MAY 2000 ISSUE

Growing **pains**

Not that there was much doubt, but March's Senate hearings on day trading and day-trading firms confirmed the growing impact active trading is having on the financial industry. The confusion and back-and-forth accusations reflect a new, rapidly expanding industry in which the debate on many issues is far from over.

Some politicians and financial concerns are accusing day-trading firms of playing fast and loose with customer funds (in terms of making loans to enable customers to trade) and not being upfront about the risks of trading. Some of the day-trading firms are crying foul.

There's certainly cause for concern on a number of issues — better risk disclosure on the part of brokers, more stringent loan and margin policies — but there's just as certainly a great deal of grandstanding taking place on all sides.

How will it all play out? The issues may seem secondary (and in a way, they are) when you're focused on making trading decisions day in and day out, but they bear watching. How these discussions pan out could directly affect how you make a living — how much you'll need in your account, how much margin you'll have access to, how much regulation you'll be subject to and so on.

With that in mind, you'll definitely want to read this month's "Inside the market". Associate editor Jeff Ponczak gives you the details on the recent Senate hearings and talks to some of the principals in the current debate. Both sides seem to be digging in their heels. (For more background on some of the topics under discussion, be sure to read last month's "Inside the market" if you haven't already)

In the meantime, the name of the game remains limiting risk and finding quality trading opportunities. This month we feature two stories that examine approaches to trading NYSE and Nasdaq stocks, respectively, contributed by traders who wrote two of last year's most popular short-term trading books.

In "Playing the specialist's game," Chris Farrell explains how the specialist system on the NYSE works and how you can use it to your advantage. He also provides a very noteworthy, recent trading example: Remember the morning in March when Proctor & Gamble (PG) fell out of bed? Find out what was happening behind the scenes and about the trade opportunity waiting for shrewd traders.

Many new traders are endlessly curious about which tools they should use, how they should set up their trading screen and what they should look for when putting on a trade. In "Day trading checklist," Bob Baird explains precisely which indicators and tools you'll want on your trading screen and what that screen will look like when a low-risk trading opportunity arises.

> **It never hurts** to subject conventional **trading "wisdom"** to a little **testing.**

It never hurts to subject conventional trading "wisdom" to a little testing. Rounding out the Trading Strategies section are two articles on price patterns that analyze a couple of well-known chart patterns and should give you a few ideas for making chart-based trading a little more practical.

But as we will remind you every month, entry and exit signals are only a small part of the trading process. It's how you control risk and maximize winning trades that counts. In "Exit, trade left," senior editor Thomas Stridsman provides a detailed analysis of different trailing stops — a favorite risk-control technique of many traders — and shows why some of the more popular approaches can harm you more than help you. You also see how a trailing stop affects the performance of a simple chart-based strategy in "Clear-cut chart pattern trading".

Ultimately, there's not much you can do about what's happening on the Hill. All you can do is take care of the business at hand — your own trading business.

Mark Etzkorn, Editor-in-chief

THIS MONTH'S Contributors

Christopher A. Farrell is a trader and author of the best-selling *Day Trade Online* (**John Wiley & Sons, 1999**). He heads Farrell Asset Management LLC and is founder of the Farrell Preferred Stock Arbitrage Fund LP, a hedge fund. He offers online trading seminars in New York City and can be reached at www.farrelltrading.com.

Bob Baird is a trader and co-author, with Craig McBurney, of *Electronic Day Trading to Win* (**John Wiley & Sons, 1999**). The duo are also creators of *Brokersaurus*, the first regular cartoon series to poke fun at the staid and stuffy world of investing and the stock market. Baird and McBurney can be reached at www.brokersaurus.com or www.Trade Mentor.com.

Sunny J. Harris is president of Sunny Harris & Associates Inc. Since retiring from ISSCO (her computer graphics software firm, originator of Harvard Graphics) in 1981 she has traded stocks, bonds, mutual funds, options and futures. Stark Research rated her the No. 1 trader in the under-$10 million category in 1994 when she achieved a 365-percent profit.

Harris publishes *Traders' Catalog & Resource Guide* **and** *The Money Mentor* (www.moneymentor.com) on the Internet. She also has authored several trading books: *Trading 101 – How to Trade Like a Pro*; *Trading 102 – Getting Down to Business*; *Electronic Day Trading 101*; *TradeStation EasyLanguage Step-by-Step*; **and** *Grading the Gurus*, **all published by John Wiley & Sons.**

Jerry Wood is a Chicago-based trader and freelance writer. He was an options market maker on the floor of the Chicago Board Options Exchange from 1985 to 1997, trading both S&P 100 Index (OEX) options and individual equity options for his own account. He actively trades stocks, options and futures.

Ted Tesser (contributing editor) is a certified public accountant and president of Waterside Financial Services Inc., Boca Raton, Fla. He specializes in assisting traders create and manage more profitable trading businesses by implementing sound trading, business and tax management strategies. He also actively trades small-cap stocks, bonds, mutual funds, futures, options and currencies.

Tesser's clients have included many prominent traders and members of the U.S. government, including a former Secretary of State, a former Secretary of the Treasury and several members of Congress. He is a featured speaker at many trading conferences and has appeared frequently as a guest on CNBC and KWHY TV-Los Angeles.

Tesser has authored more than a dozen books and manuals, including *The Serious Investor's Tax Survival Guide, The Trader's Tax Survival Guide, The Ultimate Tax Shelter* **and** *Tax Strategies for Traders,* **among others**. **His latest book**, *The Trader's Tax Solution* (**John Wiley & Sons**), **was released in January. You can reach him at (800) 556-9829 or at tbtesser@aol.com.**

Gibbons Burke is a Silicon Valley, Calif.-based independent trader, writer and software developer. He operates TraderCraft.com, a Web site that provides tools and information for mastering the craft of trading.

Burke has 23 years of experience in the financial markets at firms such as CompuTrac/Telerate, Logical Information Machines, Dow Jones Markets and Quote.com. He has published hundreds of columns and articles in *Futures* magazine and spoken at industry conferences on topics such as the Internet, technical analysis and system development, and money management.

Allen Sykora has been a journalist for 21 years, including several years covering foreign exchange trading and the futures markets. He has interviewed dozens of traders, profiling many of the top names in the stock and futures industries.

Sykora has held positions as editor and reporter for newspapers in Minnesota, Iowa and Alaska and has worked as a freelance writer for Reader's Digest, among other publications.

Who says **there's no such thing** as a FREE LUNCH?

I n an era when financial information is in great demand, many Web sites have learned a basic rule of economics: Don't give away for free something people are willing to pay for. Luckily, in the world of technical charting that's not always true. There are numerous free sites that, while they don't have enough bells and whistles to satisfy more advanced traders, do provide charts that go beyond the plain vanilla, price-and-moving-average standard.

For starters, there's MetaStock Online (www.equis.com/java), Equis International's stripped-down, Java-enabled version of their popular charting and analysis package.

The utility allows you to plot bar, candlestick or line charts on intraday, daily, weekly or monthly time frames, and apply 20 or so modifiable technical indicators, including On Balance Volume, relative strength, price envelopes and a number of oscillators (including a volume oscillator). Other features include trendline-drawing capability (always a nice plus), and a "news" button you can click on to get the latest stories from PRNewswire, BusinessWire and Reuters (the company that owns Equis) about the symbol you're analyzing. MetaStock Online may be intended to pique your interest in their full-fledged analysis platform, but it's a nice freebie.
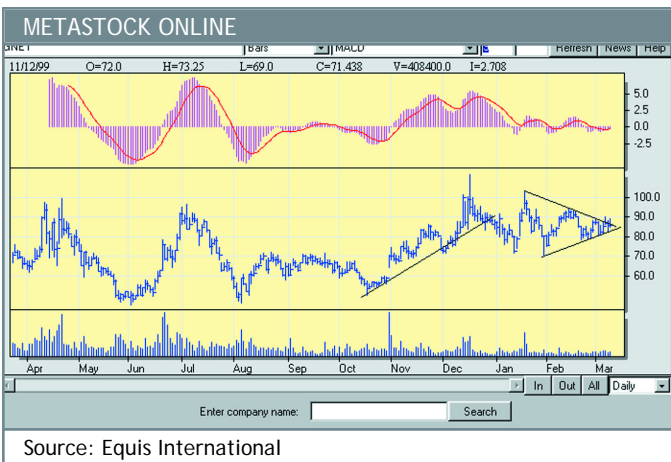
Source: Equis International

• Prophet (www.prophetfinance.com) has a couple of charting options, one of which is similar to MetaStock's. You have to register before using Prophet, but the basic service is free. The Java-powered charting feature is like that of MetaStock in terms of chart styles, application of indicators and trendline drawing. The other charting feature, SnapCharts, doesn't allow you to draw trendlines but does give you greater ability to customize the duration and time frame of your chart.

Next to its Java charts, Prophet lists the top 10 percentage gainers and losers, as well as volume and percent volume change. There are eight lists, four for Nasdaq and four for listed stocks. Double-click on a stock in the list and that company's chart comes up. This would be a nice feature except for two big problems: First, the stocks are not updated until well after the market closes, so if you're using Prophet during market hours Tuesday, you'll get Monday's big-moving stocks. Second, some of the stocks listed under the big gainers/losers

Source: www.prophetfinance.com

category were, in fact, not big gainers or losers (they looked more like issues with a big volume pop).

Prophet does have a nice bonus for Palm Pilot (hand-held computer) owners. Its Charts2Go query application delivers five kinds of stock and futures charts (up to five years of data, with studies) to the palm of your hand, using the Palm Pilot's wireless technology.

• One of the bigger dogs in the online charting arena is

Source: www.bigcharts.com

BigCharts (www.bigcharts.com), self-proclaimed the "World's coolest investment charting and research site." It's more or less two sites in one (we leave it to you to decide the level of coolness). Unlike most charting sites, it offers detailed quotes, news headlines, analyst recommendations, SEC filings and the

Traders on TRADING

Finding Web sites catering to active stock, futures and options traders can be a daunting task, but TradingMarkets (www.tradingmarkets.com) scores the hat trick.

The site, which costs $12 per month ($120/year, and a one-week free trial is available), delivers a full menu of news, analysis, opinions, etc. on stocks, but also provides good information on the futures and options. There's a lot of information here, and it can take some time to zero in on what you need.

For each section (stocks, options, futures), TradingMarkets divides its information into five subsections: Commentary, Indicators, News and Alerts, Education, and Quotes and Research. The site specializes in supplying commentary and analysis from its in-house network of professional traders and analysts, as well as proprietary momentum indicators geared toward short-term traders. (Another subsection, Community, was under construction at press time, although the site claimed it would be up by late March.)

Commentary includes intraday updates and strategy insights on the stock and futures markets, as well as before- and after-the-bell reports.

Indicators is updated nightly and is divided into uptrending, downtrending and market timing signals, among others. The Stock Scanner allows you to search for stocks that fulfill your criteria in different categories — price, volume, trend strength and relative strength.

The Education subsection offers a good archive of articles on different aspects of trading (besides the typical advertising of proprietary classes), including strategy, money management and beginners articles.

Quotes and Research, for stocks, provides the usual — delayed quotes, news headlines, charts (although the link to
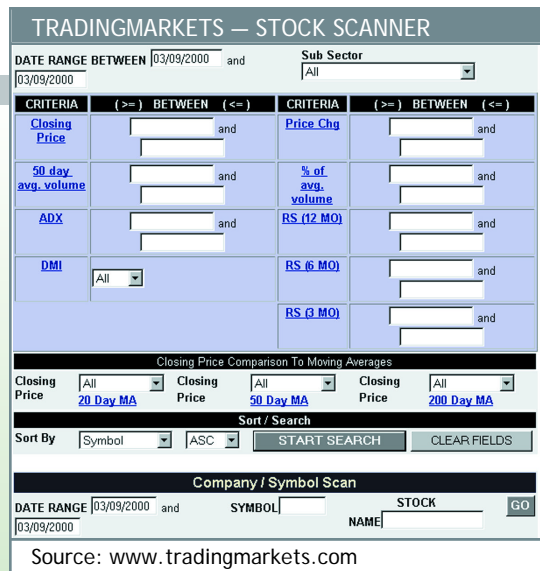
Source: www.tradingmarkets.com

the analyst ratings was dead when we tried it). TradingMarkets does make it easy to access option chains (just type in the name of the stock, and all the options are available) and the futures section (with help from Tradesignals.com) has interactive Java charts, as well as an easy way to find symbols and contract specs.

The site also features "TradersWire" news service, which features quick-hit info on stocks (new highs, new lows, volume spikes) and futures (pivot prices). TradersWire can be set up to stay on the bottom of your screen at all times, no matter where your Web surfing takes you, although clicking on certain indicators such as market insights and momentum data will take you back to TradingMarkets.

The Q&A section provides an extensive list of questions asked by subscribers and answered by various members of the staff. New questions are posted every Friday and remain on the site for almost a year, providing excellent reference material. 🎧

In the interest of full disclosure, Active Trader Editor-in-chief Mark Etzkorn formerly was editor of TradingMarkets.com.

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like. However, as its name suggests, BigCharts also provides some detailed — and free — charting.

BigCharts has everything MetaStock and Prophet have (with the exception of trendline capability), plus a little more. For starters, when choosing a time frame, you have greater ability to change both the time and the frequency. You can also choose a specific date-to-date time frame.

BigCharts offers chart types (mountain, logarithmic) not available on many other sites. Its choice of available indicators is just as plentiful as other sites, and up to four different averages — plus a moving average — can be charted against the price of a stock.

Another valuable tool BigCharts provides is the ability to compare a

Source: www.siliconinvestor.com

stock chart against that of a major index (Dow, Nasdaq, S&P 500), a market sector or other stocks. It's even possible to compare several stocks with a major index.

BigCharts also markets its charting service to other Web sites, such as CBS Market Watch (cbs.marketwatch.com).

• The charting service at Silicon Investor (www.siliconinvestor.com) also provides a bevy of options (although, like BigCharts, you can't draw your own trendlines). Its time/frequency options are good, and up to four different indicators can be plotted simultaneously. Like BigCharts, there's a tool for comparing stocks to each other and to major indices. BigCharts allows comparison charting of 10 different stocks — or nine stocks and one
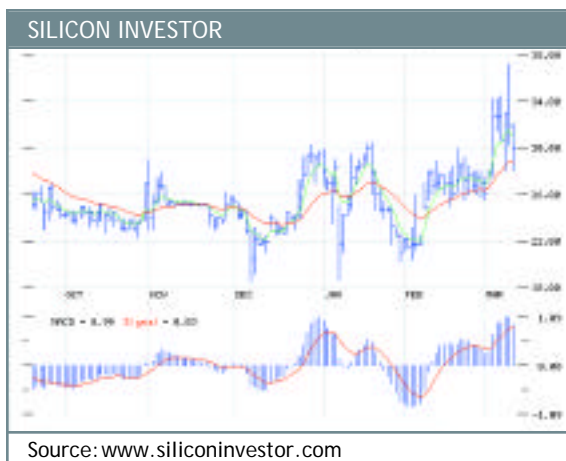
index. Silicon Investor's maximum is eight stocks, but all three indices can be plotted with them.

The two Java sites (MetaStock, Prophet) allow certain indicators (Bollinger Bands, RSI, MACD) to be charted using different time intervals (although it's not immediately clear how to do so), while BigCharts and Silicon Investor use default values for all indicators (their biggest drawback), except moving averages.

• Another good interactive charting service is Data Broadcasting Corporation (www.dbc.com). The first chart you'll bring up is rather ordinary, but click on the "Technical Charting" link at the bottom of the page to get to the good stuff.

While you can't compare a stock's chart to another company, or an index, you can, like MetaStock and Prophet, manipulate the time period of specific indicators. Unlike the other two

Source: www.dbc.com
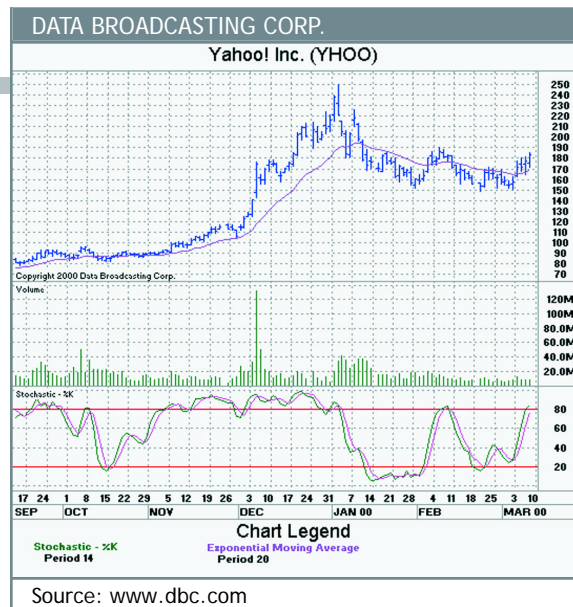
sites, though, DBC provides an explanation of each indicator and an easy way to change the values.

• Quote.com (www.quote.com) has free charting (in addition to their premium subscription service, Qcharts) for both stocks and futures, ranging from one-minute to quarterly time frames. You can plot 10 or so adjustable indicators (one at a time), and a built-in quote screen appears alongside the chart. Astrikos Trading (www.astrikos.com/public/index.shtml) provides real-time charting of indicators like the TICK, TRIN and VIX (courtesy of Quote.com, which does not allow you to chart these tools on their site) in addition to intraday futures charts.

None of these sites are a substitute for a full-fledged analysis platform, but the price is right and they are interactive — a step above the one-size-fits-all charting functions many financial Web sites offer. For user-friendly quickie charting, you can do worse. 🎧

Source: www.quote.com

Don't worry, BE DISMAL

It's an entrenched ritual of the trading world: Economic Number Watching. Every other day (it seems), there's another report or statistic blasted across the airwaves and wire services, rattling the market and jangling the nerves of traders.

The Consumer Price Index (CPI) does this, the Producer Price Index (PPI) does that, the Employment Cost Index (ECI) does this, the Fed says that. Depending on who you talk to, the widely reported economic numbers released by a variety of government agencies, academic think tanks and professional organizations are A) vital statistics for traders or B) statistical vapor, resulting in short-lived, annoying stock market gyrations.

But if you're like a lot of other traders, you're probably not really sure how some of these numbers are calculated, what they mean or why you should care about them (other than because everyone else seems to).

Whether the economic emperor has clothes is open to debate; what is not is the fact that when these numbers rear their heads things happen. After all, it's not whether a market move has meaning, it's whether the market is moving, period.

If you're one of the many traders with a superficial knowledge (at best) of what these reports and statistics are really

all about, check out the Dismal Scientist (www.dismal.com). The peculiarly (but amusingly) named site will at least give you the information to make up your own mind about the relevance of these numbers — and a host of other economic data — the next time CNBC trumpets them.

The Dismal Scientist provides definitions, dates and background information on the average yearly wage index, retail sales and everything in between. Highlights of the dictionary section include what a report or statistic measures, when it's released, who releases it, its strengths and weaknesses and what to look out for in terms of changes from one release to the next.

Other features include message boards, a wide array of economic data and forecasts, and CPI and PPI calculators that give you a feel for what these stats represent by comparing the value of money and goods over time. (There are other calculators, including one that determines a stock's "fair value.") Plenty of data on the Fed, including historical interest rate changes and minutes from FOMC meetings, is also readily available.

So if you've been seeking the answer to that burning question, "How is the CPI different from the GDP implicit price deflator?" the Dismal Scientist will certainly brighten your day. 🎧

The PAPER trader

Traders may live online, but the best trading information isn't necessarily a mouse click away. Some of the most valuable trading resources you can get your hands on (and your mind around) are found in the pages of that tried and true medium, the book.

Trading is often described in terms of speed: how fast you and your communications setup have to be to get a trade off in a here-one-second-gone-the-next market.

But the wise trader makes room for reflection and research. We informally polled a number of professional traders and searched through our own libraries to come up with a short list of notable trading books from a number of genres.

Because we tried to stick to titles for shorter-term traders who might be active in different markets, you'll notice an emphasis on technical analysis over fundamental, although a number of these books are excellent sources of information on market psychology and sentiment.

We obviously couldn't take into account every book ever written, and the list is skewed toward books that have been around a while.

With these caveats in mind, here's a look at some of the titles that should have shelf space in any well-rounded trading library.

## General market and trading psychology

Extraordinary Popular Delusions and the Madness of Crowds

If you think some of today's stratospheric tech stock valuations are unprecedented, pick up a copy of *Extraordinary Popular Delusions and the Madness of Crowds*, a book (written in 1841) that argues convincingly that when the day is done greed and fear have always and will always run the show.

With analysis of financial mania dating back hundreds of years, Charles Mackay shows how market/psychology bubbles build and burst. It makes you wonder if the phrase "new paradigm" was being tossed around back in Holland in the 17th century, when tulips became worth far more than their weight in gold. Consider the following excerpt:

"At first, as in all these gambling mania, confidence was at its height, and every body gained. The tulip-jobbers specialized in the rise and fall of the tulip stocks, and made large profits by buying when prices fell and selling out when they rose. Every one imag - ined that the passion for tulips would last forever…At last, however, the more prudent began to see that this folly could not last forever…It was seen that somebody must lose fearfully in the end."

**Recommended for market realists everywhere**
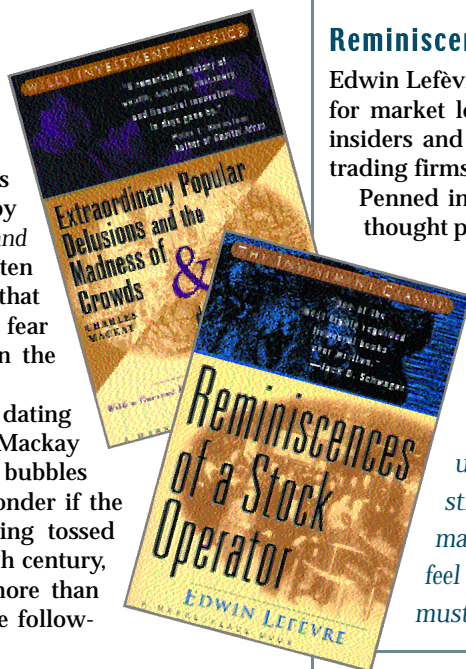
Reminiscences of a Stock Operator

Edwin Lefèvre's tale of trader Larry Livingston (a pseudonym for market legend Jesse Livermore) is a favorite of industry insiders and is even required reading at some of the largest trading firms in the world.

Penned in 1923, the narrative paints a vivid picture of the thought processes and market tactics of a shrewd speculator who started out as in the bucket shops and went on to make and lose (and make and lose) millions in the stock and commodities markets. It shows how little has really changed since the days of the ticker tape:

"[The successful trader] cannot bet on the unreasonable or on the unexpected, however strong his personal convictions may be about man's unreasonableness or however certain he may feel that the unexpected happens very frequently. He must always bet on probabilities…"
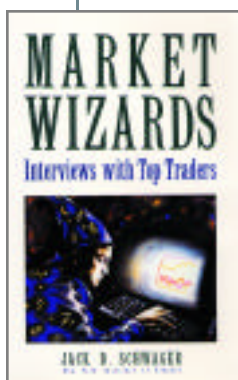
Market Wizards and *The New Market Wizards*

Part of author Jack Schwager's initial motivation behind conducting interviews with top traders was to get answers to questions that had been puzzling him about trading. The result is two insightful and readable compendiums of conversations with exceptionally successful traders, including Jim Rogers, Richard Dennis and Paul Tudor Jones. If you want to know what separates the big trading fish from the little, bury your nose in these books.

Trading strategies
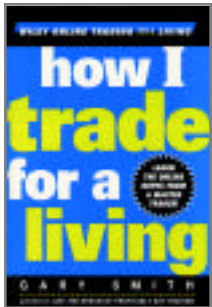
How I Trade for a Living

Gary Smith is well-known in trading circles as a outspoken critic of trading industry hype and as a grass-roots trader who has mastered the market from the ground up. After 19 years of unsuccessful trading, Smith finally turned the corner in the mid-1980s and hasn't looked back.

This book provides straightforward explanations of the techniques he's used to take a $2,200 trading account to close to $1 million. There's no magic here, no secret potion — just a lot of experience and common sense from someone who learned how to make money in the market the hard way.

Street Smarts

Judging from her very popular speaking appearances — several thousand traders can't be wrong — what Linda Bradford Raschke (profiled in Schwager's *New Market Wizards*) teaches works. In *Street Smarts*, she and co-author Larry Connors give you an excellent chance to learn the tricks of the trade of two successful short-term traders. Each strategy is spelled out rule by rule.
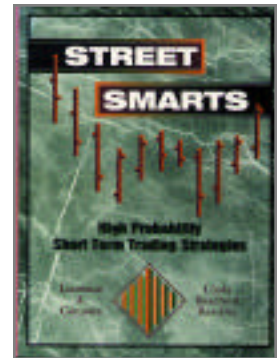
Money management

The Mathematics of Money Management

Trading is so much more than just identifying chart patterns and interpreting technical indicators. In this book, Ralph Vince explains techniques that show you how to maximize the growth rate of any trading account.

It's not the friendliest book around — there's a lot of complicated math — but it's still a must-read for serious traders interested more in making the most of their accounts instead of just being able to tell which way the market is heading.

Technical analysis and trading systems
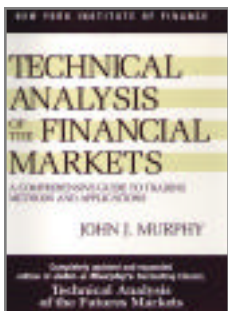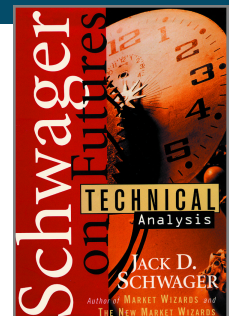
Technical Analysis of the Financial Markets

Written by longtime analyst and market commentator John Murphy, CNBC's current technical analysis consultant, this is one of the best references for technical analysis and indicators.

You can make up your own mind about the veracity of this or that indicator, but if you're interested in understanding the concepts, formulas and standard applications of various technical trading concepts, this trading resource is both comprehensive and comprehensible.

Trading Systems and Methods

Perry Kaufman's encyclopedic tome on technical indicators and trading systems explains everything from charting and seasonality to expert systems and neural networks. It's not for beginners (it can put off readers with a low tolerance for mathematics), but for those interested in exploring technical trading system concepts, it covers just about all the bases. The third edition, published in 1998, added welcome programming code, new sections and expanded discussions of old topics.
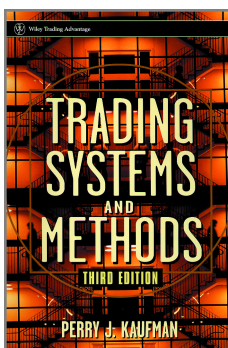
Schwager on Futures: Technical Analysis

The focus in on futures, but the technical indicators and trading system concepts Schwager outlines in this book are straightforward, thorough and applicable to any market. A must read for any trader and a reference material you will return to time and time again.

The New Science of Technical Analysis

In this book you'll find iconoclastic trading approaches from the man who has designed trading systems for George Soros and Paul Tudor Jones, among others. Tom DeMark has explored virtually every corner of the market analysis and trading landscape, developing novel trading techniques and putting his unique spin on old standards.

Trading for a Living

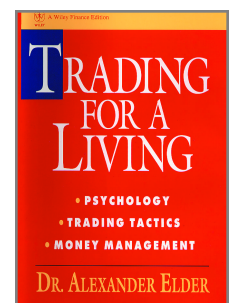For those of you just starting out, Alexander Elder has written a great book explaining the intricacies of technical analysis and indicator interpretation. Make sure you get the study guide as well; it will help take your trading skills to the next level.

WindowOnWallStreet.com is an online analysis platform featuring real-time quotes (including Nasdaq Level II and time and sales), charting and news.

Product: WindowOnWallStreet.com
(www.windowonwallstreet.com)

E-mail: sales@windowonwallstreet.com

Phone: (800) 375-8522 or (305) 485-7489.
Monday-Friday 8:30 a.m. – 9 p.m. EST;
Saturday 8 a.m. – 5 p.m. EST

Address: 8700 W. Flagler Street,
Suite 250, Miami, FL, 33174

**Required
system:** Direct (Dial-Up or LAN)
Connection to the Internet; Windows 95/98/NT;
Pentium Processor with 166 MHz or higher;
32 Megabytes of RAM;
10 Megabytes of available hard-disk space;
Microsoft Internet Explorer (Version 4.0 or higher).

Price: $79.95/month
($69.95/month if year paid in advance).
Nasdaq Level II quotes $50/month extra.

Not too long ago, if you were an individual trader who wanted to perform intermediate-and-above level computerized technical analysis, you had a handful of serious choices. There were a number of very useful niche products, but Omega Research (TradeStation and SuperCharts), Equis International (MetaStock) and Window On Wall Street (WOW) were the three big fish in the analysis pond.

That was only half the story, though. You also had to go shopping for price data to feed into your software. And in addition to the problems of integrating your software and data, the price tag for real-time data was steep.

Now, online research tools are proliferating and competition has helped deflate the cost of real-time data. WOW — www.windowonwallstreet.com — which had been making a major push toward the online environment before being bought by Omega last year, is now Omega's primary online analysis platform. It features real-time data and analysis tools for stock and option traders.

SOFTWARE SUMMARY

Product: www.windowonwallstreet.com

What it is: Internet-based analysis platform featuring real-time quote, charting, news and portfolio monitoring capabilities.

Who is the product for? Stock, stock option, mutual fund traders.

Skill level: Beginner to intermediate.

Upside: Easy to use, good basic analytical tools.

Downside: No indicator or system-testing features, no futures data.

Features

WOW's basic features include charting and analysis, quotes (including Nasdaq Level II quotes), news, and time and sales, as well as the standard portfolio tracking, news (with search capabilities) and ticker features. You can also link to online discussion and research links for any symbol you're analyzing.

Data is real-time; you can customize quote screens (up to 40 data fields) and display ranked lists of market leaders and most active issues. You can also display option chains in quote windows and set alerts based on price (or volume) targets or increases and decreases for any of your stocks.

The program's charting is fairly intuitive and will feel familiar to anyone who has used the kinds of products mentioned in the introduction. WOW is not quite as point-and-click friendly as its stand-alone software predecessors, but it is relatively easy to add an array of indicators and other analytical tools using a variety of pull-down menus and toolbar icons.

Bar, line and candlestick charts are available and time-frame options range from tick to yearly. WOW has more than 30 modifiable indicators and studies, plus another dozen or so charting tools, such as Gann and Fibonnaci arcs. You also can easily draw your own trendlines.

You can access up to 10 years of daily data, six days of intra-day data (down to the 1-minute time frame) and three days of tick data on a chart.

The basic analytical features are good, but notably missing are the system design and testing features at the heart of Omega's other products. The ability to design and test trading ideas on online, real-time data would be welcome, indeed.

Also, only stock and stock option data is available. It would be nice if futures (even a limited menu of financial futures) were part of the package as well.

User-friendliness

WOW's basic operation is fairly straightforward. The interface looks like a typical Windows program — the standard selection of menu items at the top of the screen and different icons framing the analysis window.

The program's streaming data means you don't have to refresh your screen to update prices, charts or studies — everything happens in real-time.

Changing the look and feel of different chart elements (background, text elements, trendlines) is sometimes a little more difficult than it should be, but not frustrating. It doesn't help that the built-in help system is perfunctory, at best. But, the tutorial does provides good background information on the product.

Also, adjusting the number of bars can be difficult; switching from daily to five-minute bars, for example, or requesting lots of data occasionally briefly tied up the system.

Performance

Performance on a 350 MHz Pentium PC with 256 MB RAM and a DSL connection was comparable to that on a 400 MHz Pentium with 64 MB RAM and a 56K modem connection for most functions. Adding trendlines, indicators and other analytical tools was relatively speedy on both systems.

However, switching from one time frame to another (say, daily to five-minute) often froze the chart window, and opening new charts (especially when requesting a large number of bars) with the 56K modem was sometimes an interminable process.

Executing a few basic commands — opening a chart, adding three indicators, drawing two trendlines, opening a quote list and a Nasdaq Level II screen — took no more than 45 seconds. Overall, performance was fairly stable and quick. We experienced no performance degradation with more than a dozen windows open simultaneously.

Summary

The online analysis paradigm is certainly the wave of the future (actually, the wave of the present). In principle, it's hard to beat the automatic integration of news, price data and analytical tools.

Not every kink has been worked out in this medium, but WOW provides a solid online analysis platform for traders interested in real-time quotes and charting features at a moderate price.

Protecting your "MONEY LINE"

You're in the middle of a trade and, suddenly, your Internet connection goes down.

What do you do?

For starters, learn how to diagnose and fix communications problems before they take you out of the game.

BY GIBBONS BURKE

There's no doubt that online trading is a step up from yesterday's dial-a-broker paradigm, but Web-based technology still has a few bugs to work out, as any trader who has been unexpectedly blown off the Net can tell you.

In "Getting Connected" (*Active Trader*, April 2000) we discussed how to hook up to the Internet. This month we'll look at how you can stay connected so the "money line" to your quote source and broker stays operational.

We'll look at how the Internet functions, how you can analyze your own Internet connection and which tools you can use to diagnose and solve communications problems that could sabotage your trading.

The Internet is a network of networks — a patchwork quilt of computers tied together in a loose, competitive confederation of service providers. The route your information takes over what is called the "backbone" of the Internet from your computer to another computer can vary with the time of day. It also can depend on the Internet Service Provider (ISP) you use and the ISP used by the computer on the other end.

Rarely do the packets of information sent back and forth between two computers travel nonstop, unless you are directly connected to the destination computer by a cable. Information is handed off in bucket-brigade fashion between your computer and the destination computer over a series of "hops" or connection points between the source and the destination. In this communication chain your connection to the destination is only as good as the slowest link in the chain, no matter how fast your

connection to the Internet may be.

Lots of problems can occur along the communications route. For example, sometimes the "pipes" connecting different backbone provider's networks can be saturated with too much traffic. When that happens, data packets can be dropped, requiring the originating computer to re-send the lost packet. End result: Your quote on JDS Uniphase arrives late, and as a result you could miss a trade.

The Internet has not yet developed into a mature, stable technology. When it does, your connection to any server in the world will be as reliable and trouble-free as the telephone network. But it is helpful to remember that the telephone network is more than 100 years old. The Internet is in its early 20s and, though the pace of growth and innovation is fast, there is work yet to be done.

Given this state of affairs, traders who depend on this technology to trade prof-

itably need some tools to survive when communication problems arise. The alternative is to stop trading when things get bad.

The first step is to have a basic understanding of what is going on under the "hood." This will allow you to properly diagnose problems and quickly solve them so you can continue trading.

Understanding the medium

Whenever you experience a problem you should start your investigation where you have the most ability to do something about it: at your PC. The closer the problem is to your computer, the greater your ability to deal with it; the farther away the problem is, the more difficult it will be to correct.

There are seven key places along the chain between your computer and the destination computer where trouble can get in the way of your trading day:

Your computer: Sometimes your computer cannot keep up with the incoming data; getting behind in processing that information can cause your programs to update slowly or crash. If you are monitoring several hundred stocks in real time and simultaneously running Java-based programs on a Web browser you can overload your processor.

Your Internet connection: This is of great importance, obviously because it is the element most likely to fail. The first consideration is whether your connection is "fat" enough to carry all the infor-

The Internet is in its early 20s and, though the pace of growth and innovation is fast, **there is work yet to be done.**

mation you are trying to squeeze through it. It is easy to overload 56K modem connections, especially when downloading heavy web pages.

Your ISP's network: Your ISP may have a network of connections spanning the country; your information will have to traverse all these connections to get to where it is going. The fewer connections the better, because there are fewer possible points of failure. Each connection

adds some latency because packets of information may have to spend some layover time in the connecting router. Worse, packets of information may be dropped (and lost) by an overloaded router.

Your ISP's "peering" connection to the destination computer's ISP: How traffic is routed between different Internet backbones is a Byzantine world involving commercial politics on a grand scale. It is in the interest of each ISP to provide "peer" connections with as many other ISPs as possible to better serve their customers (by increasing the number of routes information can travel), but these relationships are developing organically and sporadically. (This is perhaps where the Internet is least mature and changing the most rapidly.) If your ISP peers well with the destination computer's ISP, you will experience good connections. If the peering is bad — or worse, uses a third, intermediate ISP— your connections may be less reliable.

The destination ISP's network: Like your ISP, the destination computer's ISP may have its own network of intermediate router "hops" across which your information will have to travel. Again, the fewer the better, but in many cases this is out of your control. Without that

network your information "can't get there from here."

The destination ISP's connection to your destination computer: This is similar to your computer's connection to the Internet. If the destination computer is a popular web server or an overloaded real-time data vendor, it may be saturating the connection, causing latency and packet loss. Another source of problems here can occur when your destination server is the target of a Denial of Service (DOS) attack by Net terrorists. These vermin attempt to disrupt the operations of the destination computer by flooding their servers with requests for information. This can not only overload the destination computer's ability to serve the information, it can saturate its connection to the Internet.

The destination computer: If the destination server is not able to serve the demands made upon it by its clients service can become unreliable or slow.

That's a lot for one lonely trader to keep track of, in addition to staying on top of trades. Luckily, the following tools can help you determine where along the chain the problem exists.

Diagnosing the problem

The most elemental tool in the Interneter's toolbox is "ping," named after the sonar device used in submarines and Navy destroyers to locate underwater objects by sending out a burst of sound into the deep and timing the echo when the sound is reflected back to the sender.

Similarly, an Internet ping sends a small data packet to the destination server, which immediately "echoes" the packet back to the originating computer, which measures the time it has taken the information to travel across this route.

Ping serves three functions: First, it determines the destination is reachable over the Internet; second, it measures the amount of time it takes to communicate with the destination; and third, it checks that the destination computer is "alive" and responsive. All three are useful bits of information.

The Windows operating system comes equipped with a "ping" command in the DOS Command window. All you have to do to use this command is type:

ping *server name or IP address*

at a DOS command prompt. (Type "command" in the Start/Run menu in Windows to generate a DOS prompt.) If you are using a Macintosh computer, you need to download one of two excellent pieces of shareware: Anarchie or Mac TCP Watcher, which are both made by Stairways Software (www.stairways.com).

The Windows version of ping also has a command line option that is useful for determining "packet loss" (how much data you're losing) between your computer and the destination computer:

ping –t *server name or IP address*

It counts the number of pings sent out that didn't return.

Ping can be used to quickly determine if you have a connection to the Internet and whether your networking is operating properly. Sending a ping to a server you're fairly confident is operational is a good way to do this.

For example, you can type "ping www.yahoo.com;" if you can't get to Yahoo's web server, chances are you won't be getting through to your broker. Another good way to check your connectivity is to ping your ISP's web address.

"Traceroute" does what it sounds like — it traces all the hops in the path between your computer and the destination server and tells you how much time it takes to travel to each one (compared to ping which measures the travel time to the destination only).

To use the traceroute command in the DOS command window type:

tracert *server name or IP address*

Table 1 shows what the route looks like when you use this command to trace the route to one of Quote.com's QCharts data servers.

This route shows all the points in the path between my computer and the destination computer named herndon-r03.quote.com. If I dial up tomorrow or an

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TABLE 1 · SPEED TRACER

Traceroute allows you to view all the different Internet connection "hops" from your computer to your online destination and spot any problems.

Hop #	Min.	Avg.	Max.	IP address	Machine name
1	0.122	0.132	0.149	193.149.64.1	max1.msn-uk.pipex.com
2	0.123	0.153	0.211	193.149.64.254	msn-gw1.msn-uk.pipex.com
3	0.126	0.155	0.211	158.43.198.1	fddi5-0-0.ar1.doc.london.pipex.net
4	0.122	0.167	0.210	158.43.193.233	pos1-0.cr1.lnd6.gbb.uk.uu.net
5	0.123	0.178	0.221	146.188.5.41	pos11-0-0.gw2.lnd1.alter.net
6	0.125	0.154	0.208	146.188.2.221	422.atm6-0-0.cr1.lnd1.alter.net
7	0.196	0.203	0.218	146.188.4.209	167.atm3-0.br1.nyc5.alter.net
8	0.197	0.199	0.203	137.39.30.117	431.atm4-0.gw1.nyc5.alter.net
9	0.196	0.207	0.218	146.188.177.238	151.atm3-0.xr1.nyc1.alter.net
10	0.197	0.208	0.223	146.188.177.145	195.atm8-0-0.br1.nyc1.alter.net
11	0.202	0.252	*	206.132.150.129	s5-0-1.ar2.jfk.gblx.net
12	0.196	0.206	0.223	206.132.253.97	pos3-1-155m.cr1.jfk.gblx.net
13	0.199	0.206	0.221	206.132.253.86	pos4-0-622m.wr1.nyc2.gblx.net
14	0.212	0.218	0.228	208.178.174.125	pos7-0-622m.wr2.wdc2.gblx.net
15	0.204	0.213	0.226	206.132.113.102	pos2-0-622m.cr1.iad3.gblx.net
16	0.206	0.212	0.220	206.132.253.50	pos3-1-0-155m.hr2.iad.gblx.net
17	0.209	0.216	0.229	209.143.250.14	herndon-r03.quote.com

hour from now, the path may be different. If I trace the route to a different computer the route may be completely different.

The first column shows the "hop number." The machine at that hop is the computer to which you are directly connected — your on-ramp to the information superhighway. You can see that the destination computer, in this case, is 17 hops away from my computer. Each hop consists of a machine called a router whose job it is to direct data packets to their destination. (Many of the routers serving the Net are made by Cisco — one reason why its stock has been doing so consistently well. They are building the backbone of the Internet.)

The next three columns show the time in seconds (sometimes this is displayed in milliseconds) it takes for the ping packets to travel from your computer to that hop. Shown are the minimum, average and maximum times taken in multiple samples. In this case the round-trip travel time between my computer and the destination is 0.229 seconds, or 229 milliseconds. That's not bad, and more importantly there are no points along the line where the travel time jumps up significantly from the previous hop. This is a good connection.

The next column shows the IP (Internet Protocol) address of the machine at each hop. Every computer connected to the Internet has a unique address such as this. We humans don't do as well with numbers, so for every IP address there is usually (but not always) a machine name associated with this address. This name has to be referenced using the Domain Name Service (DNS) — a lookup service for machine names and IP addresses.

The times on the first hop are important — this is the first link in the chain, from your computer to your ISP, and if it is clogged, every other one will be clogged too. If it is dropping packets at the first connection your communications will be unreliable all up and down the scale.

Packet loss is indicated by an asterisk (*), as in hop 11. That means that one of the pings sent to that hop went AWOL. This is a potential sign of trouble at that hop — perhaps the router at that hop is being asked to process more traffic that it can handle. When this happens, commu-

nications through that router can get slow — much like a traffic jam — and similar malfunctions may occur at hops down the line. You can generate more detailed statistics on the packet loss at that hop by using the "ping –t" command mentioned earlier to ping that hop continuously for a longer period of time.

Problem solving

What do you do when you find problems? The packet loss or latency can be dealt with in a number of ways, depending on where it is taking place. If you see packet loss or high ping times to the first hop and you are using a dial-up connection, try disconnecting and dialing again — you may have hit a bad modem at your ISP or your phone line may have developed noise. Try dialing an alternative number at your ISP or try a backup ISP (you do have a backup ISP, don't you?) If the condition persists after you reconnect, you might try re-starting your computer — sometimes the internal networking gizmos on your PC can cause trouble.

If you are using a fast connection such as ISDN, cable modem or DSLyou don't have much choice here except to try reconnecting. If that doesn't help the problem, be prepared to use a dial-up connection to a modem-based ISP instead. Sure, your connection won't be as blazingly fast, but it may save the trading day until your fast service gets its house in order.

If the packet loss occurs in one of the hops near your ISP, then you can try a different local number for your ISP or use your backup ISP to route around the problem. You can also try to report the problem to your ISP— they may be able to get the problem corrected — but often this is a vain exercise.

If the problem appears nearer to your destination computer you may have luck getting them to get the problem fixed, but the best solution is to try to connect to a different server at your quote vendor.

In the Unix world traceroute is still a built-in command. In the Mac world, Stairways.com's Anarchie (shareware) and WhatRoute (free) are the best tools to perform traceroute.

Better tools

Ping and traceroute are basic Internet

tools for diagnosing your connections. Better tools exist — one of my favorites is called Ping Plotter, a $15 shareware program for Windows available at www.nessoft.com. Ping plotter provides a visual display of the traceroute plot above, but where traceroute typically runs a scan once and then quits, Ping Plotter will continuously monitor the connection between you and the destination computer. It also does a much better job at tracking packet loss statistics for each hop. Instead of an asterisk, Ping Plotter will display the percentage of pings that were dropped.

Other advanced tools available for Windows users are NeoTrace and Visual Route, both of which are available at various shareware download facilities, including CNet's www.download.com.

These tools can help you be a better Internet-based trader by allowing you to recognize when problems exist, where they are happening, how to overcome them if possible and when it is time to turn the machine off and go (insert favorite recreational activity).

It is useful to consider how you would deal with a problem at each of the points along the chain and gather the information you need to solve it, such as checklists and phone numbers, to get the problems corrected so you have them ready during the heat of battle.

Part of your plan should include learning how to access your broker to execute your trades if you cannot connect via the Internet. 🎧

Resources

Here are a few sources for utilities to help diagnose the health of your online connection

Windows ping utility:
Ping Plotter, available at *www.nessoft.com.*

Mac ping utilities:
Anarchie and Mac TCP Watcher, available at *www.stairways.com.*

Traceroute utilities (Windows):
NeoTrace and Visual Route, available at various shareware download facilities, including CNet's *www.download.com.*

Playing
THE SPECIALIST'S GAME

Savvy traders know
how the "system" works
and know how to take
advantage of it.
Here's a technique that
allows you to trade
with the odds
on your side
by understanding how
the NYSE specialist
system works.

BY CHRISTOPHER A. FARRELL

There is an old saying in trading: To be successful, you have to be greedy when everyone else is fearful and fearful when everyone else is greedy.

There is no better example of this than buying on bad news in large-cap stocks. Did you ever wonder how the best traders on Wall Street play blue-chip stocks like Proctor & Gamble, IBM or Computer Associates on a day when one of these names opens down 20 or 30 points? Did you know that when such stocks open on bad news the opening "print" is often the lowest price of the entire day?

Day traders who trade New York Stock Exchange (NYSE) stocks know a secret the investing public is unaware of: One of the highest-percentage trades of the day is buying a large-cap stock on bad news. To understand what makes this trade so successful, you must first understand how the NYSE works.

The specialist system

The NYSE is without question the most fair and orderly financial marketplace in the entire world. Why? Because of the specialist system. Each NYSE-listed issue is assigned a specialist whose sole job is to maintain a smooth and orderly market in that particular stock.

The specialist does this by risking his

or her own capital, stepping in to buy stock when there are no buyers and selling stock when there are no sellers. If 100,000 shares need to be sold and there are no buyers, the specialist will buy the stock himself; if 100,000 shares need to be bought and there are no sellers, the specialist will sell it from his own account. In effect, the specialist is truly the buyer and the seller of last resort.

The specialist doesn't risk his or her own capital every day because he or she is a nice person. This is capitalism. The specialist risks money to make money, specifically, by taking the other side of your trade. The specialist is essentially in the business of trading against the investing public: When the public is selling, the specialist is buying — at a low price; when the public is buying, the specialist is selling — at a high price. Every profit he makes comes at your, my and the rest of the investing public's expense. He can make millions of dollars over the course of the year by doing this.

Information edge
It has often been said that because he is in the business of trading against his customers, the specialist has a "license to print money." Essentially, the specialist trades off of privileged supply-and-demand information that the rest of the investing community does not have.

Are large institutions interested in buying stock? Who has been selling the stock heavily all morning? These are questions to which only the specialist knows the answers. And having this information is exactly why he is able to consistently make money, week in and week out, trading his particular stock.

Nowhere is the specialist's ability to make money more dramatic than during extreme buy and sell imbalances. But this is precisely where the day trader can exploit the specialist system, making money the same way the specialist does — essentially, taking food out of the specialist's mouth.

The Proctor & Gamble trade
To understand how this trade works, you must put yourself in the specialist's shoes and examine his actions during an

Early in the year, Proctor & Gamble was trading well above 100. It went into a slide, culminating in the dramatic downward gap on March 7.

(PG) PROCTER & GAMBLE, daily
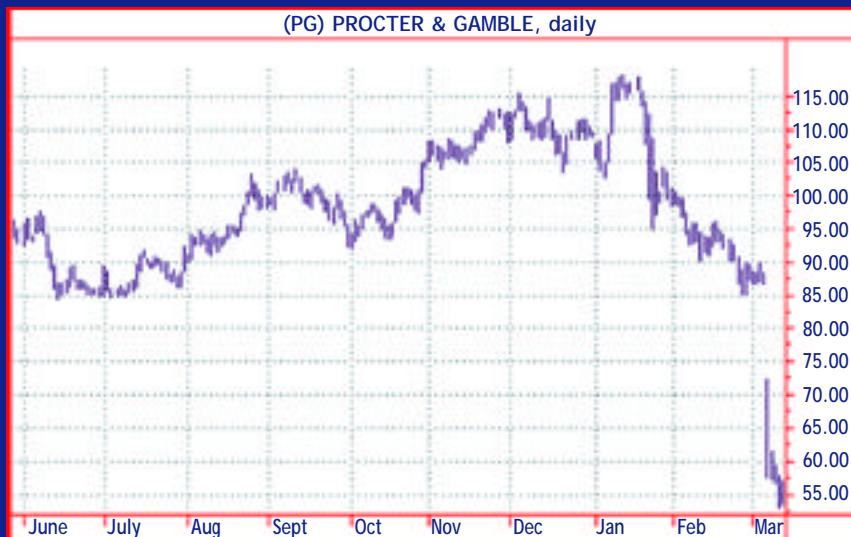
Source: www.windowonwallstreet.com

extreme sell imbalance. There is no better example of this than Proctor & Gamble (PG) on March 7.

That morning, PG issued an earnings warning and by 8:30 a.m. EST, every major brokerage firm on Wall Street had downgraded the stock.

In this case, the news was so bad that the stock was inundated with sell orders in the minutes before the market opened. Remember, when there are no other buyers in the market, the specialist must be the buyer of last resort.

What would you do if the news was so bad that by 9:30 a.m. you had more than 7,000,000 shares of sell orders on your books but you didn't have enough buyers to match them? This is exactly the dilemma the PG specialist faced on March 7. Remember, every buyer must have a seller, and you cannot open the stock for trading until all those market sell orders are matched with buyers.

Stepping up to the plate
If you're the specialist and you cannot match the sell orders on your books with buyers, you will be forced to risk your own trading capital and buy the stock yourself, even if that means buying

1,000,000 shares! What the investing public doesn't understand about this situation is the specialist can make a fortune off of these extreme situations by exploiting the public's fear.

The news is so bad the investing public wants out — at any price — and the specialist is the guy who is going to buy it from them. The secret is the specialist is allowed by the rules of the exchange to name his own price, provided it is "fair and orderly" (a vague requirement, at best, and one that give the specialist the necessary leeway to profit). If you were forced into buying 1,000,000 shares of PG and you could name your price, no matter how low, what price would you bid? Would it be high or would it be low, and in whose best interest would it be? Yours or the sellers'?

Overshooting the market
This is why when the market opens on bad news the opening print is often the low trade of the day. The specialist will intentionally overshoot the market in the hopes of profiting at the expense of the investing public. He will open the stock abnormally low, buy all the stock the public is selling and then immediately

When large-cap stocks **open on bad news, the opening print** is often the **lowest price** of the day.

Anyone who trades New York Stock Exchange stocks must trade with the specialist, not against him. This is the day trader's equivalent of betting with the house.

take it higher. This is exactly what happened in Proctor & Gamble on March 7.

When the public is dumping shares in panic and fear, the specialist is greedily buying all of the stock from them at discounted prices. In these extreme sell imbalances, the specialist knows something the investing public doesn't: When investors all rush for the exits at the same time, they become their own worst enemy. This is exactly what creates a market bottom. After the public is done selling, the stock has nowhere to go but higher.

In the case of Proctor & Gamble, when the specialist finally opened the stock for trading at 10:12 a.m., he opened it down 29 7/16, at 58. More than 7,000,000 shares changed hands on the opening print and, undoubtedly, the specialist was a huge buyer of this now "cheap" stock.

In fact, the only reason he opened the stock at 58 in the first place was because that price level was low enough to ensure he wouldn't lose money on his rather substantial long position. Remember, the specialist is the best trader in the world in his particular stock and knows more information on the supply and demand of the stock than anyone else. Ask yourself a question: Would he have bought 1,000,000 shares for himself and picked 58 as an opening price because he thought the stock would trade lower than that? Absolutely not.

What happened next is a great example of the trading edge the specialist has over the investing public. Obviously, the specialist is going to do his best to push the stock higher after establishing a huge long position. That's exactly what the specialist did. Only one minute after the stock opened for trading at 58, it was trading at 58½. By 10:28 a.m., the stock was at 60, and by 10:43 a.m., the stock was at 62.

This is not a coincidence. The specialist knew exactly what he was doing. Think of how much the specialist stands to profit from buying stock at 58 on the open, and selling it on the way up at 60, 61, 62 in the minutes that followed. Hundreds of thousands, or even millions, of dollars if the position was large enough.

How to profit: Ride the specialist's back

How can you profit from a sell imbalance like this? The way to make money in such situations is "to ride the specialist's back;" that is, buy stock with the specialist on the opening print and sell it into the updraft that should follow. If the day trader had done that here, he would have bought stock at 58 and sold it minutes later for a nice profit at 60, 61, or 62.

The logic behind this approach is very simple: NYSE rules dictate that customer (public) orders must be filled before the specialist's. For example, if both you and the specialist are on the bid at the same price, the specialist must fill your order before he fills his own. Market buy orders on the open get executed at the opening print price. So, a buy "at market" will get executed at the exact price the specialist buys the block of stock on the open.
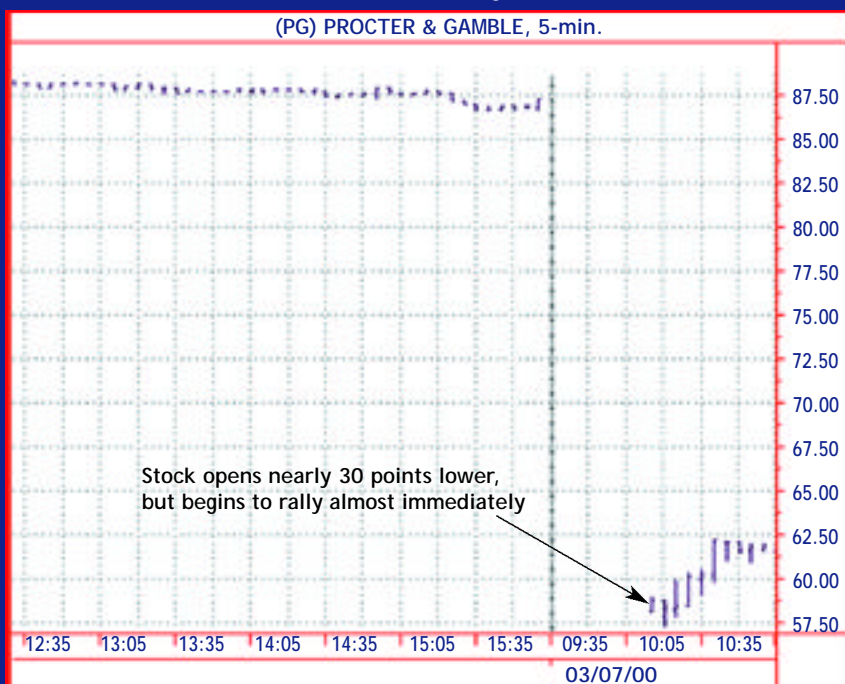
Bet with the house, not against it

This example sheds light on one of the major premises of day trading NYSE-listed stocks: Any day trader who trades New York Stock Exchange stocks must trade *with* the specialist, not against him.

He must buy when the specialist buys and sell when the specialist sells. This is the day trader's equivalent of betting with the house, of being on the dealer's side of the blackjack table at a Las Vegas casino.

If you do this consistently, over time the odds are in your favor. Why? Because you are mirroring the actions of the best trader in that particular stock in the world, the specialist. If you instead trade against the specialist, over time he will end up making money at your expense. On the NYSE, this premise is what separates winning day traders from those who consistently lose money. 🎧

FIGURE 2   PLAYING THE OPENING PRINT

The specialist opened the stock down dramatically, at 58, and proceeded almost immediately to move the stock higher. The low tick of the day was established in the first 10 minutes of trading.

(PG) PROCTER & GAMBLE, 5-min.

Stock opens nearly 30 points lower, but begins to rally almost immediately

87.50
85.00
82.50
80.00
77.50
75.00
72.50
70.00
67.50
65.00
62.50
60.00
57.50

12:35   13:05   13:35   14:05   14:35   15:05   15:35   09:35   10:05   10:35

03/07/00

Source: www.windowonwallstreet.com

Clear–cut chart pattern trading

Identifying momentum extremes and sentiment swings are what short-term trading is all about. Here's an easy-to-understand method of identifying potential swing points based on common-sense price action and market dynamics.

BY MARK ETZKORN

One of the criticisms of chart analysis is that patterns are in the eye of the beholder: A dozen traders could look at the same chart and give a dozen distinct interpretations of the different price formations and their implications for the future of a stock.

"It's a head-and-shoulders."

"No, it's a modified triple top."

"No, it's a slightly bumpy rounded-top."

"That trendline isn't valid!" and so on.

In that sense, spike days and reversal days have a distinct advantage over other chart-pattern signals because they can be quantified quite easily. While different traders may come up with their own mathematical definitions, it is at least possible for anyone to construct a formula he or she can consistently apply over time to identify these patterns.

Spikes and reversal days: momentum extremes

A spike is a bar with a high significantly higher (or a low significantly lower) than the surrounding highs (or lows). A reversal day occurs when price makes a new high (in an up move) and closes below the previous day's close, or when price makes a new low (in a down move) and closes above the previous day's close. Figure 1 illustrates the two patterns.

Spike days and reversal days reflect price climaxes and intraday sentiment shifts, respectively, and imply price corrections or consolidations. A spike is a price extreme — the kind of dramatic move often followed by a reaction or full-fledged reversal. (Of course, the astute chartist will note that a spike can only be identified in retrospect; a spike followed by a continuation instead of a reversal is another kind of one-bar pattern, the "wide-range day.")
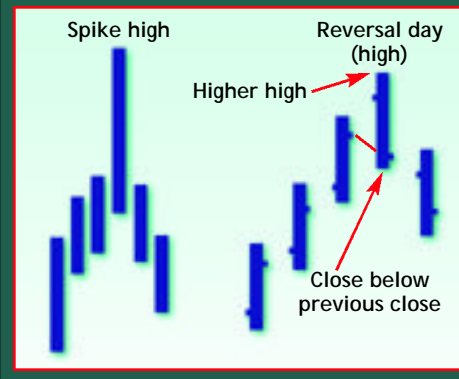
Reversal days are similar: Price (for a reversal high day) establishes a new high — typically a sign of strength — only to reverse intraday and close below the open, a sign of weakness.

The definitions of these patterns are still a little vague. How much higher or lower than the preceding bars must a bar be to qualify as a spike? And, while the basic reversal day definition is clearer, it certainly could be argued that a reversal high day that closes strongly below the previous day's close — or alternately, below the previous day's low — indicates an even greater momentum and sentiment shift and, thus, a greater likelihood of immediate follow-through.

Not surprisingly, one of the drawbacks of these two patterns as they are typically defined and interpreted is their tendency to produce a multitude of "false signals." Reversal days especially are common to the point of being meaningless.

In Figure 2, every bar that qualifies as a standard reversal high or reversal low day is marked with a red or blue dot, respectively. Obviously, these are not high-quality trade signals, in terms of the price action that follows them. Yes, there are good opportunities here and there, but for the most part, these are out-numbered by useless signals.

Defining the patterns

This is where things get good, though, for two reasons. First, part of the problem described above can be solved by coming up with specific formulas to objectively define both spike and reversal bars.

Spikes are a straightforward proposi-

FIGURE 1 SPIKE AND REVERSAL DAYS

Spike days and reversal days are easy to identify visually and represent momen-tum and sentiment extremes/shifts.

tion: How much should a high or low exceed the preceding highs or lows to qualify as a spike (disregarding, for the time being, what happens after the spike bar)? A simple approach is to use a percentage of the previous high price. For example, you could define a spike high as one 10 percent higher than the previous high. For a stock that has just made a high of 50, the next bar would have to hit 55 to qualify as a spike (that's a big spike, by the way).

Obviously, there is room for individual interpretation and discretion. While you want to exclude as many meaningless signals as possible, you can't make the requirements too stringent (e.g., 25 percent) or you won't get any signals at all. You can establish a representative level simply by analyzing past spikes.

Reversal days allow for a little more experimentation. The goal here is to emphasize the momentum of the intraday reversal. A couple of ways to quantify this might be to require the close occurs at the absolute low of the day (or in the lowest *n* percent of the bar), or that the bar close below the low of the previous day and so on.

The second, and even better, reason is the spike and reversal day concepts complement each other very well. When they occur at the same time, in the same bar, the likelihood of a rever-

sal increases. A spike-reversal high bar would be a bar that is *n* percent higher than the preceding bar that closes below the previous day's close — in essence, a reversal bar that is significantly higher than the preceding bars (see Figure 3).

What's happening when such a bar appears? In terms of a spike-reversal high day, price is making an extreme up-thrust and reversing the same day, suggesting a potential buying climax, exhaustion and the potential for a move in the opposite direction. Using the definitions outlined earlier, it's easy to categorize and identify these days.
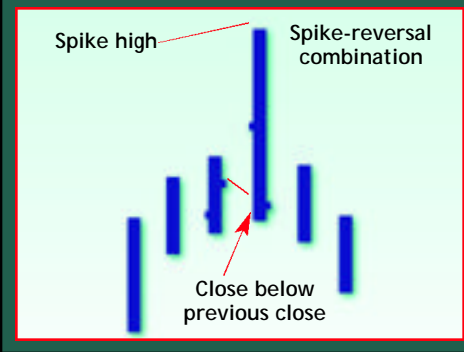
Here's a simple example:

Spike-reversal high = Today's high must be *n* percent higher than yesterday's high and today's close must be below yesterday's close.

Spike-reversal low = Today's low must be *n* percent lower than yesterday's low and today's close must be above yesterday's close.

These are fairly loose rules. You could decrease the number of signals by requiring a close above or below the previ-

ous day's high or low, or by using a similar filter. (Additionally, you could require the subsequent bar's high or low to be a particular amount below or above the spike bar to confirm the pattern.)

Figure 4 shows such points for the same price data shown in Figure 2 using a 3-percent increase or decrease (from the previous high or low) to determine the high or low of the spike-reversal bar, and an accompanying close above or below the close of the previous bar.

The most obvious difference is there are far fewer signals in Figure 4 than in Figure 2 (a good thing, considering the latter's over-abundance of bad signals). Some good signals are lost, but far more false signals are eliminated in the process.

Notice also that most of these points are, in fact, spikes (of one magnitude or another) and not wide-range days, which means the intraday reversal element of the pattern is usually followed by a move in the same direction. Overall, combining the spike and reversal day concepts appears to have the benefit of filtering out many of the lower-probability trade signals.

Developing a strategy

But is this superficially better looking mousetrap any good at catching mice? The only way to find out is to see if it's possible to develop a viable trading strategy based on the new hybrid spike-reversal day bar.

One of the interesting characteristics of many of the spike-reversal days in Figure 4 is that they precede short-term retracements, or pullbacks, in the prevailing trend — indicating (not surprisingly) that thrusts in the direction of the trend are

FIGURE 2 FALSE SIGNALS: REVERSAL DAYS

The standard reversal day definition identifies some acceptable trade signals but far more false signals.
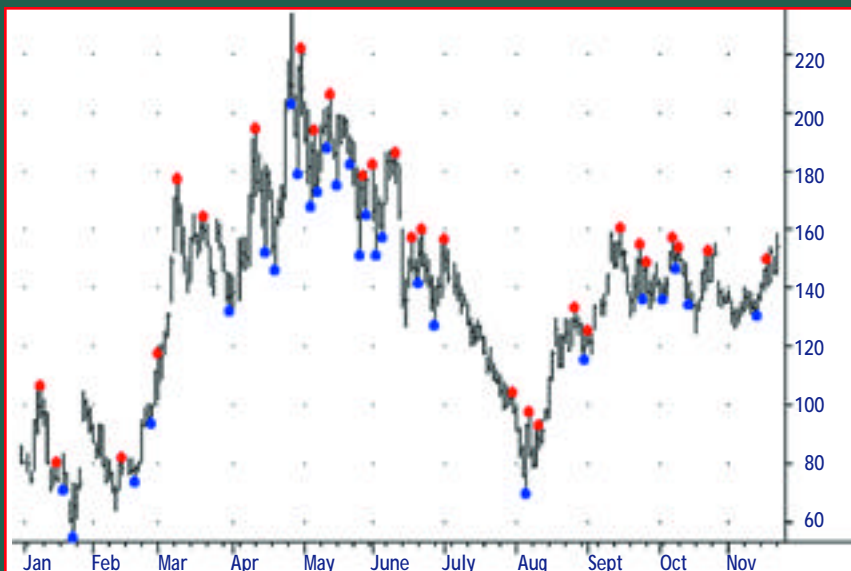
Source: TradeStation by Omega Research

more forceful than reactions against them.

A simple strategy to capitalize on the inherent characteristics of the spike-reversal day would be to enter short on the close of spike-reversal high days and enter long on the close of spike-reversal low days in anticipation of quick follow-through in the direction of the close. (This technique would require real-time monitoring of market conditions to know whether the current close satisfies the trade entry criteria. An entry on the next day's open could also be used.)

Table 1 shows the average results of a test of the spike-reversal day pattern on the 30 Dow Jones Industrial Average (DJIA) stocks from January 1990 to February 2000. The following spike and reversal combinations were tested:

• Spike moves ranging from .1 percent to .4 percent higher or lower than the preceding high or low; and

• close-to-close reversals from .1 percent to .4 percent higher or lower than the previous close.

These levels, while quite low (especially in terms of defining spikes), were used to generate as many signals as possible to get an idea of the average performance of this technique over time. Also, the test was conducted on the "mature" stocks of the DJIA, which are less volatile than the majority of Internet

FIGURE 4   FILTERED SIGNALS: SPIKE-REVERSAL DAYS

The same stock and time period in Figure 2, but with red and blue dots marking spike-reversal highs and lows, respectively. Most of the signals from Figure 2 are filtered out.
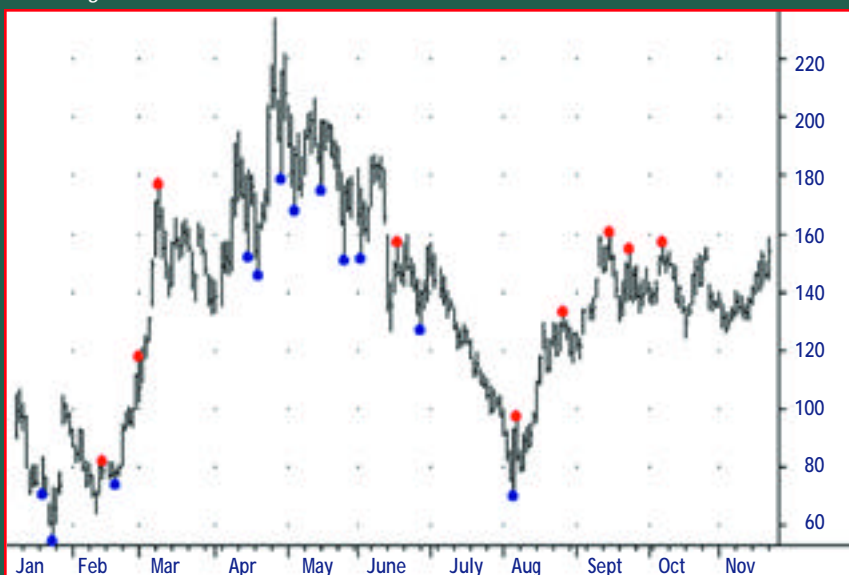
Source: TradeStation by Omega Research

is slightly more than 50 percent and the profit factor (total profit/total loss) is above 1. Using more stringent definitions for reversal and spike days than those used in the test, especially, would likely generate fewer, but better-performing, signals. But considering no stops were used and the exit was arbitrary (all trades were exited after eight days), the

article shows the result of combining the spike-reversal entry described here with a trailing stop technique.

Other techniques to improve performance include always trading in the direction of the underlying trend and trading only those signals that are preceded by a large, fast price move (which would again increase the likelihood of catching

Spike and reversal days have a distinct advantage over other chart-pattern signals because they can be quantified easily.

stocks, for example. A test conducted on the latter stocks would benefit from larger percentages (perhaps in the 1- to 4-percent range to define spikes) to reflect their higher volatility.

The results: The percentage of winners

TABLE 1   SPIKE-REVERSAL DAY STRATEGY, DJIA STOCKS

January 1990 to February 2000			
	Profit factor	Average trade (%)	Percent profitable
Average, all stocks	1.03	0.041	51.19
Maximum	2.08	1.2	60.94
Minimum	0.52	-1.06	39.66

results suggest the basic spike-reversal day, while hardly perfect, helps find potential short-term swing points.

However, such points are only the beginning of the journey, not the destination. Exit and risk-control rules are necessary to transform a trading idea into a trading plan. Any short-term strategy that operates independently of (or in opposition to) the prevailing trend must have a method to control losses and take profits, or both, to be profitable. This month's Risk Control and Money Management

a short-term exhaustion point).

A quick visual inspection of Figure 4 suggests a quicker exit might be a step in the right direction. Price often follows through immediately (in the first one to three bars), but then reverses. A trailing stop would prevent giving back these quick profits and increase the strategy's winning percentage (but would also frequently take you out of potentially big trades early). Also, requiring a more significant spike would isolate better trade opportunities

Chart patterns can be difficult to trade on a mechanical basis, but spike-reversal days present an opportunity to clearly identify short-term swing points based on common-sense price dynamics and market action. ☊

Day trading CHECKLIST

☑ *Take care of the risk,
and the profits will take care of themselves.*

☑ *It's always better to avoid a trade
when the odds aren't clearly
on your side.*

Here's one day trader's list
of elements that should be in place
before putting on a trade.

BY BOB BAIRD

Before you embark on a long road trip, it's always wise to first make sure your automobile is ready. You'd want to check all the fluids — brake, power steering, transmission and wiper, plus your gas, oil and antifreeze levels, as well as your tire pressure.

Similarly, you want to have various factors on your side before "taking off" on a day trade — a checklist of technical indicators that tell when to buy a stock and when to get out. Combining several indicators provides good risk protection.

There are two basic goals of day trading: establishing a win-loss ratio (the number of winning trades vs. losing trades) better than 1:1; and making more money on the winners than is lost on the losers.

To do this, we need to apply several technical "indicators" — Level II data, the Nasdaq trend, price-volume trends, time and sales data and the direction of market-maker changes in their bids and asks — in a strictly mechanical fashion, leaving no place for emotions or gut feelings. We'll discuss trading (Nasdaq stocks) in terms of entering the market long, but the principles apply equally to selling short.

Level II data

The first indicator is the Level II screen. Figure 1 shows a Level II window for Intuit (INTU). Instead of the typical one-bid/one-ask (Level I) display most investors get from their brokers, the Level II window displays all the interest in a stock, separated into bid and ask columns. Every broker who wants to buy or sell is displayed, along with how many shares they want to trade and at what price. Brokers have always had access to the Level II price data, but individual traders have only recently been able to benefit from this valuable information.

Each price level is color-coded and it's easy to see whether the bid or ask column is longer and, thus, which way the market is trending at that moment.

Figure 1 shows a little more interest on the bid side, resulting in a slight upward price trend. The depth of the bid and ask columns in the Level II screen gives you a feel for another important piece of the puzzle — the liquidity of a stock. Stocks with few participants in either column obviously aren't very "hot." It's better to trade a popular stock because they have constant price movements and the liquidity necessary for a fast exit.

There are two things to be careful of when watching the Level II window. The first is a preponderance of increasing bids from Archipelago (symbols ARCHIP and ARCA) and Island (symbol ISLD).

This occurs when individual day traders buy because they think a stock has bottomed out and a turnaround is imminent. Unless you see a lot of brokerages joining in, however, the price may continue to fall after these day traders have bought. It's usually best to wait until you see the "smart money," i.e., the brokerages, buying before you do.

A second thing to be wary of: Sometimes there will be very few buyers on the bid side and many sellers on the ask side. But instead of prices plummet-

ing, as the law of supply and demand would dictate, each successive ask price climbs higher and higher. The reason? Unfortunately, block trades (those consisting of 10,000 or more shares) are not required to be posted on the Level II window. Such trades are usually institutional purchases, such as those by a mutual fund, and can continue to push the price up until the buyer has filled his order.

Although you will never see a trade for 250,000 shares post on Level II, the effects are soon obvious. This may be one bandwagon worth jumping on, even in the middle, but be careful.

The beauty of Level II quotes combined with Electronic Communication Network (ECN) access is the ability to enter any price you want for a trade. If the bid is 25 and the ask is 25¼, you can enter your own bid at 25. Or, you can bid slightly higher at 25¹⁄₁₆. That way, your bid is the best and, if it is filled (there's no guarantee of that) you get the stock you want quickly, but you get it ³⁄₁₆ better than those who have to go through a broker. When you buy and sell in this manner, you "buy the bid" and "sell the ask" just like all the brokerages do.

This method is OK for reasonably slow moving stocks. For ones that are on a roll, however, you have two choices: Enter a bid that is closer to or even at the ask price, or simply put in a market order. If you're buying at the bottom or just past it,

Source: PCQuote for Windows

paying a little more won't hurt.

Let's be very clear about what day trading is and the role Level II plays. As the popularity of day trading grew, some online brokerages began to offer Level II data. They thought the average customer would consider Level II the holy grail and open an account. However, Level II data is not useful for investing or long-term trades. It doesn't matter if a stock is trending up, down or sideways at 2:04:36 p.m. today if you don't plan on selling it for two years — or even two days.

For day traders, Level II is essential, but it's not enough. Using an online broker — instead of an ECN — generates a lot of commissions for the brokerage and probably a lot of losses for you.

Simply put, if, from our example above, an order placed at 25¹⁄₁₆ does not show up at the top of the Level II window within *seconds*, you are not trading through an ECN and, thus, cannot effectively day trade.

Nasdaq trend

An intraday Nasdaq chart tells you whether overall market momentum is up or down. You want the market to be in an uptrend when you buy, because it is safer to trade in accord with the market than to hope your stock can buck a downtrend. Remember: The trend is your friend.

However, merely knowing whether the Nasdaq is up or down is not enough. The Nasdaq may be up 50 points on the day, but that is in relation to the previous day's close — a useful benchmark, but one of secondary importance for day trading.

For example, say the Nasdaq is trading at 4,250 after closing the day before at 4,200. Does this mean it has steadily gone up 50 points from the open (a true intraday uptrend), or that it opened at 4,400 and steadily traded lower putting the market in a 150-point intraday downtrend?

While you want the trend to be up when you buy into a stock, it also helps for the Nasdaq to be up from yesterday's close. The longer an uptrend has been in effect, the better. Figure 2 (left) shows 17 minutes of an intraday Nasdaq chart. Notice the Nasdaq has been down
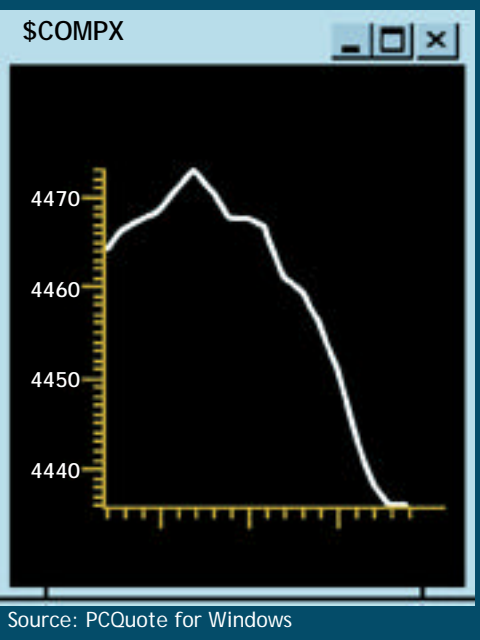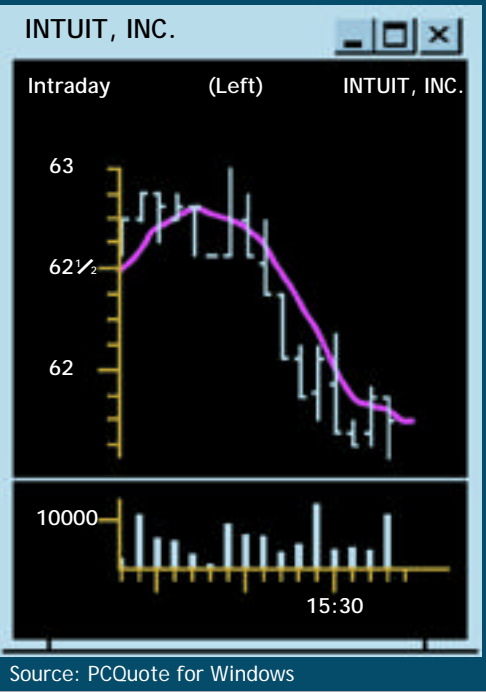
Look for the stock price to be coming off a bottom with rising volume to confirm interest in the stock.

INTUIT, INC.

Intraday   (Left)   INTUIT, INC.

Source: PCQuote for Windows

for about 12 minutes but appears to be bottoming out.

Price and volume trends

In addition to knowing the Nasdaq's intraday trend, it's also necessary to know the intraday trend of a stock you're interested in trading. (The change in a stock's price, like the Nasdaq, is pegged to yesterday's close.) Figure 3 shows the intraday trend of INTU in 1-minute bars. Volume is plotted below the price.

For a good trade setup, the stock should be coming off a bottom. A volume increase can indicate the price is low enough for bargain hunters to come in. In our example, the bottoming trend is accompanied by a volume spike of just more than 10,000 shares traded in the previous minute. This is a good entry point.

Beware, though, as such "rallies" are often short-lived. If you wait, you'll miss the move and might end up buying in at the top of the trend. To be on the safe side, you typically want to buy a little after a move has started. It's hard to get in right at the bottom, but the farther from the bottom you buy in, the more risk (that the move will end) you assume.

Trades should be maintained as long as the trend is up. Once the downtrend

comes, you can either exit quickly to ensure a nice profit or ride the trade back down in hopes the trend will change again. In the latter scenario, you still need to make enough of a profit to cover commissions so you will at least break even.

Time-and-sales ticker

Another useful indicator to have on your trading screen is the time-and-sales ticker, which shows the prices at which a stock has traded as well as the number of shares (see Figure 4). This is useful because the list is scrolling (new data is added from the bottom), giving you an idea of which way the stock is trending and at what prices it is trading.

An added benefit of the time-and-sales ticker is that the 10,000-share blocks that don't appear on the Level II window *do* show up on the time-and-sales ticker, confirming a likely institutional buy.

The speed at which the ticker scrolls also gives a good indication of the interest in the stock. Rapid scrolling indicates active trading, while little movement on this ticker indicates low volume and, thus, low liquidity.

Bid-ask ticker

The final key tool is the bid-ask ticker (Figure 5), which shows how brokers are adjusting their bids and asks. When a broker raises the bid or ask price, this is indicated in green. Lowered bids and asks are shown in red. Most brokers and ECNs are on both sides (bid and ask) of the market, so if one price is adjusted but the other remains the same, the one that doesn't change is shown in white. As the trades scroll by, the trend of a stock can be determined by noticing what color is dominating. When the screen is going green, prices are going up.

As with the time-and-sales ticker, the scrolling speed is a direct indication of interest in the stock.

The checklist

Let's review the ducks that should be in a row before you put on a trade. Again, the relatively uncommon occurrence of getting in the market at the beginning of a block trade is the exception.

1. Many brokerages should be on the bid and relatively few on the ask.

2. The Nasdaq trend should be up and, preferably, above the previous day's close.

3. The price trend should be rounding upward from a bottom.

4. Volume should be picking up.

5. The time-and-sales ticker should be showing increasing prices with significant volume.

6. The bid/ask ticker should be primarily green, reflecting price increases.

How would you apply this to our Intuit example? Let's start from the top. The Level II window shows a slight preference to the buy side (Figure 1). The Nasdaq has been down, but it appears to be bottoming out (Figure 2). The stock price also appears to have hit a bottom, and there is an accompanying volume

The time and sales ticker gives you another perspective of the stock's trend and at which prices (and the volume at those prices) it is trading.

II — INTUIT, INC.		
Time	Price	Volume
15:33		
15:33		
15:33	$61\frac{3}{4}$	600
15:33	$61\frac{11}{16}$	1,000
15:33		
15:33		
15:33	$61\frac{11}{16}$	2,000
15:33	$61\frac{11}{16}$	1,000
15:33	$61\frac{3}{4}$	400
15:33	$61\frac{3}{4}$	400
15:33	$61\frac{11}{16}$	100
15:33	$61\frac{5}{8}$	1,000
15:33	$61\frac{43}{64}$	400
15:33		
15:33	$61\frac{5}{8}$	1,000
15:33	$61\frac{3}{4}$	2,000
15:33	$61\frac{7}{8}$	300
15:33	$61\frac{9}{16}$	100
15:33	$61\frac{3}{4}$	900
15:33	$61\frac{3}{4}$	100
15:33		
15:33		
15:33		
15:33		

Source: PCQuote for Windows

spike (Figure 3). There is no clear trend as yet in the time-and-sales ticker (Figure 4) and the bid-ask movements of the market makers appear mixed (Figure 5).

Applying all the rules would result in no trade at this particular point. Although the price appears to be bottoming out, there is nothing to indicate whether this is a true bottom or just a temporary plateau. Strict application of the rules keeps you very safe, but it will also keep you out of markets at times. That's the trade-off. When a bottom comes, however, there are no better indicators than those discussed here.

Going back to the Intuit example, given that the Level II shows preference to the buy side, the Nasdaq and stock price both appear to be bottoming out and there is an accompanying volume spike, this looks much better than a 50/50 trade.

However, when the Level II shows more strength, the price and volume are clearly up, the Nasdaq is up, prices are higher in the time and sales ticker and the bid-ask ticker shows more green, a trade becomes an even higher-probability proposition.

Adhering to trading rules in a strictly mechanical fashion may mean you miss out on some good trades, but it will keep you out of more bad trades. As your trading savvy increases, you will develop a feel for which factors you want to rely on most and which you can ignore.

Assess

One of the most important things you can do after a trade is assess your performance. Whether you made or lost money, if you followed the rules, you made a good trade.

Assessing all of your trades — winners and losers — is critical. Perhaps you broke the rules and bought a stock when many of the indicators suggested you

The bid-ask ticker shows how brokers are adjusting their bids and offers. A raised bid is shown in green, a lowered bid in red. A preponderance of green reflects bullishness.

INTU	[MWSE]	$60\frac{1}{x}$
INTU	[ISLD]	60?
INTU	[SHWD]	$61\frac{1}{x}$
INTU	[INCA]	$61\frac{5}{8}$
INTU	[ARCHIP]	61
INTU	[RSSF]	$61\frac{3}{4}$
INTU	[SBSH]	$61\frac{3}{4}$
INTU	ARCA]	$61\frac{5}{8}$
INTU	[BRUT]	$61\frac{11}{16}$
INTU	[SLKC]	$61\frac{5}{16}$
INTU	[SLKC]	$61\frac{5}{16}$
INTU	[MWSE]	$60\frac{7}{8}$
INTU	[ISLD]	$61\frac{11}{16}$
INTU	[SBSH]	$61\frac{3}{4}$
INTU	[INCA]	$60\frac{3}{4}$
INTU	[SBSH]	$61\frac{3}{4}$
INTU	[ARCA]	$60\frac{5}{8}$
INTU	[MASH]	$60\frac{5}{8}$
INTU	[SLKC]	$61\frac{5}{16}$
INTU	[MASH]	$60\frac{7}{8}$
INTU	[SLKC]	$61\frac{5}{16}$
INTU	[ISLD]	$61\frac{11}{16}$
INTU	[ISLD]	$61\frac{11}{16}$
INTU	[STRK]	$53\frac{1}{x}$
INTU	[BRUT]	$61\frac{11}{16}$
INTU	[MWSE]	$60\frac{7}{x}$
INTU	[MWSE]	$60\frac{7}{x}$

Source: PCQuote for Windows

Get out while the gettin' is good

Inevitably, there will be times when everything is on your side but a stock nonetheless trends down. This is the critical situation that separates winning traders from losing ones.

If you cut your losses quickly, you can move on to the next trade. But if you hesitate and the stock continues dropping, your losses will have mounted. At that point, the temptation will be to hold the stock until it rebounds – and it may not.

To emphasize the importance of exiting a bad trade quickly, I will relate a situation that happened to me. I bought a stock at $63\frac{1}{16}$, and it moved up a quarter point before tapering off. I didn't sell when the price passed back down through $63\frac{1}{16}$, and the stock continued down.

At that point I didn't want to take the loss, so I entered a sell order at $63\frac{1}{16}$, figuring the stock would recover. I checked back later in the day and the price was nearing 63, so I canceled the order and entered another at $63\frac{5}{16}$. The price, though, never reached $63\frac{5}{16}$. Over the next few days, the stock dropped as low as $54. Ouch!

The problems with this trade were numerous. I held a position overnight and, thus was no longer day trading. I also had no guarantee the stock would ever get back up to my price and, most importantly, I had most of my trading account tied up in the trade. As a result, I was unable to trade for a week.

Holding trades overnight is the No. 1 reason day traders lose money, and it's the catalyst behind the horror stories we hear in the media. Of course, this isn't day trading.

The No. 2 reason day traders lose money is they hold a stock too long before getting out. It's usually best to make a quick sell at the first sign a stock is petering out, depending on how much money you have made and what size buffer you have. The easiest time to lose money is when you think you have bought in at the bottom but the stock continues down.

Another reason people lose money is greed. It's easy to be lulled into delusions of riches when your stock is going up. Losing a hundred dollars — or two — and exiting quickly will be more than offset by the several hundred dollars (or more) you'll make on good trades.

— Bob Baird

shouldn't, and the stock went up anyway. You made money and were happy, but in your smugness you saw no need to assess why the trade turned out good. If you had, you would have discovered no discernible reason the stock moved in your favor, and you simply lucked out. Such a result may lead you to get into a similar trade in the future, and things may not turn out so well that time. But, the loss may be the one that forces you to stick to the rules in the future.

When all is said and done, it's always better to play by the rules in a strictly mechanical fashion. You'll miss out on a lot of questionable trades (some of which will turn out good), but you'll be safely in all of the good trades. 🎧

Waving THE PENNANT

Chart analysis is the bedrock of technical trading, but do
the "classic" patterns hold water? Take a look at what
computer analysis says about the prospects
of one popular short-term
chart formation.

BY SUNNY J. HARRIS

Traders scour magazines and books, search the Internet, subscribe to newsletters and watch the financial TV channels, all in hopes of finding the holy grail — the perfect trading system (or at least someone else who has found it).

The problem with this approach is that (A) there is no holy grail and (B) no one really knows any more about handling your money than you do. The typical trader wants someone else to do the research and leg work for him (so he can get down to the business of making profits). The catch is that it is the process of doing the homework that enables you to develop a profitable approach and prepare for the test of the markets.

Few areas of technical analysis have been the subject of more research than classical chart patterns — pennants, triangles, head-and-shoulder patterns and so on. But because of the subjective nature of chart pattern analysis, very few solid conclusions can be drawn about chart-based trading techniques. If two traders can't even agree on what they are looking at on a chart, how can they agree on how to trade a particular pattern?

Do chart patterns work? That is, does a formation or pattern resolve as anticipated more than 50 percent of the time? For instance, how likely is a head-and-shoulders formation to result in a reversal (and a retracement to the neckline)?

What are the odds a pennant, flag or triangle will resolve in the direction suggested by classical technical analysis?

Despite the subjectivity of chart analysis, it is possible to define basic chart patterns mathematically and subject them to historical testing. Doing so can shed light on the basic usefulness of a pattern. In this article, we will examine what such testing reveals about the pennant formation, a shorter-term pattern often used by traders to enter on price thrusts in the direction of the trend.

Conventional chart wisdom

A number of chart pattern interpreta-

FIGURE 1 PENNANT FORMATION

The pennant formation is a short-term congestion pattern formed by converging up trendlines and down trendlines. The flag pattern is contained between parallel trendlines.

Pennant   Flag
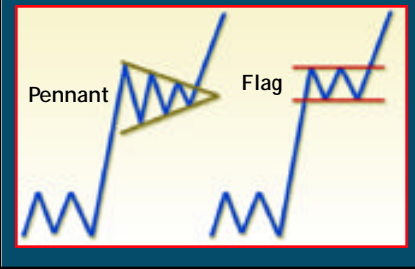
tions have become standard in technical analysis, repeated in countless books and magazines articles.

Because many of them were developed long before computers made it possible to crunch large amounts of market data, they have wormed their way into the

FIGURE 2

Pennants and flags typically represent temporary pauses in trends. Classical chart analysis holds that these patterns should resolve in the direction of the trend, as shown in these examples.

(AMZN) AMAZON.COM
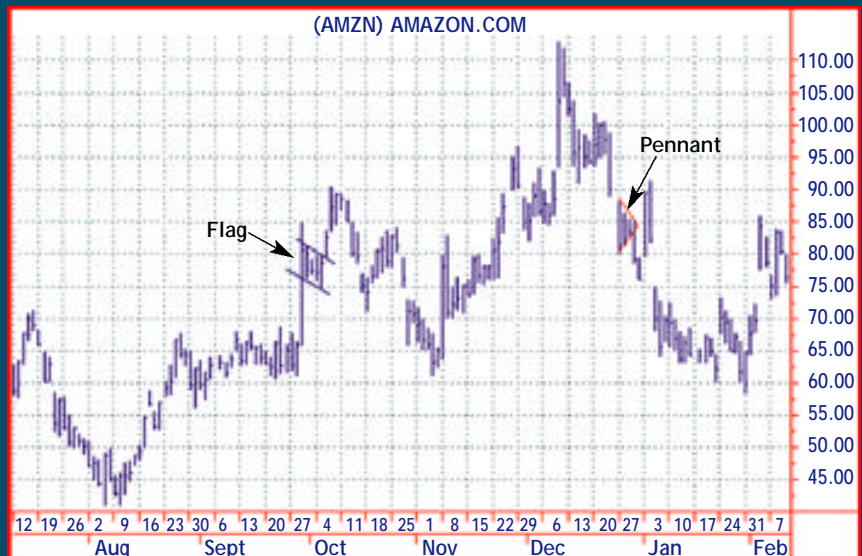
Pennant

Flag

Source: www.windowonwallstreet.com

trading consciousness without much in the way of evidence supporting (or discounting, for that matter) their validity.

The conventional wisdom is that pennants, flags and triangles are continuation patterns. That is, price tends to continue moving in the same direction it was prior to the beginning of the pattern. If a stock had been in an uptrend, consolidated into a pennant, flag or triangle formation, it would be expected to resume its rally with an upside breakout of the pattern.

Continuation patterns are essentially consolidations that interrupt a trend. A pennant is essentially a small triangle, lasting approximately five to 20 bars. (Exactly how long the pattern must be is open to debate; one man's large pennant is another man's small triangle.)

Pennants are similar to flag patterns, except that they are formed by converging trendlines, while flags are bounded by parallel lines. Figure 1 compares the two patterns. Notice that each pattern is resolved in the direction of the preceding trend: An up move is interrupted by a consolidation (the pennant or flag), which is in turn followed by an upside breakout. Figure 2 shows examples of the patterns in Amazon.com (AMZN). In each case, price breaks out of the pattern (if only briefly) in the direction of the prevailing trend.

We'll examine a group of stocks to determine how the pennant formation resolves. Are pennants useful for predicting price moves in a particular direction — that is, in the direction of the previous trend? If the percentage of actual moves is in the direction of expected moves more than 50 percent of the time, we can at least say that this technical pattern doesn't fail.

If the percentage is well above 50 percent, say 70 percent, then we can go further and say the classical analysis pattern works; it gives us an edge in the market. If we can prove this to be true with some significance, then we could build a trading system around it, and that's the ultimate goal.

FIGURE 3   PATTERN MATCH

Several of the pennant patterns identified according to the test rules. Some of the patterns resolve according to their "classical" interpretations, other do not.

(SEEK) INFOSEEKCORP

Source: www.windowonwallstreet.com

The pennant formation

As with all chart formations, pennants are for the most part easier to see with the eye than with the computer. To identify these patterns by computer we must clearly define the pattern in logical, "if-then" terms. Only then can we evaluate statistics.

First, let's summarize the traditional conditions of a pennant, which can be found in any number of technical analysis books: Prices should be contained between a down-sloping trendline and an up-sloping trendline, while volume decreases. (The volume decrease goes hand in hand with the progressively narrow trading of the pennant formation and is symptomatic of declining interest in a market.)

Other elements of pennant interpretation include using the length of the "flagpole" that directly precedes the pennant as a measuring stick for the subsequent move. But for this discussion we will focus solely on identifying the pattern and determining the direction of the breakout. Although they are not perfect examples, the patterns in Figure 2 show the type of follow-through suggested by classic technical analysis — in the direction of the existing trend.

But visual inspection is one thing. Let's see what happens when we test the pattern. We used PatternSmasher and a number of other programs (including TeleChart 2000, RadarScreen, TradeStat-

ion and MetaStock) to help identify, define and test the pennant pattern.

Defining the test

Clearly, before dismissing a particular technical pattern you would want to test it over the entire set of stocks and commodities. Similarly, before jumping to the conclusion that a technique always works you must test it on a statistically valid subset of stocks and commodities.

For simplicity, we will limit the scope of our pennant test to 12 Internet stocks: Amazon.com (AMZN), America Online (AOL), Ascend Communications (ASND), Cisco (CSCO), Earthlink (ELNK), Excite (XCIT), Infoseek (SEEK), Lycos (LCOS), Netscape (NSCP), Network Assoc. (NETA), Sun Microsystems (SUNW) and Yahoo (YHOO). The pattern will be tested on daily prices from January 1992 to February 2000 and will be limited to identifying upside breakouts only.

We will test for the following pennant conditions:

1. A sharp move must precede the pennant formation.

2. A pennant must form between an up-sloping and a down-sloping line.

3. Volume must decrease during the pennant formation.

4. The pennant must resolve with an upside breakout.

While continuing **patterns like pennants can look promising** to the naked eye, testing reveals that **using them on a mechanical basis is a difficult proposition** — you cannot simply assume a **pennant formation will resolve as expected.**

Figure 3 shows several of the pennant formations that developed in Infoseek (SEEK). Only three of them met all four of the qualifications listed above.

Analyzing the results

Over the eight-year test period, 479 pennants met the first three criteria of our test. Table 1 shows how the pennants were distributed among the different stocks.

Certain difficulties came to light in the process of isolating those pennants that resolved to the upside. While it was easy to visually inspect the charts and issue a yea or a nay, it was not as easy to tell the software what to do. Visually, a pennant that first broke out slightly to the downside, then reversed to break out of the upside of the pennant might be considered valid, as long as the upside move was sizeable (see Figure 4).

However, that technique employs a large dollop of hindsight. To be useful, a trading condition must work in real-time, not in hindsight. As a result, moves that broke the low established by the

FIGURE 4 COMPUTER ANALYSIS

A long, narrow pennant identified by chart pattern identification software breaks to the downside before reversing to the upside.

Source: PatternSmasher by Kasanjian Research

beginning of the pennant formation were disqualified.

With these added conditions in mind, Table 2 shows the percentages of upside pennants that resolved to the upside without downside penetration.

The testing, while somewhat limited, does not support the conventional wisdom that pennants resolve in the direction of the prior trend. The 47 percent probability falls short of the minimum 50 percent success threshold and far short of the 70 percent level 🎧 necessary to translate into a viable system.

While continuation patterns like pennants can look promising to the naked eye, testing reveals that using them on a mechanical basis is a difficult proposition — you cannot simply assume a pennant formation will resolve as expected.

Additional filters — or techniques that take into account factors outside the realm of these tests — may be necessary to isolate better trade opportunities. One idea is to use the concept of a "false breakout" to take advantage of a pennant that initially breaks out to the downside. If the stock quickly rallies and penetrates the initial upside pennant boundary, the stock has essentially made a downside probe and reversed, suggesting potential upside follow-through. 🎧

TABLE 1

PENNANTS BY STOCK

Stock	Number of pennants
AMZN	17
AOL	66
ASND	38
CSCO	80
ELNK	19
LCOS	21
NETA	65
NSCP	24
SEEK	27
SUNW	75
XCIT	21
YHOO	26
TOTAL	479

TABLE 2 PENNANT PERFORMANCE

Stock	Number of pennants	Upside resolution	Percentage
AMZN	17	7	41%
AOL	66	33	50%
ASND	38	14	37%
CSCO	80	42	53%
ELNK	19	10	53%
LCOS	21	6	29%
NETA	65	35	54%
NSCP	24	8	33%
SEEK	27	10	37%
SUNW	75	36	48%
XCIT	21	12	57%
YHOO	26	11	42%
TOTAL	479	224	47%

BY ALLEN SYKORA

Jerry Parnham discovered early in his day-trading career that when he swung for the fences, he struck out. So, he tightened his swing and began to concentrate on just making contact with the ball.

The Alaska-based airline pilot developed trading rules that get him in and

syncrasies of day trading, you're not going to be good at it. The point is to get some education."

Parnham read four books about electronic day trading before attending a day trading "flight school." After completing a weeklong basics course at the Online Trading Academy in Irvine, Calif., he paper traded for three months.

Parnham, noting the average day trader loses $7,500 during his first six months, admits he got "hammered" his first couple of months trading. He now realizes he was trying to stay in trades

His basic rules go something like this: If a stock is priced at $10 or less, he will trade 1,000 shares and take his profit after a move of a quarter-point (a gain of $250). If the stock is priced between $10 and $20, he will trade 500 shares and get out after a half-point gain (a profit of $250). If the stock is priced from $20 to $100, he will trade 200 shares and try to get out after one point (a profit of $200). He never trades stocks priced higher than $100.

"If you buy 200 shares of a $100 stock, you tie up $20,000 of your portfolio," Parnham explains. "You need one point to make $200. But if you buy 1,000 shares of a $10 stock, you tie up only $10,000.

Pilot earns his TRADING WINGS

out of stocks quickly, "scalping" many small profits on moves as small as a quarter-point.

"I'm shooting for doubles and singles," Parnham says. "I'm not shooting for home runs."

His rules are enabling him to score small profits around 90 percent of the time. On the day of this interview, he made four trades for an after-commission profit of $480. He's also quick to cut his losses. In fact, he says, his biggest daily loss during the previous four months (through the end of February) was $250.

Although Parnham has been trading for only a little more than a year, word about his success has already spread. During February's International Online Trading Expo in New York, he was invited to be on a panel of six day traders, five of whom were institutional traders.

Parnham became interested in trading when his savings were sitting in a money-market account, earning about 2 percent annually after taxes. At the time, he had no experience with stocks, not even as an investor. But rather than jumping straight into the market, Parnham carefully prepared himself first, just as he did when he became an airline pilot. He couldn't fly a 747 until somebody showed him how and he had simulated flying conditions. Now, he's logged 14,000 hours of flying.

"It's the same with day trading," he says. "Until someone teaches you how to day trade and you can simulate the idio-
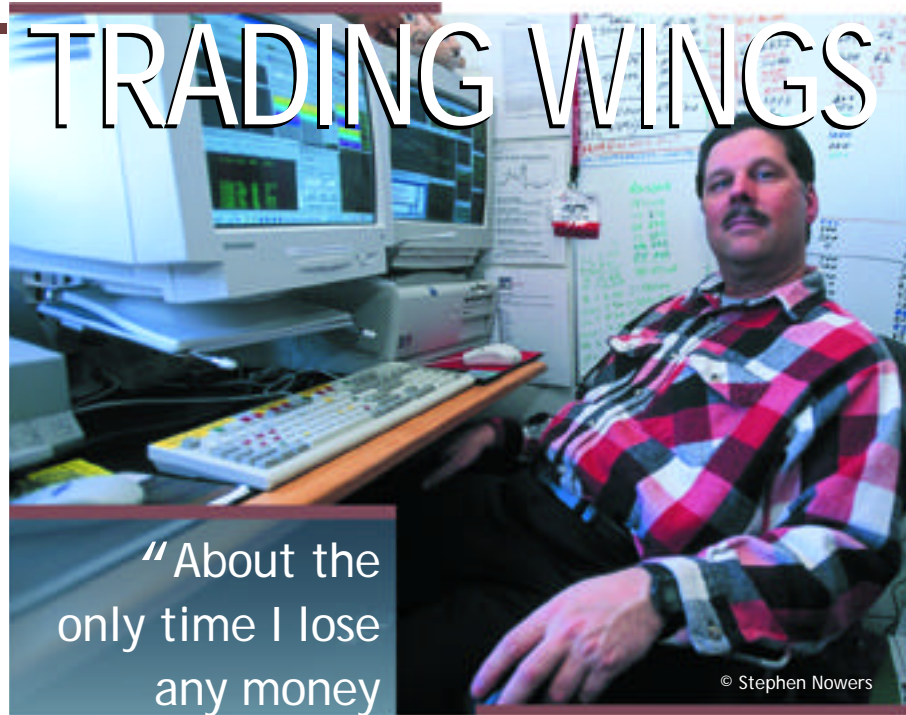
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"About the only time I lose any money is if I break one of my own trading rules."

too long, looking for the big kill.

"That's a big mistake new traders make all of the time," he says. "They try to get big, big wins."

After a while, Parnham decided he had to "establish some trading rules and stick to them." Now, he says, "About the only time I lose any money is if I break one of my own trading rules."

And you can make $250 on a quarter-point move. So for reasons of not tying up equity, I don't buy stocks over $100, even though they do tend to move more than lower-priced stocks."

Parnham considers himself strictly a "momentum" trader. Instead of consulting charts, he monitors market news, watching for earnings reports so he will know which stocks may be the big movers for the day.

"I don't care what the name of a stock is," he says. "I don't care what they make. I don't care what they sell. I don't care what their financial condition is. All I care is that they are moving up or down."

One of Parnham's key rules is to always "lowball" a stock he wants to buy by placing limit orders a half point to a full point below the current bid. As a result, although he might place 150 to 200 orders some days, only three to 10 are filled. With this methodology, he looks for stocks with a big spread between the bid and ask prices.

Suppose the bid for a stock is 7 and the ask is 7 ¼. Parnham will put in an order at 6 ½. However, he would only buy the stock if the ask price remains at 7 or higher, a half-point above his order.

"As soon as I'm filled, I've got at least a half of a point to play with," he explains. "If that half a point closes and I'm not filled, then I cancel the order."

Once filled, Parnham enters a limit order so he can capture his profit once it hits his objective — whether it be a quarter, half or full point.

He estimates he actually shorts the market more than he goes long, simply using the same trading rules in reverse. He also tries to play no more than three stocks at a time, so he can keep a close eye on them.

Parnham uses "mental stops," following the same formula he uses for his profit objective. That means a quarter-point mental stop for 1,000 shares of stocks priced up to $10, a half-point for 500 shares of stocks priced from $10 to $20 a share and a point for 200 shares of stocks priced from $20 to $100 a share.

Any time Parnham executes a trade he never leaves his screen, so he is ready to react quickly if a stock makes a significant move — either his way or against him.

> "I don't care what the name of a stock is, what the company makes, or what its financial condition is. All I care is that it is moving up or down."

He uses an Internet-based day-trading chat line to keep abreast of the latest developments in different stocks.

"Instead of watching 20 stocks [yourself], you have 100 eyes watching 1,000 stocks," he explains. If somebody on the chat mentions that a stock is moving, Parnham will watch it for a while to see if it's worth trading.

However, if a stock moves too far in one direction, he will consider putting on a opposite position. If a low-priced stock rises from $5 to $8, the stock has already moved 60 percent and Parnham knows from experience stocks seldom double in a day. Thus, if the price action to the upside starts to waver, Parnham will short the stock instead of "following the sheep."

He doesn't like to hold positions overnight, which is partly why he doesn't trade options even though he has some pilot friends who use these tools.

"Option traders have trouble sleeping at night, but I sleep well," he says with a chuckle. He also scalps IPOs, but advises newcomers to stay away from them.

Parnham is a man who likes to keep busy. His main job is piloting a Northwest Airlines 747 in and out of Anchorage, but he still manages to trade about 15 days a month. He takes his laptop with him and frequently day trades from hotel rooms on layovers to Asian cities.

In his spare time, he's also an Alaskan bush pilot and uses his plane for frequent fishing and hunting trips. He lives in an airpark in the Wasilla area, right next to an airplane hangar. The surrounding area is wooded, with views of the Chugach Mountains to the north and the Matanuska Mountains to the northeast.

The Minnesota transplant also finds time to umpire or referee high school and youth baseball, softball, football and hockey games. When he's trading, though, his sole focus is the market.

He recalls another trader who expressed frustration at regularly losing money after three years of successful trading.

"I asked him, 'What's going on at home?'" Parnham says. "He said, 'Well, they're remodeling my house and I've got the grandkids all the time.' I said, 'Bingo! How can you concentrate?'

"I have no wife, no kids and no pets, especially cats, who — other traders have told me — love to walk across their keyboards.

"You have to be able to concentrate on what you're doing. If you have a lot of interruptions, you're not going to do well. You have to watch what's going on when you day trade. You can't put on a trade, leave for the day and come back later."

Parnham emphasizes that traders have to take a business-like approach to trading and learn a successful methodology, just as in any other job.

"It's not gambling or going for a quick buck," he says. "Basically, it's a second business for me. I can't emphasize enough to get educated. If you open a $30,000 account and you don't know what you're doing, it's gone.

"Day trading is not easy. You've got to develop a strategy and set of rules," Parnham advises. "If they work, stick to them religiously. If they don't work for you, develop different rules. Then just stick to those." ♘

Long-term investor works short-term edge

BY ALLEN SYKORA

Some people think investing and trading are mutually exclusive. Richard Rinella Jr. proves they are not. Although he works with long-term investments in the financial-services industry, he makes extensive use of short-term techniques in his personal trading.

The 26-year-old Rinella works with Doerge Capital Management, a small Chicago firm that helps high net-worth clients manage their portfolios. He advises them on possible stock-market investments and bridge loans (collateralized, short-term loans to companies).

"Long-term investing is probably how I've made more money than anything else," Rinella says . "I'm a firm believer in buying good companies and holding them.

"But I like having the ability to achieve huge percentage gains in a very short period of time. The volatility in the bigger stocks gives you the opportunity to short-term trade. You've got a 10-point range on a lot of these stocks over the course of a couple of days."

As a private trader Rinella has progressed from investing to swing and position trading, and earlier this year he experimented with day trading. He trades mostly large-cap, high-volume stocks, with a focus on technology companies. He relies on technical analysis for his trading decisions.

"The main reason is that markets have changed significantly over the last two years," he says. "Fundamentals have been thrown out the window for a lot of companies. People are banking on where companies will be in four or five years, not where they are right now."

Rinella relies heavily on the Relative Strength Index (RSI), as well as Bollinger bands and simple trendlines. The RSI is an oscillator that measures momentum by comparing up closes and down closes over a given period (see "RSI formula").

Be sure to **treat each trade** as an **individual trade.**

For a standard 14-day RSI, a reading of around 30 suggests a market is potentially oversold, while a reading of around 70 implies an overbought condition. Rinella uses both overbought and oversold signals, as well as divergences between price and the RSI, to help guide his trading.

"When I see the RSI trading around 30 or below, I will step in and buy the stock, assuming it has no major upcoming news (influencing prices)," Rinella says. "When the RSI hits 70 or higher, I will see if it tails off. I'll compare the strength of the RSI to the stock price. If there is a divergence — where the stock price continues to go higher but the RSI doesn't continue to make new highs — then I'll know the stock is losing some strength and I'll take some action to get out."

Rinella also watches to see when stocks break trendlines, using such pentrations as a trailing stop technique to protect his position. For instance, if a stock he has bought is remaining above a rising trendline, he will continue to hold it, selling if it breaks below the trendline.

Rinella makes extensive use of options in his trading. He stays in close contact with a broker at Opportunities in Options, calling him three times a day to get a near-term outlook on the market. His favorite strategy is to sell naked options, although he emphasizes this is "very, very risky." If he is inclined to short a stock, he will almost always do so by purchasing a put. He also will use options to protect his stock trades.

"When I'm not sure whether a stock is going to go any higher but I'm not quite ready to sell it and want to limit my downside risk, I'll often buy a put and sell a call against that stock," he adds. "I'm collaring the stock, which limits my upside but also limits my downside."

While Rinella says he has a high winning percentage for his option trades, he

concedes the losses tend to be "substantial" because of the higher-risk strategy that he uses.

Rinella trades once or twice a day, on varying time frames. On the day of this interview, for example, he was in a trade for just 20 minutes. But the bulk of his trades tend to be a few days to a month or more.

Early this year, he experimented with day trading, taking five to six trades a day. He felt encouraged by his initial results during trending markets, although he got "eaten alive" in choppy markets. However, he gave up day trading because his job didn't allow him to watch a screen all day without interruptions. In fact, several times during this interview, he had to pause to review documents or answer the telephone — even though it was 4 p.m. on a Friday afternoon.

"Day trading requires you to be literally glued to your screen," he says. "It's wonderful if that's the only thing you're doing. But because of my work, I don't have time to focus on the screen all day long. I'm constantly answering the phones, writing correspondence or calculating balances. I would find myself putting on (day) trades and not being able to watch them, then missing the buy or sell signal to get out."

Because Rinella does both short-term trading and long-term investing, he has to decide which approach to use in a particular situation. One way he does this is to look at the competitors of a stock he is thinking about buying. If other stocks in the same sector have soared, Rinella may decide to hold onto his shares for a longer time frame. But

when he does get out on a shorter-term basis, he "tries not to look back" even if the stock continues to rise.

Rinella points out that it's critical to separate emotions from trading decisions, something he tries to accomplish by concentrating on sound technical analysis. He recalls getting in trouble once when he didn't take the time to do this.

> You have to **buy** a stock **for the right reason,** not because **you have the money** to buy the stock.

"I was lucky enough to make a decent amount of money on one particular trade," he says. "But I was so excited about making the money that I turned around and — without paying any attention to the technicals — threw the money into three other stocks. They all came back and I lost everything.

"You have to be sure to treat each trade as an individual trade. Don't let emotions influence your decisions. Make sure you're buying stocks for the right reason, not because you have the money to buy the stocks." 🎧

FIGURE 1 OVERBOUGHT AND OVERSOLD

The 14-day relative strength index (RSI) below the price series helps highlight potential overbought (70) and oversold (30) levels .

Source: www.windowonwallstreet.com

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JOHN SALEEBY:
*MAST*ERING
the trading arcade

BY MARK ETZKORN

John Saleeby is certainly a model for trading in the digital age. Engulfed in a bank of computer screens in his downtown Chicago office, the 36-year-old trader splits his attention between the markets, the TV and a video game, manipulating all of them with his high-tech joystick.

In fact, trading is just one big electronic game to Saleeby — one he enjoys as much as any kid in an arcade.

"I don't find trading stressful," the energetic Saleeby exclaims. "Since the day I started, my attitude has been, 'This is a video game, it's not money.' I look at it like that because my approach has been to never touch the money in my account. It's different if you have $20,000 in your account and you need to make $2,000 rent money. I'm sure that's stressful."

Ironically, while Saleeby has been a successful stock trader nearly his entire adult life, he never really considered trading as a full-time career until the last few years.

"I won trading competitions in high school and college, but I never looked at it as a way to make a living," he says. "I've just always traded stocks on the side. I always considered it an avocation."

In fact, Saleeby's original vocation was the law, and although he was making a good living, he knew he wanted out fairly early in his career. Not surprisingly, his dislike for the work helped push him closer to trading.

"I just didn't really enjoy law to be honest with you," he says. "I had four jobs in four-and-a-half years. I tried tax law, I tried corporate litigation, I tried assistant attorney general and I hated it all.

"I really started actively trading because I was so bored," he continues. "I'd sit around my office and trade. The head partner even came by once and said, 'You know, we always hear you talking about stocks.' I told him, 'Well, I make more money trading my stocks than I do with the law.' With comments like that, needless to say, I wasn't going to spend my whole life in law."

When his stint with the bar had run its course in 1995, Saleeby started a home automation company, which proved to be a short-lived venture.

"I began trading to create cash flow to pay for the losses, which I was able to do," he says. "And then I realized if I just closed down the damn company, I'd be making a lot of money."

Two years later, Saleeby is still going strong. He bought a seat on the Chicago Mercantile Exchange, although he trades almost exclusively from his office, and in the last year he has added the S&P and E-Mini S&P futures to the stock trading that has been his bread and butter for years.

For his stock trading, Saleeby has always believed in blending technical and fundamental data, often combining trendline analysis with an understand-

"I'd rather be wrong fast, than right slow."

ing of the fundamentals of a particular stock and its industry. Not surprisingly, Saleeby collects and dissects copious amounts of market information, something he never skimps on.

"You can never pay too much for information," he explains. "I want to know everything that actually occurs in the entire market. I'm a strong believer in a confluence of all types of information. The more information you track, and the more information that meshes, the better everything is going to work for you."

He keeps an extensive trading diary, tracking every important development each day in a market calendar he maintains by hand, a process that helps him internalize the information.

Saleeby, who admits to being somewhat "obsessed" with the markets, spoke to us over three days, explaining various trades he had recently made and others he was making at the time.

AT: How do you combine technical and fundamental analysis?
JS: I want something that is fundamentally strong that also gives me a good

> "If the market doesn't confirm my position quickly, I'm out."

chart point. In early December, for example, I was buying Advanced Micro Devices (AMD) between 26 and 28, and I loaded all the way up to 31, with a price target of 45.

I bought AMD for a number of reasons. The chip sector was red hot — the fourth quarter is the strongest one for the sector. AMD had produced a high-end chip superior to Intel's for the first time and Intel was having execution and supply problems at the time. In terms of technicals, the stock was stuck in a trading range between 18 and 31.

Given the company, sector and market were bullish, I thought AMD would break out of its range. It was moving toward the top of the range after forming a bottom pattern. Also, the stock had just made a "fractal breakout" of the long-term pattern within the range, which means it had broken out of a smaller range within the larger range (see Figure 1).

I projected a couple of different potential price targets — 51 using a doubling

of the range method and 48 using a Fibonacci projection. So I placed a conservative (exit) price of 45. When AMD's earnings came out (48 cents per share vs. a projected 1 cent per share), the stock broke out of the larger trading range and I got filled.

I'm buying for a reason — a stock has met a chart point and I believe that charts are entry points to fundamentals. That is, fundamentals have to coincide with chart points. I won't buy on fundamentals alone. I won't buy on chart points alone.

I use several technical techniques. I have a system to project trendlines and I also use ratios similar in concept to Fibonacci numbers.

Much of my trendline technique is based on John Murphy's book, *Technical Analysis of the Financial Markets*. I modify everything I use to suit my needs, but my trendline analysis is fairly straightforward. When anyone asks me about technical analysis, I always say the same thing: Read John Murphy's book. I basically draw trend channels of different magnitude and adjust them as the market moves.

AT: Do you have any purely technical systems — strictly price-based strategies — that don't use any fundamental inputs for short-term trading?
JS: I have technical systems, but I always keep the fundamentals in the back of my mind. You have to understand fundamentals, but if you trade solely on them, you're dead. You can make money trading technicals alone, but you can't make money trading fundamentals alone.

Also, I don't believe you can trade

FIGURE 1 ADVANCED MICRO DEVICES, DAILY

Chart points coincide with strong fundamentals to provide buy signals in AMD.
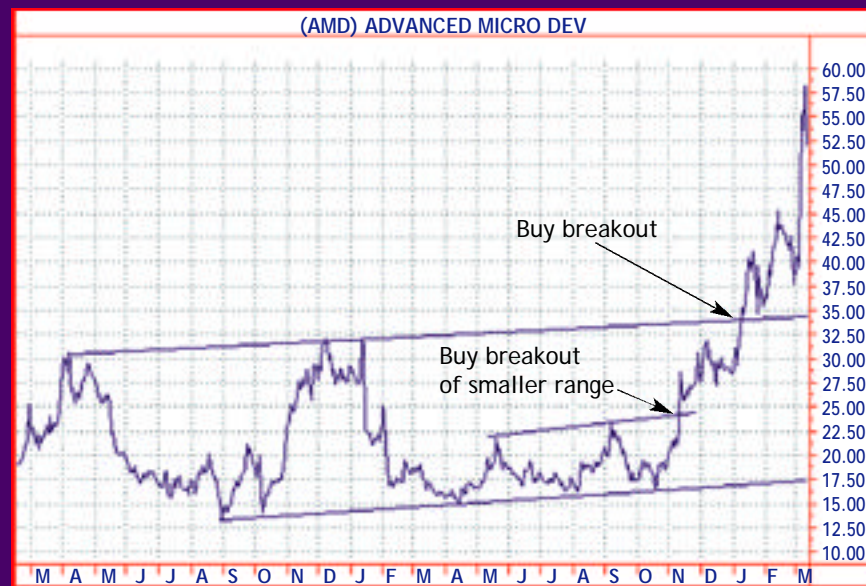
Source: www.windowsonwallstreet.com

individual stocks, especially highly volatile ones, without having a feel for the market itself. I definitely watch the S&P futures as well as the Nasdaq futures before I execute a stock trade.

I calculate all kinds of intermarket spreads and ratios, and I also maintain an extensive historical diary and databases in which I record fundamental information — earnings, the price-to-book ratio, the dividend yield and things of that nature. I look at the markets and each trade from a fundamental standpoint and a historical standpoint as well as a technical standpoint.

▼ On short–term trading techniques

AT: What kind of trading approaches would you suggest for a short-term stock trader?
JS: Tick-trading stocks is impossible, as far as I'm concerned. I've never met anyone who does it profitably and I've never been able to do it profitably.

The strategy is mathematically unsound. If you're trying to capture a sixteenth, where's your stop-loss? One-sixteenth on the other side of your entry? You can end up having to take three-tick losses to make one tick. That's the wrong ratio! And the ratio of commission costs to trading profits is prohibitive.

I did some calculations for a guy and discovered you'd have to be 80 percent correct just to break even. I don't want to trade in a way that I have to be a genius to make a little bit of money. A lot of people think technology has put them on the inside with the market makers and it really hasn't. The market makers still have superior execution techniques, superior information and lower transaction costs.

However, I think it's possible to swing trade very profitably.

AT: How would you suggest finding the best stocks to trade and which approaches to use for that kind of trading?
JS: That has to do with your personality. If you have a low-risk personality and you don't like to see things move a lot, you should really work with big-cap, blue-chip stocks that have sold off. Wait until they sell off hard and buy them for a bounce — that's a pure swing trade.

"You never need to chase a trade. The money runs out before the opportunities do."

SBC Communications was a perfect swing trade (when it sold off sharply starting in late December 1999 and bounced in early March).

I know a trader who doesn't do anything but buy dips in these kinds of stocks, using a 2-to-1 profit-to-loss ratio, and he's one of the most successful short-term traders I know. He takes no more than 5-percent heat on the downside and gets out on a 10 percent move to the upside. I look for a 3-to-1 ratio myself.

AT: But do you think that kind of approach would work in a stagnant or bear market?
JS: A downtrending market is fine as long as you trade individual stocks and not the market. I believe in the adage "It's not a stock market, it's a market of stocks." Most importantly, you must have a predefined strategy for getting in and out of trades.

Here's another simple technique: IPO lock-ups and quiet periods. A really hot IPO generally tops early on and then comes right back down. Why? Because of the four-week quiet period when the syndicate can't tout it and the insiders can't talk about it. You won't hear another word about a hot IPO until four weeks have passed. At that point the syndicate and the company will begin hyping the stock again, so it's smart to look for buying opportunities toward the end of the quiet period.

The lock-up period is the opposite situation. Generally, I don't like to short stocks because most people are naturally buyers. But look for a selling opportunity in any stock that is up significantly — I've been using five times the IPO price as a benchmark recently. Check the chart pattern. It should start to go into a downtrend about two days before the end of the lock-up period. But always

wait until the chart pattern turns down coinciding with the lock-up expiration.

The insiders are going to sell at least portions of their positions to take huge profits. Remember, the insiders have gotten in at pennies on the dollar, not at the IPO price. If you were an insider, what would you do when your stock comes off lock-up, cash in some of your huge profit or buy more stock? I've yet to meet the person who would buy more stock.

But be careful. Generally companies will announce very bullish news and analysts will tout the stock the week before lock-up ends so they can sell into the retail buying. *(See "Analysis in action," p. 76; Commerce One (CMRC) announced a deal with GM and a 3-for-1 stock split, while an analyst set a $1,000 price target, right before lock-up ended.)*

AT: You mentioned that you calculate a number of market ratios and spreads. How do you use them?
JS: I'll compare indexes like the S&P and Nasdaq, for example. That spread was very predictable until around last October, when the Nasdaq just kept going.

Spread ratios give you indications of certain market patterns. I look at the market bias implied by a spread and trade the side of the spread with the greater potential for movement — gamma, convexity or whatever else you want to call it. I rarely trade both sides — buying one and selling the other. Pure spread trading is stepping across dollars to pick up pennies.

▼ On trade execution

AT: What kind of brokerage do you use?
JS: I use several brokerages and direct access firms, and I use Globex to execute my trades in the E-mini S&P. But I don't really like direct access firms because the ECNs don't have the liquidity to move any size.

I'd rather give the order to a market maker at a brokerage, especially with larger orders because they'll often improve your execution because of their access to Instinet. I'll give these guys a sixteenth — what do I care? The other day I couldn't get an order off on an ECN — there was nothing there.

I also think it's really important to

Analysis in action

Many of John Saleeby's technical trading concepts are built on a simple base of support and resistance concepts. "This stuff is not rocket science," he says. "Generally, the simpler the technique, the better it works."

Two of his frequently used techniques: retracement percentages (modified Fibonacci levels) and multiple trendlines he adjusts as price action unfolds. He projects trendlines and price moves forward in time to calculate price targets and uses them also to determine likely support and stop levels.

A series of trades in Commerce One (CMRC) illustrate some of these techniques, as well as the way he integrates fundamental factors into his decision making.

"Companies tend to put out the most bullish news, including stock-split announcements, right before they go off lock-up [see main story]," Saleeby explains. "That's what happened with CMRC. They announced a 3-for-1 stock split and an analyst came out with a $1,000 price target — two days before the lock-up ended.

"It's a game!" he exclaims. "They give you [bogus] news right before lock-up ends so they can sell into retail buying.

"The stock then went down to 210 and I went long, expecting a short-term bounce. The stock was very oversold at that point and it just bounced off its Fibonacci retracement level of 205 (approximately .618 of the high price of 331). I exited the trade the same day when the trend on the one-minute chart lost momentum and stalled between 230 and 234.

"When it went back down I bought again at 210, which was a mistake. I did it because I was able to buy there the first time — which is a bad reason. The stock continued to drop and I bought again at 167, at the resistance implied by a trendline (in red). But it pierced that trendline and traded down to around 155, and I have to admit I was a little nervous. But fundamentally, I believed in the stock, so I was willing to take a little more heat. I got out of the entire position when it moved back up to 210.

"After that, the stock came back down and touched a longer-term trendline (in blue), forming a double bottom. So I waited and watched for another up move. I got in on a buy stop at 210 again. The stock has been in an uptrend, and I'll get out of most of the position on a downside penetration of the most recent up trendline (in green), which functions as a trailing stop." (The trade was, in fact, stopped out around 245 on a penetration of this trendline.)

COMMERCE ONE (CMRC), DAILY

(CMRC) COMMERCE ONE INC

- End lock-up period
- Sell at 234
- Buy at 210
- Buy at 210
- Sell at 210
- Bullish news announced
- Buy at 167
- Buy at 210
- Stopped out

320.00
300.00
280.00
260.00
240.00
220.00
200.00
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00

4 11 18 25 1 8 15 22 29 6 13 20 27 3 10 17 24 31 7 14 21 28 6 13
November   December   January   February   March

Source: www.windowonwallstreet.com

> " It took a couple of times of being wrong to appreciate how wrong I could be. "

have back-ups for all your technology — hardware, software, communication — in case something goes down.

AT: Do you make very short-term trades that rely on your information and trade execution capabilities — playing on earnings announcements or things of that nature?

JS: Yes, and since I have the fastest information and the fastest execution, I know I can beat the world into that kind of trade. This is what I always say: I'd rather be wrong fast than right slow. Because if you are right slow, you'll miss the profit and you'll lose anyway. But if you're wrong fast, you're in and out so quickly that there's no pain to it. If you're slow and wrong, you're double bad.

So, if you're right fast, you make the most money. I want to be the first person to know what's happening, then I want to be the first person to execute and then I want the market to confirm my position. If that doesn't happen, I'm out.

One thing to keep in mind is that you never need to chase a trade. The market has plenty of opportunities. The money runs out before the opportunities do.

AT: Is there a typical holding period on the type of trade you're describ - ing?

JS: Under 10 minutes. What I'm trying to do is be the first in. Then the rest of the world comes in, does 60 to 80 percent of the move in the next five to 10 minutes, and then I get the hell out.

▼ On stops and risks control

AT: What kind of stops do you use?

JS: I like using patterns rather than percentages or arbitrary money amounts. I use support and resistance levels and my trendlines — they function as a trailing stop. But it's equal parts art and science.

The biggest mistake people probably make, in my opinion, is to trade their

account. In fact, right now I'm training a trader who doesn't have a lot a money and I tell him, "If you trade your capital you'll never make it, because you're undercapitalized." But if you're going to take the risk, you better put it all on this and believe in it and put your stops in and hope you don't have three losing trades in a row for a while.

AT: But wouldn't it also be valid to say to this person, "Wait until you have more money before you try to trade?"
JS: Yes. I can't believe it would be to your benefit to not have enough money to do things right. But some people say the best thing that happened to them is they had to start small and conservative and had to be very careful with their capital.

AT: Do you do anything like adjust your position size in an open trade to manage risk?
JS: I have another rule: If a stock doubles for me really fast, I "play with the house's money." I take my 50 percent off the table and I leave 50 percent of it in there so I've got a free stock now.

▼ Advice for new traders

AT: What kind of advice would you give to someone starting out?
JS: Well, they couldn't do many of the things I'm currently doing. When you start out you have to be more conservative in terms of risk because you don't really know what risk is until you've experienced a big loss. If you've never experienced a big drawdown in your account, then you don't understand why it would happen or how it could happen. I think you have to go through that at some point.

I was fairly successful from the start, but it took a couple of times of being wrong to appreciate how wrong I could be. And I think that is important in a trader's maturation. As a beginner, I could not trade the way I trade now. But now I know how to recognize risk and minimize the risk of the type of loss that could really hurt me.

I think one of the reasons I was successful, quite frankly, is I never — I mean never — used margin, in stocks or futures, for over the first year I was trading. If I didn't have the cash, I didn't
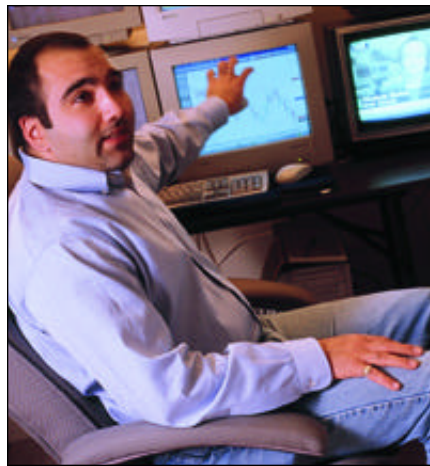
"One of the reasons I was successful is that I never used margin, in stocks or in futures, for over the first year I was trading. "

make the trade. I was never forced out of a position that I didn't want to sell. Also, it's easier to quantify your gains and losses — what kind of risk you're carrying — when you're not on margin. If it goes down five percent you know that's five percent if you have your whole bankroll on it.

Now, I use margin. But I think the fact that I didn't early on is why I'm still around.

AT: What about different ways a beginner can approach trading and analysis?
JS: One thing that I will say is that if you're starting out, you need to be a pure technician. Don't talk to me about fundamentals, because most people don't know what fundamentals are. There are so many ways you can value a company — cash flow, price-to-earnings, price-to-book — and they can give you different numbers.

SBC Communications (SBC) valued on cash-flow analysis is 32; valued on the sum of its parts, it's 65 — that's double the other valuation. Which one's right? Who knows?

Fundamental analysis is very valuable, and I use it — don't get me wrong. But people who don't understand finance will need years to be able to do fundamental analysis. Everyone looks at price-to-earnings (PE) ratios. Well, what about price-to-earnings-to-growth (PEG) ratios?

Look at Intel. Last year they generated $4.5 billion in free cash flow. How much would you pay for that free cash flow? Think of it this way: How much would you pay for a cash machine that gives you $4.5 per year?

At Intel's current market valuation, you're paying $400 for a machine that pays you $4 per year. Even factoring its growth rate, it is very overpriced by traditional methods of valuation.

You also have to think about the time frame you're going to trade on. I say the same thing to everyone: Your technical analysis has to coincide with the time frame you're trading. If you're looking at a trade that will last a week, use daily and weekly charts; if you're looking for a five-minute trade, use five-minute bars; if you're looking at tick trades, look at tick charts or maybe one-minute or five-minute charts.

AT: What do you do when you're not trading?
JS: I'm pretty much addicted to this. Sometimes I work as many as 100 hours a week. The whole time we've talked I've been trading. I've got nine screens in front of me so I can watch two channels of TV, three different market screens and play on the Internet.

As long as I'm going to sit around and watch TV, I might as well make some money while I'm doing it. 🎧

EXIT, *TRADE LEFT*

Trailing stops can help lock in profits and reduce trading risk, but they can also take money out of your pocket if you don't use them correctly. We analyze some of the popular trailing stop techniques and show you how they really perform.

BY THOMAS STRIDSMAN

"If I only had exited that trade on the first signs of trouble, I might have ended up with a small profit instead of this huge loser."

Honestly, how many of us haven't heard that one before? Or worse, how many of us actually have uttered the same phrase ourselves? The truth is, probably the first and most costly lesson we have to learn as traders is no trading strategy is complete if its entry signals aren't accompanied with a good working exit technique that allows you to hold on to your profits.

A trailing stop — a stop-loss order that follows a trade as the market progresses — is one technique traders use to protect open trade profits and prevent winning trades from turning into losers.

We'll look at a few of the different ways traders approach trailing stops and analyze how these techniques perform when subjected to extensive testing.

Defining trends and holding profits

Ever since the earliest days of technical analysis, an uptrend has been defined as a market that continues to move higher without penetrating the low of the most recent retracement, or pullback. For a downtrend, the opposite holds true.

Figure 1 shows an extended uptrend: The dashed and solid lines are successive relative highs and relative lows, respectively. In general terms, as long as the market keeps making higher highs and higher lows, the uptrend is still in effect. When this basic rule is violated, the market is either in a consolidation phase or potentially beginning a reversal.

In this example, the relative lows function as support levels and represent a succession of higher stop levels for a long position — a basic trailing stop technique. For example, as the market pushes above another relative high, the most recent relative low becomes the new stop level.

There is, however, one major problem in trying to use this kind of trailing stop strategy: If an uptrend is characterized by continuously higher highs and higher lows, which highs and lows should we use? Using many of the progressively higher stop levels in Figure 1 would result in giving back sizable profits. Also, these levels were chosen visually; others, either of greater or lesser magnitude, could have been selected. Which ones would best limit risk and maximize gain? It may seem obvious in retrospect,

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FIGURE 1 RELATIVE HIGH/LOWS AS TRAILING STOPS

In an uptrend, each successively higher low (solid lines) can function as a trailing stop point. The challenge is to decide which highs and lows to use.

($COMPX) Nasdaq Combined Composite
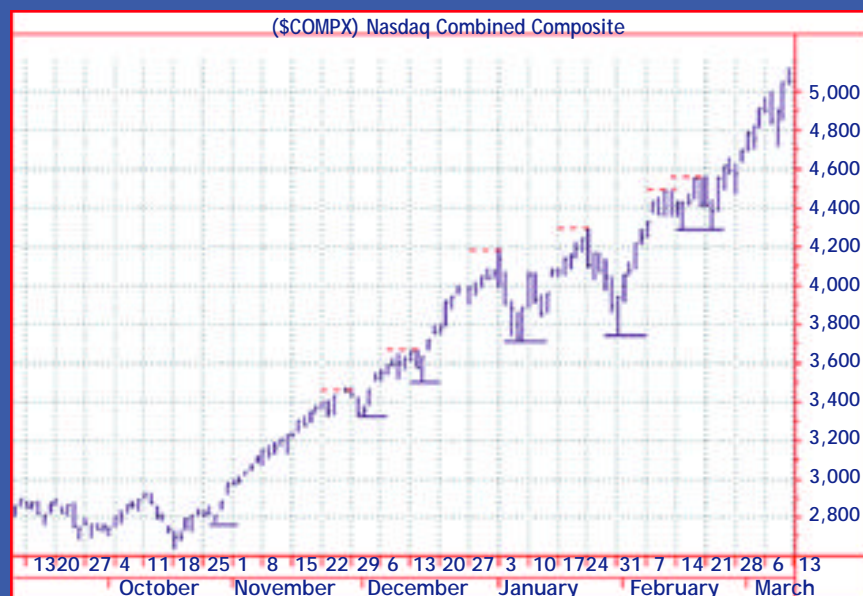
Source: www.windowonwallstreet.com

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but it's impossible to know in real time, as price action is unfolding.

A simple, if not perfect, way to work around this is to use the longest time-frame price bars (15-minute, hourly, daily, weekly, etc.) you can given your typical trade length. The object is to filter out as much market "noise" as possible without losing too much of the price information you need to make your trades. For instance, if your trades normally last no more than two or three weeks, use only daily bars, comparing the current bar only with the immediately preceding bars as the market evolves. That is, in an uptrend, today's high and low should be higher than yesterday's high and low. If they are not, the market has given you its first warning sign of pending consolidation or even trend reversal. Notice in Figure 1 how (even in this strongly uptrending market) a lower low is more likely to be followed by another lower low than a higher low.

If you're a longer-term trader, use only weekly or monthly bars to filter out the noise that comes with the daily price action. In the previous example (with a trade length of a few weeks), you also could have used weekly bars, but then

FIGURE 2   MOVING AVERAGE TRAILING STOP

A moving average also can function as a trailing stop (exiting on penetration of the average), but a too-long average will expose you to excessive risk, and a too-short average will take you out of trades prematurely.

Source: www.windowonwallstreet.com
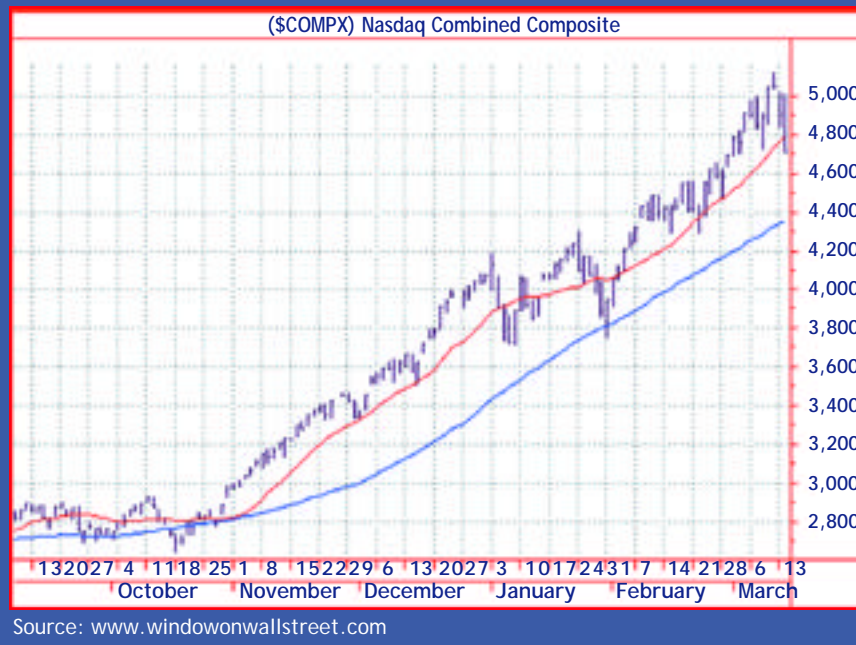
your trades would have lasted for only two or three bars and you would have filtered out too much of the price action you are trying to capitalize on.

The same principle also holds true if you're an intraday trader. For instance, if it is possible to achieve essentially the same results (without losing too much detail) using hourly bars as it is 15-minutes bars, use the former.

Using this reasoning we can construct two trailing-stop strategies. The first strategy simply uses the most recent high or low and will, for example, signal an exit for a long position as soon as tomorrow's price moves below today's low (reverse for short positions).

The second strategy is similar to the first, except that it signals an exit on a move below yesterday's close instead of yesterday's high or low. The reason is that the closing price might be more significant than the other price extremes during the day; if the trend is strong enough it is reasonable to assume that a two-day old closing price should not be overlapped if the market is going to continue to trend.

A third trailing-stop strategy would be to use a moving average: You would exit your position if price retraced enough to penetrate the moving average. The problem here is because moving averages lag price action, the faster the market moves, the farther away the average will be from the current price and the more profit you will give back when the market turns against you — adding volatility to your account and anxiety to your life. But by using a shorter (faster) average you will be stopped out too soon or at the least opportune moments. Figure 2 shows how a longer-term (blue) average can expose you too much risk, while a shorter-term average (red) gives you very little "breathing room." The problem then becomes one of picking the moving-average length that will allow you to trade as profitably as possible as often as possible.

One way to determine the best moving-average length for a trailing stop is to base it on the size of the market move you're trying to catch and what your most profitable trade length typically is. For example, for most short-term inter-

FIGURE 3 TRAILING STOP STRATEGY 1

Exit tomorrow on move above/below today's high/low (plus safety factor amount).
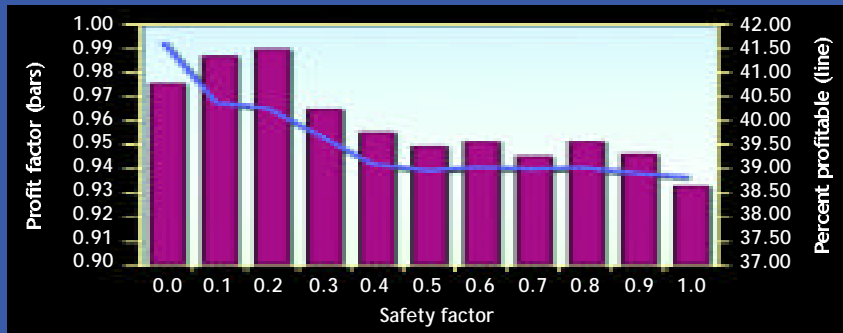
FIGURE 4 TRAILING STOP STRATEGY 2

Exit tomorrow on move above/below yesterday's close (plus safety factor amount).
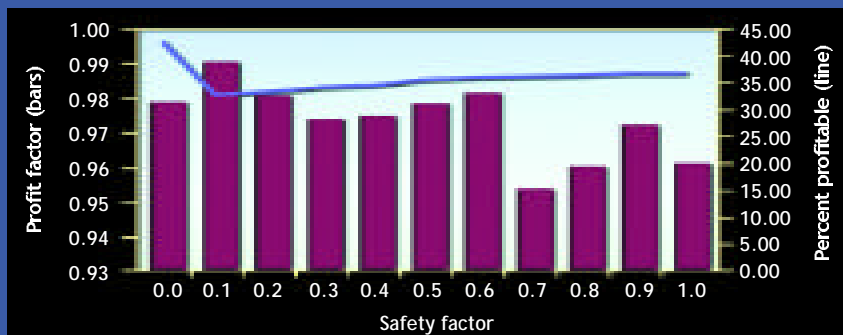
FIGURE 5 TRAILING STOP STRATEGY 3

Exit on move above/below moving average (plus safety factor amount).
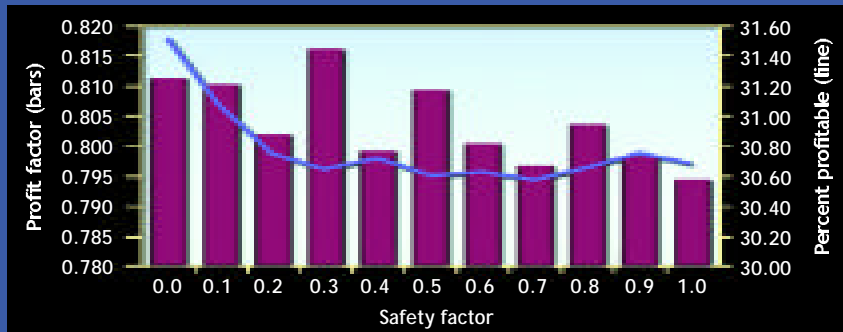
FIGURE 6 TRAILING STOP STRATEGY 4

*Exit on move more than 50 percent of average true range
(plus safety factor amount) above/below the most reent close.*

day trading strategies the optimum number of bars per trade seems to fall in the eight-to-10 days region. If that holds true for your strategy as well, then chances are this also will be the best look-back period for your moving average and other indicators.

The principle regarding the length of the look-back period can be used to create a fourth trailing-stop strategy. For instance, during a non-trending, neutral day, tomorrow's price action is likely to fluctuate about the same amount above and below today's closing price. But if the market is in an uptrend or downtrend, price should fluctuate more than 50 percent of the day's range above or below today's close, respectively.

These fluctuations can then be compared to the average true range (a volatility calculation; see "True range calculation") for the look-back period in question. If the price fluctuations exceeded what could be expected (based on the average true range) we would have an early warning sign there might be a change of direction on the horizon. In other words, you would exit a long position if the stock moved more than half the average true range below the most recent close (reverse for short positions).

How do these four strategies work in the stock market? Figures 3 through 6 show the results from testing these four trailing-stop strategies with a safety factor (a buffer to the original stop amount, see below) added to each one of them. Each strategy was tested on the 30 Dow Jones Industrial Average stocks from January 1990 to February 2000. "Programming trailing stops" (opposite page) shows the code for programming each of these strategies in Omega Research's TradeStation software.

The safety factor was added because many times the market "knows" where the most obvious stop levels are located and takes them out with a swift move before resuming in its original direction. The remedy for this is to take a slightly larger risk by placing the stop a little bit further away from the current price. For example, for a trailing stop that would exit a long trade on a penetration of the lowest low of the last two bars, a safety factor of ¼ could be added, so the stop would become a ¼-point below the lowest low of the last two bars. A safety factor is a way of giving each trade a little margin for error and you a way of not

running with the crowd. For strategies 3 and 4, we used a fixed look-back period of eight days.

To make sure that we really tested the exit techniques and nothing else, a random entry technique was used. No commissions were deducted. To compare and rank our findings we used the profit factor and the percentage profitable trades. (The profit factor is gross profit divided by gross loss, which means that if it is above 1, we made more money than we lost.)

Exit strategies 1, 2 and 3 didn't work at all — none of the variations we tested had a profit factor of 1 or above, as shown in Figures 3 to 5. Interestingly, strategies 1 and 3, which are the most basic techniques, used by many traders, did not turn out to be the best strategies in any stock, no matter what safety fac-

tor was used. This means that these strategies are very sensitive to the type of entry technique used and should, therefore, only be paired with entries that have a high probability of moving immediately in your direction.

Strategy 3 also suffers from the fact that you need to be on the right side of the moving average when you enter the trade, which makes it very difficult to use in a short-term strategy where it is crucial to pick as many tops and bottoms as possible. Strategy 4, on the other hand, worked very well, even with a random entry, with a safety factor of 0.5 percent producing the best results.

To see how strategy 4 (with a safety factor of 0.5 percent) might work with a specific entry method, we added it to the entry technique developed in "Clear-cut pattern trading" (p. 46). The entry tech-

nique uses a combination of spike and reversal days to identify potential swing points. Table 1 summarizes the results of testing this combination on the same test data used above.

The top half of Table 1 shows the combined results for both long and short positions. However, because most people trade primarily on the long side of the market, the bottom half of the table shows the result for long positions only: 46 percent were profitable, for an average profit of $96,614 per year (in today's market value), trading 1,000 stocks per market.

With an initial account balance of $547,876 (calculated as twice the sum of the margin requirements for all the stocks) and taking into account the average time spent in the market (27 percent), this would equal a return of close to 18 percent per year.

Trailing stops represent a trade-off: They can help lock in profits and reduce risk in your trading plan at the expense of overall profitability. The challenge is to find a trailing stop that prevents winning trades from turning into losers but gives winners as much of a chance as possible to reach their maximum profitability.

The tests shown here reveal that some of the more basic techniques used by traders don't leave room for improvement. The trailing-stop technique based on a move that exceeds an amount determined by current volatility (via the true range calculation) showed visible improvement over the other techniques. 🎧

PROGRAMMING TRAILING STOPS

The following TradeStation code can be used to program the four trailing-stop techniques described in the article.

```
If MarketPosition <> 0 Then Begin
    If StopSwitch = 1 Then Begin
        ExitLong Tomorrow on Low * (1 - SafetyFactor/100) Stop;
        ExitShort Tomorrow on High * (1 + SafetyFactor/100) Stop;
    End;
    If StopSwitch = 2 Then Begin
        ExitLong Tomorrow on Close[1] * (1 - SafetyFactor/100) Stop;
        ExitShort Tomorrow on Close[1] * (1 + SafetyFactor/100) Stop;
    End;
    If StopSwitch = 3 Then Begin
        ExitLong Tomorrow on Average(Close, LookBack) * (1 - SafetyFactor/100) Stop;
        ExitShort Tomorrow on Average(Close, LookBack) * (1 + SafetyFactor/100) Stop;
    End;
    If StopSwitch = 4 Then Begin
ExitLong Tomorrow on (Close - Average(TrueRange, LookBack) * 0.5) * (1 - SafetyFactor/100) Stop;
ExitShort Tomorrow on (Close + Average(TrueRange, LookBack) * 0.5) * (1 + SafetyFactor/100) Stop;
    End;
End.
```

Order up
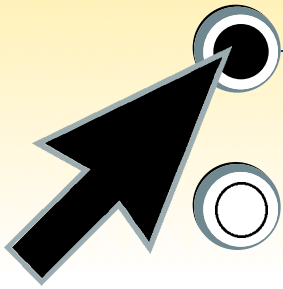
Getting in the market starts with your trade order, but there's (a little) more to it than merely clicking the **"Buy"** or **"Sell"** button. Read on to understand the peculiarities of different order types.

BY MARK ETZKORN

Trade orders come in all shapes and sizes: orders to get you in a trade, orders to get you out of a losing trade and orders that are only executed at particular times. Before you start trading, it's important to know the different methods at your disposal and understand the advantages and disadvantages of each.

We've put together a quick study guide that should make things less confusing and give you a little more confidence when you're ready to start trading. Before we explain different order types, though, let's get some basic definitions out of the way.

At any given time in a stock, option, currency or future, there is a lowest price at which sellers are willing to sell (the offer or ask) and a highest price at which buyers are willing to buy (the bid). The difference between the two is called the "spread" or the "bid-ask spread."

Figure 1 shows a hypothetical stock with a current bid of 87 and an offer of 87⅛. The highest price buyers are currently willing to pay for the stock is 87; sellers will only let it go for 87⅛. The current bid-ask spread is ⅛. The number of shares currently being bid and offered (the "size") also is shown. In this example, 500 shares are bid at 87 and 1,500 are offered at 87⅛ (stocks are quoted in "round-lots" of 100 shares, so 5 and 15 correlate to 500 and 1,500):

If you were willing to pay 87⅛ for

1,500 shares, you would enter your buy order and "lift" (or "take out") the offer; if you wanted to sell the 500 shares bid for at 87, you would enter your order and "hit" the bid.

Now that you have a little basic language under your belt, it's time to delve into the various types of trade orders.

Giving orders

Not only do different order types work in different ways, they often have different price tags attached to them. Also, while most brokerages accept the same basic menu of order types, they will reserve the right not to accept certain

kinds, either because of the potential difficulties of executing them or because some orders can expose them to unwanted risk.

Always check with your brokerage to make sure you know what kinds of orders they accept and which have extra commission fees attached to them.

Figure 2 is an example of an online

order-entry interface. Entering a particular type of trade order is typically a matter of clicking a few buttons and typing in a ticker symbol and price. (Remember, though, you never know when you'll have to call your broker and do things the old-fashioned way.)

The major order types we'll review are market orders, limit orders, stop orders, good-till-canceled orders, day orders, fill-or-kill orders, all-or-none orders, market-on-close orders and market-if-touched orders.

▼ **Market order:** An order to be executed immediately at the best price current-ly available.

Usually, a buy market order will be filled at or near the current ask price and a sell market order will be filled at or near the current bid price. If you called a broker on the phone, you would enter a market order by saying: "Buy 100 shares of Go2Net (GNET) *at the market.*"

The advantage of market orders is

FIGURE 2 ONLINE ORDER ENTRY

A typical online order entry screen for stocks. The order ready to be entered is to sell 500 shares of stock XYZ at 67⅝, good-till-cancelled.

Order entry - Stocks

- ○ Buy
- ● Sell
- ○ Buy to cover
- ○ Sell short

500   XYZ

67⅝

- ○ Market
- ● Limit   ○ Day
- ○ Stop   ● Until cancelled (GTC)
- ○ Stop limit

--Additional instructions-- ▼
All-or-none (AON)
Fill-or-kill (FOK)

Preview order before entering

FIGURE 1 THE BID-ASK SPREAD

Stock	Bid	Ask	Bid size	Ask size
XYZ	87	87⅛	5	15

that a fill of some sort is guaranteed (barring suspended trading or other market disruptions). If you really need to get in or out of the market immediately, and are not concerned about the price, market orders do the trick.

On the down side, market orders give you no control over the price at which your trade will be executed. In fast, volatile markets, this can result in a fill far away from where the market was when you entered the order.

Market orders are usually the cheapest type of order to place because they place the least demand on a brokerage.

▼ **Limit order:** An order to buy or sell at a specific price, as in "Buy 100 Oracle (ORCL) at 90" or "Buy 100 ORCL at 90 *limit.*"

If you know you want to buy or sell at a particular level, use a limit order. The advantage is you can never be filled at a price worse than the one you specify (and you can sometimes get a better fill, but don't count on it). The catch is that you might not get filled at all. Limit orders generally cost more than market orders.

▼ **Stop order:** An order to buy or sell if a specified price (the stop price) is reached or passed. There are two specific types of stop orders: stop-loss and stop-limit.

A *stop-loss* order is a buy order above or a sell order below the current market designed to cap losses on a trade. For example, if you were long Geron (GERN) at 50 and wanted to risk no more than a point on your trade, you would enter a *sell stop* at 49: "Sell 100 GERN at 49, stop."

A stop order becomes a market order as soon as a trade occurs at that price, so there is no guarantee you will be filled precisely at your desired stop level. If you are trading a volatile or illiquid stock, your odds of getting an exact fill decrease.

The *stop-limit* order is designed to address this problem. It stipulates a worst price at which a stop order can get filled. The GERN stop order described above could be transformed into a stop-limit order as follows: "Sell 100 GERN at 49, stop, *48 limit.*" This order guarantees that your stop (which becomes a market order once its price is touched) can be filled no lower than 48. This might sound great, but the catch is the order

might not get filled (or only partially filled) if the market is dropping quickly. In that case, the order, or the remainder of the order, will stay in the market as a standard limit order (in this example, at 48). If the stock keeps tanking, you're stuck in a losing trade.

You also can use stop orders to enter trades (confirm with your broker regarding particular markets). For example, if you believe a move above 50 in Dell (DELL) is a sign of a monster rally, you could enter a buy-stop order ("Buy 100 DELL at 50, stop") to get into the market as this move gets underway.

▼ **Day order:** An order that is good for one day only — it will automatically be cancelled at the end of the day's trading session.

▼ **Good-till-cancelled (GTC):** An order that remains active until you or your brokerage cancels it (or, in the case of options and futures, until expiration). Also called an open order.

If you didn't get filled today and you know you want to buy at the same price tomorrow (or the day after), use a GTC order. However, most brokers set a limit on how long a GTC order remains active (usually between 30 to 60 days), so it's important to check with them. If they have no expiration date, it's up to you to cancel it, if necessary, to avoid unwanted fills.

▼ **Market on close (MOC):** Executed as a market order as close to the end of the trading day as possible. Many trading strategies revolve around the closing price and are structured around entering

and exiting trades on the close. Also, pure day traders use MOC orders to make sure they liquidate all positions before the day ends.

▼ **Market on open (MOO):** Same as the MOC order, except that it is executed when the market opens.

▼ **Fill-or-kill (FOK):** An order that must be filled immediately or not at all. Typically used to capitalize on short-lived market opportunities.

▼ **All-or-none (AON):** An order that must be filled in its entirety or not at all. If you're bidding on 500 shares and only 250 are available to buy, your AON order would not be filled.

▼ **Market-if-touched (MIT):** A limit order that becomes a market order when a trade occurs at the limit price. For example, if you have an order to sell 100 shares of Human Genome Sciences (HGSI) at 140 "market-if-touched," your order would become a market sell order as soon as the first print occurs at 140 on the ticker. You could get filled exactly at your price, at a better price or at a worse price.

▼ **Contingency orders:** A generic term to describe orders that are dependent on certain market conditions to be executed. For example, you may want to buy a particular stock if its sector index establishes a new high and the S&P 500, Dow, and Nasdaq indices are all up on the day. Or, you may want an order executed when another order is filled or cancelled.

Your broker may or may not accept such orders. Online discount brokers do not enable you to enter such trades, although some higher-level direct access firms are beginning to offer such capabilities. For the most part, you will only be able to use contingency orders with a full-service broker with whom you have a close relationship (i.e., you have a lot of money in your account).

The type of order you use depends on a particular trading situation. For the most part, the vast majority of trading can be done with market, limit and stop-loss orders.

Also keep in mind that the more exotic the order type, the less likely your broker will execute it (or the more it will charge you for doing so). 🎧

Options can add flexibility to any trading plan.
Here's a simple, time-tested option strategy that will enable
you to profit even when the market isn't rocketing to the moon.

Taking cover with OPTIONS

BY JERRY WOOD

There was a time — it seems so long ago — before rocketing initial public offerings and 80 percent Nasdaq returns, when stocks didn't go up every day. It may be hard to believe now, but over the years there have been long stretches when equities have simply refused to double every other month.

The odds are that we will see this kind of environment — which is much more representative of the market's historical norm — once again. When we do, how can an ambitious trader make money under such dire conditions?

One possibility is to dust off a handy option strategy that worked well during the dark days of trading ranges and single-digit annual returns: the covered call.

The stock–option combination

A covered call position is the short sale of one call option for every 100 shares of underlying stock. You can either sell the call and buy the stock at the same time or sell the call on stock you already own. Here's a simple example of a covered call position in America Online (AOL):

Trade Date: Jan. 14, 2000	Cost
Stock position: Own 100 shares AOL @ $63	$6,300
Option position: Sell 1 April 65 AOL call @$8½	($850)
Total cost of trade	$5,450

As the seller (also referred to as the *option writer*) of the April 65 call, you receive $850 cash from the buyer. In return, you are obligated to sell your 100 shares of AOL to the buyer (at the *strike price,* $65 a share), if he chooses to exercise his option. This obligation lasts until the April option expiration date.

Advantages

Because the call buyer does not take the full risk of stock ownership (or the interest cost associated with that ownership) he pays a premium — in this case $850 — for the right to buy your stock. This premium is the golden goose of covered call selling. It enables you to reap the two main benefits of the position:

• **Increased return on investment.** You immediately receive income — $850, in our example above. Regardless of the stock's movement over the life span of the option, that money is yours to keep.

• **Greater downside protection for your stock position.** The money you get from selling the call effectively lowers the purchase price of the stock. In this case, the total cost of the position is only $5,450. If the stock price drops, you will lose substantially less than if you purchased the 100 shares outright for $6,300 and did not sell the call.

Disadvantages

The premium you receive for selling the option does not come without a catch. Your obligation to sell the stock at the
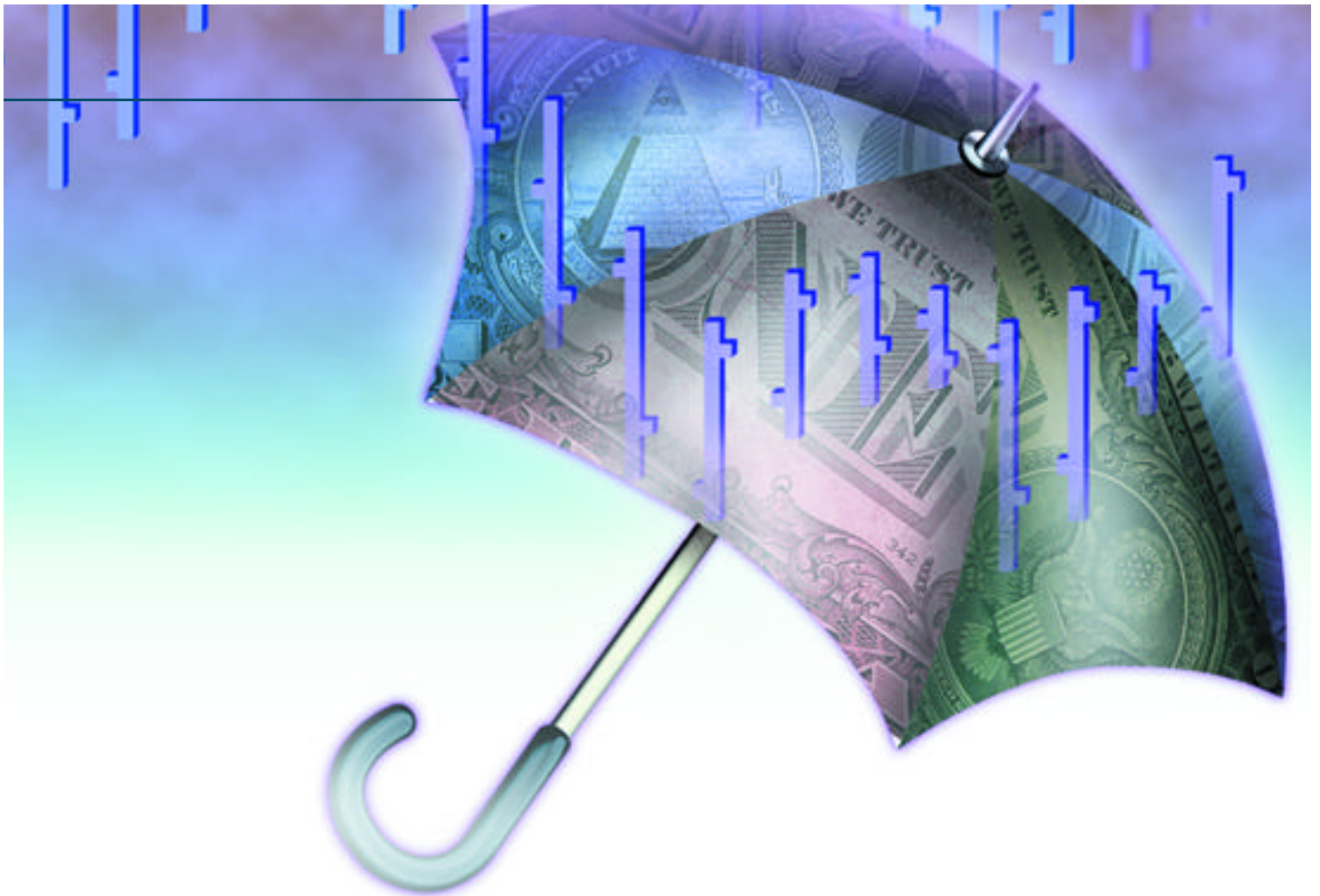
strike price has two intertwining disadvantages:

• **Risk of being forced to sell stock.** When the stock moves above the strike price, you risk having to sell your stock to the call buyer who exercises his option. There are ways to mitigate this risk, but if you own a stock that you simply cannot bear to sell (possibly because of tax consequences), think long and hard before selling calls against it.

• **Loss of upside profits.** Obviously, if you are forced to sell your stock you will give up the potential profits of any increase in your stock above the strike price. For example, if AOL was to climb to $90 at April expiration, you are still obligated to sell your stock to the call buyer at the $65 strike price.

Stocks you are neutral or moderately bullish about are the best candidates for covered calls. While the maximum profit will always occur when the stock price finishes above the strike, selling calls against a stock that you are strongly bullish on is not a good idea, as you will not profit more from a larger price increase. Conversely, stay away from stocks you feel will drop significantly.

Although the premium you received for the call will reduce your losses, a loss is still a loss and such stocks are best avoided altogether.

The next step is to consider the details that will determine the position's likelihood of success: the strike price and the expiration date of the call option.

Choosing the best strike price

The most important decision when putting on a covered call position is whether to sell the in-the-money (ITM), at-the-money (ATM) or out-of-the-money (OTM) calls against your stock.

The following are just a few of the choices you would have faced had you wished to sell calls on Jan. 14 against AOL stock trading at $63 a share.

In-the-money call:	Sell April 55; call @14
At-the-money call:	Sell April 62.5; call @ 9¾
Out-of-the-money call:	Sell April 70; call @ 6¾

Which one should you have sold against your stock? That would depend, frankly, on your opinion about the direction of AOL over the course of the next three months. Sell the ITM call if you are slightly bearish, the ATM call if you are neutral and the OTM call if you are moderately bullish.

In this example, if you think AOL might drop, the best call to sell would be the April 55 option (the ITM strike price). Because the downside break-even point of the covered call position is the stock price minus the call price, the April 55 covered write would result in a break-even price of $49 at April expiration ($63 - $14 = $49). The downside break-even levels for the April 62.5 (ATM) call and the April 70 (OTM) call would be $53¼ and $56¼, respectively.

However, if you like the near-term prospects of the stock, but are not wildly bullish (in which case selling any call would not be prudent), the April 70 would provide the greatest possible profit potential: $70 (strike price) - $63 (stock price) + $6.75 (call price) = $13.75. Selling the ATM 62.5 calls would reflect a neutral stance on the stock. Figure 1

Stocks you are **neutral** **or moderately bullish** about are **the best candidates** for covered calls.

FIGURE 1   COMPARING STRIKE PRICES

The profit potential of the covered call position hinges upon the strike price of the option.
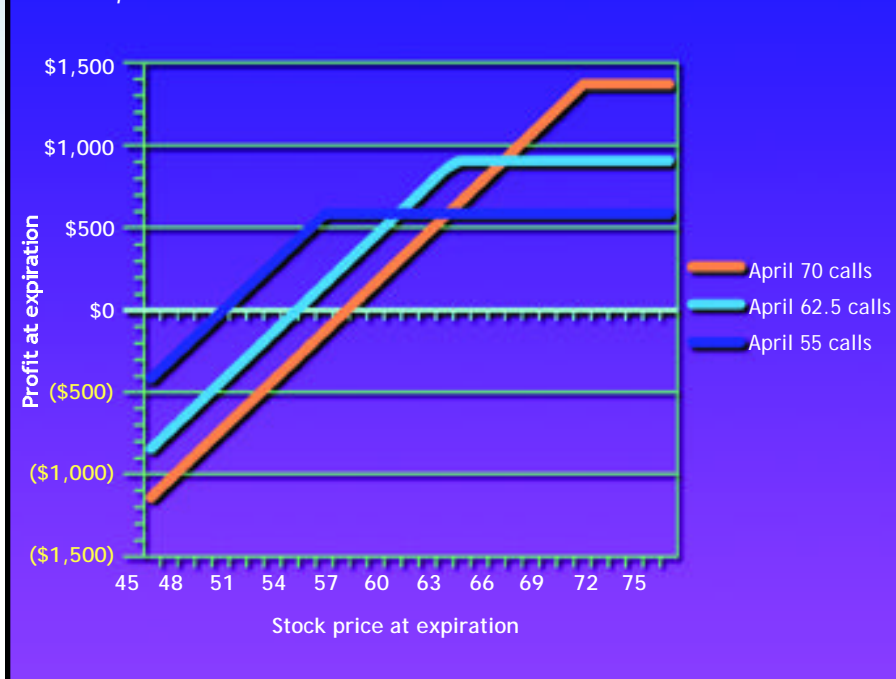
(above) better illustrates the risk-reward trade-offs inherent in choosing a particular strike price in a covered call position.

Choosing the best expiration date

As an option moves closer to its expiration date, it continues to lose time premium (call price above intrinsic value). This is called *time decay* and it is always working in the call seller's favor. This decay, however, does not occur at a steady, linear pace. It increases as the option gets closer to expiration. For this reason, covered call positions soon to expire offer faster profits. The problem is that the smaller call price also offers less downside protection.

These trade-offs must be considered when determining which expiration month to sell. Generally, the most attractive covered call opportunities will exist within two to six months before expira-

tion. This offers a good compromise between risk and reward.

Calculating return on the strategy

Perhaps the best way to examine call-writing opportunities is to compute the percentage returns, both simple and annual, that various strategies will yield. Simple returns are fine when evaluating positions with the same expiration date, but return on investment should be annualized when comparing positions expiring on different dates.

The trader should compute two different figures for each position. The first is the return if the stock is unchanged at expiration from the original purchase price. The second is the return if the option is exercised (the stock closes above the strike price at expiration). The following table demonstrates how the *return if unchanged* would be computed

for the three possible AOL covered-call candidates.

Covered calls: return if unchanged

Strike price	55	62.5	70
Expiration value of 100 shares AOL @ $63	$5,500 (exercised)	$6,250 (exercised)	$6,300 (call expires)
Subtract net investment ($6,300 minus proceeds of one AOL call)	- 4,900	-5,325	-5,625
Net profit	$600	$925	$675
Return to expiration (profit/net investment)	12.2 %	17.4%	12.0%

Because the 55 and the 62.5 calls both finished in the money, the *return if exer - cised* is the same as the *return if unchanged.* However, the *return if exer - cised* for the 70 covered call position will be different. If the stock closes above the 70 strike at expiration, it will be sold at $70 a share, resulting in $700 more profit than if the stock was unchanged at expiration. This would raise the profit to $1,375 and result in a return on investment of 24.4 percent.

These numbers, for simplicity, ignore commissions and dividends. Yes, some firms still do pay dividends (though AOL does not), and payments received during the duration of the position should be added to the net profit figure. Conversely, commissions should be deducted.

Also, the use of margin to buy stock will increase your returns, but keep in mind that margin is a double-edged sword and will accentuate your negative returns if the stock falls significantly.

Evaluating your rate of return

While you always can increase the possible rate of return by selling cheap far OTM calls, this would greatly dilute the two main objectives of the strategy: increased income and greater downside protection. Ultimately, what creates the profit potential in covered call writing is the amount of *time premium* that exists in the calls you sell. The higher the call's premium, the greater the return.

The variables that influence call premium and, in turn, the rate of return of a covered call are:
• the distance of stock from strike price,
• the time remaining until expiration;
• dividend payments,
• prevailing interest rates and
• the volatility of the underlying stock.

The most important of these pricing variables and the key to evaluating covered call opportunities is volatility. If the market expects large future price swings in a stock, then that volatility assumption *(the implied volatility)* will be reflected in higher call prices — and greater rates of return and downside protection for the covered writer. These payoffs, of course, come at a price. A volatile stock is more likely to move out of the profit range of the position and result in a loss for the trader.

For example, a three-month rate of return of more than 17.4 percent on our ATM AOL position is high. This works out to a 68 percent annual return — very rich, even by today's standards. That high return arises because predicting the price of a volatile stock like AOL three months in the future is very difficult indeed.

The trick for the covered call writer is to sell calls on a stock that is likely to experience less actual volatility in the coming months than the implied volatility is forecasting. Superior above-market returns can be generated if this is done consistently. Using a stock that has recently made a large move and appears

FIGURE 2   THE VOLATILITY COMPONENT

Another key element of the covered call strategy is volatility. Here, the differences between a higher-volatility stock (AOL) and a lower-volatility stock (DuPont) are shown.
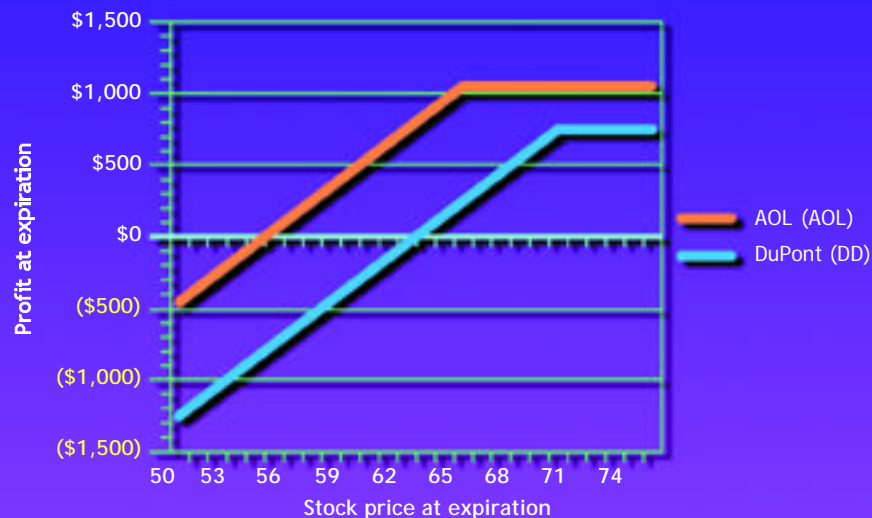
to be settling into a trading range is often the best way to take advantage of this volatility discrepancy.

Figure 2 illustrates the disparity of the returns between a high-volatility stock

	Buy 100 AOL @ 63 & Sell 1 April 65 Call @ 8½	Buy 100 DD @ 67½ & Sell 1 April 70 Call @ 4½
Expiration value	$6,500	$7,000
Cost of position	(Stock price – Call price) 5,450	[Stock price – Call – Div. Rec. ($35)] 6,265
Net profit	$1,050	$735
Return	(19.2%)	(11.7%)

(AOL) and a lower-volatility stock (Du Pont). The differences are obvious. The Du Pont (DD) covered call rate of return is lower and the break-even level is higher, even with the dividend paid by Du Pont factored in. The table above breaks down the numbers.

Exercise risk

One of the big worries of novice option traders is the threat of getting short calls exercised and having to sell stock. This is especially troublesome if you will owe significant taxes on the sale of your stock.

The best way to avoid this is to simply buy the call back when the amount of premium above intrinsic value gets small enough.

For example, consider the AOL April 62.5 covered call position. Imagine the stock rallies to $75 a few days before the expiration date, giving the call an intrinsic value of $12½. The calls are trading at 12⅜, which leaves very little profit potential in the position, so you decide to just buy back the calls to avert the possibility of losing the stock. Remember, equity calls can be exercised anytime, not just on the expiration date. They usually will not be exercised, however, until very close to expiration when the time premium gets very small. After buying back the calls, you can keep the stock and sell

calls with a more distant expiration, if you desire.

Alternately, if it's difficult to buy the calls back at a fair price, you can buy an identical number of underlying shares on the open market by expiration day and use that new stock to deliver against the calls. (Important note: You must tell your broker to deliver the newly purchased shares and not the original stock.)

It is essential to remember that no matter how far out of the money the call is, unless you buy it back, you must hold onto the stock until the option officially expires on the Saturday following expiration day. Most brokerage firms do not allow you to hold uncovered short calls, and if they do, the margin is very high. (Keep this in mind when entering the trade; you must buy the stock first.)

If you are not already long the underlying stock, the best way to minimize your risk is to enter the covered write as a single order. Tell your broker the total cost you wish to pay, which is the price of the stock minus the desired price of the short call.

Risk protection

There are protective measures you can take if the stock moves too far from the strike price. If the stock moves down to where there is little downside protection value left in the short call, you can buy back the cheap call and sell a more expensive call with a lower strike. Conversely, if the stock rises to a point where almost all of the profit potential

has been realized, you can buy back your deep ITM call and sell a higher ATM or OTM call to gain additional income.

Which position is best?

Numerous software programs claim to unravel the mystery of options and their complex formulae and cryptic Greek terms. Some of them are good at sorting through the immense stacks of equity and index option data, but keep in mind these numbers and percentages are only tools, not magic bullets. They can be employed to assess and compare risk, but will not tell the whole story.

In general, selling ATM or slightly OTM calls with a two- to six-month time frame is the optimum covered call strategy. But ultimately, trading is more art than science and the trader must sort through a full plate of factors, such as stock price expectation and volatility, when determining whether to enter into a trade.

Stock prices can do five things: They can stay the same, go up a little, go up a lot, go down a little or go down a lot.

The trader or investor who sells covered calls against his stock will likely do better than his stock-only counterpart under four of these five scenarios. Not bad odds considering equity prices just might not explode to the upside forever. ☏

FIGURE 1 INVESTOR: FORM 1040

FIGURE 2 INVESTOR: SCHEDULE A

A tale of TWO RETURNS

BY TED TESSER, CPA

Confused by the maze of tax rules and regulations? Don't worry, when it comes to your trading profits, the most basic issue — are you a trader or an investor? — is the one that matters the most. Take a look at this case study and begin preparing for next year.

Last month, I discussed the many advantages a trader has over an investor. What follows is a real-life story that illustrates the impact of these advantages.

A prospective client was referred to me last year with a tax problem. By his prior accountant's calculations, he owed the government almost $88,000 in taxes on what he considered to be a modest profit.

The details of Mr. N. Vestor's situation were as follows: He had recently started managing his own investment account. In his first year of doing so full time, he did quite well, earning a gross profit of just more than $300,000. Unfortunately, he had many expenses that consumed a great part of his profits.

He spent more than $60,000 on data feeds, computers, trading systems, office furniture, etc. His interest on a margin loan was more than $50,000 and he attended many investment sem-

Form 1040 (1998) A. TRADER 123-45-6789 Page **2**

Tax and Credits	34 Amount from line 33 (adjusted gross income)	34	102,341
	35 a Check if: ☐ **You** were 65 or older, ☐ Blind; ☐ **Spouse** was 65 or older, ☐ Blind.		
	Add the number of boxes checked above and enter the total here ▶ 35a		
Standard Deduction for Most People Single: $4,250 Head of household: $6,250 Married filing jointly or Qualifying widow(er): $7,100 Married filing separately: $3,550.	b If you are married filing separately and your spouse itemizes deductions or you were a dual-status alien, see page 29 and check here ▶ 35b ☐		
	36 Enter the **larger** of your **itemized deductions** from Schedule A, line 28, **OR standard deduction** shown on the left. **But see** page 30 to find your standard deduction if you checked any box on line 35a or 35b or if someone can claim you as a dependent	36	4,250
	37 Subtract line 36 from line 34	37	98,091
	38 If line 34 is $93,400 or less, multiply $2,700 by the total number of exemptions claimed on line 6d. If line 34 is over $93,400, see the worksheet on page 30 for the amount to enter	38	2,700
	39 **Taxable income.** Subtract line 38 from line 37. If line 38 is more than line 37, enter -0-	39	95,391
	40 **Tax.** See page 30. Check if any tax from a ☐ Form(s) 8814 b ☐ Form 4972 ▶	40	24,429
	41 Credit for child and dependent care expenses. Att. Form 2441 — 41		
	42 Credit for the elderly or the disabled. Attach Schedule R — 42		
	43 Child tax credit (see page 31) — 43		
	44 Education credits. Attach Form 8863 — 44		
	45 Adoption credit. Attach Form 8839 — 45		
	46 Foreign tax credit. Attach Form 1116 if required — 46		
	47 Other. Check if from a ☐ Form 3800 b ☐ Form 8396 c ☐ Form 8801 d ☐ Form (specify) — 47		
	48 Add lines 41 through 47. These are your **total credits**	48	
	49 Subtract line 48 from line 40. If line 48 is more than line 40, enter -0- ▶	49	24,429
Other Taxes	50 Self-employment tax. Att. Sch. SE	50	
	51 Alternative minimum tax. Attach Form 6251	51	
	52 Social security and Medicare tax on tip income not reported to employer. Attach Form 4137	52	
	53 Tax on IRAs, other retirement plans, and MSAs. Attach Form 5329 if required	53	
	54 Advance earned income credit payments from Form(s) W-2	54	
	55 Household employment taxes. Attach Schedule H	55	
	56 Add lines 49 through 55. This is your **total tax** ▶	56	24,429
Payments Attach Forms W-2, and W-2G on the front. Also attach Form 1099-R if tax was withheld.	57 Federal income tax withheld from W-2 and 1099 — 57		
	58 1998 estimated tax payments and amount applied from 1997 return — 58		
	59 a **Earned income credit.** Att. Sch. EIC if you have a qualifying child. b Nontaxable earned income: amt. ▶ and type ▶ — 59a No		
	60 Additional child tax credit. Attach Form 8812 — 60		
	61 Amount paid with Form 4868 (request for extension) — 61		
	62 Excess social security and RRTA tax withheld (see page 43) — 62		
	63 Other payments. Check if from a ☐ Form 2439 b ☐ Form 4136 — 63		
	64 Add lines 57, 58, 59a, and 60 through 63. These are your **total payments** ▶	64	0
Refund Have it directly deposited! See page 44 and fill in 66b, 66c, and 66d.	65 If line 64 is more than line 56, subtract line 56 from line 64. This is the amount you **OVERPAID**	65	
	66a Amount of line 65 you want **REFUNDED TO YOU** ▶	66a	
	b Routing number ▶ c Type: ☐ Checking ☐ Savings		
	d Account number		
	67 Amount of line 65 you want **APPLIED TO 1999 ESTIMATED TAX** ▶ 67		
Amount You Owe	68 If line 56 is more than line 64, subtract line 64 from line 56. This is the **AMOUNT YOU OWE.** For details on how to pay, see page 44 ▶	68	24,429
	69 Estimated tax penalty. Also include on line 68 — 69		

Sign Here Joint return? See page 18. Keep a copy for your records.

Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and complete. Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge.

Your signature — Date — Your occupation TRADER — Daytime telephone number (optional)
Spouse's signature. If a joint return, BOTH must sign. — Date — Spouse's occupation

Paid Preparer's Use Only
Preparer's signature — Date — Check if self-employed ☐ — Preparer's social security no.
Firm's name (or yours if self-employed) and address ▶ Waterside Financial Serv., Inc — EIN
7400 N. Federal Hwy, Suite B21 — ZIP code
Boca Raton, FL — 33487

SCHEDULE C (Form 1040)
Department of the Treasury Internal Revenue Service (99)

Profit or Loss From Business
(Sole Proprietorship)
▶ Partnerships, joint ventures, etc., must file Form 1065 or Form 1065-B.
▶ Attach to Form 1040 or Form 1041. ▶ See Instructions for Schedule C (Form 1040).

OMB No. 1545-0074
1998
Attachment Sequence No. **09**

Name of proprietor A. TRADER — Social security number (SSN) 123-45-6789

A Principal business or profession, including product or service (see page C-1) TRADER — B Enter NEW code from pages C-8 & 9 ▶ 523900

C Business name. If no separate business name, leave blank. — D Employer ID number (EIN), if any

E Business address (including suite or room no.) ▶
City, town or post office, state, and ZIP code

F Accounting method: (1) ☒ Cash (2) ☐ Accrual (3) ☐ Other (specify) ▶
G Did you "materially participate" in the operation of this business during 1998? If "No," see page C-2 for limit on losses — ☒ Yes ☐ No
H If you started or acquired this business during 1998, check here ▶ ☐

Part I Income

1 Gross receipts or sales. Caution: If this income was reported to you on Form W-2 and the "Statutory employee" box on that form was checked, see page C-3 and check here ▶ ☐	1	
2 Returns and allowances	2	
3 Subtract line 2 from line 1	3	
4 Cost of goods sold (from line 42 on page 2)	4	
5 Gross profit. Subtract line 4 from line 3	5	
6 Other income, including Federal and state gasoline or fuel tax credit or refund (see page C-3)	6	
7 **Gross income.** Add lines 5 and 6 ▶	7	

Part II Expenses. Enter expenses for business use of your home **only** on line 30.

8 Advertising	8		19 Pension and profit-sharing plans	19	
9 Bad debts from sales or services (see page C-3)	9		20 Rent or lease (see page C-5): a Vehicles, machinery & equipment	20a	5,050
10 Car and truck expenses (see page C-3)	10	3,115	b Other business property	20b	
11 Commissions and fees	11		21 Repairs and maintenance	21	3,166
12 Depletion	12		22 Supplies (not included in Part III)	22	5,069
13 Depreciation and section 179 expense deduction (not included in Part III) (see page C-4)	13	21,650	23 Taxes and licenses	23	
			24 Travel, meals, and entertainment: a Travel	24a	6,511
14 Employee benefit programs (other than on line 19)	14		b Meals and entertainment 8,711		
15 Insurance (other than health)	15		c Enter 50% of line 24b subject to limitations (see page C-5) 4,356		
16 Interest: a Mortgage (paid to banks, etc.)	16a		d Subtract line 24c from line 24b	24d	4,355
b Other	16b	51,357	25 Utilities	25	2,611
17 Legal and professional services	17	2,250	26 Wages (less employment credits)	26	
18 Office expense	18	4,561	27 Other expenses (from line 48 on page 2)	27	83,233
28 Total expenses before expenses for business use of home. Add lines 8 through 27 in columns ▶				28	192,928

29 Tentative profit (loss). Subtract line 28 from line 7 — 29 — -192,928
30 Expenses for business use of your home. Attach Form 8829 — 30 — 6,250
31 Net profit or (loss). Subtract line 30 from line 29.
● If a profit, enter on **Form 1040, line 12,** and ALSO on **Schedule SE, line 2** (statutory employees, see page C-6). Estates and trusts, enter on **Form 1041, line 3.**
● If a loss, you MUST go on line 32. — 31 — -199,178

32 If you have a loss, check the box that describes your investment in this activity (see page C-6).
● If you checked 32a, enter the loss on **Form 1040, line 12,** and ALSO on **Schedule SE, line 2** (statutory employees, see page C-6). Estates and trusts, enter on **Form 1041, line 3.**
● If you checked 32b, you MUST attach **Form 6198.**
32a ☒ All investment is at risk.
32b ☐ Some investment is not at risk.

For Paperwork Reduction Act Notice, see Form 1040 Instructions. — Schedule C (Form 1040) 1998

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inars that cost him almost $20,000 total.

Although he thought he had enough deductions to cover most of his taxable income, his prior accountant told him many, if not most, of these deductions would be lost. He had never heard of the Alternative Minimum Tax (ATM) — a situation I have found to be the case with many investors lately.

Figures 1 and 2 are from N. Vestor's original 1998 Federal tax return, before filing.

As you can see, the tax consequences of being classified as an investor were dire! He owed approximately $66,500 (Figure 1, line 68) in Federal tax. Another $22,500 in New York State and New York City taxes (not shown) gave him a total liability of almost $89,000.

Let's go over some of the lowlights of this sad tax return. Figure 2 shows that all the allowed "investment expenses" were taken below the line (they are deducted after total income is calculated) on Schedule A (the form used for individual itemized deductions). This has several implications for N. Vestor — none of them good. The possibility of tax-deductible expenses has been eliminated in many ways.

First of all, there is a general phaseout of deductions because N. Vestor's income was above a certain level. You will note that next to line 28 on Figure 2 there is the item "Reduction -$5,311." This is a reduction in N. Vestor's itemized deductions — the first haircut he has received.

There is also a specific phaseout of deductible investment expenses. Schedule A puts a "floor" on deductions equal to 2 percent of adjusted gross income. Line 25 of Figure 2 shows a "floor" of $6,030. Anything less than that amount cannot be deducted.

Furthermore, although N. Vestor spent approximately $50,000 on equipment (computers, furniture for his trading office, etc.), he was only able to deduct $5,000. Line 22 (Figure 2) shows a $5,000 depreciation deduction. N. Vestor will be able to depreciate the rest of these expenses over the next three, five or seven years. However, as you will see, some people are able to deduct the full amount in the year of purchase.

And, although N. Vestor spent almost $20,000 on seminars and private tutorials, none of those expenses were included on his schedule A as "investment expenses" (investment seminars are not deductible expenses on an investor's tax return).

The interest N. Vestor paid on his margin loan is reported on Line 13 (Figure 2), and although it is not specifically limited (because N. Vestor had a profitable year) it is not an above-the-line deduction. Also, N. Vestor was forced to elect his capital-gain income be treated as investment income, negating any future long-term capital gain treatment on transactions held more than a year (which would be taxed at a maximum 20 percent tax rate).

On the 1040 Form (Figure 1), notice no exemption was taken on line 38. This $2,700 exemption (based on N. Vestor claiming only himself as a dependent) was phased out to 0 because of income greater than $93,400. If that's not bad enough, it gets worse.

The real killer is found on line 51 of Figure 1. Even though the IRS has taken away as many deductions as they could, they now add back some of the ones they allowed and calculate an "Alternative Minimum Tax," in this case totaling $18,126.

N. Vestor becomes A. Trader

Upon re-examination of the facts and circumstances, and my review of N. Vestor's Trader Questionnaire (to be discussed in a future article) I discovered that he was, in fact, A. Trader in disguise. He met most of the criteria for being considered a business and, consequently, was entitled to many tax benefits bypassed by filing as an investor.

Upon completion of the revised tax return, the difference in total tax liability for Federal and State was quite significant.

The first major difference is rather than filing a Schedule A, the expenses of A. Trader are calculated on Schedule C (Figure 4) and deducted dollar-for-dollar on Form 1040. All of the "investment expenses" previously taken below the line on Schedule A, and then some, are now considered to be ordinary business expenses and deductible on Schedule C. Filing as A. Trader allows an increase of tax-deductible expenses in several ways.

First, deductions are now taken "above the line" as subtractions in arriving at adjusted gross income. This is the preferred

place for deductions, as they are used in calculating income *before* all the phaseouts, instead of after them. There is no phaseout of deductions on Schedule C.

Allowable depreciation has now increased from $5,000 to $21,650 because of the allowance of a section 179 election, which allows anyone with earned income to write off as much as $18,500 in business purchases. This enabled A. Trader to write off the first $18,000 of an asset purchase in 1998, and to depreciate the balance over the next three, five or seven years.

Additionally, A. Trader now also can include the $19,113 spent on trading seminars among his deductions, and he can fully deduct his margin loan interest without any impact on long-term capital gains rates (Figure 4, line 16b).

A. Trader also qualifies for the home office expense. Line 30 (Figure 4) shows he has another $6,250 in deductible expenses because he traded at home. And, there is now a full exemption amount of $2,700 on Figure 3, line 38.

Furthermore, A. Trader now has no Schedule A, no itemized deductions and in fact gets an additional $4,250 as a standard deduction (Figure 3, line 36).

Even better, there is now no Alternative Minimum Tax, as business expenses are not subject to this.

Table 1 compares and summarizes these two returns line by line.

Additionally, while N. Vestor pays $22,472 in state and local taxes, A. Trader pays just $10,167. So, A. Trader's total tax bill is $34,596 — a 61 percent reduction from N. Vestor's $89,017.

These benefits were attained without the use of the 475 election. They were simply the difference between an individual with the same income and expense figures filing as an investor, then being reclassified as a trader. Had there been a loss involved and a 475 election made, the difference would have been even more significant. ☊

TABLE 1	INVESTOR VS. TRADER, LINE BY LINE	
Same trader, different tax obligations. The difference between filing as a trader and as an investor are dramatic, as illustrated.		
Line/Section (Figure)	**N. Vestor**	**A. Trader**
12/Form 1040 (not shown)	Not applicable; no Schedule C	Full dollar-for-dollar deduction on Schedule C
22/Schedule A (Figure 2)	Limited depreciation	Section 179 – More taken on Schedule C
22/Schedule A 28/Schedule C (Figures 2/4)	Some investment expenses non-deductible	Fully deductible on Schedule C
25/Schedule A (Figure 2)	2-percent floor	Not applicable
28/Schedule A (Figure 2)	Reduction in itemized deductions because of income	Not applicable
36/Schedule 1040 (Figures 1/3)	Only itemized deduction	Standard deduction in addition to trading expenses
38/Schedule 1040 (Figures 1/3)	Exemption phaseout because of income	Full exemption phaseout
51/Schedule 1040 (Figures 1/3)	Alternative Minimum Tax of $18,126	No AMT
Total Federal Tax	**$66,545**	**$24,429**

Lucy stock picking system

Market: Stocks, stock derivatives, index shares (SPDRs, DIAs, QQQs).

System logic: This short-term system (average trade: slightly less than three days) trades only the long side of the market and enters when the stock is showing evidence of turning back to the upside after a retracement. A trend filter helps ensure the stock is in a longer-term uptrend when the trade is entered. The stop and exit rules keep risk small and lock in profits through the use of a trailing stop.

Rules:

Enter on the close (long side only) if:
1. Today's low is 0.2 percent lower than yesterday's low **and**
2. today's close is 0.3 percent higher than yesterday's close, but only if the market is above its 350-day moving average and after a retracement of at least 2.5 percent.
3. Risk only 0.5 percent of available equity per trade.

Exits*:
1. Stop out immediately if the market moves against you 1.6 percent;
2. lock in a profit after a move of 0.6 percent or more in your favor and
3. exit immediately if market moves 3 percent in your favor.
4. Exit any open positions after nine days.

Test period: Jan. 1, 1995 to Feb. 15, 2000
Test data: Daily stock prices for all stocks making up the Dow Jones Industrial Average; $10 deducted for commissions per trade.
Starting equity: $100,000 (nominal)

EQUITY GRAPH

Source: CSI, Unfair Advantage
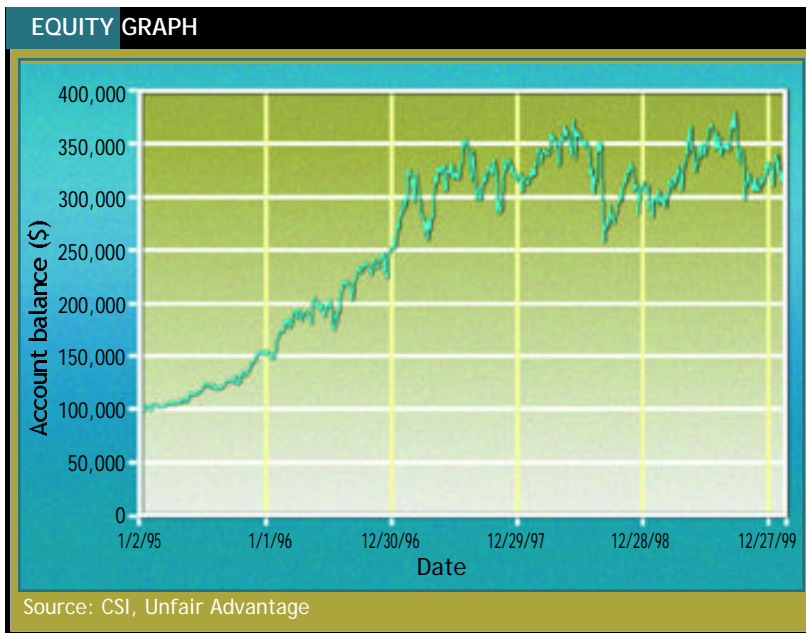
Buy-and-hold stats: Total return — 179 percent
Max DD — 22 percent
Longest flat period — 6 months

Lucy has done much better than buy-and-hold, despite the latest 1.5 years of deep drawdowns (see equity curve) and relatively few profitable trades. Buy-and-hold always risks 100 percent of equity and spends 100 percent of the time in the market, in all markets. Lucy only risks 0.5 percent of equity on each trade and is in the market less than 85 percent of the time (and on average, only 14 percent of the time in each individual stock).

SYSTEM SUMMARY

Profitability		Trade statistics	
End equity ($):	303,581	No. trades:	3,201
Total (%):	204	Avg. trade ($):	64
Year (%):	23.81	Tr./Mark/Year:	20.5
Profit factor:	1.13	Tr./Month:	51.3
Risk measurers		**Time statistics**	
Max DD (%):	-30.74	Longest flat (m):	16.1
Largest loss ($):	-39,933	TIM (%)*:	83.77
Winners (%):	52.92	Avg. days:	2.77

Source: CSI, Unfair Advantage

As measured on all markets combined. The average time in the market per individual stock is 14.13 percent.

System drawbacks: Very low average profitability per trade (but many smaller creeks soon make up a larger river). Too many bad signals during deep retracements following prolonged explosive moves. The trend filter makes the system slow to react to major changes in the longer-term trend.

Glossary
Total (%): total percentage return over test period
Year (%): annualized avg. return per year
Profit factor: gross profit/gross loss
No. trades: number of trades
Average trade: dollar amount of average trade
Tr./Mark /Year: trades per market per year
Tr./Month: trades per month
Max DD (%): maximum drawdown (equity loss)
Largest loss: biggest losing trade
Winners (%): percentage of winning trades
Longest flat (m): longest period spent between two equity highs, in months
TIM (%): amount of time system is in the market
Average days: average trade length

Disclaimer: *The Trading System Lab is intended for educational purposes only to provide a perspective on different market concepts. It is not meant to recommend or promote any trading system or approach. Traders are advised to do their own research and testing to determine the validity of a trading idea. Past performance does not guarantee future results; historical testing may not reflect a system's behavior in real-time trading.*