

Bull Session

Some news you should know about your Ex

in this issue

ELECTRONIC LISTED LIQUIDITY
ARCAEX AT THE INSIDE
ORDER TYPES
STRESS SITUATIONS

What's new?

ARCAEX IS PLEASED TO
ANNOUNCE THE LISTINGS OF:

AIG

OPTIONSXPRESS

METROPOLITAN HEALTH
NETWORKS

contact

SALES REP 212.430.6900

TRADING SUPPORT 888.513.9873

CLEARING 312.960.1362

CONNECTIVITY 888.689.7739

REGULATION 312-442-7788

questions?

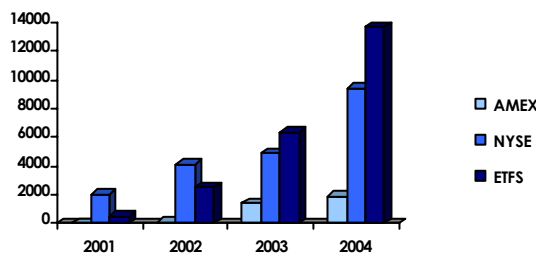
QUESTIONS ABOUT THESE
ENHANCEMENTS OR OTHER
INQUIRIES CAN BE DIRECTED TO
THE ARCHIPELAGO TRADING
DESK AT 888.513.9873 OR TO
YOUR SALES REPRESENTATIVE

Electronic Listed Liquidity on ArcaEx

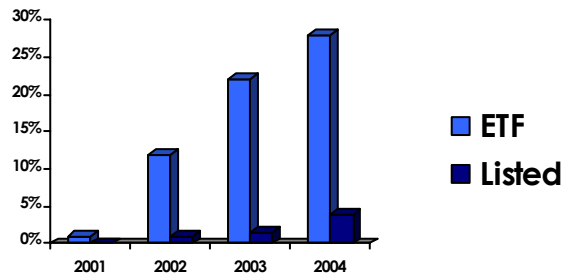
This edition of the Bull Session will examine some of the reasons behind the growth in listed trading on ArcaEx and will explore how more traders are seeking the advantages of trading listed stocks electronically. One reason may be that ArcaEx is at the “inside” quote more than 50% of the time in many listed securities. Or is it because ArcaEx has order types that allow you to take control and access electronic liquidity in listed securities, coupled with fast anonymous executions. Or as we will read later in this Bull Session, is it because in times of market stress, a pure electronic model like ArcaEx’s performs more efficiently than the traditional specialist based model?

Since ArcaEx launched its listed trading platform in 2002, one thing has become clear- more and more clients are realizing the advantages of trading listed stocks electronically on ArcaEx. Each year since inception has seen a continued rise in both listed shares handled (volume) and in overall ArcaEx listed market share.

ArcaEx Listed Share Volume
(in millions)



ArcaEx Listed Market Share



In 2004, clients handled a total of 25.3 billion (NYSE-AMEX-ETF) listed shares on ArcaEx. This included a new total daily volume record of 125 million listed shares traded. ArcaEx continues to make gains in both volume and market share in NYSE and AMEX single stock listed names. Some noteworthy names with market share above or approaching 10% include:

ArcaEx Single Stock Listed Activity: February 28 to March 4, 2005

Company	% ArcaEx at NBBO	ArcaEx Volume	ArcaEx Market Share
Elan	65.9%	70,183,431	14.0%
Nortel Networks	90.7%	12,677,240	8.4%
Martha Stewart Living	35.5%	1,955,326	10.0%
Glaxosmithkline	30.0%	1,735,323	9.0%
Imergent	22.0%	1,070,250	13.0%

(Source: ArcaVision)

In addition to our growth in single-stock names, as the popularity of Exchange Traded Funds (ETFs) continues to grow, ArcaEx has also quickly established itself as a major ETF marketplace. ArcaEx's recent ETF total monthly share volume showed a year-over-year gain of 125%, with more than 1.6 billion shares traded in January 2005 compared to 724 million shares traded in January 2004. Additionally, in February 2005 ArcaEx was the leading market center in the trading of many ETFs including SMH (44.0% market share), IWO (45.0% market share) and EWJ (46.0% market share).

ArcaEx ETF Activity: Weekly February 28 to March 4, 2005

Symbol	Average ARCA Spread	Average ARCA Depth (Shares)	Average ARCA Depth (Dollars)	Percentage Time ARCA at NBBO	ARCA Volume	ARCA Market Share
QQQQ	0.03%	88,167	\$3,301,152	90.0%	110,665,777	24.0%
SMH	0.04%	19,735	\$677,632	85.0%	91,169,300	50.0%
SPY	0.01%	31,620	\$3,830,874	70.0%	85,115,864	28.4%
EWJ	0.10%	78,901	\$854,926	97.0%	24,613,430	50.3%

(Source: ArcaVision)

If you would like to learn more about ArcaEx's most actively traded listed stocks and ETFs you can elect to receive the *ArcaEx Single Stock Listed Activity: Weekly Top 25* or the *ArcaEx ETF Activity: Weekly Top 25*. These reports include information like ArcaEx's average spread, market share and percentage of time at the NBBO. You can receive this report through your existing ArcaVision subscription or by becoming a subscriber. Clients can subscribe to ArcaVision at: <https://www.arca-vision.com/login/register.do>.

ArcaEx at the “Inside” – Electronic Liquidity at the Touch

The perception that only the primary markets can be the sole providers of price discovery is being debunked every trading day on ArcaEx. With advantages like speed, best price, and order control, many clients are realizing that they can compete with the specialist or other market participants by posting orders on ArcaEx. The evidence is in the numbers. An overall exchange quotation comparison, of the time spent by ArcaEx at the inside for DJIA® listed stocks, shows just how frequently ArcaEx is at the inside and available for an execution *at the best price* in these actively traded names.

Average Execution Speeds DJIA Listed Stocks:

ArcaEx: < 1 second
NYSE: 17.2 seconds

(Source: ArcaVision / SEC Rule 11Ac1-5 data)

Dow Jones Industrial Average Listed Stocks Only December 2004

Market Center	Time at Inside Quote	Quoted Depth (shares)
NYSE	72.9%	4,176
ArcaEx	54.8%	6,857
National	19.7%	5,426
American	12.4%	100
Nasdaq	15.7%	10,055
Chicago	5.0%	1,708
Philadelphia	1.1%	351

(Source: ArcaVision)

In the month of December 2004 ArcaEx was at the inside 54.8% of the time in DJIA® listed stocks with a quoted depth (the total number of shares displayed at each market’s best price) greater than that of the NYSE. In fact, when you compare ArcaEx to the other electronic markets like the National Stock Exchange and Nasdaq, ArcaEx outpaces the competition in providing aggressively priced quotes. Simply put, when trading listed names, your ability to get an execution, at the best price may only be a few milliseconds away when you send your listed orders to ArcaEx.

It’s the Electronic Order Types

As listed trading strategies continue to evolve, the need for traders to be able to electronically access liquidity, maintain control over their orders and obtain consistent, sub-second trade executions at the NBBO is more important than ever. ArcaEx offers a variety of order types that are well suited to and effective for trading listed securities quickly and easily.

The ArcaEx NOW Order™ is one perfect example. The NOW Order allows you to enter a limit order that will only interact with the ArcaEx order book and other markets displaying immediately accessible quotes. Currently these include both traditional trading venues connected via the Intermarket Trading System like the National Stock Exchange and Nasdaq and direct access to alternative venues like the INET ATS. Your marketable order would never be routed to a manual, floor-based exchange and would be immediately returned to you if it could not be executed electronically.

ArcaEx at the Inside Notable Listed Names (February 2005)

LU 92%
NT 90%
Q 75%
RAD 72%
NOK 69%
F 63%
PFE 60%
ABX 53%
CC 52%
MOT 55%

Sweeping all electronic liquidity quickly using a NOW Order is simple and fast:

NOW Order Example:

Markets in bold are NOW Participants

<u>Market</u>	<u>Bid Price</u>	<u>Bid Size</u>
ArcaEx	20	1000
NYSE	20	1000
National	20	500
Nasdaq	20	500
INET	20	600

NOW Order: Sell 5000 shares at \$20

Execution: 2600 shares at \$20. The balance of the order is cancelled and returned to the client within milliseconds.

If you would prefer to interact with the electronic liquidity available on ArcaEx only, you can use a Post no Preference (PNP Order) and/or an Immediate or Cancel (IOC) order on ArcaEx. With these order types you can access not only the displayed liquidity on ArcaEx, you can also tap into the hidden liquidity attached to Reserve and Discretionary orders.

The benefits of probing ArcaEx’s electronic liquidity include fast and anonymous access and control over your order. An IOC order will be returned to you immediately if there are no trading opportunities on ArcaEx. A PNP order that is not immediately executed will be posted to the ArcaEx Book for display in the National Market System where it can be accessed by other market centers and will never be routed outside of ArcaEx. And if you want to cancel your PNP order, it can be done immediately.

A complete listing of all ArcaEx order types can be found on the ArcaEx website: <http://www.archipelago.com/traders/market.asp> or by contacting your ArcaEx sales representative.

Price Transparency and Discovery in Stressful Markets

Current market events coupled with a recent academic study support what we have known all along - that in times of market stress - a pure electronic model like ArcaEx’s performs more efficiently than the traditional market-maker or specialist based model.

An open market structure allows for continuous price transparency and price discovery resulting in access to faster more effective trade executions during both calm and stressful periods in the market. Recent market events in the pharmaceutical sector serve as examples of the pricing efficiency on ArcaEx.

ArcaEx Only Order Types:

IOC

A market or limit order that is to be executed in whole or in part as soon as such order is received. The portion not so executed is to be treated as cancelled. IOC’s only execute on ArcaEx and do not route.

PNP

A limit order to buy or sell that is to be executed in whole or in part on ArcaEx. The portion not executed is posted in the ArcaEx Book without routing any portion of the order to another market center. PNP orders in the \$0.03 exempt ETFs (SPY, and DIA) will not be displayed if such orders would lock or cross the NBBO; a PNP in the exempt ETFs will not be displayed in the National Market System or in the ArcaBook data feed until the overall market changes to a level in which the PNP will not lock/cross the market; though the order will not be published, incoming orders and ITS commitments will interact with these orders within the \$0.03 range.

Listed order types that contain non-displayed price or size components:

- Reserve
- Discretionary

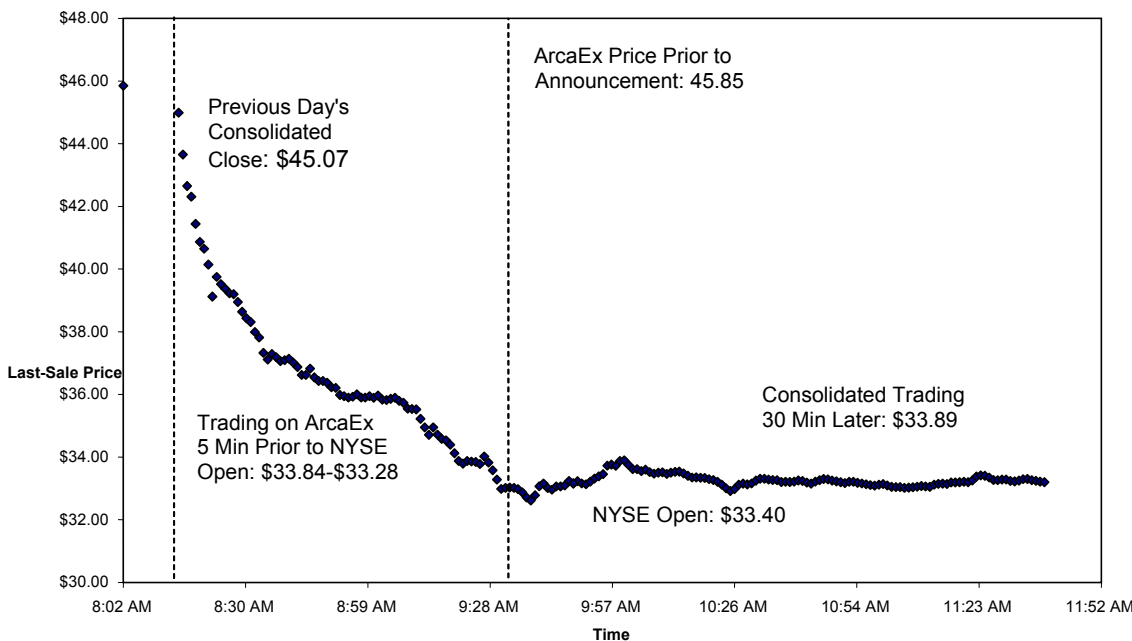
Listed Case Study: Merck

On September 30th at 8:00 am ET, ArcaEx opened to the news that Merck (MRK) was recalling a key drug from the market. By 8:15 am ET the price was down \$12 on ArcaEx from the prior close of \$45.07. At 9:30 am ET MRK was trading around \$33.00 on ArcaEx. All this information was disseminated to investors via the consolidated tape during the pre-market hours with ArcaEx being the only market publicly providing quote and last sale information from 8:00 am to 9:30 am ET. Going into the regular open at 9:30 am ET the NYSE specialist began displaying a price indication of \$32 - \$35 (a spread of \$3) and eventually opened for trading in the stock at 9:32 am ET at 33.40, the price that already had been discovered on ArcaEx.

Elan Too!

On February 28, 2005 when Elan announced that it was suspending sales of a key drug- ArcaEx market share surged to over 17% and was at the inside 60.3% in shares of Elan.

Opening Trades in Merck
September 30, 2004



Genentech

On March 14, 2005 when biotech giant Genentech announced that its key cancer drug helped extend the lives of patients- ArcaEx market share surged to 16% and was at the inside 43%.

GM

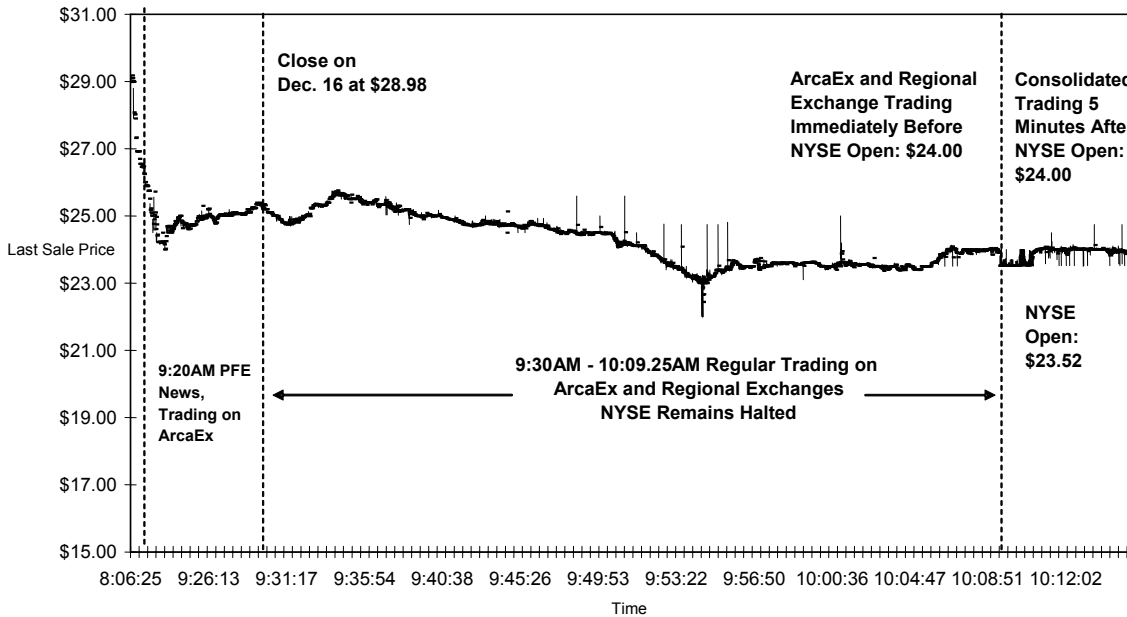
On March 16th when General Motors announced the potential of a deeper earnings shortfall ArcaEx market share was 14.2% and at the inside 60.3%.

Listed Case Study: Pfizer

On December 17th at 8:06 am ET, Pfizer (PFE) opened for trading on ArcaEx at the prior close of \$28.98. At 9:20 am ET PFE issued a public statement announcing a potential health risk linked to a key drug currently on the market. At 9:20 am ET PFE is already trading at \$28.08 on ArcaEx. The dissemination of the news caused the NYSE to postpone the open in PFE to 10:09 am ET. For the period of time leading up to and during the trading halt (9:30 am ET-10:09 am ET) on the NYSE, ArcaEx continued to disseminate quote and last sale information to investors via the consolidated tape. At 10:08 am ET immediately before PFE opened for trading on the NYSE, PFE was trading at \$24.00 on ArcaEx. Eventually the NYSE specialist began trading in PFE stock at 10:09 am ET at a price of 23.52. Trading on the consolidated

tape 5 minutes after the NYSE open was at \$24.00, the price that had already been discovered on ArcaEx.

**Opening Trades in Pfizer
December 17, 2004
Press Release Issued at 9:20AM ET**



Be Alert

A good way to stay on top of the electronic trading action in listed stocks is to subscribe to ArcaEx's Electronic Liquidity Updates or Liquidity Alerts.

These alerts can be sent right to your desktop and contain those stocks in which ArcaEx market share exceeds 10% of the overall market volume.

Liquidity Updates:

Provided three times daily at 10:15, 13:15, and 15:15 ET.

Liquidity Alerts:

Provided every half hour beginning at 10:30 ET.

To receive these alerts via email or via FIX, please send a request to: MarketTools@archipelago.com

Please include "Electronic Liquidity Alert" and/or "Electronic Liquidity Update" in your request.

The Merck and Pfizer examples are familiar ones to ArcaEx. There are numerous others that support the fact that ArcaEx provides an efficient and fair market place during times of market stress. While the NYSE specialist is busy determining the "fair" price for buyers and sellers, many investors have already established what they think the stock is worth and have already executed their orders on ArcaEx. By providing continuous price discovery and maintaining an open and transparent market, ArcaEx delivers the tools investors need during both stressful and calm times in the market.

Information Shocks and Stock Market Liquidity

At ArcaEx we have always felt that members of the trading community are best served by meeting directly within an open, fully electronic and totally transparent environment. This competitive market structure results in access to tighter spreads and faster more effective trade executions. A recent academic study serves to substantiate that claim.

The study: "Information Shocks and Stock Market Liquidity," conducted by Kenneth Lehn, Sukesh Patro and Kuldeep Shastri, compared the performance of the New York Stock Exchange (NYSE) and Nasdaq on two days in 2003 when securities markets received important news information that resulted in rapid stock price movements and heavy trading volume (calm vs. stress periods).

Study Findings:

- The electronic participants such as ArcaEx quoted narrower spreads than traditional Nasdaq dealers during BOTH calm and stress periods.
- Effective bid-ask spreads increased significantly for both NYSE and Nasdaq securities during stress periods.
- Spreads increased more so for NYSE securities, contradicting the view that the NYSE is better at providing liquidity during times of market stress.
- The relatively superior performance of Nasdaq vs. NYSE during periods of market stress is driven largely by the performance of its electronic participants such as ArcaEx and ECNs, and not by traditional market-makers and NYSE specialists.

A complete copy of this study can be obtained by visiting the AEI website: http://www.aei.org/events/eventID.922.filter.all/event_detail.asp or by contacting your ArcaEx sales representative.

Merck and Pzifer Revisited

Comparing ArcaEx vs. the NYSE® on the days of stress for MRK and PFE, On both occasions when the markets were subject to negative news, ArcaEx was at the inside a larger percentage of the time and on average was able to quote narrower spreads than those quoted on the NYSE.

Exchange Quotation Comparison MERCK September 30, 2004

Exchange	Time at Inside	Quoted Spread	% Spread
ArcaEx	61.05%	\$0.02	0.07%
NYSE®	52.16%	\$0.03	0.10%

Exchange Quotation Comparison PFIZER December 17, 2004

Exchange	Time at Inside	Quoted Spread	% Spread
ArcaEx	72.77%	\$0.02	0.10%
NYSE®	46.82%	\$0.04	0.18%

(Source: ArcaVision)

In times of stress and times of calm ArcaEx provides an open and competitive marketplace for the trading of listed stocks.

Other Study Findings:

Within the Nasdaq Listed Market- the spreads of electronic participants such as ArcaEx were approximately 30-40% lower than the corresponding spreads of traditional Nasdaq market makers.

On January 2nd the average quoted relative spread for IBM (NYSE) was 0.042% during the calm period and 0.093% during the stress period.

On January 2nd the corresponding average spreads for Microsoft (Nasdaq) were 0.025% during the calm period and 0.028% during the stress period.

The ArcaEx Issuer Spotlight

The roster of companies listed on the Pacific Exchange for trading on ArcaEx, continues to grow with recent dual listing announcements from American International Group, Inc. (AIG), optionsXpress (OXPS) and Metropolitan Health Networks (MDF).



Listed Company	Symbol
American Int'l Group, Inc	AIG

Company Profile: American International Group, Inc. (AIG) is the world's leading international insurance and financial services organization, with operations in more than 130 countries and jurisdictions. To learn more about AIG visit www.aig.com.



Listed Company	Symbol
optionsXpress	OXPS

Company Profile: optionsXpress Holdings, Inc. provides innovative securities brokerage products and services for investor education, strategy evaluation and trade execution. Through its subsidiaries optionsXpress, an online brokerage, and brokersXpress, an online trading and reporting platform for independent investment professionals, the company offers a wide range of investor tools, superior customer service and competitive commissions. To learn more about optionsXpress visit www.optionsxpress.com.



Listed Company	Symbol
Metropolitan Health Networks	MDF

Company Profile: Metropolitan is a growing healthcare organization in Florida that provides comprehensive healthcare services for Medicare Advantage members and other patients in South and Central Florida. To learn more about Metropolitan Health Networks, Inc. please visit its website at <http://www.metcare.com>.

A complete list of PCX/ArcaEx listed companies can be found on the ArcaEx website: <http://www.archipelago.com/issuers/ListedCompanies.aspx>

ArcaEx Listed Company Facts

Over 230 companies are listed on PCX/ArcaEx.

13 of the current components of the Dow Jones Industrial Average are listed on PCX/ArcaEx.

99 of the 2004 Fortune 500 are listed.