

CONFIDENTIAL TRADING MEMORANDUM

SPECTRE Level IV Advanced Real-Time Predictive Logic Trading Environment **Defining a New Level in Trading and Asset-Price Discovery**

With the many changes in the market place, the current trading environment has become more challenging than ever. Online Brokers, as well as old-style Retail Brokers, have had a harder time than ever proving their value to investors and traders. Most trading platforms available show little more than standard charts and indicators, and provide crude depth-of-book and order execution interfaces. **SL4** (located at <http://www.spectrenet.com/sl4>) is the next generation trading platform created by traders to fulfill the *huge* gap in the trading/decision support marketplace. It provides everything from advanced order execution to advanced predictive logic in order to guide traders moment-by-moment to the best trading opportunities. Instinet recently acquired ProTrader, Ameritrade acquired TradeCast, Goldman Sachs acquired SLK/RediPlus and The Hull Group, and Schwab acquired CyberTrader. **SL4** offers a multitude of proprietary features that **none of the aforementioned platforms can come close to matching**. The cutting-edge **SL4** trading platform provides a distinct strategic advantage to any Trader, Market-Maker, or Broker utilizing the **SL4** technology. The following is a summary of some of **SL4**'s primary features.

The following list has been identified as a small representation of the type of proprietary features and trading data that is supplied and referenced for users of the **SL4** trading environment:

- Thousands of Real-Time HIGH-PROBABILITY Trading “Opportunities” Provided Every Day, Generated by Scanning Hundreds of Different Listed and NASDAQ Stocks.
- Order Entry, Alerts, and Opportunities can additionally be communicated to Trader utilizing **SL4**'s built-in voice/speech processor, as well as overlaid onto **SL4**'s proprietary charts.
- **SL4** is also invaluable for trading Futures, e-Mini S&P 500 and Nasdaq 100 Futures, and Foreign Exchange. It can display and process any Depth-of-Book data source (ECN Books, Exchange Depth-of-Books, Firm's Internal Order Books), and will be compatible with Single Stock Futures (SSFs) that are expected to experience dramatic growth in the near future.
- End-of-day Performance Record Indicates Maximum Profit Potential of Every Trade Opportunity Presented, Assuming 2 Levels of Risk Per Trade (ie. for a stock such as MSFT, this would be a 10 cent move). Most trading systems are based on simple indicators, volume, and charting patterns, and process little more than recent time & sales data consolidated into bar charts. In **SL4**, opportunities are calculated through a highly complex algorithmic process that takes into account every facet of the data presented (such as Time&Sales, participant, and depth data), all in real-time, to provide 1000's of High-Probability BUY or SELL opportunities every day.
- **SL4** can be utilized to identify new trading opportunities in different stocks and/or to trade a single stock or group of stocks.
- Basket Trading feature enables the Trader to consolidate multiple trading signals across several assets and provides a new weighted trading opportunity. Baskets can also be charted, and entered into the Order Entry Manager for Automatic Execution. Consolidation of signals can provide even higher accuracy than individual signals, and allows for easy implementation of sector-based trading styles.
- On the Back-End, Complex Formulas Calculate the Top 10 Market Makers and Their Activity at Multiple Price Levels. The Trader is Presented the Current Trading Day's Top 10

Market Makers and Their Calculated Trading Activity in the Stock (Heavily Long, Long, Short, Heavily Short). This data is updated dynamically moment-to-moment. The Trader is also shown the previous day's Market Maker Rankings for comparison to today's controlling interests.

- Provides Intraday Alerts that Informs Traders of Any Event that May be of Significance in Identifying the Next Move or Reversal:
 - When a team of Market Makers has accumulated or distributed a significant quantity of stock at a particular price level.
 - Extended Consolidation and Previous Day and 52-Week High/Low Break-Outs.
 - When a Top 10 Market Maker holds or retreats from control in a particular stock.
 - When a Top 10 Market Maker attempts to repeatedly control a particular price level.
 - When a team of Market Makers attempt to Trick other Traders and Quickly Shift Their Positions on the Montage.
 - Any stock that is identified as having entered into a strong trending phase and how far it is currently extended on a moment-by-moment basis.
 - Many other powerful alerts, including CUP formations, Order Imbalances, Range Contraction BreakOUTs, Trend and Support/Resistance Auto-TrendLine Identification and CrossOver Alerts on Multiple Timeframes, Cycle-Optimized Overbought and Oversold Indications on Multiple Timeframes, and the ActiVU display provide alerts to stocks that are about to move, continue a current move, or face a reversal. **SL4** will also identify if a stock on the move had any News Headlines associated with it.
 - Specialized Alerts, Indications, and Tools for Identifying Panic Market Trading Conditions and Their Potential Reversal Points.
 - Pivot Point Identification and Trading Zone Support/Resistance Probability Analysis.
- Full ability to Filter and Scan incoming informational Alerts.
- Proprietary Charting Routines Provide a Non-Lagging, Real-Time Representation of Current Price Movement and Order Flow, while Removing Most of the Underlying "Noise". This is especially powerful for less liquid stocks with wider spreads, since the **SL4** charts provide a much clearer image of the true underlying trend. Charts can be displayed either in Absolute Price or in Price Extension from the Open of the Day, and also factor in time and volume versus price. A Trader can also watch activity on a 1 minute, 3 minute, 5 minute, 15 minute, 60 minute, and daily basis utilizing the ChartTrends feature, which also provides a weighted easy-to-read display of the current trend on each time frame.
- Key Price Levels are calculated and presented to the trader as they are discovered. It is at these prices that "battles" tend to take place that lead to trend reversals.
- Trading Opportunities, Key Prices, and other information can be directly overlaid onto the chart for easy analysis.
- Complete Asset Statistics are Provided for Every Stock in **SL4**. This enables traders to expeditiously understand the trading dynamics of a particular stock.
- Advanced Level II / Depth-of-Book Montage Screens that presents a clear and concise representation of current market activity, along with optional consolidation of total available size at the top three best bid / offer levels. ECN Book Data is also incorporated into the Montage, and the Top 10 Market Makers are highlighted with ranking and last-move information overlaid. Double-clicking on a particular Market Maker provides quick information on the Market Maker's name, and other important information regarding his currently displayed quote. All colors can be adjusted to maximize the trader's comfort

throughout the trading day. Price Levels are optionally grouped by **SL4**'s calculated Level Size for each asset, so that true underlying movement is easier to identify. This feature is especially powerful since decimalization has taken effect.

- Dynamically updating representation of the Trend Strength at the current Price Level, as well as an indication of the Primary Underlying Trend Strength, clearly displayed at the top of each Montage. Order Flow Ratios and other statistics can also be displayed.
- Analyzes Market Maker Activity Across an Entire Sector of Stocks, and Indicates Which Market Makers are Buying or Selling a Particular Sector, if any. Also determines if the Buy or Sell Opportunities issued by **SL4** can lead to a potential move in a particular Sector, and also provides an overall Trend Strength indication for the entire Sector.
- Complete Advanced Portfolio Management and Order Execution Screens that can be linked to any computerized order execution back-end system that publishes an API (Application Programming Interface) and is easily compatible with Stocks, Futures, and Foreign Exchange symbols. Orders are repeated back to Trader Verbally, nearly eliminating order entry errors. Multiple orders can easily be created and confirmed in a blink of an eye, with a simple mouse-click or keystroke to transmit or cancel each (or all) open orders.
- Account Handler provides automatic order routing to the best market center, and Trader can see which market centers are currently available and active and can block certain routes from the SMART routing feature through a click of the mouse. Account Handler can also simulate off-floor STOP / STOP-LIMIT orders and Reserve orders, along with a slew of others. For back-ends that do not offer Cancel/Replace features, the Account Handler can simulate Cancel/Replace and provides a single **SL4** Order ID for order so that it can easily be rolled-up and identified on the back-end. New routes can easily be added as they become available once they are added to the firm's back-end environment.
- API available to enter and manage orders via **SL4**'s advanced front-end environment for automatic execution of customized trading systems and other third-party applications.
- Warnings are provided if **SL4** detects potential delays in real-time data delivery versus its source. **SL4** also provides in-depth connection statistics in order to assist in monitoring and diagnosing network problems or other potential performance issues. **SL4** also implements sophisticated scanning methods to clean incoming data to minimize stuck quotes and ECN Order Book Bids or Offers.
- **SL4** is currently compatible with market data from eSignal, MarketFeed, PC-Quote Orbit, Townsend RealTick, and QCharts. New data feed sources can be easily implemented. All that is required is the creation of a new Data Feed Handler that can power all of **SL4**'s components.
- Advanced Real-Time Simulated Trading Environment allows accurate simulation of trading results in order to gauge a trader's abilities without risking live capital. Orders will only fill if there was a high probability that the execution could have occurred.
- If required, **SL4** can run side-by-side with other Charting, Trading Packages, or Order Execution Applications.
- Dual-Screen Compatible to maximize available viewable area and to allow for maximum trader comfort.

Bear Stearns Analyst Finds Semi-Professional Traders Are Increasing Their Presence and Driving Technology.

NEW YORK--(BUSINESS WIRE)--Jan. 16, 2001--Amid growing concern in the market, Amy Butte, Bear Stearns financial services analyst, believes that day traders are still alive and kicking.

In her report entitled Day Trading and Beyond: A New Year, An Updated View, Butte revisits the on-line trading realm to find that semi-professional traders continue to increase their presence in the market, as they further embrace the most sophisticated technologies. Back in April, Butte released her first on-line trading report, which categorized the population that makes up the on-line trading community into three distinct groups: semi-professional / day traders (customers that trade 25-45+ times per day), active traders (customers that trade 15-40 times per year) and self-directed asset managers (customers that trade less than 15 times per year). "Last year we were only first learning of the day-trading phenomenon. Now we are finding that semi-professional traders continue to flourish, surpassing many of the other types of traders and defining their industry," explains Butte.

An Emerging Presence

According to Butte's study, the total number of on-line retail accounts rose an estimated 48% in 2000, but the average number of trades per account fell. Despite the fact that trade execution for self-directed asset managers and active trader accounts was flat and down 37%, respectively, trades per account rose 55% at the semi-professional level, said Butte. "Clearly not everyone in this industry has slowed their trading. What could be considered a relatively small community of day traders, has really emerged as a powerful force in the on-line investing world," said Butte.

Increasing Demand

As day traders become increasingly Internet savvy, they are playing a major role in driving the competitive dynamics of on-line trading. Butte discovered that although the number of technology providers has remained the same, "first-mover" status has remained a crucial competitive advantage. Therefore, Butte notes on-line developers are constantly seeking new avenues of growth, specifically by creating updated trading technologies. "Developers are faced with the challenge to move beyond direct-access capabilities," said Butte. "Previously traders simply looked for fast, efficient execution. Now, as the traders' demands intensify, they are searching for better trading technology."

Meeting the Challenge

Butte found the day traders' demands were being met, in part, by "smart order routing" capabilities - either with real-time or end-of-day information. According to Butte, these systems assist traders by uncovering trading patterns and helping the trader find the best method of execution. "For example," explained Butte, "when traders needed to test a technical pattern, in the past they would have to wait until the end of the day to run a list of the stocks meeting those criteria. The new systems can alert traders as soon as stocks have met their criteria, and can even execute trades automatically," explained Butte.

Trends To Watch

Butte believes the on-line trading technology sector is headed for consolidation over the next six to 12 months. "Traders need systems that can handle their scale and increased trading capacity. The more advanced the decision support tools, the more likely the traders will be to use the service," explained Butte. She also notes that the pressure to improve trade execution and increase capacity could grow especially intense with the implementation of full-scale decimalization and SuperSoes within the next year or two. Butte predicts that the trend toward consolidation could spark increased interest in this segment and perhaps push valuations higher.

Trading systems mentioned in the report include REDIPlus, Watcher Technologies, CyBerTrader, RealTick, TradeCast, Tradescape and Gr8trade.

To obtain a copy of the full report, "Day Trading and Beyond: A New Year, An Updated View," or to speak with Amy Butte please contact Ana Davila on (212) 272-9438 or Michelle O'Brien on (212) 272-6659. Those interested in listening to a replay of the conference call hosted by Amy Butte which discusses the new report can call (888) 695-7641. The replay will be available until January 19, 2001.

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