELL</td>
<td>5.63</td>
<td></td>
</tr>
<tr>
<td>DSC Communications Corporation</td>
<td>DIGI</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Dura Pharmaceuticals, Inc.</td>
<td>DURA</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>Electronic Arts Inc.</td>
<td>ERTS</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Electronics for Imaging, Inc.</td>
<td>EFII</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Fastenal Company</td>
<td>FAST</td>
<td>0.19</td>
<td></td>
</tr>
<tr>
<td>First Health Group Corp.</td>
<td>FHCC</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>Fiserv, Inc.</td>
<td>FISV</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>Food Lion, Inc.</td>
<td>FDLNB</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>FORE Systems, Inc.</td>
<td>FORE</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Gartner Group, Inc.</td>
<td>GART</td>
<td>0.34</td>
<td></td>
</tr>
<tr>
<td>Company Name</td>
<td>Symbol</td>
<td>Price</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>General Nutrition Companies, Inc.</td>
<td>GNCI</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Genzyme Corporation</td>
<td>GENZ</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>HBO &amp; Company</td>
<td>HBOC</td>
<td>1.30</td>
<td></td>
</tr>
<tr>
<td>Herman Miller, Inc.</td>
<td>MLHR</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Immunex Corporation</td>
<td>IMNX</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Intel Corporation</td>
<td>INTC</td>
<td>12.89</td>
<td></td>
</tr>
<tr>
<td>Jacor Communications, Inc.</td>
<td>JCOR</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>Jefferson Smurfit Corporation</td>
<td>JJSC</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>KLA-Tencor Corporation</td>
<td>KLAC</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>Linear Technology Corporation</td>
<td>LLTC</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>LM Ericsson Telephone Company</td>
<td>ERICY</td>
<td>1.62</td>
<td></td>
</tr>
<tr>
<td>Maxim Integrated Products, Inc.</td>
<td>MXIM</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>McCormick &amp; Company, Incorporated</td>
<td>MCCRK</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>MCI Communications Corporation</td>
<td>MCIC</td>
<td>3.09</td>
<td></td>
</tr>
<tr>
<td>Microchip Technology Incorporated</td>
<td>MCHP</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>Micron Electronics, Inc.</td>
<td>MUEI</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Microsoft Corporation</td>
<td>MSFT</td>
<td>21.67</td>
<td></td>
</tr>
<tr>
<td>Molex Incorporated</td>
<td>MOLX</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Netscape Communications Corporation</td>
<td>NSCP</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Network Associates, Inc.</td>
<td>NETA</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>Nextel Communications, Inc.</td>
<td>NXTL</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Nordstrom, Inc.</td>
<td>NOBE</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>Northwest Airlines Corporation</td>
<td>NWAC</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Novell, Inc.</td>
<td>NOVL</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>Oracle Corporation</td>
<td>ORCL</td>
<td>2.47</td>
<td></td>
</tr>
<tr>
<td>Oxford Health Plans, Inc.</td>
<td>OXHP</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>PACCAR Inc</td>
<td>PCAR</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>PacifiCare Health Systems, Inc.</td>
<td>PHSYP</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>PairGain Technologies, Inc.</td>
<td>PAIR</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>PanAmSat Corporation</td>
<td>SPOT</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>Parametric Technology Corporation</td>
<td>PMTC</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Paychex, Inc.</td>
<td>PAYX</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>PeopleSoft, Inc.</td>
<td>PSFT</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>PhyCor, Inc.</td>
<td>PHYC</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>QUALCOMM Incorporated</td>
<td>QCOM</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>Quantum Corporation</td>
<td>QNTM</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>Quintiles Transnational Corp.</td>
<td>QTRN</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Reuters Group PLC</td>
<td>RTRSY</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Rexall Sundown, Inc.</td>
<td>RXSD</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Ross Stores, Inc.</td>
<td>ROST</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Sigma-Aldrich Corporation</td>
<td>SIAL</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>Staples, Inc.</td>
<td>SPLS</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>Starbucks Corporation</td>
<td>SBUX</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>Stewart Enterprises, Inc.</td>
<td>STEI</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Sun Microsystems, Inc.</td>
<td>SUNW</td>
<td>1.61</td>
<td></td>
</tr>
<tr>
<td>Sybase, Inc.</td>
<td>SYBS</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>Synopsys, Inc.</td>
<td>SNPS</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>Tech Data Corporation</td>
<td>TECD</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Tele-Communications, Inc.</td>
<td>TCOMA</td>
<td>1.69</td>
<td></td>
</tr>
<tr>
<td>Tellabs, Inc.</td>
<td>TLAB</td>
<td>1.30</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td>Symbol</td>
<td>Price</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>U.S. Office Products Company</td>
<td>OFIS</td>
<td>0.19</td>
<td></td>
</tr>
<tr>
<td>Viking Office Products, Inc.</td>
<td>VKNG</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Wisconsin Central Transportation Corporation</td>
<td>WCLX</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>WorldCom, Inc.</td>
<td>WCOM</td>
<td>4.78</td>
<td></td>
</tr>
<tr>
<td>Worthington Industries, Inc.</td>
<td>WTHG</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>Xilinx, Inc.</td>
<td>XLNX</td>
<td>0.31</td>
<td></td>
</tr>
</tbody>
</table>
Appendix F: Reading and Reference Material

Books:
- Reminiscences of a Stock Operator - Edwin LeFevre
- The Electronic Direct Electronic Trader - Mark Freidfeltig
- Secrets of the SOES Bandit - Harvey Houtkin
- Technical Analysis of the Futures Markets - John Murphy
- Japanese Candlestick Charting Techniques - Steve Nison
- The New Market Wizards - Jack D. Schwager
- The Market Wizards - Jack D. Schwager
- The Disciplined Trader - Mark Douglas
- The Art of War - Sun Tsu
- Introduction to Technical Analysis - Martin J. Pring
- Getting Started in Technical Analysis - Jack D. Schwager

Newspapers:
- The Wall Street Journal
- Investor's Business Daily
- Barron's
- Financial Times

Internet Websites:
- Yahoo Finance: www.quote.yahoo.com
- BigCharts: www.bigcharts.com
- TheStreet: www.thestreet.com
- DayTraders Online: www.daytraders.com
- NASDAQ: www.NASDAQ.com
- NASD: www.nasd.com
- Pristine: www.pristine.com
- New York Stock Exchange: www.nyse.com
- Chicago Mercantile Exchange: www.cme.com
- Chicago Board of Options Exchange: www.cboe.com
- The Wall Street Journal: www.wsj.com
- Value Line: www.valueline.com
- Momentum Securities, Inc: www.soes.com
- Smartmoney.com
- lqc.com
Appendix G: Slang Terms Used by Direct Electronic Traders

**Jigged Out:** Tricked into closing a trade by a small, but usually, quick price moves in the wrong direction. As in, “I got into a lot of good trades today, but kept letting myself get jigged out.

**Whacked:** A sharp, usually quick trade that goes against the trader. As in, “I got whacked for three sticks.

**Stick:** A full point (or dollar). As in, “I got on Microsoft for a three stick winner.”

**Slippage:** Getting filled at undesirable higher (or lower) prices on market orders. As in, “I hate the slippage in SOES orders.”

**Teenie:** One-sixteenth of a point. As in, “I always seem to lose when I try to squeeze out an extra teenie.”

**Scalper:** A high volume trader playing small quick momentum moves in a stock. A scalper usually trades 1,000 share at a time and takes lots of small winners, rarely exceeding ¼ point. As in, “That guy’s a great scalper.”

**Buying Power:** The total of a trader’s equity and all available margin. As in, “If that trader gets whacked again they’ll be cranking his buying power down to a buck.”

**Baby sitting:** Holding an open and generally losing trade for a long time. Usually, hoping the stock price will increase (or decrease) enough so the trader can get out of the trade even. As in, “That guy sure has been baby sitting that trade for a long time.”

**Nut:** The total cost of commissions. A particular concern for scalpers who may do 200 to 300 tickets a day, or more. As in, “Today was a tough trading day, I just barely covered my nut.”

**Squiggily Lines:** All the various technical indicators that can be overlain on to a trader’s charts. As in, “That guy sure uses a lot of squiggily lines.”

**Investor:** Someone holding a position overnight. As in, “Markets closing in two minutes, I’m not sure whether I should close this position or become an investor?”
Melted(-ing) an Account: Taking one or more large losses in a relatively short time that reduces a Trader’s equity to the point where they cannot continue to trade. As in, “He melted his account in two weeks trading internets.”

Learning Curve: The length of time it takes to learn to become a profitable trader. As in, “Looks like that trader is ahead of the normal learning curve.”

Printing on the “O”: Trade prices that are either below the Inside Bid price or higher than the Inside Ask price. Trades being executed at such “overriding” prices indicate extreme urgency to either buy or sell that stock, especially when such “overriding” prices continue for awhile. As in, “DELL’s really running, it’s printing on the “O”.”

Crunching: When support for a stock seems to evaporate and bid prices start to fall rapidly. As in, “Watch out, that stock looks like it is about to start crunching through that price level.”

Tanking: Similar to “crunching” but, more generally used to describe when either the “futures” or the entire market are going down sharply.
Appendix H: Financial Terminology

13 Week Treasury Bill - IRX - The T-Bill index - (IRX) is based on the discount rate of the most recently auctioned 13-week U.S.Treasury bill. The new T-bill is substituted weekly on the trading day following its auction, usually a Monday.

Actual EPS, CPS, or DPS - Reported annual earnings, cash flow or dividends per share for a company for the fiscal year indicated. For companies that report on a quarterly basis, this information will contain the sum of the actual earnings, cash flow, or dividends for the previous four quarters. For companies that report semi-annually, the field will contain the sum of the previous two semi-annual actuals.

American Depositary Receipt ADR - A security, created by a U.S. bank, that evidences ownership to a specified number of shares of a foreign security held in a depositary in the issuing company's country of domicile. The certificate, transfer, and settlement practices for ADRs are identical to those for U.S. securities. U.S. investors often prefer ADRs to direct purchase of foreign shares because of the ready availability of price information, lower transaction costs, and timely dividend distribution.

AMEX - American Stock Exchange

AMEX Composite - XAX - The AMEX Composite Index - (XAX) the American Stock Exchange introduced a new AMEX Composite Index with a new ticker symbol, XAX, on January 2, 1997. The XAX is a market capitalization-weighted, price appreciation index, and replaces the AMEX Market Value Index (XAM) which, since its inception, has been calculated on a "total return basis" to include the reinvestment of dividends paid by AMEX companies. The new AMEX Composite Index is more comparable with other major indexes, which reflect only the price appreciation of their respective components.

Analyst - A person with expertise in evaluating financial investments; he or she performs investment research and makes recommendations to institutional and retail investors to buy, sell, or hold; most analysts specialize in a single industry or business sector.

Ask (or Offer) - The price at which someone who owns a security offers to sell it; also known as the asked price. (See also "Best Ask").
**Assets** - Any possessions that have value in an exchange.

**Average Maturity** - The average time to maturity of securities held by a mutual fund. Changes in interest rates have greater impact on funds with longer average life.

**Beginning Net Asset Value** - The market value of a fund share on a predetermined start date.

**Best Ask (or “Best Offer”)** - The price at which someone who owns a security offers to sell it; also known as the asked price. Please note that the New York Stock Exchange and the American Stock Exchange do not provide Ask information on a delayed basis. (See also "Ask").

**Best Bid** - The price a prospective buyer is prepared to pay, at a particular time, for trading a unit of a given security. Please note that the New York Stock Exchange and the American Stock Exchange do not provide Bid information on a delayed basis. (See also "Bid").

**Beta** - A measure of the volatility of a stock relative to the overall market. A beta of less than one indicates lower risk than the market; a beta of more than one indicates higher risk than the market. NASDAQ.com uses the S&P 500 as the underlying index to measure the overall market for beta.

**Bid** - The price a prospective buyer is prepared to pay at a particular time for trading a unit of a given security. (See also "Best Bid").

**Capital Gains Distribution** - Payments to mutual fund shareholders of profits from the sale of securities in a fund's portfolio. Capital gains distributions (if any) are usually made annually.

**Consensus Rating** - The average of analysts' recommendations for a single entity. As many brokers have different ratings systems, their recommendations must be standardized so that a consensus can be calculated. The I/B/E/S ratings are calculated using a standard set of recommendations, maintained by I/B/E/S, each with an assigned numeric value:
1. Strong Buy
2. Buy
3. Hold
4. Underperform
5. Sell
Each recommendation received from the analysts is mapped to one of the I/B/E/S standard ratings. Assigning a numeric value to the broker text enables I/B/E/S to calculate a consensus recommendation. This consensus recommendation appears as the mean (average) of the assigned values.

**Crossed Market** - when the Inside Bid is greater than the Inside Ask
**Date of Record** - The date on which a shareholder must officially own shares in order to be entitled to a dividend.

**Debt to Equity Ratio** - Long-term debt divided by shareholders' equity, showing relationship between long-term funds provided by creditors and funds provided by shareholders; high ratio may indicate high risk, low ratio may indicate low risk.

**Deleted** - A security is no longer included in The NASDAQ Stock Market.

**Distribution Date** - Date on which the payout of realized capital gains on securities in the fund portfolio occurred.

**Dividend** - Distribution of earnings to shareholders, prorated by the class of security and paid in the form of money, stock, scrip, or, rarely, company products or property. The amount is decided by the Board of Directors and is usually paid quarterly. Mutual fund dividends are paid out of income, usually on a quarterly basis from the fund's investments.

**Dow Jones Industrial Average - DJIA** - The Dow Jones Industrial Average index (DJIA) is a price-weighted average of 30 actively traded blue chip stocks, primarily industrials. However, it also includes American Express Co. and American Telephone and Telegraph Co. Prepared and published by Dow Jones & co., it is the oldest and most widely quoted of all the market indicators. The components, which change from time to time, represent between 15% and 20% of the market value of NYSE stocks. The DJIA is calculated by adding the closing prices of the component stocks and using a divisor that is adjusted for splits and stock dividends equal to 10% or more of the market value of an issue as well as substitutions and mergers. The average is quoted in points, not in dollars.

**EBITDA** - Earnings before interest, taxes, depreciation, and amortization.

**Effective Annualized Seven-Day Yield** - Yield for 7 day period including the day reported, calculated by adding 1 to the base period return used in calculating the standard 7 day yield raising the total to the power of 365 divided by 7 and subtracting 1 (NOTE: To be reported on Wednesday only).

**Electronic Data Gathering, Analysis, and Retrieval EDGAR** - An electronic system implemented by the SEC that is used by companies to transmit all documents required to be filed with the SEC in relation to corporate offerings and ongoing disclosure obligations. EDGAR became fully operational mid-1995.

**Ending Net Asset Value** - The market value of a fund share on a predetermined end date.
**Ex-dividend** - Interval between the announcement and the payment of the next dividend.

**Ex-dividend date** - The date on or after which a security begins trading without the dividend (cash or stock) included in the contract price.

**Family of Funds** - Group of mutual funds managed by the same investment management company. Each fund typically has a different objective; one may be a growth-oriented stock fund, whereas another may be a bond fund or money market fund. Shareholders in one of the funds can usually switch their money into any of the family's other funds, sometimes at no charge. Family of funds with no sales charges is called no load families. Those with sales charges are called load families.

**Fiscal Periods** - Because not all companies have the same fiscal year end, we, in cooperation with I/B/E/S, use FY1, FY2, etc., to identify unique fiscal periods for forecast data. For comparison purposes, I/B/E/S rounds off the quarter end dates to the nearest month end.

The following is a description of how this labeling works:

- **FY** = fiscal year
- **Q** = quarter
- **SAN** = semiannual

The most recently reported earnings number is denoted with a zero (0). Then, the first estimate year is denoted with a one (1), the year after that, a two (2), and so on. So, as an example, if FY0 corresponds to the December 96 year end reported, then FY1 data refers to estimates for December 97, FY2 refers to estimates for the December 98 year end, and so on. Use the same conventions for interim periods (quarter and semiannual).

**Fundamental Analysis.** Analysis of Valuation based on the study of a company's (or sector's) Financial Statements, Earnings Power, Products, Market, etc.

**Foreign** - A non-U.S. company with securities trading on The NASDAQ Stock Market.

**Gold - GOX** - The CBOE Gold Index - (GOX) is an equal-dollar-weighted index composed of 10 companies involved primarily in gold mining and production. The index is re-balanced after the close of business on expiration Friday on the March quarterly cycle.

**Halted** - See “Trading Halt”

**Held** - A situation where a security is temporarily not available for trading (e.g. Market Makers are not allowed to display quotes).

**Intraday** - within one specific Trading Day
**Inside Market** - The highest bid and the lowest offer prices among all competing Market Makers or ECN in a NASDAQ security, i.e., the best bid and offer prices.

**Instinet System (INCA)** - An Electronic Communication Network. Instinet Corp (formerly Institutional Network) – a computerized order execution and quotation service. Originally, it was designed to allow institutional investors to display anonymous Bids and Offers available to other institutional investors.

**IPO Date** - The date that the security started publicly trading.

**Last Sale reporting** - An electronic entry by NASD Members to The NASDAQ Stock Market of the price and the number of shares involved in a transaction in a NASDAQ security. The trade reported must be submitted to NASDAQ with 90 seconds of the execution of the trade.

**Limit Order** - A Limit Order is an order to buy or sell a stock at a customer-specified price.

**Load Fund** - Mutual Fund that is sold for a sales charge by a brokerage firm or other sales representative. Such funds may be stock, bond or commodity funds, with conservative or aggressive objectives.

**Locked Market** - When the Inside Bid is equal to the Inside Offer

**Long Position** - Stock ownership, seeking upside price move

**Long Term Gain** - A gain on the sale of a capital asset where the holding period was six months or more and the profit was subject to the long-term capital gains tax.

**Management's Discussion and Analysis (MD&A)** - An essential area looked at by analysts; an interpretive section of the prospectus and of the annual report, frequently called the Financial Review.

**Market Capitalization (MCAP)** - Price per share multiplied by the total number of shares outstanding; also the market's total valuation of a public company.

**Market Category** - The market it trades on, either NASDAQ National Market (NNM) or NASDAQ SmallCap Market (SCM).

**Market Close Date** - Date on which the closing Net Asset Value (NAV) was last calculated.

**Market Makers** - The NASD member firms that use their own capital, research, retail and/or systems resources to represent a stock and compete with each other to buy and sell the stocks they represent. There are over 500 member firms that act as NASDAQ Market Makers. One of the major differences between The NASDAQ Stock Market and
other major markets in the U.S. is NASDAQ's structure of competing Market Makers. Each Market Maker competes for customer order flow by displaying buy and sell quotations for a guaranteed number of shares. Once an order is received, the Market Maker will immediately purchase for or sell from its own inventory, or seek the other side of the trade until it is executed, often in a matter of seconds.

**Market Maker spread** - The difference between the price at which a Market Maker is willing to buy a security and the price at which the firm is willing to sell it i.e., the difference between a Market Maker's bid and ask for a given security. Since each Market Maker positions itself to either buy or sell inventory at any given time, each individual Market Maker spread is not indicative of the market as a whole. (See also "Inside Market".)

**Market Order** - an order to buy or sell a stock at the market's best quoted price.

**Market Surveillance** - The department responsible for investigating and preventing abusive, manipulative or illegal trading practices on The NASDAQ Stock Market. Considerable resources are devoted to overseeing The NASDAQ Stock Market. A vast array of sophisticated automated systems reviews each trade and price quotation on an on-line, real-time basis. Off-line computer-based analyses are conducted to evaluate trading patterns on a monthly, weekly and daily basis.

Whenever any of these automated systems indicate unusual price or volume in a stock, NASDAQ Market Surveillance analysts determine if this was the result of legitimate market forces or perhaps a violation of rules. Among other things, analysts review press releases, review historical trading activity, interview brokers, Market Makers, and NASDAQ-listed company officials. Market Surveillance continues its inquiries until unusual movements are adequately explained.

If legitimate market forces were at work the case is closed without action. If it appears rule violations have occurred, a disciplinary action is initiated. Where corporate insiders or members of the investing public are involved in a potential violation, the case will be referred to the SEC.

**Market Value** - The market price; the price at which buyers and sellers trade similar items in an open marketplace. The current market price of a security as indicated by the latest trade recorded.

**Maturity Date** - The date on which the principal amount of a bond is to be paid in full.

**Material news** - News released by a NASDAQ company that might reasonably be expected to affect the value of a company's securities or influence investors' decisions. Material news includes information regarding corporate events of an unusual and non-recurring nature, news of tender offers, unusually good or bad earnings reports, and a stock split or stock dividend. (See also "Trading Halt".)
Mean - The mathematical average of a range of numbers (calculated by dividing the sum total of all the items in the range by the total number of items in the range).

Median - The middle number in a defined distribution; when looking at estimates, median refers to the estimate above and below which lie an equal number of estimates for the period indicated.

Money Market Fund - Open-ended mutual fund that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit, and other highly liquid and safe securities, and pays money market rates of interest. The fund's net asset value remains a constant $1 a share, only the interest rate goes up or down.

Most Active - Most active stocks in a market

Mutual Fund - Fund operated by an investment company that raises money from shareholders and invests it in stocks, bonds, options, commodities or money market securities.

NASDAQ Composite Index - The NASDAQ Composite Index measures all NASDAQ domestic and non-U.S. based common stocks listed on The NASDAQ Stock Market. The Index is market value weighted. This means that each company's security affects the Index in proportion to it's market value. The market value, the last sale price multiplied by total shares outstanding, is calculated throughout the trading day, and is related to the total value of the Index.

NASDAQ International Ltd. - A subsidiary of the NASD headquartered in London, England. Its mission is to support NASD members in London, serve as a liaison to international companies seeking to list securities on NASDAQ, encourage foreign institutional participation in NASDAQ stocks, and to heighten the international image of the NASD and its markets.

NASDAQ International Service - An extension to The NASDAQ Stock Market's trading systems that allows early morning trading from 3:30 to 9:00 A.M. Eastern Standard Time on each U.S. trading day. This NASDAQ service enables participants to monitor trades during London market hours. NASD members are eligible to participate in this session through their U.S. trading facilities or through those of an approved U.K. affiliate.

NASDAQ National Market securities - The NASDAQ National Market consists of over 3,000 companies that have a national or international shareholder base, have applied for listing, meet stringent financial requirements and agree to specific corporate governance standards. To list initially, companies are required to have significant net tangible assets or operating income, a minimum public float of 500,000 shares, at least 400 shareholders, and a bid price of at least $5. The NASDAQ National Market operates from 9:30 A.M. to 4:00 P.M. EST, with extended trading
in SelectNet from 8:00 A.M. to 9:30 A.M. EST and from 4:00 P.M. and 5:15 P.M. EST.

**NASDAQ SmallCap Market securities** - The NASDAQ SmallCap Market comprises of over 1,400 companies that want the sponsorship of Market Makers, have applied for listing and meet specific and financial requirements. Once a company is approved and listed on this market, Market Makers are able to quote and trade the company’s securities through a sophisticated electronic trading and surveillance system. The NASDAQ SmallCap Market operates from 9:30 A.M. to 4:00 P.M. EST., with extended trading in SelectNet from 8:00 A.M. to 9:30 A.M. EST and from between 4:00 P.M. and 5:15 P.M. EST.

**National Association of Securities Dealers, Inc. NASD** - The self-regulatory organization of the securities industry responsible for the regulation of The NASDAQ Stock Market and the over-the-counter markets. The NASD operates under the authority granted it by the 1938 Maloney Act Amendment to the Securities Exchange Act of 1934.

**Net Asset Value (NAV)** - The market value of a fund share, synonymous with a bid price. In the case of no-load funds, the NAV, market price, and offering price are all the same figure, which the public pays to buy shares; load fund market or offer prices are quoted after adding the sales charge to the net asset value. NAV is calculated by most funds after the close of the exchanges each day by taking the closing market value of all securities owned plus all other assets such as cash, subtracting all liabilities, then dividing the result (total net assets) by the total number of shares outstanding. The number of shares outstanding can vary each day depending on the number of purchases and redemptions.

**Net Change** - The difference between today's last trade and the previous day's last trade. The difference between today's closing Net Asset Value (NAV) and the previous day's closing Net Asset Value (NAV).

**Net Income** - Income after all expenses and taxes have been deducted, and used in calculating a variety of profitability and stock performance measures.

**NYSE** - New York Stock Exchange

**Number of Estimates (# of Est)** - Number of analysts included in the Mean EPS forecast.

**NYSE Composite Index** - a market value-weighted index which relates all NYSE stocks to an aggregate market value as of Dec. 31, 1965, adjusted for capitalization changes. The base value of the index is $50 and point changes are expressed in dollars and cents.

**No Load Fund** - Mutual Fund offered by an open end investment company that imposes no sales charge (load) on its shareholders. Investors buy shares in no-load funds directly from the fund companies, rather than through a broker as is done in load
funds. Many no-load fund families allow switching of assets between stock, bond, and money market funds. The listing of the price of a no-load fund in the newspaper is accompanied by the designation N.L. The net asset value, market price and offer prices of this type of fund are exactly the same, since there is no sales charge.

**No Quote (NQ)** - No Market Makers making an inside market at this time.

**Offer Price** - The price at which the shares were originally offered to the public.

**Open order** - An order to buy or sell a security that remains in effect until it is either canceled by the customer or executed.

**P/B Ratio (Price/Book Ratio)** - A stock analysis statistic in which the price of a stock is divided by the reported book value (as of the date specified) of the issuing firm.

**P/C Ratio (Price/Cash Flow Ratio)** - A financial ratio that compares stock price with cash flow from operations per outstanding shares.

**P/E Ratio (Price/Earnings Ratio or Multiple)** - A stock analysis statistic in which the current price of a stock (today's last sale price) is divided by the reported actual (or sometimes projected, which would be forecast) earnings per share of the issuing firm.

**P/S Ratio (Price/Sales Ratio)** - A financial ratio that compares stock price with sales per share (or market value with total revenue).

**Penalty Bid** - A Syndicate Penalty Bid can be displayed on the NASDAQ System during the period of a registered public offering of a security. Such a bid may be entered by the managing underwriter or a member of the underwriting group acting on its behalf, and is intended to facilitate the offering by stabilizing the price of the security during the distribution period. This activity is permissible under SEC Rule 10b-7.

**Pre-Syndicate Bid** - A Pre-Syndicate Bid can be entered in the NASDAQ System to stabilize the price of a NASDAQ security before the effective date of a registered secondary offering. This activity is permissible under SEC Rule 10b-7.

**Previous Day's Close** - The previous trading day's last reported trade. The Previous Day's Close on the NASDAQ web site is updated at 3:30 A.M.

**Principal orders** - Refers to activity by a broker/dealer when buying or selling for its own account and risk.

**Prints (a.k.a. Time & Sales)** - real time report of actual trades with price & size.

**Quarterly Report (10 Q)** - A report, which public companies are required to file quarterly with the SEC, that provides unaudited financial information and other selected material.
**Refresh (Market Maker)** – when a Market Maker has filled a SOES obligation and is willing to buy or sell more shares at the same price.

**Real-time trade reporting** - A requirement imposed on Market Makers (and in some instances, non-Market Makers) to report each trade immediately after completion of the transaction. Stocks traded on The NASDAQ Stock Market are subject to real-time trade reporting within 90 seconds of execution.

**Retained Earnings** - Net profits kept to accumulate in a business after dividends are paid.

**Return of Capital** - A distribution of cash resulting from depreciation tax savings, the sale of a capital asset or of securities in a portfolio, or any other transaction unrelated to retained earnings.

**Return on Equity** - (net income divided by shareholders' equity) a measure of the net income that a firm is able to earn as a percent of stockholders' investment.

**Return on Total Assets** - (net income divided by total net assets) a measure of the net income that a firm's management is able to earn with the firm's total assets.

**Securities and Exchange Commission SEC** - The federal agency created by the Securities Exchange Act of 1934 to administer that act and the Securities Act of 1933. The statutes administered by the SEC are designed to promote full public disclosure and protect the investing public against fraudulent and manipulative practices in the securities markets. Generally, most issues of securities offered in interstate commerce or through the mails must be registered with the SEC.

**Seven-Day Yield** - Yield for seven day period including the day reported.

**Short interest** - The total number of shares of a security that have been sold short (see "Short Selling") by customers and securities firms.

**Short Selling** - Short selling is the selling of a security that the seller does not own, or any sale that is completed by the delivery of a security borrowed by the seller. Short selling is a legitimate trading strategy. Short sellers assume the risk that they will be able to buy the stock at a more favorable price than the price at which they sold short. The NASDAQ Short Sale Rule prohibits NASD members from selling a NASDAQ National Market stock at or below the inside best bid when that price is lower than the previous inside best bid in that stock.

**Short Term Gain/Loss** - The gain or loss realized from the sale of securities or other capital assets held six months or less.
**SIC Code** - Standard Industrial Classification (SIC) code. A numbering system established by the Office of Management and Budget that identifies companies by industry. It is used to promote the comparability of economic statistics from various facets of the U.S. economy.

**Slippage.** The difference in price from the current trading level at the time Market Order is placed, to the actual execution price.

**SOES** - The Small Order Execution System

**SOES Order Entry Firm** - a NASD member firm who is registered as an Order Entry Firm for purposes of participation in the Small Order Execution System (SEOS).

**Spread** - The spread for a company's stock is influenced by a number of factors, including:
Supply or "float" - the total number of shares outstanding available to trade.
Demand or interest in a stock. Total trading activity in the stock.

**Standard and Poor's 500 - $SPX** - The S&P 500 Index - ($SPX), more formally known as the S&P 500 Composite Stock Price Index, is a European-style, capitalization-weighted index (shares outstanding multiplied by stock price) of 500 stocks that are traded on the New York Stock Exchange, American Stock Exchange and NASDAQ National Market®. The advantage of "cap-weighting" is that each company's influence on index performance is directly proportional to its relative market value. It is this characteristic that makes the S&P 500 such a valuable tool for measuring the performance of actual portfolios.

**Stock Dividend** - Payment of a corporate dividend in the form of stock rather than cash. The stock dividend may be additional shares in the company, or it may be shares in a subsidiary being spun off to shareholders. Stock dividends are often used to conserve cash needed to operate the business. Unlike a cash dividend, stock dividend is not taxed until sold.

**Stock Symbol NYSE** - A unique one, two or three letter symbol assigned to a security traded on the New York Stock Exchange

**Stock Symbol NASDAQ** - A unique four- or five-letter symbol assigned to a NASDAQ security. If a fifth letter appears, it identifies the issue as other than a single issue of common stock or capital stock. A list of fifth-letter identifiers and a description of what each represent follows:
A - Class A
B - Class B
C - Issuer qualifications exceptions*
D - New
E - Delinquent in required filings with the SEC
- Second convertible bond, same company
I - Third convertible bond, same company
J - Voting
K - Nonvoting
L - Miscellaneous situations, such as depositary receipts, stubs, additional warrants, and units
M - Fourth preferred, same company
N - Third preferred, same company
O - Second preferred, same company
P - First preferred, same company
Q - Bankruptcy Proceedings
R - Rights
S - Shares of beneficial interest
T - With warrants or with rights
U - Units
V - When-issued and when distributed
W - Warrants
Y - ADR (American Depositary Receipt)
Z - Miscellaneous situations such as depositary receipts, stubs, additional warrants, and units.

* The letter "C" as a fifth character in a security symbol, indicates that the issuer has been granted a continuance in NASDAQ under and exception to the qualification standards for a limited period.

**Surprise** - Difference between the actual and expected earnings. Special symbols are used for negative actual or expected earnings as follows:
N+ : Negative actual earnings with positive surprise
N- : Negative actual earnings with negative surprise
-+ : Negative consensus earnings with positive actual earnings
-0 : Negative consensus earnings with zero actual earnings
NA : Not available (data necessary for calculation are not available)

**Syndicate Bid** - A Syndicate Bid can be entered in the NASDAQ System to stabilize the price of a NASDAQ security prior to the effective date of a registered secondary offering. This activity is permissible under SEC Rule 10b-7.

**Time & Sales** – see “Prints”

**Technical Analysis.** The study of price and volume based mostly on chart pattern formation and with no concern for Fundamental Information such as financial statistics or statements.

**TREASURY BOND 30 Year - TYX** - The Treasury Bond index - (TYX) is based on 10 times the yield-to-maturity on the most recently auctioned 30-year Treasury bond.

**Today's High** - The intra-day high trading price.
**Today's Low** - The intra-day low trading price.

**Trading halt** - The temporary suspension of trading in a NASDAQ security, usually for 30 minutes, while material news from the issuer is being disseminated over the news wires. A trading halt gives all investors equal opportunity to evaluate news and make buy, sell, or hold decisions on that basis. A trading halt may also be imposed for purely regulatory reasons, either by The NASDAQ Stock Market or the SEC.

**Two sided market** - The obligation imposed by the NASD that NASDAQ Market Makers make both firm bids and firm asks in each security in which they make a market.

**Underwriter** - The investment banking firm that brought the company public. In the IPO Summary section we include both the primary Underwriter, called the Lead Manager and the Co-Manager, when available.

**Volatility** - The degree of price fluctuation for a given asset, rate, or index; usually expressed as a variance or standard deviation.

**Volume** - Total volume in each stock reported to The NASDAQ Stock Market from NASD members and exchanges trading NASDAQ securities between the hours of 8:00 A.M. and 5:15 P.M. EST.

**Yield** - In general, a return on an investor's capital investment. For bonds, the coupon rate of interest divided by the purchase price, called current yield. Also, the rate of return on a bond, taking into account the total of annual interest payments, the purchase price, the redemption value, and the amount of time remaining until maturity.
Appendix J: Standard & Poor's 500 Index (SPX)

**SPX S&P 500® Index Options**

*Product Specifications*

**Symbol:**

SPX

**Underlying:**

The Standard & Poor's 500 Index is a capitalization-weighted index of 500 stocks from a broad range of industries. The component stocks are weighted according to the total market value of their outstanding shares. The impact of a component's price change is proportional to the issue's total market value, which is the share price times the number of shares outstanding. These are summed for all 500 stocks and divided by a predetermined base value. The base value for the S&P 500 Index is adjusted to reflect changes in capitalization resulting from mergers, acquisitions, stock rights, substitutions, etc.

**Multiplier:**

$100.

**Strike Price Intervals:**

Five points. 25-point intervals for far months.

**Strike (Exercise) Prices:**

In-, at- and out-of-the-money strike prices are initially listed. New series are generally added when the underlying trades through the highest or lowest strike price available.

**Premium Quotation:**

Stated in points and fractions. One point equals $100. Minimum tick for series trading below 3 is 1/16 ($6.25) and for all other series, 1/8 ($12.50).

**Expiration Date:**

Saturday immediately following the third Friday of the expiration month.

**Expiration Months:**

Three near-term months followed by three additional months from the March quarterly cycle (March, June, September, and December).

**Exercise Style:**

*European* - SPX options generally may be exercised only on the last business day before expiration.

**Settlement of Option Exercise:**

The exercise-settlement value, SET, is calculated using the opening (first) reported sales price in the primary market of each component stock on the last business day (usually a Friday) before the expiration date. If a stock in the index does not open on the day on which the exercise & settlement value is determined, the last reported sales price in the primary market will be used in calculating the exercise-settlement value. The exercise-settlement amount is equal to the difference between the exercise-settlement value, SET, and the exercise price of the option, multiplied by $100. Exercise will result in delivery of cash on the business day following expiration.
Position and Exercise Limits:

No position and exercise limits are in effect. Each member (other than a market-maker) or member organization that maintains an end of day position in excess of 100,000 contracts in SPX (10 SPX LEAPS equals 1 SPX full value contract) for its proprietary account or for the account of a customer, shall report certain information to the Department of Market Regulation. The member must report information as to whether such position is hedged and, if so, a description of the hedge employed. A report must be filed when an account initially meets the aforementioned applicable threshold. Thereafter, a report must be filed for each incremental increase of 25,000 contracts. Reductions in an options position do not need to be reported. However, any significant change to the hedge must be reported.

Margin:

Uncovered writers must deposit 100% of the option proceeds plus 15% of the aggregate contract value (current index level multiplied by $100) minus the amount by which the option is out-of-the-money, if any. Minimum margin is 100% of the option proceeds plus 10% of the aggregate contract value. Long puts or calls must be paid in full.

CUSIP Number:

648815 (Call 1-800/OPTIONS for overflow symbol CUSIP numbers.)

Last Trading Day:

Trading in SPX options will ordinarily cease on the business day (usually a Thursday) preceding the day on which the exercise-settlement value is calculated.

Trading Hours:

8:30 a.m.- 3:15 p.m. Central Time (Chicago time). Call 1-800/OPTIONS for more information.
Appendix K: NASDAQ Circuit Breaker Rules

Circuit Breaker Trigger Points and Trade Halt Durations for the Second Quarter, 1999

<table>
<thead>
<tr>
<th></th>
<th>Before 1:00 p.m. PST</th>
<th>1:00 p.m. - 1:59 p.m. PST</th>
<th>2:00 p.m. - 2:29 p.m. PST</th>
<th>2:30 p.m. or later PST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1000-point Decline in the Dow</strong></td>
<td>1 Hour Halt</td>
<td>1 Hour Halt</td>
<td>½ Hour Halt</td>
<td>No Halt; If Decline Continues To 1950-points, Then Close For Day</td>
</tr>
<tr>
<td><strong>1950-point Decline in the Dow</strong></td>
<td>2 Hour Halt</td>
<td>1 Hour Halt</td>
<td>Close For Day</td>
<td>Close For Day</td>
</tr>
<tr>
<td><strong>2950-point Decline in the Dow</strong></td>
<td>Close For Day</td>
<td>Close For Day</td>
<td>Close For Day</td>
<td>Close For Day</td>
</tr>
</tbody>
</table>

The National Association of Securities Dealers, Inc. (NASD®) has agreed, upon the request of the Securities and Exchange Commission, to halt domestic trading in all Nasdaq securities and all equity and equity-related OTC securities should the NYSE declare a market-wide trading halt, pursuant to their rules. NASD member firms should become familiar with the percentage-based, circuit-breaker standards and be prepared for trading halts in Nasdaq® and OTC trading should the Dow Jones Industrial Average (the Dow) decline to the applicable trigger-point levels established by this rule.

The point-decline thresholds at which trading is halted change every quarter, so that those thresholds may accurately reflect the current market. The thresholds are percentage-based levels of 10%, 20%, and 30% declines in the Dow. The actual numerical points will be determined based on the state of the market each calendar quarter. For the second quarter of 1999, as shown in the table above, the thresholds are 1000-, 1950-, and 2950-point declines.

The NASDAQ website will have the new trigger points displayed each quarter.

For more information, please see General News - SEC Approves New Circuit Breakers Effective April 15, 1998.
## Appendix L: Daily Trading Sheet

<table>
<thead>
<tr>
<th>Time</th>
<th>Buy/Sell</th>
<th>Stock</th>
<th>Long/Short</th>
<th>Size</th>
<th>Price</th>
<th>MM ID/ECN</th>
<th>P&amp;L</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix M: Decimals & Fraction Sheet

<table>
<thead>
<tr>
<th>Decimal</th>
<th>Fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0156</td>
<td>1/64</td>
</tr>
<tr>
<td>0.0313</td>
<td>1/32</td>
</tr>
<tr>
<td>0.0625</td>
<td>1/16</td>
</tr>
<tr>
<td>0.0781</td>
<td>5/64</td>
</tr>
<tr>
<td>0.0938</td>
<td>3/32</td>
</tr>
<tr>
<td>0.125</td>
<td>1/8</td>
</tr>
<tr>
<td>0.1875</td>
<td>3/16</td>
</tr>
<tr>
<td>0.2031</td>
<td>13/64</td>
</tr>
<tr>
<td>0.2188</td>
<td>7/32</td>
</tr>
<tr>
<td>0.25</td>
<td>1/4</td>
</tr>
<tr>
<td>0.3125</td>
<td>5/16</td>
</tr>
<tr>
<td>0.3281</td>
<td>21/64</td>
</tr>
<tr>
<td>0.3438</td>
<td>11/32</td>
</tr>
<tr>
<td>0.375</td>
<td>3/8</td>
</tr>
<tr>
<td>0.4375</td>
<td>7/16</td>
</tr>
<tr>
<td>0.4531</td>
<td>29/64</td>
</tr>
<tr>
<td>0.4688</td>
<td>15/32</td>
</tr>
<tr>
<td>0.5</td>
<td>1/2</td>
</tr>
<tr>
<td>0.5625</td>
<td>9/16</td>
</tr>
<tr>
<td>0.5781</td>
<td>37/64</td>
</tr>
<tr>
<td>0.5938</td>
<td>19/32</td>
</tr>
<tr>
<td>0.625</td>
<td>5/8</td>
</tr>
<tr>
<td>0.6875</td>
<td>11/16</td>
</tr>
<tr>
<td>0.7031</td>
<td>45/64</td>
</tr>
<tr>
<td>0.7188</td>
<td>23/32</td>
</tr>
<tr>
<td>0.75</td>
<td>3/4</td>
</tr>
<tr>
<td>0.8125</td>
<td>53/64</td>
</tr>
<tr>
<td>0.8281</td>
<td>13/16</td>
</tr>
<tr>
<td>0.8438</td>
<td>27/32</td>
</tr>
<tr>
<td>0.875</td>
<td>7/8</td>
</tr>
<tr>
<td>0.9375</td>
<td>15/16</td>
</tr>
<tr>
<td>0.9531</td>
<td>61/64</td>
</tr>
<tr>
<td>0.9688</td>
<td>31/32</td>
</tr>
<tr>
<td>0.9844</td>
<td>63/64</td>
</tr>
</tbody>
</table>
Appendix N: CyberTrader Trading Software

Introduction

To enhance the learning environment, training in the one week, Introduction to Direct Electronic Trading “Bootcamp” is done on the CyberT (Version 1.3) program, this is a limited version of the full CyberTrader program. The programs are identical with the exception that on CyberT only one stock box and two charts can be opened at any one time. Additionally, certain other market monitoring tools are not initially downloaded with the CyberT program, but may be subsequently added. The three-week advance class trains on the full version of CyberTrader (Version 1.7).

The CyberTrader and CyberT programs were developed and are owned by Cyber Corp. of Austin, Texas. Cyber Corp. reserves all rights to their programs. Online Trading Academy and Momentum Securities – Irvine license these programs from Cyber Corp. for trading and training purposes. Each “bootcamp” student will be provided a copy of Cyber Corp’s comprehensive manual on the features and operation of their CyberTrader (v1.7) and CyberT (v1.3) trading programs. It is important that students preparing to trade using either of these programs diligently study this manual before trading live.

Cyber Corp’s disclaimer in their manual reminds traders that “each trader is accountable for every trade done on using these programs, even if you didn’t mean to do it. So be careful.” They also point out that CyberTrader and CyberT programs depend on third-party data feeds, lines and systems to make the systems run smoothly. Such connections and data feeds maybe and are interrupted from time to time. Such fully automated trading is on the cutting edge of technology and each individual trader must accept all the associated risks of equipment and software failures.

CyberTrader (Version 1.7) is the software program that will provide most of the data the trader will utilize during market hours and is also the trader’s main tool for executing orders. Although there are many other sources of data (PC Quotes, Bloomberg and other data services) and also other ways to execute an order (e.g., phone orders through Instinet), most trading activity is routed through CyberTrader. Getting familiar with the software is as crucial to NASDAQ trading just as a race car driver needs to be completely familiar with his racecar or a concert pianist is familiar with his piano.
Main Trading Windows

Figure 2-1: Main Window - Must be open at all times.
This window shows the following information:
- **Time**: The time in the Eastern Time Zone (i.e., New York time)
- **Date**: Today’s date.
- **$Used**: Amount of capital being used to support current open positions
- **Open P & L**: Gross profit (green) or loss (red) on current open positions (based on inside bid or ask)
- **Open Positions**: Number of positions currently open (for current trading day only)
- **Closed P&L**: Gross profit or loss on closed positions
- **Tickets**: Number of actual fills or deliveries (includes partial fills)
- **Ticket Average**: Closed P&L amount divided by the number of tickets (keep this amount above your “per ticket” commission costs to cover commissions)

Figure 2-2: Account Manager On-Line (Must be Open at all times)

This window gives you the following information:
- **Orders**: A list of all orders placed. Current open orders are in light blue
- **Exec**: A list of all orders executed, with price, time, method of execution, size and contra
- **Trades**: A list of all closed trades with profit or loss, with buy and sell price and closing times
- **Opens**: A list of currently open trades, with profit or loss, based on current inside quotes
- **Holds**: This page will display any long-term positions held
- **Stats**: On this page the trader can view vital information about their account
Figure 2-3: Open Trades Window (Must be open at all times)

A list of currently Open Positions. Long positions are shown in green. Short positions are shown in red.

Figure 2-4: Position Manager Alerts (Must be Open at all times)

Gives information about the status of your current position. Green messages when Market Makers & ECN’s are acting in your favor (regardless of long or short). Red messages when Market Makers are not acting in your favor. Blue messages for execution and order confirmation.
**Figure 2-5: Market Maker Window (At least one must be open at all times)**

This window shows the following information:
- Displays all Level 2 information:
- Stock symbol and company name
- Market Maker & ECN bid & asks with share size (x100)
- Share Size Setting
- Previous Trading Day Close
- Current Trading Day Opening Price
- Current Volume
- Last Trade
- Scrolling Time & Sales Report with size (x100)
- Current trading day high
- Current trading Day Low
- Number of ECN’s/Market Makers at Inside Bid & Ask

<table>
<thead>
<tr>
<th>Bid Stock</th>
<th>Bid Price</th>
<th>Ask Stock</th>
<th>Ask Price</th>
<th>Current Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSCO</td>
<td>116 15/16</td>
<td>PWJC</td>
<td>117</td>
<td>117 9</td>
</tr>
<tr>
<td>SBSH</td>
<td>116 15/16</td>
<td>DEMP</td>
<td>117 1/16</td>
<td>117 2</td>
</tr>
<tr>
<td>ISLD</td>
<td>116 15/16</td>
<td>BEST</td>
<td>117 1/16</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>INCA</td>
<td>116 15/16</td>
<td>PRUS</td>
<td>117 1/16</td>
<td>117 1/16 13</td>
</tr>
<tr>
<td>NITE</td>
<td>116 7/8</td>
<td>ARCA</td>
<td>117 1/16</td>
<td>117 1/16 5</td>
</tr>
<tr>
<td>MSCO</td>
<td>116 7/8</td>
<td>ISLD</td>
<td>117 1/16</td>
<td>117 1/16 3</td>
</tr>
<tr>
<td>BRUT</td>
<td>116 7/8</td>
<td>JPMS</td>
<td>117 1/8</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>ARCA</td>
<td>116 7/8</td>
<td>NITE</td>
<td>117 1/8</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>OLDE</td>
<td>116 7/8</td>
<td>RSSF</td>
<td>117 1/8</td>
<td>117 1/16 2</td>
</tr>
<tr>
<td>PWJC</td>
<td>116 13/16</td>
<td>INCA</td>
<td>117 1/8</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>TWPT</td>
<td>116 3/4</td>
<td>RBNC</td>
<td>117 3/16</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>MONT</td>
<td>116 3/4</td>
<td>LEHM</td>
<td>117 1/4</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>MLCO</td>
<td>116 3/4</td>
<td>SNDS</td>
<td>117 1/4</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>MADF</td>
<td>116 3/4</td>
<td>BRUT</td>
<td>117 1/4</td>
<td>117 1/16 13</td>
</tr>
<tr>
<td>MASH</td>
<td>116 3/4</td>
<td>MASH</td>
<td>117 1/4</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>GKMC</td>
<td>116 5/8</td>
<td>WARR</td>
<td>117 3/8</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>KCMO</td>
<td>116 5/8</td>
<td>MADF</td>
<td>117 3/8</td>
<td>117 1/16 2</td>
</tr>
<tr>
<td>BTRD</td>
<td>116 5/8</td>
<td>PFSI</td>
<td>117 7/16</td>
<td>117 1/16 4</td>
</tr>
<tr>
<td>ADAM</td>
<td>116 9/16</td>
<td>SELZ</td>
<td>117 1/2</td>
<td>117 1/16 1</td>
</tr>
<tr>
<td>SLKC</td>
<td>116 9/16</td>
<td>DLJP</td>
<td>117 1/2</td>
<td>117 1/16 1</td>
</tr>
</tbody>
</table>
Execution Keys

CyberTrader utilizes a regular computer keyboard to send orders. Default (basic) settings are organized in such a way that order sending will be as efficient and consistent as possible. Order keys are pre-colored as a guide and are set up to avoid the use of the mouse, whenever possible. This is especially crucial for high velocity traders (Scalpers). The green keys are associated with buy orders (or “upward” direction), while the red keys are associated with sell orders (or “downward” direction). The following is list of basic CyberTrader (v 1.7) execution keys:

SOES Keys:

- Shift + ]: SOES Market Buy
- Shift + ’: SOES Limit Buy
- Shift + Q: SOES Market Sell
- Shift + A: SOES Limit Sell
- Shift + W: SOES Market Short
- Shift + S: SOES Limit Short
- Shift + L: Will automatically liquidate all open position with corresponding MARKET SOES Orders (depending on position type: Long or Short)

Notes on SOES Keys:

All order keys will execute with reference only to the currently highlighted CyberTrader window.

- SOES Market Buy is always executed at the BEST ASK price
- SOES Market Sell is always executed at the BEST BID price
- SOES Limit Buy is executed at the CURRENT ASK or better only
- SOES Limit Sell is executed at the CURRENT BID or better only
- SOES Market Short is executed at the BEST BID and subject to the Short Sale Rule
- SOES Limit Short is executed at the CURRENT BID only and subject to the Short Sale Rule
- To utilize the SOES LIQUIDATE Option, the “Account Manager” window must be highlighted.

Going Live: CyberTrader Settings for the Novice

Recommended trading settings for the beginning trader are as follows:

- Set SOES cancel to “0” - this will prevent CyberTrader from automatically canceling your SOES order. This is important when you are waiting in the SOES line to exit a trade that is not going your way;
- Set SelectNet cancel to 30 seconds – since SelectNet orders are generally dealt with by Market Makers on a “Last In–First out” (LIFO) basis, CyberTrader automatically cancel an older SelectNet order and remind you to refresh. This will also prevent your order from getting filled too far out-of-the-money;
- Set to use “Strict 5 minute Rule” to avoid costly mistakes (this is a back office setting);
• Set to “Close Out Open Positions” in case you forget to change your share size on partial fills (this is a back office setting)

**SelectNet Keys:**

**Shift + Z:** SelectNet Broadcast Bid (to Buy)
**Shift + ?:** SelectNet Broadcast Offer (to Sell)
**Shift + .:** SelectNet Broadcast Short Offer (to open Short)
**Alt + Z:** SelectNet Bid (to Buy) Preference
**Alt + ?:** SelectNet Offer (to Sell) Preference
**Alt + .:** SelectNet Short Offer (to Sell) Preference

**Notes on SelectNet Keys:**

- SelectNet keys will bring up a window that will indicate order size and price.
- SelectNet short offers are subject to the **Short Sale Rule**.
- A SelectNet Broadcast Bid will automatically select the current bid price.
- A SelectNet Broadcast Offer will automatically select the current ask price.
- These prices may be adjusted using the arrow keys (up or green, to increase price. Down or red to decrease).
- Prices can be adjusted in 1/32 and 1/64 increments, using the Shift + arrow keys.
- SelectNet Broadcast Bids & Offers are automatically directed to all Market Makers.
- SelectNet is usually based on LIFO (Last In – First Out) queuing. If you are not filled within 15 seconds, cancel and refresh your order to get back in front of the queue.
- SelectNet Broadcast orders may also be manually changed to preference a specific Market Maker by tabbing down to the MM ID space and selecting the Market Maker or ECN of your choice via the arrow keys.
- SelectNet Preference Bids or Offers are automatically directed to specific Market Maker on the inside most Bid or Ask at their specified Bid or Asking price.
- Pressing the **ENTER** or **SPACE BAR** key will send your order.

**Island Keys (F1 through F4 Only):**

**F1:** Island Bid (Bidding, hoping to Buy)
**F3:** Island Short Offer (to Short)
**F4:** Island Offer (Offering, hoping to Sell)

**Notes on ISLD Keys:**

- Your ISLD order, if it matches or is better than the current Bid or Ask, will appear on the Market Maker window.
- Your ISLD order may be delivered by another Direct Electronic Trader or Market Maker.
- ISLD keys will bring up a window that will indicate order size and price.
- An ISLD BID will automatically select the current BID price, unless changed by the user.
• An ISLD Offer will automatically select the current ASK price, unless changed by the user.
• Prices can be adjusted by 1/32 and 1/64 increments, using the Shift + arrow keys.
• Prices adjusted increments smaller than 1/16ths (i.e., 1/32nds or 1/64ths) will not appear on the MM for most large-cap stocks. If your ISLD Bid or Offer is the best ISLD price in that stock, your order will appear on the MM Window with a price adjusted to the nearest 1/16 below your 1/32 or 64 price.

Island Crosses

• If you want to sell stock on ISLD at a price that is on the Bid column, you must match the best ISLD bid currently on the bid side.
• If you want to buy stock on ISLD at a price that is displayed on the Ask column, you must match the best ISLD offer currently on the Ask side.
• ISLD works best on stocks with good liquidity.
• ISLD is a powerful order tool to use to get in between spreads. That is, to try and buy at the Bid or try to Sell at the offer.
• ISLD orders are very susceptible to partial fills, due to the large number of traders trading less than 1,000 shares.
• Do not hold down the “shift” key while using the Island Keys! This will bring up the ARCA execution system to which your firm may not have access.

CYBERSMART Keys (F5 through F12):

The CyberSmart Keys are designed as a shortcut to follow a pre-determined sequence to select a specific type of order based on ECN and/or Market Maker availability on the inside quotes. The CyberSmart Key’s can go direct to an ECN (if direct access is available) or use the SelectNet system to target other ECNs and, finally, revert to the SOES system. They have a feature, however, that continuously resends the order in the attempt to fill. They are designed to avoid rejected orders due to changes at the inside quote.

The keystrokes for CyberSmart market executions are:

In CyberT (v1.3)
Market Sell Control + F5
Market Short (must be on uptick) Control + F6
Market Buy Control + F8

In CyberTrader (v1.7)
Market Sell Shift + F5
Market Short (must be on uptick) Shift + F6
Market Buy Shift + F8

The keystrokes for CyberSmart limit executions are:
In CyberT (v1.3)
Limit Sell Control + F9
Market Short (must be on uptick) Control + F10
Market Buy Control + F12

In CyberTrader (v1.7)
Market Sell Shift + F9
Market Short (must be on uptick) Shift + F10
Market Buy Shift + F12

Depending on the software’s settings on your computer, the CyberSmart keys follow a sequence. Commonly, it is set as follows:

First Target: ISLD Direct
Second Target: INCA (note 100 share increments only, no odd lots)
Third Target: ARCA (note 100 share increments only, no odd lots)
Fourth Target: BTRD
Fifth Target: All other ECN’s
Sixth Target: SelectNet Preference Orders to any available Market Maker
Last Option: SOES Order

On these settings, when the CyberSmart key is pressed the software will scan the Inside Ask (for buy orders) or Inside Bid (for sell orders) for any ECN on the list and “target” (SelectNet Preference) those ECNs if available. If the order is not successfully filled or partially filled at the available price level, the order will be sent out at the next price level, 1/16th above/below the inside price. The market orders keep increasing the limit price by a 1/16th for 60 seconds. At that time, the CyberSmart order will automatically cancel.

Notes on Use of CyberSmart Keys:

- The CyberSmart keys, because they use the SelectNet system, may be subject to the 10 second SelectNet rule.
- The CyberSmart Key will send out an order based on available share size
- The CyberSmart Keys may be set differently according to your preference. Please see “Smart Keys” setting under Options in the Market Maker Box.

In CyberTrader (v1.7) and CyberT (v1.3), the CyberSmart keys replaced the old (and barely) Smart Keys. The old Smart keys weren’t very. Once they had looked for an appropriate ECN or Market Maker to preference, the program would revert to SOES. Once in SOES, the trader had no option but to stay in the SOES line despite price “slippage”. The new CyberSmart keys will keep looking even after a trader is relegated to the SOES line. If an ECN or Market Maker becomes available, the program will cancel the pending SOES order and attempt to execute the order with that newly available ECN or Market Maker.

There is no longer any reason to use a (barely) Smart Key execution. All such executions should be accomplished using the appropriate CyberSmart key.

Order Cancellation Keys

- Shift + C : to cancel an order on a specific stock, or;
- **Number Pad “0”**: The most commonly used Cancel Key. Note: NumLock must be on for the Number Pad "0" to be activated as a cancel order key.

**Other Important Execution Keys**

- **Shift + K**: “Kill Switch”. Will cancel ALL open orders. Note: Must have “Account Manager” window highlighted.
- **Shift + L**: Will Liquidate ALL open positions automatically by sending corresponding SOES orders. Note: Must have “Account Manager” window highlighted.

**Other Keys**

- **"7" key**: To change share order size hit the "7" key and then type in the number of shares desired (do not use the number pad), or use the arrow keys.
- **Esc**: will remove an open SelectNet or ISLD window without sending an order (Make sure the cursor is not on MM ID)
- **Spacebar**: Will move from one highlighted Market Maker window to another. Note: if you have an open SelectNet or ISLD window, pressing this key will send your order!
- **Enter**: will activate a highlighted button within a window (no need to use the mouse). Note: If you have an open SelectNet or ISLD window, pressing this key will send your order.
- **Shift + Spacebar**: To move between the Account Manager window to Market Maker window
- **Tab**: will switch from one option to another (used in SelectNet and ISLD windows)

**Important CyberTrader notes for the Novice Trader**

- Get familiar with those keys! It may take a little time, but it is worthwhile to learn them early. Your order execution method is critical in NASDAQ Trading
- Make sure you have the correct CyberTrader window highlighted before hitting your keys.
- Share size changes apply to a specific Market Maker window only.

- **The default (basic or automatic) CyberTrader share size is 1,000 shares**. Every time a trader logs on to CyberTrader, all Market Maker windows are set to trade at a 1,000 share size. In fact, if you have changed the share size (using the “7” key), pressing Enter on the CyberTrader window would automatically return it to 1,000 shares. Select the “Save Current Share Size at all times” option for this on the Market Maker Box “Settings” page. This would disable CyberTrader from resetting your share size to 1,000 shares, until you log-off.
- When leaving your terminal, even for just a moment, do not leave any Market Maker window highlighted. If you will be away from the computer for more than a few minutes, it is best to log-off. The important trade data will remain there until the end of the trading day.
- Make a habit of physically writing your trades down on a trading sheet. No trader is immune from occasional system errors. Keep your own personal records of your trades. This will also help you analyze your trading activity.
Editing Key Strokes

On both CyberTrader and CyberT, the user has the ability to edit the key strokes required for transmission of different execution orders. Under the “Options” menu available in the Market Maker Box, the menu item “Key Settings” is used to edit the default settings for the various execution orders.

In Chapter 27 (at page 98 and 99) of the Cyber Corp program manual the default settings for both programs are indicated. For instance, in Version 1.6 and earlier of CyberTrader the Smart keys were a single keystroke. To differentiate the new “CyberSmart” from the old “Smart” function, CyberSmart was set-up as a two-keystroke routine. Traders may, if they wish, edit the CyberSmart two keystroke routine to make it responds to a single keystroke (i.e. just using the appropriate F key). All students at Online Trading Academy are asked not to edit execution function keystrokes, except to understand how this function works.
Appendix O: The Executioner Trading Software

• Introduction

Another attractive trading solution is the programs provided by The Executioner, L.L.C., an internet based, remote trading brokerage headquartered in White Plains, New York. These programs are built on the framework of RealTick III, a Microsoft Windows based program that makes extensive use of a “point, click, drag and drop” (PCDD) technology. Executioner I and II programs are primarily manipulated via the mouse and as a result are very user friendly.

The Executioner I and II programs are part of a family of trading programs developed and copyrighted by Townsend Analytics, Ltd. of Chicago, Illinois. Townsend Analytics, Ltd. and The Executioner, L.L.C. reserve all rights to their programs. Online Trading Academy and Momentum Securities – Irvine license these programs for trading and training purposes. A comprehensive manual on the features and operation of the Executioner programs is available on The Executioner’s website. The URL address for that website is www.executioner.com. It is important that students preparing to trade using either of these programs diligently study this manual before trading live.

The Executioner manual reminds traders that "each trader is accountable for every trade done on using these programs, even if you didn’t mean to do it. So be careful." They also point out that the Executioner programs depend on third-party data, lines, and systems to make the systems run smoothly. Such connections and data may be, and are, interrupted from time to time. Such fully automated trading is on the cutting edge of technology and each individual trader must accept all the associated risks of equipment and software failures.

The Executioner software programs will provide most of the data the trader will utilize during market hours and is also the trader’s main tool for executing orders. Although there are many other sources of data, and other ways to execute an order (e.g., phone orders through InstiNet), most trading activity is routed through the Executioner. Getting familiar with the software is as crucial to NASDAQ trading just as a race driver needs to be completely familiar with his racecar, or a concert pianist with his piano.

The Executioner Program

The Executioner program is modular. The three key elements are: 1) the MarketMaker window which provides Level II information about the currently selected stock. 2) The Order Entry Screen, which is the place to enter electronic orders and to view a list of the orders that have been placed, and 3) the Market Minder window which can be used to monitor multiple stocks, your positions or your positions.

The heart of the Executioner program is the Market Minder box. It has nine tabs that allow a trader to track stocks of interest in his, or her, account on a real-time basis. If a trader wishes, charts, news and internet services, such as the Pristine Day Trader, may be displayed in this box.
In surveying the market for stocks of interest, the trader uses a table under the “Interest” tab. While there is a default interest table available for new users of the program, traders are able to construct their own interest table. There is a library from which column headings can be selected. The program allows the user to save different tables set-ups.
In a fashion similar to the “Interest” tab, the “Positions” tab allows the trader to build a table to display pertinent information about their open and closed positions.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>P&amp;L/shr</th>
<th>P&amp;L Total</th>
<th>Last</th>
<th>Bid Ask</th>
<th>Net Pos</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>KLAC</td>
<td>1.88</td>
<td>-1875.00</td>
<td>46 5/32 S↑</td>
<td>46 1/8</td>
<td>46 3/16</td>
<td>1000</td>
</tr>
<tr>
<td>JBIL</td>
<td>.00</td>
<td>-937.50</td>
<td>52 5/8 S↓</td>
<td>52 11/16</td>
<td>52 3/4</td>
<td></td>
</tr>
<tr>
<td>RDRT</td>
<td>.00</td>
<td>-187.50</td>
<td>14 1/4 S↑</td>
<td>14 1/4</td>
<td>14 5/16</td>
<td></td>
</tr>
<tr>
<td>YHOO</td>
<td>5.00</td>
<td>9791.67</td>
<td>73 3/16 S↑</td>
<td>73 1/8</td>
<td>73 1/4</td>
<td>1000</td>
</tr>
<tr>
<td>BOST</td>
<td>-13</td>
<td>-125.00</td>
<td>6 15/32 S↓</td>
<td>6 29/32</td>
<td>6 15/16</td>
<td>1000</td>
</tr>
<tr>
<td>DELL</td>
<td>6.56</td>
<td>6500.00</td>
<td>139 7/8 S↑</td>
<td>139 13/16</td>
<td>139 7/8</td>
<td>1000</td>
</tr>
<tr>
<td>SUNW</td>
<td>-25</td>
<td>-250.00</td>
<td>47 5/8 S↑</td>
<td>47 5/8</td>
<td>47 11/16</td>
<td>1000</td>
</tr>
<tr>
<td>BAY</td>
<td>.50</td>
<td>500.00</td>
<td>33 15/32 S↑</td>
<td>33 13/16</td>
<td>33 15/16</td>
<td>1000</td>
</tr>
<tr>
<td>DMMC</td>
<td>.56</td>
<td>1125.00</td>
<td>18 7/8 S↑</td>
<td>18 7/8</td>
<td>18 15/16</td>
<td>2000</td>
</tr>
<tr>
<td>CHRZ</td>
<td>.00</td>
<td>.00</td>
<td>52 3/16 S↑</td>
<td>52</td>
<td>52 1/4</td>
<td>2000</td>
</tr>
<tr>
<td>USWB</td>
<td>2.00</td>
<td>4000.00</td>
<td>18 3/4 S↑</td>
<td>18 3/4</td>
<td>18 7/8</td>
<td>2000</td>
</tr>
</tbody>
</table>

The Executioner Program – Sample Positions Table

The top portion of the Market Minder Box provides basic or NASDAQ Level I information about the selected stock. Like many of the elements of this program, the user is able to point, click, drag and drop (PCDD) to select a stock from the Interest List (or other source) to place a new stock in the top portion of the Stock box.

<table>
<thead>
<tr>
<th>BAY</th>
<th>BAY NETWORKS INC</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 11/16</td>
<td>↑ -1/4</td>
</tr>
<tr>
<td>High</td>
<td>31 1/2</td>
</tr>
<tr>
<td>Low</td>
<td>29 7/8</td>
</tr>
<tr>
<td>Close</td>
<td>30 15/16</td>
</tr>
</tbody>
</table>

The Executioner Program – Sample Stock Box
The MarketMaker Display

This is the central display for real-time information about a specific stock. The MarketMaker window has three panels. The upper panel displays basic (Level 1) information about a stock. The middle panel displays a Range Bar, which displays in graphic format the relative number of market makers or ECN’s at each price level.

The lower portion of the MarketMaker window is the actual NASDAQ Level 2 screen. It can display either NASDAQ Level 2 data or Regional market quotes for multiple exchange listed stocks. The MarketMaker screen sorts and color codes the bids and asks quotations according to their relationship to the best market prices. The best bid and ask prices are colored yellow.

The Executioner Program – MarketMaker Window

By left double-clicking on the Offer side of the Market Maker Window, the Order Execution box opens and is ready to accept an order to buy the stock. In a similar fashion, if you left double-click on the Bid side of the Market make box, the order execution box opens ups and is ready to accept your offer to sell a stock.
The Order Execution box has several “buttons” at the bottom that allows the trader to choose the best execution method. Once selected, the actual order is confirmed in the window in the upper half of the box. All actions taken by the program on the pending order are also confirmed in the box.

The Executioner Program – Order Execution Window

Order execution is an essential part of Direct Electronic Trading on the NASDAQ. The Executioner has a “smart” program in its execution system. If a trader, as an example, decides to place a buy order, it may be placed on the Archipelago (ARCA) ECN. The “smart” routing then performs the following “loop” operations for the trader:

1.) It will attempt to locate the ARCA ECN, as the Executioner has a direct subscription to this. This would complete the fastest “fill” of the order.

2.) In the case that ARCA was not immediately available, the routing would then “hunt” for other ECN’s, such as ISLD, ATTN or INCA. This would be equally as fast as an ARCA “fill.”

3.) Again, if no ECN’s were available, the execution system would then attempt to find a Market Maker with the best “fill” rate. The system would use SelectNet to preference this MM for the “fill.”

4.) Should the MM not have available shares, the system would “fill” with the partial available and automatically place a new order at the inside “bid” in an attempt to complete your initial order, at the limit that you prescribed.

Note: This system has the ability to “see” an ECN “pop” up, cancel the Market Maker preference order and execute the order as in steps 1 and 2.

This is truly “smart” order execution and, thus, a tremendous advantage for the trader.
RealTick III has one of the best stock charting packages currently available. That package has been made part of the Executioner programs. Again, by using the DDCP technology, it is extremely easy to pick a stock symbol from the Interest Tab and “drag” it to a chart. By “dropping” the selected stock symbol onto the chart, the chart of that stock is brought up.

The RealTick III charting package used in the Executioner program has a great deal of flexibility. In addition, the program has an extensive library of technical studies that are available to process the raw price and volume information displayed in the charts.

The Executioner Program – Typical Chart with Technical Studies

Again, these are only a few of the features offered by the Executioner. A more complete overview is available from the Executioner headquarters (see URL above or call 888-843-9286 toll-free) and these features are presented in more detail in the operations manual.